

The South India Motor Owner.

Vol-10

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96 THE SOUTH INDIA

MOTOR OWNER

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MOTORING
FLYING

8

OCTOBER 1938

Official Organ of THE AUTOMOBILE ASSOCIATION OF SOUTHERN INDIA

"Made by us!"

1888
1938
DUNLOP
50 YEARS OF GROWTH

DUNLOP

THE NATIONAL TYRE WITH THE INTERNATIONAL REPUTATION

AUTOMOBILE ASSOCIATION OF SOUTHERN INDIA

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Mysore Motor Guide Art Printing ...	0	12	0
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Advertisement "copy" to be supplied without application from the publishers by the 20th of the month preceding that in which the advertisement is to appear, failing which current "copy" will be repeated or where no current "copy" is available, space booked will be reserved and the advertiser will be held responsible for the cost.

South Kanara District :—

Moodabidri/Guruvainkere Road Hossangady Bridge:— This Bridge at mile 5/7 of the above road will be closed for all bus and lorry traffic as it is in a dangerous condition.

Malabar District :—

*Ponnani to Pattambi, via Kumaranallur:—*The Bharathapuzha river can be crossed over the bridge at Shoranur. At other places a car cannot be taken over the ferries even though there are jungadam arrangements. Country carts alone are taken over these jungadams.

Coimbatore District:—

*Kollegal/Coimbatore vide S.I.M.O. September issue, p. 286:—*Further information has been received that this road has existed for many years, and has been improved a lot in the last few years. A bus service runs daily between Kollegal and Coimbatore. There is still great room for further improvements as the condition of parts of the road during the S.W. monsoon is definitely bad and traffic is liable to be held up by unbridged streams.

As the necessity for a good road between Kollegal and the District Headquarters has been felt for many years, it is hoped that the Provincial Government will put the work through as soon as possible.

The road in question runs along the Eastern foot of the Billigirirangan Hills for their entire length.

Goorg Province :—

*Mangalore/Mercara Trunk Road:—*The bridge at mile 10 (from Mercara) having collapsed on 15-8-1938 a diversion road has been opened and through traffic restored from 24-9-38.

Mysore State :—

*Shimoga/Mangalore Road Agumbe Ghat:—*On account of heavy rains a crack has formed at the 59th mile (from Shimoga) of the above road. Since a slip is apprehended at any time, the Ghat Section of the Shimoga/Mangalore Road has been closed to traffic. Necessary repairs are being carried out which may continue till the end of November.

H.E.H. The Nizam's State :—**Nalgonda District :—**

*Masulipatam/Hyderabad Road:—*The Paleru river near Kodar is fordable at present.

The Causeways mentioned below are fordable at present (12-10-1938).

GREAT NORTHERN TRUNK ROAD**Nellore District :—**

The Pennar River Causeway near Nellore Town.

GREAT SOUTHERN TRUNK ROAD**Chingleput District :—**

The Palar Causeway near Chingleput Town.

South Arcot District :—

The Ponnaiyar Causeway near Villupuram.

MADRAS/BANGALORE TRUNK ROAD**North Arcot District :—**

Rice Causeway near Tiruvallam village.

MADRAS/CALICUT TRUNK ROAD

Wenlock Causeway near Arcot Town.

ANNUAL DINNER

The sale of tickets for the Supper Dance Cabaret, which it was proposed to hold at the Connemara Hotel on the 27th of this month, has been very disappointing and unless 100 tickets are sold before the 20th instant, the arrangements will be cancelled as a guarantee of not less than 100 guests must be given to the Connemara Hotel by that date.

ROUTE ITINERARIES

95 itineraries covering 54,961 miles were issued during the month.

ROAD TRAFFIC SIGNS

We have to thank the Authorities concerned for the new 'Zigzag' (left) signs at each end of the Ulsoor Rock on Kensington Road where the road is narrow, on a bund and a small temple at its most blind bend.

The 'Artist', however, has slightly mixed his 'gears' and got the bends in reverse, while one signpost has been placed too far forward and behind a hedge which has just been clipped. I imagine that a month's growth of the hedge will entirely hide the sign. I have no doubt that the defects have been already noticed and that before these notes go to print, they will have been remedied.

Driving Licence Reminder Form

The Secretary,

Automobile Association of Southern India,

Box No. 704,

Cathedral P. O., Madras.

Name of member.....

Membership No.....

Full Postal Address.....

.....

.....

.....

Dated.....193

My Driving Licence No.....

dated.....issued by.....

.....

Expires on..... Will you kindly

record this for your reminder service.

Signature.....

N.B.—It is important that every change of address be promptly communicated.

Also, at the junction of Kensington and Old Madras Roads, the words 'slow left' has been removed from the side of the island pillar facing towards South Parade. Motorists proceeding from the latter road along the Old Madras Road will now understand that they have not to circle round this post.

The Gersoppa (Jog) Falls :—

Inquiry has elicited the information that a stock of tinned provisions, liquors, etc., are no longer held at the Mysore Bungalow; also that visitors are advised to take their own bedding, bed-linen and blankets.

Eggs, milk and chickens usually available if previous notice is given to the butler in charge of the bungalow.

Formerly, the provisions there were a boon to visitors and one can only presume that very valid reasons existed for their abolition. But the absence of mattresses appears to be a distinctly retrograde step at a time when one gets the impression that the Mysore Government are endeavouring to equip all first class bungalows with them. One can carry a certain amount of food-stuff but mattresses or camp-cots for a family present a problem, and will, I think, deter many from visiting the Jog. As far as I know, clean, fresh straw is not procurable as a makeshift, and a very good one too, I've found.

A possible reason is that during the monsoon the place is so terribly damp and wet; and the bungalow has to be entirely closed from about June to October, the bedding becomes unfit for use. This is just an idea of mine. Anyway, the matter has been represented to the Secretary.

88 bicycles, 1 carriage, 2 rickshaws, 7 jutkas and 3 carts, and all this by daylight; what might happen by night?

Signposts :—

Suggestions will shortly be put up for signposting exits from Bangalore to Kurnool (for Hyderabad), and Poona-Bombay and Shimoga.

Traffic Islands :—

The want of one universal rule for negotiating these in the City and Civil and Military Station is still much commented on by motorists. In the latter place, one must keep left, while in the City it varies, and at some junctions, some roads are taken left and some right, which is the more confusing to strangers to the place. It must, however, be admitted that all the chief junctions are controlled, and very efficiently too.

Mysore Licences :—

(i) Constant inquiries make it necessary to remind visiting motorists that short-term licences exempt one from all Municipal tolls and the exemption is specified on the licence, but—and this is so often omitted—you must carry the licence on the front glass windscreen on the near or left lower corner of the glass or within two inches of it..... visible in front. Many a person has paid a municipal licence, for failure to do this and which constitutes an offence.

(ii) Production of registration certificates when applying for Mysore licences is now enforced (page 133 clause 8, Mysore

AUTO CIN-DEK**A "PABCO" PAINT**

FOR CARS, BUSES AND LORRIES

Agents and Distributors:—SPENCER & CO., LTD., MADRAS

The Closing of Rest House Crescent to Vehicular Traffic :—

The closing of this road at its junction with South Parade has raised a deal of public criticism, so I may be excused for referring to it. At the time I thought it hard on the residents of the Crescent and thought that it might have been made a one-way traffic to enter the Crescent from South Parade, with a suitable signpost to that effect just below at Church Street. But no one can deny, I think, that illiterate cyclists, jutka and bullock drivers, and even drivers strange to the place might at times ignore the sign at the Church Street end and debouch on to South Parade just when motorists would have acquired a sense of (false) security and would not expect them.

It would definitely require a traffic constable to control the Church Street end, and the volume of traffic there scarcely justifies that. Motorists will therefore prefer the road closed to traffic, and they have some claim to be protected. There have been accidents there and not all have reached the Press and the public. If any one doubts that the one-way would be largely ignored by cyclists, etc., the following facts are instructive: At a certain important junction where a 'keep left' traffic pillar exists, and where several serious accidents have occurred, a check was made as follows:—From 10-30 to 11-30 a.m., on 21st September 1938, 3 motor cars, 60 bicycles, 5 carriages, 8 jutkas and 4 bullock carts disobeyed and took the right. On the 23rd idem, from 5-35 to 6-35 p.m. the numbers were:—1 lorry,

Motor Manual) as is done in the Madras Presidency. In the absence of the R.C. produce the vehicle for inspection. Members applying to this office for Mysore licences will oblige by sending me the R.C. with the schedule or letter.

(iii) Complaints are still received of 30-day (instead of 7-day) Mysore licences being issued to motorists entering Mysore State en route from Anantapur to Bangalore Cantonment. Motorists intending to reside in the Station should not take more than a 7-day licence when entering Mysore, and report every instance of attempted coercion: nothing else will stop this practice.

(iv) Driving Licences granted elsewhere in India are valid in Mysore up to date of expiry, but there are some exceptions, one being that such licence is not valid after the holder has ceased to be a resident of B.I. or State which issued it (page 52 —16-A of the Mysore Motor Manual). It seems, therefore, that if one takes up residence in Mysore, one must get new driving and car licences, and re-register car and get a new number from the moment of entry.

Glaring Headlights :—

I have been asked to refer to this nuisance in the Station and can personally support this 'grouse'. The worst aspect of this is the driver with terribly blinding headlights who refuses to dim or dip until the oncoming, and normally considerate, driver, in sheer self-defence, retaliates.

MISCELLANY

Spelling is often a Matter of Environment :—

Apropos of the Editor's remark on the spelling of *licenCe*—page 279 of the September issue: For years (all my life possibly) I spelt it with two c's. Latterly, owing to constant dealings with the Mysore State and Bangalore Station motor traffic regulations and licences I dropped into the habit of spelling *licence* (the noun) with an 's'. The Mysore Motor Manual, as also in their enactments on the subject consistently use one 's'. So also do the Civil & Military administration in their vehicle regulations and forms, and in the excise department in their dealings with the vendors of liquor. The Madras Government (and Bombay) say *licenCe* and, as though to be consistent with them, this Journal says likewise.

It would seem then that it is not a case of *few spell it correctly*, but, is it possible to spell it *INcorrectly*?

Chambers 20th Century Dictionary puts *licenSe* first, with *licenCe* as an alternative or permissive form; Blackies Concise Eng. Dict. supports Chambers. The New Manifold Eng. Dict., as also the New Standard Illust. Dict. the latter being specially brought out by eminent authorities for use in India, use both spellings; while the Oxford says *licenCe*. Thus both are right, and the same may be said of 'milage' and 'milEage', but in the U.S.A. it must be *licenSe*. But in America, cars are automobiles.

Mosquitoes :—

Few motorists travel without some precautions against these pests, and next to Nets, the mosquito-coils are the most effective. I recently saw a suggestion that if these were made in India, much revenue would be diverted from China and Japan. It is surprising that this has not been done—at least, I have not heard of a local brand. So here's a tip to any enterprising person: A few years ago I and my family were staying with friends in Cannanore, where the dense vegetation bred a vicious type of mosquito that went all out for the newly imported blood, and made our first night a misery. The next day our hostess' servant went to the sea-beach close by and gathered a handful of bushy twigs and leaves. These were placed in a platter and, though green, burnt freely and drove every mosquito away. Occasional burnings kept them away. The point which I want to bring out is, the great similarity, both in colour (olive green) and the smell given off by the smoke (plenty of that) of the shrub and the 'coils'.

If this shrub thrives on a sandy beach, it is possible that it may be found in sandy soil inland. We shall certainly experiment with this shrub the next time we come across it. These things aren't so very difficult as the following will show: my wife bought a couple of those Chinese tin puzzles into which you stand the legs of a store's safe to keep away ants. These were dissected and after a few days experiments we had quite an effective substitute at a fraction of the cost of those on the market. Actually, the tins cost 2 annas each to make and the ingredients for the mixture about the same or less.

Those Miles Per Gallon :—

With the springing up in this Station of so many traffic islands, and a very definite drop in the m.p.g. through the drop in speed at every corner, petrol is a constant topic of conversation. It is curious too what false ideas some motorists have about economical speeds. To quote an instance: I was once on an extended tour with friends in another car. Our commissariat was about equally divided between the two cars, but he was the perfect optimist and although he never picked his way on

a bad bit of road, he hadn't enough kit to repair a punctured bicycle. He possibly depended on me for all that and the first-aid kit. This was pretty bad if I happened to be in front and had to go back some 30 or 40 miles to look for him. I arranged therefore that at every 15 or 20 miles the first car would halt and allow the other to pass and take the lead. I had on one occasion taken the lead but had only gone 10 miles when my friend passed me at a terrific speed (I was doing about 40 owing to the bad road) and it was not possible for him to speak when passing so I did not see him till we reached our destination some 40 miles on. He then explained that he thought he was running out of petrol and he had to speed up in order to get to the petrol pump quickly. With him, it was 'gallons per hour', not m.p.g. in relation to speed, and he judged me to be a fool when I said that his proper course was to have slowed down to a steady 30 to 35 m.p.h. in order to economize in petrol.

It may interest the beginner—if the question of money or costs concern him to mention the results of experiments carried out a few years with a popular car. On full throttle or picking up at 10 m.p.h. consumption was 12 m.p.g. And at 55 m.p.h. it was 16¾ m.p.g. The consumption decreased gradually as the speed fell to 35 m.p.h. when it was 32 m.p.g. and stayed at that down to 27½ m.p.h. thereafter dropping gradually to 24½ m.p.g. when the speed fell to 10 m.p.h. From this it is clear that for those in no hurry and to whom costs count, the most economical speed of a car is between 25 and 35 m.p.h.

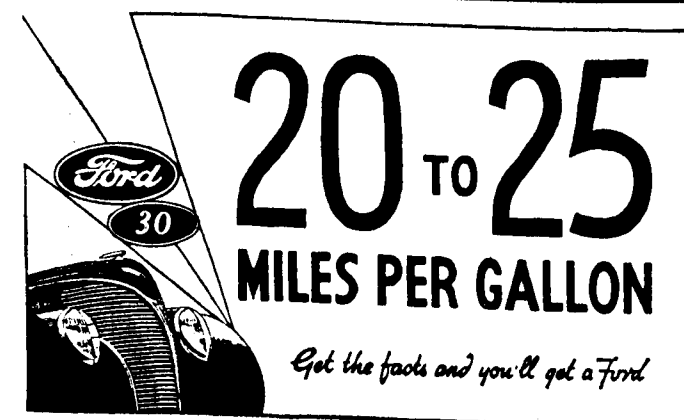
Apart from speed, every motorist can avoid the waste of petrol by the old habit of reviving up the engine before switching off. Not only is sudden reviving up harmful to the engine, but it is now—the experts say—very harmful to the cylinders. It was considered useful years ago when lubricating oils were considerably heavier than the types employed on modern cars, and the tendency now is for this petrol vapour to wash the cylinder bores dry of lubricant, thus exposing them to excessive wear. There are other objections connected with a back electro-motive force generated in the ignition circuit, and this often results in a blown ignition warning light. Therefore, with most cars, you should not switch off until idling speed is attained, or much harm may result. You will gain much in petrol too.

Maps :—

The new Road Maps of South India revised up-to-date is now ready, and the price has been reduced from Rs. 4/8 to Rs. 3/4.

Gazetteer :—

According to information received from the Central Survey Department of Madras, the compilation of the proposed Gazetteer will take more than another 12 months to complete.



20 TO 25
MILES PER GALLON

Get the facts and you'll get a Ford

Branch Notes

Bangalore

By Major A. W. Waters, M.B.E. (Retd.)

Hon. Secretary, Bangalore Branch, A.A.S.I.

General :—

A much quieter month but just enough to average eight hours a day. The number of callers dropped to 97 including 3 on Sundays. The office was opened for a while on two Sundays to deal with pressing letters, and one visit was made on a Sunday to a member in connection with this tour.

The position might be summed up as 'all quiet in the Centre'. This is due, I think, to the general exodus to Mysore for the Dasara Festivities. There were several cases of real and prompt service to members; one from Europe whose extensive and complicated tour was, at the last moment, considerably altered, but nevertheless, our head office at Madras, and fresh itineraries delivered—within 36 hours—at a distance of over 200 miles.

Another case was a member who months ago was supplied with various routes from Bangalore to Patna, as also information as regards shipping his car from Madras to Calcutta, etc., etc. He dropped in one evening to say goodbye and thank us and said that his plans were entirely changed and he had now to go via Poona to make a call there and would then find his way to Patna but had not the foggiest idea of the road and conditions. "Suppose, I must muddle along as best I can" he said, and seemed rather gloomy. "Wait a bit" sez I, and a few minutes sufficed to turn out a complete and up-to-date itinerary from Bangalore to Patna. To say that he was astonished is putting it mildly, for he was leaving next morning and there was no time to address our head office. He grabbed that itinerary like a drowning man at a life-buoy and went away all smiles, but not before he'd purchased a badge for his car. The point was that, although the route was perhaps not the most direct, it was one entirely suited to the monsoon season, and he wanted one with the least trouble. Advice was given to three members involved in accidents and traffic offences and one case was referred to headquarters.

3 maps were issued to members, and 5 badges. Two badges were received from members leaving India and refunds settled. 13 Madras, Mysore and Station licences were obtained and delivered to members.

Correspondence :—

182 letters were received from all sources. The issues were:—

To the Secretary	..	105	(2 more than August)
Others—Outstations	..	33	(8 " " " ")
Local	..	71	(14 less than " ")
		209	a decrease of 4 from

August with a further drop in postage due to holding over unimportant letters to make up full units of postal weights.

Trivandrum

By A. K. Tampi, Esq.,

Hon'y. Secretary of the Trivandrum Branch.

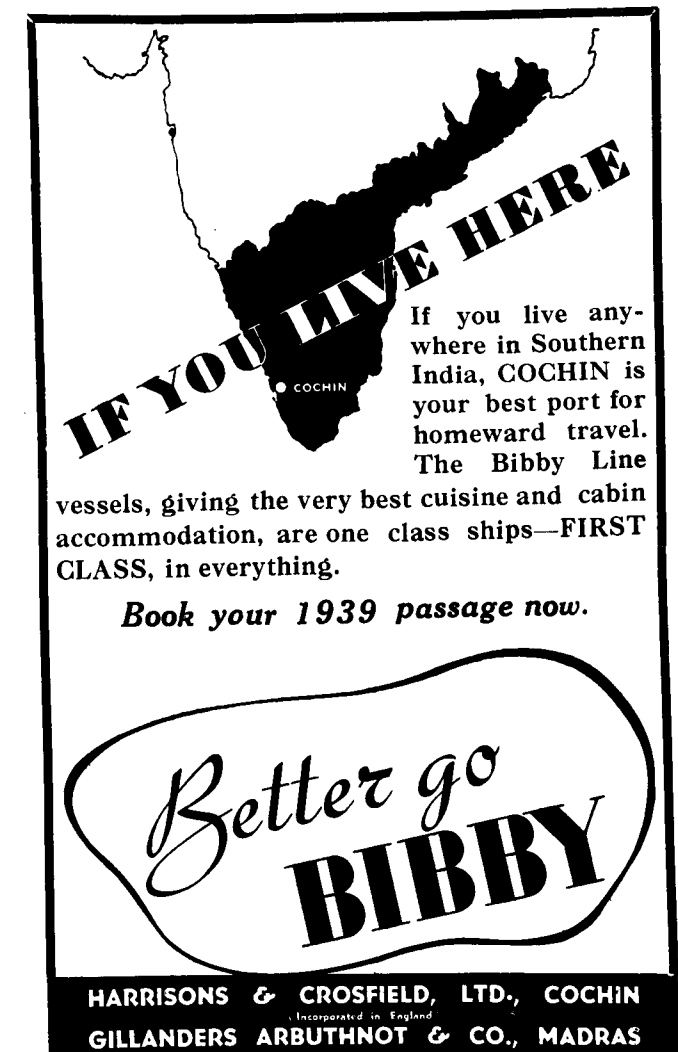
General :—

I should like to thank the Honorary Secretary of our Bangalore Branch for the felicitations which he bestowed upon us in his notes last month. No doubt the good start we made was by the use of propaganda and Scout Patrols in creating "A.A."-mindedness.

There is nothing outstanding to report this month, for there were few visitors, although we expected many for the Princess' wedding. Trivandrum was very busy with the wedding ceremony and there was lots of fun and entertainment for the sightseers.

The Office :—

The work is increasing. A large number of motorists, both members and non-members, called at the Office for routes and itineraries and also for short term licences to British India. One badge was supplied to a member. All the road information notices which were sent from the Head Office were given full publication in the local Press.



IF YOU LIVE HERE

If you live anywhere in Southern India, COCHIN is your best port for homeward travel. The Bibby Line vessels, giving the very best cuisine and cabin accommodation, are one class ships—FIRST CLASS, in everything.

Book your 1939 passage now.

Better go BIBBY

HARRISONS & CROSFIELD, LTD., COCHIN
GILLANDERS ARBUTHNOT & CO., MADRAS

Correspondence :—

40 letters were received from all sources.

Letters issued were:—

To the Secretary	5
Others—Outstation	26
Local	22

Total .. 53

Scout :—

One Scout and two car park attendants were present throughout the month.

A Letter of Appreciation :—

A letter of appreciation has been received from a member who was supplied with routes, triptyque and the necessary licences for a tour in Ceylon.

Madura

By Messrs. T. V. Sunderam Iyengar & Sons

Hony. Secretaries of the Madura Branch.

A tribute to the work done by the Automobile Association of S. India was paid by Sri N. Chandrasekara Iyer, District and Sessions Judge, Madura, when he presided over the opening ceremony of the Madura Branch on 3rd September.

A spacious and gaily decorated pandal was erected in front of the new office at No. 15, North Veli Street, Madura. Many distinguished visitors, members of the Association and District Officials were present.

Sri N. Chandrasekara Iyer on arrival was received by us and by Mr. Owen, the Secretary of the Automobile Association of S. India, Madras.

Mr. Owen made a statement explaining the aims and objects of the Association. The Automobile Association, he said, was a brotherhood of motorists irrespective of race or creed formed to protect their own interests. It was not a profit-making concern, its own income being derived entirely from the Subscriptions received from members, which was utilised purely for the purpose of giving them service. The Association was recognised by the Government as the representative body of private motorists in South India. The Association gave touring facilities freely to all members, route itineraries being issued from anywhere to anywhere. Facilities were also afforded to members for foreign touring. Technical advice on motors was also given free to members, and the services of a technical expert for detailed examination and report for a small sum were also available for such of the members as intended to purchase second hand cars. A scheme was being drawn up by which members would be given free legal defence in the event of police prosecutions.

In declaring the office open, Mr. Chandrasekara Iyer drew attention to the benefits which motorists could derive from the Association and appealed to them to join the Association.

Office :—

Many non-members visited the office to learn of the activities and the advantages of becoming a member of this Association. They were furnished with all details on the spot.

24 motorists called for road information, licences, etc., and they were supplied with all the details. 23 car badges were issued and fitted to members' cars.

Correspondence :—

73 letters were received from all sources.

Letters issued were:—

To the Secretary	43
Others—Outstation	30
Local delivery by peon ..	240

Route Itineraries :—

8 route itineraries covering a distance of 2,829-7 miles were issued to members during the months of August and September 1938.

The illuminated electric sign has been hung outside the office and is lighted every night.

Road Signs :—

Many places in the town of Madura require signposts and a detailed report has been submitted to Head Office.

Mr. Strang and Mr. Haddrell of New Zealand called here in their Saloon No. EYT 107 and were supplied with information and a Road Map of India. On leaving en route to Mysore they wished a happy future for this branch office.

SCOUTS AND CAR PARK ATTENDANTS**Madras :—**

The usual two car park attendants have been on duty at the Cinemas throughout the month. One Scout was sent to Mysore on September the 23rd along with one man from Bangalore Branch to work in conjunction with the Police during the Dasarah Festivities. They return on the 12th of October, and their report will be published next month.

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Bangalore :—

Scout Whyms was present in Bangalore from the 1st to the 22nd of the month, and on the 23rd proceeded with Scout Drury (from Madras) to Mysore on special duty in connection with the Dasara Festival and the Dasara Exhibition there.

*Summary of functions attended:—*Important Church Services: 8. Century Club: 3. City Y.M.C.A.: 2. Cubbon Park Bandstand: 2. Golf-Club and B.U.S. Club: 3. Bangalore Gymkhana Races: 2. Bowring Institute Dances, etc., etc.: 7. City Town Hall: 1. Official reception, dinner and dance: 1. Opera House dance: 1. Carnival: 4. Hockey Tournament, B.U.S. ground: 6. Sports: 1. Technical advice to members: 2. Licences obtained and delivered to members: 13. Rendered assistance to 1 member. Observed traffic-junctions (privately) 2 hours. General patrol work over all important roads in the City and Station, and at the Cinemas nightly.

Number of cars at the City Town Hall function—67 plus 17 members' cars. Official reception, 62 including 23 with badges. At the latter function, C. P. A. Fitzgerald was single-handed (with no Police) and had to cope with arrivals and departures and with two car-parks at the back of the bungalow, and was very specially thanked for the way he managed.

Trivandrum :—

Important roads and busy centres were patrolled during the day.

4 members were given assistance on the road.

The Scouts assisted the Car Park Attendant, at the Museum Car park 4 times a week and attended at the Cinemas on Saturdays and Sundays.

Madura :—

The Scout toured the roads in and around Madura, gave assistance to certain members on the road and attended the parking of cars at the following places—the Anniversary of the Old Boys' Association at the Sourashtra High School; and at the festival at Nattarasankotai. He also went by road to Ramnad and assisted a member in railing and ferrying his car from Ramnad to Talaimannar.

OCCUPATION OF INSPECTION BUNGALOWS, CIRCUIT HOUSES, Etc.

Last month it was reported that the Durbar of Pudukottah State had granted the same privileges to members of the A.A.S.I. for the use of the bungalows in that State as in the Madras Presidency.

This month it is a pleasure to inform members that the Chief Commissioner of Coorg has now also granted the same privileges, as notified in the Proceedings of the Chief Commissioner of Coorg, R. Dis. No. 2564/442-38 dated 29th Septem-

ber 1938, amending Rule 8 of the Rules for the Occupation of Inspection Bungalows in Coorg.

SILENT ZONES IN MADRAS

Last month members were invited to express their views regarding the desirability of the prohibition of horn-blowing at night in certain areas in Madras. Only the following two letters have been received, and therefore it is unlikely that this Association will make out a case to the Authorities for Silent Zones in Madras.

"While there is at present an unnecessary amount of horn blowing, I consider that prohibition of horn blowing will be attended with risks unless the pedestrians and very slow moving vehicles are compelled to use their own special lanes and the motorists are given a lane reasonably clear of such constant sources of danger and anxiety.

"If the nuisance is due to the loudness of the horns, it may be possible to instal horns which are not of great intensity in addition to the ordinary horns; the former alone to be used during the period or in the area of the Silent Zone."

"Until there are more pavements in Madras, I think it a fatal mistake to prohibit horn-blowing at any hour. In my opinion it would be better if the use of electric hooters were forbidden altogether, all road users being compelled to blow *bulb horns*. Electric hooters are startling, and their continual use down a street is a nuisance by day or night. This has proved successful in Calcutta to my knowledge.

"Lastly, I must say that I have never seen a 'bus driver give a signal to traffic behind, when he is starting or swinging out to overtake another vehicle in spite of the fact that he must realize that the traffic behind cannot see through him."

COLLECTION OF BULLOCK SHOES

The attention of the Association has recently been drawn to the excellent work of the pupils of the Union High School, Coimbatore, who have collected a total of 28,027 cast shoes within a radius of 7 miles of the Coimbatore Municipality in the first 6 months of this year.

The following is a list of the pupils with their individual collections, and it is noted that prizes are being awarded to the pupils who collected the three highest scores which amounted to 11,538.

These pupils are also actively engaged in other welfare work in the villages around Coimbatore, and it would be a gesture of appreciation of their good work in undoubtedly saving motorists many punctures and possibly accidents if members and

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other motorists in the Coimbatore District could help the High School by offering them, through the Head Master, the occasional use of their cars to visit outlying villages.

Union High School, Coimbatore

Junior Red Cross Group

SCRAP HORSE AND BULLOCK SHOE COMPETITION, 1938.

Results.

1st Prize	R. Kingsley	VI-B (J. R. C.)	..	5333
2nd Prize	Palaniswami, C.	VI-B	..	3900
3rd Prize	Doraiswami, P. M.	IV-A	..	2305
Special Prize				
1.	Veerabadran, S.	VI-B (J. R. C.)	..	2000
2.	Ramalingam, N. K.	IV-B (..)	..	1700
3.	Ramakrishnan, C.	IV-B (..)	..	1200
4.	Ramaswami, G.	III-B (..)	..	1153
5.	Mahadevan, C. R.	VI-B (..)	..	1120
6.	Palaniappan, P.	IV-C	..	1064
7.	Francis Xavier, A.	III-B	..	1000
8.	Edwin Ganesan, P.	III-B	..	1000
Honourable Mention				
1.	Susanathan, M.	III-A (J. R. C.)	..	835
2.	Veeraswami	III-B (..)	..	650
3.	Manickam, V.	II-B (..)	..	610
4.	Fredric, R.	II-C	..	594
5.	Palaniswami, A.	II-B (J. R. C.)	..	500
6.	Jeyaseelan	III-B	..	326
7.	Srinivasan, K.	VI-A	..	320
8.	Joseph, D.	II-B	..	313
9.	Rajagopal, P. C.	II-B	..	180
10.	Sivaswami	II-B (J. R. C.)	..	175
11.	Krishnaswami, S.	V-A (..)	..	160
12.	Somasundaram, M. S.	V-A (..)	..	141
13.	Gnanapragasam, G.	II-B (..)	..	114
14.	Devasirvatham	III-B (..)	..	125
15.	Sundaram, N.	III-B (..)	..	110
16.	Balakrishnan, S. R.	II-B (..)	..	105
17.	Natarajan, T. L.	II-B (..)	..	100
18.	Natarajan, C. S.	II-A (..)	..	100
	Collections below 100	..	..	794
	Total collected	..	..	28,027

N. B.—Prizes will be awarded during the School Day Celebrations.

(Sd.) R. E. RAJASEKHARAN,

Counsellor,
J. R. C. Group.

COIMBATORE.
13th June, 1938.

(Sd.) M. J. SARGUNAM,
Headmaster.

FREE SHOOTING OF TIGERS IN MYSORE STATE

The area within a radius of six miles round about Thuduru village, Mandgadde Hobli, Thirthahalli Taluk, Shimoga District, is thrown open for a period of three months for the free shooting of tigers.

The area within a radius of five miles round about Arasinagere village, Shikarpur Taluk, Shimoga District, is thrown open for a period of three months for free shooting of tigers.

NEW ROAD IN S. INDIA

The following is a letter from R. C. Morris, Esq., our Hony. District Representative in Mysore, regarding the note which was published in the last month's Magazine under the above heading, respecting the proposal of the Government of India for the construction of "an All-British India Road" from Coimbatore to Kollegal:—

"In regard to your note in the September issue of 'The South India Motor Owner', under the caption 'New Road in Southern India', please note that the road referred to has existed for many years, and has been improved a lot in the last few years. A bus service runs daily between Kollegal and Coimbatore. There is still great room for further improvements, however, as the condition of parts of the road during the S. W. Monsoon is definitely bad and traffic is liable to be held up by unbridged streams.

The Government of India have sanctioned a grant of 2½ lakhs to improve the road throughout, and it is to be hoped that the Provincial Government will put the work through as soon as possible as the necessity for a good road between Kollegal and the District Headquarters has been felt for many years.

The road in question runs along the eastern foot of the Billigirirangan Hills for their entire length."

"KEEP TO THE RIGHT" IN FORMER AUSTRIA

The following letter has been received from the Deutsche Automobil Club:

"We beg to inform you that in the night from the 18th to the 19th September 1938 the rule of the road 'keep to the right' will become valid in the whole territory of former Austria, consequently also in Lower Austria, Wien and northern Burgenland, where the rule 'keep to the left' is now in force. Thus the rule 'keep to the right' will be uniform without exception in the whole Reich. Will you kindly inform your members intending to visit Germany?"

SAFETY FIRST

Members are invited to make suggestions and criticisms on the following proposals, and to address their correspondence to: A. S. Trollip, Esq., Chairman of the Joint Town Planning Committee, Electric House, Fort, BOMBAY.

Membership

68 new members were enrolled from 1st September to 13th October 1938. These new members were introduced by the following:—

7 each by the Hon. Secretaries, Madura Branch and Madura Scout.

2 each by Hon. Secretaries, Bangalore Branch and Trivandrum Branch, Messrs. G. Sree Ram Babu, The Ocean Accident & Guarantee Corporation Ltd., H. H. Chapman, and the Hon'ble Mr. Justice F. W. Gentle.

1 each by Messrs. L. Dee, Simpson & Co., H. M. White, U. R. Rao, N. An. Annamalai, H. F. Saunders, Sree Rajah of Malludora, The Commercial Credit Corporation Ltd., Messrs. V. Duraiswamy, H. W. Shelley, W. H. Luker, G. Srinivasalu Chetty, A. P. Adam, L. Stanford, and Md. Kazim Khaleeli.

The remaining 27 were enrolled by the staff.

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The Indian Roads & Transport Development Association, Ltd.

Monthly News Letter

MOTOR VEHICLES BILL

THE Motor Vehicles Bill underwent many changes in the hands of the Select Committee and after a prolonged debate in the Central Assembly covering a period of three weeks has emerged as a useful piece of Legislation. It will come into force on the 1st of July next year after consideration by the Council of State and will be called the Motor Vehicles Act 1939.

It contains 136 clauses and impresses one, when comparing with the 1914 Act of 20 clauses, with the importance which motor transport has assumed.

Many Provincial Governments had framed rules under Section 11 of the 1914 Act, to meet the changing conditions, many of which have now been embodied in the new Bill.

The section relating to Compulsory Third Party Insurance will come into force four years after the Bill, namely July 1st, 1943.

This Association had made strong representations against certain clauses in the original Bill which were very largely upheld in the Select Committee and later as a result of the effective support given to their views by the European Group in the Assembly—the really dangerous implications in the Bill have been removed.

The clauses dealing with co-ordination which originally gave railways power to interfere in the issue of permits for road transport vehicles were modified so that the only references to co-ordination are now condensed into one clause.

In this clause the Provincial Governments are empowered firstly to prohibit or restrict the conveying of long distance goods traffic or of prescribed classes of goods whether by private or public carriers and secondly to fix maximum and minimum fares or freights for stage carriages and public carriers. While these powers were strongly objected to by the European Group and the Muslim League as well as the Congress Nationalists they remained as part of the Bill on account of Government and the Congress party who were in the majority favouring their inclusion.

In exercising these powers Provincial Governments will have regard to:—

- the advantages offered to the public, trade and industry by the development of motor transport,
- the desirability of co-ordinating road and rail transport,
- the desirability of preventing the deterioration of the road system, and
- the desirability of preventing uneconomic competition among motor vehicles.

The principal provisions of the Bill may be described as follows:—

The Provincial Governments will each constitute a Provincial Transport Authority, and likewise Regional Transport Authorities, the area of which latter shall in no case be less than an entire district or the whole area of a Presidency town. In the North-West Frontier Province and in Chief Commis-

sioner's Provinces, the Provincial Government may abstain from constituting any Regional Transport Authority.

The functions of the Provincial Transport Authority will be to co-ordinate and regulate the activities and policies of the Regional Transport Authorities of the province. It may also, if it thinks fit or if so required by a Regional Transport Authority, perform those duties in respect of any route common to two or more regions.

Personnel.—The authorities will consist of such number of officials and non-officials as the Provincial Governments may think fit to appoint, but none of them may hold any interest as an employee, proprietor or otherwise in any transport undertaking.

The Act provides that all motor vehicles shall be registered by the Registering Authority in whose area the owner is resident and any motor vehicle registered at the commencement of the Act is deemed to be registered until April 1, 1941.

Vehicles will bear a distinguishing registration mark containing a group of letters and not more than four figures. Temporary registration is also provided for. A transport vehicle will require a certificate of fitness before it can be registered. This, however, does not apply to delivery vans, which have been exempted from this formality.

Registration will be effective throughout British India but if a vehicle is kept in another province for a period exceeding 12 months the owner should apply for re-registration to the registering authority of that area.

Any transfer of ownership is to be notified by the transferee within 30 days, likewise any alteration in the vehicle which will render the particulars in the certificate of re-registration no longer accurate are to be notified to the registering authority within 14 days.

Conditions of suspension and cancellation of registration are prescribed as also appeals by the owners against such decisions.

Laden and Axle Weights.—An additional obligation attached to the owner of a transport vehicle other than a motor cab is that when applying for registration his application must be accompanied by a document signed by the maker or assembler of the vehicle stating the greatest laden weight and the greatest axle weights for which the vehicle is designed when fitted with the specified tyre equipment. This is designed to facilitate the checking of overloading of vehicles and a special schedule is attached to the Bill, to assist the registering authorities, detailing the maximum loads which the different types and sizes of tyres in use are designed to carry.

As distinct from registration, no transport vehicle, namely, any public service vehicle or goods vehicle, will be allowed to operate without a permit from the prescribed authority. School buses are, however, exempt. The Regional Transport Authority will be, responsible for the issue of permits and consideration of applications and control of transport in their areas, special conditions being laid down for the various types of transport vehicles.

Stage Carriage.—The "stage carriage," which is the term applied to a vehicle other than a motor cab adapted for the



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carriage of passengers for hire or reward, will require a permit which will be issued after the Regional Transport Authority has taken into consideration the following points:—

- (a) the interests of the public generally,
- (b) the advantages to the public,
- (c) the adequacy of existing road services,
- (d) the benefit it may bring to any particular locality,
- (e) the effect on other remunerative services, also the condition of the roads.

The Regional Transport Authority will further take into consideration any representations from other road transport interests before finally issuing the permit and it may limit the number of stage carriages on specified routes, fix conditions regarding the number of passengers, the amount of luggage such a vehicle may carry as well as enforce the exhibition of fare and time tables and lay down whether or not tickets for passengers shall be issued.

Contract Carriage.—Another class is the "contract carriage" which is a vehicle engaged under a contract expressed or implied for the use of the vehicle as a whole for a fixed or an agreed sum. It must not, however, stop and pick up or set down passengers *en route*. This applies generally to such buses as those engaged for a wedding party or carrying passengers to a pilgrim centre, etc.

The application for a permit for this type of vehicle may be granted or refused by the Regional Transport Authority dependent on the number of contract carriages that may be necessary or desirable in the public interest. They will also take into consideration representations which may be received from other persons already holding contract carriage permits in the regions. A motor cab is included in this classification, notwithstanding that the passengers may pay separate fares. The Regional Transport Authority has power to fix the fares to be charged and require that they should be fitted with taxi meters and also carry a copy of the fare table for the inspection of passengers.

Public Carrier.—Next we come to goods vehicles of which the "public carrier," being a vehicle used for transport of goods for hire or reward, is the most important. The matters to which the Regional Transport Authorities will have regard before issuing permits for the operation of this class of vehicle are similar to those of the stage carriage except that they may also specify in the permit the maximum laden weight and maximum axle weight any vehicle may carry and have regard to the prevention of uneconomic competition between other road transport services.

The next type of goods vehicle is the "private carrier" which is used solely for the carriage of goods which are the owners' own property or goods necessary for his business and is not used for a business providing transport. Certain facilities are given to owners of this type of vehicle as compared to the public carrier inasmuch as the Regional Transport Authority may, in issuing permits have regard only to the condition of the roads, after satisfying itself that the permit is necessary in connection with the business of the applicant. It may, however, impose conditions regarding the description of the goods which may be carried. This was considered necessary by the drafters of the Bill in order to safeguard against the abuses already existing, by the owners of private lorries carrying goods other than their own.

The inclusion of this clause in the Bill met with considerable opposition from certain members of the Assembly as it was

felt it would impose a restriction on the freedom and right of traders to choose the most convenient or economical form of transport. The Regional Transport Authority, moreover, was not in their opinion competent to judge whether an industry might or might not require to employ additional road transport.

Applications for Permits.—Applications for permits for stage carriages and public carriers are to be made not less than six weeks before the date on which it is desired the permit should take effect while those for contract carriages and private carriers may be applied for at any time.

Permits will be effective without renewal for not less than three years and not more than five years, as the Regional Transport Authority may specify in the permit. Provided that other conditions are equal, an application for renewal shall be given preference over new applications for permits. A permit is not transferable from one person to another without the permission of the Transport Authority which granted the permit.

The holder of a permit may with the permission of the Transport Authority replace by another vehicle of the same nature and capacity, any vehicle covered in the permit. Provisions are also made for the issue of temporary permits to meet urgent unforeseen requirements. A Transport Authority may cancel or suspend any permit if there is any breach in the conditions specified and the holder has the right of appeal.

