

1040

MOTOR INDIA



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MOTORINDIA

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Illustrations

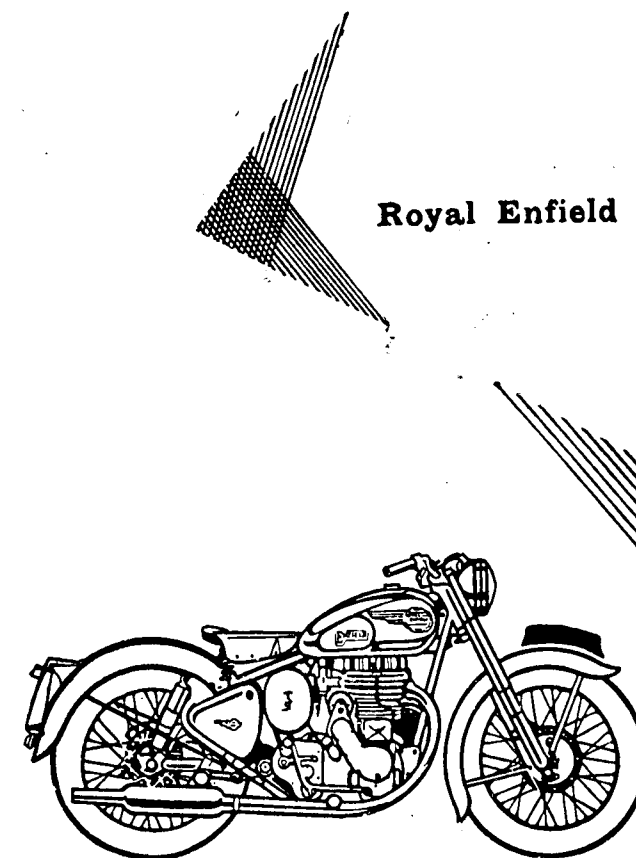
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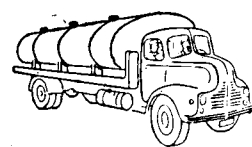
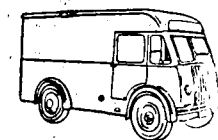
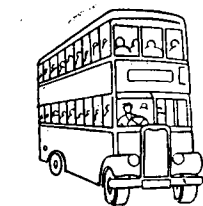
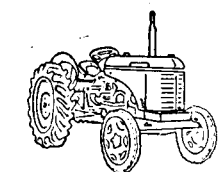
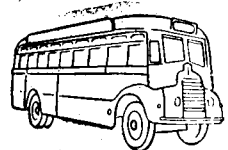
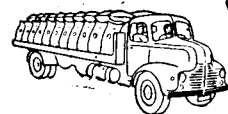
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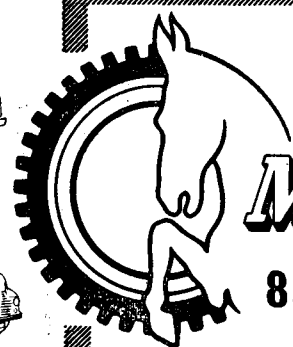
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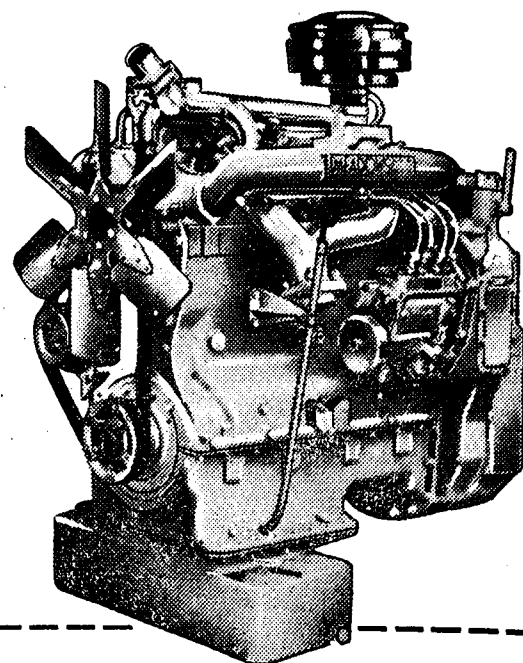
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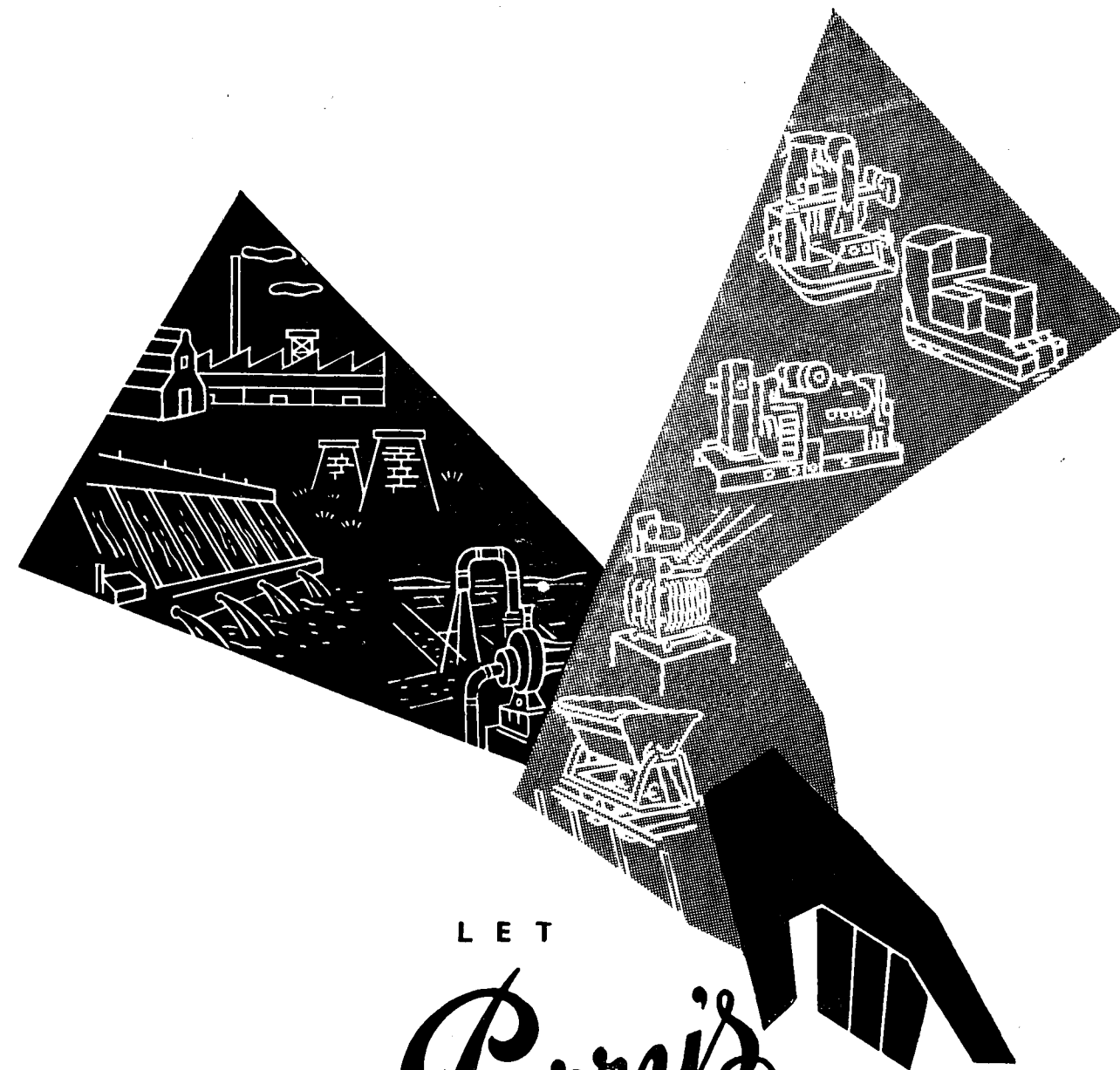
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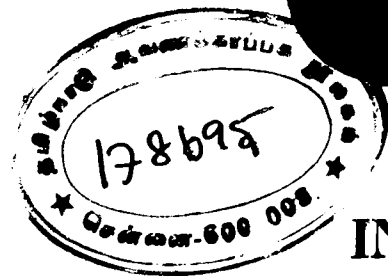
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FOR PUBLICATION

ON MATTERS RELATING

TO

AUTOMOBILES

and on

ROAD,

RAIL,

AIR &

SEA Travel

(RATES BY ARRANGEMENT)

EDITOR

MOTORINDIA

141, MOUNT ROAD

MADRAS-6

EDITORIAL

Road transport people will generally welcome the report published elsewhere in this issue that the Government of India "is seriously considering how best to utilise road transport for handling the surplus traffic." It would appear from a speech made by the Deputy Minister for Railways and Transport while inaugurating the Delhi branch of the Indian Institute of Road Transport recently that the Government has already asked the interests concerned to prepare schemes for setting up large units for long distance operation in areas where Railway capacity is short. The Minister also hoped that the private sector would make full use of this opportunity and give an effective proof of the capacity of road transport for handling the transport problem as efficiently and economically as any other carrier can do.

We note this change of attitude with pleasure and we have no doubt that transport operators will only be too glad to do their best in making a success of the Second Plan. For it cannot be denied that when a country is determined on the forward march in industrialisation, transport has to keep pace with the country's industrial expansion.

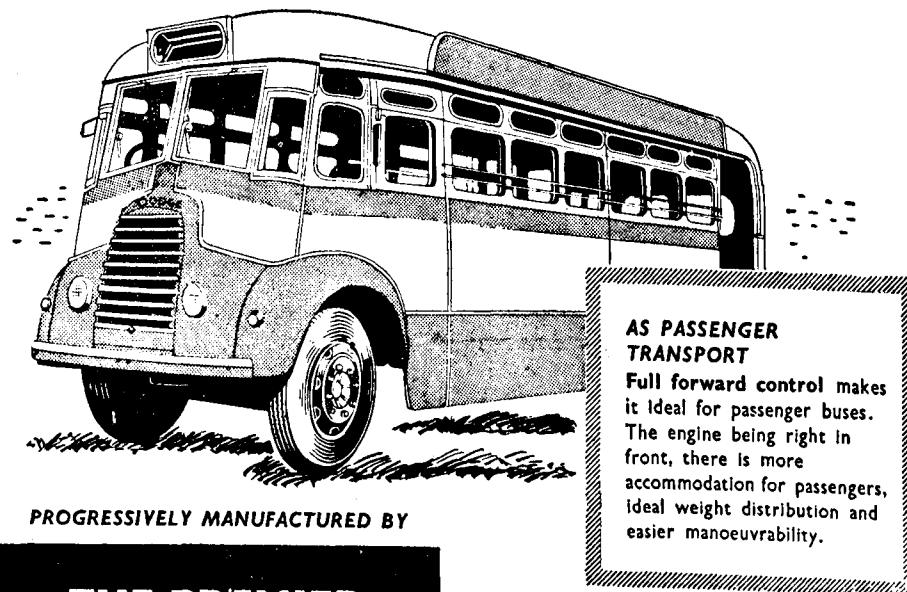
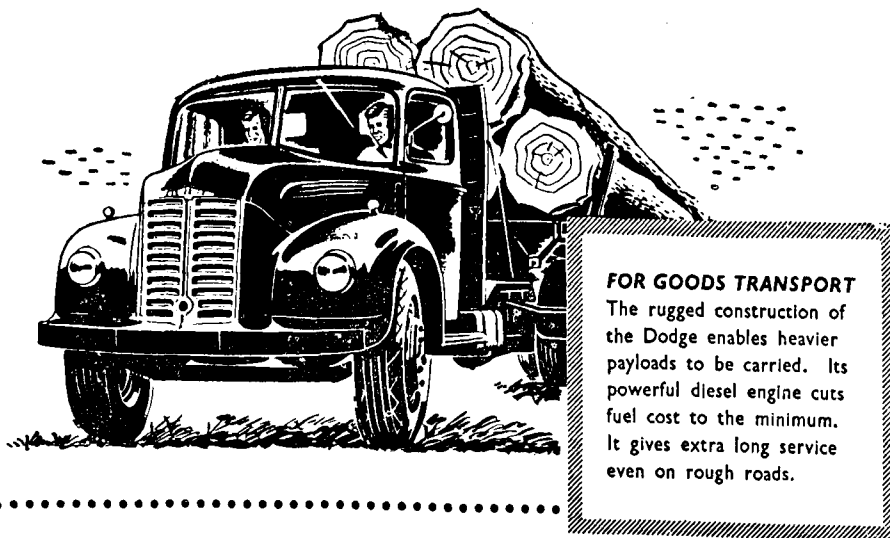
In an interesting article on the road transport system and its working in Australia, a country where progressive manufacture of motor vehicles started only some ten years ago and is being pushed through with such enlightened planning and enthusiastic effort, we give our readers the various factors that have gone to build up Australia's new automobile industry. Side by side with the industry, road services have increased considerably and within the last ten years the number of commercial vehicles on the road has more than doubled. India has much to take from the Australian example in this respect, and the Deputy Minister's statement, we hope, is only a beginning.

But if the private sector is to be expected to give its unstinted cooperation in the expansion of road services, it logically follows that the state of uncertainty regarding the future of passenger and goods transport must end sooner or later, sooner the better. If the nationalised sections like the Madras city transport service, for example, cannot open the eyes of Government on the ever increasing need for efficient, comfortable and regular transport service for the public at large, then the advice of Sir C.P. Ramaswami Ayyar—who was one of the earliest of Indian administrators to nationalise passenger transport, as Dewan of Travancore—has come very timely indeed.

Presiding over a meeting in connection with the anniversary celebrations of a leading transport operating firm at Kumbakonam, he has pleaded for a clear and definite enunciation of the exact policy of the Government, the limits of its policy, the ambit of its activities at least for a certain time so that there might be an equilibrium, there might be a possibility of the private sector looking around collecting its resources and making plans on that basis. Sir C.P. had no interest except the orderly development of the country's industries and the success of the Five Year Plan, and we have no hesitation in suggesting that the Government should come forward to make some such categorical declaration of its mind. May we take it that the Delhi statement is a forerunner of such a declaration?

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Road transport expands in Australia

Keeping pace with country's industrial expansion

By Margaret Lawrence

WITH A TOTAL OF 195 MOTOR VEHICLES OF ALL TYPES TO 1,000 OF POPULATION, AUSTRALIA IS THE FOURTH MOST HIGHLY MOTORISED NATION IN THE WORLD.

Because of the popularity of the "utility"—a light vehicle carrying both passengers and goods up to a ton or so—Australia's registration figures show the greatest number of commercial vehicles per head of population in the world. Australia's figure of 6.6 commercial vehicles per 100 persons compares with 6.2 in the U.S.A., 6.1 in New Zealand, 6.0 in Canada, 2.6 in France, and 2.2 in the United Kingdom.

Road transport is keeping pace with the country's industrial expansion. Within the last ten years the number of commercial vehicles on the road has more than doubled. New registrations for 1954 totalled 65,292, a figure probably exceeded last year, judging by the registrations for the first six months.

Yearly traffic carried on the nation's 500,000 miles of road is now approximately 7,400,000,000 ton miles and 15,000,000,000 passenger miles.

Road transport services are provided mainly by small unit fleets practically all of which, both passenger and freight, are privately owned and controlled. Most of the road goods traffic is for short or medium hauls, usually not more than 50 miles, although long distance interstate road transport is becoming an increasingly important feature of the transport pattern.

The type of commercial vehicle in most common use has a carrying capacity of not more than four tons. Approximately half are utilities. A great number of these handy little vehicles are used by the owner for his personal transport needs only, and are not licensed as commercial carriers. Trailers are common, both of the four wheel and the articulated type. Main types of new vehicles registered in 1954 were utilities (39,090), lorries (16,450), panel

vans (7,144) and station wagons (2,080).

Geography—the vast distances with scattered population, and the generally flat terrain—makes it natural for the motor to play an important part in Australia's transport economy, while the number of automobiles is a reflection of the generally high standard of living. Continuing prosperity of the primary producers has been a major factor in increasing sales, of commercial vehicles in particular; for several years almost two-thirds of the commercial vehicles registered were for rural areas. In the country motor vehicles are considered essential transport, and in no sense a luxury.

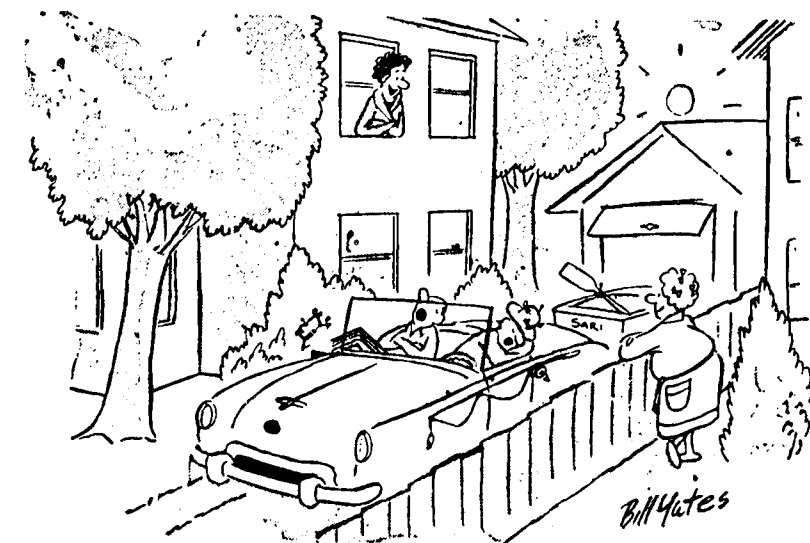
Imports of completely assembled commercial vehicles are declining each year, as Australia's fast-growing motor industry expands production. In 1954 less than 450 commercial vehicles were completely imported, all of them being of the heavy type of truck or bus.

Easily the best-seller among commercial vehicles is the HOLDEN utility (21 horse-power), the all-Australian model produced by General Motors-Holden to suit local conditions. A total of 12,693 HOLDEN utilities and 1,967 panel vans was registered for 1954.