In the event of the death of a holder of a permit the Bill provides for his successor to continue the use of the permit for a period of three months and it is left to the Transport Authority to make if necessary the transfer within that period.

Hours of Work.—The hours of work of drivers of transport vehicles are limited to a total of 54 in the week and they may not work more than five hours at a stretch without half an hour's rest nor more than nine hours in a day.

Speed limits also have been imposed for the various classes of vehicles which it is left to Provincial Governments further to restrict according to local conditions. Private motor cars are not included in these restrictions except those with a trailer which are limited to 30 miles per hour. Motor buses also are limited to 30 miles per hour while light goods vehicles may not exceed 25 miles per hour. Other goods vehicles are limited to 15 miles per hour. Provincial Governments may also make rules regarding city, inspection, use of safety glass, speed governors, etc.

Heavy Transport Vehicle.—The Bill generally provides for the operation of the light transport vehicle—that is, a vehicle with a maximum axle load not exceeding 10,600 lbs. and a maximum laden weight not exceeding 14,500 lbs. Heavy transport vehicles will require special permits, to be issued by the Provincial Government, who may restrict or prohibit their use in any area or route within the province.

The weight limits referred to are higher than those suggested by Government in the original draft of the Bill which specified that the axle weight of a light transport vehicle should be limited to 9,000 lbs. and its laden weight to 12,500 lbs. As these lower limits, if accepted, would place a considerable number of vehicles in the heavier category, the prohibition and might adversely affect the development of motor transport, the Select Committee supported the increased weights which were finally accepted by the Assembly.

In so far as concerns the control of traffic the Provincial Governments are given power to restrict the use of any specified type of vehicle, prevent overloading, erect traffic signs, fix

The Bill as passed provides for the introduction of Compulsory Third Party Insurance for any motor vehicle in four years from the date of the Bill coming into force. The costs have been estimated for third party risks to persons (and not property) at approximately Rs. 76-8-0 per annum for vehicles under 2 tons and Rs. 93 for vehicles over 2 tons, while for a 20 passenger bus it will be approximately Rs. 183.

The effect of the provisions of the Bill on the future of the motor transport depends very largely on the constitution of the Provincial and Regional Transport Authorities to be set up by the Provincial Governments. Many of the powers of control in the Bill have been vested in the Provincial Governments and the fact that it is laid down that no person having any financial interest in transport nor an employee of a transport undertaking may be a member of any of the transport authorities will deprive Government of persons with first-hand knowledge of the subject and the authorities in consequence will commence to function with a handicap.

Controversial Matters.—Much also depends on the impartiality and wisdom of the Provincial Governments and the authorities to be set up particularly in regard to such questions as the prevention of uneconomic competition among motor vehicles, the prohibition of long distance traffic and the fixation of maximum and minimum fares.

The size of the regional areas to be set up is also a matter of vital importance to the development of motor transport. It is laid down in the Bill that they should in no case be smaller than a district, but this is considered much too small by transport interests—for there is always the danger that the regional authorities in jealously guarding their powers in respect of transport problems within their areas may tend to develop a rather parochial outlook and take no genuine interest in traffic beyond their jurisdiction so that they may not issue an adequate number of permits for transport vehicles coming into or passing through their areas from outside.

This would represent a serious handicap to the development of motor transport so that as few regional areas as is administratively possible will be the best for road transport. One can well imagine what may happen if each of the 29 districts in Madras Presidency is constituted as a regional area, operating in water-tight compartments.

Salutary Effect.—The provisions in the Bill to regulate and control motor transport, generally speaking, should have a most salutary effect on its future development. It is possible it may at first result in certain hardships to the small owners operating a single bus or lorry the condition of which leaves much to be desired—for the need for a certificate of fitness will remove many of these vehicles off the roads. The powers given in the Bill to limit the number of vehicles operating over certain routes or areas will go a long way to prevent a superfluity of vehicles operating and the resultant uneconomic cut-throat competition, of which we have heard so much from the railways.

The fixation of maximum loads for transport vehicles will assist the authorities in the prevention of overloading while the limitation of hours of work of drivers to 9 hours per day and 54 hours a week will do a great deal in the interests of public safety. With these regulations and control gradually becoming operative more reliable services will develop and it is possible after a time a new mentality and responsibility amongst road transport owners may prevail, of "service to the public" in place of operation in the interest of the owner with little real regard for the public. In fact irresponsible operators will be brought

to heel and it will gradually become safe for owners to co-ordinate their services with one another.

Hours of Work.—The provisions in the Bill limiting the hours of work for drivers of transport vehicles came in for considerable discussion and a clause empowering the Provincial Governments to apply the hours to drivers of private cars was taken out of the Bill.

There is however another side to this question namely the effect of these regulations and control on the transport business itself. The limitation of hours of work will entail the employment of extra drivers on certain services, and the control of speed will result in some services taking longer while the periodical examination of vehicles for fitness together with the cost of insurance against third party risks will tend to increase the cost of operation and have an effect on the general costs of road transport. This will also have the effect of bringing motor transport responsibilities more in line with rail transport.

Long Distance Traffic.—The fact that Provincial Governments will have the power to prohibit or restrict long distance traffic of the private carrier was strongly opposed for it was maintained that the trader should have the right of choice of the method most suitable and economic for his purposes.

The original draft of the Bill gave the railways the right to object to the issue of permits by regional authorities which has, however, been removed and it is now left to the Provincial Governments alone to examine and take action on any adverse effect road transport development may have on railways' interests. The removal of the objectionable clauses relating to co-ordination from the Bill met with the approval of the House generally—but it was still felt that there was a need for some co-ordinating body to be set up at the Centre which would bring the interests of the railways and roads under one body for the consideration and examination of the subject. It has been suggested that the existing Central Transport Advisory Council might suitably be reconstituted for this purpose.

AVIATION

India Needs More Aerodromes

India needs more and better aerodromes. The Central Government has been obliged to devote its available resources to the development of aerodromes on the main trans-India route and on the two main feeder routes.

Outside these routes civil air transport has had largely to rely on the existence of R.A.F., landing grounds scattered throughout the country. These grounds are not situated with the particular object of serving commercial centres. Moreover they are frequently of insufficient size for the safe operation of commercial aircraft when loaded to their paying capacity.

Potential aircraft operators are deterred by the lack of aerodromes to serve important localities. Provincial Governments, municipalities and private persons hesitate to prepare aerodromes in the face of the lack of aeroplanes to use them. The vicious circle is one which sooner or later has to be broken. The Indian States are opening up aerodromes in their territories and others may be expected to follow suit.

It is of paramount importance that aerodromes should be properly sited and planned that they should be maintained and operated to a uniform standard for the sake of safety. In British India the necessary standard can be assured under the Indian Aircraft Rules. In approving aerodromes within their territory the Indian States will be guided by the same standards so as to ensure uniformity throughout India.

Municipal authorities and other persons who may be considering how to bring new trade to their towns by improving their amenities will therefore be interested in a book entitled Notes on the preparation, Licensing and operation of Aerodromes and Landing Grounds, just published by the Directorate of Civil Aviation of the Government of India.

This book is an important summary of information on the planning and management of aerodromes; it will also be of assistance to pilots, particularly those who may be called upon to advise as to the choice and development of aerodrome sites.

The book is a mine of information on those aspects of aviation concerned with aerodromes. Details are given of the requirements of different classes of aerodromes, from emergency landing grounds to first class air ports, including such matters as selecting the site, drainage, clearance of approaches buildings, lighting for night flying, etc.

Aerodrome Lighting.—Many of the leading points are illustrated by simple sketches as, for example, the different kinds of markings to be used on aerodromes and the arrangements of aerodrome lighting. There are chapters on such matters as legislation, the responsibilities of an aerodrome licensee, night flying requirements and aerodrome maintenance.

That an aerodrome should be as close as possible to the town which it is meant to serve, but that it should at the same time be zoned and planned for future expansion is one of the important points brought out.

There are several difficulties peculiar to aerodrome construction in India, such as the problem of drainage and the need for prepared runways during the monsoon, and the high altitude and the high temperature of many parts of India which make it necessary for aeroplanes to have more space in which to take off, these problems are fully discussed in this new book.

Pilots also will find much to interest them, more particularly in the useful facts given in the chapter "Operation from aerodromes of limited dimensions," which provides by simple graphs and explanations a key to the safe use of small aerodromes and what allowances should be made by pilots for altitude, slope, temperature and similar factors.

AERODROMES AND LANDING GROUNDS IN INDIA

The Director of Civil Aviation in India in a recent note to airmen has published a comprehensive list of 166 aerodromes and landing grounds for civil aircraft in India and Burma with the conditions governing their use. They are divided into different classes. Civil aerodromes and landing grounds licensed or approved for public use and which are normally maintained in good condition come under Class A, Part I, and those for private use normally in serviceable condition under Class B. Several aerodromes under the Royal Air Force and Army landing grounds are also available but open only to commercial and private aircraft on *bona fide* long distance flights, provided sufficient notice is given, and not for displays or joy-rides. Part III contains a list of aerodromes and landing grounds in Indian States. These are generally in good condition but it is usually necessary to obtain permission for their use as their temporary unserviceability as in the case of Class B aerodromes, Part I, is not always notified.

STATES' PROGRESS IN AVIATION 50 Landing Grounds

Increased Traffic and Interest in Flying

The construction of more than 50 landing grounds, regular air services on the Delhi-Bombay route and the Porbandar-Bhavnagar-Bombay route, the establishment of seaplane stations at Udaipur and Gwalior and the direct connection of these States with the Empire air mail service between England and Australia are some of the outstanding developments of aviation in Indian States.

Bhopal, Indore and Gwalior gave subsidies and landing facilities to the Bombay-Delhi air service, which was operated very successfully last cold weather from November 8, 1937, to May 9, 1938. The service flew 82,915 miles and passenger traffic amounted to 68,770 passenger miles. This service will be resumed after the rains.

The air service between Bombay and Kathiawar was started on November 1, 1937, by Air Services of India, Ltd., with calls at Bhavnagar, Rajkot, Jamnagar and Porbandar. Traffic increased steadily and on April 18, 1938, the frequency was raised to five times a week. The service will continue after the rains, when the company hopes to be entrusted with the carriage of surcharged mails.

During this short season 219 scheduled services were operated by the company. A regularity of 99.5 was achieved and 933 passengers were carried.

The Madho Sagar Lake at Gwalior is being equipped jointly by the Government of India, the Air Ministry and the State as a permanent seaplane station on the trans-India service. A permanent aeronautical radio station is being installed this year by the Government of India. Gwalior is an important night stop for seaplanes where passengers enjoy the facilities of the excellent State hotel. At Udaipur, the Raj Sammand Lake has been equipped as a seaplane station and has shown itself to be satisfactory for regular operation.

BRITISH MOTORWAY SCHEME

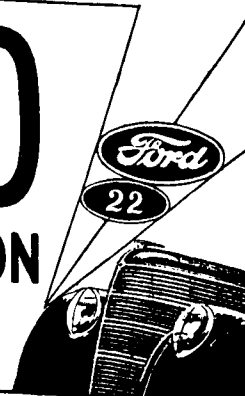
The County Councils Association have sent in a 1000 mile "motorways" scheme for the consideration of the Minister of Transport amounting to £60 million.

The Association states that the Scheme is framed to meet the ordinary commercial needs of the country and that no regard has been given to the need for motorways for the purposes of national defence.

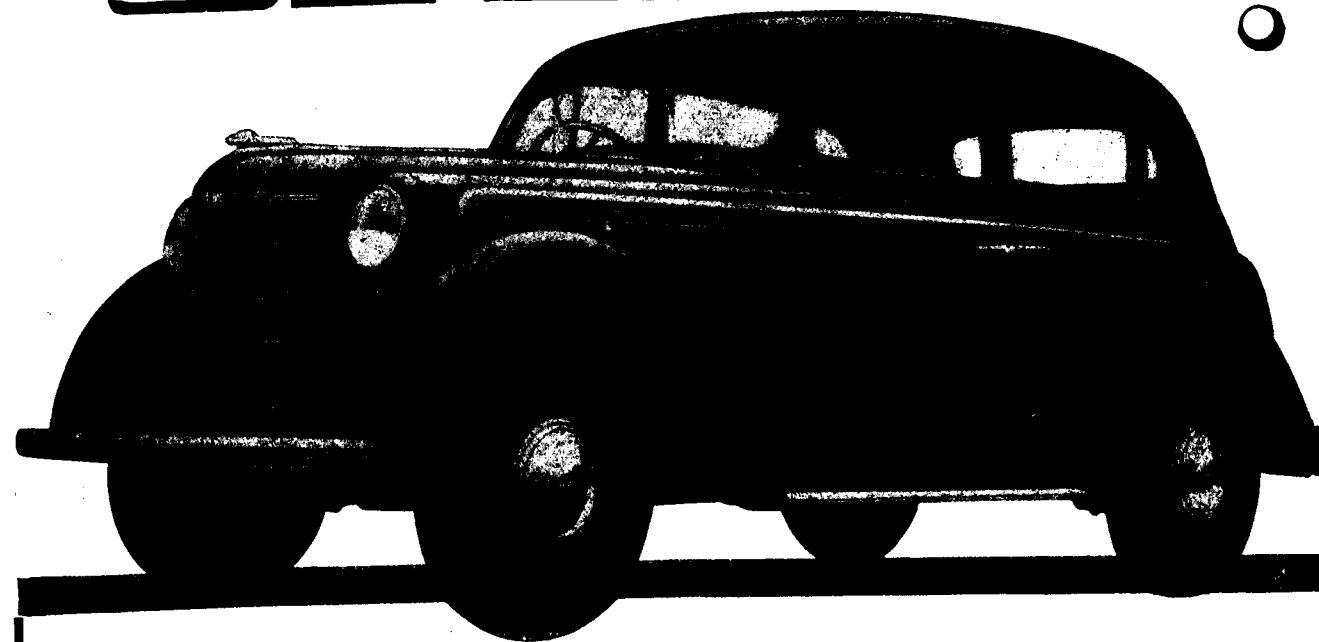
(Continued on page 328).

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The *NEW* OPEL 10!



THIS brand new Opel 10 Kadett, with redesigned front end and many improved body and engine features, is the last word in motoring economy. Available at the world's lowest cost for a car of this class, the Opel 10 embodies all the features of a General Motors car—Knee-Action front springing, All-Weather Ventilation, Super Hydraulic Brakes, and All-Steel body. Both the Sedan and the Cabrio-Coach models develop 27 h. p., and have a 92" wheelbase. Start saving with an Opel from this month.

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Other New OPEL Models are

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- OPEL 12 Olympia Cabrio-Coach.
- OPEL 16 Five Passenger Super-Six Sedan
- OPEL 16 Five Passenger Super-Six Cabriolet.

Pneumatic-Tyred Equipment for Bullock Carts

Encouragement Afforded by Public Authorities

GOVERNMENT OF INDIA

ON 30th May 1934, the Government of India, Finance Department, authorized assessment of duty at the special rate of 5 per cent. on A.D.V. Wheels of Bullock Carts fitted with Pneumatic Covers and Tubes, instead of the usual 20 per cent., for a period of two years. This concession was withdrawn on arrangements being made for the manufacture of Tyres and Tubes in India.

PROVINCIAL GOVERNMENTS

Bombay

The following notification was published in the *Government Gazette* dated 11th July 1935 (i.e., before the general abolition of tolls in the Presidency).

"In exercise of the powers conferred by section 3 of the Tolls on Roads and Bridges Act 1875 (Bombay Act III of 1875), Government are pleased to exempt Bullock Carts fitted with Pneumatic Tyres from payment of Tolls on all Provincial Roads with effect from 1st April 1935."

This was followed by a *communiqué* in which the Director of Information stated:—

"It has long been recognized that bullock carts with iron-tyred wheels are the principal cause of excessive wear and tear on road surfaces. Recently Pneumatic-tyred Wheel equipment for Bullock Carts has been introduced, and it is considered that the adoption of this equipment in general use must result in reducing appreciably the cost of upkeep of public roads.

Government have accordingly suggested for the consideration of Local Bodies, including Municipal Authorities, the desirability of their encouraging the use of bullock carts fitted with Pneumatic Tyres by exempting vehicles so equipped either partially or wholly from wheel tax and road tolls.

It has also been suggested to these authorities that it will be to their advantage to use Bullock Carts of this type in connection with their own sanitary and other services, both on account of the reduction in the cost of upkeep of their roads and as effecting economy in the operation of such services.

Government on their part have already decided to exempt Bullock Carts fitted with Pneumatic-tyred Wheels from payment of tolls on all Provincial Roads, from April 1st, 1935."

In a recent Bombay Government resolution, P.W.D., Government point out that the use of Pneumatic Rubber Tyres on Bullock Carts will be a distinct advantage to the life of roads and to their maintenance costs. In order to encourage the use of rubber-tyred vehicles, Government have therefore inserted the following clause in the "Notice to Contractors" P. W. D. Form 96 (e):—

"When tendered rates are the same, preference will be given at the discretion of the accepting Authority to those who tender for the carting of materials by vehicles having Pneumatic Tyres."

Madras Presidency

SAIDAPET.

The Municipality have agreed to reduce the Licence Fees by 50 per cent.

ERODE.

The Erode Municipality have reduced the tax on Pneumatic-tyred Vehicles to half the present rates from the 1st April, 1936.

TRAVANCORE STATE.

The Travancore Government are considering the improvement of the 57-mile long arterial road from Trivandrum to Cape Comorin, which carries some of the heaviest traffic in South India. A note circulated by the Government to the members of a conference convened in this connection points out that the cost of reconstructing the road as well as the recurring maintenance expenditure is dependent upon the type of traffic to be provided for.

"The damage done to the roads by the iron-wheeled bullock carts is very great," states the note. "It is estimated that an average of 2,000 carts use the road daily, and the damage started by these carts is continued by buses and lorries. If these iron-wheeled bullock carts can be prevented from using the road, the cost of maintenance will be greatly reduced. A tyre factory will undertake to carry out conversions of all iron-wheeled bullock carts at Rs. 130 per cart, including axle, ball-bearing cups, wheels and tyres.

The time required for the conversion of 2,000 bullock carts is approximately six months. It is, therefore, suggested that, at the commencement of the scheme, the public be informed that after a given date, allowing the six months interim period, no iron-tyred vehicle of any description will be permitted to use the Trivandrum-Nagercoil-Cape Comorin Road. During that period, arrangements will be in progress for remetalling and surface treating. The Government will provide the original equipment, as it may not be possible for the owners to invest the necessary sum of Rs. 130 on account of initial expenses for conversion of the carts. This would cost a sum of Rs. 2,60,000 to the State.

Tyre replacements, which should not be required for four to five years, will have to be met by the cart-owner, the price of which will be Rs. 50 per pair of tyres. Cart-owners will be able to save this sum during the five years on account of the lengthening of life of their carts, the better condition of their bullocks and their ability to transport loads equivalent to those now being carried with one bullock instead of two.

The cost of reconsolidating and surfacing the road to carry iron-tyred carts for five years is Rs. 7,06,230, annual maintenance is Rs. 48,336, and the cost when these carts are equipped with pneumatic tyres would be Rs. 4,21,515 and maintenance Rs. 24,168, the cost of remetalling remaining the same in each case, i.e., Rs. 1,58,175. In the case of the road being surfaced to carry only pneumatic-tyred vehicles, it is estimated that the equipping of 2,000 bullock carts with pneumatic tyres could be carried out at Rs. 130 each or Rs. 2,60,000 in all, and even if the whole cost is borne by Government, there will be a saving of over Rs. 24,000 in initial cost and Rs. 24,000 annually after the first five years."

Siting of Schools

MR. A. S. TROLLIP, Chairman, The Joint Town Planning Committee, writes:—

The first instinct of those responsible for the siting of schools seems to be prominence in some populous locality. Schools, in fact, should be built as far as possible in areas carrying the least traffic, in areas that are as quiet as possible.

The Joint Town Planning Committee makes the following recommendations on the siting of schools:—

Location:—Schools should be sited off main roads so that they will be free from traffic noises, motor vehicles, exhaust gases, and dust.

Where schools are located on main roads, entrances and exits from or on to main roads should be closed where possible and new ones made inside roads if possible.

Careful attention should be given to visibility in the siting of entrances and exits; the principles are detailed lower down.

It is desirable that the school should be placed on a street hat has wide footpaths.

It is essential to locate schools near playgrounds or open spaces, preferably abutting thereon. A memorandum on playing fields is under consideration and will be issued shortly.

Grouping:—For the convenience of transport and general economy, it is recommended that a number of schools should be grouped together in each locality, opposite to or abutting on a playing field. Where the space available in the playing field is not sufficient for the use of all the schools simultaneously, different days in the week may be allotted to each school or group of schools, to share the benefits of a common playground.

Gate and Guard Rails:—A sudden rush of children out of the school gates can be prevented by the use of stiles or turnstiles.

Another way to prevent this is to open the gates five minutes after the school closing bell has rung. This checks the impulse to run from the building straight into the street.

Guard rails or pedestrian fences should be erected along the kerb of the footpath opposite the exit. Their length should be greater than twice the width of the gateway.

Vehicular Traffic:—Entrances and exits for vehicular traffic to and from the school should be provided separately if possible. They should be properly planned with respect to the traffic outside, taking care to see that cars make a *clockwise movement* from the entrance towards the exit. This will also facilitate the loading and unloading of passengers in an orderly manner.

Parking:—Since cars generally arrive before the students are ready to leave, proper parking arrangements are necessary. If there is parking space in the school compound or in the adjoining streets, this should be laid out properly to enable cars to get away in an orderly manner.

Facilities in Monsoon:—A portico to the school building during wet weather facilitates loading and unloading of students.

Cautionary Signs—Schools:—The Government of India have standardised a sign to warn motorists of the presence of a school, viz., a schoolboy with a satchel. This sign should be

placed on either side of the entrances and exits at least 100 feet in advance and in a position where they can be readily seen by motorists; application should be made to the Road Authority for the provision and erection of such signs.

In business districts with their multiplicity of business signs, advertising posters, etc., and the background of shop windows, it is difficult to place a sign where it will be seen by passing motorists. In such places it is generally useless.

Where the Road Authority has no funds to erect a sign and where a sign will be effective, permission to erect a school sign should be obtained and a sign should be painted and erected by the school authorities. A full size print of the standard school sign can be obtained on application to the Safety First Association by sending that body a stamped addressed foolscap envelope and a request on a plain sheet of headed notepaper.

Visibility of Exits and Entrances:—For visibility and in order to enable the motorist to see school entrances and exits well in advance, the following points should be observed:—

1. **At Bottlenecks or S-curves:**—The motorist is not able to get an advance view; besides his attention has to be concentrated on the hazards that already exist at such places and it would be unsafe to have a school entrance or exit in the vicinity.

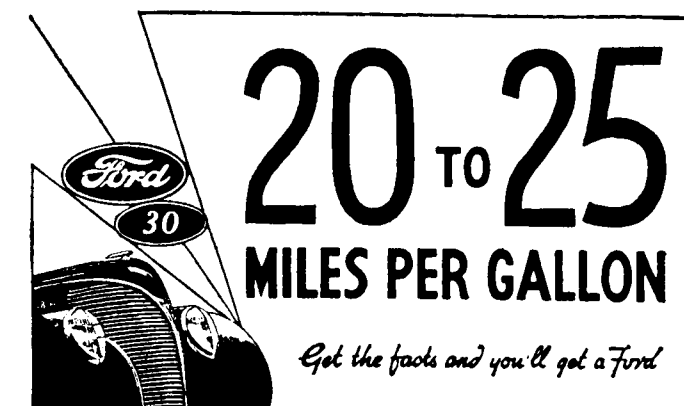
2. **On the inside of curves or near acute-angled corners:**—Here too an advance view is impossible; and the motorist taking the sharp turn, these corners require, cannot be expected to be on the lookout for school children.

3. **At setbacks or in recesses** where an advance view is hindered.

4. **At setforwards or behind obstructions** like advertisement hoardings, drinking fountains, car parks etc., children may rush out directly into the street unobserved by the motorist and get run over.

5. **Abutting on footpaths** or roads where hawkers are allowed. These roadside shops distract the children and prevent them from giving all their attention to the traffic on the road they are about to cross.

6. **At important junctions** and crossings or at roundabouts. The motorist requires a wider vision and the minimum of distraction at these places. Wherever it is necessary for children to cross at important junctions or roundabouts, they



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should be taught to cross at the throats of the streets leading to the intersection. They should never be allowed to walk diagonally across a junction or through a roundabout.

7. *At approaches to bridges* or rises in the road. A motorist advancing from the other side of the bridge or rise has his vertical vision obstructed and is unable to see beyond him to any appreciable extent.

8. Exits and entrances should be as open as possible, *with low compound walls*, so that motorists will see children proposing to leave the school grounds well in advance.

Internal Traffic:—It is desirable that all student traffic along corridors and stairs should keep to the left. Stairways should be constructed with bannister rails on both sides. Where the width is so narrow that only one rail can be admitted, the rail should be so placed that it is on the left side when descending. The help of a hand-rail is more essential when descending as this action is the more hazardous.

Education in Road Usage:—Using the road to-day is a skilled business; and it is most desirable that all children should

be instructed in the proper use of the road—walking on the footpath, keeping to the extreme right of the road where there is no footpath, and crossing the road properly. This instruction should as far as possible be correlated with the ordinary subjects of the school curriculum, e.g., essay writing, drawing, geography, mechanics, chemistry, and arithmetic.

Several schools in Bombay and elsewhere have established School Safety Patrols to direct students to and from school along recognised crossings in the vicinity of the school.

Cyclists:—As a large number of school-going children use bicycles, it is important that there should be a periodic inspection in the school of the machines used by the students and their condition, and a test to determine whether a student is competent or otherwise to ride a cycle.

Educational authorities are advised to contribute in every way towards assisting the community to solve the traffic problem, and the ways mentioned above deal with the most important points. More detailed information on any of these points can be obtained from the Safety First Association of India.

The Alliance Internationale de Tourisme

Congress Days in Luxembourg

NOT only in the annals of the Luxembourg Touring Club, but also in the history of the A.I.T. the days between the 20th and 24th of August 1938 will be red letter days. For it was in Luxembourg, where 40 years ago the A.I.T. was born, that we celebrated the success of this powerful organisation, which was so small at the beginning.

Mr. André Wolff has just published a book about the development of this organisation. The title is: "Forty Years of International Touring (1898–1938) under the Sign of the A. I. T." and it contains all the important dates in the history of the A. I. T. In the beginning we learn about Touring before the Congress in Amsterdam and Brussels (1897), then comes the description of the Congresses and the activity of the L. I. A. T. until the Great War, followed by the reorganisation of Touring after 1918 and the creation of the A. I. T. An appendix gives us the views of the leading personalities of this organisation, and their work in various countries. Dr. Henneberg, President of the A. I. T., wrote the introduction to this interesting book which is dedicated to the City of Luxembourg. To all those who care for Touring and that world wide association called the A. I. T., it will be of great value.

The A.I.T. could not have shown its appreciation of the help of the Luxembourg Touring Club better than by celebrating its 40th anniversary at the same place where its cradle stood—in Luxembourg. We must say that Luxembourg has shown at this occasion such a wonderful spirit of organisation and so much hospitality, that it need not stand back to any other country. To lay stress upon the international relationship, the organisers of the Congress had placed an enormous Globe at the entrance of the Municipal Hall, amidst a flower-bed showing in big letters the initials of the A.I.T. and the T.C.L.

This important international meeting was a very effective propaganda for the country. During these days, the charm and variety of the Luxembourg scenery were praised again and again. The foreign delegates also appreciated the good roads, the numerous tourist paths and, last not least, the traditional Luxembourg hospitality.

The organisers had done everything to give their guests the right impression of the country and to show them the different aspects of it: the Oesling and the valley of the Sûre, Moselle and Müllertal, the steel works, Mondorf and its mineral springs, and above all the city of Luxembourg with its active inhabitants, who are so proud of their independence.

The festivities began on Saturday, August 20th, with the reception of the D.D.A.C. (Der Deutsche Automobil Club). Forty German cars, carrying 150 persons under the direction of their President, Baron von Egloffstein, met in the capital, and Mr. André Wolff, administrator of the T.C.L., greeted the delegation at the Casino. In his address, Mr. Wolff underlined the task of the Touring Clubs as far as international understanding is concerned. The president of the D.D.A.C. expressed his thanks, and Major Doehmer presented the T.C.L. with a

valuable gift. Followed a short visit of the town, conducted by Mr. J. P. Koltz, and in the evening a reception at the German Embassy.

The actual Opening Session of the Congress took place on Sunday, August 21st at 10 a.m. in the Central Hall of the Palais Municipal. The musical part of the programme was executed by the augmented station orchestra of Radio Luxembourg, under the direction of Mr. Henry Pensis. H. E. Mr. Joseph Bech, Foreign Minister, addressed the audience and insisted on the importance of Touring for a better understanding between the nations; Mr. Auguste Thorn, President of the organisation-committee, spoke about the social value of Touring, and the development of the A.I.T.; he also unveiled the memorial board of the foundation of the A.I.T.; then Dr. Henneberg (Geneva), President of the A.I.T., said a word about good old times and appreciated the work of his predecessors. He insisted on the fact that the A.I.T. consists to-day of 104 clubs, established in 61 different countries, and counts over ten million members.

The City of Luxembourg had also prepared a reception which followed the Opening Session and took place in the wainscoted room of the Palais Municipal. Mr. Gaston Diderich, Mayor of Luxembourg, praised Touring as a national industry and a help to world peace.

Meanwhile the Belgian Cyclists' Band "Royal Guidon Hesbignon" from Haneffe (Liège) had arrived and gave an exhibition at the Place d'Armes. As for the foreign delegates, they went to the Memorial of the Unknown Soldier and deposited a wreath of flowers. Later on, those taking part in the cyclists' rally and the motor rally arrived, and in the afternoon prizes were distributed to the winners, and they all gathered at the Casino for a cup of tea.

Monday morning was occupied by a general meeting of the delegates at the Casino, while the ladies went to see the Luxembourg golf course. In the afternoon followed a reception in the castle of H. E. Count Ansembourg, Luxembourg Ambassador in Brussels. The day was closed with a banquet



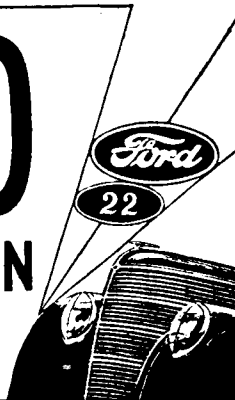
PREMIER'S RETURN FROM HISTORIC MEETING WITH HITLER.

Mr. Neville Chamberlain, the Prime Minister, received a great ovation when he arrived by air at Heston Airport after his historic talk with Herr Hitler at Berchtesgaden.

The picture shows the crowd cheering the Premier as he left the airport in a Hillman Saloon for Downing Street, where he immediately held an important conference with Lord Halifax, Lord Runciman—who also had only just returned by air from the Continent—Sir John Simon and Sir Samuel Hoare. Mr. Chamberlain later drove to Buckingham Palace and was received by the King.

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at the Casino, which was offered by the T.C.L. Unfortunately it is impossible for us to give here the contents of all the speeches, but we must at least enumerate the names of the orators: Mr. Adolphe Seholtus, Counsellor at the Government, who was representing Mr. N. Margue, Minister of Touring; Mr. Alphonse Greisch, Attorney, President of the "Union des Villes et Centres Touristiques"; Mr. Edouard Chaix, Honorary President of the T.C.F.; Baron von Egloffstein, President of the D.D.A.C.; Mr. Arthur D. Allen, Assistant Secretary of the A.A., who was also representing Sir Stenson Cooke, Vice-President of the A.I.T.; Mr. Paul Duchaine, General Secretary of the A.I.T.; Dr. Henry Henneberg, President of the A.I.T. and Mr. Auguste Thorn, President of the organisation-committee of the T.C.L. This grand manifestation of international understanding was rounded off by a little dance which went on until the early hours.

For Tuesday, August 23rd, an excursion through the Luxembourg Ardennes was on the programme. The delegates visited Esch s/Sûre, Wiltz, Vianden and Echternach. Everything helped to make this excursion a perfect day: the charming reception of Mr. Wolff, Mayor of Vianden, the excellent lunch at the Hotel Bel Air in Echternach and the splendid walk through the famous "Wolfsschlucht".

In the evening the delegates were conveyed to a reception offered by Mr. and Mrs. Charles Schwall and Mr. and Mrs. André Wolff-Schwall at the Golf Club-House. A film of the A.I.T. Congress in Morocco was shown together with the first part of the Luxembourg film, containing views taken at the inaugural session, as well as pictures of the rose-exhibition opened by H. R. H. Grand-Duchess Charlotte and the Grand-Ducal children.

Wednesday, August 24th—the culmination of this Congress so rich in enjoyments of all kinds. After all, vivid instructions are more efficacious than dry discussions, and help to create friendships which are sure to last.

This last day was devoted to more serious things: first the visit of the steel-works at Esch, followed by two receptions,

one by Director Koener, the other by Mr. Reichling, delegate of the Mayor of Esch. The foreign visitors understood that they had been shown the national wealth of the country, and they may have wished that these treasures should only be used for the benefit of humanity and for World peace.

Lunch was served at the Hotel Grand-Chef in Mondorf, where the delegates were greeted by Mr. Alphonse Bervard, Director of Mondorf-Etat. He spoke about the close relationship between Touring and hospitality, for which Mondorf is a good example through its situation between Luxembourg, France and Germany. After lunch Mr. Willy Gilson took the delegates to visit the health resort. His clear explanations of the thermal baths left the best impression.

Wealth! Health! Under this double sign the Congress came to an end. The closing banquet offered by the Luxembourg Government was held at the Hotel Brasseur. It was presided over by H. E. Mr. Joseph Bech who was surrounded by ministers, presidents and personalities of all domains. It was a great moment, considering the importance of the A.I.T., and the thought of its 50th anniversary came up. After the discourse of Mr. Bech and Mr. Allen, whose talk was relayed by Radio-Luxembourg, Mr. André Wolff addressed the congressists in the name of the T.C.L. He explained the leading part which the A.I.T. has played during the last forty years wherever Touring was concerned, and how the T.C.L. tried to work in the same spirit. He spoke about past experiences and about the problems which still remain to be solved. He said he considered Touring to be a necessity for humane and international equilibrium, and that he was sure of the ascension of the T.C.L. which will partly be due to the devoted help of his collaborators of which the most discrete are not always the least important.

Dr. Henneberg, President of the A.I.T., expressed his thanks to the Government for the distinction which he and Sir Stenson Cooke had received—the decoration of "Commandeur de l'Ordre de la Couronne de Chêne". He also had a kind thought for his former and present collaborators, expressed his great friendship to the T.C.L. and thanked them in the name of all those who had been able to participate at the Jubilee Congress of the A.I.T.

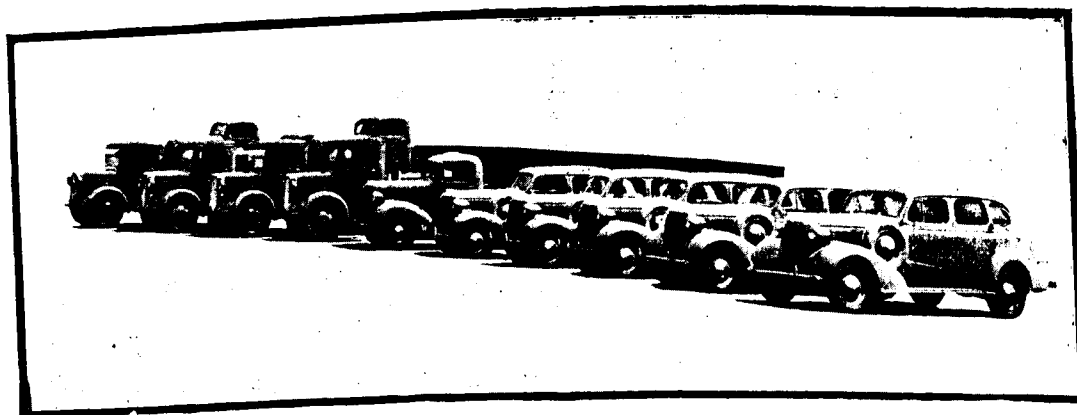


Photo shows the fleet of Bedford and Chevrolet Trucks and five 1938 Chevrolet De Luxe Sedans ordered by the Attock Oil Company Limited, Rawalpindi. The cars and trucks were taken by road.



Don't take risks every time you step into your car!

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Lower Circular Road, Calcutta.

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The Modern Craft of Car Painting

50 Operations to Produce the "Body Beautiful"

"Sanders" and "Ding" Men

ONE of the features of the modern car which is seldom written about, but which is probably the first noticed by the new owner, is the superb finish now given to bodywork. The popular car of today has paintwork of a quality that even "luxury" cars could not equal a few years ago. As an example Ford cars have been finished with a synthetic enamel which has proved unusually successful in retaining its lustre and depth of tone under the severest conditions of service. It can also be cleaned very easily, ordinary washing down and leathering resulting in a deep gloss without smears or dull patches.

In the shops at Dagenham where Ford car bodywork is produced, painting and finishing require a total of 50 separate operations and inspections.

Operations start on the "clean line", where oil, grease and dirt are cleaned from the steel body panels with white spirit and Deoxidine is applied to eliminate rust. The body is thoroughly washed with water, both hot and cold, then wiped and dried in an oven, and finally, to be doubly sure that it is clean, it is rubbed down with alcohol. The importance of absolute cleanliness is something that the visitor notices right through the paint shops.

After a searching scrutiny to ensure that no defective or badly scored part goes into paint, the body is now ready to go through a series of operations comprising priming, glazing,

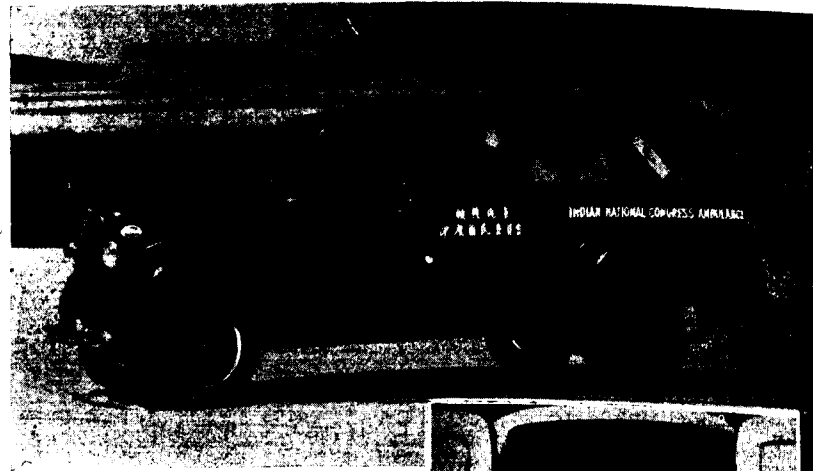
and ground-coating. Three coats of primer-surfacer, and a coat of heavy ground enamel are given before the final finish, consisting of two coats of enamel all over, is applied. After each operation the paint is baked on in ovens, at temperatures ranging from 180 degrees to a maximum of 250 degrees, and it is also washed down and thoroughly dried in ovens between each process.

One of the most important processes is "sanding down," which is carried out twice—after priming, and then again after the application of the ground coat of enamel. Each man has his own special part of the body to sand down, and the smooth beauty of the finished bodywork depends largely on the care and skill employed.

Between the application of the ground coats, and the second sanding operations, the body goes to the "Ding" line, where tiny dents, called dings, are removed. By dings the body painter does not mean dents such as those formed in wings by minor collisions, but tiny indentations only discernible by the trained eye.

With its ground-coated panels now rubbed down to a glass-like smoothness, the body finally arrives at the enamel sprayers, where the two coats are skillfully applied inside and out, and baked on. The sprayers, like the sanders and ding men, are craftsmen of long experience, and, at Dagenham, they work in draught booths which are among the most up-to-date in the world.

Indian National Congress Ambulance Unit



First pictures to be received in this country of the ambulance which will be operated in conjunction with the Chinese Red Cross Society by the Congress Medical Mission, under the leadership of Dr. M. Atal.

This special Ford V-8 ambulance has been bought by the Indian National Congress, through public subscriptions, and is their gift to the Chinese Government.

These pictures were taken before the ambulance was shipped to Hong Kong.



The Alliance Internationale de Tourisme

Sir Stenson Cooke's speech at the closure of the Congress Jubilee of the Alliance Internationale de Tourisme at Luxembourg on the 20th August 1938 in commemoration of the 40th Anniversary of its foundation. The speech was broadcast by the Luxembourg radio.

YOUR Excellency, Ladies and Gentlemen,

This, the closure of the Touring Congress at Luxembourg, is a great moment—a moment in History. It completes the monument to those who, having worked untiringly to simplify travel, have now passed on, along a road from which there is no returning. It serves, too, to encourage their successors to carry on the good work in the same spirit of unconquerable enthusiasm.