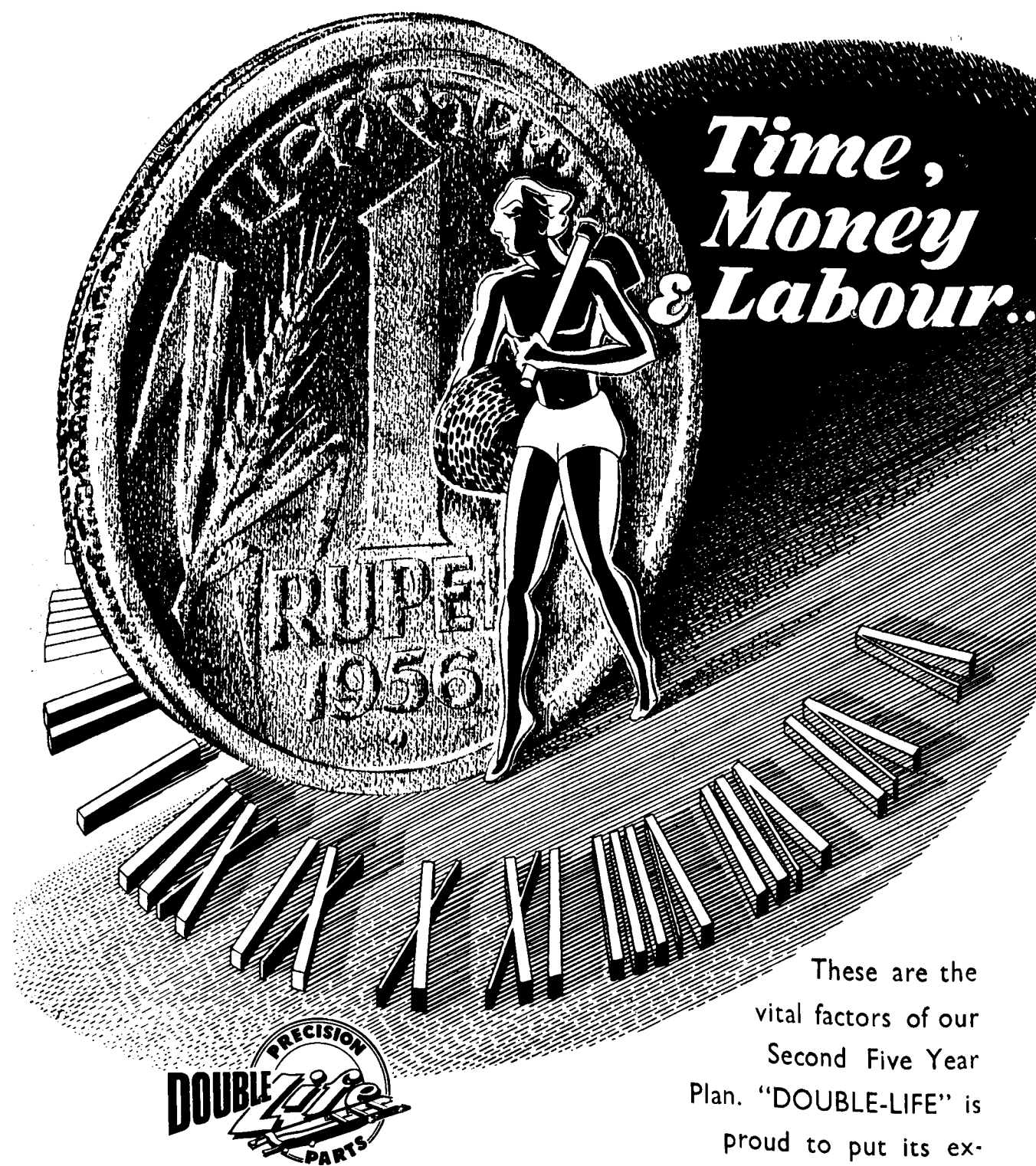
The great majority of the other commercial vehicles now going on to the road are assembled in Australia in the assembly plants of British and/or American manufacturers. The percentages of imported and Australian content varies from company to company. FORD, for instance, the second ranking seller with 8,812 new registrations of commercial vehicles in 1954, has steadily increased the Australian content, which now stands at about 90 per cent. Some of the other companies import almost all of the chassis components and body panels, while others import some components and panels only.

Other leading makes of commercial vehicles now being assembled in Australia are AUSTIN (6,707), MORRIS (6,255), INTERNATIONAL HARVESTER (4,710), BEDFORD (3,924) AND STANDARD (3,348). Each of the manufacturing companies plans progressively to reduce the imported content of their vehicles. Present tariff policy which favours the import of "knocked down" rather than completely imported vehicles, is a factor influencing this trend.

Control of road transport is in the hands of the governments of the six Australian States. Although they



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do not differ on general aims and policy, details of regulation differ greatly.

Only one State, Tasmania, co-ordinates all forms of transport within the State—by road, rail, air and sea—under a single authority. In both Queensland and Western Australia, road and air transport are under a single authority, while in the other three States the authorities are responsible for road transport only, although they may make recommendations with respect to railway lines.

By the end of 1952 the railways were able to handle all the traffic available, and consequently the regulations restricting road transport were much more rigidly enforced.

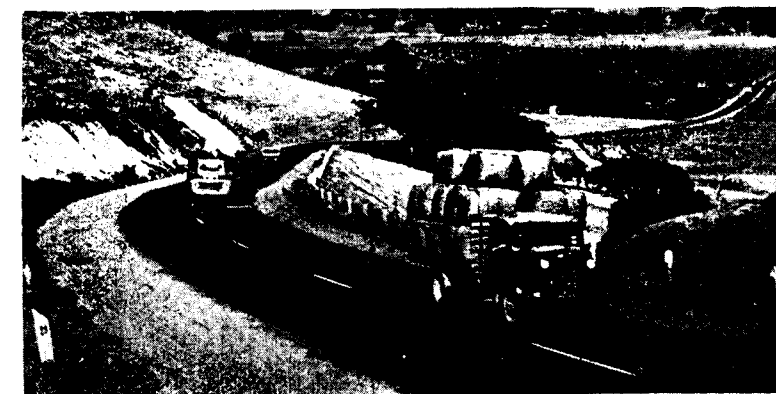
Regulations Challenged

Road operators thereupon challenged the legality of the regularity legislation of the various States, insofar as it applied to interstate motor transport. After a series of legal battles in the Australian courts, the issue came before the Privy Council, the final court of appeal for member nations of the British Commonwealth of Nations. IN 1954 THE PRIVY COUNCIL HELD THAT THE REGULATORY LEGISLATION, AS IT APPLIED TO INTERSTATE OPERATIONS, WAS "ULTRA-VIRES" OF SECTION 92 OF THE CONSTITUTION OF THE COMMONWEALTH OF AUSTRALIA, WHICH STATES THAT "TRADE, COMMERCE AND INTERCOURSE AMONG THE STATES, WHETHER BY MEANS OF INTERNAL CARRIAGE OR OCEAN NAVIGATION, SHALL BE ABSOLUTELY FREE."

As a result of that decision, interstate road transport has gone ahead rapidly. Today fleets of modern trucks and trailer outfits operate on the main highways, moving substantial quantities of freight over long distances.

An example is the long range road haulage of motor car bodies from Adelaide to Melbourne (480 miles) or Sydney (another 580 miles) to be fitted on the chassis at these assembly

Road transport is keeping pace with industrial expansion in Australia. An older type truck carrying bales of wool, seen in a typical country setting.



points. Road transport is also playing an increasingly important part in transportation of building materials, particularly as the raw materials are generally available locally and have to be delivered "on the job".

Trucks are specially designed to carry particular freights. A picturesque example is the "road train," consisting of a 26 ft. long diesel-powered "prime mover" with from one to three trailers attached. A small number of these road trains are being used to transport cattle to rail centres in the remote interior of northern Australia. With three trailers attached the road train has a capacity of 90 bullocks, or 69 tons of general merchandise.

Road Passenger Operations

Road passenger services also have expanded considerably in recent years, especially following the decision of the Privy Council mentioned earlier. Although interstate passenger services are still regulated where they offer competition to the railways there are no longer any restrictions on interstate passenger operations.

Fast daily express services now link Adelaide, capital of South Australia, with the capitals of the three Eastern States, a total distance from Adelaide to Brisbane of 1,666 miles. One company operates three daily services each way between Australia's two largest cities, Sydney and Melbourne, covering a distance

of 580 miles in 16 hours. At present about 3,000 persons are travelling interstate by road each week.

Conducted tours in luxurious passenger coaches, cover all Australia's most popular tourist and holiday areas. Tours range from one-day excursions to luxury "package" tours lasting from six to 35 days, some of them combining excursions by plane and launch. Beauty spots covered by these tours include the Snowy Mountains in South Eastern Australia with its brilliant Alpine scenery and impressive hydro-electric project; and the Murray Valley, the rich fruitgrowing area irrigated by the River Murray. The most spectacular road tour is the "Capricornia" tour, a 35-day all-inclusive tour from Melbourne which includes a splendid scenic drive up the east coast, the mountains and table lands of tropical Queensland and the coral wonderland of the Great Barrier Reef.

Road tours, both express and tourist, are extremely popular and road operators are doing record business. One leading Melbourne company, which now has 43 coaches in operation, expects soon to add another 50 to its fleet, at the rate of one a week.

The most popular type of road tourist coach carries 29 passengers, and has wide vision windows and aircraft-type seats adjustable to five different positions.

In the capital cities and in the larger country towns, passenger

omnibus services are ancillary to trams and trains. The type of metropolitan omnibus in most general use, both by private and public operators, has a seating capacity of from 20 to 45 passengers. Double-decker buses and trolley buses are in operation in some cities.

Road Making

Dispersal of a small population over a large area (9,000,000 people in nearly 3,000,000 square miles) makes Australia's task of building an adequate road network an unusually expensive one. Nevertheless, the continent possesses over 500,000 miles of first-class roads, including some of the longest highways in the world.

One highway runs from Brisbane, capital of Queensland, down the east coast and westward to Perth linking the five mainland State capitals is a 3,421-mile chain.

During a single year of World War II, Australian engineers constructed more than 5,000 miles of new roads to carry supplies to the armed forces guarding remote stretches of coastline.

Construction of main roads is in the hands of the different State construction authorities, local roads being the concern of the municipalities.

Road construction is financed from three main sources, namely, a tax on motor vehicles which brings in about Rs. 20,00,00,000 a year; a tax on owners of land adjoining local roads which yields Rs. 25,00,00,000 a year; and part (Rs. 24,00,00,000) of the Federal Government's tax on petrol. In addition, some road construction is financed from loan funds, about Rs. 9,70,00,000 being obtained from this source in 1953-54.

A small proportion of the Federal Government's contribution is reserved for expenditure on strategic roads and roads giving access to Federal property, and to road safety activities. The remainder is allocated to the State governments, according to population and area, for road construction and maintenance. Of the amount distributed to the States at least 40 percent must be spent in rural areas.

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MOTORINDIA

November 1956

about your car

By 'Robot'

Practically, all of us keep an eye on the petrol economy of our cars. So, many of us do not fill up the petrol tank with more than two or four gallons. If you check up a dozen cars picked at random, you will find the level of petrol in the tank very low in most of them. This is because the owners do not realise that it is a wrong principle of economy. It is a wise thing to keep the petrol tank as full as possible for two

motorists take a keen interest. I have referred to several factors which affect the fuel consumption; but that is not all. The good or bad functioning of any one part of the automobile has a direct or indirect effect on the working of the other components of the car in question. To function properly, a car must combine the working of several separate pieces or groups of mechanisms; and some parts serve more than one purpose and thus one section of the car reacts upon another; but the purpose of each is understood by considering them separately.

Our automotive engineers have done a splendid job in designing and

Sometimes the speed of your engine may be anything upto 3,000 revolutions per minute, which means the pistons and crankshaft also work at the same speed.

If you travel at about 35 m.p.h. your wheels rotate about 450 times per minute. Some of these figures might seem fantastic, but they are true.

If you bear this in mind, you will appreciate that your car needs a 'better deal' from you. After all, if you make it a regular practice, at the most, you may have to devote daily only as much time as you do for brushing your teeth! And this will certainly help to keep your car in 'peak' condition.

TAKE A TIP

reasons, apart from the fact that the car is then ever ready for an emergency journey. The first point is that petrol easily turns into vapour and if there is much 'empty space' in the tank, this space, in a short while, will be occupied by petrol vapour and air. Although one cannot measure exactly what amount of petrol turns into vapour, the fact remains that some quantity of petrol goes waste, which could be minimised, if not prevented. You can actually see the amount of such vapour coming out of your petrol tank, if you just watch when filling up your tank next time. The second point is that the 'empty space' in the petrol tank is occupied by petrol vapour and air as stated above. The change in the atmospheric temperatures has a direct effect on the air inside the petrol tank. When there is a drop in the temperature, it usually causes moisture in the air to condense, thus adding drops of water to the petrol in the tank if there is much air inside. Even this little amount of water may at times make the working of your car engine erratic.

In these few articles, I have been mainly dealing with the fuel consumption of a car, because that is perhaps the one most important subject about which most of the

producing the modern motor cars. Although the basic principles are the same, compared to the cars that were put in the market about 50 years ago, the present day automobile incorporates tremendous improvements—with faster speeds, high performances and vastly improved scientific techniques.

Before we go into much details, it would be perhaps interesting to know what amount of work some of the parts, which appear to be so small, have to do under normal working conditions.

The fuel pump, which pumps petrol from the tank, is a very small item; but it is very reliable. It pulsates about 15 times a second (the human heart works at about this rate per minute) or about 900 times in every mile when you drive at about 40 m.p.h.

The spark plugs, on a six cylinder engine, fires about 1,500 times in every mile. The average life of a spark plug is 10,000 miles and during this, a plug would have fired 15,000,000 times! And that too under high combustion temperatures which is sometimes near about 1000°F. and explosive pressures as high as 400 lbs. per sq. inch. To make the plugs work at the above rate, the distributor points open and close 8,000 times in every mile.

TROUBLE SHOOTERS

By P. F. Lally

Just to drive a car is not enough. It is your "Baby" and you should be able to detect or know at least some of the causes of defects in the car.

In a series of articles the causes of various common troubles to be encountered will be dealt with. We begin with

CAUSES OF OVERHEATING

- (1) Clogged radiator, engine water jacket or the exhaust system.
- (2) Wrong type or defective pressure type radiator cap.
- (3) Clogged, soft and collapsed radiator hose.
- (4) Scales in engine water jacket.
- (5) Blown cylinder head jacket.
- (6) Defective thermostat.
- (7) Bent or uneven fan blades.
- (8) Retarded ignition.
- (9) Rusty water pump impeller.
- (10) Slipping fan belt.
- (11) Cracked water jacket.
- (12) Foreign particles, obstructing the air flow through radiator.
- (13) Over-tight pistons and rings.
- (14) Dirty, thick oil and low oil level in the crank-case.
- (15) Leaks in radiator or hose.

(Next month 'CAUSES OF BRAKE TROUBLES')

November 1956

5

MOTORINDIA

15

the new Mercedes-Benz

The new Mercedes-Benz 220 S Coupe, shown at the Paris and London Motor Shows will interest our readers.

The Mercedes-Benz Type "220 S" which as a Sedan with its lively 100 HP 6-cylinder engine is acknowledged to be one of the most popular automobiles of the European medium class, was shown for the first time as a Coupe at the 1956 Salon de l'Automobile in Paris. To the most fastidious buyer, who attaches considerable importance to exclusive elegance of an individual character, the Convertible and the Coupe, which is new on the market, offer outstanding qualities in respect of performance, elegance and safety.

The Convertible will be preferred by motorists favouring sunshine and fresh air. A number of customers, however, do not want to miss the elegant shape of a Convertible, yet give preference to a hardtop independent of weather conditions. For

this category of motorists the "220 S" Coupe is now available.

The Coupe, like the Convertible, is being built as a two-seater with two emergency seats or seating 4-5 passengers. If the car is being used as a two-seater, additional luggage space besides the already spacious luggage compartment can be obtained by collapsing rear seats and back rest. The luxurious interior featuring genuine cowhide corresponds to the Convertible's interior.

Chassis and engine have been taken over from the well-tried "220 S" Sedan. The rigid frame floor unit together with the single joint swing axle adopted from racing experience and the turbo brake system servo-unit assists ensure greatest possible safety. The 6-cylinder engine with two downdraft carburetors mounted in the sub-frame guarantee utmost reserve of power and supreme acceleration. Naturally, this automobile, too, features the smooth Daimler-Benz recirculating ball-type steering and a transmission fully synchronized in all four gears.

TECHNICAL SPECIFICATIONS

Engine

Number of cylinders 6.
Total piston displacement 2195 ccm (133.9 cu.ins.).
Engine output 100 PS/4800 n (DIN), 112 HP/5000 n (SAE).
Max. engine revolutions 6000 r.p.m.

Bore/stroke 80/72.8 mm (3.15/2.87 ins.).

Compression ratio 7.6 to 1.

Firing order 1-5-3-6-2-4.

Max. torque 16.5 mkg/3500 (DIN) (118 ft. lbs.); 17.8 mkg/3800 (SAE) (129 ft. lbs.).

Valve arrangement in-head, overhead camshaft.

Carburetor 2 Solex 32 PAJTA compound downdraft carburetor.

Ignition timing: Automatically advanced by centrifugal force and vacuum and manually retarded by octane rating selector.

Crankshaft bearings: 4 multi-layer bearings.

Connecting rod bearings: multi-layer bearings.

Oil filter: in main circuit.

Oil cooling: oil water heat exchanger.

Oil filling capacity of crankcase max./min.: 6/3.5 ltrs. (10½-6¼ Imp. pts.); (12¾-7½ US pts.).

Cooling: water—cooling, closed circuit, with pump, thermostat with short-circuit line, fan.

Engine mounting: rubber-mounted in 4 points.

Chassis

Gear box: controlled synchronisation in all four gears, steering column gear shaft.

Ratios: 1st 3.52 to 1; 2nd 2.32 to 1; 3rd 1.52 to 1; 4th 1 to 1; reverse gear 3.29 to 1.

Climbing power: 1st 52% (1 in 1.8); 2nd 30% (1 in 3.3); 3rd 18% (1 in 5.5); 4th 10.5% (1 in 9.5).

Max. speed in the different gears: 1st 49 km/h (30 m.p.h.); 2nd 76 km/h (47 m.p.h.); 3rd 119 km/h (74 m.p.h.); 4th approx 160 km/h (100 m.p.h.).

Rear axle ratio: 1:4.10.

Engine speed at 100 km/h (62 m.p.h.) in the 4th gear 3470 r.p.m.

Clutch: F. and S. single-plate, dry.

Front wheel suspension: independent wheel suspension with trapezoid and triangular wishbone arms, coil springs with additional rubber pads. Hydraulic, telescopic shock absorbers, torsion bar stabilizer.

Front wheel suspension with engine transmission block, steering and torsion bar stabilizer mounted to "sub-frame".

Rear axle: single-joint-swing axle with low-placed pivot and thrust arms, coil springs with additional rubber pads, hydraulic telescopic shock absorbers, final drive with hypoid gears.

Brake system: hydraulic brake with Ate servo brake T 50; front Alfin, rear special grey-cast brake drums with turbo-cooling, brake shoes with automatic adjustment, front: 2 leading brake shoes, rear: 1 leading and 1 trailing brake shoe.

Steering: DB recirculating ball-type steering with automatic adjustment and steering shock absorber.

Size of tyres: 6.70-13 sports type with 4 plies.

Electrical system: 12 volt.

Battery capacity: 56 amp.h.



Exquisite elegance and a powerful 112 h.p. 6-cylinder engine endow the 2/4 seater touring coupe with its own distinctive character.

Dimensions :	220 S Sedan	A/C Convertible & Coupe
Wheelbase :	2820 mm (111 ins.)	2700 mm (106 ins.)
Track, front	1430 mm (56½ ins.)	
rear	1470 mm (57 7/8 ins.)	
Ground clearance approx :	215 mm (8½ ins.)	
Overall length	4715 mm (185½ ins.)	4700 mm (185 1/8 ins.)
Overall width	1740 mm (68½ ins.)	1780 mm (70 3/8 ins.)
Overall height (unloaded)	1560 mm (61 1/8 ins.)	1530 mm (60 1/4 ins.)
Turning circle approx.	11 m (36 ft.)	
Fuel tank capacity incl. reserve	64 ltrs. (14 Imp. gal.=17 US gal.) 5.5 ltrs. (1.2 Imp. gal.=1.5 US gal.) (change over tap)	
Octane rating of fuel	super or benzine-benzene fuel with a minimum octane rating of 86 acc. to Research Method (ROZ)	
Engine oil consumption	0.15 ltr./100 km	(235 m.p. Imp. pt. = 196 m.p. US pt.)
Weights		
Dry weight (without spare wheel and tools)	1240 kg (2730 lbs.)	1325 kg (2921 lbs.)
Curb weight of vehicle	1340 kg (2950 lbs.)	1425 kg (3141 lbs.)
Payload	450 kg (990 lbs.)	365 kg (805 lbs.)
Permissible total weight	1790 kg (3940 lbs.)	1790 kg (3940 lbs.)
Axle load, front	840 kg (1850 lbs.)	840 kg (1850 lbs.)
Axle load, rear	950 kg (2090 lbs.)	950 kg (2090 lbs.)
Performance		
Max. speed approx.	160 km/h (100 m.p.h.)	
Power weight ratio	12.4 kg/PS (DIN) or 11.1 kg/HP (SAE) = 24.4 lbs./HP (SAE)	
Standard fuel consumption	9.6 ltrs./100 km (29.4 m.p. Imp. gal. = 24.5 m.p. US gal.)	
Determined at 3/4 of the max. speed (mx. 80 km/h = 50 m.p.h.) less 10 per cent mileage.		