Forty years ago delegates of the leading Touring Clubs of Europe met in this beautiful Luxembourg. They met to lay the foundations of the Alliance Internationale de Tourisme—the A.I.T. as it is called today. From this small beginning the A.I.T. has grown to be the largest and the most powerful Touring Group in the world. It comprises the leading Automobile Associations and Touring Clubs throughout the five continents of Europe, America, Africa, Asia and Australasia.

In 1898 it was small, but full of optimism. Today the International Touring Alliance represents more than one hundred individual organisations and speaks and acts for ten million tourists.

Motoring in 1898 was an infant, an unwanted child, struggling to grow up in a world hostile to the mechanical horse; but the A.I.T. adopted it in the true spirit of a pioneer.

Let us give full credit to the imagination and faith of the founders—for it must not be forgotten that these organisations were at that time primarily interested in bicycle touring and hiking. What wonderful vision they showed. Indeed they built something greater even than the creation of their wildest dreams. How could they have foreseen the tremendous results that were to follow the development of the pneumatic tyre, and the other great inventions which combined to make the automobile practicable?

The popularity of This Motoring (and indeed of cycling) is largely due to the initiative of the organisations belonging to the A.I.T. Nationally they occupy themselves with propagating travel and encouraging people to tour in their own countries. Internationally, and working through the A.I.T., they combine to establish facilities for eliminating frontiers as barriers to road travel. They open up Continents; they discover the world.

Those of you who take your automobiles abroad should spare a moment to pay special tribute to the Touring Club of Belgium for inventing the document known as a Triptyque, and to the Touring Club of Italy for inspiring the Carnet de Passages en Douanes. These magical papers smooth the way across the borders of no less than 50 countries.

In the early days the motorist was thrown upon his own resources to negotiate with the Customs Office at each frontier, Cash had to be deposited on entry and reclaimed on departure—a process involving delay and difficulty. Furthermore, there

were no International Conventions enabling the car and driver, registered in one country, to circulate in another without re-registration and taking out local Licences. It was certainly all very complicated.

To-day all this sort of trouble has disappeared. Under cover of International Service, millions of motorists circulate in foreign countries. They travel freely throughout Europe and beyond to India, Ceylon, Burma, Malaya, Siam and Indo-China; to Canada, New Zealand, Australia; through the middle East and from one end of the vast Continent of Africa to the other. They accomplish the transit of the three Americas, too.

Thus it has come about that, through the cordial co-operation existing between the Associations and Clubs of the A.I.T., every facility is extended to the tourist from abroad. Hard work has been involved in building up this service. Conferences have been held from year to year, unanimity has been achieved and diplomatic action has been promoted. Information has been collected on itineraries, maps, hotels, restaurants and garages; on sport and on legal questions. This has been, and is being exchanged and made available to the visitor. Be it travel by Road, Rail, Water or Air service is rendered. It is wonderful what a lot can be achieved by reciprocal effort and enthusiasm in a good cause.

The A.I.T., in sponsoring the development of great highways joining countries and crossing Continents, deserves every credit. The Automobile Association is especially proud that the A.I.T. has fathered our Scheme for a transcontinental route from London to Istanbul and beyond to India and to the Cape, and is now working to join Algeria to the Cape via the Congo. The A.A. stands ready to co-operate in any plan for extending this principle. We want to live to see good roads across all the Continents, serving all states and thus bringing them closer together.

This thought prompts me to say that we, the representatives of Touring organisations, who are met together to-day in Luxembourg to celebrate the 40th Anniversary of the A.I.T.,



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are conscious that it has accomplished something for our members even more valuable than these merely material advantages. The moral and spiritual gain has been infinitely greater.

The tourist from overseas is helped to get to know neighbouring countries and peoples. Wherever he goes he makes friends and thus does his part in bringing about a better understanding. No one will challenge me in emphasising the price-less importance of this in the cause of world peace. When you know your neighbour and when you like him, you trust him and he trusts you.

Undoubtedly, the motorist on tour with his family or friends does as much to contribute towards a better accord between one nation and another as the Statesman or the Diplomat. He is an ambassador at large; a member of the great brotherhood of Travel.

To descend again to the material plane, one may observe that touring is trade and that international touring is a form of foreign trade. It works in both directions; it circulates vast sums of money, it stimulates industry, it helps business. It helps also to restore health and to defeat unemployment.

(Continued from page 318).

TRAFFIC DENSITY

The traffic density of motor vehicles (excluding motor cycles) in different countries at December 1937 are as follows:—

Country	Motor Vehicles	Road Mileage	Motor Vehicles per mile of road
Great Britain	2,441,250	178,507	13.7
Belgium	212,946	20,244	10.5
Switzerland	92,143	10,037	9.2
Holland	143,836	15,969	9.0
Germany	1,521,277	217,900*	7.0
France	2,200,000	393,761	5.6
Italy	450,724	151,392	3.0
U.S.A.	29,654,847	3,065,000	9.7
Canada	1,306,385	410,808	3.2
Egypt	31,212	4,046	7.7
Union of South Africa ..	324,084	80,467	4.0
Algeria	64,550	41,942	1.5
British India	173,243	287,979	0.6
Japan	166,000	665,394	0.2
New Zealand	239,657	52,000	4.6
Australia	749,855	471,392	1.6

* 216,674 miles at January 1936 plus about 1,200 miles since opened.

An exact comparison is however complicated by local variations in the definition of what constitutes a road.

DIESEL-ENGINED VEHICLES

The Diesel-engine made its first appearance in a commercial vehicle in England in 1928. The increase in Diesel-engined vehicles in recent years is shown by the Ministry of Transport vehicle census as follows:—

September	Omnibuses and Coaches	Goods and other Vehicles	Total
1934	2,398	4,317	6,715
1935	5,541	5,429	10,970
1936	8,547	6,167	14,714
1937	12,997	7,124	20,121

The ramifications of the A.I.T. are indeed widespread and the Automobile Associations of Great Britain and the Automobile Associations throughout the British Empire are proud to be allied with the other members of this great Group. We look forward to working together in the common good for many years to come.

Yes, and we are not forgetful of Luxembourg, upon whose massive rock the solid foundations were laid forty years ago for the international structure, which means so much to us all.

I respectfully tender grateful thanks to their Royal Highnesses the Grand Duchess Charlotte and the Prince of Luxembourg for their Patronage to the Government of Luxembourg and to our dear friends, the Touring Club Luxembourg for the characteristic hospitality and for the many manifestations of cordial friendship we are enjoying at this moment in the Grand Duchy.

It is all very wonderful! Thank you Luxembourg! Thank you!

Diesel-engined passenger vehicles have increased more rapidly than goods as, with the 9d. per gallon tax on Diesel oil, it is only operators running long annual mileages who can show savings on fuel sufficient to balance the heavier first cost. The development of the light diesel engine has thus almost come to a standstill.

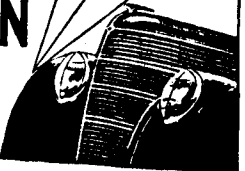
ITALIAN MOTOR VEHICLE REGISTRATIONS

Recent figures published in Italy show the encouraging state of the motor vehicle industry. For the first five months of this year 20,957 new motor vehicles were registered, against 12,586 for the same period of 1937. Only 28 of those registered this year were of foreign make, against 17 last year. Out of the 20,957 vehicles registered during the first five months this year, 17,470 were motor cars, against 10,277 last year, and 291 motor buses, against 181, motor lorries amounting to 2,740, against 1,893, and tractors 456, against 335.

25^{TO}30

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Ovrhaul

Some of our readers have asked us what we know of "Ovrhaul".

When this preparation was put on the Indian market we were interested to see how a preparation applied to the cylinders of a car would save having to reboring them.

Of the many cars that have been treated with "Ovrhaul" the results have proved satisfactory. We have heard of one exception but we are convinced that in this case the directions were not correctly carried out.

"Ovrhaul" certainly does the work ascribed to it and does it very efficiently.

We ourselves have put it to tests in three cars and found a remarkable improvement not only in the compression but an appreciable saving in oil and petrol.

Beware and carry out the directions to the letter and there will be no regret.

The Sole Distributors for India, Burma & Ceylon are Messrs. R. G. Rajan & Co., 1-37, Nagapier Street, Triplicane, Madras and the Sole Agents for Mysore State, Bangalore, Coorg, Coimbatore and the Nilgiris are Messrs. Townshend & Co., 18, St. Mark's Road, Bangalore.

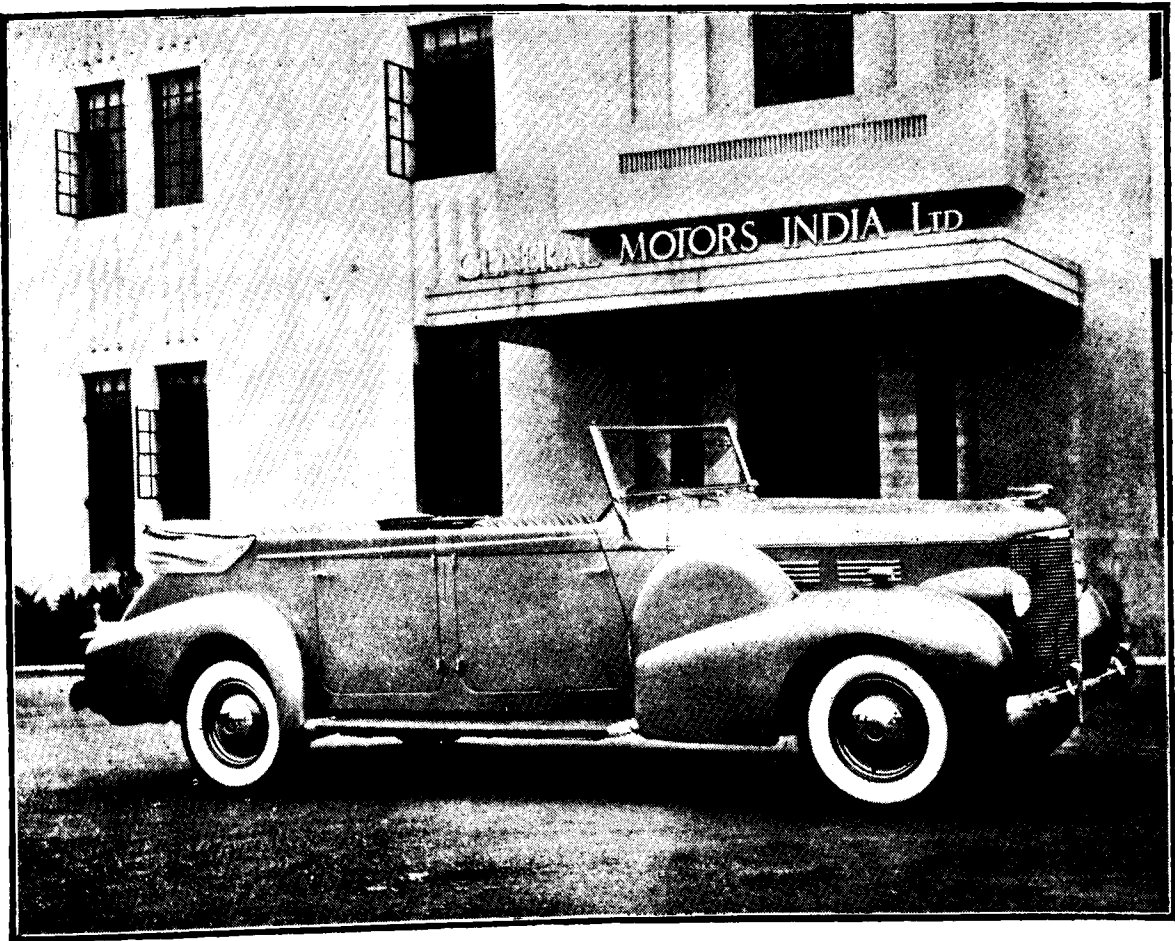
Things We Hear!

A smart young couple in a smart roadster pulled up at a filling station. A bright looking youth was immediately in attendance. Said the lady "Er! what gas do you recommend for this Auto?" The youth lounged round the car looking closely at it and came to rest near the radiator. Then, "That's a problem" said he.

The convalescent wife, a lady of ample proportions, was being pushed home in an invalid chair by poor little hubby, bent double and perspiring profusely. "Oh darling!" said she,

"it's going just like a motor car". A gasp from the rear, "Yes! and as usual the exhaust is behind".

The new garage hand was put on polishing car bodies. For the first week he was told to use his right hand only, the second week his left only and the third week he was told to use both hands simultaneously. At the end of the third week the foreman said to him "Easy isn't it?" "Yes," he replied, "and next week if you fasten a broom to the back of my trousers I'll sweep the floor at the same time".



The beautiful V-8 Cadillac Tourer specially built for a prominent Ruling Chief in India. The body was designed by Messrs. Vanden Plas, famous coach-builders, England.

MADRAS FLYING CLUB NOTES

RAIN continued to fall during the month of September, usually in the form of heavy showers at night and adroitly avoiding interference with club flying. An unusually fresh cool month and a lush green field. The competition for the cup in memory of the late Rajah I. V. Krishna Rao was finally completed during the month. Out of the 13 competitors Mr. T. M. Doraiswamy was winner, followed by Master W. Parthasarathy (last year's winner) and Mr. Ratnam.

Mr. Fernando was the one to do the great bulk of the month's cross country flying, firstly with a flight to Trichy and back, then a round tour via Cuddapah, Bellary, Bangalore and Trichy, then a return flight to Hyderabad—all these in a Gipsy Moth—and finally a return flight to Colombo in the Leopard Moth, taking Messrs. Jayasinghe and Balasingham with him, and from Colombo he made a return flight to Jaffna. The only other cross country flight made was to Pondicherry and back by Mr. Sitaram who took his young brother Mr. Rajaram, not landing of course at Pondicherry since the settlement is still without an established landing ground and the piece of waste land near the town used last March is now under water.

Mr. Mohamed Ismail Khan flew his first solo during the month, the club's first Muslim to fly solo, and Messrs. Mathews and Balasingham performed satisfactorily their tests for the 'A' licence.

Mr. R. N. Dastur from the U. P. Flying Club at the close of the month journeyed southwards a thousand miles to join the Madras Flying Club for the purpose of taking the blind and night flying courses necessary for the 'B' licence.

FLYING TIME FOR SEPTEMBER 1938.

Dual instruction to members under training	15- 5
Advanced dual to A, A-1 pilots	3-25
Solo flights by members under training	12-35
Solo flights by A, A-1 & B pilots	35-55
Pilot with passengers (A, A-1 & B pilots)	31-10
Joy rides	1- 0
Cross country flights by the club instructor	..
Test flights	..
TOTAL HRS.	99-10

The following members took dual instruction during the month:—

Europeans:—	Nil.
Indians:—	
Mr. Solayappa Chettiar	Advanced dual.
Mr. Sitaram	"
Mrs. Kapadia	"
Mr. R. N. Dastur	"
Mr. C. V. Mathews	Dual.
Mr. Paul T. Balasingham	"
Mr. V. G. Narasimha Reddy	"
Mr. Mohamed Ismail Khan	"
Ceylonese:—	
Mr. H. Aserappa	Advanced dual.
Mr. Jayasinghe	Dual.

CROSS COUNTRY FLIGHTS DURING THE MONTH OF SEPTEMBER 1938

Date	Machine	Pilot	Passenger	Journey	Time
3-9-38	VT-ACU	Mr. S. J. P. Fernando	Nil	Madras-Trichinopoly	2-20
3-9-38	"	"	"	Trichinopoly-Madras	2-20
6-9-38	"	"	"	Madras-Cuddapah	2-5
6-9-38	"	"	"	Cuddapah-Bellary	1-55
6-9-38	"	"	"	Bellary-Bangalore	1-50
7-9-38	"	"	"	Bangalore-Trichinopoly	2-0
7-9-38	"	"	"	Trichinopoly-Madras	2-10
13-9-38	"	"	"	Madras-Cuddapah	1-55
13-9-38	"	"	"	Cuddapah to 8 miles south of Begumpet	2-55
14-9-38	"	"	"	Begumpet-Madras	3-55
16-9-38	"	Mr. Sitaram	Mr. Rajaram	Madras-Pondicherry and return without landing	2-0
22-9-38	VT-AIL	Mr. S. J. P. Fernando	Mr. Balasingham & Mr. Jayasinghe	Madras-Trichinopoly	1-50
22-9-38	"	"	"	Trichinopoly-Colombo	3-25
23-9-38	"	"	2 passengers	Colombo-Kandy & back	1-25
24-9-38	"	"	"	Colombo-Puttalam. Jaffna & back	4-20
25-9-38	"	"	Mr. Balasingham	Colombo-Trichinopoly	3-5
25-9-38	"	"	"	Trichinopoly-Madras	2-0



S.I. PUBLICATIONS

	Rs.	A.	P.
Road Map of Madras Presidency	4	8	0
Road Map of Northern India. Scale 16 miles to 1 inch. Mounted on linen and folded in stiff covers	6	8	0
A. A. Handbook of Northern India	5	0	0
A. A. Handbook of Ceylon	5	0	0
Road Map of India. Scale 50 miles to 1 inch. Mounted on linen and folded into covers	2	0	0
"This Motoring" The Romance of the A. A. by Sir Stenson Cooke	2	0	0
List of Petrol Depots in Southern India	0	4	0
Touring in Great Britain and Europe 1937 A. A. publications	Free to Members only		
Europa Touring by A.A. London	8	8	0
"My Glorious Adventure," by Captain T. Yates-Benyon. A record, written in a light, amusing style of the author's trip by car from Piccadilly to Calcutta	5	0	0
Map of Madras City showing principal roads and buildings produced by the Madras Calling League, Folder or flat	1	0	0
Mysore Motor Guide			
Art Printing	0	12	0
Ordinary	0	8	0
The Madras Road Traffic Code, 1938	1	4	0

Postage extra in all cases.

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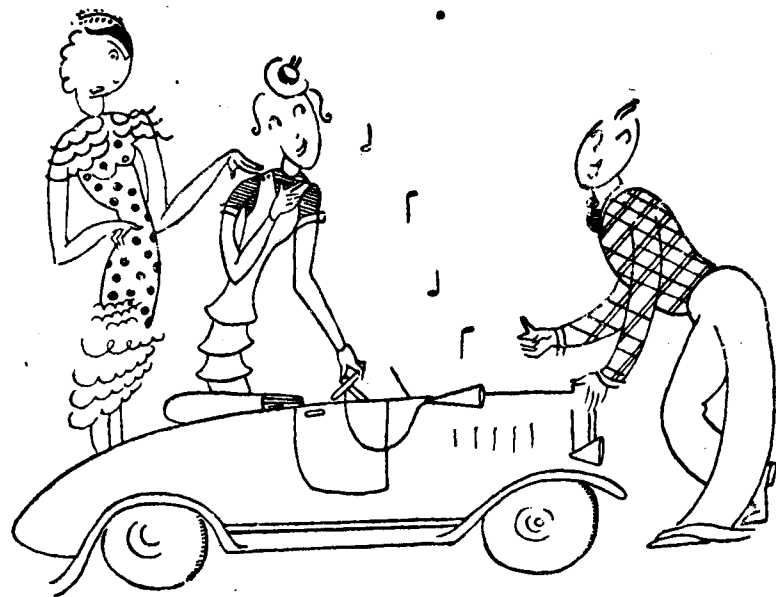
Contributions and photographs are invited and will be paid for if accepted. An adequately stamped, addressed and suitable envelope should accompany all contributions and photographs for their return if not accepted.

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Advertisement "copy" to be supplied without application from the publishers by the 20th of the month preceding that in which the advertisement is to appear, failing which current "copy" will be repeated or where no current "copy" is available, space booked will be reserved and the advertiser will be held responsible for the cost.



I've been helping Betty choose a car, because she thought my experience would be useful. And it's lucky I did go, because she really had no idea. First she wanted a red one, if you please! Why, she'd have to dye her hair before she went near the thing! Then she wanted one with a horn that went dee da doo daw, but I told her every one would accuse her of copying the Higgs girl. Anyhow, in the end we found one with the sweetest little Sambo who winked when you opened the make-up case. So Betty bought it. And then I explained to her how you look after a car to make it last a long time. At least, I told her to be sure to use Patent Castrol, which everyone says is the most important thing of all.



THE SOUTH INDIA MOTOR OWNER



The Official Organ of the
Automobile Association of Southern India

Vol. X, Number 11]

NOVEMBER 1938

[Single Copy As. 8

Secretary's Notes and News

All Members are entitled to a copy of this Magazine every month after their names have appeared in the monthly list of New Members Elected. Any member who does not receive his or her copy regularly is requested to inform the Secretary immediately.

ROAD INFORMATION

Coimbatore District.

Pollachi to Kollengode:—The road up to Pollachi District limit is in good condition. Repairs to the bridge near Anamalai river at mile 4/5 of the road (extending vent way) are not done.

Agumbe Ghat—Mysore State.

Shimoga—Mangalore Road:—Repairs to the crack on the above road at mile 59/3 Agumbe Ghat Portion have been completed and the road is now open to through traffic.

Malabar District.

Madras/Calicut Trunk Road:—The construction of culverts at mile 380/2 and 380/4 on the above road Palghat—Mannarghat has been reopened to traffic.

Cannanore to Manantoddy:—The road from Cannanore to Malabar District limit at Bevalli via Mambram, Kuttupramba and Nedumboyil is motorable all through the year. There is a ferry service over the unbridged river at Mambram, about 10 miles from Cannanore; and also a jungadam to take all kinds of motor vehicles across. This service will be in operation all through the year.

South Kanara District.

Coast Road—Mangalore/Baindur:—The laterite arched bridge at mile 79/7 of the coast road (Mangalore—Baindur Frontier) has collapsed on account of heavy rains and that the bridge will be closed to vehicular traffic until further notice.

OFFICE NOTES

The month of October was an extraordinarily busy one owing to the two General Meetings and to the commencement of the taxation quarter.

During the month 782 letters were received and 1193 letters were sent by post and 506 letters were delivered by hand. Apart from the above over 2,500 packets consisting of annual reports, notices of the General Meetings and subscription reminders were despatched.

444 telephone calls were received and 226 were made during the month and the total number of personal callers exceeded 800.

480 Madras M. V. Tax quarterly licences and 22 Mysore M. V. licences were issued in addition to a number of Madras short term licences.

Several enquiries regarding shipping and landing of cars at Madras and Cochin were received and arrangements made for clearing 3 cars at Madras and the railing of 1 car to Colombo.

One triptyque to Ceylon, 4 triptyques to Hyderabad, and 3 International Driving Permits were supplied to members.

Several complaints regarding the bad condition of roads, bad signpostings, and the unnecessary delay at level crossings were received to which the attention of the respective authorities was drawn.

ANNUAL DINNER AND DANCE

The Annual Dinner which had not been held for the last two years was a great success though not supported as well as it might have been.

The air-conditioned ballroom at the Connemara Hotel was reserved by the kind co-operation of the management for a very small guaranteed number. The two Novaris and Miss Eleanor Davis gave of their best cabaret turns and Harvey and Young gave a special turn in A.A. Scouts uniform showing how the Lambeth Walk should be done and finished up with the A.A. salute in place of the usual Oi.

Mr. Jack Bontemps and his band played throughout the evening and put an extra A.A. zip into it.

Competitions were arranged for the Lambeth Walk, the Palais Glide and guessing the weight of Mr. Bannerjee and the height of Mr. Harvey for which both Ladies and Gentlemen's prizes were given for each event and presented at the end of a very pleasant evening by Mrs. C. P. Johnstone, the wife of our new Chairman. Everybody thoroughly enjoyed the evening and it is hoped that they will tell their friends and bring them along next year.

INSPECTION BUNGALOWS

Last month and the month before the names were published of several additional states who had granted to members of the A.A.S.I. the privilege of using their inspection bungalows in addition to the Madras Presidency.

The attention of all members is drawn to the condition (see the last para on the inside of the membership card) that they must produce their membership card to the watchmen of the bungalows they wish to occupy. Unless members will co-operate by abiding by the conditions, this privilege may be withdrawn.

Branch Notes

Bangalore

By Major A. W. Waters, M.B.E. (Retd.)

Hon. Secretary, Bangalore Branch, A.A.S.I.

NANDI HILLS AND THE BANGALORE WATER-WORKS

For the convenience of members, a stock of sketch-maps, 1-inch to 2 miles, with copious notes of these places are kept ready, and any member applying for copies is welcome to them.

Many inquiries have been received from members extending from the West Coast to Travancore and other parts of South India. The subjects including fishing, import of Arms into Mysore. Shooting rules and suitable locale for small game; planning tours with special reference to licences, tolls also their composition. Bombay motor tax rules, and advice on roads and distances covering practically the whole of South India, and the Central Provinces.

ROAD TRAFFIC SIGNS

The Zigzag (left) signs on Kensington Road have now been suitably placed, and it now remains to repaint correctly the 'bends' which were reversed.

ELECTRIC STANDARDS

Good progress is being made in painting these with black and white bands, and it is expected that all the old dirty-yellow ones will soon disappear. The posts on Kensington, and Museum, Roads require immediate attention, as they stand out dangerously on the dark roads and are entirely black. On these roads, it is sometimes necessary to halt behind one of these posts till the traffic clears and it is a marvel that there have not been ghastly accidents from this cause.

Much better lighting in the Station is called for, and the revenue from lighting from the buildings on the roads should not (if it does) govern considerations of the number and wattage of the lamps on them. The fact remains that the number of vehicles on the roads is increasing to an enormous extent and the revenue on their taxation must have trebled in recent years, which alone justifies keeping pace with proper road illumination.

MOTOR DRIVERS

My note in the September Issue has brought a shoal of inquiries from all over the South, and four drivers have been found employment with members, while three are under reference and if engaged will exhaust my list.

I have received a number of appreciatory remarks from members for the notes on places of interest in Mysore State, and it seems that quite a lot have been led to visit those places, and have adjudged them to be as interesting as the notes represented them to be.

Trivandrum

By A. K. Tampi, Esq.,

Hony. Secretary of the Trivandrum Branch.

GENERAL

With the Maharaja's Birthday celebrations going on in full swing and the large number of visitors and tourists who had come down specially for the "Birthday Week" to see the "Tamasha", Trivandrum was overcrowded and was having a very busy time during the whole week. There were lot of gaiety and fun for the sightseers, for the whole town and public buildings were illuminated and I should say it was a "city of lights". There were lot of entertainments, besides the exhibition we had which was going on for ten days. So it was almost a peak month for Trivandrum.

THE OFFICE

Three badges were issued to members. Several motorists both members and non-members who had come down for the Birthday Week called in at the office for information, routes and itineraries and also for short term licences to British India.



IF YOU LIVE HERE

If you live anywhere in Southern India, COCHIN is your best port for homeward travel. The Bibby Line vessels, giving the very best cuisine and cabin accommodation, are one class ships—FIRST CLASS, in everything.

Book your 1939 passage now.

Better go BIBBY

HARRISONS & CROSFIELD, LTD. COCHIN
GILLANDERS ARBUHNOT & CO. MADRAS

Supplement to 'South India Motor Owner', November, 1938

USED CARS FOR SALE

Simpson & Co., Ltd., Madras



7,637 miles only! Chevrolet 1937 De Luxe Saloon in perfect running order. Finished in Maroon.

Price Rs. 2,800

1938 Vauxhall Saloon in perfect condition. Owner driven throughout. Mileage 6,324 only. **Price Rs. 3,050** for a brand new 14 H.P. 6 cylinder car.



Hillman Minx 1938 10 H.P. De Luxe Saloon. Mileage under 12,000. In excellent condition.

Price Rs. 2,150

Austin 16-6, Sliding head Saloon. European owned. Mileage under 20,000. A luxurious car with plenty of accommodation. Room for two extra seats.



Price Rs. 1,900. A bargain.



1935 M. G. Midget Sports Two Seater. In perfect condition. Mileage under 20,000. Tyres excellent.

Price Rs. 1,350 only

1937 Ford V-8 Saloon. Attractively finished in Blue. Looks as good as new. Mileage 18,000.



Price Rs. 2,250

United Motors (Coimbatore) Ltd., Coimbatore

1936 Model Oldsmobile Touring Sedan Car in first class condition and running order.

Price Rs. 2,150

1937 Model Oldsmobile Touring Sedan Car in first class condition and running order.

Price Rs. 2,650

Offices and Town Hall in City; all important Cinemas; nighty;

They were supplied on the spot. All the road information notices which were sent from the Head Office were given full publication in the local papers.

Madura

By Messrs. T. V. Sundaram Iyengar & Sons

Hony. Secretaries of the Madura Branch.

This month being the taxation period many members called at the office with their registration certificates and 38 licences were obtained from the Treasury and delivered to members. One member who had no Registration Certificate (as it had been sent to the authorities for entry of transfer of ownership) was refused a licence and assistance was rendered in getting the same.

One important event during this month was the visit of one of the patrons of the Association, His Excellency the Governor of Madras. Madura became very full with people eager to see him. His Excellency passed the office thrice and must have noticed the "AA" sign. The Scout and the Car Park Attendant attended to the parking arrangements of cars at all important functions and rendered help to motorists.

Documents for one of our members proceeding to Ceylon were received from Head Office and the Scout accompanied him as far as Ramnad to assist in railing his car to Dhanushkodi.

One member who had been to Ceylon returned here on his way back. Though it was a Sunday, all possible help was given to him and a route itinerary to Ootacamund was supplied.

ROUTE ITINERARIES

Route itineraries were issued covering a distance of 2061.1 miles.

38 motorists called at the office.

5 badges were issued and fitted to members cars.

Scouts and Car Park Attendants

MADRAS

Attended various Cinemas as usual and 5 public functions during the month. Nine members were given roadside assistance for minor repairs.

BANGALORE

Car Park Attendant Fitzgerald was an eye-witness to a collision between two motor cars at the junction of St. Marks Road and South Parade, at about 10 p.m. on the 1st October. He duly reported this to this office and I sent an extract of his report to the Commissioner of Police, C. & M. Station. He was later asked to make a statement to the Traffic Branch of the Police; nothing more has, up to date, been heard about it.

Brief Summary of Some of Their Chief Duties.

Masonic Banquet; Boxing and Dance at the Opera House; 8 Dances; 3 visits to Band in Cubbon Park; 4 to Carnival; 3 Gymkhana Races; Tennis Tournament 3; 10 visits to B.U.S. Club; 5 hockey Tourneys; 10 Church Services; 8 licences and fitted up 2 badges for members; 2 Concerts; 5 visits to Public Offices and Town Hall in City; all important Cinemas; nightly;

Regimental Sports, and, lastly, most important was the Wedding at Carlton House, the Residence of Sir Mirza M. Ismail, the Dewan of Mysore, and a Vice-Patron of this Association.

This office received a personal visit to thank us for the excellent Car Park arrangements at the Regt. Sports, many motorists attesting to the same. There were 52 cars present—21 with our Badges.

The Carlton House Wedding.

The main reception was from 4-30 to 9 p.m. and the car arrangements worked without a hitch.

A pleasing feature of this function was the perfect and cordial co-operation of the Mysore Police—of all ranks—with the A.A.S.I.

A letter conveying the sincere thanks of Sir Mirza M. Ismail has been sent to the Secretary's Office.

One member's car was given help by C. P. A. Fitzgerald.

Dasara in Mysore.

Scouts Drury from Madras and Whyms from Bangalore were on duty in Mysore from 24th September to 12th October and attended the parking grounds at every important function during that period. They reported to the District Superintendent of Police in Mysore on arrival and worked under his instructions throughout. At the end of the period they were given a certificate of good conduct and the satisfactory work

Driving Licence Reminder Form

The Secretary,
Automobile Association of Southern India,
Box No. 704,
Cathedral P. O., Madras.

Name of member.....

Membership No.....

Full Postal Address.....

.....

Dated.....193

My Driving Licence No.....

dated.....issued by.....

.....

Expires on..... Will you kindly

record this for your reminder service.

Signature.....

N.B.—It is important that every change of address
be promptly communicated.

done by them by Inspector of Police, "A" Division of Mysore City.

MADURA

Road Scout.

He was on duty throughout the month and visited Tanjore, Negapatam, etc., to note the condition of the roads and where to erect signposts. A separate report has been submitted.

TRICHINOPOLY

Car Park Attendant's Activities.

The services of the Attendant were utilised during the first week of the month at the Union Club Tennis Tournament. Opportunity was also taken to send him to the Golden Rock Cinema on Saturday the 15th October 1938 during the performance of the popular film "Snow White and the Seven Dwarfs" when it was anticipated that a very large number of cars would attend. Appreciation was expressed from one quarter respecting the Attendant's presence at this function.

Towards the end of the month, when His Excellency the Governor and Lady Marjorie Erskine visited Trichinopoly, the Attendant was present at the following functions:—

1. The Civic Reception given in the Town Hall by the public of Trichinopoly.
2. The Fête held in Sir T. Desikachari's compound in aid of His Majesty's Anti-Tuberculosis Fund.

Note:—

- (i) These licences are valid throughout Mysore State, but do not exempt one from paying all Mysore State (not Municipal) Tolls just as the permanent residents, in that State, have to pay.
- (ii) 6 days grace are allowed in the Civil and Military Station to take out a licence, so that, if on entering the Station to reside, your Mysore licence has, say, only 2 days before expiry, you still have the right of a full 6 days grace, but note that, this 6 days grace will not permit you to re-enter Mysore State (e.g. Bangalore City) after the State licence has expired, and if you do so you are liable to pay another 7-days Mysore State licence.

FREE SHOOTING OF TIGERS IN MYSORE STATE

The area within a radius of five miles round about Yeraganahalli Village of Honnali Taluk, Shimoga District, is thrown open for a period of 3 months for free shooting of tigers reported to be causing havoc in the locality.

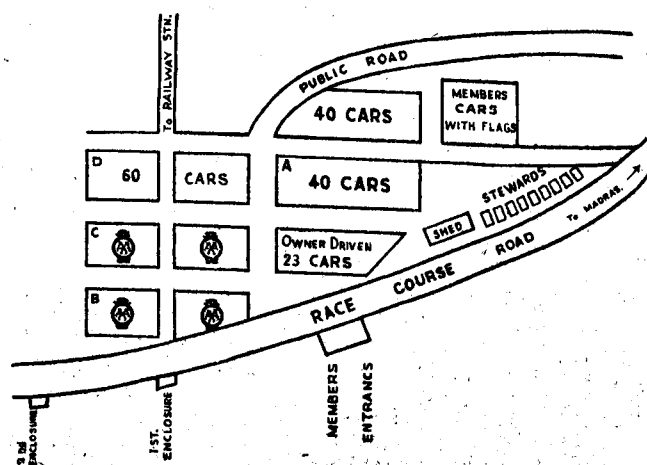
The villages of Talaguppe in Shimoga District and Aggunda in the Hassan District are thrown open for free shooting of tigers.

The area within a radius of five miles round about Padmenahalli Village, Bhadravathi Hobli, Pandithnahalli Village, Belur Taluk, Hanball Village, Manjarabad Taluk, and Gangoor Village,

Belur Taluk, is thrown open for a period of three months for free shooting of tigers reported to be causing havoc in the localities above named.

MADRAS RACES

B parking ground was reserved for A.A. members last year but as it was found to be insufficient both B and C parks have been reserved this season.



3. The Sacred Recital held at St. John's Church, Trichinopoly.
4. The Garden Party held at the Rajah of Pudukottah's Palace.

TO MOTORISTS INTENDING TO STAY IN BANGALORE C. & M. STATION

When you enter the Mysore State, the Mysore Licensing Officer is quite right in refusing to issue more than a 7-days licence because in your case, you are going to reside within the Civil and Military Station limits. In these circumstances any Mysore licence would become *invalid* in the Station at 6 a.m. on the 7th day after arrival in the Station.

It will now be necessary for you to take out—according to your stay—for cars 15 cwt. and over, and cars under 15 cwt.) either:—

- (a) 30-day period licence Rs. $\frac{7}{8}$ starting from the date of arrival in the Station, or
- (b) A quarterly licence Rs. $\frac{15}{8}$ for the current calendar quarter.

Membership

The Committee have to thank the following members who introduced new members.

48 new members were enrolled between 14th October and 7th November 1938.

- 4 by Madura Scout.
 2 each by Messrs. Madras Automobiles Ltd., Simpson & Co., and Mr. C. H. D. Leonard.
 1 each by E. H. Colebrooke, Esq., Messrs. L. Dee, A. Chari, U. R. Rao, P. R. V. Sarma, D. W. Bartley, F. W. J. Mumford, C. R. Raghavachari, W. G. Latham, S. A. Vincent, H. H. Chapman, V. Duraiswamy, C. B. Beadnell, L. H. Jacob, Rao Sahib T. Sundaram Iyer, Mr. S. R. Bhide, Hon. Secretary, Bangalore Branch, Hon. Secretaries, Madura Branch, Dr. G. J. Ingram-Cotton, Messrs. South Indian Motor Company and the Ocean Accident & Guarantee Corp. Ltd.

The remaining 18 were enrolled by the staff.

NEW MEMBERS

- N. B. Hartley, Esq., Teekoy Estate, Eratupetta P.O., Via Palai, Travancore.
 C. K. Narasimha Iyengar, Esq., C/o Associated Electrical Industries (India) Ltd., Race Course Road, Coimbatore.
 M. N. M. Chokalingam Chettiar, Esq., Paganeri, Ramnad District.
 RM. PR. Periakaruppan, Esq., Banker, Arimalan, Pudukottah State.
 S. V. RM. Venkatachalam Chettiar, Esq., Banker, Alavakottai, Ramnad District.
 Rao Sahib Dr. A. Mathuram, Guru Medical Hall, Trichinopoly.
 A. M. Khan, Esq., 83, Ice House Road, Royapettah, Madras.
 M. Venkataraman, Esq., 21, Aundiappa Mudali Street, Vepery, Madras.
 P. Gopala Rao, Esq., Inspector of Motor Vehicles, Guindy House, Guindy, Saidapet P.O.
 Dr. Joseph Gnanadickam, Eye Specialist, Trichinopoly.
 D. W. Gollan, Esq., Superintending Engineer, P.W.D., Trichinopoly.
 Wm. H. Baxter, Esq., Bungalow 1128, Vanivilas Road, Mysore.
 G. W. Priestley, Esq., I.C.S., C/o The Secretariat, Fort St. George, Madras.
 K. Ramaswami Iyengar, Esq., Asst. Commissioner of Income Tax, Rajahmundry.
 E. B. Lebell, Esq., C/o Gordon Woodroffe & Co. (Madras) Ltd., Madras.
 Manilal M. Mehta, Esq., 165, Broadway, Madras.
 The Maharajah Saheb of Parlakimedi, Parlakimedi, Ganjam District.
 Rev. T. Walters, Fallowfield, Cathedral P.O., Madras.
 W. Scott-Brown, Esq., C.I.E., I.C.S., Collector and District Magistrate, Bellary.
 E. O. Longley, Esq., 35, Khaleeli Mansions, Mount Road, Madras.
- J. T. Perry, Esq., C/o The Goodyear Tyre & Rubber Co. (India) Ltd., Mount Road, Madras.
 P. Saravanam, Esq., 119, Poonamallee High Road, Vepery, Madras.
 E. C. Buck, Esq., D.T.S.P.'s Bungalow, M. & S. M. Railway, Guntakal.
 A. V. Rajagopalan, Esq., 140, Brodie's Road, "Krishnavilas," Mylapore.
 E. H. Easterbrook, Esq., 17, Taylor's Road, Kilpauk, Madras.
 P. Ramaswami, Esq., "Kamala Vilas", Bagavantam Gupta Road, T. Nagar, Madras.
 W. H. Wright, Esq., C/o Parry & Co., Ltd., 1st Line Beach, Madras.
 H. E. Mons-Louis Bonvin, Governor of French India, Government, Pondicherry.
 H. R. G. Keystone, Esq., Kelmescot, Nungambaukum.
 P. Y. Fairbairn, Esq., C/o Bombay Burma Trading Corp., Mudis P.O., Coimbatore District.
 C. J. D'Costa, Esq., 17A, Rundall's Road, Vepery, Madras.
 P. Mahadevan, Esq., 53, Sankarapuram, Bangalore.
 Lt.-Col. R. B. Leslie, Flagstaff House, Wellington, Nilgiris.
 Major C. Gilbert, Trichinopoly.
 Rev. J. White, Spencer's Hotel, Madras.
 E. H. Beadnell, Esq., "Brionheath", Kotagiri, Nilgiris.
 KN. AV. AR. Ramanathan Chettiar, Esq., Natarasankotai, Ramnad District.
 J. R. Kirkwood, Esq., C/o Messrs. Harrison & Crosfield Ltd., Quilon, Travancore.
 R. L. Goode, Esq., 2/3 F. F. Rifles, St. Thomas' Mount.
 S. M. S. Alagappa Chettiar, Esq., Karaikudi, Ramnad District.
 Dr. A. C. Cunnappa Moodaliar, No. 5, Nowroji Road, Kilpauk.
 V. K. Ayappan Pillai, Esq., 79, Poonamallee Road, Kilpauk, Madras.
 F. Angre, Esq., 294, Sampigey Road, Malleswaram, Bangalore City.
 Dr. S. J. Eapen, D.M.O., M. & S. M. Railway, Guntakal.
 W. R. Bryson, Esq., Mackay's Gardens, Madras.
 S. Suryanarayanan, Esq., Kamalalayam, Boag Road, Theagarayanagar.
 T. V. R. Murthi, Esq., No. 37, Sir Thyagaraja Road, Thyagarayanagar, Madras.
 A. C. Rose, Esq., 3, Sterling Gardens, Cathedral P.O., Madras.

Continental

Tyres & Tubes are reliable



The Indian Roads & Transport Development Association Ltd.

Monthly News Letter

INDIAN ROADS CONGRESS

THE fifth annual meeting of the Indian Roads Congress will take place in Calcutta from the fifth February until the eleventh February 1939.

The details of the technical papers to be read and discussed at the Congress are not yet available but we hope to be able to give particulars of them in our next monthly *News Letter*.

PROGRAMME OF ROAD DEVELOPMENT: BENGAL

Mr. King's Report

Mr. A. J. King, Special Officer, Road Development Projects, Bengal, has now completed his Report on Road Development Projects in Bengal, which he has drafted in seven volumes, of which the first one has now been printed and published. While a complete idea of the recommendations of the Special Officer cannot be had until the remaining six volumes are available for examination, there is in the first volume sufficient evidence of the magnitude of the task the officer was faced with and an indication that the scheme he recommends may be the largest among the provincial programmes so far drawn up.

The work the Special Officer was required to perform under the terms of his appointment was divisible into two distinct parts:

Part I comprising a detailed examination of the existing road system in the province, and the collection of statistics and particulars relating to all factors which had a bearing on the question of communication by road, and

Part II comprising the formulation of a comprehensive programme for road development in the province sufficient to serve the needs of the country to a reasonable degree in respect of both internal communication within local areas, and of inter-district, provincial and inter-provincial communication.

Examining the means of communication now existing in the Presidency, the Special Officer says:

(1) The system of unmetalled roads, as it now exists, is almost entirely unsuitable to be considered as forming a part of a road system, if this system is to be of a standard sufficient to meet the requirements of modern traffic. The reasons in support of the statement are (i) the exceedingly bad state of the surface of these roads due firstly to the unsuitability, from the road point of view, of the natural soil with which they have been constructed, and secondly, to the insufficient funds to permit of proper upkeep, (ii) the want of continuity caused by the presence of a great number of unbridged gaps; and (iii) the existence of stretches on which the road surface has not been raised sufficiently above flood level to permit of its regular use by traffic during the rains.

(2) The system of metalled roads as existing at present is badly distributed, wanting in continuity, uneconomically aligned with regard to the railways, and, with respect to the greater part of its length, below the standard required to meet the demand of modern traffic. The reasons in support of this statement are (i) the concentration within eight districts (out of the twenty-seven in the province) of almost 70 per cent. of the total mileage of these roads; (ii) the fact that the total

length of these roads is split up into 226 independent isolated stretches having no connection by metalled road with one another; (iii) the fact that almost 30 per cent. of these roads are within 5 miles of, and parallel to, the railways; and (iv) the existence of a total length of low-grade road (moorum, laterite or brick-metal), which amounts to almost two-thirds of the total mileage of the metalled road system.

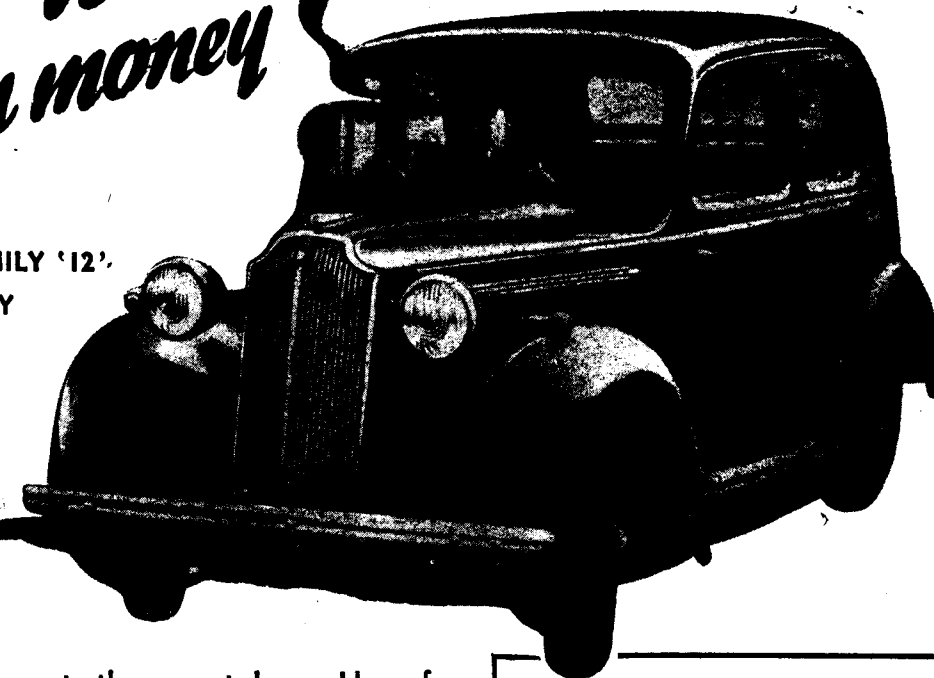
(3) The metalled roads and unmetalled roads considered together constitute a collection of roads which although considerably greater in length than is necessary to efficiently serve the country, does not conform (either as regards distribution and alignment or as regards standard of construction) to the requirements of a road system capable of efficiently serving the needs of the country and suitable to meet the requirements of present-day traffic, but offers possibilities for conversion (by the improvement of selected sections of existing road and the construction of such additional lengths of new road as are required for completing the scheme) into an improved road system of shorter length, but sufficient to serve the needs of the province to a reasonable degree, and suitable to meet the demands of traffic expected to be carried by the system.

"It may almost be said" the Special Officer proceeds, "that except for the system comprising the Grand Trunk Road and the roads connected to it, the Province of Bengal has no 'Road System' in the proper sense of the term, even though it contains a very large mileage of roads. The road problem in the province is, therefore, not the simple one of merely improving short lengths of existing road, or providing short lengths of additional road with the object of bettering a system already mostly in existence, but rather one of developing in the entire area covered by the province a complete new road system, in the development of which use is made, to the greatest extent possible, of the existing roads, both metalled and unmetalled. The necessity for making use of the existing roads as far as possible has been kept constantly in mind while framing the scheme submitted with the present report, for a system of improved roads in the province."

The investigations made by the Special Officer were of a varied nature. A detailed examination of existing roads was conducted in respect of drainage, land and embankment, metalling and bridges and these particulars recorded for 5,256 miles of roads and 119,729 running feet of bridging in localities selected for the purpose from several districts. Particulars were collected of the ferries at present plying on unbridged rivers and streams and details of 973 ferries of major importance are tabulated in the report. Areas subject to inundation were ascertained and maps prepared showing (a) areas usually inundated at intervals of from one to three years, (b) areas inundated at intervals of about five years and (c) those subject to occasional inundation. Steps were taken to examine the industrial activity of the province by collecting information as to the number and location, in several districts, of industrial concerns such as mines and factories including cotton, jute, rice and oil mills and jute presses, tea factories and other miscellaneous concerns. Particulars were collected of the location and importance of *bais* and *melas* (weekly, bi-weekly or periodical rural markets)

*Built to
save you money*

THIS NEW BIG FAMILY '12'.
COSTS LESS TO BUY
AND LESS TO RUN
YET IS BUILT TO
HIGH VAUXHALL
STANDARDS



PROVIDING an answer to the present-day problem of cutting expenses without sacrificing convenience and enjoyment, this new Vauxhall will save you money on every mile. It will give you better, smoother, safer and livelier 12 h.p. motoring than has been possible hitherto. Take the wheel on all cars of similar power, and even higher price. Let a ride decide. Your local Vauxhall dealer will gladly demonstrate.

PRICE This Vauxhall 12 h.p. four cylinder car priced substantially lower than other British twelve, offers unprecedented value. It maintains the Vauxhall's usual high standard.

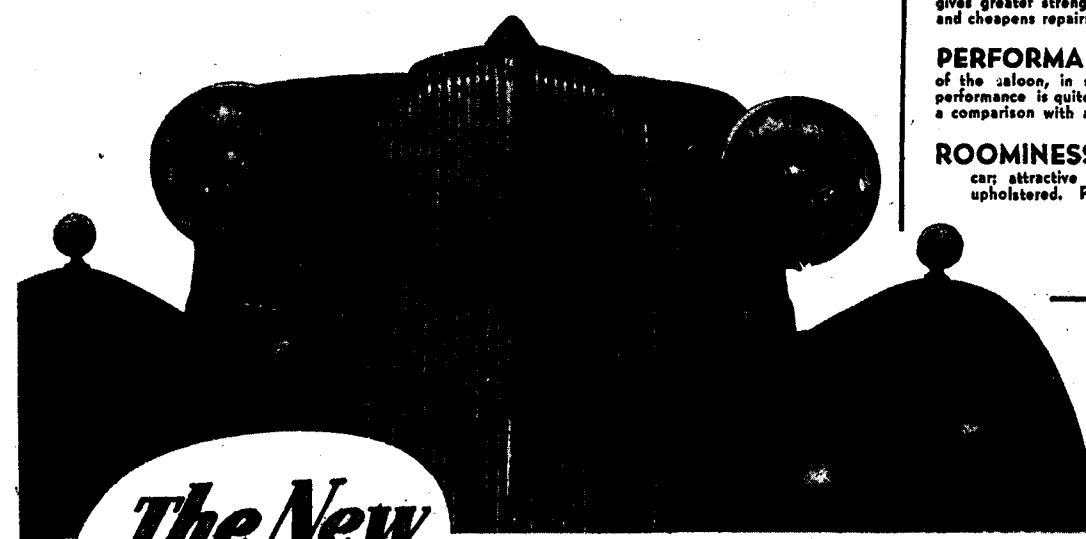
PETROL SAVING Despite outstanding performance, petrol economy is unique. Under normal driving conditions 35 m.p.g. is assured.

SMOOTHNESS Trouble-free torsion bar independent suspension proved best of all types—turns riding into gliding and makes all roads smooth. The special engine mountings make the already smooth engine still smoother.

SAFETY All-steel integral body construction gives greater strength with less weight; simplifies and cheapens repairs.

PERFORMANCE In spite of roominess of the saloon, in spite of petrol economy, the performance is quite outstanding and we welcome a comparison with any other "12".

ROOMINESS A really comfortable family car; attractive in appearance and tastefully upholstered. Plenty of luggage space.



The new Vauxhall "12" Four can be purchased on easy terms through the General Motors Hire Purchase Plan.

The New

VAUXHALL

Other Models:
VAUXHALL '28' LUXURY SALOON
VAUXHALL '14' SIX

'10'—'12' FOURS

existing in the province. An investigation was made to ascertain the extent to which public motor services had been developed in the province, this being done by collecting particulars of the number, type and weight of public vehicles licensed to ply in the districts; and last but not the least, the volume and type of traffic carried over the existing roads was examined by traffic census.

In respect of buses plying for hire in the districts, the Special Officer's investigations show that the carrying capacity of the vehicles vary greatly, the largest being 33-passenger vehicles and the smallest those carrying 9 passengers, with due allowance for luggage. In certain districts definite routes have been fixed, on each of which a certain number of buses are allowed to ply, while in others there is no such restriction, the buses being permitted to ply throughout the district. The total length of road over which definite routes have been fixed for buses is 2,172 miles which includes 1,547 miles of metalled roads out of a total length of 4,825 miles of metalled roads in the province.

The total number of points at which traffic census was taken was 393, of which 223 points were located on metalled roads and 170 points on unmetalled roads. Including 5 points at which the total weight of traffic was found to exceed 1,500 tons per day, a traffic intensity of 500 tons and over was observed at 60 points (of which 16 were on unmetalled roads), while at 124 points of observation the intensity of traffic observed was less than 100 tons per day.

"These traffic observations," states the Special Officer, "cannot however be taken as a criterion of the volume and type of traffic likely to develop with the improvement of the road system, as in many cases the difficulty and the expense involved in transport over the present system of roads restricts the export of agricultural produce (of which the traffic mainly consists) and consequently the import of the manufactured articles which the agriculturists usually purchase with the proceeds from the sale of their surplus produce. It is almost impossible to forecast the extent to which traffic is likely to develop with the provision of improved means of communication, but there can be no doubt that a considerable increase might be expected, especially on those roads which serve areas in which the quantity of agricultural produce is either greatly in excess of, or considerably less than, that required for local consumption."

The roads forming the main system which it is proposed should be developed in the province have, for the purposes of the report, been classified by the Special Officer, as follows:—

Class.	Definition.
I Trunk ..	Roads which form the main routes within the province and afford connection to the headquarters of all districts.
II Inter-district Main ..	Roads, other than trunk roads, which form the main connection between the headquarters of adjacent districts.
III District Main ..	Roads, other than trunk roads and inter-district main roads, which form the main lines of communication within a district, and extend across the entire district or an appreciable portion of it.
IV District Secondary ..	Roads, other than trunk roads and main roads, which provide means of communication in local areas within a district.

In framing the scheme, the necessity for providing a road system capable of meeting the requirements of the country, as judged from both the provincial and the district points of view,

has been taken into consideration. In each district existing roads and alignments for new roads have been so selected as to provide, within the district itself, a road system suitable for meeting to a reasonable degree the requirements in respect of internal communications within the area covered by the district. At the same time care has been taken to see that the items chosen were so located as to be capable of being linked up with the roads selected in adjacent districts in a manner suitable for providing, by the combination of the district systems, a complete and continuous network of roads spread over the entire area covered by the province and for affording a means of communication which will permit of the movement of traffic in any desired direction by reasonable direct routes.

Feeder roads to railways and steamer services which do not lend themselves to inclusion in the main scheme as a part of the system of connected roads are dealt with in the report independently.

Dealing with the cost of carrying out a comprehensive road programme, Mr. King points out that from the start it was understood that the present resources of the province were insufficient to put the scheme into execution at a rate which was likely to complete the whole, or at least an appreciable portion of it, within a reasonable time. Notwithstanding this it was considered that the preparation of the comprehensive scheme was essential not only to enable Government to decide their future policy with regard to the development of communications by road, but also to form the basis for selecting individual sections of road for improvement so that these sections would form parts of a complete and carefully designed road system to be completed at some future date.

TRANSPORT CO-ORDINATION IN ARGENTINA

The recently constituted Argentine National Transport Co-ordination Commission has now held its inaugural session. It has the task of regulating competition between the Argentine railways and road transport concerns, and co-ordinating all inter-provincial transport, thus supplementing the Buenos Aires City Transport Co-ordination law. Among the obligations to be imposed on road transport concerns are the acceptance of all goods offered, without according preferences or special rates, insurance against third-party risks, compliance with new regulations regarding minimum salaries, working hours, tariffs, etc.

ROAD TRANSPORT IN CEYLON

There were 3,312 motor vehicles of a total value of £450,000 imported into Ceylon during 1937, compared with 2,568 vehicles valued at £349,000 in 1936, according to the Administration Report of the Registrar for Cars of Ceylon for 1937. At the close of the year there were 30,223 vehicles in the island compared with 28,623 at the end of the previous year. There were 295 different makes of vehicles, of which a total of 138 came from the United Kingdom, 91 from the United States and 28 from France. The quantity of petrol imported during the year was a record—14,144,058 gallons, compared with 8,798,243 gallons in 1936.

AUTOMOBILE ASSOCIATION PROGRESS

At the thirty-third annual meeting of the Automobile Association, held at the Savoy Hotel on 20th July, Mr. Charles McWhirter, Chairman of the Association, who presided over the meeting, announced that the Association's membership had passed the 700,000 mark. Describing their progress, he said that during the year the increase in members exceeded 48,000

the largest number which had ever been achieved in one year. It was 18 years since the first 100,000 had been obtained; the half million was reached in 1933, and since then over 200,000 members had been added.

FLYING TRAINING IN INDIA

The introduction of the Empire air mail scheme, the provision of night flying facilities and the grant of large subsidies to the flying clubs by the Government of India have resulted in a substantial increase in the number of hours flown and the number of 'A' pilots trained.

The three-year agreement which the Government of India has with the subsidized flying clubs, expires at the end of the current year. It is, therefore, of interest to review the results of the last two years.

The total amount of the subsidy grant distributed among the seven clubs was Rs. 1,43,128 in 1936-37, out of which Rs. 23,000 was debited against the Aviation Petrol Tax Fund. In 1937-38, Rs. 1,36,500 was distributed, out of which Rs. 21,000 was debited against the Petrol Tax Fund.

In passing, it may be noted that revenue of about Rs. 51,000 accrues to Government in the form of Petrol Tax, Income-tax and Customs Duty, from the activities of the flying clubs in India. The net expense of flying training to the country is, therefore, less than a lakh of rupees—a very modest sum by present standards.

In 1936-37, the grant was distributed more or less evenly, and each club received roundly Rs. 20,000. In 1937-38, in making the distribution, account was taken of the number of flying hours performed by each club, as well as of the number of 'A' pilots' licences issued and renewed as a result of their activities. In addition, the inland clubs, whose costs are necessarily higher than those at the ports, received a certain benefit. In this way, the full budgetary provision was utilized, four clubs getting roundly Rs. 21,800 and the other three Rs. 19,800, Rs. 15,600 and Rs. 13,800 respectively.

In 1937-38, 10,683 hours were flown by the subsidized flying clubs as against 8,782 hours the previous year. In addition, the flying clubs in the Indian States performed 2,985 hours' flying against 1,560 hours in 1936-37.

Commercial Pilots.—There has been no increase in the number of 'A' pilots trained over preceding years. The increased flying done by the clubs has been devoted principally to the training of commercial pilots, although the clubs do not earn Government bonuses in respect of such training. The commercial nature of the club's training is borne out by the large increase in night flying: 344 hours in 1937, as against 66 hours in 1936. This increase is also, in part due to the night flying facilities which are now available at most of the aerodromes where the flying clubs are located.

The number of commercial pilots trained for the past three years is as follows:—Nine in 1935, 18 in 1936 and 20 in 1937.

Introduction of the Empire Air Mail scheme early in 1938, has been responsible for a substantial increase in the number of persons actively employed in civil flying in India. The following table shows the total numbers employed by the aircraft

operating companies operating wholly in India, who are concerned with the scheme:—

	As at 31-12-1936		As at 31-7-1938	
	E.	I.	E.	I.
Administrative ..	3	27	3	51
Pilots and wireless operators ..	5	7	2	24
Ground Engineers ..	5	10	6	13
Engineering Apprentices ..	—	7	—	4
Traffic ..	1	9	3	90
Others ..	—	41	—	73
TOTAL ..	14	101	14	255

The increased activity of the flying clubs in India in the training of pilots which has been witnessed in 1936 and 1937 is largely due to the increased demand which has had to be met to provide for the above expansion.

One of the difficulties with which the operating companies were faced was in providing the advanced training which is necessary before a pilot, who has been wholly trained on the light types of aircraft such as are owned by the flying clubs, can be given charge of a larger type of commercial machine which has a higher performance.

The Government of India gave assistance by arranging special flying courses on their Avro-X aeroplane, and Tatas established, at their own cost, in addition, what virtually amounted to an advanced flying training school. They also undertook the further training of wireless operators, whom they recruited from those candidates who had passed the wireless course at the Aeronautical Training Centre of India.

While the flying clubs provide the necessary regional centres for initial training, the need has been felt for an advanced aviation school.

Future Prospects.—Flying training is expensive and, with the present subsidy, the rate for flying even the light types of aircraft owned by the clubs, cannot be brought below Rs. 30 per hour without loss. One can hardly expect to see a substantial increase in the number of those taking up flying until it is cheaper.

Now that the Empire Air Mail scheme is working, there is uncertainty as to what the next stage of development may be, for it is, unfortunately, a truism that civil aviation is not able to fly by itself.

If there is not to be retrogression, it would seem that the flying clubs in India will have to be given fresh justification as well as a new subsidy agreement at the end of the year.

C. P. ACT TO TAX SALES OF PETROL

The above Act, referred to in our April *News Letter*—the validity of which was questioned by the Government of India and submitted to the Federal Court—came up for their consideration during the present month in the Princes' Chamber, New Delhi.

Sir B. L. Mitter, with Mr. S. M. Chaudhri and Mr. A. K. Ahmed, appeared for the Governor-General-in-Council.

Provinces other than the Central Provinces were invited to participate in the discussions as the case was of obvious importance to the finances of all the autonomous Governments. As a result five provinces in addition to the C.P. were represented.

The full bench of the Federal Court consisted of the Hon. the Chief Justice, Sir Maurice Gwyer, the Hon. Mr. Justice Shah Suleiman and the Hon. Mr. Justice M. R. Jayakar.

The question relates to the sales tax on petrol sought to be imposed by the Central Provinces as to whether in fact such a tax amounts to an excise and therefore is a central perquisite under item 45 of the Federal List and beyond the scope of item 48 of list two, the Provincial Legislative List.

Sir B. L. Mitter, pleading that such a tax could only be regarded as an excise, argued that the definition had three bases, namely, that the tax was on a particular article, that it involved a commercial transaction and that its incidence was passed on to the consumer in the price. He proceeded to point out the difference in a tax and a duty and said that the word "Tax" had a much larger connotation than the word "Duty" generally. A sales tax had a very wide scope and if it overlapped the Provincial Legislature was excluded. Under Section 100 of the Government of India Act it was clear in the case of an excise duty the overlap belonged to the Centre.

Mr. Puranik, Advocate-General of the C.P., submitted that the definition of the word "Excise Duty" before the Court was not a proper definition. He also contended that it had been admitted on all hands that one of the ingredients of excise duty

was that it was imposed on home products and manufactures. It was immaterial whether the tax had a tendency to enter into the price of the commodity on which the tax was imposed. He argued that the provinces had the power to levy a tax on the sales of goods irrespective of the fact whether they were produced in the home province itself or brought from outside.

Sir Brojendra admitted that the tax levied by the C.P. Government might be a sales tax within the meaning of the Provincial List but it also came within the category of an excise tax. If it was contended that a sales tax could be imposed on the top of an excise duty, then it would lead to curious results. Suppose, for instance, jute, which was a commodity used all over India, was taxed by Bengal, then it would mean that the Government of Bengal could tax consumers in other parts of India. This was repugnant to the whole scheme of the 1935 Act.

Sir Brojendra concluded by stating the Central Provinces Government had adopted a wrong form of taxation. They had committed what might be termed a legislative wrong or tort.

It is anticipated that the Federal Court will deliver judgment in the course of the next week or so.

Radio Sets in Private Cars

The following letter has been received from the Station Director, All India Radio, Madras:—

It will interest you to note that I had a long interview on the morning of 18th October with the Commissioner of Police, Madras, regarding the use of private radio sets in private cars. What emerged therefrom is that there is no objection to a radio set being installed in a private vehicle and its use for private purposes. But if a loud speaker is loud enough to attract the attention of people on the roads or in such other places as may be frequented by the public the owner renders himself liable to action under the City Police Act.

The ban is actually in force against the use of public address or public amplifier systems used for advertisement purposes.

The line between just listening for one's own private amusement and infringing the City Police Act is admittedly a thin one, and may perhaps only be decided by a test case. The point is that the radio set in a private car must not come in the classification of the playing of music in a vehicle. This letter is being written to give you the information received by me and to request you to communicate to me any cases that may arise regarding radio sets in private cars, the sales of car radio sets etc.

Yours faithfully,
VICTOR PARANJOTI,
Director,
All India Radio, Madras.

Construction of Roads and Bridges

Rs. 12.54 Lakhs Schemes to be Carried Out by Local Bodies

Road Development

The Government have agreed to consider favourably proposals of District Boards to utilise their accumulated Railway Cess funds on well-considered schemes of capital expenditure relating to roads, bridges, culverts and causeways.

Government have authorised local bodies to take up for execution 97 urgent schemes including in the Seven Years' Programme of Road Development which have been approved by the Government of India. The schemes are estimated to cost Rs. 12.54 lakhs as shown below:

Nature of Schemes	No.	Estimated cost (in lakhs of Rs.)
District Bridges	19	2.20
District Roads	19	2.39
Metalling Roads in Delta areas	59	7.95
	97	12.54

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Minutes of the Proceedings of the Extraordinary General Meeting and Annual General Meeting of the A. A. S. I.

MINUTES of the proceedings of the Extraordinary General Meeting of the Automobile Association of Southern India held on Thursday the 27th October 1938 at 5-45 p.m. on the lawn adjoining the Registered Office of the Association at 38 (b), Mount Road, kindly lent for the purpose by Messrs. T. B. Mehta & Sons, Mint Street, Madras.

Present:—21 members were present in person and 33 members were present by proxy.

The President welcomed the members and opened the proceedings by calling on the Secretary, Mr. G. W. Owen, to read the notice convening the meeting. The notice having been read, the President explained to the meeting that the old Articles of Association had become antiquated and were not in accordance with the amended Indian Companies' Act. The Committee had called special meetings and Sub-Committee meetings were convened to amend these Articles in consultation with the Association's Solicitors, Messrs. King and Partridge. The President called upon the Chairman to explain certain details of the revised Articles which had been circulated to all members of the Association. Mr. Justice Gentle then proceeded to explain that the old Articles of Association had not been revised since the Association was originally formed; that they were in some cases contradictory. Many other Articles which were statutory under the Companies' Act were omitted, although they should be deemed to be included in the rules of the Association. The Articles had therefore been entirely redrafted by the Association's solicitors and circulated to all members of the Association.

He then moved that the following amendment should be made to Article 3 of the revised Articles to read as follows:—

"The Committee may invite distinguished gentlemen to be Patrons and Vice-Patrons of the Association, who on acceptance together with the existing Patrons and Vice-Patrons shall become ordinary members of the Association but shall not be liable to pay the subscription prescribed in Article 15."

In Article 15, the following should be added after the word 'Association' in the second line: "except Patrons and Vice-Patrons", and in Article 18, the following should be inserted after the word 'Association' in the first line: "except a Patron or Vice-Patron."

The Chairman moved that the number proposed for a quorum at General Meetings should be reduced from 20 to 16, and that Article 28 should be amended accordingly.

The following Special Resolution adopting the new Articles of Association as amended was passed unanimously:—

"That the regulations contained in the printed document submitted to the Meeting, and for the purpose of identification subscribed by the Chairman thereof, be approved and adopted as the Articles of Association of the Association in substitution for, and to the exclusion of, all existing Articles thereof."

No other business being on the Agenda for this meeting, the meeting terminated.

Annual General Meeting

The Minutes of the proceedings of the Annual General Meeting of the Automobile Association of Southern India held

at 5-15 p.m. on Thursday the 27th October 1938 on the lawn adjoining the Registered Office of the Association at 38 (b), Mount Road, kindly lent for the occasion by Messrs. T. B. Mehta & Sons, Mint Street, Madras.

Present:—28 members were present in person and 312 members were present by proxy.

The President welcomed the members and opened the proceedings by calling on the Secretary, Mr. G. W. Owen, to read the notice convening the meeting. The notice having been read, the President, Sir Mahomed Usman, presented the Annual Report and the Accounts for the year ended 31st December 1937, and said that it was a matter for congratulation that membership of the Association had considerably increased. During the year under review there was an increase from 1,257 to 1,720 members and the present strength was 2,184. More members would mean more income to the Association and better service to the members and the public. It should be the aim of every member to see that more members joined the Association.

Sir Mahomed Usman said that the Association had been very fortunate in obtaining the services of Mr. G. W. Owen who is proving himself to be most useful, capable, and efficient in the discharge of his duties as Secretary.

Continuing, Sir Mahomed said that the Road Patrol System was introduced in July 1937. The road scouts had been doing very good work both in Madras and in the mofussil. The



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Association was represented on the Madras Traffic Advisory Committee and he was glad to say that many of the suggestions made by the Association had been adopted. The Committee of the Association had been devoting its attention to the question of providing free legal defence to members in addition to free legal advice. Rules had been framed and arrangements were being made to provide legal defence as early as possible in cases where it was required. The Association now had branches at Bangalore, Trivandrum and Madura, the last two branches having been opened in May and September this year. In the years to come, he hoped more branches would be established. The finances of the Association had improved and he wished to congratulate the Executive Committee on the excellent work it had done. The Chairman of the Committee, the Hon'ble Mr. Justice Gentle, had been taking a very keen and active interest in the affairs of the Association and the present prosperous and flourishing condition of the Association is entirely due to him, and it is matter for regret that he is not standing for re-election as Chairman owing to other public duties. He then moved that the Annual Report and Accounts be adopted which was seconded by Mr. M. K. Khaleeli and carried unanimously.

The President moved that Messrs. Fraser and Ross be reappointed to audit the Accounts of the Association on an annual fee of Rs. 300 for a monthly audit to be conducted in the Association's offices, including the reparation of the Annual Statement of Account and Balance Sheet, and it was resolved unanimously that they should be re-appointed on the said terms.

The President moved the following resolution which was passed unanimously amid acclamation:

"That this General Meeting of the Automobile Association of S. India places on record its grateful appreciation of the very valuable services rendered to the Association by the Hon'ble Mr. Justice F. W. Gentle as Chairman or the Committee during the last two years."

The Hon'ble Mr. Justice F. W. Gentle thanked Sir Mahomed Usman for the kind sentiments expressed by him and said that he had done no more than any other office-bearer of the Association. It was a matter of great pleasure, he said, to see the number of members of the Association increasing. Sir Mahomed Usman as President, and Dewan Bahadur Govindoss Chathurbhujadoss as Vice-President had done very valuable service and had been taking a very keen interest in all matters of the Association. He then proposed that Sir Mahomed Usman and Dewan Bahadur Govindoss Chathurbhujadoss be re-elected President and Vice-President of the Association respectively, which was carried unanimously.

Sir Mahomed Usman thanked the members for re-electing him as President and said that he would do his best to be useful to the Association. He then proposed that Mr. C. P. Johnstone be elected as Chairman, Mr. A. A. Hayles as Vice-Chairman, and Mr. K. Govindan as Honorary Treasurer, which was carried unanimously.

Regarding the election of 3 members to the Committee in place of those retiring, the Chairman, Mr. Justice Gentle explained that it was obligatory under the Indian Companies' Act as amended that one-third of the Committee should retire each year,

and as there were eleven members of the elected Committee last year, the nearest divisible number was four; but as Mr. Govindan was now on the Committee as an officer of the Association the number of elected members was 10, and therefore the number to retire was 3. As all present members were elected at the same time, the three to retire were chosen by lot as follows: Messrs. S. G. Harrison, M. K. Khaleeli and E. A. Watson. They were eligible for, and offered themselves for re-election.

Out of the three members to be elected, two had to be ordinary members and one a trade member in the place of Mr. E. A. Watson, retired.

At this juncture, Mr. Mahomed Musa Sait asked whether it would be in order if all members of the Committee retired as in previous years to which Mr. Justice Gentle replied that the present procedure was in accordance with the Indian Companies' Act of 1913 as amended and the New Articles.

A list of members who were willing to serve on the Committee if elected was distributed amongst those present, together with blank forms with instructions to write the names of two ordinary members and one trade member. Mr. Justice Gentle pointed out that although the names on the list were those who had informed the Secretary of their willingness to serve on the Committee they were at liberty to vote for any other member of the Association.

Mr. W. H. Sell explained that the ballot was being taken only to save time and to get the general sense of the meeting; it was not to be final and ultimately there would have to be a resolution to fill up the vacancies.

Messrs. C. P. Johnstone and F. G. Luker were unanimously appointed as Scrutineers of the ballot; the papers were then collected and it was found that 5 members had voted for three ordinary members and no trade member. The President pointed out this irregularity to the meeting and suggested that if the meeting was in agreement a fresh ballot should be held immediately, but it was proposed by Mr. G. Srinivasan Chetty, seconded by Mr. S. Sankara Mudaliar and carried unanimously that these five ballot papers should be ignored. The Scrutineers then announced that the result of the ballot was in favour of Messrs. Harrison and Khaleeli, and Mr. Watson as trade member.

Mr. F. G. Luker proposed and Mr. Srinivasan Chetty seconded and it was resolved unanimously that Messrs. Harrison, Khaleeli and Watson as trade member should be re-elected as members of the Committee. The President announced that all resolutions having been passed unanimously no use was made of proxies.

Dr. K. V. Subramaniam asked if it was possible to train the road scouts in First Aid as he had had occasion to call upon a scout for some medical assistance on the road between Madras and Bangalore previously, and was told that he had received no training. The Chairman pointed out that the present Road Scout in Madras had undergone a course of First Aid training and that the Patrol to whom Dr. Subramaniam referred had been found unsatisfactory and his services dispensed with.

After a vote of thanks to the Chair, the Meeting terminated.

MADRAS,

2nd November 1938.

Report on the Celebration of the Road Traffic Week at Vellore

From 29-8-1938 to 3-9-1938

THE week started on 29th August 1938. Leaflets both in English and Tamil on the Road Traffic Rules were printed and placards bearing the rules were prepared. The local Scouts assembled at the Collector's bungalow and each Scout bearing a placard marched in twos from the Collector's bungalow along the Officers' Lines Barracks maidan road, Katpadi road, Mundi street, Long bazaar, and Commissary road and reached the town police station. Along the route printed leaflets were distributed to the public. The procession was attended by the Deputy Superintendent of Police, Inspector of Police, the District Scout Commissioners and other Scout Officers.

In the evenings the Scouts posted themselves on the cement road and regulated pedestrian traffic daily between 5 and 6.

On 30th August 1938 Rao Sahib C. Doraswamiah and T. S. Venkatramanan gave talks to the pupils of the Sri Mahant's High School on the Road Sense.

On 31st August 1938, Rao Sahib C. Doraswamiah gave a similar talk to the pupils of the Government Muhammadan High School, Vellore.

On 1st September 1938, Rao Sahib C. Doraswamiah spoke to the Girls at the Government Secondary School for Girls in the morning and to the Municipal Boys and Girls at the Saidapet Central School. Mr. S. Rajam talked to the children at the Thottapalayam Central School.

On 2nd September 1938, Rao Sahib C. Doraswamiah gave a talk on the subject to the High School pupils of the Voorhees College and Mr. T. S. Venkatramanan to the Middle School section in the morning. In the evening Rao Sahib C. Doraswamiah talked to the Municipal Children at the Kalaskara Street Central School, Mr. T. S. Venkatramanan at the Kusba Central School, Mr. James D. Isaac at the Kosapet Central School.

On the morning of the 3rd Scouts again assembled at the Voorhees College Compound and marched through the principal Streets as on the first day. The Scouts were larger in number and they were led by the District Scout Commissioner and the Assistant District Commissioners and the Inspector of Police.

In the evening a public meeting was held at the Gandhi Maidan presided over by Rao Sahib C. Doraswamiah. Nearly a thousand people had gathered. At the outset Sri K. Vaidyanatha Ayyar spoke explaining the Road Traffic Rules to the audience. Next Mr. T. S. Venkatramanan, Assistant Scout Commissioner engaged the audience and explained to them the need for the pedestrians developing a road sense in view of the congestion and dangers on the road on account of the fast moving vehicular traffic. He pointed out the road sense prevailing in the public of important cities like Madras, Bangalore, Bombay and other cities and insisted on the need for obeying the cautions of the policeman on point duty.

Rao Sahib C. Doraswamiah in conclusion referred to the need for developing a better road sense on the part of not only pedestrians, but also cyclists and motorists.

Sri K. S. Viswanatha Ayyar proposed a vote of thanks and put to the audience if they favoured the enforcement of the Road Traffic Rules in Vellore and all welcomed the proposal none dissenting. The meeting came to a close at 7-30 p.m.

Suggestions for the Enforcement of the Road Traffic Rules.

1. The Municipality may be asked to prepare Tin boards and paint on each a rule both in English and Tamil like the ones used by the Scouts on the procession on the first day and hang one on each electric lamp post and allow them to remain there for about a fortnight and then remove them and fix them up on different road for another fortnight and then change them frequently. This arrangement will catch the public eye and will give them better education.

2. The Electric Supply Corporation should be addressed to allow these tin boards to be hung on the posts.

3. The constables on point duty should not only concern himself with directing the vehicular traffic but also be instructed to warn the pedestrians against using the middle of the road and see that the roads are always kept clear of the pedestrian traffic by diverting it along the sides.

The Pioneers of Motoring

Not many motorists of today especially those who brag of doing 200 miles in 4½ hours realise that there was a speed limit of 12 miles an hour in England only 35 years ago.

Mr. E. R. Logan a resident of Kodaikanal has presented the Association with the newspaper cutting appearing on page 362 together with the original summons with which he was served in August 1903.



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MADRAS

Traffic News

RIGHT OF WAY AT ROUNDABOUTS

Frequent Breaches of Off-side Rule

BOTH at intersections and at the many roundabouts of Bombay city breaches of the rule that traffic on the right has the right of way are to be seen every few minutes. Yet it is only common courtesy that traffic entering a roundabout should give way to traffic already there. One of the Common Driving Fault diagrams issued recently by the W.I.A.A. dealt with the off-side rule at intersections and, though technically correct, roused a certain amount of criticism.

Recently a large number of roundabouts have been introduced into Bombay's street system in order to speed up the circulation of traffic. The layout of Bombay's roads does not always permit the siting of these roundabouts so as to cause traffic to slow down before entering them; the result is that at certain places—notably the Churchgate Street, Queen's Road and the Byculia Bridge roundabouts—some vehicles can go straight through at speed without slowing down. This is dangerous to traffic already at the roundabout which has both the legal and the moral right of way. The Safety First Association of India and the W.I.A.A. is endeavouring to design a suitable sign for erection at roundabouts to show traffic which is upstream has the right of way, and suggestions from the public are welcome.

STONE SPLITS IN HALF—BREAKS WINDOW

When a heavy vehicle ran over a flat stone some six inches long in one of Bombay's busiest streets the other day, the stone split in two—and half of it was hurled through a plate glass window, just missing a man sitting behind it. The importance of keeping the streets free of stones, coconut shells, and similar things is not always realised—and motorists should heed this warning not to run over them.

CORNER VISIBILITY AND LOW WALLS

Central Government Buildings A Good Example

The Central Government's building in Queen's Road, Bombay, is now almost in full occupation and motorists are congratulating the Government of India on giving a lead to other builders by constructing a very low boundary wall which gives excellent corner visibility. High compound walls create blind corners but the memorandum issued by the Safety First Association of India on corner development has been widely re-printed all over India, so that future buildings should be completely up-to-date in this important traffic aspect.

STEPPING STONES FOR WALKERS

Now that roundabouts are general in Bombay to facilitate the movement of vehicles and to speed up traffic provision should be made for pedestrians.

Generally speaking, pedestrians should not cross a junction through a roundabout but should cross at the intersecting street instead, just outside the throats. Where streets are more than 20 feet wide—as are almost all streets in Bombay—"stepping stones" in the form of pedestrian refuges should be provided so that people may cross the streets safely.

SHOULD FILTERING BE PERMITTED?

Traffic in Bombay is allowed to filter to the left against a police constable's signal except where, to ensure the safety of pedestrians crossing the road, the constable on duty stops all vehicular traffic by holding out both arms horizontally.

Traffic is growing every month in the city and the time has come when the advisability of permitting the continuation of filtering should be considered.

On wide thoroughfares it facilitates traffic movement but on busy streets less than 60 feet wide, or at intersections with acute angle kerb corners and heavy cross traffic filtering should probably be controlled. The question is complex and the Safety First Association of India have submitted a memorandum on it to the traffic authorities.

EXPERIMENTS IN STREET LIGHTING

Ingenious Reflector in Lamps on Pedder Road

Bombay Municipality have recently paid considerable attention to the question of street lighting—a matter dealt with more than once in the W.I.A.A.'s Magazine—*Motoring in India*.

Perhaps the most striking experiment recently conducted is the lighting of Hornby Vellard with mercury vapour lamps and of the adjoining Lovegrove Road with sodium vapour lamps. Presumably the adoption of different types of lamp on contiguous sections of the same road was intended as an experiment to find out which is preferable; the experiment, however, will give no conclusive results since the road surface in the area is not continuously the same—and a major factor in street illumination is the reflection cast up by the road surface; while the placing and location of the lights in the different places is also different, which renders comparison less easy.