DISTINCTIVE in STYLING, COMFORT & ECONOMY

STUDEBAKER President Classic & Commander 1956

WITH ECONOMICAL V8 OVERHEAD VALVE ENGINE

PRODUCTS OF STUDEBAKER-PACKARD
COMBINING BEST OF BOTH

V.S.T. MOTORS PRIVATE LTD.
MADRAS-2.
SOUTHERN MOTORS
BANGALORE.

PHOENIX-4

Lambretting all the way from Italy, through Greece, Yugoslavia and the Middle East en route to Australia, are German born Felicitas Hauck (right) and Italian University teacher Cesare Battaglini. Photo was taken in Bombay. They were later in Madras en route to Australia from where they will return by an exclusive land route to Italy.



4,500 Miles on The Lambretta

MADRAS

Passing through Madras on the 10th of this month were the Italian doctor of Economics, Dr. Battaglini Cesare and his girl student in Literature, Miss Felicitas Hauck who are in the midst of a world tour on two standard model open type Lambretta Scooters, designed specially for the purpose and fitted with 5 gallon petrol capacity. The tourists who have so far seen practically every sight worth seeing and other monuments or building of attraction in several countries, visited the office of *MOTORINDIA* to tell us their experience in their 10,000 mile journey which they have so far completed.

The tourists left Italy on July 6th, this year and travelling overland through Yugoslavia, Greece, Turkey, Lebanon, Syria, Iraq, Iran, Pakistan and India, found the journey on the Lambretta very comfortable and exceedingly smooth without any mechanical troubles, except for a few punctures on route in their

THE WORLD Motoring Through the Motor Transport Operators of

By A. Serbin

It happened on the last day in July. An unusual bus, its bright yellow body framed in a red border, moving in the heavy traffic of Moscow's busy central streets aroused the interest of pedestrians. The outlines of valises could be guessed under the tarpaulin cover on the roof. The driver had a turban on his head. Two tiny flags, the Saffron, White and Green Flag of India and the Red Flag of the USSR, fluttered on the windshield.

We knew that a bus from India was expected in Moscow any day, and we were naturally eager to meet its passengers who were touring different countries. Seeing the bus stop in front of Hotel Metropole, we rushed across the street.

Finding that the Indian tourists

Michillin tyres.

The tourists told *MOTORINDIA* that considering that the roads were very bad particularly in Iran and other countries, with the exception of European countries and India, the performance of the Lambretta were really remarkable. They were doing the trip on an average of 150 miles per day. They said that the Scooters were very popular in Europe and they had heard that the same was the case in America. They had not been to America yet, but they propose to drive across the Americas in their two Scooters very shortly.

From Madras, they are proceeding to Calcutta and then to Singapore by road. From Singapore they will board a ship to Sydney from where they will proceed to Japan before reaching the United States. They hope to drive across the Americas by road before returning to Italy on the completion of their 45,000 road mile trip. They expect the Scooters to give them no trouble in their round the world tour.

Earlier, the tourists visited the office of Messrs. South India Automobile Corporation where they were entertained by the Manager.

had already departed to their comfortable rooms in this hotel which is quite well known to foreign tourists, I applied for and was granted an interview. After the long trip the tourists were enjoying their tea. An extra cup was brought in for me.

I learned that the fourteen passengers who came to Moscow from India were motortransport operators. This interesting bus trip through many countries of the world was undertaken at the initiative of Mr. Kundan Lal, Secretary of the All-India Motor Union Congress, and he himself headed the group.

The bus had covered thousands of miles before reaching the streets of Moscow, having set out from India on May 5th. After a sea voyage from Bombay to Basra, the travellers continued their trip by bus across the deserts and mountains of the Middle East. Before long, the bus from India was seen on the roads of Europe. Their way lay through Paris, Berlin and Warsaw, and now, they were in Moscow, at last.

"We are eager to learn as much as possible about the Soviet Union and thus assist in strengthening the friendship between the Indian and the Soviet peoples," Mr. Kundan Lal told me.

They had a very busy five-day schedule in Moscow, where they went sightseeing. At the Kremlin they were charmed by the ancient Russian architectural memorials and the unique collection of the Armoury, at the Agricultural and Industrial Exhibitions, where they spent practically a whole day, the Indian visitors were especially interested in the new Soviet automobiles. Naturally, they did not miss the opportunity of seeing the Moscow University buildings on the Lenin Hills.

They even managed to squeeze into their crowded schedule some purely business meetings. The visitors spent a few hours at the Ministry of Motor Transport and Highways of the RSFSR where they asked for information about the training of automobile drivers, their working

OF TRAVEL Countries of the World

India on a Pleasure Trip

and living conditions. Next, they wished to meet members of their profession. At the First Bus Stand of Moscow they were cordially received by their Soviet colleagues who were naturally interested in particulars about this trip.

"We have come all the way without a single accident," Mr. Kundan Lal told them; "not once did we have to change any part. It is not surprising, therefore, that our chief mechanical engineer, N. Singh, had practically nothing to do on the way. I should like to mention that the road from Brest to Moscow is so excellent that we were able to cover the thousand and one hundred kilometres (with stops) in thirty hours."

The Soviet drivers helped the travellers to get their bus ready for the remainder of their journey. Their bus was given a prophylactic examination at the bus stand, where starters were changed, filters cleaned and the battery charged. The Indian visitors were persuaded to take along a spare battery, for who knows what might happen on a long trip like that.

The workers of the stand invited their Indian friends to see the summer camp where their children were staying in a picturesque Moscow suburb. The children were delighted to see the Indian visitors, and when they noticed the YCL and Young Pioneer badges worn by some of them, they inquired:

"And where did you get them?"

"We received these badges," replied the Indian visitors proudly, "as presents from the children who turned out to welcome and cheer us on the way from Brest to Moscow."

The children of the Moscow drivers also wished to present some keepsakes to the Indian visitors, and every traveller left the camp with a red Pioneer tie.

From Moscow the Indian transport men went on to Kharkov, from there to continue their trip via Rostov, Krasnodar, Tuapse, Sochi, Sukhumi, Kutaisi, Tbilisi and Yere-

van. They were looking forward with interest also to their journey through Iran, Afghanistan and Pakistan.

While the Indian bus was speeding towards the Soviet-Iranian border, a motorcycle crossed the Polish-Soviet border bringing two other tourists from India to the Soviet Union, Ulkar Singh Oberoi and Gurdip Singh. After graduating from the University of Delhi last year, they set out on a round-the-world cycling trip. In eight months the young Indian travellers had managed to visit Iran, Iraq, Syria, the Lebanon, Turkey, Bulgaria, Yugoslavia, Hungary, Czechoslovakia and Poland. Their first lengthy stop on Soviet territory was at Minsk, capital of Byelorussia, where they attended an interesting meeting at the Know-Everything Club which arranges meetings of young people with persons who had been abroad on business or pleasure trips. The Indian visitors readily described their rich impressions.

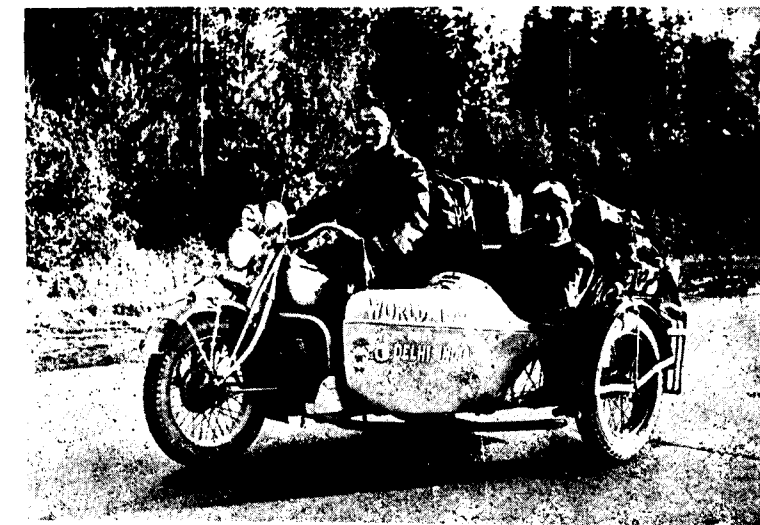
Arriving in Moscow on the afternoon of August 10, the two motorcyclists, saw the sights of the capital



The Indian tourists G. Singh and U.S. Oberoi in Moscow during a trip round the world. They are seen on Gorky Street.

and attended the Spartakiad of the Peoples of the USSR. From Moscow the tourists expect to go to Leningrad, then to Finland and other Scandinavian countries, before continuing through Western Europe. They look forward with pleasure to the reunion in Paris with two of their comrades from whom they had parted in the Balkans, in order to go together to America and Japan. This group of Indian tourists expects to be home in two and a half years.

"We should like to write a book about our round-the-world cycling trip," Upkar Singh Oberoi told me.



World tourists from India on the Moscow-Minsk highway.

COMMERCIAL VEHICLES

By
Ralph Feilden, *Motoring Correspondent*

Hundreds of goods and passenger vehicles in a variety of size and type, vehicle equipment and thousands of ancillary parts and accessories were on display at the 1956 International Commercial Motor Show at Earls Court, London.

This year's Show was the largest of its type ever organised in Britain. In the vehicle section itself, the latest goods and passenger-carrying transport from British factories were joined by some of the products of the U.S.A., Germany, Czechoslovakia, and, for the first time, of Holland and Sweden.

During the first six months of 1956 the commercial vehicle output of British manufacture was nearly 180,000 units. The number of buses, trucks, vans and other commercial vehicles exported amounted to nearly 84,000, which was 17,000 greater

FOR

than the combined exports of commercial vehicles of Western Germany, France and Italy.

A VERSATILE INDUSTRY

The Show revealed once again the versatility of the industry and the diverse types of vehicles available—from small $\frac{1}{4}$ -ton utility trucks to huge tractors capable of towing heavy loads over the varied terrain of world countries; buses and coaches specially designed and constructed for carrying passengers under every climatic and road condition; trucks, tankers, lorries of varying sizes, and vans for a diversity of purposes, also trailers with load capacities varying from $\frac{1}{4}$ -ton up to 100 tons or more.

Sound engineering, especially on the heavy side, has always been a feature of British commercial vehicle construction. The Show disclosed no departure from that policy. There was no pandering to novelty or un-

EVERY PURPOSE

orthodox designs which have no merit unless they can be justified by operational economy and sound construction.

In a few cases some firms revealed a somewhat unusual approach to the usual form of vehicle design. A case in point is the Leyland Atlantean air-conditioned 78-seater double-deck bus, incorporating a six-cylinder diesel engine mounted horizontally at the extreme rear of the chassis. In unit with the engine (developing 125 b.h.p. at 1,800 r.p.m.) is a semi-automatic epicyclic gearbox with four forward ratios. The drive is taken at an angle of 72° to a spiral bevel double reduction rear axle. Another interesting feature is independent front springing by torsion bars and double wishbones. Independent front suspension is also a feature of the Crossley Bridgemaster 82-seater bus.

SEMI-AUTOMATIC DRIVE

There are sound engineering principles behind the production of vehicles in lightweight alloys by Jensen Motors Ltd. With an unladen weight of 2 tons 17 cwt, the gross laden weight of a van giving unusually generous loading space is 9 tons. Despite the light body construction, strength is assured by adequate internal bracing.

Much ingenuity has been expended in lightening the task of the driver by simplification of gear changing by means of auxiliary controls representing a compromise between the normal gearbox and fully-automatic transmission.

Examples of this method are the monocontrol transmission with epicyclic gearbox operated by electro-pneumatic valves on an A.E.C. model. With no clutch or gear change pedal, this method provides two-pedal (brake and accelerator) semi-automatic control.

The driving of light vans upto $\frac{1}{2}$ -ton loads, is rendered easier by a

light-operated method of control incorporating a centrifugal clutch which automatically takes up the drive on throttle pedal depression, a vacuum-servo cylinder which operates the clutch during gear changes, and a control valve connected through a solenoid to an electric switch in the gear lever knob. This method provides two-pedal control with driver effort confined to moving a gear lever. This type of transmission is a feature in many light vehicles.

REDUCING DRIVER FATIGUE

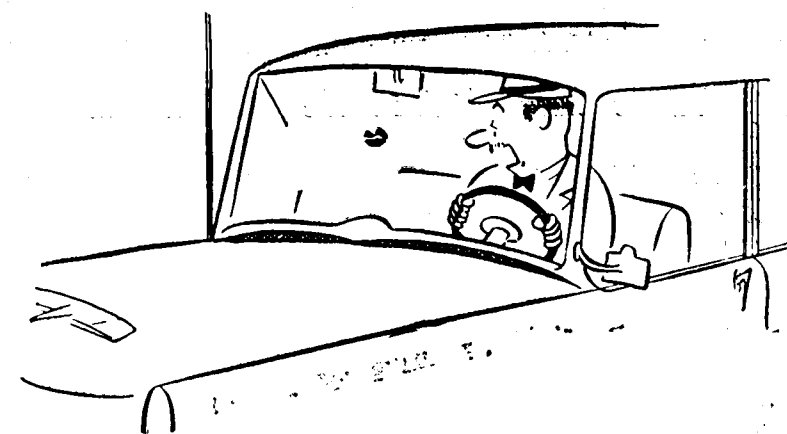
Multiplicity of cogs is the correct term to apply to many gearboxes. Five speeds are quite usual, but the Scammell six-wheel drive oilfield model has six-speeds and auxiliary 2-speed box, the E.R.F. Road Ranger powdered by a Rolls-Royce oil engine, has a 10-speed gearbox and exhaust braking, while the Foden eight-wheeler goes a step further with a 12-speed epicyclic gearbox. Some gearboxes are offered with fully-automatic transmissions, examples being the Borg-Warner and Hobbs. American experience with long hauls has revealed that automatic gearboxes make for greater operating efficiency and less driver fatigue.

On the heavy vehicles driver effort is further reduced by power-assisted steering. Many manufacturers offer power steering as an optional extra. But, the weight of the larger vehicles indicates that it will not be long before power steering will be standard practice.

NEW DIESEL UNITS

The diesel engine has entirely eliminated the use of the petrol engine in heavy vehicles, while the development in the range of small oil engines will ultimately result in all commercial vehicles being diesel-driven. The Perkins and other small diesels reveal the economics of fuel oil over petrol.

The latest small diesel unit is of 2,200 c.c. capacity, developing 54 b.h.p. at 3,000 r.p.m. It is for use in vehicles with capacities of $\frac{3}{4}$ ton to 2 tons. This engine has a distributor type fuel injection pump, used for the first time in Britain on a production diesel engine. In the



"I guess I haven't got used to these power-brakes yet."

larger diesel engines increasing use is being made of horizontal "flat engines" whose compactness renders them of value in being conveniently located under the floor, thus providing more goods or passenger space according to the type of vehicle in which they are installed. A typical example of the use of under-floor engine location is the Leyland World-master single deck bus, with a 34 ft. long body and 40 independently adjustable reclining seats. Diesel engines on show ranged from 50 to 200 b.h.p. and included vertical, horizontal, V-8 and V-12 air-cooled types, all mainly of the four-stroke type; two-stroke engines of Foden; and a Rootes three-cylinder six-piston horizontally opposed unit.

LOADING SPACE INCREASED

Representative examples of full-forward design were displayed by many firms. This method, incorporating the location of the engine alongside the driver, or alternatively under the seats, presents generous loading space relative to overall vehicle length. Undoubtedly the many examples of under-floor goods vehicles on display will attract vehicle users' attention to the potentialities of a practical layout. On the Albion "Claymore" the frame design permits a convenient low entrance cab for the driver.

Technicalities disclosed developments in improving conventional brake performance. Within the limitations of drum diameters and widths, most designers have concen-

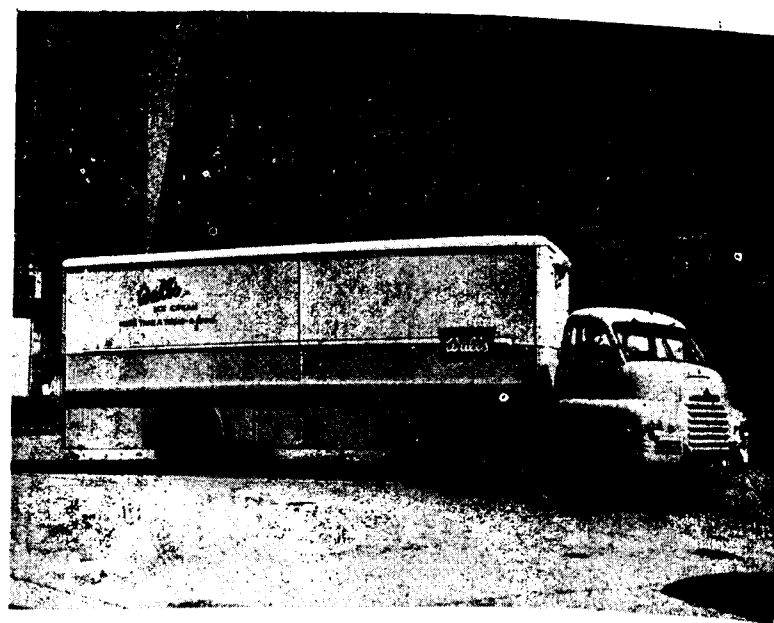
trated on increasing drum thickness to eliminate risks of distortion largely responsible for brake stresses and shoe grab. Several examples of exhaust braking systems were featured on heavy vehicles. This method supplements the action of normal shoe and drum equipment and reduces brake wear down long steep gradients encountered in many countries.

Exhibits emphasised an increase in the use of plastics. Glass fibre is used for drivers' cabs, in chassis components, and in bodywork. This material offers obvious advantages in toughness, simplicity of production and repair, also lightness.

TOUGHER TYRES

Tubeless tyres are on the increase. Manufacturers have been quick to realise the benefits of air retention, reduced weight, and ease of fitting and removal, as well as the elimination of a heavy spare wheel. Nylon corded giant tyres made their first appearance in Britain. They are claimed to offer outstanding strength, toughness, lightness, and more resistance to flexing, shock, and bruising.

The body section disclosed that British coachbuilders have nothing to learn from other countries. Luxury coaches were displayed in metal with stressed interior skin. The vehicle side of the Show revealed stabilization in sound design with a wide approach to new technical developments as they are formulated and perfected. Manufacturers of components and accessories are equally progressive.



A large capacity drop-frame refrigerated vehicle, built on one of the Big Bedford Units, exhibited at the Earls Court by Vauxhall Motors Ltd.