The lighting of a street lined with low overhanging trees, such as Pedder Road, presents many difficulties; for the situation prevents the lamps being suspended at a height which makes better lighting possible, whilst on the other hand the size of the lamp has to be limited, as otherwise too much glare would result. The Gas Company are to be congratulated on the method they have adopted for improving the lighting of Pedder Road. A piece of polished metal which has been placed on the kerb side of the lantern serves the purpose of directing that portion of the light, which would otherwise fall on the abutting property, on the road surface.

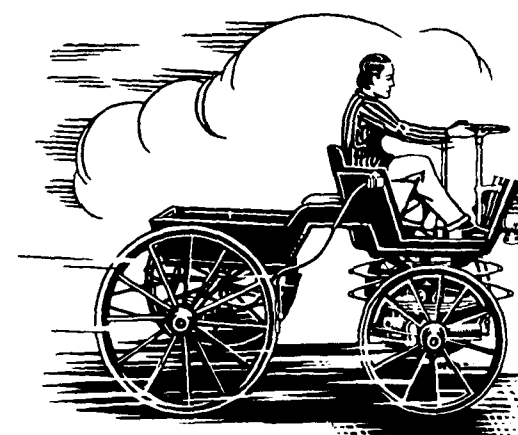
ROAD TRAFFIC FILM COMPETITION

In this age of mechanics and speed, the use of the road is becoming a skilled business and with the growing popularity of the screen as the blackboard of the modern school, The Safety First Association, in conjunction with the "Illustrated Weekly of India", have sponsored a 16 m/m road traffic film competition, the object of which is to attract the best talent in the country with a view to having one or two good films that can be used for educational purposes. Attractive prizes are being offered and it is hoped that the competition will be a great success. This competition is open to both amateurs and professionals.

DRIVER ON LUGGAGE CARRIER

Dangerous practices and accidents on the streets of cities in India are more often than not ascribed to the bad habits of

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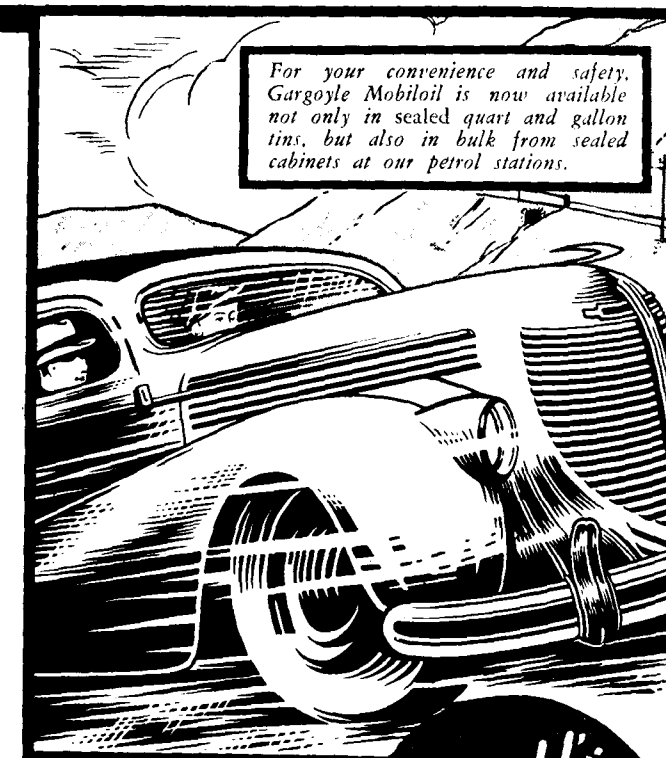
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drivers; but owners are often as much to blame. A startling example of thoughtless selfishness was to be seen near Bombay a short while ago.

In a small saloon car sat a husband and wife and two friends: the door of the luggage compartment had been opened down to form a carrier—and on the carrier, obviously most insecure, sat the unfortunate driver in his white drill uniform and peaked cap.

When first seen the car was descending a very steep twisty hill road with a bad surface—and descending much too fast.

"Criminal" is not too strong a word to use for the behaviour of motorists who expose their drivers to such dangers.

DRIVING WITH DOOR NOT CLOSED

Carelessness seems to be on the increase among drivers, at any rate in the bigger cities. An officer of the W.I.A.A. spent a whole morning recently noting down examples of carelessness and dangerous practices in the streets of Bombay.

Eleven cars were being driven with electric traffic indicators up, obviously left thus by oversight. Three cars on the well-known Marine Drive had their off front doors not properly closed. A taxi and a private saloon both obviously had one or more leaves of their rear springs broken, for they listed heavily to one side. Three motorists were moving in broad daylight with their headlights on—probably carelessness, though perhaps the explanation was overcharged batteries. A car and two taxis were minus door handles, while several vehicles were equipped with black water-proof cloths monsoon covers which were too big and flapped about, in all cases obscuring the vision of those coming behind and in two cases obscuring equally the vision of the drivers of the cars themselves.

The fact that too few owners make a periodic inspection of their cars to ensure that nothing is coming loose is shown by the number plates which are picked off the streets either by the W.I.A.A. Road Patrols or by the Police; while the former Association have recently been called upon to defend a member who lost his number plate at night and improvised one out of cardboard and chalk, which also came loose and fell off; so that he was later charged with driving without a proper number plate at the front.

MANHOLE COVERS IN MONSOON

The recent floods have shown up two weaknesses in our street system, viz., the need for a type of manhole cover that will not be raised above the road level by the pressure of the water within the drains and secondly the need for deferring road works, especially major road openings on streets subject to flooding during the monsoon.

Both these defects are dangerous to motorists. They act as a very serious obstruction and danger, especially when the carriageway is flooded.

THE RUNNING SCHOOLBOY AND THE ROAD

The standard caution sign adopted by the Government of India to signify the presence of a school is a schoolboy running, carrying a satchel. This superseded the older symbolic sign of the flame of knowledge. Many school proprietors seem to think that if they have the signs put up outside their premises they have done all they can. This is far from so.

In business districts with their variety of background, shop signs, advertising posters, show-windows, and articles for sale,

coupled with not too well disciplined foot and wheeled traffic, it is almost impossible for a motorist to see a sign.

Generally speaking, many cautionary signs are a symptom of poor road design. They indicate a danger which the engineer and the town planner should have avoided, had they done their jobs properly. In many cases it is a question of wrong location; schools are sited in main streets because of the advertising value of such positions. Other more important factors—such as health, traffic safety, proximity to open spaces, and noise—are neglected.

It has been amply demonstrated that the school authorities have the power within themselves to tackle problems their schools create, for they can teach students the correct use of the road; they can control the parking of cars that come to take their children home and they can control the crossing of the street by their students in the vicinity of the school. These are real opportunities of preparing students for citizenship.

CROSS ROADS AND TRAFFIC LINES

In approaching a crossing, motorists should manoeuvre into the correct lane, i.e., left hand lane for those about to make left turns, the middle lane for those about to proceed straight through, and the outside lane for those about to make a right turn.

If all motorists approached a crossing in accordance with these principles, the Safety First Association and the W.I.A.A. say that much time would be saved and many accidents would be prevented. We have seen several cases where drivers desirous of turning right weaved into the left lane before making the turn—the very worst position to be in.

ACCIDENT REPORTING AIDS PREVENTION

The question of accident reporting is of very great importance since remedial steps are dependent upon the causes of accidents. In this connection the Safety First Association addressed the Department of Communications, Government of India, who have replied that the question of adopting a standard form for recording accidents and of compiling periodical statistics thereto had already been taken up with the Provincial Governments and it is hoped that a decision would be arrived at before long.

This is very excellent news indeed. Accident reporting is the foundation of accident prevention. This information will be of the greatest value to all who are working towards the elimination of accidents by focussing public attention on improved driving and walking and the provision of safer highways.

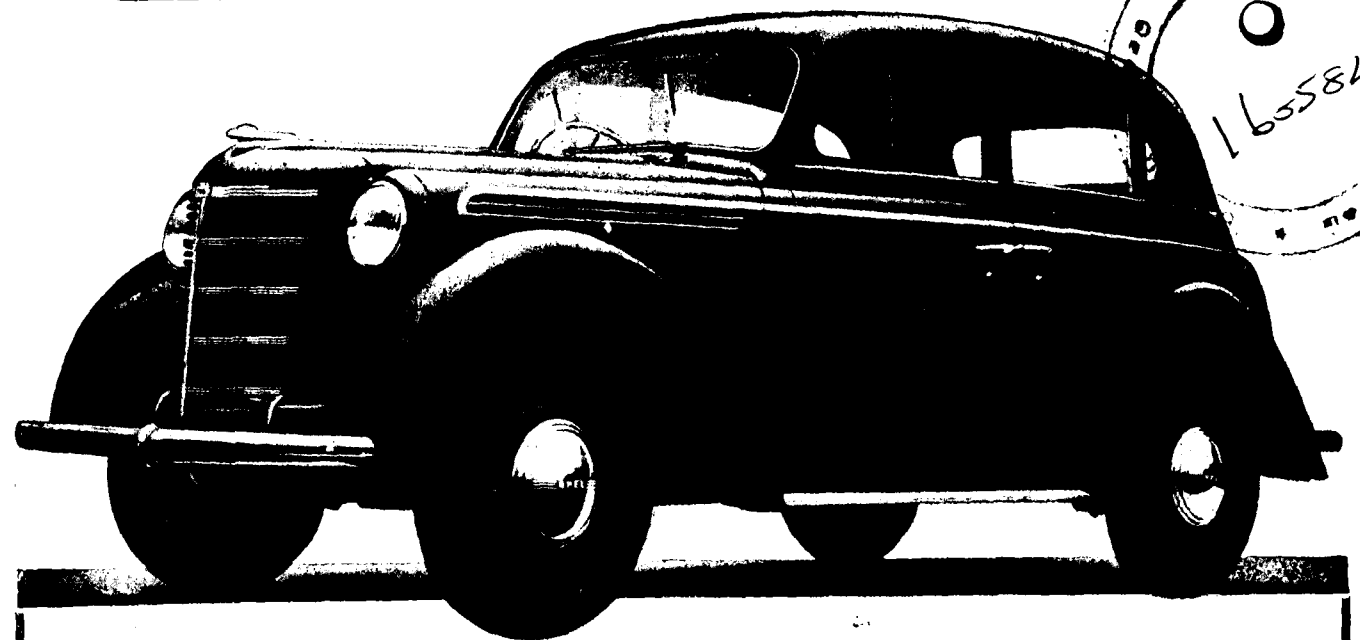
HOW TO TREAT GLARING HEADLIGHTS

On approaching a car with glaring headlights the W.I.A.A. advise all motorists to slow down, even to the extent of stopping if necessary, and to keep their eyes on the road towards the left, forbearing to look into the offending beams.

Usually a signal—alternate switching on and off one's own headlights—will be sufficient to convey to an approaching motorist that his headlights are causing you discomfort and cause him to douse his lights until he has passed you.

Many of the night accidents in the suburbs of India's city, it is said, are caused by the improper use of headlights.

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THIS brand new Opel 10 Kadett, with redesigned front end and many improved body and engine features, is the last word in motoring economy. Available at the world's lowest cost for a car of this class, the Opel 10 embodies all the features of a General Motors car—Knee-Action front springing, All-Weather Ventilation, Super Hydraulic Brakes, and All-Steel body. Both the Sedan and the Cabrio-Coach models develop 27 h.p., and have a 92" wheelbase. Start saving with an Opel from this month.

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COLOUR BLINDNESS AND TRAFFIC

Tests taken in Melbourne (Australia) show that 3% of the population are blind in some measure, 4% are weak in distinguishing red, and 12% in distinguishing green. The *British Standards Institution* are considering the abolition of all red and green signals. They are considering the suggestion that existing signs might be supplemented by square and octagonal backgrounds, vertical and horizontal lines for "STOP" and "GO" across the lights, or the placing of these words across the lenses of the lamps.

The Safety First Association of India have suggested that the symbolic signs, the cross (X) meaning 'NO' or 'STOP' and the tick (✓) meaning 'YES' or 'GO' would offer an international solution.

BARE BOARDS ON TEST CHASSIS

Backless Seat Dangerous to Drivers

A member of the W.I.A.A. drew the attention of the Safety First Association to the fact that a number of lorry chassis on test were being driven with only a plain board seat for the driver with no back to it.

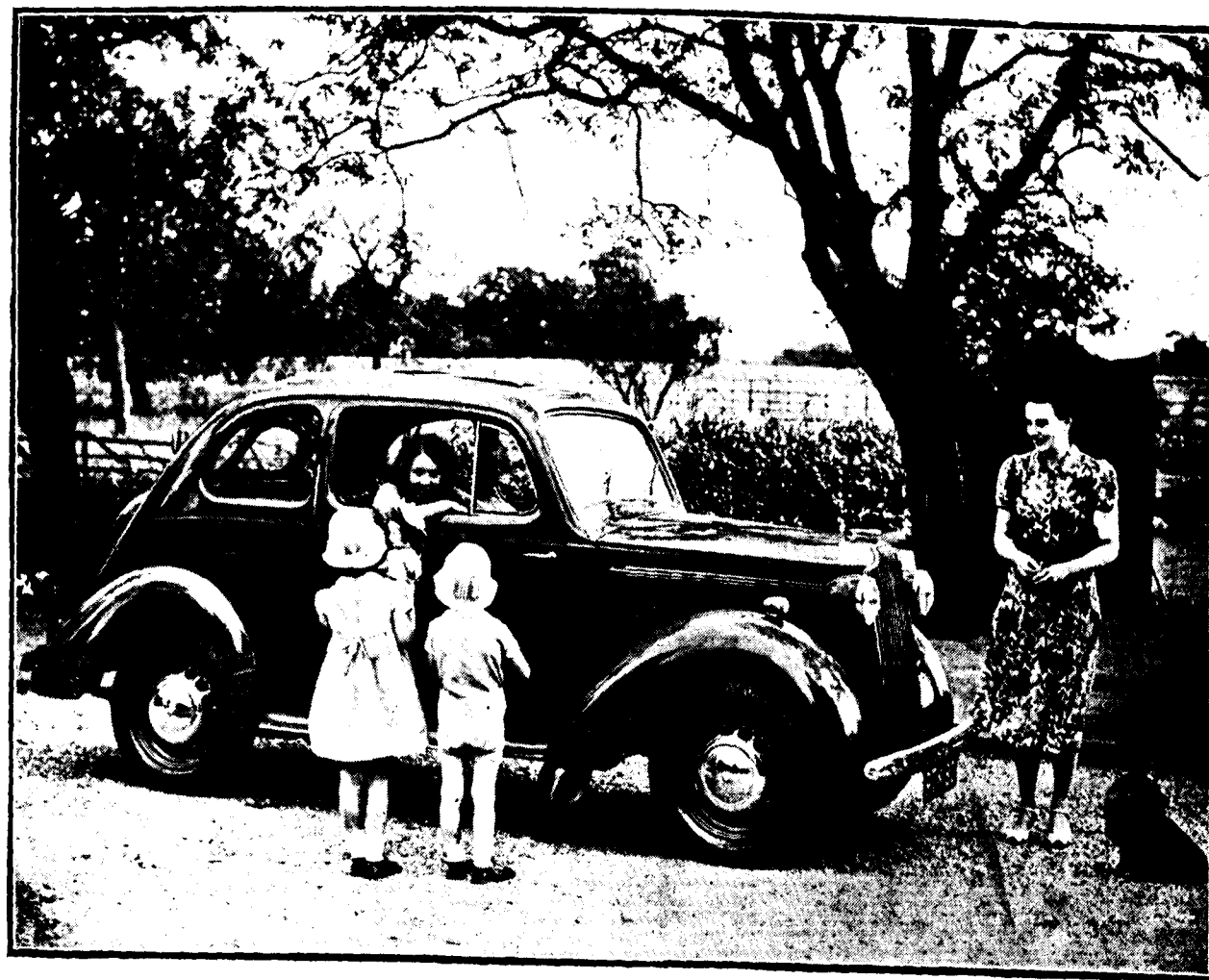
The writer pointed out that when a driver applies the brakes to a car or lorry he presses himself against the back of the seat

on which he is sitting in order to acquire leverage: the harder the braking and the more sudden the emergency the more leverage he requires. Moreover there are occasions when it is necessary to brake and steer round the corner, or, to brake and change gear simultaneously. All these actions are difficult to perform if the driver is sitting in a backless seat. Further, a plain wooden seat in wet weather tends to become slippery—an added danger.

The Safety First Association referred the matter to the Traffic Advisory Committee, which brought it to the notice of the Commissioner of Police.

The Commissioner in his reply stated that the dangers attendant upon backless seats were being brought to the notice of all local automobile dealers, with special reference to Section 26 (A) of the Bombay Motor Vehicles Rules which reads:

"No person shall drive a motor vehicle unless it is at all times under full control so as to prevent undue interference with passenger or other traffic, and unless it is maintained in such a condition as to prevent danger to the public."



In less than a year the Vauxhall 10 coupe has won three First Prizes in Coachwork Competitions; first at the Blackpool Rally, followed by the Hastings Concours D'Elegance and the Welsh Motor Rally. It is an ideal car for the woman driver, very easy to handle—with a small turning circle, Synchro-Mesh gears and giving 40 miles per gallon economy.

Perbunan: A New Industrial Synthetic Material

Insusceptible to Oil or Petrol

By Willy Mobus

AFTER tests and trials carried on for years synthetic rubber (Buna) is now being manufactured on a large scale in Germany. Technical industry is thus supplied with a material greatly superior to the natural product. Buna is manufactured from coal and lime. The final product is secured by a gradual process of combining atoms of butadien; this process of combining atoms is called "polymerisation". Butadien obtained from lime and coal is at the ordinary temperature of a livingroom a gaseous substance. The combination of individual butadien atoms is brought about by different methods which have been so far perfected that various kinds of synthetic rubber possessing different properties can be produced as desired. The most important types produced at the time being are Buna S and Perbunan. While Buna S is already used chiefly in manufacturing automobile tyres and insulatory material for cables, Perbunan is an absolutely new material for industrial use; it is insusceptible to oil or petrol and its resistance to heat is far superior to that of natural rubber.

Perbunan is worked in a similar way as caoutchouc. It is mixed with soot, white lead or other ingredients and vulcanized with sulphur. These ingredients considerably influence the qualities of the final product. "Active" soot, for instance, tends to greatly increase the resistance to wear and tear while white lead increases heat conductivity. Natural caoutchouc at the temperature of 176-195 deg. F. becomes viscous and sticky, but Perbunan remains unaffected up to 266 deg. F.; moreover it is much more durable than natural caoutchouc.

How to reduce vibration is one of the great problem of modern mechanics. The materials used must be above all highly elastic and insusceptible to oil, grease and petrol. As Perbunan fulfils all these requirements to a very large extent, it is specially suited for engines and motors where the prevention or suppression of oscillations is of paramount importance. Already years ago combinations of rubber and metal were produced with the object of diminishing or eliminating undesirable vibrations. Now Perbunan instead of natural caoutchouc can be combined in the process of vulcanization with metal, wood and plastic materials; it may be mentioned that Perbunan has no effect whatever on metals. In order to ensure noiseless action of driving gears cog-wheels are vulcanized with Perbunan. In the manufacture of machine tools oilproof fan-belts made of Perbunan are being used with excellent results. Perbunan belt-conveyors are specially useful for conveying hot coke, hot ashes, hot salts or greasy and oily materials. In the printer's office cylinders of Perbunan find a wide field as they offer much better guarantee against wear and tear than the cylinders now used. Textile mills also find rollers of Perbunan very useful. As Perbunan is almost impermeable, it is also specially suitable for the manufacture of balloon envelopes.

A characteristic and very important feature of Perbunan is that by reducing electric resistance it acts as a semi-conductor and that in consequence the accumulated electricity of belts, hoses, etc., is easily turned off. This electric conductivity can be still further increased by adding certain ingredients. On the other hand Perbunan can be turned into an excellent insulating material which is particularly useful in the manufacture of electric cables and wires. Because of its great durability, its high

capacity for conducting heat and its chemical properties Perbunan is used as a protective coating in rubber hose and pipes, ship's cables and hawsers, etc. Wherever goods and materials are subject to rough handling this synthetic rubber gives good results. Perbunan hose and pipes are useful, for instance, in boiler-houses and railway engines where they keep in excellent condition notwithstanding the great heat. Perbunan also offers great advantages as a material for protective articles of clothing, such as gloves, soles and heels for boots, etc. which are extensively used in the oil, chemical and food stuffs industries. Perbunan products play an important part in the hard rubber industry. By increasing the percentage of sulphur Perbunan as well as all other varieties of Buna yield synthetic hard rubber that is specially adapted for lining all sorts of utensils and vessels, pipelines, fittings and mountings, and in the chemical industry, as the great durability and insusceptibility to heat, etc. protect Perbunan hard rubber completely from chemical corrosion.

Though synthetic rubber greatly resembles and even excels natural rubber in usefulness, it must be remembered that these materials are quite different, natural rubber being based on isoprene while synthetic rubber is developed from butadien; the fact that it has been possible to produce new varieties of rubber by other processes than those followed by Nature demonstrates the great importance of chemical research.—(I.R.I.B.).

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Motoring in India

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BOMBAY SUBURBAN POLICE THINK 88 SUFFICIENT!

Injustice and Inaccuracy of Speed Trap

BELIEVING the 88 yard speed limit trap used by the Bombay Suburban Police to be inequitable the W.I.A.A. cabled to the A.A. of Great Britain and to the A.A.A. in New York as follows:

"Please advise after consultation police authorities minimum distance considered equitable for timing to support police prosecution for exceeding thirty M.P.H. speed limit. Local suburban police timing over 88 yards only and prosecuting all timings five second and below."

Back came the replies. The A.A. cabled:

"Our official solicitors have confirmed at Scotland Yard their experience that minimum distance for timing with stop-watch is 220 yards with five yards grace and minimum timing by following patrol one-fifth mile."

The A.A.A. sent the following reply:

"The method outlined constitutes speed trap of type condemned by A.A.A. Minimum timing distance generally 1,000 feet with speed determined by pacing".

From these replies it appears that in America stop-watch speed traps are condemned in their entirety and offenders against speed limits are checked by motor-cycle patrols following their cars over a measured distance; in Great Britain both methods are used but speed traps are of a minimum length of one furlong while a still greater distance is demanded for the checking of speedsters by car or motor-cycle patrols.

Possibilities for Error

Why should the police of countries far more experienced than is India in motoring problems condemn short distance speed traps? The answer, in the opinion of the W.I.A.A. is that timing over a short distance leaves far too many possibilities for error. This according to the W.I.A.A. is what happens in the Bombay Suburban District:—

A sergeant and two constables measure out with a tape measure a distance of 88 yards; white lines are then painted on the side of the road or kerb at the beginning and end of this measured distance. The two constables are both in plain clothes and one is posted at each end of the 88-yard section. A hundred yards or so further on stands the sergeant.

When a motor-car which is suspected of travelling at more than 30 m.p.h. approaches, the first constable waits until the car's rear wheels are in a line with the white line, whereupon he waves behind his back a white cloth, the second constable has kept his eyes glued upon the first constable and the moment he sees the white cloth waved he presses the key on his stop-watch; he then turns his eyes right and depresses the key of the stop-watch a second time when the rear wheels of the supposedly offending car came opposite his white line. Should the stop-watch show a time of five seconds or under, the second constable signals to the sergeant, who promptly holds up the offender.

The Trap

The trap is based upon the fact that it takes six seconds to cover 88 yards at 30 m.p.h., the same distance covered in five seconds means a speed of 35 m.p.h. Motorists taking the trap at 34 m.p.h. are considered to have done so either through no intention or some other cause and are not stopped. Motorists taking the trap at more than 35 m.p.h. are immediately charged.

The police maintain that an error of one second in this arrangement is impossible owing to the training of their men. If this contention is to be accepted the constables of the Bombay Suburban District police force have a very much faster reaction time than the average experienced motorist—and this we find hard to believe.

The B. E. S. & T. Company carried out reaction time tests with their drivers with an ingenious electrical apparatus: when a green light glowed the driver had merely to depress sharply a lever underneath his finger once; the time taken between the glowing of the light and the depression of the lever was his reaction time. The average for highly skilled and experienced drivers was just under one second; the average throughout the fleet was just over. The best figure ever recorded by a private motorist at this instrument, was 0.64 of a second—a figure which would be considered exceptional in any part of the world. The same tests made in America and Great Britain, where the speed of modern life makes quick reaction far more essential and far more natural than the speed of life in India, showed an average in the United States for experienced drivers of 0.75 seconds, and in Great Britain of a fraction high. *Yet we are asked to believe that an uneducated police constable has so instantaneous a reaction time that he can press the button of a stop-watch in very much less than one second after the flapping of a piece of cloth 88 feet away from him!* One would have thought that the probability was that the stop-watch key would be pressed rather more than a second after the flapping of the cloth—and an error of one second in so short a distance means an error in the motorist's prejudice of not less than five miles per hour. When it is considered that more than 90 per cent. of speedometers are at least 10 per cent. fast in their recording the motorist travelling with a speedometer reading of 30 is almost certainly moving actually at not more than 28 m.p.h., the figures given in evidence by the police of 36 and more miles per hour for alleged offenders becomes still more incredible.

The human element in the present Suburban police trap is far too great for justice, for not only is there the time lapse between the flapping of the cloth by the first constable and the pressing of the stop-watch button both on and off by the second constable, but there is also the time lag between the first constable's judging the position of the rear wheels in relation to the white strip and his flapping of the handkerchief, a time lag between the second constable's making the same judgment and switching the stop-watch off. And on top of all this the police are stationed on the opposite side of the road to that of the car to be trapped, in order that they may not be spotted so easily by the motorist.

The Avowed Object

The original avowed object of the District Superintendent of Police was to stamp out the reckless road hog and the criminally careless driver, men who are a menace on the road and have caused so many deaths and injuries in the past. But it was not his intention to trap the ordinary decent motorist who may by ill-luck or misjudgment exceed 30 m.p.h. by a small margin. Yet the present method of the Bombay Suburban Police results in just this, that motorists are convicted, their licences are endorsed, and fines are realised on a large scale with no special reference to dangerous driving. Yet a speed trap should in fact be put into operation only when a car approaches which is obviously being driven at an excessive speed or in a reckless manner.

THE

"power-weight-strength" ratio

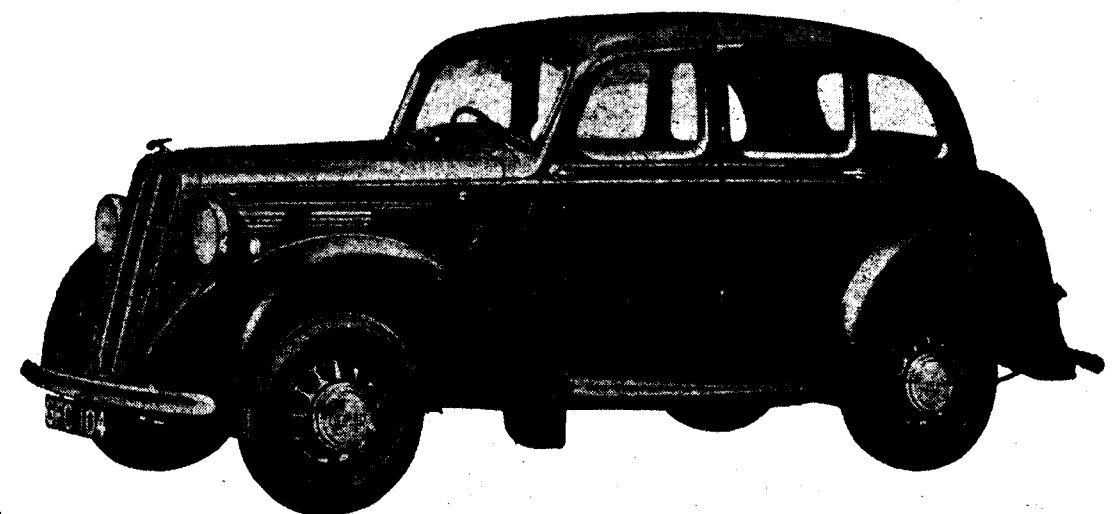
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NEW MORRIS TEN

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weight" ratio. Added lightness with added strength has made possible "miles more to the gallon" with "miles more to the hour". See this great car for yourself—new O. H. V. engine, four speed gearbox, capacious luggage boot, etc., etc.



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Motoring in German Austria

By J. Kehling

THE whole of Austria, that uniquely-beautiful country, which has long been one of the most popular touring spots of Europe, forms today a part of Greater Germany. For travellers this signifies better amenities in many respects. Motorists in particular will profit by this very soon, for even though the numerous projected highways cannot be built over night, nevertheless the existing roads will be improved immediately.

If one wishes to enjoy fully the beauty of German Austria one does not wish to experience any unpleasant surprises, and so one must bear in mind that motoring in a mountainous district presents rather high demands on the motor and the driving ability of the motorist. However, a driver with little experience in mountain motoring and with only a light car can climb over Austria's mountains by avoiding the steepest mountain passes. And that is easily possible! One needs only follow the route here described in order to see all the beauties of German Austria, her lovely landscapes, her marvellous buildings and interesting cities—in short, to obtain an excellent survey of the whole beautiful land. It is naturally impossible in the description of this tour of about 1500 kilometres to refer to all the sights individually; one must consult one's guide-book for that. At any rate, the motorist may rest assured that he will find no real difficulties to mar the pleasure of his trip. And one more bit of advice: Even though one can see a great deal from a motor car, even so it is impossible to penetrate everywhere; therefore, one should not neglect to take along a pair of good walking boots and a stout stick with whose help alone the visiting of many interesting places is possible.

Of all the entrances to German-Austria, the finest is by way of venerable, gracious Salzburg. When we have had our fill of its numerous beauties then we steer our auto eastwards to St. Gilgen, where the lakes of the Mondsee and the Wolfgangsee make us wish to linger, and from the charming near-by health resort of Bad Ischl we must not neglect to visit the lovely lake of Hallstättersee before we drive northwards along equally beautiful lake Traunsee and past the delightful town of Gmunden to Linz.

Instead of continuing our way on wider but less beautiful roads along the right bank of the Danube eastwards towards Vienna, let us remain on the left bank, where a small road soon leads us through the famous Wachau district, which with its many fortresses and castles reminds us of the Rhineland. The Niebelungen followed this road when they escorted the blonde Kriemhild to the court of King Etzel. That we—without our car—make an excursion with the "pulley ferry" across the Danube at Melk in order to visit the far-famed Benedictine monastery, and perhaps also the dream-like Castle of Schonbühl, goes without saying. After we have tarried at a number of other romantic, idyllic spots, we leave the wonderful Wachau at Krams, and soon after we have left Stockerau behind us we see in the distance the old "Steffel", which is the name of the main tower of the Stephans Cathedral in Vienna.

Vienna! A never-to-be-forgotten experience! Here we must not only follow our Baedeker in order not to miss any of the sights, but we must also find "the golden heart of Vienna", if we are really to know the old Imperial City properly. This can be done the best by spending an evening in the merry

Prater, or perhaps on the heights of the Grinzing at Heurigen, just outside of Vienna; only we must leave our car in the garage—alcohol is dangerous food for an auto under certain circumstances!

Skirting the green woods of Vienna we continue on our journey to the south, passing the popular health resort of Baden and mounting from Vienna-Neustadt into the ever-higher mountains until, after a varied journey, we have reached Semmering, at a height of almost 1000 metres, which is equally popular as a health resort, summer vacation centre, and for winter sports. We motor over the Spital and down into the marvellously beautiful valley of the Murz, disturbing the quiet of the lovely old cities of Murzzuschlag and Kapfenberg. At Bruck we bear to the south and follow the no less fascinating valley of the Mur. There is a castle on the hill above the wide plain in which Graz lies—Graz, the capital of the Stiermark province and now the most southern city of the German Reich.

Not always smooth-going, but full of charm and variety is the next stretch of our tour through the German-Austrian mountains. It leads us out of the valley of the Mur into that of the Kainach, passing Voitsberg and Koflach on the way, where there are important lignite mines. We ascend the 1166 metre high Packsattel of the "Vier Tore" range, descending on the other side into the valley of the Lavant. Through a romantic, narrow gorge, called the Twimberger Garden, we reach the attractive towns of Wolfsberg and St. Andra, where we must leave the valley of the Lavant in order to reach Volkermarkt and then Klagenfurt, the beautiful capital of Karnten. Here we must stop, for not only does the city itself offer many interesting sights, but the neighbourhood abounds in scenic loveliness. Perhaps the choicest part of the district is its world-famous lakes, especially the Worthersee, on whose shores charming villages of villas invite one to linger.

In order to avoid the rocky Karawanken district, we turn now to the west on the road to Villach, a magnificently-situated old city. At nearby Bad Villach there is a warm spring, which we pass if we follow the road along the quiet valley of the Gail, which with its green meadows, its high hills and pretty villages is well worth a visit. But at Kotschach we must leave this inviting valley and drive over the Gailberg-Sattel ridge into the valley of the Drau. Soon afterwards we come to Dolsach, the birthplace of the famous painter, Defregger. We are now on Germany's most beautiful and highest alpine highway. We drive past magnificently-situated Heiligenbult, we ascend the ice-capped Tauen, and come to the foot of Germany's highest mountain, the 3800 metre high Grossglockner. Our car then rides easily northwards into the deep valley of the picturesque Fuchser and to charming Zell-am-See, in the "beautiful Tyrol-Land."

This is another one of those places which enchants the visitor with its loveliness and the splendour of its surroundings, and which is particularly to be recommended to the motorist as his "headquarters", because he can make many beautiful excursions from here. However, we continue our tour to the north through the valley of the Saalach, admiring the rocky wildness of the Steinberg (stone mountain), and the Steinernen Meer (stone sea). Presently we cross the frontier just after Lofer between Tyrol and Bavaria along the Stein Pass, and now we

ave the opportunity of becoming acquainted with the uniquely-beautiful Alpine Highway, which brings us in a short time to glorious Berchtesgaden. From here it is only a stone's throw to Hallein, one of the very old Salz Cities. It lies on the Salzach, along whose valley we continue our journey and it is not too much to say that this valley is one of the most heavenly arts of our entire journey through the German Alps. It becomes ever narrower, almost a gorge, in which streams and waterfalls resound. We pass one natural wonder after another, among them the Lueg Pass, often fought for because of its strategic position, Werfen, the 1000-year-old fortification, and especially the icy-mountain, the Eisriesenwelt, one of the wonders of the world, lying high above Werfen.

At Bruck-Fusch, we cross the road that we had left behind us when we left Glockner. We continue driving westwards along the sunny Pinzgau district, famous for its horse-breeding. We must certainly follow this valley as far as Krimml, wonderfully-situated with its famous waterfalls. Then we drive back as far as Mittersill, from where we follow the scenic Thurn Pass which leads us to the Jocberger valley. This slope forms the most ideal skiing grounds in central Europe, known particularly by its famous village of Kitzbühl. A little later at St. Johann, we turn west into the green Solland. Here we enjoy magnificent views of the dismal pointed rocky walls of the "Wilden Kaiser". We soon reach Kufstein, and from here we can go by foot into the heart of this mighty mountain range, and into the awe-inspiring, magnificent valley of the Kaiser.

The roaring river Inn is now our sign-post: following its right bank we pass Worgal, Rattenberg, Brixlegg and Jenbach; here we can make an excursion to the smiling valley of the Isch, or we could cross to the other side of the Inn, and admire

the gem-like Lake of Achen (see). Romantic Schwaz and quaint Hall are other interesting towns that we pass along our way to Innsbruck, the industrious capital of Tyrol at the beginning of the Brennerstrasse. It is hard to tear ourselves away from this gay and hospitable city, which offers numerous delights within its walls and in its vicinity. We continue along the Inn and arrive at romantic, much-visited Landeck. The Arlberg road starts from here, ascending the 1802 metre High Pass and over to the romantic valley of the Stanz, then sharply descending into the valley of the Kloster, where we pass the towns of Bludenz and Feldkirch, until all of a sudden we find ourselves at Lake Constance, reaching this "Swabian Sea" at Breganz. From Arlberg on we traverse quite a different, but extraordinarily interesting, road, which we can follow if we wish to proceed quickly to the north: at Stuben, soon after the Passhöhe, the tiny, but scenically-lovely Flexen road invites us—it leads us through the valley of the Lech to Fussen, where there are connections with the widely-branched network of German highroads.

This tour through the German-Austrian mountains from Salzburg to Breganz can be carried out easily in two weeks if one contents oneself with stopping at only a few places. There are, however, many opportunities of shortening the route considerably in Kufstein, Innsbruck, Zirl and Nassereith. And, once again, rest assured that the tour here described presents no major road difficulties, and that it can be followed with absolute confidence by motorists having small cars, as well as by those with powerful motors. This route is so planned that the automobilist sees the most charming districts, the most significant cities and the most interesting buildings, all of which bless German-Austria in super-abundance.—(I.R.I.B.).

If All Motorists Knew This

[F all motorists in this country knew that science had determined by carefully worked out calculations that one-fifth of them, which would be several millions, actually *miss death by a split second* on the highways they would resolve, they had any sense at all, to increase their margin of safety, report to this effect—and it is dependable—was made at the annual meeting a few days ago of the American Psychological Association in Columbus, O.

This is the story, and it is an interesting one. It is the habit of 20 per cent. of the drivers of cars on the highways of the country to allow themselves less than one second to clear an oncoming car when they are passing another going in the same direction. This was determined by motion pictures taken from a moving car, with all the elements of timing precisely corded and without the motorists knowing they were being admitted to such tests.

T. W. Forbes and T. M. Matson of Yale university drove through the middle west, the far west, and the northeast with their motion picture camera. Records were made showing the time consumed by passing cars in going around others on two different highways and in getting back to the right side of the road. The tests were made only when cars were approaching

from the other direction, head-on collisions with which would have been unavoidable if the narrow margin of safety provided by a split second had not been sufficient.

The investigators noted the time consumed, after the driver passed the car going in the same direction, in getting back to the right side of the road out of the way of oncoming traffic. Every fifth driver so tested did it in less than a second, got over to the right side of the road before the oncoming cars arrived at the point where a collision would have occurred. It was concluded by the investigators that one-half the number tested, or one-tenth of the drivers, definitely were operating in "a danger zone." They were missing almost certain death by too small a fraction of a second for it to be considered reasonably safe.

There never has been any question as to what was the most dangerous thing a motorist could do on the highway. It is now and always has been passing cars going in the same direction and against oncoming traffic. If a driver waits until oncoming traffic is some hundreds of yards away he can take his time and avoid cutting in ahead too soon, thus widening his own margin of safety and that of the car he has passed. Let motorists who read this resolve hereafter to give themselves more time than a split second in avoiding head-on collisions on the road.

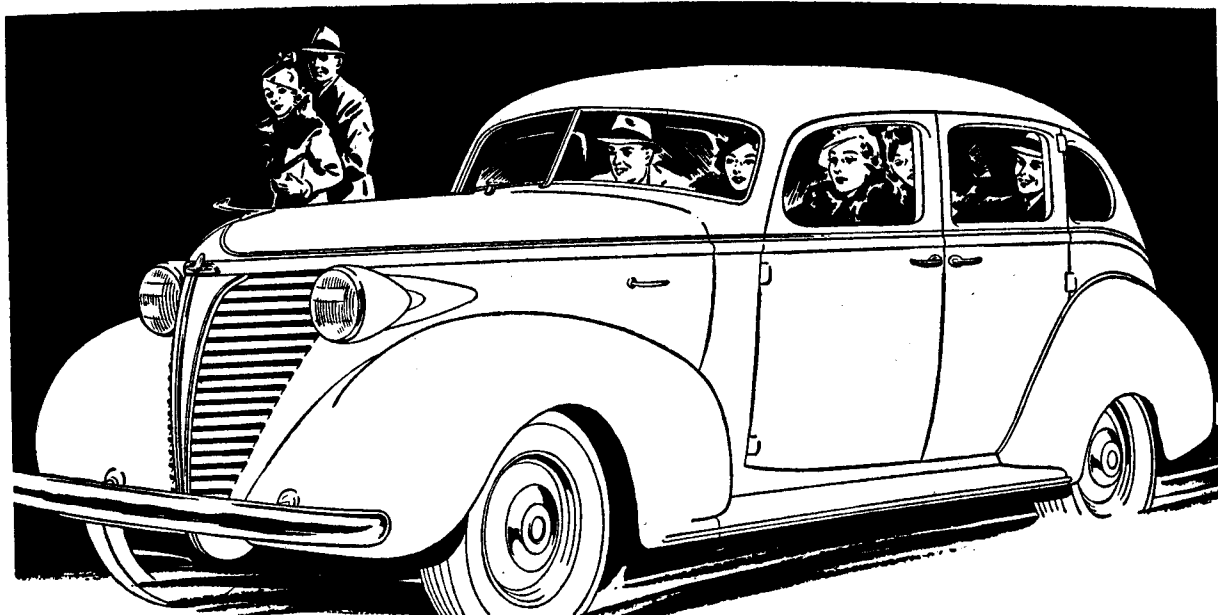
(Sioux City Journal).

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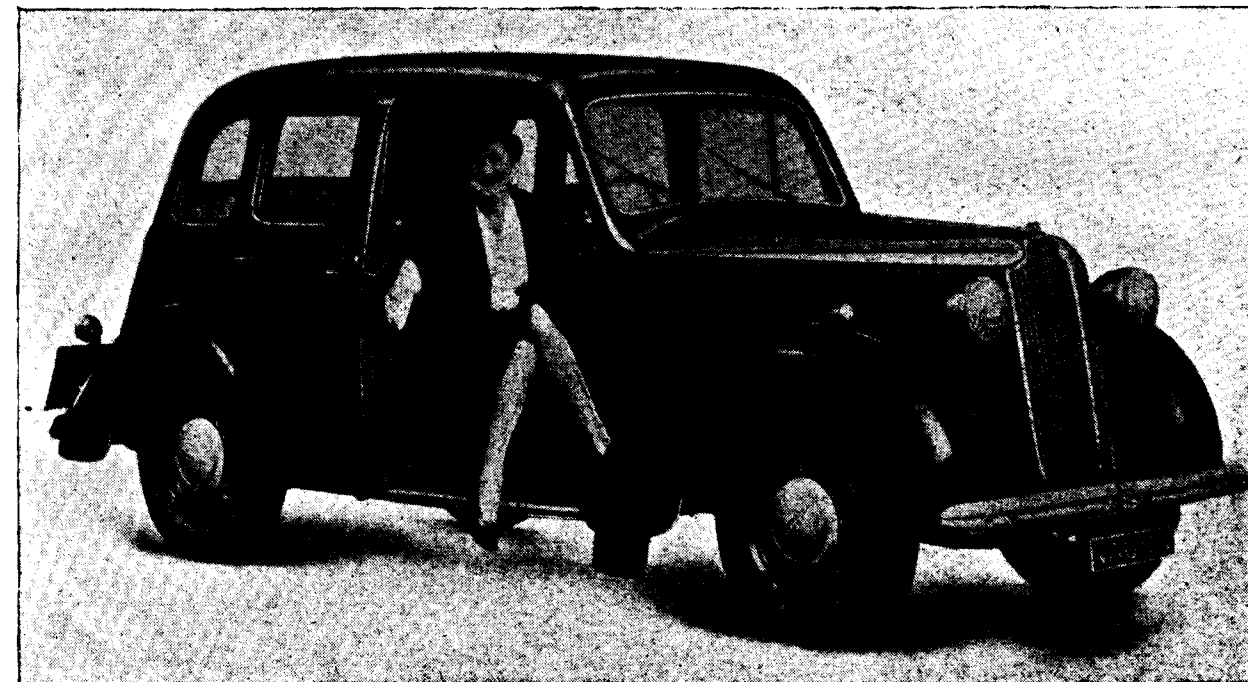
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Vauxhall Introduces a New "Twelve-Four"



THE new "12" h.p. four-cylinder Vauxhall is a welcome newcomer to this country. For the new car, although it is built to high Vauxhall standards, costs less to buy than any other Twelve. Although it is powerful and roomy, it costs less to run—for it will do 35 miles per gallon with normal running. One thing deserves special mention, for from it derive many qualities which make the new Vauxhall a car in a class of its own. This is the advance in design that has been made in the power-to-weight ratio: on this depend acceleration, hill-climbing, top-gear performance, and indirectly, a dozen other things by which a car is judged. Put simply, it means that the new "12"-four is more powerful than other Twelves, yet it is lighter. It weighs, in fact, only 18½ cwt. against the 23 cwt. average of five other Twelves.

The new method of construction which proved so successful with the Vauxhall "10" has made this weight-saving possible. The new "12"-four is built like a box-girder bridge. Body and chassis are one—welded together to form an all-steel unit. In this way, the body has been turned from a liability into a structural asset. As well as the obvious advantages—reduction of transmission stresses, longer tyre life and a dozen other things—the new weight allows a high rear-axle ratio to be used, which means less wear and tear for the engine.

This power-to-weight ratio also accounts for the particularly fine performance of the new "12". It has a maximum speed of 65-68 miles per hour, and an acceleration that is really sparkling. The car will, for instance, reach 50 m.p.h. in under 22 seconds from rest. Top-gear acceleration will bring the car from 10 m.p.h. to 30 m.p.h. in 10.8 seconds, a fact which saves continual gear-changing while driving in traffic: and 45 m.p.h. can be obtained in second.

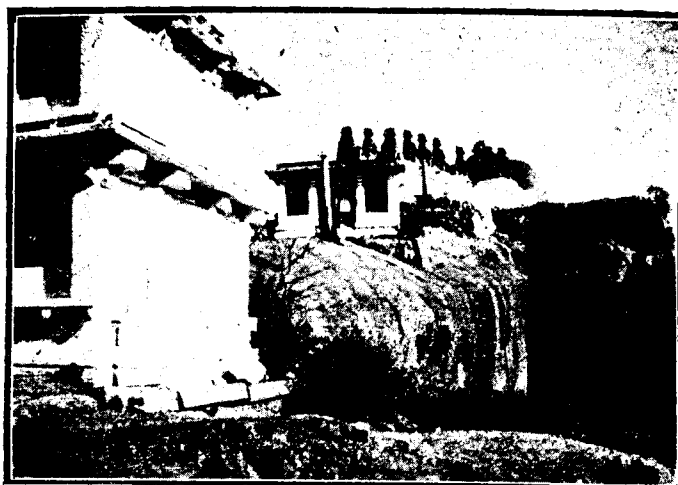
Independent springing is no new thing to most Vauxhall owners. But for the benefit of those who may wish to be enlightened on this type of springing, let's put it like this. When

conventional springing—which presupposes a separate front axle—is used, certain steering problems arise which can be solved only by using stiffer springs in front than at the rear. This leads to "pitching"—the movement that sends the back seat passenger up in the air when the car meets a bad bump, and sets heads a-jogging even on good roads. When independent front wheel springing is used, there is no need to have a separate front axle, and the entire design of the front end can be approached from a different angle, which permits the use of flexible springs all round. Besides turning "riding into gliding", independent springing simplifies many of the major steering problems, provides exceptional safety and road-holding, and enables the new Vauxhall "12" to be given a turning circle of only 38 feet.

The new model has a sliding roof, in addition to All-Weather Ventilation. This system only enables occupants of the car to get fresh air without draught. In hot weather the windows can be adjusted so that they scoop in cool air, and, in addition, a scuttle ventilator can be opened to divert cool air around the feet of the passengers in the front compartment. Body-conformity seating, fitted to the front seats, adjusts itself to your body instead of making you do the adjusting, and ensures comfort even on the longest journeys. Side arm-rests in the rear seats, a disappearing centre arm-rest, recessed (and unspillable) ash-trays, foot-rests, a roof net for small parcels, sun visors and assist cords are only a few of the luxury features fitted to this new Vauxhall "12"-four.

In appearance, the car is unusually well-proportioned. Wide doors allow easy entrance and exit, and the driver has really good visibility. Above all, the car is roomy; it will easily take four adults and a child. The luggage compartment at the rear, big enough to accommodate two large suit-cases and a large attache case with the lid closed, will carry considerably more when the lid is swung back on its supports. The spare wheel is carried on the outside of the boot panel and is encased in a neat metal cover.

An Excursion to Chitaldroog



A large Hindu temple within the fort.

TOWARDS the end of the last cold season by planning an excursion to Chitaldroog we enjoyed a pleasant motor picnic and an opportunity of visiting the famous old fort there, but in order to avoid the monotony and fatigue of a run of 126 miles we decided to do the journey in two stages. The first halt was at Tumkur, 43 miles away, which we reached after an easy run over a fairly good road. The scenery was splendid the outstanding features of the landscape being the numerous old forts and temples perched dramatically on the top of small mountains and at one place we ran alongside a long mass of granite resembling nothing so much as a hewn rock wall. "We" were a party of eight in two small cars, well equipped with tiffin baskets and bedding. The bedding proved most useful when, for want of accommodation at the Travellers' bungalows, some of us had to sleep on the floor and, as everybody will agree, cemented floors are not too easy on the bony parts of one's anatomy.

After exploring Tumkur and its environs leaving about midday we had lunch comfortably in a quiet and apparently little used T.B. where the attendant, an old dame, was quite useful and supplied us with plenty of fresh water from the compound well. She positively beamed at sight of the "baksheesh" when we were starting away. The rest of the journey was uneventful and the afternoon grew hotter and hotter as we drove into the westering sun through country for the most part flat and dry with here and there some large patches of marshy land studded with toddy palms. For very many miles the road had assumed a peculiar formation as if heavy lorries had run over it too soon after repairs leaving deep parallel furrows with quite a severe ridge between, and the task of steering a small car steadily necessitated a fairly slow average speed. At about four o'clock we sighted mountains in the distance ahead and for 10 or 12 miles drove with a range of hills on our left, later running over and through them about four miles from Chitaldroog.

When we eventually drove in, all very dusty, under the trellised porch of the T.B., just in time to secure the only vacant room, the evening shadows were lengthening and it soon became too dark for any sightseeing that day.

We set out early next morning armed with a camera and a couple of stout sticks merely in case a snake or so resented our intrusion of their haunts, but we were lucky and only a

few great lizards, basking in the sun here and there, seemed startled enough to scurry off into their holes on seeing us.

The present town which is surrounded with a line of fortifications, and includes an inner fort, is built at the north eastern base of a dense cluster of rocky hills. The wall is in a good state of preservation, except where modern requirements have necessitated its destruction in several places, but the Eastern Gate and the Northern Gate, by which the Bombay Trunk road passes, are intact. Entering by the Eastern Gate we were confronted by four others with the usual zigzag style of passage through each. Within the fort stands an immense trough formed out of a single stone which was used for watering elephants. Once inside the fort we soon discovered that it would be a strenuous business going over the whole hill and really in some places the climb was not a conversational ascent, but we actually got as far as the highest line of ramparts. There are several Hindu temples and huge stone granaries and pits for storing oil and ghee, which were constructed by Tippu. To get to the ghee pit one would have to mount a flight of about a hundred narrow slippery steps curving round an immense rock with no protecting banister. Almost in the centre of the hill, half way to the top, is a large tank of water, quite 100 yards by 80, in a valley between two rocky slopes and banded in by stone walls at either end. Low down on the Western side of the hill we were shown a narrow opening where, tradition says, one valiant woman, who used this secret passage to go to a water hole, was one day surprised by the enemy but, as it was wide enough for only one man at a time, she was able to keep them at bay by pushing them back with a stick until help arrived. History however does not corroborate this story and the opening is much bigger now. Near one of the larger temples there are two huge stone frames, about forty feet high, from which thick iron chains hang, for all the world like giant Roman Rings. Some say that the High Priest of the temple suspended his swing here in the cool of the evening, others that the chains were used for hanging prisoners head downwards over a fire! Perhaps; in those barbarous days!

The history of Chitaldroog fort is definitely interesting. The hill must have stood for aeons as nature made it one gigantic mass of granitic rocks rearing up hundreds of feet above the surrounding country, yet it was not till 1634 that Kasturi Rangappa Nayak, then head of the Beda or Bhoi clan,



A section of the fortifications.

and a descendant of the first Palegar appointed by the Vijayanagar King in 1508, first thought of building a fortress on it. The Palegars seem to have gone from strength to strength and became allied to the Mahrattas against Haider Ali in 1775 and we read that Haider who had long and earnestly desired the possession of the fortress and was jealous of the power and bravery of the Palegars, besieged the place for three months from July 1776 without success. During this siege it is said that prisoners seized by the defenders in their numerous sorties were offered as sacrifice to the goddess Kali and after the place was captured in 1777 no less than about 2000 heads were found ranged in rows of small pyramids in front of the temple of the goddess. Once again in 1778 Haider Ali besieged Chitaldroog and finally overcame it through the treachery of the spiritual instructor of the Mahomedan troops of the Palegar who marched out and threw himself on the mercy of the victor, after months of resistance. The original forts built by the Palegars were of mud and stone parts of which are still standing, but the formidable stone fortress was erected by Haider Ali and Tippu Sultan and it was to this stronghold that Tippu transferred his family and treasure from Seringapatam, on the approach of the English Army under Lord Cornwallis in 1791. The battlements and bastions, which are still in almost perfect condition, have withstood the ravages of time and the elements for well



A view from half way up the hill.

over a hundred years and look strong enough to remain "in hoc status" for at least another century.

F. H. S.

Fewer Cars Look Old Now-A-Days; Better Finishes

ONE of the improvements made in cars during the last few years is the greatly increased durability of body finishes. Some present-day enamels retain their lustre throughout the life of the car.

This advantage, which is appreciated by every motorist who takes a pride in his car, and has greatly reduced the trouble and cost of keeping bodywork in good condition, is largely a triumph for the chemist and research worker.

New synthetic enamels have been produced, with higher gloss and greater durability than the materials previously used. They are baked on—that is, each coat is dried in ovens at high temperatures—to provide an immensely hard finish.

The steps taken to test these new finishes are indicative of the painstaking care that has been responsible for these developments.

Several years ago, for instance, the Ford organization began to use a new synthetic enamel finish—one of the first, incidentally, to be placed in production on a large scale. Before the first car left the works with the new finish, tests had extended over many years. Apart from innumerable laboratory tests, panels covered with the new enamel were sent all over the world. They were constantly exposed to trying weather conditions in many different countries, while similar panels, finished with other materials, were exposed under identical conditions. The results gave extremely valuable information.

This is the finish now used for all Ford Cars, and owner's experiences show that it is highly satisfactory. Nevertheless, a Ford engineer stated that fresh information is still being gained from hundreds of other panels scattered over the world. "In the study of finishes," he said, "no information is as valuable as the results of actual outside exposure."

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“Boiling” Safety Glass to Test It

EXACTING tests are necessary in the manufacture of the safety glass used in modern cars.

Safety glass is a “sandwich” of two sheets of glass cemented to a middle sheet of transparent plastic. This sandwich must resist the destructive effects of weather and sunlight, and its outer surfaces must be exactly parallel to avoid distortion.

One test, used in the manufacture of safety glass used for Ford cars, is to submerge a sample of the glass in boiling water for eight hours. If low boiling point solvents are present they make bubbles, as they would under the heat of the sun.

To ensure that discolouration and “rainbow” effects will not occur in use, samples of each batch of glass are subjected to

an ultra-violet ray test. The glass is heated to a temperature of 140 degrees Fahr., and exposed to the intense light for 500 hours. This is equivalent to 2½ years of normal use.

Parallelism of the glass surfaces is checked by using a laboratory instrument resembling a surveyor’s transit. The slightest divergence from the true parallel is detected by this means.

Perhaps the most spectacular test, from the layman’s point of view, is that of dropping a steel ball, weighing 2 lbs., on to the glass from various heights. Safety glass usually resists parting until the ball is dropped from a height of four feet, although plate glass of the same thickness is shattered if an object of the same weight is dropped from a height of only a few inches.

The Anti-Motor Crusade in England

Our readers are doubtless aware that all, or almost all, the Benches of Magistrates in England have entered up a kind of anti-motor crusade and that in most of the cases brought before them they have by fairly heavy fines endeavoured to put down the practice of motoring and motor-cycling. Some Benches of Magistrates, however, seem to exercise a certain amount of discretion, and, at any rate sometimes, to give to those brought before them the benefit of any doubt there may be. By the last mail we received two newspaper cuttings, which will probably interest many of our readers. They show that Mr. E. R. Logan has been hauled before a Bench of Magistrates for driving a motor cycle at an excessive rate of speed, and that he did not come off second best in the conflict.

The following extract is from the “Southern Daily Mail” of the 10th August, 1903, and seems to show that the serious illness from which Mr. Logan suffered some 8 or 9 months ago and which compelled him to take sick leave has not impaired his mental powers.

MOTOR CRUSADE

Big Batch of Defendants Before Fareham Magistrates

At the Fareham Petty Sessions today, before Col. C. P. Boyd and other magistrates, no less than sixteen summonses under the Light Locomotives Act, against defendants charged with driving motor cars at an excessive speed, were heard.

The Trap Exposed

Ernest Robert Logan, resident of Portsmouth, denied driving a motor bicycle and side carriage combined at an excessive speed on the Havant-road, Cosham, on July 29th. P. C. Prince said that the machine was travelling at fifteen miles an hour.

Defendant denied going more than ten miles an hour, as he was pedalling at the time, and subjected the constable to a severe cross-examination as to what transpired. He handed the Bench half a dozen photographs of the locality, and ascer-

tained from the constable that seven cars had been stopped on the road that afternoon.

P. C. Prince admitted that two cyclists had gone back to warn motorists, and that their ‘trap’ was exposed. Three gentlemen who arrived soon after in another car sarcastically raised their hats to him whilst in hiding.

Ultimately the Bench dismissed the case.

In The County of Southampton

Petty Sessional Division of Fareham

To E. R. Logan, of the Parish of Portsmouth in the County of Southampton.

INFORMATION has been laid before me this day by Walter Hack in the said County, for that you, on the 29th day of July, in the year of our Lord One thousand nine hundred and three at the Parish of Cosham in the County aforesaid, then being a person driving a light locomotive on a certain highway, to wit the Havant Road there unlawfully did drive the said light locomotive at a greater speed than twelve miles an hour contrary to the Light Locomotives on Highways Order 1896 made in pursuance of the Statute in such case made and provided.

YOU ARE THEREFORE hereby summoned to appear before the Court of Summary Jurisdiction sitting at the PETTY SESSIONAL COURT HOUSE at FAREHAM, in the said County, on Monday, the 10th day of August instant, at the hour of quarter past Eleven o’clock in the forenoon, to answer to the said Information.

DATED the first day of August, One thousand nine hundred and three.

(Sd.)

Justice of the Peace for the County aforesaid.

MADRAS FLYING CLUB NOTES

OCTOBER’S weather this year was strange, what with a late and lusty finale to the S. W. Monsoon; all blow and no wet at Madras, as the Carnatic always experiences that windy current; followed by a ten days late arrival of the N. E. Monsoon, bringing to the Coromandel Coast the usual heavy rain storms in its train. The arrangement was all to the good in that it provided a useful wind in the right direction for the Mysore Dasara joy riding, without too much rain, and a run of clean weather for subsequent night cross country flying before the onset of the thunder storms in the last week.

The month’s activities opened with a week at Mysore by the Leopard Moth cum club instructor. The race course ground was not available this year but Colonel Lucas, commanding the Mysore State Forces, very kindly allowed the cavalry parade ground to be used. In addition to the stereotyped and innumerable joy rides over Mysore town some short charter flights for sight seeing in the Mysore State were taken, notably by the Resident, Col. Gordon, and a friend. The sights so visited in a single flight included a lost sand-buried city of the forgotten past near Talakad, the great Cauvery falls and their rainbows at Sivasamudram and all the places of interest on Seringapatam island, recalling the Duke of Wellington and Tippoo Sultan and the battles of a century and half ago.

Cross country flying was fairly prevalent during the month. Early on Mr. Fernando flew the Leopard to Colombo; and at the extreme end of the month to Hyderabad, taking Mr. Mathews with him on return, and (more particularly) Mr. Crowley, Principal of the Christian College at Alwaye in Travancore, as a lift on a dash he was making to Delhi, which the Hyderabad Flying Club was happily able to continue for him. Mr. Law took the Leopard to Bangalore and back one morning, to drop a friend there; and Mr. Dastur took Mr. Leuchs one Sunday for a long triangular flight in the same machine, landing at Donakonda and Cuddapah, by way of one of the two triangular day tests for his ‘B’ licence. Flights to Pondicherry were made by Messrs. Krishnan, Dastur and Mathews; and Mr. Krishnan flew also to Nellore. Flights to Bangalore with the Instructor were made by Mr. Krishnan and Mrs. Kapadia, and one by night by Mr. Aserappa. A similar night flight was made by Mr. Dastur to Cuddalore and other points. This member completed all his flying tests for his ‘B’ licence during the month; day, night and under the hood, and returned into the north whence he had come.

The Mysore joy riding entailed of course a flight to Mysore and back. There was also a charter flight to Trivandrum by the Instructor to take there and bring back Mr. Maitland Jones and Mr. Pattabi Raman, son of the Dewan of Travancore.

An R.A.F. flight of four Wapitis from the North visited the aerodrome for a few days just before the N. E. Monsoon set in to take part in some exercises. The Officers, Flt. Lt. Darwin and F/Os. Smith and Powley joined the flying club and flew the club aircraft, acrobatics included. Other visitors who flew club aircraft and who incidentally joined the club were Monsieur Vincens of Pondicherry, who is the owner of a Gipsy Moth in Saigon, and Mr. Nicholson from the Rangoon Flying Syndicate.

FLYING TIME FOR OCTOBER 1938.

Dual instruction to members under training	..	2-50
Advanced dual to A, A-1 pilots (by day)	..	24-25
.. (by night)	..	11-20
Solo “flights” by members under training	..	1-50
Solo flights by A, A-1 and B pilots (by day)	..	33-45
Solo flights by A, A-1 pilots (by night)	..	1-30
Pilot with passengers (A, A-1 and B pilots)	..	38-40
Joy rides	..	13- 5
Cross country flights by the club instructor	..	16-30
Test flights	..	0-25

TOTAL HRS. 144-20

The following members took dual instruction during the month:—

Europeans:—

Mr. Vincens	Advanced dual.
Mr. Nicholson	..
Mr. Lippincott	..
Flt. Lt. Darwin	..
F/O Powley	..
F/O Smith	..

Indians:—

Mr. Balasingham	Dual.
Mr. V. G. Narasimha Reddy	..
Mr. Mohamed Ismail Khan	..
Mr. R. N. Dastur	Advanced dual.
Mr. W. Parthasarathy	..
Mr. K. S. Krishnan	.. Cross country instructional.
Mrs. Kapadia	..
Mr. R. Sitaram	..
Mr. T. M. Duraiswamy	..

Ceylonese:—

Mr. H. Aserappa (Test for B licence with Instructor).

CROSS COUNTRY FLIGHTS DURING THE MONTH OF OCTOBER 1938

Date	Machine	Pilot	Passenger	Journey	Time
1-10-38	VT-AIL	Mr. Tyndale Biscoe	2 passengers	Madras-Mysore	3-0
3-10-38	VT-ABH	.. Aserappa	1 passenger	Madras-Pulicat and back, without landing	0-50
7-10-38	VT-AIL	.. Tyndale Biscoe	2 passengers	Mysore-Madras	1-50
9-10-38	VT-AIL	.. Fernando	1 passenger	Madras-Trichy	2-0
10-10-38	..	..	Nil.	Trichy-Colombo	3-10
..	..	..	..	Colombo-Trichy	3-25
..	..	..	..	Trichy-Madras	1-55

CROSS COUNTRY FLIGHTS DURING THE MONTH OF OCTOBER 1938—(Contd.)

Date	Machine	Pilot	Passenger	Journey	Time
10-10-38	VT-ABH	Mr. K. S. Krishnan	Nil	Madras-Pondicherry and back without landing	2-20
11-10-38	VT-AIL	„ Law	1 passenger	Madras-Bangalore	2-0
12-10-38	„	„ „	Nil.	Bangalore-Madras	1-20
„	„	„ „	2 passengers	Madras-Arkonam and back without landing	1-10
„	„	„ Tyndale Biscoe	1 passenger	Madras-Wandewash and back without landing	1-20
„	VT-ABH	„ R. N. Dastur	1 „	Madras-Pondicherry and back without landing	2-0
„	VT-ACU	„ Dastur	With Pilot Instructor	Madras-Cuddalore, Conjeeveram, Arkonam and back without landing (night flying)	5-5
13-10-38	VT-ABH	„ K. S. Krishnan	Nil.	Madras-Pondicherry and back without landing	2-10
„	VT-ACU	„ Aserappa	With Pilot Instructor	Madras-Bangalore and return without landing (night flying)	5-15
16-10-38	VT-AIL	„ Dastur	Mr. Leuchs	Madras-Donakonda	2-15
„	„	„ „	„	Donakonda-Cuddapah	1-5
17-10-38	VT-ACU	„ „	With Pilot Instructor	Cuddapah-Madras	1-20
„	„	„ „	Nil.	Madras-Tirumala and Arni and back without landing	2-35
„	„	„ „	„	Madras-Chingleput and return without landing (night flying)	1-30
18-10-38	VT-ACU	„ Tyndale Biscoe	Mrs. Kapadia	Madras-Gudiyatam and back without landing	2-30
„	VT-ABH	„ K. S. Krishnan	Nil.	Madras-Nellore and back without landing	2-45
20-10-38	VT-AIL	„ Tyndale Biscoe	2 passengers	Madras-Trichy	1-45
21-10-38	„	„ „	„	Trichy-Trivandrum	1-55
24-10-38	VT-ABH	„ „	Mr. K. S. Krishnan	Trivandrum-Trichy	1-55
25-10-38	„	„ „	„	Trichy-Madras	1-45
26-10-38	„	„ „	„	Madras-Bangalore	2-35
30-10-38	„	„ „	Mrs. Kapadia	Bangalore-Madras	2-35
31-10-38	„	„ „	„	Madras-Bangalore	2-10
„	VT-AIL	„ Aserappa	With Instructor	Bangalore-Madras	2-40
„	„	„ „	„	Madras-Tirumala and back without landing	1-40
„	VT-AIL	„ Fernando	2 passengers	Madras-Donakonda	2-5
„	„	„ „	„	Donakonda-Hyderabad	1-10
„	„	„ „	1 passenger	Hyderabad-Madras	3-25

Statistics of Road Accidents in the Madras Presidency

	1937 31st March	1937 30th June	1937 30th Sept.	1937 31st Dec.	1938 31st March	1938 30th June
Accidents at different localities.—						
At road junctions	36	43	19	25	26	32
Cross roads	13	29	14	25	9	17
On straight roads or bends with good sight line	309	313	289	248	358	324
In built up areas	59	66	69	48	27	40
Places controlled by Police or traffic signals	7	32	6	4	4	8
Total ..	424	483	397	431	424	421
Types of Vehicles involved.—	31st March	30th June	30th Sept.	31st Dec.	31st March	30th June
Motor Cars	193	220	169	152	168	195
Motor Cycles	7	13	11	8	6	3
Omnibuses	118	160	102	119	142	125
Lorries and Vans	77	88	93	57	86	64
Pedal Cycles	29	38	29	40	46	58
Jutkas—horse drawn	10	22	19	17	14	17
Bullock Carts	31	49	25	28	36	41
Hand-carts	2	4	4	4	5	4
Others	7	16	15	6	12	7
Total ..	474	601	467	336	515	514
Speed of Mechanically Propelled Vehicles.—	31st March	30th June	30th Sept.	31st Dec.	31st March	30th June
Below 10 m.p.h.	35	75	39	62	75	76
„ 10—20 „	112	112	160	185	184	211
„ 20—30 „	217	203	50	60	116	73
„ 30—40 „	15	28	11	13	18	9
„ 40—50 „	2	5	5	2	5	4
Above 50 „	..	1	..	..	..	1
Not available	26	16	86	46	4	14
Total ..	407	488	351	336	402	388
Classification of persons killed.—	31st March	30th June	30th Sept.	31st Dec.	31st March	30th June
Motor Cyclists	..	1	..	..	..	..
Pedal Cyclists	3	4	..	1	6	5
Drivers of other vehicles	3	5	5	2	9	5
Attendants and Passengers	16	25	18	14	19	12
Pedestrians	69	75	69	36	65	49
Total ..	91	110	92	53	99	71
Classification of persons injured.—	31st March	30th June	30th Sept.	31st Dec.	31st March	30th June
Motor Cyclists	1	3	4	3	5	2
Pedal Cyclists	27	27	21	25	27	29
Drivers of other vehicles	38	49	49	35	40	33
Attendants and Passengers	111	164	188	132	152	206
Pedestrians	210	218	165	195	183	207
Total ..	387	461	427	390	307	477
Causes of Accidents.—	31st March	30th June	30th Sept.	31st Dec.	31st March	30th June
Due to Drivers	139	182	142	120	139	128
Pedal Cyclists	30	25	24	26	33	41
Animals	21	27	12	15	30	26
Pedestrians	186	172	146	153	173	177
Vehicles or equipment	25	15	15	12	20	17
Road Conditions	5	15	15	6	10	11
Weather	1	2	2	..	..	5
Obstructions	4	9	7	4	1	3
Passengers	13	16	10	11	15	11
Other causes	9	10	12	4	5	4
Total ..	433	473	397	351	426	423

PARTICULARS OF MOTOR VEHICLES IMPORTED INTO INDIA

	MONTH OF AUGUST				FIVE MONTHS, 1st APRIL TO 31st AUGUST			
	1936		1937		1938		1937	
	Quan- tity	Value Rs.	Quan- tity	Value Rs.	Quan- tity	Value Rs.	Quan- tity	Value Rs.
<i>Motor Cars (including taxi cabs)—</i>								
From United Kingdom ..	371	7,46,583	411	8,54,374	1,803	34,95,736	2,200	41,88,640
" Germany ..	49	90,726	117	1,93,870	241	4,34,246	512	8,15,366
" Italy ..	..	..	5	9,619	1	3,300	131	1,68,962
" Canada ..	36	63,119	147	2,66,766	210	3,82,117	843	13,59,749
" United States of America ..	376	6,97,568	395	7,71,690	1,558	30,02,302	1,880	37,49,393
" Other Countries ..	9	13,704	33	46,695	83	1,12,105	153	2,60,858
Total ..	841	16,11,700	1,108	21,43,014	3,896	74,27,488	5,719	1,05,42,968
<i>Share of Bengal</i>								
" Bombay ..	218	4,35,341	277	5,43,134	942	17,78,150	1,486	27,25,342
" Sind ..	346	6,36,910	557	10,73,897	1,772	32,83,850	2,944	54,25,514
" Madras ..	63	1,26,703	94	1,89,107	324	6,60,388	431	8,70,202
" Burma ..	135	2,38,186	180	3,36,876	602	11,70,911	858	15,21,910
" ..	79	1,74,560	..	..	256	5,24,189	..	..
Total ..	841	16,11,700	1,108	21,43,014	3,896	74,27,488	5,719	1,05,42,968
<i>Motor Cycles (including scooters)—</i>								
From United Kingdom ..	23	10,407	32	20,892	151	73,573	205	1,08,213
" Germany ..	56	11,601	40	9,526	155	37,835	305	65,404
" Other Countries ..	2	462	3	749	11	2,868	19	11,494
Total ..	81	22,470	75	31,167	317	1,14,276	529	1,85,111
<i>Motor Omnibuses, Vans and Lorries—</i>								
Imported with bodies ..	60	4,24,042	26	56,773	171	6,94,457	114	2,05,569
Chassis ..	645	9,35,751	1,305	16,81,841	3,677	48,73,027	5,767	73,83,269
Total ..	705	13,59,793	1,331	17,38,614	3,848	55,67,484	5,881	75,88,838
<i>Total of Motor Omnibuses etc.—</i>								
From United Kingdom ..	110	6,34,485	184	3,81,591	456	15,23,111	869	16,12,974
" Canada ..	112	1,60,555	202	2,44,268	602	8,56,539	1,238	15,32,889
" United States of America ..	478	5,47,690	931	10,70,035	2,734	30,12,455	3,633	41,03,834
" Other Countries ..	5	17,063	14	42,720	56	1,75,379	141	3,42,141
Total ..	705	13,59,793	1,331	17,38,614	3,848	55,67,484	5,881	75,88,838
<i>Wheels and accessories (excluding rubber tyres)</i>								
Total Value ..		6,09,073		9,99,713		27,03,792		45,70,698
						6,01,083		
								32,96,443

Extracted from the Publication of the Department of Commercial Intelligence and Statistics, India.

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We have supplied route itineraries from anywhere to anywhere free to members for many years and will always be very grateful for any information with regard to road conditions, in order to keep these itineraries up-to-date.

The Government of India is now contemplating the passing of a bill for the compulsory Insurance of all motorists against third party risks—and if this is passed the 10% reduction being offered by the approved Companies to our members will practically pay their subscription.

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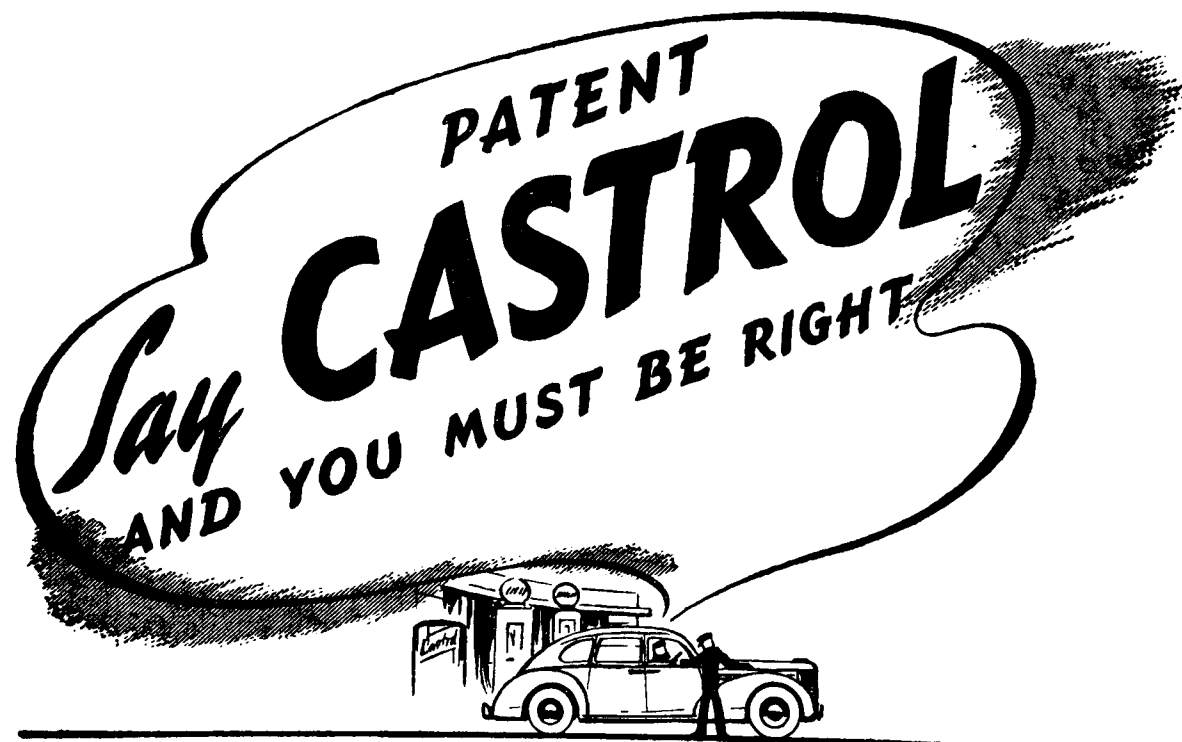
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THE SOUTH INDIA MOTOR OWNER



The Official Organ of the
Automobile Association of Southern India

Vol. X, Number 12]

DECEMBER 1938

[Single Copy As. 8

Secretary's Notes and News

All Members are entitled to a copy of this Magazine every month after their names have appeared in the monthly list of New Members Elected. Any member who does not receive his or her copy regularly is requested to inform the Secretary immediately.

Road Information

Chingleput District

San Thomé High Road, Madras:—The culvert in San Thomé High Road, near Quibble Island, will be closed to all motor vehicles, the laden weight of which exceeds 3 tons, until further notice.

Ootacamund-Gudalur-Mysore Trunk Road.

The Bridge at mile 22/3 on the above road is proposed to be reconstructed and work with diversion road has been commenced. Notice boards restricting the speed of motors to 5 miles per hour between miles 21/1 and 22/4 have been exhibited at the spot.

Inspection Bungalows

Mysore State having now come into line with all other States in Southern India, the list of States permitting members of the A.A.S.I. the privilege of using P.W.D. Circuit Houses and Inspection bungalows is now complete.

tions. By so doing a great deal of unnecessary correspondence and expense in sending out reminders is avoided. This will be all the more important in future after the introduction of free legal defence as members whose subscriptions are in arrears will be disqualified from this benefit.

For their information, the following are the charges made by various Banks for standing orders to pay subscriptions direct to the Association when they fall due:

GREETINGS

The Committee of the Automobile Association of Southern India wish all members, Branch Honorary Secretaries and Honorary Representatives a Prosperous and Happy New Year, and assure them that 1939 will be a year of further progress.

	Rs.	A.	P.
The National Bank of India	0	12	0
„ Chartered Bank of India, Australia and China	0	12	0
„ Eastern Bank Ltd.	0	12	0
„ Lloyds Bank Ltd., Bombay	0	12	0
„ Imperial Bank of India, Madras & all Branches	0	8	0
„ Bank of Mysore	0	4	0
„ Indian Bank Ltd.	0	4	0
„ Madras Provincial Co-operative Bank, Ltd.	0	2	0
„ Indo-Commercial Bank, Ltd.			Free
„ Madras Peoples' Bank, Ltd.			Free

Foreign Touring

The following is an extract of a letter received from a member who has returned to India after a tour through Europe: "I have returned from my home-leave and am very pleased to tell you that I never experienced the least trouble when cross-

Bankers' Charges

Members are continually requested to make use of the Banker's Order form for payment of their Annual Subscrip-

MADRAS M. V. TAX FOR JANUARY/MARCH QUARTER SHOULD BE PAID BEFORE 1st JANUARY 1939

ing frontiers with my car. The papers given to me by you proved absolutely sufficient and I again wish to thank you for all you have done in the matter".

Head Office Activities

November was a particularly busy month in clearing and shipping cars for members. Three cars were cleared and delivered by road to members in the Nilgiris and one by road to Poona. Two cars arrived at Cochin and were successfully cleared and handed over to their owners and four cars were shipped from Madras, two to Rangoon, one to Colombo and one to Calcutta.

Four International Driving Permits and one International Driving Certificate and over 100 Madras and Mysore licences were issued during the month.

789 letters were received by post, nearly 1000 personal and telephone calls were received, 1160 letters despatched by post, 984 delivered by hand and 110 itineraries covering 53,616 miles were issued.

Government of Madras

HOME DEPARTMENT

Notifications

G.O. No. 5415, dated 10th November 1938:—

Motor vehicles—Offences under Motor Vehicles Act and Rules—Institution of proceedings, issue of summons and disposal of cases—Delay—Instructions issued.

From the Secretary, Automobile Association of Southern India, Madras, dated 7th September 1938, No. 498.

The Automobile Association of Southern India has represented that inconvenience is caused to motorists by the delay on the part of the concerned authorities in the institution of proceedings against offenders under the Motor Vehicles Act and Rules, the service of summons on such offenders and the disposal of the cases in the courts.

2. The Government observe that instructions have recently been issued in the city of Madras regarding the prompt charging of offences under the Motor Vehicles Rules. The Inspector-General of Police is requested to issue suitable instructions on the subject, including the necessity for the prompt service of summons, for the guidance of the Police in the mufassal as well, if he has not already done so.

3. The District Magistrates are also requested to instruct Magistrates subordinate to them to take such steps as are possible to ensure that summonses are served on the accused and the witnesses in cases under the Motor Vehicles Act and Rules, so as to give them adequate notice with a view to enable all the parties to be present and the case to proceed without adjournment on the appointed day, especially when the accused has to be summoned from a long distance.

(By order of His Excellency the Governor).

H. R. UZIELLI,

Secretary to Government.

G.O. No. 5281, dated 1st November 1938:—

Motor vehicles—Taxation—Short-term licences—Issue in police stations and outposts near frontiers of the Province—List of police stations and outposts—Further amendments—Issued.

In exercise of the powers conferred by Clause (1) of Section 2 of the Madras Motor Vehicles Taxation Act, 1931 (Madras Act III of 1931), the Government of Madras are hereby pleased to make the following amendments to Home Department Notification No. 740, dated the 11th June 1938, published at pages 851 to 853 of Part I of the *Fort St. George Gazette*, dated the 14th June 1938, as subsequently amended:—

AMENDMENT.

In the said notification, in the entries relating to the Salem District after Item 6, the following items shall be inserted, namely:—

- | | |
|--|-----------|
| 7. Bangalore-Denkanikota Road:—Denkanikota Police 17 miles. Station ¼ mile. | } Mysore. |
| 8. Bangalore-Krishnagiri Dharmapuri Road:—Royakota outpost 25 miles. Station ¼ mile. | |

(By order of His Excellency the Governor)

H. R. UZIELLI,

Secretary to Government.

Driving Licence Reminder Form

The Secretary,

Automobile Association of Southern India,

Box No. 704,

Cathedral P. O., Madras.