MOTORINDIA

November 1956

MOTORINDIA

21

Model apprenticeship under the mercedes star

Many Indians have obtained their professional equipment with Daimler-Benz

(From a Special Correspondent)

"Of course, there are Indians among our apprentices," was the reply to the query I put to the head of the apprentices' workshop in the Daimler-Benz A. G. in Stuttgart-Unterturkheim. "Last year we had seven young men from India. At present there are only three. Would you like to speak to one of them?"

A few minutes later a young man came into the office. He was obviously not born on the Neckar, but he is of the same energetic, alert type as his fellow-workers at the benches and machines in the apprentices' hall. Like them, he wears the badge of the Company—the Mercedes star—on his dungarees.

"This is Mr. Cadambi," the head of the department said by way of introduction. "Perhaps you will talk for a little to him and excuse me a moment."

The young man from India was greatly interested when he heard that I wanted to write an article for the Magazine.

Mahdau Cadambi, the son of a high-ranking civil servant at New Delhi came to Germany some time ago and, along with two compatriots, is at present working with Daimler-Benz. One of them, the son of a director of the Tata-Mercedes plant at Jamshedpur near Calcutta, has been here for the same time, while the other, a doctor's son, has been here six months more. All three graduated from the same school, the Doon School, Dehradun, and all three are serving their apprenticeship in the Daimler-Benz works. That takes three and a half years, after which they are going to study at a German technical high school, where they will qualify as engineers before going back home.

The young man gave me an account of his plans, accompanied by many expressive gestures, and told me about his work at the moment. He enjoys being here, and feels at home with the others in the shop. He is proud of what he has learnt already and is at present working in the wood-pattern shop.

Mr. Cadambi also told me about the training shop that has been established in the Tata-Mercedes plant at Jamshedpur. Fifty or sixty young Indians are being trained there under the supervision of an experienced teacher from the Daimler-Benz works in Gaggenau. The venture seems to be so successful that plans are afoot to take double the number of apprentices.

In the course of conversation with the head of the apprentices' workshop I learnt that he had nothing but praise for the young men from India. They are both quick and willing. He also takes an interest in them outside of the works. Cadambi, his two compatriots and most of the other foreign apprentices either live with master-craftsmen or are often in their homes. The Indians keep close contact with their compatriots in Stuttgart and with the very active Deutsch-Indische Studiengesellschaft there. Otherwise their lives do not differ from those of Germans of the same age and with a similar educational background. They have settled down in the works. After acquiring indispensable skills in handling tools and machines, they work at assembling and checking engines, then at assembling front and rear-axles and gears; finally, if time is left, they are sent to the repairs department. I was particularly struck by one of the apprentices, a bearded man in a turban, and was told that his gentlemanlike bearing and the high level of his work has made a deep impression on the German workman.

Apprentices from all over the world

All the Daimler-Benz plants take foreign apprentices and trainees. In Unterturkheim alone there are at present 30 foreigners, from China, India, Lebanon, Irak and Iran, from some of the South American States, Holland, Sweden, Norway, Iceland, France and Belgium. Last year the trainees in Unterturkheim also included young men from Natal, the Sudan, Saudi Arabia, Spain and Switzerland.

Foreign apprentices are, of course, on the same footing as their German comrades as regards the welfare arrangements of the plant. They are examined by a doctor regularly and share the weekly gymnastic practice in the gymnasium belonging to the plant. They also receive the same maintenance allowance and eat with the German employees in the canteen, where they get a good meal at midday for 30 pfennigs. There are sometimes, as is to be expected, some difficulties in connection with meals. Sometimes, for instance, Mohammedans are not allowed to eat the food provided. But such cases are exceptional, and nobody has ever starved. As a rule, they have a good appetite for everything that is served, including Swabian national dishes, and they enjoy their food.

Practical demonstration all-important

At first, when the main object is to teach apprentices the simplest manual skills, mastery of German is not the most vital factor. It is almost more important to demonstrate a mechanism practically than to explain it in words. The optical impression is the main thing, and it is the teacher's first duty to show how a tool is handled and how a machine works. His aim is to impart his skill and experience to the young people in his charge. And on his success depends the entire range of apprentice training.

Since the firm of Daimler-Benz has a total staff of 48,000, it can draw on an almost inexhaustible reserve of instructors. The proportion of highly qualified skilled workers is above the average since more than 25% of the staff have been more than 25 years with the firm.

It might be of interest to look more closely at the team of instructors in the apprentices' shop at the Unterturkheim plant. Herr Felger, the head, began his career as a mechanic's apprentice. After qualifying as a journeyman he worked in various factories. Then he attended a School of Engineering, from which

he graduated before he took up work in precision mechanics. He joined the staff of Daimler-Benz in 1938 and since 1945 has been in charge of the training of apprentices. His collaborators, 10 masters and three foremen, are selected from the best qualified workmen, who have also proved their worth in the field of human relations. Four of them started as apprentices in Unterturkheim. They have all been employed in the apprentices' workshop for 11 years and more than 1,000 young men passed through their hands this year.

Up-to-date machines and tools

They have a whole part up-to-date machinery at their disposal. The equipment of the apprentices' workshop includes 45 turning lathes, 10 cutters, 6 grinding machines, 1 boring machine and 12 drills, 1 diesel passenger car, a petrol engine, all the special tools used in the plant, and measuring devices allowing an end measurement of 1/1,000 mm.

The training workshop is located on the top storey of the highest building in the big Unterturkheim plant and so it has more light and sun than any other of the workshops. The shop is more than 300 feet long and about 60 feet wide. The front is reserved for the youngest apprentices, about 100 in all. They have passed a severe examination, having had their abilities checked by a career adviser in the Labour Exchange before being selected from the many candidates for admission to the Daimler-Benz workshop as apprentices.

Here they are now trying to file out of a piece of iron a cube with accurate angles and smooth surfaces. Every operation is demonstrated beforehand, of course, and they do not take long to be adept at handling material and tools. Tasks are graded according to a well-devised system that has been tested and improved over a long period of years. Every now and then a new tool is introduced, involving a new task. The walls are hung with teaching aids, and specimens of work by former apprentices made after their first year are exhibited in glass cases as an encouragement to any who might be overcome with despair at the difficulty of some operation. And when they have their first year behind them they

really have accomplished quite a lot in the way of filing, bending and shaping sheet metal, boring, sawing, screwing, welding and fitting all sorts of shapes and sizes together.

A basic training is the foundation

This systematic basic training is essential for all apprentices. Without it, they might later have to use tools they have not learnt to handle. It provides the foundation for the subsequent years of training. The apprentices' department in Unterturkheim gives instruction in 12 different branches, viz., motor mechanics, tool makers, engine fitters, electricians, turners, works mechanics, thin plate workers, formers and moulders, mechanics for the tempering shop, varnishers, wood-pattern makers, material testers, workers in chemical and photographic laboratories and technical draftsmen, in every case in accordance with the requirements of the trade or profession in question. In Unterturkheim everything is taught that is necessary for the manufacture of the motor chassis. Other trades are more prominent in other Daimler-Benz plants. In the Sindelfingen works, for instance, which makes car bodies, 30 saddlery apprentices are being trained.

Work by hand and machine progresses in difficulty. Apprentices in their second or third year display a certain confidence as they stand a lathe or machine. They still require to be advised and supervised, since it is now a question of learning all the special tricks of the trade whose mastery will distinguish them from the rank and file of workers in later years. Here and now they acquire the "know-how" that will later stamp the quality of every product they plan and execute. They, too, are responsible for the reputation of the high quality of German workmanship.

In their second and third years, apprentices have to perform their work according to a set time. Many of them are sent to various departments of the plant to work under a journeyman. There is, of course, no hustling in the training shop, but the boys themselves see how they are progressing by the time they take and by the quality of their workmanship, and recognise



DRIVING UNDER-WATER

Almost completely submerged a lorry is seen being driven through the wading pit at the British Ministry of Supply's Fighting Vehicles Research Establishment in Surrey, during a demonstration of the latest British Army vehicles. The exhibition was staged to show that many of the vehicles developed for military purposes are particularly suitable for comparable civil work in which exceptional demands are made upon strength, power and ease of handling. Among the 2,000 visitors attending the exhibition were prominent industrialists from all over the world, and military, diplomatic and trade missions from Commonwealth and foreign countries.

how much they must still learn. Accuracy, however, has always priority over time, and there are everywhere evidences of the success of this principle. We see devices for squeezing out metal, for roughening brake linings, a wood-pattern vise and many other products any precision mechanic would be proud of.

Training shops since 1917

Before the training workshop was established at the Daimler-Benz factory at Unterturkheim in 1917 apprentices were trained in the various departments of the plant. The training workshop has grown steadily and has at present 325 apprentices and about 70 trainees, including 30 foreigners, who are acquiring the technical skills necessary to the student at a technical college. At present about 2,000 apprentices are being trained in

all the Daimler-Benz works in Germany. Most apprentices stay on in the works as journeymen, and many of them are on the staffs of Daimler-Benz and affiliated concerns abroad, where they work as foremen and masters, as heads of shops and constructors.

Generous welfare arrangements

This intensive training of the young is naturally expensive, costing about DM 1500 annually for every apprentice. Before taking up work every apprentice is sent for a fortnight to the holiday home in the Black Forest belonging to the Daimler-Benz plant, in order to prepare him physically for his new job. During the first year apprentices are given a monthly allowance of DM 65, and this is increased by 10 marks every year. Apprentices also receive the full bonus at Christmas. Mention has already been made of the midday meal for 30 pfennings and of the medical attention. Seventy orphan apprentices get their midday meal free.

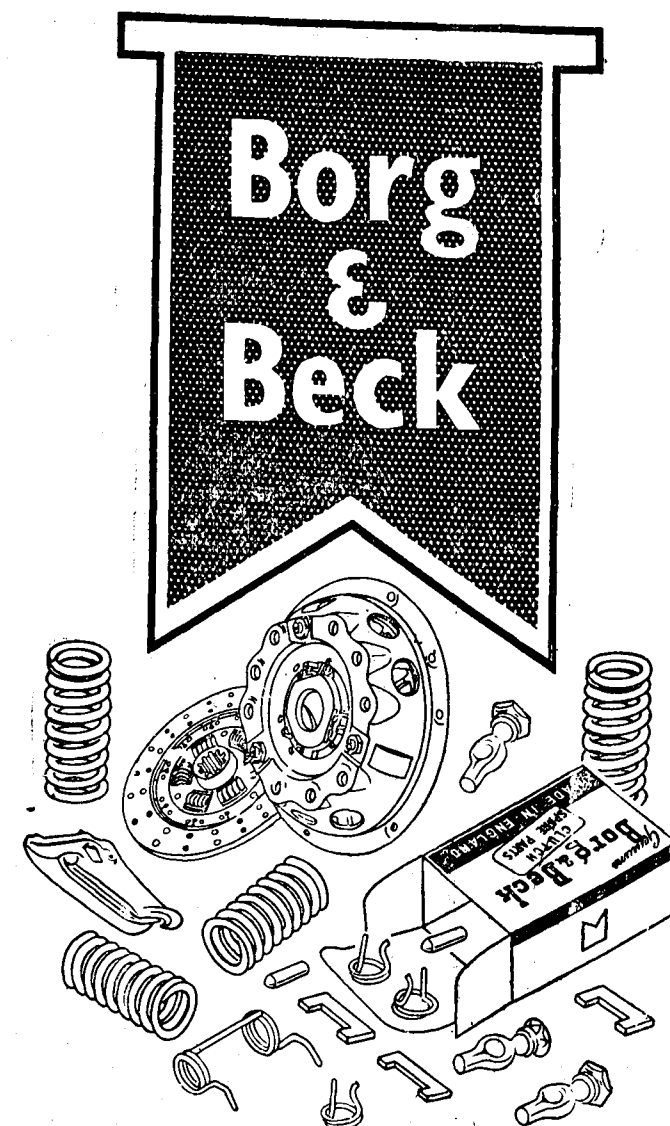
Theory is not neglected

In view of the demands made today of every skilled worker it is obvious that theory and practice must go hand in hand. One day in the week is devoted to lessons at the vocational school. The instruction given there is supplemented by lectures and courses in the halls of the training department in cooperation with the school staff. There is a library which is popular with apprentices. This balance of theory and practice is probably one of the main reasons for the success of the Daimler-Benz training system.

The men in charge of the technical training of these apprentices have from year to year become increasingly responsible for their all-round training and have thus greatly extended their sphere of influence. The workshop instructor pays as much attention to the growth of the apprentice's character as he does to his charge's progress as a reliable and skilled mechanic. The works provide an increasing opportunity for the development of the apprentice's personality, and the results achieved in this respect in the Daimler-Benz plant are encouraging for the future.

(Courtesy—The India Magazine)

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CLUTCH SPARE PARTS

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**AUTOMOBILE PRODUCTS
OF INDIA LTD.**

BHANDUP, BOMBAY 40.

PSAP-67

MOTORINDIA

November 1956

Madras Motor Parts Dealers

Throw Open Membership to All India

annual report marks progress and increased membership

MADRAS

The Annual General Body meeting of the Madras Motor Parts Dealers Association was held on the 10th instant at the office of the Association in General Patters Road under the presidency of Mr. P. Chandriah of Messrs. Modern Automobiles, President of the Association.

At the outset, the meeting approved the minutes of the last Annual meeting and adopted the 13th Annual Report and Statment of Accounts presented by Mr. S. Natarajan, the energetic Secretary of the Association. The Report inter-alia stated that the Association's membership increased to 101 out of which 30 members were from the Mofussil areas.

During the first part of the year, the Import Policy of the Government on Motor Spare Parts, as formulated under the Red Book, outlined a number of new restrictions. Several items were included in the restricted list, the issue of Import Licences for those restricted items having been very much curtailed. The Duty on certain items was also unduly enhanced. The Association took up the matter and made representations to the Government of India, Ministry of Commerce and Industry. The import Policy of July-December 1956, viz., the second period of the year, relaxed the re-establishment of quotas for items under list III, while increase of quota percentage on restricted items and complete removal of restrictions on many items as pointed out by them were still under consideration.

The Report added that a deputation met the Chief Controller of Imports, Madras, when he visited this place on the 2nd May, and submitted a Memorandum, pointing out the various anomalies in the Import Trade Control Policy : and one of the main points stressed was the extension of the validity of the

above Import Licences for the Import of Diesel Engines, issued for the period July-December 1955. It was gratifying to note that the Chief Controller, Mr. S.N. Dilgrami then and there conceded the point and consequently the validity of the above licences for Diesel Engines was extended by another six months from the dates of expiry which enabled the importers to get their shipment effected.

The Report also stated that the members of the Association contributed liberally to the Cyclone Relief Fund and presented a cheque for Rs. 4,115 to the Governor of Madras for this purpose. Another interesting point which was mentioned in the Annual Report was the fact that the Association was affording its best assistance to Members in taking up matters with customs and the Government authorities whenever any difficulty was experienced. The Report expressed pleasure at the progress in the number of members during the year and sincerely

hoped that the ensuing year would mark more and more interest being evinced by members in the affairs of the Association to make it more useful for safeguarding the interests of the Trade.

The General Body then unanimously elected Mr. V. Kunjitapadam of Messrs. Bharat Motors as President for the ensuing year and the following as members of the Committee : Sri S. Natarajan, Auto Parts Trading Co., Sardar Manohar Singh, Singen & Co., (India), Sri M.K. Govindaswamy, Kannappa Motor Stores, Sri InderSain, Upper India Trading Co. Ltd., Sri P. Chandriah, Modern Automobiles, Sri S. S. Kalyanpur, Automotive & Allied Industries Ltd., Sri V. Narayanaswamy, Madras Mercantile Agencies Ltd., Sri V. A. Neelakanthan, Associated Accessories Ltd., and Sri T. S. Krishnamurthy, Motor and General Trading Co. (Please see photo on page 41.)

The meeting passed resolutions empowering the Executive Com-



Mr. P. Chandriah, the outgoing President and Mr. V. Kunjitapadam, the new President of the Madras Motor Parts Dealers Association at the Anniversary Celebrations.

MOTORINDIA

November 1956

25

President Kunjitapadam advocates

mittee to coopt two more members for the Committee, and making the membership of the Association available for all motor parts dealers doing business in any part of the Republic of India.

The Secretary Mr. Natarajan reported that to make the voice of the Association more effective in matters of interest to the Trade it was necessary that they should get the Association affiliated to some Chamber of Commerce in the City. He said that from practical experience he was glad to say that they got all the assistance and cooperation during the recent period from the Andhra Chamber of Commerce in various matters.

Mr. InderSain said that it will appropriately reflect their cosmopolitan outlook if the Association which consisted of a large number of automobile dealers would affiliate themselves with the Andhra Chamber, thus cementing the cordiality that existed between the Tamils and Andhras. The meeting finally

resolved to affiliate itself with the Andhra Chamber of Commerce.

Mr. P. Chandriah, the out-going President in a short speech thanked the Members on behalf of himself and the out-going office bearers for what they have been able to do during the last one year. He offered his special thanks to Mr. Natarajan, the able Secretary and the other members of the Committee who were of immense help during the year of his Presidentship in tackling many important problems. He was glad to say that once again there was no contest for the post of President or for the Committee and that Mr. Kunjitapadam, well known for his mature thinking and good work, has been chosen as their President.

It was not enough if they met once in a while and just discussed current issues. "We must explore ways and means to maintain the sustained interest to meet major problems which are always there in some form or other."

With a vote of thanks by Mr.

Natarajan, the meeting terminated.

Office-bearers

A meeting of the newly formed Executive Committee of the Madras Motor Parts Dealers Association was thereafter held under the Presidency of Mr. V. Kunjitapadam. The Committee coopted Messrs. S. M. Subramaniam of Messrs. Modern Distributing Co. and K. Vasudevan of Overseas Manufacturers Sales Co. The meeting also elected the following office-bearers among the Committee members, Mr. P. Chandriah, Vice-President, Mr. S. Natarajan, Secretary, Mr. V. N. Narayanaswamy, Joint Secretary and Mr. S. M. Subramaniam, Treasurer.

Dinner

In connection with the Annual General Body meeting the Madras Motor Parts Dealers Association held a delightful dinner party in the spacious lawns of new Woodlands Hotel when over a 100 Members of the Association were present. Guests were received by Mr. S. Natarajan,

all-India effort to face issues

Secretary. The members spent over a pleasant hour at dinner. After dinner Mr. V. Kunjitapadam, President made a short speech in the course of which he thanked the Members who have elected him as President and added: "What I can do is just in proportion to your active help."

We cannot live apart from the rest of India. Our Map is redrawn to constitute 14 States and 6 Territories. In that redrawing, Madras State has shrunk to just 13 Districts, that shrinkage raises the most difficult problem.

Secondly Import Licence, Sales Tax and Road Transport are raising difficulties. Restricted items of import on quota-percentage basis, intending and other types of manufacture and the new found impulse of the States—all are just head-aches. Above all, scarcity of foreign exchange is the toughest nut to crack.

How are we going to face all this issues? It cannot be done by an annual meeting or even occasional conferences. It cannot be done

even at State level. An All India effort is advisable and should be made possible to reconcile the various conflicting interests.

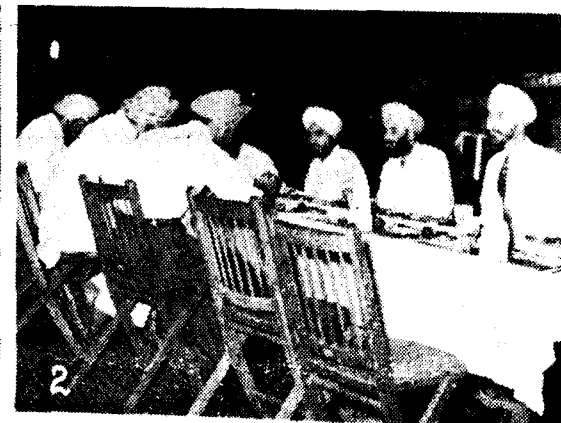
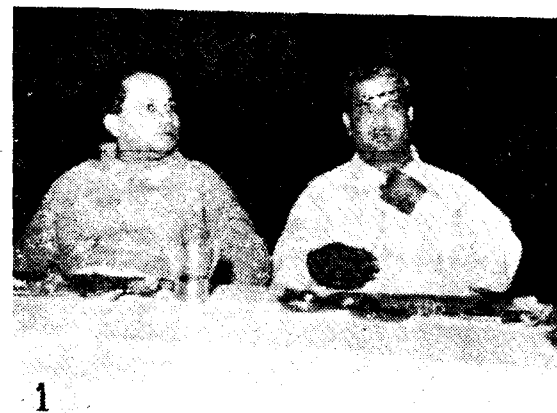
From 1950, we had shocks from Manufacturers, margin of profit fixation, quotas, changes in our inventory and so on. Casualties are also not unknown.

Since we are of the trading sector, every one assumes our wealth and draw on us for various charity and institutions etc. To the best of our ability, we have responded. But our problems and difficulties remain our own and we have to seek solutions.

To discuss and resolve we must be united, strong and unselfish. For the greater good of our Trade, we must efface petty loyalties and small considerations. With the expansion of Transport in the Second Plan, our trade is bound to prosper. That prosperity we must share and share alike and gather the enduring respect and love of our clients. Let me hope for such a future.

Photo taken at the Annual Dinner Show.

1. Mr. S. S. Kalyanpur and Mr. V. R. Sivaraman.
2. "Birds of the feather flock together" to partake of Rice, Sambar, Rasam, etc.
3. Mr. Bhalla, Mr. Gian Singh and Mr. Satpal.
4. The main table.
5. Mr. Chandriah and Mr. L. L. Narayan.
6. A General view of one of the tables.
7. Mr. Kunju addressing the members, and
8. Mr. S. N. Ramasamy and others enjoying a drink.



S. R. V. S. celebrates fifteenth anniversary

MADRAS

"I have found that there were certain basic difficulties connected with State undertakings. I do not blame anybody; I do not blame anything except human nature. If a person is certain of his salary and has nothing to do with the results of his work, he is likely to take things easy. And that is not a peculiarity of the Indian mind or the Indian temperament." Thus said Sir C. P. Ramaswamy Ayyar, who as a former Dewan of Travancore, was one of the first administrators in India to order the taking over of the bus transport system in Travancore by Government several years ago, presiding over the fifteenth anniversary celebrations of Sri Rama Vilas Service, Kumbakonam recently.

Mr. S. Anantharamakrishnan, Chairman of the firm, had earlier requested Sir C. P. Ramaswamy Ayyar to give them the benefit of his experience as an administrator and statesman on the important questions on the economic front, including the nationalisation of road transport etc., vis-a-vis the Second Five Year Plan.

The Anniversary function commenced with a puja in front of a well decorated Lord Rama's picture which was attended by the members of the staff of S.R.V.S. and its Chairman, Sri Anantharamakrishnan. The guests for the function were entertained. After a group photograph was taken, there was a garden inspection at which Mrs. Lund, wife of Mr. A. J. Lund, Director and General Manager of M/s Simpson & Co. Ltd., adjudged the winners. The visitors also examined the Technical Exhibition displayed by various sections of the factory. The white crowd in the exhibition attracted most of the visitors.

Dr. Sir C. P. Ramaswamy Ayyar then declared open a new Reception Room in the Service Station. Addresses of welcome were presented to Dr. C. P. Ramaswamy Ayyar, the Board of Directors and to Sri Arogyaswamy, Director and General Manager of Sri Rama Vilas Service Ltd. Medals were distributed by Mrs. Lund to the employees of the firm who have completed 12

years of service. The pleasant function terminated with dinner for the hundreds of guests.

Sri S. Anantharamakrishnan, Chairman, Board of Directors, Sri Rama Vilas Service (Private) Ltd., welcoming the gathering earlier said *inter alia*:

This is essentially a workers' festival. Fifteen years ago, the S.R.V.S. was established in this town with a few buses and on an occasion like this it is usual to say all the things that have happened during the last 15 years to the Company and to the workers. I am not going to do the



Mr. S. Anantharamakrishnan, Chairman, speaking at the SRVS fifteenth anniversary celebration at Kumbakonam.

same thing this year, and seeing that we have a very distinguished President today in our presence, I am going to request him to give us his views on many of the burning problems of the day confronting the Industrialists and various other sections of the community.

The future Historian perhaps will record this age as the age of liquidation; we have successfully liquidated the Maharajas and Rajahs, we have liquidated the Zamindars, we have liquidated the landlords, and we are in the process of liquidating

the Industrialists, the commercial community and the rest. The problems facing the industrialists, the Merchants, the Traders and the Commercial Community in general are so important. I think people at large do not appreciate quite what is happening.

I would like your views, coming from your vast and wide experience and your mature wisdom, on some of these problems and would request you to give us your advice, how you think these could be successfully tackled or solved. I would only mention a few problems, in which we need or we would solicit your advice.

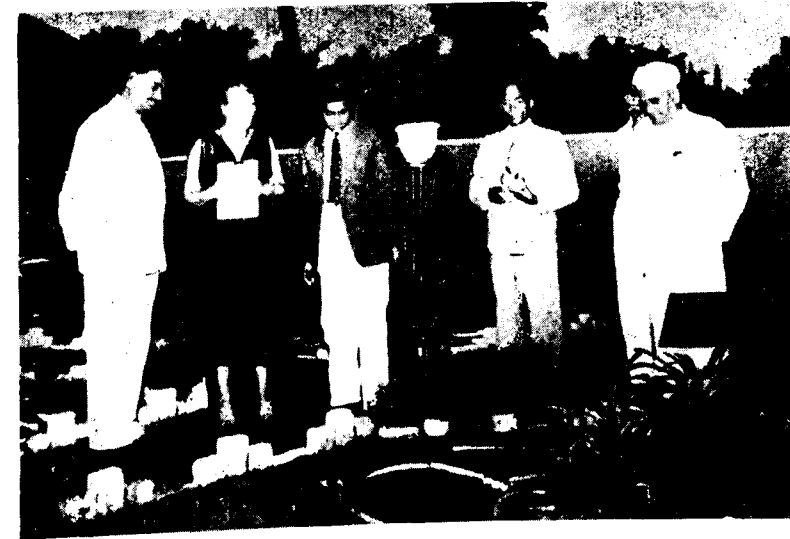
There seems to be a keen controversy about the respective places of the private and the public sectors in the economy of the Country. Let us pause for a while and see exactly what private sector has done to this country during the last several centuries. Even today the private sector is performing almost 95% of the economic activity of the Nation. Private sector does not necessarily mean a few rich businessmen who may be coming from Bombay or Calcutta or Madras. Private sector includes tens of thousands of smaller merchants also, who have been performing during the last few centuries a very valuable task. In fact, without those people the whole economic set-up of the Country would have been paralysed long, long ago. In the circumstances, therefore, to talk of the private sector doing away with and to stigmatise them is not doing the correct thing by the private sector.

After all, the public sector has come into being only during the last few years, probably 10 years, as against the private sector which has not only been in existence for centuries but has also been performing a very useful service. I feel—and there are many thousands of people who feel this way—that the private sector has still a very important role to perform. It can only be performed by the private sector and the Government should give them all the opportunities to render the service that they are capable of rendering to the country.

NEW RECEPTION ROOM DECLARED OPEN

After all, service to the country may take several forms. To run the business, to be in charge of the economic administration of the country is as important as politics. AND I THINK IT IS ONLY RIGHT THAT THIS IMPORTANT FACT, THE PART PLAYED BY THE PRIVATE SECTOR SHOULD BE RECOGNISED BY THE GOVERNMENT AND AN EVEN MORE IMPORTANT PART ASSIGNED TO THEM IN THE YEARS TO COME.

After all, if you examine the problem a little more deeply, I do not know why the Government should want to take over the responsibility of running the administration under the public sector, while even by allowing the private sector to do the job, they still get the cream of the profits made by the private sector. If I had the choice of having to do the work and collecting the money at the end of the day and that of not doing the work and still collecting the same money at the end of the day, what should I choose? Taxation today gives the Government the bulk of the revenue of the business houses; taxation, controls and the various things could bring the business in the private sector under very, very strict check. The departments of the Government, they get the bulk of the profit, they decide how much the private sector should pay the labour, they decide what amenities they have to give them, they fix up the prices, they fix up the margin of profit and in fact they fix up everything. After doing all this and collecting the bulk of the profit from the private sector as taxation, why should the government want to take over the responsibility of running the business? I suggest that the private sector can do a very, very useful service as the Government wants them to do, to raise the standard of the people in much shorter time than what the public sector will ever do. And I think the Government should give an opportunity to the private sector to do what they can to prove their claim. If at the end of 25 years, if the standard of living has not been



Mrs. Laud judging at the Garden Competition—
Mr. Arokiaswamy is on her left.

raised by the private sector, then that is the time to put them all in the van; not before you had given them a chance to see what they can do.

Then there is Nationalisation, various Laws, Labour Laws and others which are coming by the hundreds; I think a little caution there, a little slowing down in passing these Acts, is necessary. There is no need to rush about passing—I was told that in 12 months time something like 300 different enactments have been passed through the Lok Sabha.

Last year, the Companies Act was passed with 780 Sections controlling approximately 30,000 companies. They have not had the time to study them and the Companies Act contains about 75 penal provisions. 30,000 Companies have been operating in India for probably 50 years or more and I do agree there have been black sheep amongst the Company Managers, Company Directors and the Company Promoters. But blacksheep have been found elsewhere also. There are good and bad people in all spheres, and legislation controlling all the good, bad or indifferent, the whole of it on the same part, is not the answer.

There are a number of other problems like Nationalisation. Here also I know you are probably one of the earliest to decide on the Nationalisation of Transport while you were Dewan of Travancore. Maybe that your ideas about Nationalisation have changed just now; I hope it had. Nationalisation is not the remedy for our Country. We have not developed yet that spirit of selfless service to the State as has happened in other parts of the World. It will take time; we shall do this probably 10 or 20 years hence, we shall probably be able to, our public servants will be able to discharge their duties as well as the private services or private industries. But at the moment it is too premature to do any wholesale Nationalisation. Whether it be of Insurance, whether it be of contemplated Banking, or whether it be of any other line, the idea of Nationalisation should be given a rest for a few years and by the end of the Second or Third Five Year Plan if the Government have not achieved the results which they expect the private industry and other people in the commercial set-up to achieve, if they have not produced the results, then that will be the time for the Government to step in;

"It is too premature

for wholesale Nationalisation"

—S. Anantaramakrishnan

they will have a very valid argument then. But at the moment there is no valid argument for Nationalisation.

The biggest Nationalised Industry is the Railways in India. Almost a fourth of the expenditure of the Second Five Year Plan is laid down on Railway. Can anybody take credit for the way in which they are running the Railways as compared to the efficiency of the Railways displayed in other parts of the World? Here is an Industry where we have invested about 1,000 crores or more, and 1,000 crores is two year's total income of the Government of India. Why don't you put that right first? To get a wagon it takes 2 months. It is true that they have done quite a lot. But at the same time there is so much more to be done. **I think the Government should try and perfect what they have undertaken to do instead of launching on all sorts of new things under the public sector.**

Many people have stated that the success of the Second Five Year Plan depends entirely on the provisions of adequate Transport—Rail as well as Road. Many people have written voluminous things on the bottleneck of the Transport and how it is even feared that the Second Five Year Plan would fail because the transport arrangements are not adequately made. How can we make them? It is not enough to depend entirely on Rail Transport. The road transport is a very important branch of the Transport field and it has been catering to the needs of the commercial and the agricultural community in the country. A lot of money has to be spent on roads, extension of roads, formation of new roads. Cheaper transport has to be made available and we have to educate the people to go in for modern methods of Transport. But everybody feels that unless something is done on

the transport side the success of the Second Plan may be jeopardised."



Sir C. P. Ramaswami Ayyar who presided, addressed the gathering.

Sir C. P. Ramaswami Ayyar, in his presidential address, said:

"I came here last in 1951 and have noticed with admiration and satisfaction the variegated developments that have taken place and the improvements that have been effected.

MUCH OF THIS WORK, MUCH OF THIS ACHIEVEMENT, IS DUE TO THE INDEFATIGABLE EFFORTS, AND, IF I MAY SO TERM IT, THE MISSIONARY ZEAL OF MR. AROGYASWAMI. I KNOW HOW IMPETUOUS HE IS AND HOW HE HAS BUILT UP THIS ORGANISATION FROM THE BEGINNING TO THIS, A GREAT PICTURE OF PROSPERITY AND WORK OF DIFFERENT KINDS WELL TRANSACTED AND WELL COMPLETED. I HAVE THEREFORE GREAT PLEASURE NOT ONLY IN

TENDERING MY CONGRATULATION ON THIS FIFTEENTH YEAR OF THE EXISTENCE OF THIS ORGANISATION, ON THE EFFICIENCY OF THE SERVICE THAT IS CARRIED OUT, BUT UPON THE HARMONY THAT EVIDENTLY IS ONE OF THE FEATURES OF THIS ORGANISATION.

One can see that, from the way in which Labour has behaved in this organisation for the last 15 years, it has been satisfied. In essence what has been done—beginning from hair-cutting down to the laundry—the kind of services that are being rendered voluntarily to Labour by the Management has made the Labour corps contented and happy.

And that is saying a great deal. And now, my good Friends, after having dealt with this organisation, I cannot omit to realise that this organisation is part of that great system of Amalgamations of which the chief captain is Mr. Anantaramakrishnan. Amalgamations comprises of 15 companies and employs four to five thousand workers.

I shall have to narrate my own personal experience. I have had experience for over 30 years practically of State enterprise and its contact with private enterprise. I came very early to the conclusion before the idea of the Welfare State was developed or evolved in India as a whole, before the idea of the Police State was taken away from the forefront of the picture, when I was more or less a bureaucrat serving under an essentially bureaucratic Government, the Government of Madras, and I maintain it now, that there are in essence and of necessity certain industries, certain enterprises, certain schemes which are best dealt with by the public, on behalf of the public

"Private Enterprise is the best cure"

says Sir C. P.

and through the instrumentality of the Government. Those enterprises and those business include the creation, the management, the inauguration and the development of great public utilities which, in the nature of things, private enterprise cannot possibly deal with. One of those schemes is the harnessing of great rivers and sources of power. Without all the resources of the State at the command and those resources being utilised to the full, you cannot possibly make any use of the river tracts, of great reservoirs and the great cataracts and waterfalls—artificial or natural—for the purpose, either of irrigation or of channels or canalisation or for the production of Hydro-Electric power. That was proved to me very effectively and definitely at the beginning.

I turned my attention later on to another aspect of State enterprise which was transport. I came to the conclusion, which the Five Year Plan now reiterates and reimposes that the whole of the commerce, the industry, the industrialisation of this country, whatever other things might be done or not done, essentially and finally depends upon an efficient system of transport. My dream then was—and I have stated that over and over again—my dream then was not to use but to take advantage of the great rivers of India. Soon after I had assumed responsibility for irrigation, I found what Russia had done. Russia had done a great piece of work in connecting by a system of canals and channels, the northern rivers of Russia with the Volga, with the result that today in the Soviet Republic there is a system of waterway coming from the north of Russia to the South of Russia which allows water transport for all manufactured and agricultural products. Water transport, especially canal transport is one-third as cheap as railway transport and, therefore, Russia had evolved that system by means of a State-wide canalisation, utilisation of the rivers and having a canal cut right across from one end

to the other. And taking advantage of the difference of levels from place to place they have developed what you might call Hydro-electric centres nuclei. Not large reservoirs as latterly is the Indian practice, but small reservoirs each of them being the nucleus of a widespread net work of hydro-electric small scale industries. And from that point of view also it was found by me, after certain negotiations, that without the possibility of the co-operation of many States and many political units such a project cannot come into effect.

I am very glad to say that after these 25 years, within the last six months, the Government are considering the possibility of starting some such canal system. Now, that obviously, essentially will be and must be a state-controlled affair. That system of connecting, let us say, the Ganga with the Cauveri or the Ganga with Thambrabarani—taking advantage of the differences of levels and making it possible for various small enterprises, small scale industries spring up in addition to waterway transport all those things can only be done by State enterprise.

That having been stated, I come next to another experience. After these two projects were started, I engaged in the system of State Transport and I found that there were certain basic difficulties connected with these State undertakings. I do not blame anybody; I do not blame anything excepting human nature. If a person is certain of his salary and has nothing to do with the results of his work, he is likely to take things easy. And that is not a peculiarity of the Indian mind or the Indian temperament. About 7 years ago I was in Newzealand. I travelled a great deal in Australia and Newzealand. Newzealand is a country of State-enterprise in every direction and from every point of view everything is done by the State. You have only to attain the age of 65, whether you are a man or woman, and whether you like it or not you are offered a pension, you can decline it, but you get it. You are given free

medical aid. You are not only given free medical aid, but any prescription given by the Doctor you hand over to any shop and they must give you the medicine free of charge. There are maternity benefits, old age benefits, injury benefits and practically every aspect of life is ordered by a kindly and paternal Government and all enterprises are practically State-owned. They told me—the Ministers in Newzealand told me—that the incentive that there was to concentrated work was disappearing in Newzealand and people were getting lackadaisical and lazy. Now, so far as Government Officers are concerned, a Government servant comes at 10 o'clock—if he comes 5 minutes earlier, he can go into the retiring room and come back at 10 o'clock—and as soon as the lunch hour strikes he goes off. Supposing there is no result produced in the day, there is nothing to bother him and it will be very difficult for a Government to take charge of the output of an enterprise and see to what is called a zealous performance on a competitive basis.

I say also that from my experience of the State Transport which, on the whole in Travancore is doing fairly well, but not so well as it should have done. But there were other enterprises which I started—Potteries, Fertilisers and various other things. **Everything that was started on a Government basis has slackened a bit. Many things started on a private enterprise basis have succeeded. And therefore I have found that apart from what may be called the great State monopoly or public utility, ordinarily private enterprise is the best cure and the best method of dealing with private transactions, and competitive work and industry and commerce will best be served by the encouragement of the private sector.**

Now assuming, however, I am wrong and Mr. Anantaramakrishnan is wrong,

Clear enunciation of limits of policy needed to maintain equilibrium

assuming that the public sector can be invoked, can be invoked with advantage and benefit and profit, nevertheless I think they are entitled to ask this; that there should be a clear and definite enunciation of the exact policy of the Government, the limits of its policy, the ambit of the activities at least for a certain time so that there might be an equilibrium, there might be a possibility of the private enterprise looking around collecting its resources, making up its mind and making plans on that basis. With a welfare State there is nothing that you do that is not supervised or inspected. I have met some Capitalists all over India and they are not all 'imps of Satan,' not all of them. Now what they complain of is that they do not know from day to day or from hour to hour, what enterprises are going to be the subject of public sector activity, and that they do not know when that activity starts, what is the limit, the boundary, the jurisdiction of the activity with the result that they cannot possibly collect the necessary funds, they cannot canalise their activities, they cannot regiment them to be of the best possible advantage and when they are in a state of suspense or disequilibrium, they are blamed by the Government and it is stated that private enterprise is not sufficiently helpful to Government. That therefore, is one of the requisites in my opinion, namely, that the Government should indicate a kind of general idea that during the next Five Year Plan such and such things would be the subjects of, very definitely indicated subjects of, private enterprise and they will be allowed to do the best they can. And I make this observation with special reference to the report of the Second Five Year Plan.