Name of member.....

Membership No.....

Full Postal Address.....

.....

.....

.....

Dated.....193

My Driving Licence No.....

dated.....issued by.....

.....

Expires on..... Will you kindly

record this for your reminder service.

Signature.....

N.B.—It is important that every change of address be promptly communicated.

Branch Notes

Bangalore

By Major A. W. Waters, M.B.E. (Retd.)

Hon. Secretary, Bangalore Branch, A.A.S.I.

General:—

The work at this office has entailed a considerable amount of overtime this month. 87 members and 14 non-members called for information and their appreciation of the ability to deal with them promptly on the spot is shown by the steady increase in the number of personal calls and enquiries received.

Requests for a number of Xmas tours were received from members in the Nilgiris, Mysore State, and the West Coast. 37 itineraries were supplied and 14 M.V. licence obtained and delivered. Correspondence included 214 letters received from all sources and 264 despatched which is 51 more than any previous record for this office and over 100 more than last November.

Xmas Greetings:—

This Branch wishes the Head Office, all Branches and District Representatives, a Merry Christmas and a Happy and Prosperous New Year.

The Gersoppa Falls (Jog):—

Apropos of my remarks on page 307 of this Journal for

sequent demand for a quarterly licence, due to the omission to obtain the former at the frontier. It is suggested that in all cases prominent 'notice-boards' be provided—if this is not done. A list, with their location, will be found on pages 180–183 of this Journal for June 1938.

Road Information:—

I am reliably informed that the road from Hassan to Halebid (Temples) via Salagame, which was opened a few years ago and makes a short-cut on the triangle—Hassan—Halebid—Belur (or *vice versa*), "is only a fair weather (gravel) road and so it is fit for motor traffic only during summer (dry?) season from November to April".

Shravanabelagola:—

Motorists visiting this (super) famous Jain Shrine a few miles from Channarayana in the Hassan District, are reminded to take with them either rope, or rubber-soled shoes to wear when going up the hill to the Shrine; failure to do so means going up in bare feet or hose and the rock in which the steps are hewn becomes very hot in the summer. No leather articles of any description should be taken up the steps, for religious reasons.

Civil & Military Station Licences and their "Days of Grace":—

These licences are not valid in Mysore State during the 6 days grace (in the Station) following their expiry; a recent

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FOR CARS, BUSES AND LORRIES

Agents and Distributors:—SPENCER & CO., LTD., MADRAS

October last, about 'Mattresses' and 'Supplies' at the Mysore Bungalow: I am asked to correct the statement, and remove, if necessary, any misapprehension that may have been entertained by members on the subject of foodstuffs and Mattresses. Contrary to the official information furnished to this office that "tinned provisions, vegetables, meat, bread, etc., are not available"; I am now informed that "A complete establishment, including Butler, Cook, Maity, Scavengers, etc., are maintained at the bungalow. The Butler has a very complete stock of tinned foods and can always provide meals of quality and diversity equivalent to those obtainable at Sivasamudram. European liquor will not be available at the Mysore Government's Jog Falls Bungalow, neither are they obtainable at Sivasamudram....The Butler is allowed to charge for meals and for the rooms according to a schedule of rates, which is hung up in the Dining Room."

It is also now made clear that the advice to visitors "to bring their own bedding, bed linen and blankets" does not refer to "mattresses" which are provided.

Madras Licensing Offices at Frontier Police Stations and Out-posts:—

Some of these are at varying distances from the road, and visiting motorists, who required short-term licences, are known to have failed to locate them and become involved in the con-

decision has made this quite clear. Hence, as pointed out on page 369 of this Journal for November 1937, if you enter Cubbon Park or any part of Bangalore City, for instance, before renewing your licence in April etc., you render yourself liable to pay for a Mysore licence,—if nothing more? The fact that it takes several weeks in the Station during April to cope with all the new demands for the various licences for the many thousands of vehicles, cycles, dogs etc., is no excuse. It might be a mitigatory argument against the additional fine which can extend to fifty rupees.

It may be said that dogs and bicycles have, in April, 30 days grace, hence motorists demands should be dealt with first. True, but do they not also want to go into the Park etc.?

To the 'man in the street', the omission in the 'reciprocal agreements' of any remedy for this disability, is not clear to understand.

Cheques for Subscriptions:—

When paid into this Branch, cheques should be endorsed merely: "The Automobile Association of Southern India"; also crossed or to order. Out-station cheques require the addition of the Bank's charges.

Legible Signatures:—

In certain cases, and when non-letter-heads are used it is a convenience when signatures are also hand-printed.

Membership

48 new members were enrolled from the 15th November 1938 to date.

The Committee thank the following members who introduced new members this month:—

4 each by the Hon. Secretary, Bangalore Branch, Scout Rangarangan of Madura Branch,

3 by Mr. V. Doraiswami,

2 each by Messrs. K. Ramaswami and G. Sri Ram Babu.

1 each by Messrs. H. V. Chauham, C. H. D. Leonard, Addison & Co., Trichinopoly, S. R. Bangaruswami, V. G. Saravanam, Hart Ford Fire Insurance Co., Ltd., Md. Kazim Khaleeli, Miss S. C. Ferguson, Messrs. J. R. N. Pryde, Simpson & Co., J. J. Rowe, A. R. Srinivasan, J. Heywood, B. J. Purohit and Dr. W. F. Rule, D.D.S.

The remaining 18 were enrolled by the staff.

NEW MEMBERS

K. Narayanaswami, Esq.,
Innespet, Rajahmundry, East Godavari Dist.

The British India General Insurance Co., Ltd.,
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G. C. Robinson, Esq.,
Auchindoor, Ootacamund, Nilgiris.

Olof A. Johansson, Esq.,
Arasaradi, Madura.

Vellanki Akkayya Choudary, Esq.,
Inspector of Factories, III Circle, Guntur.

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Government School of Technology, Madras.

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E. Bixler Davis, Esq.,
Allur, Nellore District.

E. Dewhurst, Esq.,
C. T. L., Calicut, Malabar.

Mrs. B. McCarthy,
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C. Sundaram, Esq.,
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Rev. J. Williams,
Wesley Manse, Trimulgherry, Deccan.

E. E. Mack, Esq., I.C.S.,
District Judge, Bellary.

Rajamantrapravina N. Madhava Rao,
Member of Council, Mysore District.

Joseph Pare, Esq.,
C/o Collector of Ramnad, Tallakulam P.O., Madura.

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The King's Own Royal Regiment, Fort St. George, Madras.

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U.P.A.S.I. Tea Experimental Station, Devarshola P.O., Nilgiris.

A. K. Chanda, Esq.,
Fort St. George, Madras.

Mrs. G. S. Price,
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D. H. McPherson, Esq.,
C. E.'s Office, M. & S. M. Ry., Park Town, Madras.

K. R. S. Rau, Esq.,
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E. Whayman, Esq.,
C/o Presidency Port Office, Madras.

Major F. C. West, R.E.,
Garrison Engineer, Fort St. George, Madras.

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N. Sampath Iyengar, Esq.,
Branch Secretary, Oriental Government Security Life Assurance Co., Ltd., Madura.

D. D. H. Thomas, Esq.,
C/o Burmah-Shell Ltd., Madras.

Rev. A. Gordon,
Tuni, E. Godavari District.

Abu Baker Haji Eisa, Esq.,
10, Benson Cross Road, Bangalore Cantt.

A. F. Baker, Esq.,
2A, Sampangy Tank Road, Bangalore.

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The Future of Road Transport

Talk by Lt.-Col. H. C. Smith, O.B.E., M.C., M.L.A., General Secretary, Indian Roads & Transport Development Association, on 8-12-1938 at the Madras Centre of A. I. R.

ROAD transport in India, generally speaking, can be divided into slow and fast moving traffic. Of the former there are approximately ten million units, made up of buffalo, bullock and camel carts while the latter may be said to consist of 180,000 mechanically propelled vehicles in the shape of the motor car. Madras can claim to have approximately one million slow and twenty thousand fast moving vehicles on the roads.

The slow moving vehicle has been in existence for centuries and is likely to remain one of the principal means of transport in the country for many years to come. The fast motor vehicle has been with us but a little over three decades and has already, through the manifold advantages it offers, revolutionised transport.

It is with reference to the control and adjustment of these various forms of transport in our daily economic life that I wish to talk to you this evening.

In the same way that railways are not expected to operate efficiently without an adequate track, neither can economic road transport be provided without suitable roads. I will therefore first of all deal with our roads as an integral part of road transport.

The 70,000 miles of metalled roads in India may have met the needs of the slow moving vehicle in the past, but with the growth of motor transport they no longer adequately serve their purpose. The combined destructive effect of the fast and slow transport equipped respectively with pneumatic and metalled tyres, causes such an enormous deterioration in road conditions that the cost of their repair and maintenance has become a serious embarrassment and problem to the Provincial authorities. The Road Engineer, too, is faced with his problem of finding a suitable and economical type of road to carry both these forms of transport.

In so far as concerns the technical side, road engineers in the various provinces are carrying out experiments and to co-ordinate their work and to facilitate an exchange of views, the all-India Roads Congress was inaugurated some five years ago. The next meeting of the Congress is to be held in Calcutta in February when the members will have the additional advantage of examining the results of certain experiments carried out on road surfaces by the Government Research Department at the Alipore Test House.

Another method of saving road surfaces adopted by some Provincial Governments is the segregation of traffic, where road widths permit, by keeping the centre of the roads for the fast and the sides for the slow traffic. This is undoubtedly a sound solution and is one adopted in other more highly developed countries by the construction of special motor roads called "autobahnen" or "autostrades".

The ultimate problem, however, is not technical but one of finance. The principle that all users and beneficiaries of roads should contribute their share towards their cost is followed in many countries, but I regret it is not the case here. Slow moving traffic should pay their share; they should not expect to get off scot-free. Motor transport is already paying more than its share, in fact the ten crores it pays in taxes etc.

to-day, exceeds the total annual expenditure on roads in this country by approximately three crores of rupees. It is true that of the ten crores, the Central Government keep nearly five crores of rupees, for their general revenues. More money is required for roads and while it is unfair that one class of transport should bear a disproportionate burden, the Provincial Governments, being responsible for roads, can quite fairly urge upon the Central Government to contribute a larger share of this revenue from motor transport taxation for road purposes.

There are other ways in which the authorities can help to tackle this problem. The fact that science has produced pneumatic-tired equipment for bullock carts, the use of which results in an enormous saving in public money by the extension of the life of road surfaces, should impress the authorities with the importance of granting facilities for their adoption.

Up to the present I have dealt briefly with the problem of the provision and finance of our roads as an integral part of road transport.

I have very little to say about slow moving transport other than that it should be made to conform to the rules of the road by keeping to the left and that it should pay its fair share towards road upkeep. It is in regard to motor transport, however, that I wish to make particular reference.

Due to its manifold advantages motor transport has grown in recent years to such proportions that the provisions contained in the 20 clauses of the Motor Vehicles Act of 1914 were found to be totally inadequate. The Government of India in conjunction with the Provincial Governments therefore drafted the new Motor Vehicles Bill containing some 136 clauses which was recently passed by the Central Assembly and will become operative in July 1939.

The Bill gives powers to the Provincial Governments to regulate and control more closely the development of motor traffic. This includes the restriction of conveying long distance goods traffic whether by private or public carriers and the fixation of maximum and minimum fares or rates for stage carriages. The Bill also provides for the introduction of compulsory third party insurance for any motor vehicle in four years from the date of the Bill coming into force. Some of these provisions were strongly opposed by the Chambers of Commerce and other bodies. They considered that industry and trade should have the unfettered right to choose the most convenient and economic form of transport whether by road or rail and that the fixation of fares was undesirable as competition was conducive to efficiency.

To introduce this closer control the Provincial Governments are to constitute a Provincial Transport Authority and Regional Transport Authorities, while it is also laid down that the size of the Regional Areas to be set up must in no case be less than an entire district or the area of a Presidency Town. The Bill further states that registration of vehicles shall be effective throughout British India. All transport vehicles, namely, any public service vehicle or goods vehicle other than a motor cab shall, when being registered, be accompanied by a document signed by the maker or the assembler which will give the maximum laden weight the vehicle is designed to carry. This

is with a view to the checking of overloading of vehicles which is at present so prevalent. To guide the authorities a special schedule is included in the Bill detailing the maximum loads which the different types and sizes of tyres are designed to carry.

No transport vehicle shall be allowed to operate without a permit from the Regional Authority, who shall take the following points into consideration:

- the interests of the public generally,
- the advantages to the public,
- the adequacy of existing road services,
- the benefit it may bring to any particular locality,
- the effect on other remunerative services, also the condition of the roads.

The Regional Transport Authority will also take into consideration any representations from other road transport interests before finally issuing the permit.

Another important regulation is the examination of fitness of transport vehicles and the issue of a certificate by a prescribed authority before a permit to operate is granted. This will eliminate many of the derelict vehicles at present in use on the roads and should result in an improvement in the conditions of public safety.

Hours of work of drivers of transport vehicles are to be limited to 54 in the week and a maximum of nine during the day. Speed limits for different types of vehicles have also been laid down.

The effect of the provisions of the Bill on the future of motor transport depends very largely on the constitution of the Provincial and Regional Transport Authorities to be set up. It is laid down that no persons having any financial interests in transport or even an employee of a transport undertaking may be a member of any transport authority. This will deprive Government of the assistance of persons with first-hand knowledge of the subject. Much also depends on the impartiality and wisdom of Provincial Governments and the authorities in regard to such questions as the prevention of uneconomic competition among motor vehicles, the prohibition of long distance traffic and the fixation of maximum and minimum fares.

The size of the regional areas is also a matter of vital importance to the future of motor transport. Transport interests consider that a district is too small and that a Province should be split up into four or five areas only not 29 as in this Presidency, for there is the danger that the regional authorities in jealously guarding their powers in respect of transport problems within their areas may tend to a rather parochial outlook and seriously restrict the movement of road transport.

The provisions of the Bill should have a salutary effect on the future of road transport. It is possible that it may result at first in certain hardships to small owners whose vehicles are no longer considered fit for use.

But with the regulations gradually becoming operative more reliable services will develop and it is possible after a time "service to the public" will become the prime consideration.

The Madras Traffic Control Act 1938 came into force last April and embodies most of the provisions contained in the

All India Motor Vehicles Act 1939, and generally speaking with the unbiased application of the regulations in the Bill, I believe that motor transport will continue to bring many commercial, social and educational advantages to the country.



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14th July "Cheshire" — Staff includes Conductor and Matron.
28th July "Yorkshire".
11th August "Derbyshire".

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The Indian Roads & Transport Development Association Ltd.

Monthly News Letter

RAILWAYS AND ROAD COMPETITION

THE following statement on the railways and road competition in England has been issued by the "British Road Federation Ltd." In reproducing the memorandum in full it is believed there may be much of interest to readers examining the problem of transport in this country:—

"Are railway difficulties to be solved at the expense of road transport?"

A new attack has been launched against road transport in the interests of the railway stock holders. This is not unexpected, and is perhaps not unnatural, as railway stock holders, in common with most other classes of investors, have suffered a sharp fall in the value of their securities over the past year. This fall is itself a reflection of the expectation of a lower return on railway stocks, an expectation which is no doubt justified. Following the decline in industrial activity this year, railway freight receipts have fallen by about 6 per cent., in spite of the rates increase last Autumn, and no corresponding economies have been effected in operating costs.

This account of the current position of the railways applies equally to most other branches of economic activity, including road haulage, but there is this important difference; it is claimed that the railways' difficulties can be solved by penalising another industry—road transport—and it is seriously suggested that certain types of traffic should be forbidden to move by road and so forced back on to the railways. This claim is supported by the plea that the roads are already sufficiently congested without the lorries and buses; in other words, that the traffic should be cut down to fit the roads instead of the roads being improved until they are adequate for the traffic.

Is transport policy to be decided by national or sectional interest?

Decisions on matters of public policy must, however, be made in the national interest rather than in that of the railway stock holders. No investor is entitled to assume that it is the duty of Parliament to ensure that the industry in which he has sunk his capital shall always be protected from loss of business to other, and possibly younger, industries, which are able to offer the public a better or a cheaper service. Certain of the Empire mails, for example, which previously travelled by sea, now travel by air, no doubt to the detriment of the shipping companies which used to enjoy the business, but this is accepted as the natural course of development and gives rise to no outcry on the part of the shipping shareholders.

The transport problem is really perfectly clear. All freight traffic arises from the business activities of traders who wish to have their goods moved from one place to another. The trader may decide either to carry his goods himself in his own vehicles, or to hand them over to be carried by the railways, the road hauliers, or some other form of public transport. He makes his decision according to the relative efficiency and economy of the types of transport available. If he is compelled by law to use a means of transport which, given freedom of choice, he would not have selected, it means that he is being compelled to use a form of transport which, for his purpose, is either less efficient or more costly, or both, than the one he

would have chosen; i.e., trade and industry would be penalised in the vital aspects of efficiency and economy, in order that the railway stock holder might continue to draw his dividends.

Is the trader to have freedom of choice between alternative forms of transport?

The opinion of traders, and even of the providers of transport themselves, is unanimous as to the need for maintaining freedom of choice between alternative forms of transport. The Transport Advisory Council, which represents all forms of transport road, rail and water, together with local authorities, labour and industry—reporting last year, said: "There should be an unfettered right on the part of the trader to select the form of transport which he approves and which is most convenient and economic for his purposes." The trader's right to freedom has also been unanimously endorsed by the Chambers of Commerce and by the Federation of British Industries. It is not for one moment suggested that there will not be an enormous volume of traffic which the trader will prefer to send by rail, but it is for the trader to make the decision himself, and not for a transport dictator to decide arbitrarily whether particular classes of traffic should go by road or by rail. Even rail traffic must travel by road for the first and last stages of its journey, except in those cases where both the consignor and the consignee own private railway sidings and the railways themselves operate 10,000 road vehicles and have a financial interest in many others.

Is road transport restricted?

Much play is made by the opponents of road transport of the restrictions under which the railways operate, and undoubtedly a strong case can be made for their relaxation in certain directions. No mention is made, however, of the much more onerous restrictions under which road transport labours. Road transport pays £88,000,000 a year in special taxation, one-tenth of the whole national revenue, although the roads only cost £58,000,000 a year, and are used by many others besides motor vehicle operators. (In India motor transport contributes in taxation approximately 10 crores of rupees while it is doubtful whether any more than 8 crores is spent on road development and maintenance. The roads are also used by several millions of bullock carts paying little or no taxation.) Public hauliers must obtain licences for their vehicles at intervals of two or five years; these licences may be, and frequently are, opposed by the railways, although road hauliers have no right similarly to oppose railway services. It is only with extreme difficulty that a haulier may increase the number of his vehicles, however much the increase of his business may warrant it, and he always runs the risk of being deprived of his means of livelihood when his licences come up for renewal. These are but examples of the 220 Acts and Orders by which road transport is hampered and restricted.

Is a progressive railway policy practicable?

There is no wish to deny that the problem of the future of the railways is one of grave national importance, and that a state of affairs in which receipts fall while expenses remain rigid cannot be viewed with equanimity. Some fluctuation of receipts, in line with the general state of trade, is of course normal and gives no cause for anxiety. If, however, there is



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beyond this a long-term trend towards decreasing receipts, whether through traffic previously handled by the railways being lost to competitors or being carried by traders themselves, appropriate reorganisation measures must be taken.

Probably comparatively few further operating economies are possible on the basis of the present railway organisation, but barely the fringe has been touched of the possibilities of reorganisation. The railways based their original system of frequent intermediate main-line stations and a multiplicity of branch line "feeders" on the assumption that horse transport, with an effective radius of only three or four miles, would be used for collection and delivery. At the time they were built, this was, of course, their only possible policy.

The development of the internal combustion engine has, however, completely revolutionised road transport, and, if the railways are to regain their prosperity, they must accept this fact and motorise themselves without delay; this will involve not merely the replacement of horses by mechanical horses while maintaining the railway framework intact, but the general closing down of branch lines and of intermediate main-line stations, the speeding up of traffic, the centralisation of handling points and the use of mechanical vehicles for collection and delivery from the big centres. The present system of excessive decentralisation over an enormous number of branch-lines and wayside stations is extremely extravagant in labour and is one of the chief factors preventing a reduction in railway expenditure.

The railways still have a very important part to play in the economic life of the country, although possibly not so important as in the past, and they must be assisted in the process of adjusting themselves to a less preponderant role in the country's transport system, by the facilitation of reductions in their expenditure and by the reorganisation of their finances.

In conclusion, it cannot be too clearly emphasised that the development of motor transport has been one of the most effective contributions to national prosperity, upon which alone the railways must rely for their receipts."

BOARDING A BUS IN MOTION

Damages Against Intending Passenger

The Manchester County Court decided recently that a man who fell when boarding a bus in motion was liable in damages to a woman travelling in the bus who was injured when the bus stopped suddenly. The facts were that a man attempted to board a Manchester Corporation bus as it was proceeding through the heart of the city. He did not succeed, but held on to the vehicle and was dragged some distance along the road. An alarm was given, and the conductor hurried past passengers inside the bus in order to ring the emergency bell. As the conductor passed a woman passenger, her handbag fell on to the floor. She leaned forward to pick it up, and, when the bus stopped quickly in response to the three rings of the bell, she was thrown backwards and received bruises and shock. She claimed damages against both the Corporation and the man who boarded the bus.

Judge Leigh, holding that the conductor and the driver of the bus had acted reasonably and without negligence in pulling up the bus as soon as possible, put the responsibility on the man who was the cause of the stopping of the bus, and entered judgment against him for £40 damages and costs, which are estimated at £90.

LEGISLATION AND ROAD TRANSPORT IN ENGLAND

Recent and prospective legislation affecting road transport is reviewed in his annual report by Mr. W. Edwards, President of the National Road Transport Employers' Federation. In welcoming the Road Haulage Wages Act, he points out that the Federation has long recognised the necessity for some form of statutory regulation, without which the good employer who pays his men a standard wage is at the mercy of his unscrupulous competitor who cuts rates and compensates himself at the expense of his employees' wages. It is gratifying, he says, that at long last the ancillary user has been brought within the scope of wages regulations. Mr. Edwards regards the Minister of Transport's action in extending the availability of licences as marking the end of the first experimental period in the licensing system. "It is to be hoped," he says, "that before long the haulier will be in a position to devote his whole attention to his *raison d'être*—service to the public. The solution is to be found not so much in amending legislation as in fostering the spirit of goodwill, and I am hopeful that before long that enmity, which is at all times too evident, will have been removed, and that road and rail will collaborate in the task of providing the trader with service of maximum efficiency." This certainly is the spirit in which the problem should be tackled, and there will be many who will endorse Mr. Edwards' sentiments.

Improved Thermal Efficiency

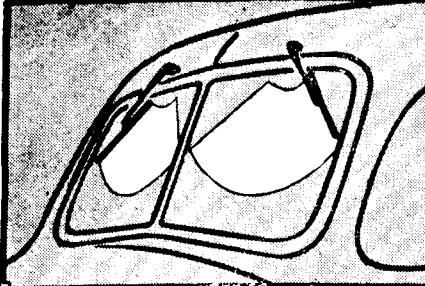
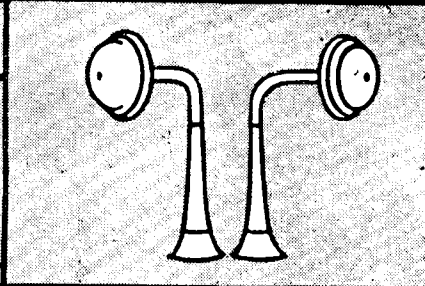
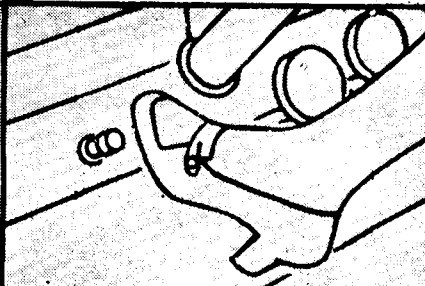
In these days of intense competition, perhaps more severe internally than externally, it behoves the operator who wants wider margins between income and expenditure to explore the possibilities of reducing the factors which remain—namely, fuel consumption and vehicle maintenance. Happily, there is a method ready to hand to improve to a very marked degree the thermal efficiency of any engine; that is, by means of cylinder heads of a suitable aluminium alloy. Given suitable aluminium heads with correct carburettor settings and correct water temperature round the jackets, there is in such cases a most remarkable economy in fuel costs to be achieved quite cheaply. The cost of this type of head is relatively so low that on an annual mileage of, say, 20,000, the outlay should be repaid in less than six months, and thereafter full return made to the operator in reduced expenditure on fuel.

As an example, it is interesting to cite the case of a 3-ton vehicle so fitted which runs 120 miles per day. Previous to the fitting of the aluminium heads the fuel consumption was 12 m.p.g., which at, say, 1/6d. per gallon, meant an expenditure for the 10 gallons required, of 15s. per day. When the aluminium heads had been fitted the consumption was 15 m.p.g., requiring 8 gallons for the 120 miles or an expenditure on fuel of 12s. per day. Hence, the saving in fuel cost was 3s. per day, which represents a reduction of 20 per cent.

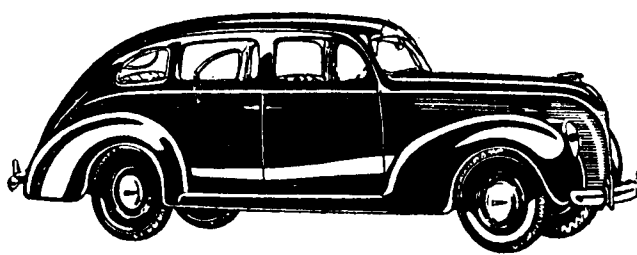
Planned Maintenance

There is a large field for control of maintenance cost by planning the maintenance. Nowadays, it is definitely, and properly, out of date to repair a vehicle only when it breaks down; it is being widely recognised that it is much more prudent and economical to anticipate such a breakdown and give the vehicle the requisite attention before serious trouble sets in. In the main, wear is due to mileage run; therefore it is wise to base a maintenance schedule on mileage.

Experience has shown that it is possible, and definitely advantageous, to group these recurring needs. I say advantageous

		
Two windshield wipers. Safety Glass in windshield and all windows.	Twin electric horns concealed behind radiator grille, strong but pleasant tone.	Foot control for headlight beams, no need for driver to take hand from wheel.

INCLUDED IN THE FORD PRICE.



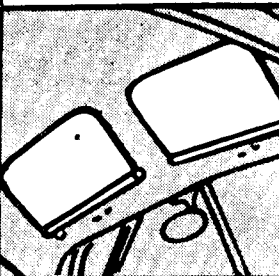
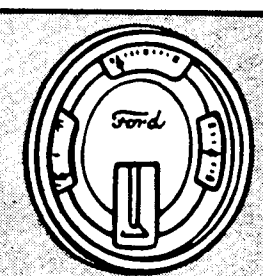
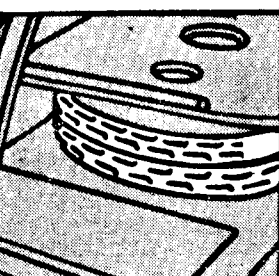
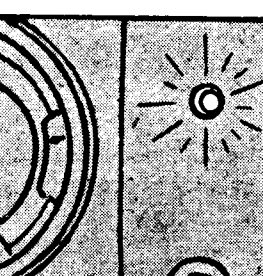
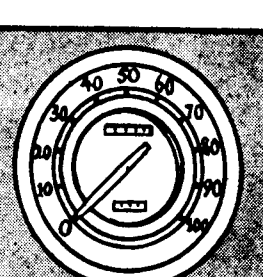
The Ford V-8 '30 includes all features shown here at no extra charge.

THERE is a fundamental value that you automatically get when you buy a Ford V-8 '30. It is the traditional Ford value reflected in the V-type 8-cylinder engines, the Center-poise riding comfort, the improved Easy-Action Safety Brakes, and the Ford standards of quality in design, materials and construction.

But, in addition, the 1938 Ford gives you other value. For your convenience, we have illustrated here the many features of the Ford '30' for which no extra charge is made.

Beauty, big size and economy are regular equipment in both the '30' and '22' Ford V-8s. V-8 economy is as outstanding as the Ford's big car appearance and comfort.

SEE YOUR FORD DEALER TODAY FOR
A DEMONSTRATION.

	
Two swivel-type sun visors, protecting both front-seat passengers against glare.	Engine heat indicator, petrol gauge, oil-pressure gauge and ammeter, all grouped in unit.
	
Spare wheel, tyre, tube and lock, fitting under shell in big luggage compartment.	Telltale light on instrument panel to show position of headlight beams.
	
Rustless Steel wheel bands on all wheels, including spare, an attractive extra.	Edge-lighted speedometer, with soft glow that throws no glare in driver's eyes, and separate "Trip" mileage.

FORD MOTOR COMPANY OF INDIA LTD.

BOMBAY

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because, by giving due and timely attention to these factors, costs are controlled downwards. An indiscriminate repair "system" is bound to show such a loss of efficiency over the life of the vehicle that operators are more likely to be running at a loss than at a profit.

Psychology and the Driver

In addition to the foregoing factors there is another, i.e., an efficient and contented staff which can be a valuable asset to road transport. A properly selected employee is usually happy and efficient in his job and is unlikely to suffer from ill-health, nervous troubles, and the minor forms of general discontent which characterise the employee who is physically unfit or whose mental make-up does not fit in with his particular industrial environment.

Any person above the age of 16 years, within certain physical limits, is at liberty to drive a motor vehicle in Great Britain almost irrespective of his physical condition and entirely irrespective of his mental condition. Adequate braking facilities and braking performance have now become the most important element in the operation of motor vehicles, but given the most powerfully effective brakes maintained in perfect condition, one is still dependent on the human element. Some drivers lose their heads in an emergency and in others the mental lag is so pronounced that accidents occur which would be avoided by a normal driver. From tests which have been carried out there is reason to believe that, under actual driving conditions, nearly one second elapses between the moment a driver perceives an emergency demanding a decision and the taking of appropriate action on his part. The quickest drivers can react half a second sooner than the slowest and there is no doubt that, when an emergency arises, individual variations in reaction times make all the difference between an accident and an escape.

In the brief interval of one second a vehicle travelling at 30 m.p.h. will cover 44 feet and it is obvious that if a pedestrian commences to cross a 30-foot roadway with a car approaching at a speed of 30 m.p.h. he must allow sufficient space of time to cover the mental inertia of the driver plus the minimum stopping distance in feet for that particular vehicle. A vehicle travelling at a speed of 30 m.p.h. with brakes working up to a maximum on a road surface giving a co-efficient of friction between tyres and road of .7, would be brought to rest in 43 feet. Thus the total stopping distance of the vehicle from the time the pedestrian commenced to cross the road would be 44 feet plus 43 feet = 87 feet and this would occupy 2.95 seconds. If the pedestrian misjudged the distance the car was away from him, a serious emergency would arise because it would take the pedestrian 5.1 seconds to cross the road walking at a speed of 4 m.p.h.

An old adage states "Fire is a good servant but a bad master," so mechanisation is outstripping the limits of control which can at present be exercised by the average human mind. Psychological tests and training can undoubtedly be of assistance in improving the mental performance of the average adult, be he pedestrian, cyclist or motorist, but if we are adequately and efficiently to control in the best interests of the general community the wonderful powers which the mechanisation of road transport has given, an intensive campaign must be inaugurated for the education of the child both as "servant" and "master" of road transport mechanisation.

These are factors which have particular reference to India—and call for serious consideration by the owners when engaging drivers and the authorities when examining them for driving licences.

STRONG DEMAND FOR NEW ROADS

As a protest against the Government of the United Provinces for the non-construction of a motor road connecting certain important towns in the Gharwal district, the members of the Gharwal District Board, it is understood, have resigned including its Chairman. The District Congress Committee and all members of the Gharwal Rural Development Association excepting its Chairman have resigned. In addition all members of the Srinagar Town Area Committee and also two non-official members of the Landsdown Cantonment Board have resigned. A Resolution was passed to launch *satyagraha* with a view to compel Government to accede to their demand for a motor road.

The form which the civil disobedience threat will take is refusal to pay Government four annas excess in land tax which provides an income of Rs. 92,000.

Such is the desire of the rural public to-day for motor roads that they are prepared to take drastic action to impress upon Government the justice of their demand.

AMRITSAR'S ROADS

At a recent meeting of the Amritsar Municipal Committee strong representations were made against the Engineer on account of the bad condition of the roads. It was stated that the municipality should be ashamed of its roads and that there was a huge waste of public money on their consolidation and maintenance.

CIVIL AVIATION IN INDIA

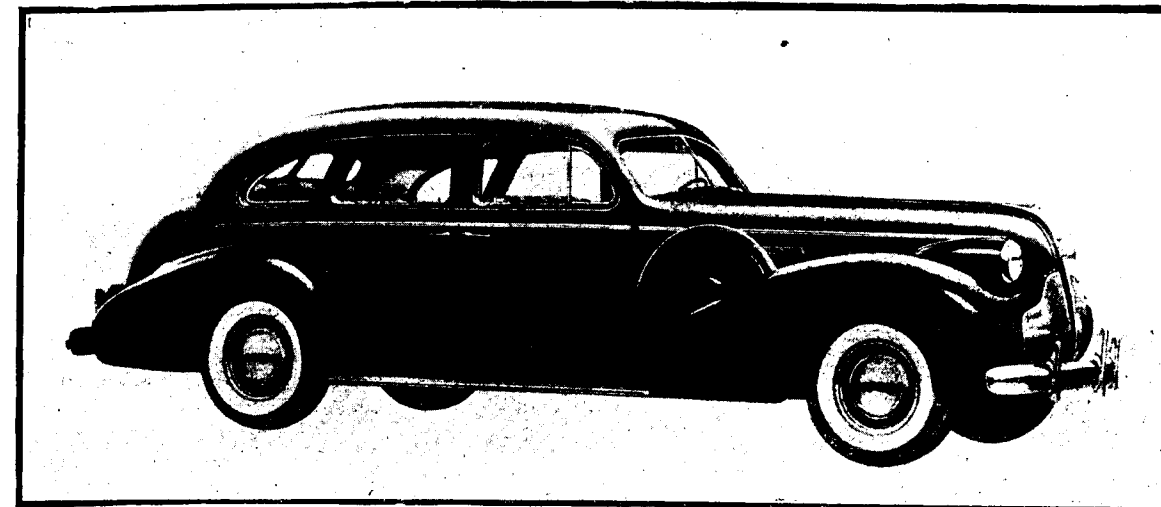
The rapid development of air transport in India within recent years foreshadows the great advance in air traffic that may be expected in the immediate future. But, it is doubtful if the substantial measure of progress so far achieved in Indian air transport would have been possible but for the impetus given to such projects by the organisation of inter-Empire air routes. In fact, a fourfold increase in the operations of Indian air transport companies has been one of the first fruits of the Empire air mail scheme, as recorded by the Director of Civil Aviation in India in his Annual Report for 1937-38, just published. The process of preparing for the greatly enlarged scheme of operations under the "All-Up" Scheme which began in February 1938, near the close of the year under review, was well under way during the period and the Report reveals that substantial progress was made in 1937.

With the opening up of the new Bombay-Kathiawar and Bombay-Delhi air lines, the mileage of Indian air routes was raised from 6,483 to 8,325 miles. "These new lines," says the Report, "are significant of the impetus which has been given to projects for internal air routes" and proceeds to point out that "the widening of the public demand for air traffic and the air carriage of mails will inevitably encourage further growth of airways connecting with the trunk services or serving local needs." No doubt, commercial aviation in India has assumed the dimensions of a major industry, thanks to the encouragement provided by State support and the growing air-mindedness of an increasing section of the upper strata in the country's population. Tata Sons, Ltd., the pioneers of internal air transport in India, operated in 1936 a total route mileage of 2,160 which in 1937 was extended to 2,960, covering a major portion of the important inland and feeder services connecting with the

(Continued on Page 382)

Buick for 1939

"King of the Road" Takes on a New Face



The new 1939 Buick Touring Sedan.

STRIKING an entirely new note in styling with many important engineering improvements, Buick announces four new eight-cylinder chassis models for 1939. They are, respectively, the Series 40 Special, on 120-inch wheelbase; the Series 60 Century, with a wheelbase of 126 inches; Series 80 Roadmaster, with 133-inch wheelbase and Series 90 Limited, with a wheelbase of 140 inches.

The immediate impression of the new Buick for 1939 is that it is lower and longer with fleetier, racier lines. This effect has been achieved by improvements in chassis design which have resulted in materially lowering the car while maintaining a flat floor without a tunnel.

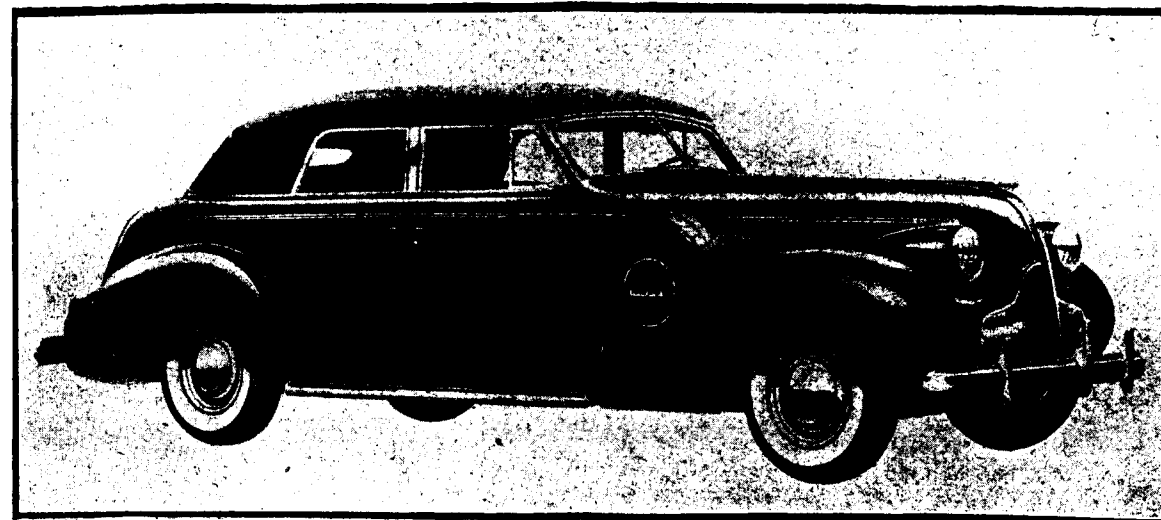
An innovation which contributes to the striking appearance of the cars and which is also important in other respects is the adoption of "cat-walk cooling" employed extensively on European racing cars. With this construction the grilles are set in rakish contour in the cat-walk section of the front end, bringing them lower, thus resulting in better streamlining while at the same time permitting a narrower bonnet for better vision and bringing

ing air to the radiator at greater pressure, promoting increased cooling efficiency.

The frames for the Series 40 and 60 are completely redesigned and now terminate just back of the rear spring seats. The new design contributes materially to stability and results in a floor almost two inches lower. With slight changes the body has been strengthened to readily carry the petrol tank, bumpers and whatever luggage may be carried in the trunk compartment.

Independent front wheel suspension using coil springs is continued, with shock absorbers of the double-acting type. However, the Series 40 and 60 front suspension geometry has been improved to provide far steadier but lighter steering.

While the Series 40 has the conventional running boards the model 60 Series has a shorter running board. This intensifies the streamline appearance of the cars. Another new feature is the "Sunshine" Turret Top which is available on both the Series 40 and Series 60 models. This is the first American car to be provided in this country with the sunshine roof which



The new 1939 Buick Convertible Sedan.

has been growing in popularity in Europe. Buick's new sliding top provides sun, air and sight-seeing advantages for closed cars which have hitherto only been possible in an open car. The roof panel slides back providing this vision upward. It is dust-proof and rainproof.

The valve-in-head "straight eight" engine has been improved in many details of design. On the Series 40 the motor is a $3\frac{3}{32} \times 4\frac{1}{8}$ inch unit developing 107 horsepower at 3400 r.p.m. On Series 60, 80 and 90 the motor is $3\frac{7}{16} \times 4\frac{5}{16}$ inches and develops 141 horsepower at 3600 r.p.m. Improvements in the motor include a new fuel conditioner with new carburettor, choke, air cleaner and new manifold; new waterpump bearings sealed and lubricated for life; new engine mountings and other detail changes.

The Handi-Shift gear shift control for the 1939 Buick transmission is an outstanding new feature. The shift lever extends at right angle from the steering column just below the steering wheel where it is easily reached by the hand. To shift gears, the movement is essentially the same as with the conventional transmission, so there is practically nothing new for the driver to learn. The shift lever operates a small diameter shaft which parallels the steering column to the underside of the toe board, where it connects with appropriate linkage designed to provide positive and effortless gear selection.