The Second Five Year Plan itself makes it clear that two things are necessary. That there is a big gap between the amount necessary for the implementation of the 4800 crore plan, which according to Mr. T. T. Krishnamachari might be a 5000 or 5500 crore plan, and what

is obtainable from local resources. Foreign exchange is a very big gap and they are expecting help from outside. Now people in England and America, even the English people connected with this great enterprise are not pure philanthropists. They have a little profit motive lurking in their brains somewhere. And I do not think that we can expect them to be philanthropists at large coming here to the benefit of the suffering humanity although the utterances of some statesmen would make us think that the world is simply waiting to pour money into these backward countries merely for the pleasure of pouring money into those countries. That kind of statement is made in after-dinner speeches and in order to ward off political attacks and should not be taken at full face value. There is no doubt that in order to bridge the gap indicated in the Second Five Year Plan you do want some confidence in local enterprise, some possibility of local enterprise enlisting the support and co-operation of foreign capital. And that is a matter which again is of the utmost importance. But next, and only next to that, the gap that has to be bridged is the very question of transport to which I have referred. What they say is this. Supposing you grow more food and the Railway trucks do not move at all, supposing you produce more steel in distant Orissa or in Bihar and there is nothing to bring it here, bring it to the place of consumption, that is going to be one big matter. And that is why for instance, in the Five Year Plan is made a very clear statement that one of the great difficulties in the implementation of the Second Five Year Plan may be this question of transport. AND THEREFORE I SUBMIT TO THE GOVERNMENT THAT IN ORDER TO SUPPLEMENT THAT DEFICIENCY, IN ORDER TO MAKE GOOD THAT ESSENTIAL PRELIMINARY TO

THE SUCCESSFUL IMPLEMENTATION OF THE FIVE YEAR PLAN, TRANSPORT, ATLEAST FOR THE TIME BEING, MAY BE GIVEN A FREE SCOPE TO WORK AND ENERGISE UNDER PRIVATE ENTERPRISE. THAT IS A PROPOSITION THAT I WOULD DEFINITELY MAKE.

Now, you, Sir, have referred to the number of Laws passed. There are two difficulties now. That the number of Lawyers in various Legislatures is getting lesser and lesser; the reputation of the Lawyer from the point of view of the Government is diminishing in geometrical progression. The number of Acts is increasing by a hyper-geometric progression and the number of amendments that are necessary owing to the paucity of the Lawyers, even amendments to the Constitution, is also increasing. Now we have therefore this spectacle of very energetic legislation by somewhat, I do not say incompetent, but inappropriate functionaries. Now, that is one of the things that are really bothering some of us either existing or extinct lawyers. I am an extinct lawyer myself. Now there is no doubt that not only in this country but in every country which takes upon itself the function of a Welfare State, namely that of being responsible for peace and policing and looking after newspapers and your conduct on the roads and in your houses, and what you drink and what you eat and all all the rest of it, assuming that a State gets beyond these things and says that every activity is within its ken, within its jurisdiction, you are bound to have numerous regulations and laws and there is no use of quibbling with it, because you will find in every country almost, within the last 15 or 20 years, the amount of legislation is projected into an un-offending world and the doctrine, every man is presumed to know the

making new models in Japan

Auto Industry sets Postwar Mark of producing 59,250 Cars in '55; Midget Vehicle output Soars

The production of cars, especially the smaller ones, has made remarkable progress during the past few years.

law, has become a ludicrous travesty of actual facts. But what can be stated is this: that the Government should, give up the habit of profoundly distrusting the Lawyer. They are now making it impossible for a lawyer to appear in many Tribunals and many courts and many places where labour and other matters are being discussed.

Now the point that I am most intent upon emphasising is this: That to-day the Government is undoubtedly bent upon producing a socialistic pattern. But we have recently seen that socialism is of various types. We had a socialism which is now being condemned as a one-man cult or a personality cult. Within the last day or two we have seen little murmurs in Poland and elsewhere indicating that socialism need not be such a complete abdication of human personality.

MY OBJECTION TO THE WHOLE OF THE APPROACH OF THE GOVERNMENT IS THAT THEY ARE A LITTLE INDIFFERENT TO THE VALUE AND THE IMPORTANCE OF THE DEVELOPMENT OF HUMAN INDIVIDUALITY AND HUMAN PERSONALITY.

When I say that I realise that my argument will also mean that the time will come, that contingency cannot be avoided, that labour is entitled to its personality as much as capital, and that sooner or later there must be a kind of welcome partnership between capital and labour. Towards this process many wise organisations are tending fast. BUT THE WHOLE OF THE LEGISLATION THAT IS NOW TAKING PLACE IS A LEGISLATION OF "DON'TS". WHAT WE NEED IS A LEGISLATION OF "DO'S."

According to the Automobile Industry Association, 59,250 cars were built in 1955 for a postwar record. Broken down by items they were 20,584 trucks, 4,807 buses, 21,505 small trucks and 13,354 small passenger cars.

The figures were 5,380 less than the 1954 statistics for the larger vehicles but 9,067 more for the Midget cars.

In other words, the increased production of the smaller cars more than off-set the decrease in new cars of the larger type.

Smaller Car Details

By smaller cars here are meant vehicles under 14 feet in length, 5.5 feet in width and 6.5 feet in height whose maximum cylinder capacity is 0.4 gallons.

The swift increase in the production of small automobiles springs from two main reasons:

1. Demand for privately owned trucks has been on the increase since the end of the war. In Japan where most of the enterprises are conducted on a medium or small scale, the demand is naturally greater for easier managed small trucks.

2. Taxi companies prefer the small Japan-made cars to the large U.S. imported vehicles.

There is an increasing demand for small private vehicles from the general public which has come to recognise the marked improvement in the quality of Japanese cars.

Consequently all motor companies are increasing production of cars for private use and turning out new models.

Plan Inexpensive Cars

In the past, manufacturers have concentrated efforts on production of vehicles to be used as taxis. Now that the Toyopet and Datsun models have reached the international level,

they are switching their attention to the making of inexpensive cars within reach of the general public.

The first step toward demonopolizing private vehicles and making them available to the public was taken last May when the Ministry of International Trade and Industry called upon the car makers to submit plans for what might be called People's Car, capable of seating four persons and running 62 mph.

The idea was to offer State subsidy for mass production of the best plan with a goal of around 2,000 a month.

If produced on this scale, officials figured the cars could be sold for 250,000 each.

Makers Not Interested

Car makers were not interested, however, and embarrassed MITI officials reluctantly withdrew their suggestion.

Car manufacturers claimed it would not pay to turn out 250,000 vehicles what with the present high cost of labour and materials. They also could not understand why a specific type of car should be designated People's Car.

Recently some of the motor car companies other than the makers of cars of established names as Toyopet, Prince and Datsun, have been studying the possibility of turning out the equivalent of People's Car on their own initiative.

And in the face of growing public interest in owning cars of their own, the automobile industry is beginning to give serious thought to the making of small private vehicles that would appeal to the public.

Radiation Refining

The Maruzen Oil Company in Tokyo has decided to adopt, for the first time in Japan, a unique method of refining and improving the quality of oil through radiation.

The company will organize an atomic energy research section in its refinery in Shimizu next month as the first step toward the venture.

MOTORINDIA IS A MUST FOR AUTOMOBILE OWNERS

production of modernized tractors in Russia

The Atlai Tractor Plant

By V. Stashevsky

The shops and village of the Atlai Tractor Plant occupy the Northern part of the city Rubtsovsk. The plant has turned out more than a hundred thousand tractors.

The plant is equipped with modern machinery, with highly productive automats, special aggregate machines for high-tension current metal hardening and for electric spark finishing.

Systematic work is being carried on in the plant to improve the designs of tractors. In place of the tractors with kerosene motors, previously manufactured, the plant is putting out powerful diesel motor tractors DT-54. In the aggregate with a five furrow plough with such a tractor in a working shift it is possible to plough up to 10 hectares of land, or from 35 to 40 per cent more than with the ASChTZNATI machine. Having greater pulling capacity the DT-54 tractors are at the same time considerably more economical than any previous tractor.

Now the plant designers are working out a still more rational model of a tractor and simultaneously are improving the design of the DT-54 machine. The modernized tractor has many advantages. It has a bridge with a separate drive, which greatly lightens the work of a tractorist and reduces it to half. It is provided with a closed cab which protects the operator from bad weather, has a better cooling system.



"This isn't exactly the way we flush a radiator, Norman."

The plant turns out other products besides tractors. For instance last year over 1200 diesel motors and tens of millions of tractor spare parts were manufactured for the needs of industry and agriculture.

Work at the plant demands high skill. For this purpose the plant is provided with a whole network of special schools. The desire of the workers to acquire knowledge is exceptionally great. For instance, this year more than a thousand workers are attending evening subsidiaries of the Atlai Institute of Agricultural Mechanical engineering and of the Machine-Building Technical School. There are two evening high schools and about ten courses to raise the qualifications of the workers. They are functioning continuously at the plant. Tuition is free of charge. Each student upon graduating a course of study is immediately provided with suitable work. Engineers, as a rule, become either shop managers, or assistants to shop managers; and technicians get jobs as shift-foremen or senior foremen.

The spacious shops of the plant are full of sunlight in the day-time and at night are lit by thousands of electric lamps. In the shops wardrobes for workers' clothings and shower accommodations are provided. Some premises are provided with first-aid. A night sanatorium and well-equipped polyclinic is provided on the territory of the village for the workers and other employees.

The employees of the Tractor Plant have every right to be proud of their village. Its many-storeyed dwelling houses are provided with central heating and many apartments have baths and showers.

There are seven elementary and secondary schools, four kindergarten, a stadium, a hotel, a drug store, a post office, many clothing and shoes shops, dry goods stores and groceries. Much work is done to beautify the streets with flowers and trees.

Individual home building is carried on a wide scale.

Last year the workers and employees of the plant built for themselves in the village 235 private houses and this year 450 houses are being built.

In connection with this state loans

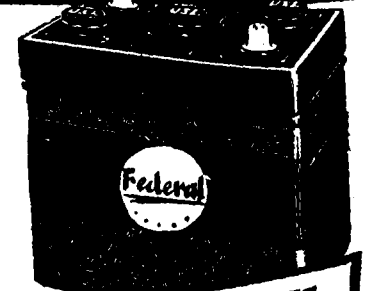
to individual house builders were sharply increased. Last spring the loans amounted to 450,000 rubles and this year they have grown to over a million rubles.

During their vacations a part of the tractor employees go to visit their relatives and friends, some with rucksacks on their backs go hunting; many obtain accommodation passes and go to summer resorts and sanatoriums. Last year the trade union committee of the plant gave such accommodation passes to 1100 workers and employees, and this year it will send to summer resorts no less than 1300 persons.

The village is now covered with scaffoldings of new building jobs. A new Palace of Culture is being built, a large television centre, a new cinema and other cultural-servicing enterprises are also being built.

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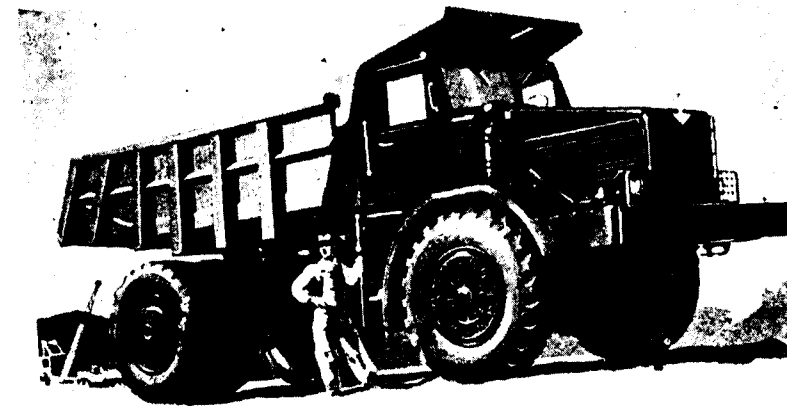
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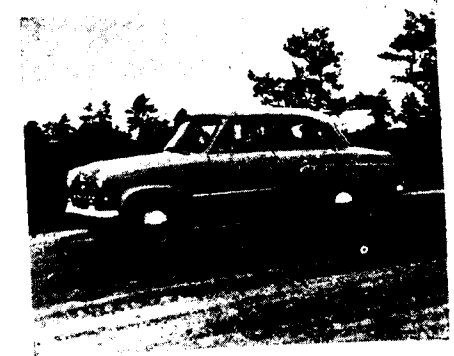
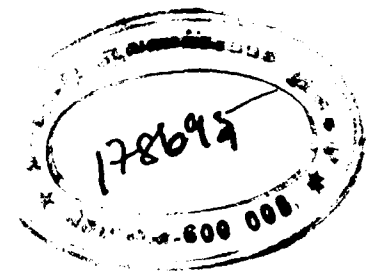
MOTORINDIA

November 1956

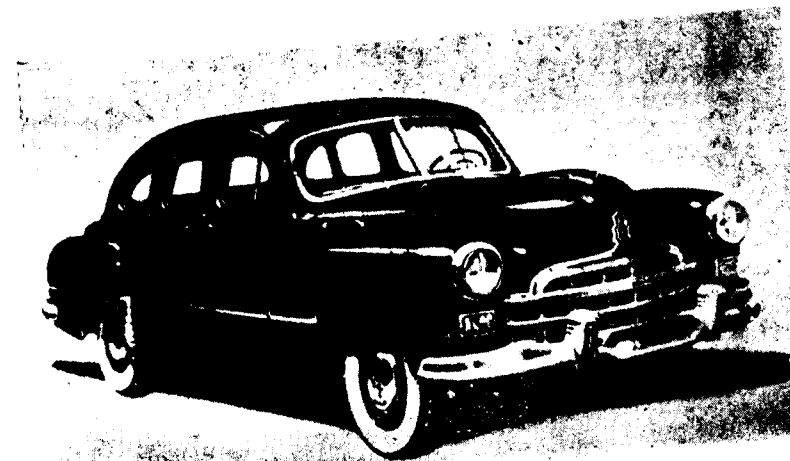
The Soviet Automobile Industry in Pictures



The MAZ-525 tip lorry produced by the Minsk Auto Plant.



The Moskvitch small displacement car.



The passenger car ZIM produced by the Auto plant in Gorky



The Serpukhov plant has put out a new small car, named SZL. This cheap car develops 80 kilos per hour and covers 100 kilos on 5 litres of petrol.

MOTORINDIA

November 1956

The French Motor Industry

(From our Paris Correspondent)

Speaking before the National Assembly at the end of the last parliamentary session, the French Prime Minister pointed out that, from one year to the next, the general index of Industrial production in France had risen by over 10 per cent, and he added that the continuation of economic expansion was "our best reason of hope for the future."

The Motor Industry, for its part, has not only kept up with the average rate of economic expansion; it has exceeded it by a long way:

The total production of motor vehicles, which amounted to 373,240 units for the first six months of 1955, has risen to 432,317 units for the first six months of 1956, an increase of 15.8%.

During the first six months of this year 345,533 passenger cars have been built whereas, during the whole of 1938, the production of passenger cars had amounted to only 199,000 units.

On the basis of 1938 = 100, the general index of industrial production for the first six months of 1956 averages 189. On the same basis, the index of the Motor Industry reaches 340.

Therefore, the Motor Industry has again played this year the part of one of the prime movers of French expansion.

In the internal economy of the country, the position of this industry vehicle production and specialized manufacturers of equipment and tyres can be described by quoting a few typical figures relating to the year 1955:

200,000 men working,
110,000 millions francs of wages paid,
One million tons of iron and steel products used,
600,000 millions francs in turnover.

This is indeed a first ranking position.

In the field of external trade, the Motor Industry, which by tradition is an export industry, has contributed for a great part to 'provide the French economy with the foreign exchange it needs.

During the first five months of 1956, French exports to foreign countries have, on the whole, decreased in value by 5.9 per cent, compared with the corresponding period of 1955. At the same time, exports of motor vehicles of all kinds have increased in value by 6 per cent.

Between the first six months of 1955 and the first six months of 1956, French exports of passenger cars have progressed, in numbers, by 27.3 per cent.

This percentage of increase is higher than those achieved by other large European producing countries whose exports are in progress:

Germany	23.2%
Italy	21.9%

If we add up exports to foreign countries and exports to French overseas territories, we arrive at a total of 92,873 vehicles exported during the first six months of 1956, which means that every 2 minutes 50 seconds a French vehicle has left metropolitan France for some external market.

It is therefore possible to state that the Motor Industry is at present one of the main factors of French economic prosperity and one of the main reasons of hope mentioned by the French Prime Minister.

This hope should not be deceived during the months and the years to come.

The "demand for motor-cars" for which production is ready to adapt itself should, as a matter of fact, continue to expand for a number of reasons which can be briefly recalled:

There are still relatively few motor vehicles in France.

With one car for every 14 inhabitants, France is still at the stage reached by the U.S.A. in 1919; ten million French households are still without a car.

With one industrial vehicle for every 36 inhabitants, France is still at the level reached by the U.S.A. in 1929.

If we take into account all vehicles—cars and industrial vehicles—we find there is in France one vehicle per 10 inhabitants.

The degree of motorization in France is lower not only than that of the U.S.A. but also than those of Canada, Australia and New Zealand. It does not exceed that of Sweden.

The French "park" of motor vehicles is an old one.

A national "park" containing 38 per cent of cars over 15 years old and 42 per cent of industrial vehicles over 12 years old is likely to call for progressive rejuvenation.

New classes of buyers will appear as French purchasing power increases.

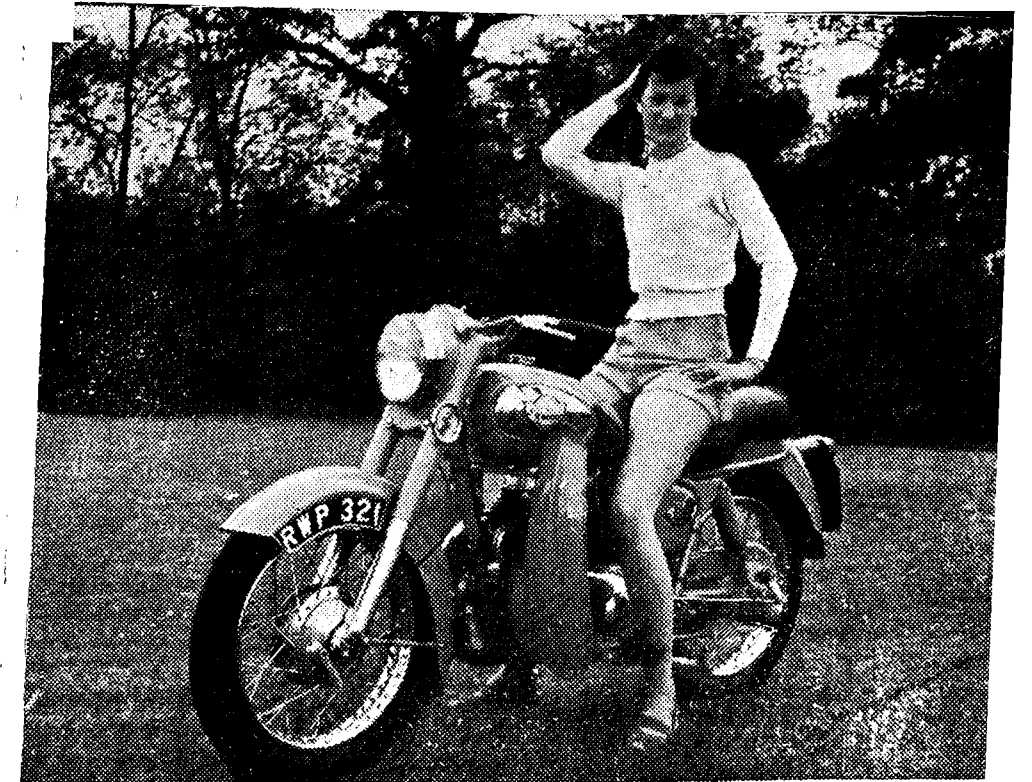
Experience has shown that to every general increase of purchasing power corresponds a more than proportional increase in the demand for motor-cars.

The democratization of the motor-car, which is thus likely to continue is only one of the consequences of technical progress, thanks to which, over a certain period of time, prices of motor-cars always tend to get lower in comparison with the prices of other products while the intrinsic qualities of the vehicles improve.

Technical progress finds its natural and immediate extension in the social progress represented by a wider distribution of motor-cars.

NEW LIGHTWEIGHT MOTOR CYCLE

This lightweight motor cycle of entirely new conception and design was recently announced by a British firm. Named the 'Crusador 250', this latest addition to the Royal Enfield range is claimed to be the most up-to-date in its class. It has a single cylinder 250 c.c. overhead valve engine fitted with a four speed gear box. For safe driving, full width hub brakes, telescopic front forks and a swinging rear suspension have been incorporated in the design. Fitted into the headlamp is an instrument panel.



London Show Reflects U. K. Motor Industries Vigour and Inventiveness

LONDON Plastic car bodies, two-pedal control, "fashion" and colour, increased power for the small family car—these were the highlights of the International Motor Show held in London recently. Sensational at-

tractions at the show, however, were the Rover gas-turbine prototype car, and Donald Campbell's world-record-breaking gas-turbine boat, *Bluebird*.

For those primarily concerned with conventional motoring, there

was everything from the low-consumption "baby" to the luxury limousine with installed television wire-recorder for the busy business man, and even air-conditioning for keeping the temperature down in tropical climates.

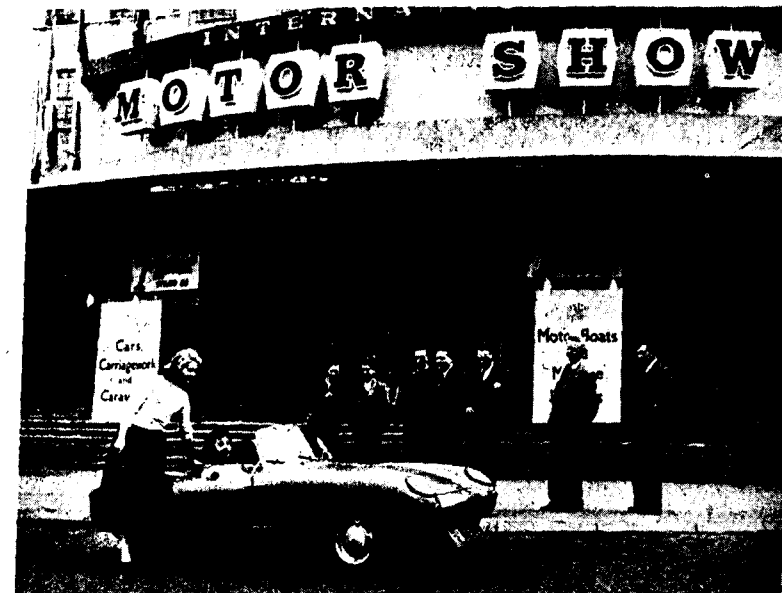
Nearly 20 new car models, equipped with automatic or semi-automatic transmission, were seen among the 300 cars displayed at the Show together with caravans, motor-boats, and countless accessories of all kinds.

Britain's Prime Minister, Sir Anthony Eden, who opened the Show, congratulated the British motor industry on its vigour and imagination. He said: "There is plenty of evidence here, for anybody who looks around, of vitality and inventiveness."

A prominent feature of the British models at this year's show was the adoption of automatic and semi-automatic transmission devices in answer to the growing demand for ease of driving.

The Deputy President of the Society of Motor Manufacturers and Traders, Dr. F. Llewellyn Smith, remarked "that it would be a hard man to please who could not find a British car to meet his own particular requirements."

In the first eight months of this year (1956) Britain's motor industry exported £274 million worth of cars and accessories, compared with £255 million in the corresponding period last year.



A sports car that does 60 miles per gallon and 70 miles an hour drives up to the Earl's Court Show. The 'Berkeley' has a glass fibre body, has all the glamour of a luxury but is cheap, safe, easily repairable. World famous racing driver Moss claims it is almost impossible to overturn it even cornering at high speed.

THE OPPORTUNITY PAGE

TENDERS AND AUCTIONS

The General Manager, Saurashtra State Road Transport Corporation, Rajkot, has invited sealed tenders for the work of building 45 district type composite passenger bus bodies on 23 Tata-Mercedes-Benz 190' wheel-base and 22 Leyland Comet 203' wheel-base full forward control chassis. The work of body-building will be spilt up in lots of 5 and the tenderers should send their offer for each lot. Earnest amount at the rate of 4% of the amount tendered should accompany the tender.

The controller of Stores, Bombay State Road Transport Corporation, Santa Cruz, Bombay, has invited tenders for the supply of 6,500 sets of 825 x 20/10 ply heavy duty tyres and tubes from sole agents for reputable foreign manufacturers. Tenderers should quote for import and supply against their own licence or for direct shipment from the manufacturers in case import licence is made available by the State Transport Corporation.

The Agricultural Engineer to the Madhya Pradesh Government, Bhopal, has invited sealed tenders for the sale of 10 old continental C-B-70 crawler tractors of about 58 H.P. The tractors have worked for about 1,500 hours each. There are no implements or attachments.

The controller of Stores, Bombay State Transport, Santa Cruz has invited tenders for the supply of heavy duty commercial type batteries.

Tender forms can be had from him on payment of Rs.2.

The President, District Local Board, Nasik, has invited tenders for supply of one Diesel Oil Road Roller with an unballasted weight of 10 tons and of 30 to 40 B.H.P. with electric starting equipment and complete with awnings, curtains, spares and tools.

The General Manager, Delhi Road Transport Authority, New Delhi, has invited tenders for supply of Brake and Clutch lining for various vehicles of the organisation. An earnest money of Rs. 2,000 should accompany each tender.

The Controller of Stores, BEST, Bombay, has invited tenders for supply of (1) Delivery Van and large-size station wagon; (2) Rear Hub Roller bearing; (3) Plates copper Electrolytic and (4) meters with minimum demand indicating mechanism.

The Chief Civil Engineer, Nangal Fertilizers and Chemicals Private Ltd. Diplomatic Enclave, New Delhi, has invited tenders from contractors for transportation from Delhi to Nangal of 20,000 maunds of aluminium alloy roofing materials, the estimated cost being Rs 15,000

The Directorate of Supplies and Disposals, 6, Esplanade East, Calcutta, will sell through auctioneers about 50 three-tonners and 50 15 cwt. trucks at vehicle depot, Panagarh; and several other vehicles

(to be reduced to scrap) at vehicle Detachment, Barkana, and Vehicle Sub-Depot, Dhanbad.

Messrs. Shankar Ramchandra & Bros., 128, Mahatma Gandhi Road, Poona-1, will, under instructions from the Bombay State Transport Corporation, sell several brand new spare parts of the running models like Chevrolet, Studebaker, Dodge, Ford, Bedford etc. worth several lakhs of rupees.

The Director of Supplies and Disposals, Bombay, will sell through their auctioneers lorries 3 ton, 30 cwt., 15 cwt., such as Chevrolet, Ford, Dodge, Austin cars, tractors, ambulances etc., at Vehicle Depot, Dehu Road.

Mohan Lall & Co., Ambala Cantt will sell at Neemuch (Central Reserve Police) Chevrolet buses, Dodge trucks, Ford, Jeeps and Norton Motorcycles; and at Delhi Cantt. (Vehicle Sub-Dept) Motor cycles Solo Horley Davidson, lorries and trucks in large quantities.

Murrays, Madras-1, will sell by auction 101 Chevrolet, Dodge, Ford Lorries, Cars, armoured vehicles, and carriers at V.V. Park, Agram, Bangalore.

Messrs. Gulab Rai & Sons will sell by auction at Bairagarh, Bhopal huge lot of M.T. Components, batteries, tyres etc. belonging to the Central Tractor Organisation.

The Superintendent, Palace, Jamnagar, has invited offers for sale of cars such as Daimler, Packard, Hudson, Studebaker, Mercury.

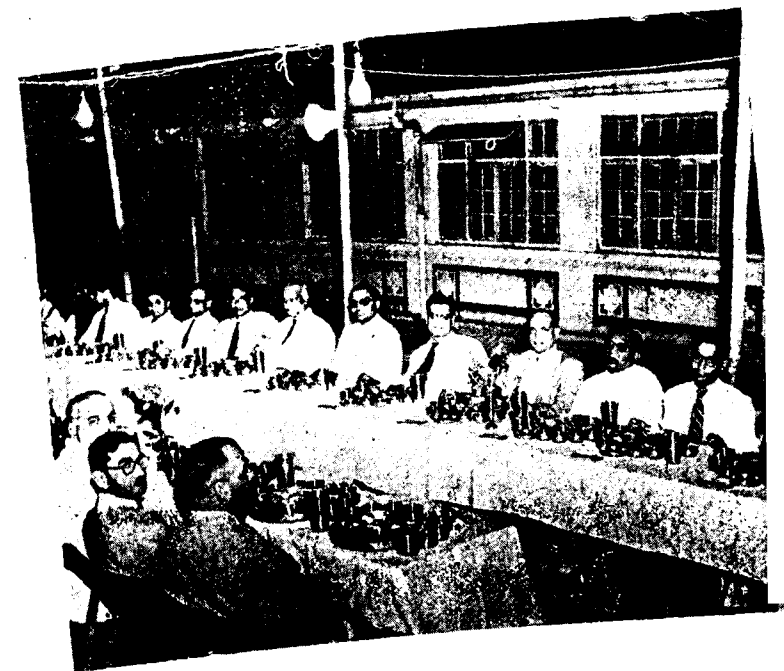


Social & Personal

The Photo on top left was taken at the Dinner Party given by Dr. Pranlal Patel in honour of the West German Technical Mission. The next photo shows (left to right) Dr. Pranlal Patel, Dr. Rucker (Leader of the Mission), The Hon. Shri Shanthilal Shah—Law & Education Minister, Bombay State & Baron Von Pachhammer—Consul General for West Germany in Bombay



A Dinner Party was given at Bombay by the Automobile & Agricultural Industries Corporation to Dr. & Mrs. Pranlal Patel on their happy return from Tour Abroad, when the photos (right) were taken.

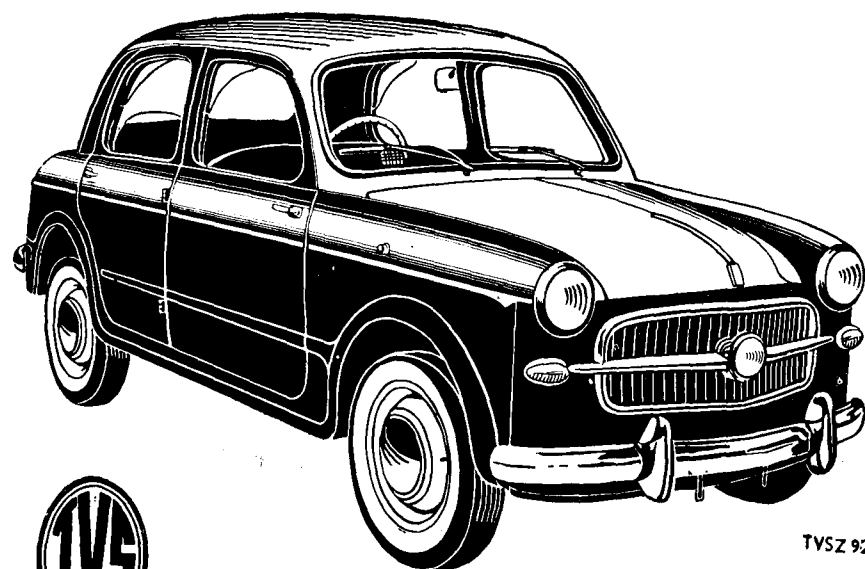


Mr. J.C. Delaplaine, President, Willys Overland Export Corporation and Mr. K. Covelle of Willys Motors Inc. Toledo, U.S.A have arrived in Bombay by Air India International on a business visit to India. They were met at the airport by Mr. Keshub Mahindra, Director and Mr. S. K. Swaminadhan, Sales Manager respectively of Mahindra & Mahindra Ltd., and Mr. T. M. Maxwell, Regional Manager for Willys in India, all seen in the photo below.



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MOTORINDIA

November 1956

MOTORINDIA NEWS SECTION

(BY OUR SPECIAL CORRESPONDENTS)

Vital Role of Road Transport in relation to Second Plan

Mr. Saraiya on the need for trained personnel

BOMBAY

Presiding over the fourth annual meeting of the Institute of Road Transport here, Mr. R.G. Saraiya, its president, stressed that road transport had a vital role in making the Second Plan a success.

He pointed out that in the context of the overstrained railways, road transport had to step in and prove its mettle if the additional traffic expected during the Plan period was not to suffer. Mr. Saraiya said that it had been estimated that the volume of transport needed for the over-all production envisaged in the Second Plan would be of the order of 199 million tons.

The gap in the railway facilities would be 36 million tons, out of which water transport was expected to cope with six million tons, leaving 30 million tons to be met by road transport.

The President also drew attention of the Institute to the manpower needed to operate about 245,000 additional vehicles (including passenger vehicles) which would be put on the roads during the Plan period. He pointed out that one million personnel would be needed—this in addition to those employed in ancillary industries.

Stressing the importance of trained staff, Mr. Saraiya said that it should be the endeavour of all those interested in road transport to see that adequate facilities for professional training were made available. In this aspect the Institute had a vital contribution to make.

He hoped that the Institute examinations would, in due course, be recognised as authoritative tests for road transport personnel and that certificate and diploma holders would derive benefits.

Mr. Saraiya was re-elected President of the Institute for 1956-57. The Governing Council of the Institute was also reconstituted.

"Old Maid" in Bombay

BOMBAY

"The Old Maid has done it—7,000 miles from Singapore to Bombay," said the 28-year-old Israeli Journalist, Yecidia Mersy, on his arrival here after achieving the first post-war overland trip to India from that British colony.

His face wreathed in broad smile, "Didi", as the journalist is affectionately called, leaned over the dust-covered jeep to recount the story of his jeep adventure. The love for the jeep was generated in him—thanks to the underground movement in his country between 1945 and 1948.

He took part in the independence war, leading a jeep commando. He

was till recently in the Far East touring as a U.N. correspondent. "My original plan was to fly to India from Singapore. But it came to my mind that it would be better to undertake a land trip. Instantly I put all my money on a war model jeep and I called it Old Maid," the correspondent added.

How does one feel when riding on a jeep in monsoon and difficult terrain? "Didi" felt "awfully pleasant, if you can take it." The Old Maid cut its way through dense jungles and across numerous streams before reaching Bangkok. At one point "Didi" and his companion had to make a raft to get the jeep across a river. Near Banaras they were nearly marooned when a police party came to their rescue.



The newly formed executive of the Madras Motor Parts Dealers Association included Mr. V. Narayanaswamy, Mr. P. Chandiah, Mr. V. Kunjitapadam (President), Mr. Inder Sain and Mr. S. M. Subramaniam (Sitting); Mr. K. Vasudevan, Mr. T. S. Krishnamurthy, Mr. V. A. Neelakanta Iyer, Mr. S. S. Kalyanpur, Sardar Manohar Singh, and Mr. S. Natarajan (Standing) besides, Mr. K. Govindaswami who was not in the city when the photo was taken.

MOTORINDIA

November 1956

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Bus Tilting Test

BOMBAY
The extent to which a double-deck bus could safely tilt under the worst conditions of loading without losing its stability was demonstrated recently at the Dadar Workshops of the BEST Undertaking when a new double deck bus on a Leyland Titan chassis was put to such a critical test in the presence of representatives of the chassis manufacturers, body manufacturers, assemblers and transport officials.

The bus is the first of a series of the new 27'-6" long Leyland Titans with body fabricated by the Hyderabad Allwyn Metal Works, Ltd., and assembled by Messrs. Jayanand Khira & Co. Ltd., at their Santa Cruz Works. This will form the first of a lot of over 27 foot double-deck buses to run in India with a carrying capacity of 70 seated passengers, which again will be another first to the credit of Bombay city.

The top deck was loaded with 38 sand bags, each weighing 130 pound, on the upper deck, to represent 38 passengers and apart from equivalent weight provisions for a

conductor in each of the top and bottom decks, and for a driver in his seat there was no other loading. In other words, the bus was loaded to represent the worst possible conditions.

The vehicle was then lifted on one side and gradually tilted until the inclination to the horizontal was 28 degrees which is the specified tilt angle under the Motor Vehicles Act Rules. The bus was found to be quite stable at this angle, and it was opined that the critical angle will be about 2 to 5 degrees more than the above.

The above vehicle is the prototype of 100 double-deck vehicles, bodies for which are now under construction and a majority of which will go into service during the current official year.

Accident Statistics

BOMBAY
Four hundred and thirty-three street accidents were reported in Greater Bombay in August. Motorists appeared to be responsible for 65 of these—15 fatal, 15 serious injuries and 35 minor injuries. Ped-

estrians were blamed for 368 accidents—6 fatal, 28 serious injuries and 334 slight injuries. Prosecutions, have been launched against 3,549 drivers for breach of traffic regulations.

Floating Fair

BOMBAY
Japanese exporters have a novel plan of making their goods known to all parts of the world. They have decided to take their exhibition right to many viewers in their own countries. The Japan Machinery Export Association has drawn up a plan to outfit an 8,800-ton ship to tour nine important ports of South-East Asia as a floating fair featuring the latest Japanese machinery, including automobiles and their accessories.

The Japanese Cargo-passenger ship "NISSHO MARU" will visit Bombay on January 26, 1957, and will hold the floating exhibition for three days, leaving the port on January 29.

S.T. Enters Amreli

AHMEDABAD
Nationalisation of passenger transport service is now complete with the taking over by the Bombay State Transport Corporation of the service in Amreli district on October 1. The service was inaugurated by Dr. Jivraj Mehta, Minister for Finance and Industries. A State Transport depot was also opened by him.

Cadillac for Bombay Winner

SRINAGAR
A Bombay resident won the first prize—a Cadillac owned by the erstwhile Premier Sheikh Abdullah—in the Jammu and Kashmir Red Cross Raffle.

In the presence of hundreds of spectators standing in the rain, Gen. S. M. Shrinagesh, Chief of the Army Staff, picked ticket No. JKC 7996 which won the automobile worth Rs. 50,000.

Another ticket JKM 7020 which won the second prize of a Willys Jeep, was picked by Mr. Homi Mody former U.P. Governor. Other prizes included a Hindustan Landmaster and a Fiat.

Huge Expansion Programme by General Motors in Australia

SYDNEY

General Motors-Holden's Ltd., of Fishermen's Bend, Victoria, makers of Australia's popular car, the Holden, is to spend £14,000,000 on new installations, as part of a £A21,622,000 expansion programme in four States, during the next five years. Production of Holden cars and trucks throughout Australia is planned to reach 100,000 annually by 1958.

The new allocation of finance will bring to £A47,750,000 the Company's post-war expenditure on new plants and facilities. Principal expansion will be at the Company's 153-acre site at Dandenong, Victoria, which will be provided with a new railway station on the main Gippsland line, and a spur siding into the plant. The Dandenong body assembly and vehicles assembly plant should be in operation in the first half of 1956, and from that time all Holdens in Victoria should be completed there.

Additional equipment is to be provided at the Fishermen's Bend and Woodville (South Australia) and at all assembly plants in the five mainland states to raise the output to 100,000 vehicles annually.

Other main purposes of the expansion are to provide additional facilities at all plants to handle an increased volume of the other makes of vehicles which the Company produces and sells. These include Vauxhall, Bedford, Chevrolet, Pontiac, and the G.M.C. truck. Transfer of a spare parts and accessories division from Fishermen's Bend to Dandenong is also provided for. Provision is also to be made here for the Company's Frigidaire division.

At Strathpine, near Brisbane, Queensland, a new body assembly and vehicle assembly plant will be erected at a cost of £A2,851,000. Funds employed by the Company in its business, which have totalled

£A40,000,000 will now be increased to more than £A61,000,000.

General Motors-Holden's Ltd. states that the capital for the expansion programme was from profits, which were being ploughed back into the business "as a declaration of faith in Australia".

Economics of Oil Refinery

SYDNEY

The oil refinery of the Shell Company of Australia Ltd. recently constructed at Geelong, Victoria, saved Australia about £A1,000,000 in foreign exchange last year, according to the Company's recent annual report. This saving is increasing as new sections of the plant come into operation. At the end of last year Shell's total capital investment in Australia exceeded £A45,000,000.

The Company states that consumption of petroleum products in Australia has increased two and a half times since 1939. Comparing the price rise with other commodities, the Company states that the increase

for motor spirit was 100 per cent; textiles 500 per cent; building materials, metal and coal, 200 per cent, and foodstuffs 200 per cent.

New transport Co-op. Society

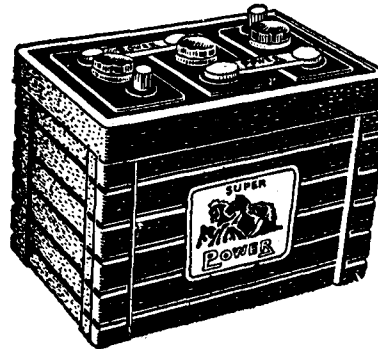
BOMBAY

A new venture by owners of small fleets of vehicles called the Bombay Transport Co-operative Consumers' Society Limited, was declared open in Bombay in October by Mr. Babubhai J. Patel, Deputy Minister for Home and P.W.D.

Speaking on the occasion, Mr. Patel reminded them that in the present competitive era small fleet owners could hardly exist unless they united and operated on a co-operative basis. He asked them to pool their resources and strengthen the society and survive the competition from bigger fleet operators.

Welcoming the Minister, Mr. Indravadan Oza, M.L.A. and President of the Society, said that the society had been started on the suggestion of Mr. Patel. He disclosed that the Society would have its own petrol pumps, service stations, workshops and goods booking agencies throughout the state.

First To Start
Last To Finish



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Bombay-4**

Branch :
**68, General Patters Road
MADRAS-2**

MOTORINDIA

November 1956



A convoy of 16 Tata-Mercedes-Benz truck chassis, taken on the outskirts of Mangalore. Such convoys are now a common sight on the different highways of India.

MOTORINDIA

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Third International Bicycle and Motorcycle Exhibition

At the third IFMA 1956 (International Bicycle and Motorcycle Exhibition), at Frankfurt (Oct. 21-28) a comprehensive West German and a representative foreign offer was shown. Judging from the number of exhibits in 1953, the IFMA with 355,000 visitors and an exhibit space of 35,000 square metres was the largest international show of the cycle industry.

All leading West German manufacturers of bicycles, power-assisted bicycles (marketed under the name "Moped" in West Germany), scooters, cabin scooters and auxiliary motors were represented.

In addition to bicycle, motorcycle and scooter firms, more manufacturers of parts and accessories than in 1953 took part in this

year's IFMA. West German manufacturers of parts and accessories export their goods to over 100 countries all over the world. The rising export rate results from the large variety of goods they can offer, the favourable prices they can demand, owing to extensive rationalisation and from the first-class quality of their goods.

All countries with an important cycle industry are taking part in the third IFMA 1956.

Increase in German Automobile Export

A total of 908,841 motor vehicles were produced in the Federal Republic in 1955. This represents, when compared to the 1954 output of 680,597 units, an increase of 33.5% or 228,244 vehicles.

Shortly rising exports accounted for 106,000 units of this total increase. The export figure for 1955 was 403,857 automobiles, some of them purchased with foreign currency inside the boundaries of the Federal Republic. That is 35.5% more than in 1954, when the annual export figure was 298,154 units. The proportion of exports to the total output of this industry was 43.8% in 1954 and 44.4% in 1955. That is to say, in 1955 almost every second vehicle produced in the Republic was exported. In terms of money, DM 1,800 million worth of automobiles and automobile parts were exported from West Germany in 1954 and an estimated DM 2500 million worth in 1955.

The automobile industry's share in the total export trade of West Germany was 8.2% even in 1954. When comparable statistics are published for 1955 they will probably show an increase in this respect, too.

400 Types of oil and fuel filters

Filtering materials that can extract particles as small as 1/100,000th of an inch from lubricating and fuel oils are used by an Australian manufacturer of automotive and industrial filters.

To ensure the efficiency of its filters the company uses a testing device designed to gauge accurately the operating performance of both oil and filter elements of over 400 types of filters.

"Mortic" fuel and oil filters manufactured by J. B. Morgan & Co., Pty. Ltd., of Melbourne, are used exclusively as original equipment for all Australian-built Ford and International motor vehicles.

Very wide range

They are also used in stationary engines made by Villiers (Aust.) Pty. Ltd., Le Tourneau-Westinghouse heavy earth-moving machinery and for the Holden car engine test-bed installations by General Motor Holdens Ltd., as well as by many other large Australian manufacturers.

The huge range of "Mortic" filters covers practically every requirement—350 types of lubricating oil and fuel filters for automotive use, nearly 30 types of air filters for industrial use (including air-conditioning) and over 30 types of suction filters for hydraulic equipment.

An alphabetically arranged, "Mortic" filter catalogue clearly shows the correct type of "Mortic" filter replacement element for any make and model of car, truck, tractor and diesel engine.

Performance tested

"Mortic" fuel and oil filter elements are scientifically tested for performance on J. B. Morgan's "C.E.Q. Filtrite" testing equipment.

The "C.E.Q. Filtrite" was specially designed to accurately gauge the operating performance of both oil filter elements and containers. It precisely indicates the contaminant extraction quotient (C.E.Q.)—the filtering and sludge arresting capacity of the filtering material when subjected to a flow of heavily contaminated oil under pressure.

It also effectively tests the ability of filter packs and canisters to withstand normal operating pressures.

The C.E.Q. filtrite test is exclusivt to J.B. Morgan & Co. Pty. Ltd. It

reveals that "Mortic" filter element remove all the most injurious engine or fuel oil contaminants—metal particles, dust, combustion residues, moisture and harmful acids—without interfering in any way with the detergent additives or any other valuable constituents of good lubricating oil.

New factory

Increasing demand for "Mortic" products both for the home market and for export will soon be met from the new 50,000 sq. ft. J.B. Morgan factory at North Coburg, Victoria.

The first section—a 5,300 sq. ft. bay, one of eight similar to be erected on a one acre site—was officially opened on June 8, 1956.

Large Units for Long-distance Operation to be Set up Opportunity for the Private Sector

NEW DELHI

The Government of India is "seriously" considering how best to utilise road transport for handling the surplus traffic, and has already asked the interests concerned to prepare schemes for setting up large units for long-distance operation in areas where Railway capacity is short, Mr. Shah Nawaz Khan, Deputy Minister for Railways and Transport, said here while inaugurating the Delhi branch of the institute of Road Transport.

The Government would be prepared, he said, to relax the distance restrictions laid down by the Code of Principles and Practice in the regulation of Road Transport, render assistance in obtaining permits for inter-State operation, and give other necessary facilities.

"I do hope that the private sector will make full use of this opportunity, and give an effective proof of the

capacity of road transport for handling the transport problem as efficiently and economically as any other carrier can do," he added.

Road Transport, Mr. Shah Nawaz Khan said, employed nearly 100,000 vehicles, carrying only 18 million tons. With better organisation and elimination of some of the inhibitory factors, the carrying capacity of these vehicles could be easily increased by 30 to 50 per cent.

Besides, it could be reasonably expected that the next five years would bring an additional 60,000 or so vehicles on the road, and these could carry another 15 to 20 million tons.

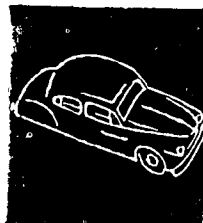
Mpst of this capacity would, however, be utilised for carrying feeder traffic to the railways. For road transport to act as a supplementary carrier, there was need to develop long-distance road traffic even on routes parallel to the Railways, he said.

LOAD AND INFLATION SCHEDULES FOR COMMERCIAL VEHICLES ADOPTION OF NEW SCHEDULES BY INDIAN TYRE INDUSTRY

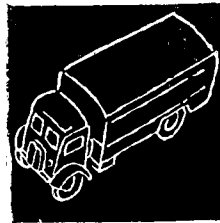
In December 1955, the Tyre and Rim Association, U.S.A., and Society of Motor Manufacturers and Traders of Great Britain, adopted new load and inflation schedules for truck, bus and light commercial vehicles. In order for the Indian Motor Transport Industry to obtain the benefit of these new load and inflation schedules (shown below) the Indian Tyre Industry have adopted these schedules. These new load and inflation schedules have been forwarded to the Central and State Governments in India, and we understand to have also been accepted by them and are being made effective in all States immediately, pending the passage of the new Motor Vehicles Act.

Tyre Size	Ply Rating	Maximum Recommended		Tyre Size	Ply Rating	Maximum Recommended	
		Load (Lbs.)	Inflation Pressure (lbs.)			Load (lbs.)	Inflation Pressure (lbs.)
9-00-13	6	1860	30	7-50-20	10	2980	75
7-00-15	6	1520	45	7-50-20/34 x 7	12	3300	90
7-00-15	8	1800	60	8-25-20	10	3330	70
6-00-16	6	1255	45	8-25-20	12	3600	80
6-50-16	6	1420	45	9-00-20	10	3960	70
7-00-16	6	1580	45	9-00-20/36 x 8	12	4280	80
7-00-16	8	1870	60	10-00-20	12	4580	75
7-50-16	8	2140	60	11-00-20	12	5150	75
9-00-16	10	2920	60	12-00-20	14	5540	85
10-50-16	12	4000	75	14-00-20	16	6450	90
7-00-17	8	2060	60	9-00-22	10	8725	85
6-00-20/30 x 5	8	1870	70	10-00-24/42 x 9	14	4230	70
6-50-20	8	2180	65	11-00-24	12	5570	85
7-00-20 /32 x 6	10	2630	75	11-00-24	14	5810	75
7-00-20	10	2630	75	12-00-24	14	6260	85
7-50-20/34 x 7	10	2980	75		16	7280	90

It has been suggested that, should vehicle operators have difficulty in registering vehicles under these new load and inflation schedules, they bring this to the attention of the tyre industry which in turn will be pleased to take up the matter with the State-Government concerned.



Models and their prices



CARS

	Rs.	as.
1956 Model Plymouth Sedan, (Sundaram Motors Private Ltd.) Ex. Premier Automobiles Factory, Kurla ...	18,302	0
1955 Model Plymouth Plaza—Suburban ...	19,855	0
Hindustan Landmaster 1956 (South India Automotive Corporation Private Ltd.) ex plant Uttarpur ...	9,845	0
Dodge 1956 (Addison & Co. (P) Ltd.) ex Bombay ...	18,415	0
Baby Hindustan 1956 (Addison & Co. (P) Ltd.) ex Madras including S.T. & Import charges ...	9,550	0
Standard Super Ten Saloon (Union Co. (Motors) Private Ltd.) on the road ...	10,022	2
Standard Estate Car (Union Co. (Motors) Private Ltd.) on the road ...	14,889	2
Studebaker 'Parkview' station Wagon 1956 model [Reliance Motors Ltd.] ex plant Calcutta ...	20,280	0
Studebaker 1956 Commander (V.S.T. Motors Private Ltd.) Including S.T. & Delivery Charges ...	19,850	15
Studebaker 1956 President Classic [V.S.T. Motors Private Ltd.] Including S.T. & Delivery Charges ...	22,237	13
The Fiat 1100 The Elegant [Sundaram Motors Private Ltd.] Including S.T. & Delivery Charges ...	10,400	11
Willys C.J. 3B Universal Jeep [Sundaram Motors Private Ltd.] ex plant Bombay ...	12,160	0
Willys Model 4-75 Station Wagon [Sundaram Motors Private Ltd.] ex plant Bombay ...	18,500	0
MOTOR CYCLES		
Royal Enfield [The Madras Motors (Private) Ltd.]—		
“150 Ensign” with spring frame rectified lighting set and electric horn.	1,700	0
“350 Bullet” with spring frame ...	3,175	0
499 c.c. Model ‘j2’ ...	3,500	0
“500 Bullet” with spring frame ...	3,650	0
“500 Twin” with spring frame and with Magdyno or coil ignition ...	4,050	0
“700 Super Meteor” with spring frame and with Magdyno or coil ignition ...	4,500	0
Matchless 350 c.c. with rera suspension [Addison & Co. (P) Ltd.] ex Madras ...	3,675	0
Triumph Terrier [Addison & Co. (P) Ltd.] ex Madras ...	2,175	0

	Rs.	as.
Triumph Tiger Club [Addison & Co. (P) Ltd.] ex Madras ...	2,325	0
The New Bina Peugeot 48 c.c. [The Union Co. (Motors) Private Ltd.] on the road.	970	3
B.S.A. Motor cycles. [The Union Co. (Motors) Private Ltd.]—		
125 c.c. Bantam on the road ...	1,880	4
150 c.c. Bantam Major on the road ...	2,212	0
250 c.c. Model C. 11. G. on the road ...	2,736	8
350 c.c. Model B. 31. on the road ...	3,978	11
650 c.c. Plunger type on the road ...	4,629	13
650 Swinging Arm on the road ...	4,892	8
Jawa (S.P. Ratnam & Sons) 2.5 H.P. with spring frame, dual seat, with unique kick starter and gear change lever in one	2,660	0
VANS		
Standard Delivery Van. [Union Co. (Motors) Private Ltd.] on the road ...	10,628	9
Commer Factory Built Van. 14. 4 H.P. 1956 model [George Oakes Ltd.] including S.T. and dely. charges.	11,641	4
TRUCKS & COMMERCIAL CHASSIS		
[George Oakes Ltd.]		
Leyland Comet “203” WB Passenger Diesel Chassis including S.T. & dely. charges.	40,049	12
Leyland ECPO 2/26-176 WB full forward control Passenger Chassis S.T. & dely. charges ...	39,604	5
Leyland ECOS 2-176 WB full forward control goods chassis S.T. & dely. charges ...	39,767	13
Leyland ECOS 2/1R-163 WB goods chassis including S.T. & dely. charges ...	39,137	2
Leyland ECOS 2/2R-118 full forward Tripper chassis including S.T. & dely. charges ...	38,925	14
[Rane (Madras) Ltd.] Studebaker 1956 Diesel Truck Chassis.		
2E 28B-155 W.B. Chassis ex plant Calcutta ...	24,192	0
2E 38B-131 W.B. E.H.D. Chassis ex plant Calcutta ...	25,415	0
2E 38B-155 W.B. E.H.D. Chassis ex plant Calcutta ...	25,650	0
2E 38B-171 W.B. E.H.D. Chassis ex plant Calcutta ...	25,885	0
2E 38B-212 W.B. E.H.D. Chassis ex plant Calcutta ...	26,130	0
Hindustan Motor Trucks Prices include Transport charges and Sales Tax.		
H.M. 2E 7-112 W.B. Chassis	14,121	12
H.M. 2E 13-131 W.B. Chassis ...	15,551	5

	Rs.	as.
H.M. 2E 28B-155 W.B. Chassis ...	18,634	
H.M. 2E 38B-155 W.B. Chassis ...	20,25	
H.M. 2E 28B-155 W.B. Chassis ...	19,002	
H.M. 2E 38B-171 W.B. Chassis ...	20,466	
Willys Model 4-75 Wheel Drive on ton truck chassis 118" W.B.		
[Sundaram Motors Private Ltd.] ex plant Bombay ...	13,93	
Jeep Trailer ex plant Poona or Madras ...	18,00	
[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 ...	27,10	
LP 312/42 165" W.B. Full Forward Control Truck Bus Chassis ex Works Jamshedpur ...	28,60	
LP 312/48 190" W.B. Full Forward Control Bus Chassis ex Works Jamshedpur ...	29,50	
L 312/36 142" W.B. 5-Ton Truck Chassis ex Works Jamshedpur ...	26,81	
LK 312/36 142" W.B. 5-Ton Truck Chassis ex Works Jamshedpur ...	30,50	
Fargo (at Sundaram Motors Private Ltd) Dodge (at Addison & Co (Private) Ltd) prices ex-factory Premier Automobiles Ltd., Kurla, Bombay :		
C3D6 Model 116" Pick up	16,31	
C3D6 Model 116" W/S ...	12,00	
C3G6 Model 129" W/S ...	17,50	
C3 & C4G6 Model 153" W/S	17,60	
C3 & C4G6 Model 153" W/S	17,60	
C3 & C4G6 Model 153" W/S with Perkins Diesel Engine	24,20	
C3 & C4G6 Model 171" W/S	18,27	
C3 & C4G6 Model 171" W/S with Perkins Diesel Engine	24,50	
C3 & C4H6 Model 153" W/S	19,00	
C3 & C4H6 Model 153" W/S with Perkins Diesel Engine	25,15	
C3 & C4H6 Model 171" W/S	19,70	
C3 & C4H6 Model 171" W/S with Perkins Diesel Engine	25,887	0
C3 & C4H6 Model 193" F/F	19,487	0
C3 & C4H6 Model 193" W/S	19,860	0
C3 & C4H6 Model 193" F/F with Perkins Diesel Engine	26,364	0
C3 & C4H6 Model 193" W/S with Perkins Diesel Engine	26,737	0
C3 PW Model 126" Folding Windshield ...	19,645	0
C3 PW Model 126" Folding Windshield ...	20,157	0
105 P6 Model 165" SF Diesel	25,300	0
105 AP6 Model 165" SF	25,978	0
87 P6 Model 190" FF.C. Diesel	26,869	0
87AP6 Model 190" FF.C. Diesel	27,547	0
87P6 Model 190" FF. Diesel	26,572	0
87AP6 Model 190" FF Diesel	27,250	0

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