In addition to the new shifting mechanism, a complete new transmission, smaller but stronger and more efficient, has been developed especially for the Series 40. Being shorter it is more

rigid. The mainshaft is piloted in larger cageless roller bearings than were used in 1938. The counter and reverse gear bushings have been given increased life through improved lubricant circulation. The gear ratios in first and reverse gears have been changed so that the car will now accelerate faster in low gear.

All front seats are fully adjustable, except on the model 90-L. They have a 4-inch fore and aft movement and are $\frac{3}{4}$ of an inch higher in the forward position than in the rear location. When the seat is adjusted, the position of the seat back is also corrected for proper support so that it is more nearly vertical when the seat is in the forward position and sloped slightly to the rear when the seat is in the rear position. Through these adjusting features road visibility is assured to drivers both of extreme stature as well as those of average height and the controls are always within reach.

The new instrument panel is slightly convex in shape from bottom of windshield and the whole expanse has a new grain finish to match the garnish mouldings on each model. In the centre, new vertical radio grille bars, wider spaced than in 1938, follow the contour of the panel from windshield almost to the bottom edge of panel. In a recess below the radio grilles are the controls for the light switch, and radio, and also the new automatic cigar lighter is located here. Controls placed in a panel are easier to grasp than those individually recessed.

The new Buick models are on display at all Buick Dealers' showrooms.

(Continued from Page 380).

trunk services. The lack of speedy communications between Bombay and Kathiawar has resulted in the establishment of a new company—Air Services of India, Ltd.—rendered possible by the support of the Kathiawar States. With the steady increase of traffic, it became possible to increase the frequency from three to five services per week. The successful organisation and working of these services is a remarkable example of Indian enterprise in a new field that calls for a high degree of technical and industrial organisation.

Despite the far-reaching effects of air traffic development that the Empire Air Mail Scheme is producing in this country and the efforts made by Government as well as private enterprise to place India definitely on the world's aviation map, progress has been slow. India's aim should be not merely the creation of a national system of air transport but to equip herself with a highly efficient system of air defence. The latter objective is inherent in the former. The chief obstacle that stands in the way of their achievement is of course the question of the financial cost involved. The Report significantly observes that the Capital Works Programme has in fact had to be continually reviewed and recast in certain particulars in order

to provide for the most vitally necessary works within the grant; and that the grant (of Rs. 9,16,00,000 out of which Rs. 52,00,000 has been expended by March 1938) will shortly be wholly expended, cannot be taken to imply that all necessary works will have been done.

The next big step, quite obviously, must be the linking of the two biggest commercial centres, Calcutta and Bombay, by a direct service. Unfortunately plans to this end have so far been nullified. It is known that Tatas are prepared to start a daily service for mails only in the first instance—since the carriage of passengers would double the overhead costs—provided they receive some subsidy, direct or indirect, from the State. According to experts, the distance between the two cities could be covered non-stop overnight; fast mail planes could operate on a five-hour schedule, leaving Bombay after dusk and reaching Calcutta before dawn. The only intermediate ground organisation required would be beacons and direction finding wireless stations at intervals. But if the service is to have the best chance of success, it should be daily and it must carry mails without any air surcharge—and this is where the need for State support arises.

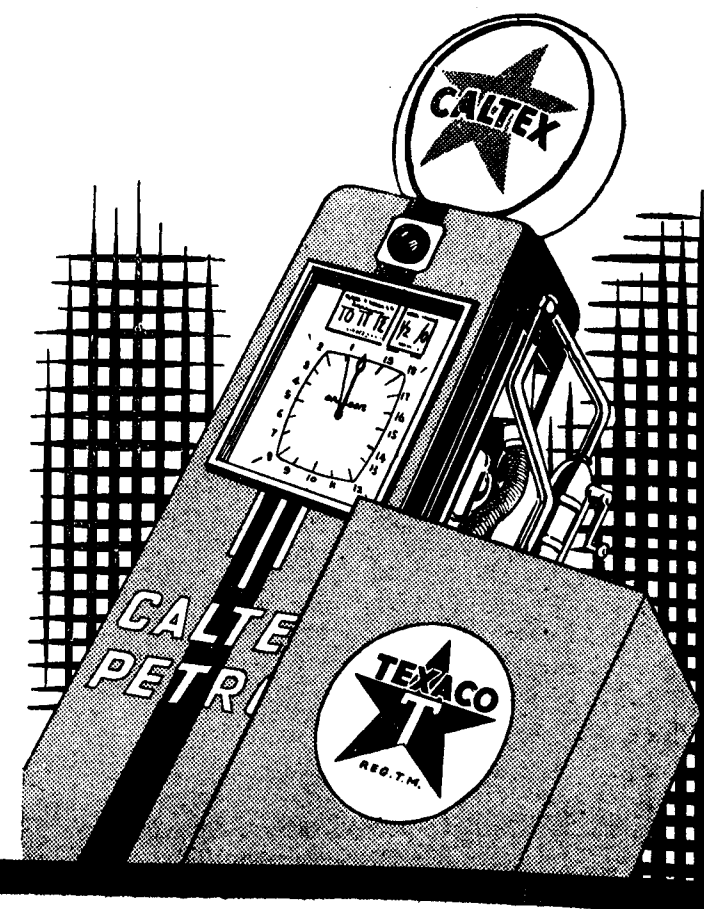


PERFECT lubrication is all the difference between economical motoring and costly motoring. During the New Year, remember that wherever Caltex petrol is available (and it is available everywhere now) you can also get the New Texaco Motor Oil. Look for the sign of the red star. Every time you fill up with petrol, check your oil level. When you send your car to be serviced, insist on this better-than-any oil. It will not only prevent wear and tear in your engine, but also help to control petrol consumption.

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Traffic News

Issued by G. RADCLIFFE GENGÉ, Publicity Officer, Western India
Automobile Association, or A. S. TROLLIP, Hon. General Secretary,
Safety First Association of India

RACE CARD SELLERS ON ROAD

Interference with Traffic Flow Should be Prohibited

WITH the return of the racing season in Bombay, the sellers of race cards and booklets are making their presence felt. Many people complain that they rush about the streets recklessly in their eagerness to get their supply sold off as soon as possible. The same is true of newspaper vendors—particularly of evening editions. The Flora Fountain and Bori Bunder junctions, the Hughes Road approach to Kemp Corner, the bottom of Warden Road and the approach to the Race Course are some of the situations in Bombay which need looking after.

Motorists can help in removing this nuisance by refusing to buy from vendors who approach them in the roadway. They should draw up at the kerb to make their purchases.

Steps must be taken to put an end to this interference with the movement of traffic. Newspaper boys, race-card sellers, handbill distributors and beggars are in the habit of approaching buses, tram-cars and even moving automobiles on the roadway. This is not only a dangerous practice but it also interferes with the movement of traffic. No person should be allowed to stand or loiter on the roadway, other than a safety zone, if this interferes with the lawful movement of traffic.

THE TECHNIQUE OF CORNERING

A competent driver is usually distinguished by the way in which he takes his corners. The most important point to observe when taking a corner is to get into the correct traffic lane.

If you are taking a left turn edge into the lane nearest the kerb (advises the W.I.A.A. in a *communiqué*), do not hug the kerb too closely when at the bend, for if you do so your car is sure to swing wide after negotiating the bend. Keep out slightly when approaching the corner, and you will be able to keep close to the kerb after taking the turn. Above all, be careful not to 'shy', i.e. do not suddenly swing out right and then left.

Right-angled turns and road junctions offer other problems in cornering technique. Whether gear changing should be made before or after the corner is a vexed question difficult to answer. A change down well in advance of the turn is advisable as the retarding effect of the engine relieves the brakes. This method invariably keeps the car steadier and the corner can be taken at a higher speed when the engine is pulling.

Slippery roads present extra difficulties. The golden rule under these conditions is to avoid sudden action: quick acceleration, braking, or a pull on the steering wheel may precipitate a skid. Slow down on slippery roads and avoid trouble.

COURTESY TO TRAM PASSENGERS

Some motorists show scant regard to passengers boarding or leaving tram-cars; they blind along quite close to a tram when the latter is stopping, even though there is ample space to pull over to the left to give passengers room to alight or board a vehicle.

Many motorists never realise that pedestrians may be crossing the road in front of a stationary tram—and such motorists require a severe warning, states the Safety First Association of India.

DANGER OF DIPS IN GOOD ROADS

In several of our otherwise well-surfaced main roads there are dips or depressions which give a severe jolt to motorists who travel over them even at a reasonable road speed. Motorists who know such defects avoid them even to the extent of travelling on the wrong side of the road.

On some foreign roads a cross depression has been introduced to make motorists reduce their speed, but where this is consciously done a warning sign is given to motorists cautioning them to reduce their speed to a figure which is safe to negotiate the dip.

A well surfaced road is an invitation to speed and a depression, especially a cross one or a change in surfacing material, might be the cause of an accident if not adequately symbolised well in advance. Motorists should be thus warned of the need for care during the next 100 yards also.

UNFAIR TEST OF STREET LIGHTING

A technical correspondent draws attention to the fact that the test which has been made along Hughes Road to discover which is the better form of light is not a fair one, because the lanterns which are being used for the greenish-blue lights on half the road are unsuitable for mercury vapour lamps.

He points out that the maximum candle power obtainable from these lamps is 630 whereas, if they were fitted with the modern type of fittings, specially designed for this purpose, the candle power would equal 1560. It is, therefore, unfair to compare the present Hughes Road mercury vapour with the sodium lamps, which latter are equipped with the latest type of sodium fittings available.

ALTITUDE AND GRADIENT SIGNS

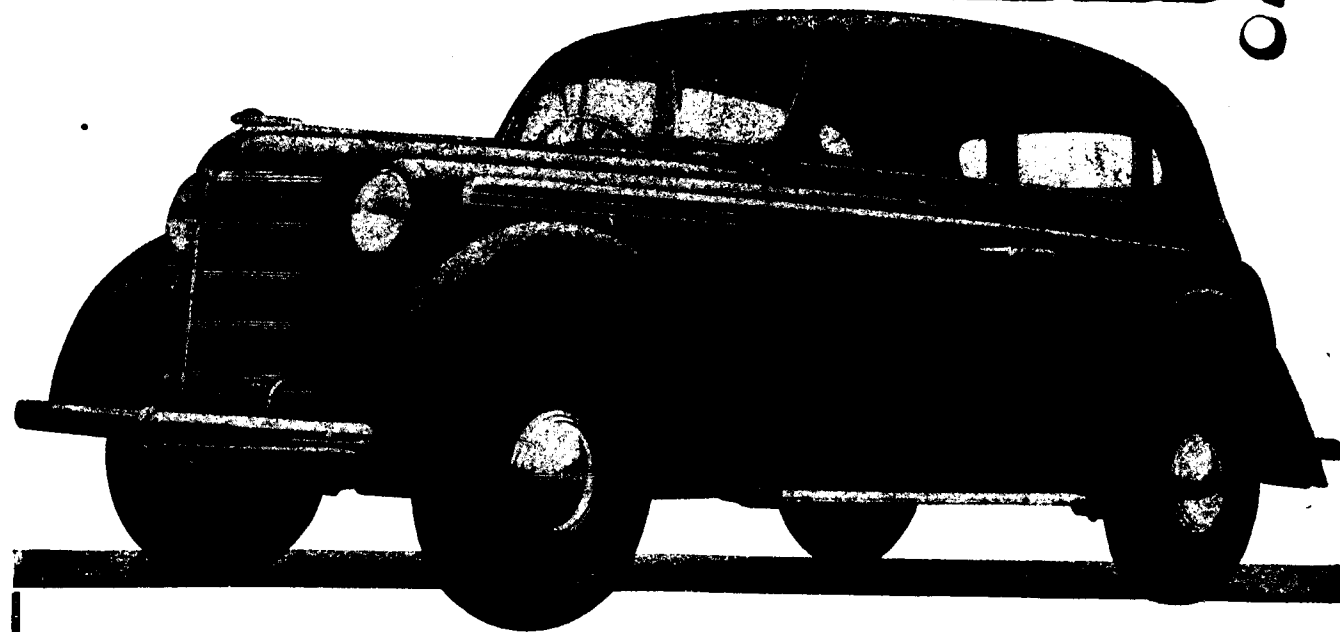
At present there are no agreed signs to indicate to motorists the altitude above sea-level and the gradient of a road.

In England the Automobile Association have erected a few signs of their own, giving name of hill and gradient at crests of hills on important roads, generally where the descent is more than 1 in 10.

In the United States of America steep and dangerous descents are shown by hill signs sometimes supplemented by special indications giving the length of grade or advise "use the second gear". The Safety First Association have suggested alternative signs for altitude and gradients of a symbolic character to the Board of Communications with a view to their standardisation.

In designing signs it is suggested that it would be an excellent idea if authorities would refer the matter to the Board of Communications for their suggestions, as this would enable standardisation to take place—a matter which is of the greatest necessity to the motoring interests in India.

The *NEW* OPEL 10!



THIS brand new Opel 10 Kadett, with redesigned front end and many improved body and engine features, is the last word in motoring economy. Available at the world's lowest cost for a car of this class, the Opel 10 embodies all the features of a General Motors car—Knee-Action front springing, All-Weather Ventilation, Super Hydraulic Brakes, and All-Steel body. Both the Sedan and the Cabrio-Coach models develop 27 h.p., and have a 92" wheelbase. Start saving with an Opel from this month.

Other New OPEL Models are

- OPEL 12 Olympia Sedan.
- OPEL 12 Olympia Cabrio-Coach.
- OPEL 16 Five Passenger Super-Six Sedan.
- OPEL 16 Five Passenger Super-Six Cabriolet.

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Compulsory Liability Insurance Would Increase Accidents

NOT the least paradoxical of the multitude of human nature's inconsistencies is the practice of complicating simple problems and over-simplifying complex ones. The introduction of irrelevant factors and (or) the removal of relevant ones results inevitably in erroneous computations and conclusions. Thus the quest for solutions or even mitigations of the problems of society is anything but facilitated by the very general preference for personal opinion to impersonal fact.

Discussions indicate that a large proportion of the advocates of universal compulsory automobile insurance are ignorant not only of its implications but of what it is. As St. Paul said: "I bear them witness they have a zeal for good—but not according to knowledge." Many hold the erroneous opinion that it makes compensation compulsory for injury or loss suffered in a motor accident. It does not. Compulsory automobile insurance, too, is quite generally and fallaciously assumed to include property damage as well as public liability coverage. Nowhere does it do so. Another illusion widely held regarding it is that it would result in reduced individual premium cost. Leading authorities state definitely that making automobile insurance mandatory would increase its individual premium cost and the experience of Massachusetts (the only motor licence jurisdiction in the Western Hemisphere that has or has had compulsory insurance in effect) supports this dictum as well as the contention of competent authorities that compulsory insurance would tend to increase traffic accidents.

Compulsory public liability suits congested the courts of Massachusetts to an extent that all but paralyzed them. Collusion cases abounded. Because of this and the fact that motorists are recruited from every stratum of the social pyramid, it is only too apparent compulsory property damage coverage would tie the courts in a super-Gordian knot with which even an Alexander could not cope. In Massachusetts, it is noteworthy, a law similar to the Financial Responsibility Laws in effect in most of the licence jurisdictions of Canada and the United States, is scheduled for early enactment—a commentary, if you will, on the functioning of the Bay State's compulsory insurance statute.

Most advocates of compulsory insurance are surprised to learn that under the provisions of the Financial Responsibility Law there has been in effect for years selective compulsory insurance. Insurance is obligatory for certain categories of transport carriers, as well as motor vehicle owners and operators who have failed to settle final-judgment awards of damages and those convicted of breaches of the more serious provisions of the Highway Traffic Act and the Criminal Code.

"Why does universal compulsory insurance increase the individual premium cost? That is not an unusual or unreasonable question. The answer is implicit in part in the foregoing statement that compulsory insurance does increase accidents—through making irresponsible drivers even more careless—and in part in the fact that irresponsible drivers generally do not carry liability insurance voluntarily. Loss experience, that is

the payment of indemnities, is the fundamental basis of premium rate. Any insurance man will tell you that what he terms the "loss ratio" determines the premium rate, by which he simply means that the selling price of insurance is determined largely by the major factor in the cost of providing it—the old story of income and disbursement per unit.

Mandatory universal liability insurance by adding the irresponsible class of drivers to the voluntarily insuring class, increases the mean moral risk, loss ratio and so the individual premium cost. It is significant that automobile insurance is much more costly in Boston, where compulsory, than, for instance, in the much more motorized city of Detroit where it is voluntary. That few, if any, automobile insurance companies advocate compulsory liability insurance is not without significance, too.

There are two other economic aspects of universal compulsory liability insurance, one primarily of significance to motorists as a class and the other of great importance to society at large. The former is simply that unsatisfied final liability judgments against uninsured motorists as such total annually, in dollars and cents, but a very small percentage of what the total premium cost would be of liability coverage for the uninsured motor vehicles, even at currently obtaining rates.

One of Canada's most lucrative sources of revenue is tourist traffic. Last year this Dominion derived from tourist traffic an income of approximately three hundred million dollars—or more than twenty-seven dollars per capita. Authorities estimate that the preponderant part of this income provided by motor tourists would be reduced by at least half if the Canadian provinces imposed universal compulsory liability insurance. If one or more of them did, its or their share of the total motor tourist traffic revenue would be proportionately reduced.

One hundred million dollars plus (Ontario's share: fifty million dollars plus) in addition to an increase in traffic accidents and court cases is the apparent annual premium Canada would have to pay for universal compulsory liability insurance over and above its premium cost to Canadian motorists. It will be apparent on a moment's reflection that the premium cost to Canadian motorists of universal compulsory liability insurance would be but a fraction of its total cost to Canadians as a whole, non-motorists as well as motorists. Something less than a fifth of a billion dollars per annum must appear too high a price even to the most ardent advocates of compulsory insurance.

A giant drop forge can be used to crush a mosquito, or a pile driver or a steam roller to swat a fly—but the benefit would be very considerably less than commensurate with the cost. And that is by no means the only valid objection to universal compulsory liability insurance for Canadian motorists.

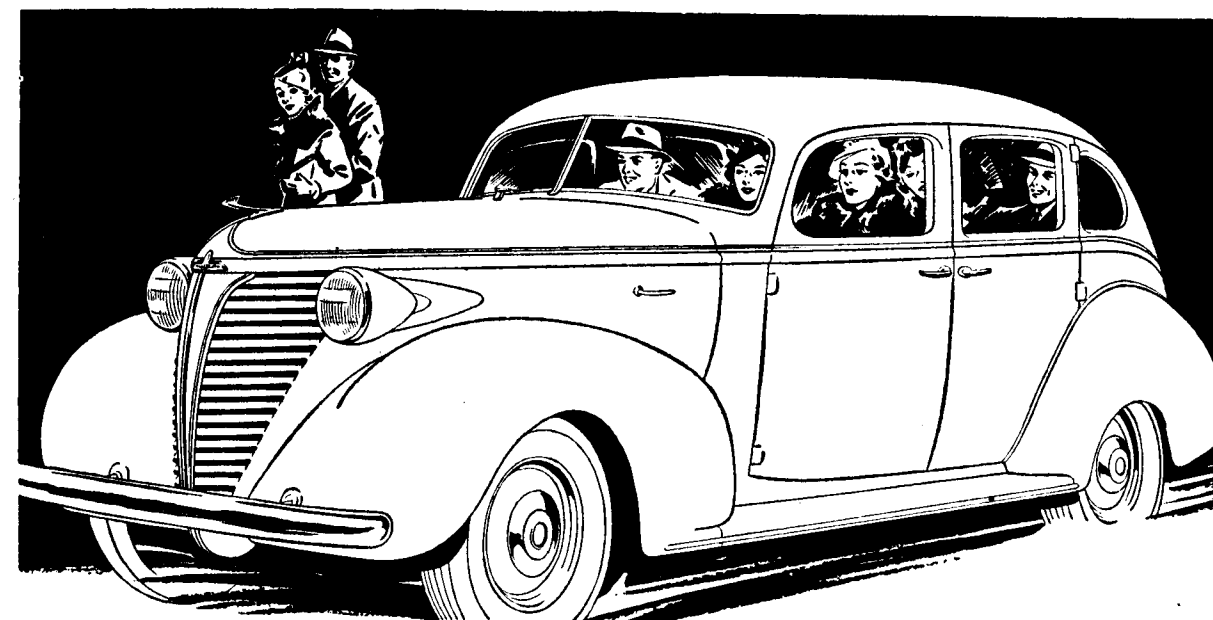
Means should and doubtless sooner or later will be found to indemnify those who suffer injury and loss through the faults of judgment-proof irresponsibles. It should not be forgotten, however, that such injury or loss is by no means confined to traffic casualties.—*Canadian Motorist.*

IT'S HERE

HUDSON 112

THE NEW LOWEST PRICED HUDSON

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Sole Distributors for Madras Presidency and South Indian States

B. R. MOTORS

30, Mount Road,

MADRAS

'Phone 8128

An Amazing New Record Car



OF all the machines that have been produced to travel at the highest speeds on land, none has been half so attractive as the new car that the genius of

Reid Railton has produced for John Cobb to drive over in Utah. There is a thrill in merely inspecting the mechanism, so well does it seem suited to the purpose for which it is created, so ingeniously have the various components been arranged for strict economy in weight. The engines used are two super-charged Napier Lions, and the tyres were specially designed by Dunlop, the one firm that has seriously tackled the problem of suitable tyres for these extraordinary high speeds.

Conventional frame there is none, but instead a rectangular steel girder forms the spine of the car and terminates at each end in a fork. On either side of this girder, roughly in the centre, are the two engines which together give approximately 2,500 h.p. from 23,936 c.c. each.

At one end of the engine is a very large centrifugal blower turning at something like 30,000 revolutions a minute. It is supplied by three large carburettors, the air in-takes for which have to be carried to a point where they are not likely to pick up salt on the track. The two magnetos supply current for the plugs, of which there are two in each cylinder. The lubrication is on the dry-sump principle.

From the other end of the crankcase the drive is taken through a Laycock joint to a short shaft, and so to the 3-speed gear box, the joints allowing certain freedom of movement through rubber bushes. From the rear of the gear box the drive passes to a brake drum with a broad contracting Ferodo band operating on the outer diameter and actuated by hydraulic pressure through a lockhead cylinder. The band type of brake is used partly because it grips almost the entire surface of the drum, and partly because it makes it easy to install a water-cooling system allowing water to flow to the inside of the drum when the brake pedal is pushed forward.

All four wheels are driven. The right-hand engine drives the rear wheels, the left-hand engine the front wheels, each crankshaft turning towards the frame, and each transmission being complete with its own bevel and its own 3-speed gear box. The front axle has independent suspension for its two wheels.

Diagonally across the structure run the rods connected to the suspension, which is housed in an almost cylindrical

case. The first movement of the wheel is taken by a short, sturdy coil spring, and further movement by a nest of large rubber discs. Mounted as part of the unit are the necessary stops, and another circular casing, which is part of the suspension slides in a collar. This is held against the casing by pressure which can be adjusted so that it forms the shock absorber with very little additional weight. Be it noted that the actual movement of the wishbone brackets upon which the wheel hubs are mounted is very limited. A differential is necessary because the front wheels have to turn to steer the car. The track for this axle is 5 feet 6 inches. At the rear the construction is different, and there is no differential. The wheels are not independently sprung, and there is an ordinary type propeller-shaft. The track of the rear axle is only 3 feet 6 inches. Gigantic Dunlop disc wheels are used, but some saving in weight has been effected by altering the design and using a light alloy instead of steel, while the tyres are of special type of very small cross-section measuring 44 inches in diameter, practically without tread. Experience has proved that these withstand best the very high centrifugal stress entailed.

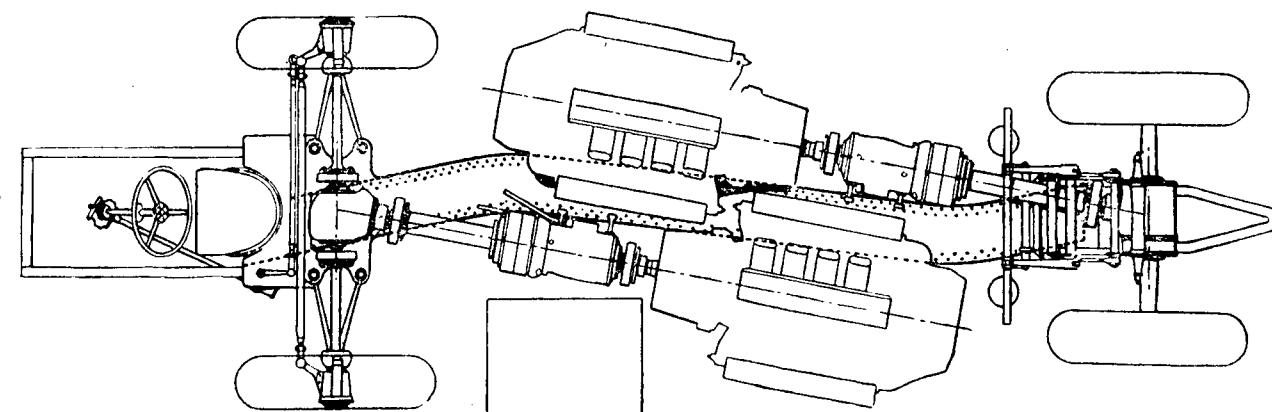
The driver's cockpit is almost in the nose of the car, well in front of the engines, and actually in front of the forward axle. The steering gear actuates the front wheels in the normal manner save that the steering column operates a bevel gear which drives a shaft, trailing backwards in a horizontal tube towards the axle, and, through this shaft, the drop-arm and steering-rod are controlled by a Burman gear.

Though the actual time for which the car will run and the distance it will travel are necessarily short, 18 gallons of fuel have to be carried in a light tank at one side of the frame, and 15 gallons of oil in another tank also at the side of the frame, tucked in beside the engine. There is no radiator to break up the smooth nose of the streamlined body. The engines are just cooled by the 75-gallon water tank carried within the body and assisted by ice.

The detachable beetle-shaped body is made of "alcad" and aluminium, and is without any break in the smooth flow of its lines. The cockpit cover, a streamlined metal hood, with a window of Perspex—a patent material resembling glass—alone shows above the line. Four small humps, two on either side, are allowed for the tyres, but there is nothing else, and the whole of this body can be lowered on to the chassis like a cover, and removed equally easily.

With the body in position the wheels are almost invisible. The exhaust gases are discharged through short pipes from the top, at one side, and underneath the body, an ingenious scheme directing the blast from the lower pipes backwards instead of directly downwards.

The driving cockpit is rather weird and most unusually placed. The driver has his seat inside the body, his head being in the metal coning tower or hood, and he can see clearly through the curved window. At the back there is a bulk-head cutting off the engine compartment; beneath is the underpan, and at



A plan view of the Railton Chassis.

each side the huge wheels and tyres. The metal cowl of the windscreen forms part of a hatch which is raised to allow the man to get into position, and lowered and secured when he is in his seat.

Among the suppliers for components and fuel used in this machine it is notable that the tyres, wheels, seat cushioning, and rubber suspensions were provided by the Dunlop Rubber Company.—(Reprinted in a condensed form from the "Auto-car").

Britain's Greatest Motor Factory Protects Its Workers

Bomb Proof Shelters and Covered Trenches to Cost £20,000

WHAT is probably the most comprehensive and carefully worked out system of Air Raid Precautions in Great Britain is now in a forward state of preparation at Longbridge, the 100 acre factory of the Austin Motor Company, where 22,500 persons are at present employed.

The Austin scheme aims not only to afford protection from enemy air raids for this huge number of workers, but also the co-ordination of an active fire and gas fighting force for safeguarding the factory.

The chief protection at Longbridge will be afforded by three main shelters, one centrally situated, another behind the West Works where Austin bodies are built, and a third adjacent to the new Aero factory.

The central shelter which is already complete except for a few minor items of equipment is a 150 yard underground tunnel, with walls of brick and roofed with reinforced concrete. It will accommodate 750 of the female staff, and certain key executives constituting the control of the fire and gas fighting force.

A telephone exchange within this shelter will maintain contact with and control operations from the other shelters throughout the factory, and having its own motor generator it will not depend on any outside supply of electricity.

Its entrances are heavily protected by 10,000 sandbags, and it provides safety against anything up to a 500 lb. bomb.

The shelter behind the West Works, now in a forward state of construction, is an even bigger undertaking, since it will accommodate over 4,000 persons, so that the entire female Austin staff, as well as many male workers are given protection.

This shelter is being constructed of reinforced concrete on the floor of a disused sandpit, which will be filled in when the shelter is completed, to leave it 35 feet below ground. Over 30,000 cubic yards of soil excavated for extensions of the Longbridge railway sidings will be available for this purpose.

This shelter will also be a centre for active workers, fire fighters, a decontamination squad, and a first-aid service, in

addition to two further shelters heavily protected against splinters, blast and gas, housing similar services.

The second line of defence at Longbridge will be in the nature of an extensive covered trench system, located on three sides of the factory, which will accommodate all the male workers, and to which in case of emergency, the entire factory would be evacuated except for one man left in charge of the boiler house.

In connection with the trench system a number of volunteer first-aid men and stretcher bearers are being enrolled from amongst the workers to bring casualties to any one of the three protected "hospitals" within the factory.

Additional to all these precautions, two splinter-proof observation posts, heavily constructed and protected with sandbags, have been built on high ground on each side of the factory. From these posts observers will be able to witness any damage to the factory and by sights determine its location within the hundred acres of buildings.

These observations will then be reported to the "bridge" in the central shelter from which the fire fighting and decontamination services will be directed if immediate action proves necessary.

Supplementary to these precautions coloured plans of the trenches and shelters allocated for each department or shop are being displayed throughout the factory, showing the routes of evacuation. Roadways and bridges have been modified to suit, and in every shop a warning siren with a special note has been installed.

Altogether, with these shelters, the covered trench system and the reinforcement with equipment and personnel of its fire fighting service, the Austin Motor Company is spending £20,000 on Air Raid Precautions.

Other works executives concerned with the problem of protecting their employees and plant are invited to inspect A.R.P. as at present being developed at Longbridge.

A Tribute to Triplex

A NUMBER of interesting photographs have reached the Cowley, England, headquarters of Morris Industries Exports Limited, who are the largest exporters in the world of British cars and commercial vehicles. Although these photographs feature unpleasant situations to the cars concerned, they do pay the greatest tribute to Triplex Safety Toughened Glass which is a standard fitting throughout the complete range of cars and trucks manufactured by the group of companies controlled by Viscount Nuffield.

Whilst travelling between Brisbane and Sydney, George A. Lloyd, Australian resident representative for "M.I.E.," had the misfortune to have a large stone strike his windscreen. But instead of splintering the whole surface of the glass into razor sharp pieces, as would ordinary glass, the glass merely crumpled into a harmless substance resembling granulated sugar; each particle being divided by a series of minute cracks. The occupants of the car naturally sustained no injury.

Two even more unusual examples of the safety properties of this glass come from Truro, England, and from Vancouver, British Columbia. In the former instance a four-year-old Morris saloon car was allowed to run off the road and fell down a 350 ft. cliff. Although badly damaged, not a single pane of glass was broken. In the latter case a Morris Eight saloon was inadvertently hit by a street car and, as can be seen from the photograph, met with the same good fortune.

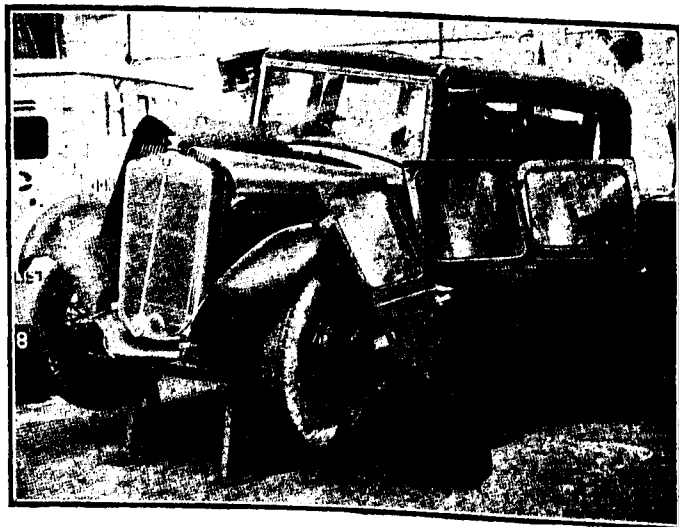
This conversion of friable plate glass into a glass of such great strength, the transparency of which is in no way altered in the process and which possesses such admirable properties should it be fractured, must surely be one of the most scientific

discoveries for many years. It is said that the complete manufacturing processes of Triplex toughened glass, as fitted to most British cars because of its greater efficiency, is known to but a mere dozen persons and it is therefore a jealously guarded secret.

It is possible to make Toughened Glass, which is proof against discoloration and blisters, do anything that is required of it. It is springy and supple and many times stronger than plate glass.

The first step in the toughening of ordinary plate glass is the cutting on templates into the required shapes by skilled operatives. An essential is also a uniform quality and purity of the basic glass. An allowance at the same time must be made for the alteration in size during the toughening process, calling for a close knowledge of the size variations.

Following upon the grinding and polishing of the glass edges, the glass is then suspended on automatic conveyors for



heat treatment. The furnaces are below floor level and are located immediately underneath each conveyor. When the glass is lowered into the furnace the furnace door closes and, after a predetermined period, opens again to allow the glass to emerge with a red glow. It is then hung between frames which spray jets of evenly distributed compressed air over its surface.

This apparently simple process entirely changes the nature of the glass and causes the surfaces to contract and harden, and puts them into such a state of compression that it can literally withstand the most terrific blows and stresses.

The nature of these blows is seen in the next stage when every piece of glass is subjected to an impact and a polariscope test. To comply with the exacting requirements demanded of it, the toughened glass must then be able to withstand a steel ball weighing 1.68 lb. being dropped on it from a height of 5 ft. and, in a further test, from 8 ft. Ordinary plate glass of the same thickness would break if a similarly weighted ball were dropped from a height of less than 1 ft. and would break at the same time into the usual sharp edged fragments.



A FOUR-YEAR-OLD Morris saloon car (right) which was allowed to run off the road and fall down a 350 ft. cliff at Truro, England. (Above) NO GLASS WAS BROKEN either when this Morris Eight had been violently hit by a street car in Vancouver, British Columbia.

Hardships of Motorists in Madras Presidency

The following is the text of a letter to the Secretary to the Government of India, Home Department, a copy of which was sent to the Secretary to the Government of Madras, Home Department, by the Secretary, the Automobile Association of Southern India:

I have the honour to address you on behalf of the Automobile Association of Southern India.

In view of complaints received from members of this Association, my Committee has considered the subject matter of their grievances and have directed me to submit their views with a request that early steps may be taken to make new, or amend the existing, rules of procedure relating to prosecutions for technical offences.

(1) Motorists are put to great inconvenience and unnecessary expense in having to appear in person at Criminal Courts to answer charges of a technical nature under the Motor Vehicles Act and Rules made thereunder. Especially does this affect motorists who are employed as touring officers and are recalled sometimes hundreds of miles to answer such charges. The necessity to appear in person, may be deleted and the accused given the opportunity of paying a fine or of being represented by counsel or special vakalat if necessary.

(2) Another practical grievance of motorists accused of motoring offences is in regard to the receipt of summonses. In many instances the summons is received only a day or so prior to the day fixed for the hearing of the case. Great inconvenience is caused both to the accused and to his employers by not being given sufficient time to make the necessary arrangements to appear in court in person. It is very desirable, therefore, that summonses should be served at least ten days prior to the date of hearing.

(3) In one case, a member complained that having appeared in person on the date on which he was summoned to do so, the Sub-Magistrate adjourned the case simply because the prosecution and witness were not present. The adjournment of the case was a great hardship and expense to this member as he was obliged to waste two whole days in having to appear for that hearing, and when called again to appear on the adjourned date, he was on tour and had to return a distance of over 700 miles.

My Committee therefore think it fit to suggest that when it is obligatory for a motorist to appear in person, it should be compulsory for the prosecution and witnesses to appear also, so that the case may be proceeded with. If a case has to be adjourned for any reason, an application for adjournment should be made at least ten days prior to the date fixed for the hearing, and if granted, all parties should be notified immediately.

(4) As regards the inordinate delay taken in the institution of proceedings against offenders under the Motor Vehicles Act, which in some cases, is as much as six months after the alleged offence, my Committee considers that in the interest of Justice and the parties concerned, the proceedings should be instituted within 14 days of the alleged offence, and such cases taken up immediately for disposal.

After a lapse of such long periods details cannot be accurately remembered by either party, and the accused may not even remember if he was in any particular locality on the said date, and has not, therefore, a fair opportunity to defend himself.

My Committee requests that suitable rules be framed in order to mitigate the difficulties enumerated above.

Electric Horns Ban From April in Bombay

Bulb Horns For Motorists

The use of electric horns in the city of Bombay will be absolutely prohibited from April 1st, 1939 (states a W.I.A.A. communiqué), as an experiment for six months.

This was decided at a Government Traffic Advisory Committee meeting by a majority and the ban on the use of electric horns means in effect that every car in Bombay will have to be fitted with a bulb horn. The reason for this is that should a motorist be involved in an accident which the trying magistrate

decides could have been avoided by the use of a horn the motorist will both commit an offence if in such circumstances he uses an electric horn and, if in such circumstances he does not use a bulb horn: so that the fitting of a bulb horn will be virtually compulsory.

The W.I.A.A. issues this advance information both as a warning to the motoring public and also to advise dealers to order a sufficient stock of bulb horns in advance.

CALCUTTA :
Standard
Buildings
32, Dalhousie
Square

LAHORE :
The Mall

FOR

ADVICE

ON

MOTOR INSURANCE

CONSULT

BOMBAY :
Churchgate
House,
Churchgate
Street
RANGOON :
128, Phayre
Street

THE OCEAN ACCIDENT & GUARANTEE CORPORATION LTD.

KARACHI :—New Forbes Buildings

MADRAS :—169, Popham's Broadway

Wireless

Receiver Realignment

By E. J. HENNING, B.A., Radio Engineer,

Radio Instructor, Spicer College.

A QUESTION frequently asked of radio technicians is, "What do you mean by realigning my receiver? Why does it need it, and how do you do it?" A parallel question asked of an auto mechanic would be, "What do you mean by grinding valves and readjusting tappets, why does my car need it and how do you do it?"

Receiver alignment became a necessity when the public demanded a receiver with a single tuning control. In the early days of radio, a receiver might have had six tuning controls. The operator shifted the first, then the second, the third and so forth until the signal came in well with the sixth adjustment. In making each adjustment the operator "aligned" each control to the exact frequency of the incoming signals.

But that was too complicated. "Give us single dial control", was the demand. Actually, modern radios are still more complicated. Some sets to-day have 25 tuning controls! But only one of these is controlled by the operator—the one he dials. The other 24 controls are semi-permanent adjustments. It is when these other 24 controls fail to tune exactly to the same signal as the main tuning control, that a service man must "realign" then *till they do*.

The variable part of a tuning control is usually a condenser. A condenser consists of two conductors (metal plates, separated by an insulator air or mica). A given condenser has a certain capacity for storing electrons (electricity). As the area of the two metal plates increases or the distance between them decreases, this capacity of the condenser increases. As the capacity of a condenser in a tuning circuit increases, the circuit responds to a higher wavelength.

The main tuning control is usually a variable air condenser. It consists of movable metal vanes interleaved with stationary metal vanes, and separated from each other by air. As the tuning control is turned more and more of the vanes interleaf, increasing the capacity of the condenser and tuning the set to a higher wavelength. On the medium waveband when the vanes are just slightly interleaved, the set is usually tuned to about 200 metres. When they are almost fully interleaved, the set tunes to about 550 metres.

In the early days there were usually three of these main tuning condensers. In to-day's modern receiver these three condensers are all put on one shaft and rotate simultaneously. But it is difficult to so accurately match these three sections of the condenser that they tune exactly in step with each other. Therefore three smaller semi-variable condensers are placed one across each of these main condenser sections. The capacity of these "trimmer" condensers is added to that of the main condensers. These trimmers are usually two small metal plates, separated by mica, and increase their capacity by being pressed closer together by an adjusting screw.

Now suppose these main tuning condensers and trimmers are in an unaligned receiver. If the set owner tunes the 1st

condenser section to say 250 metres, the second one may be tuned to 251 metres and the 3rd, to 248 metres. Obviously better results would be obtained if all three were tuned to the desired signal at 250 metres. Therefore the service man decreases the compression of the trimmers on the second condenser thus reducing the capacity and making that condenser tune to the lower wavelength of 250 metres. He increases the compression on the third trimmer, increasing the capacity and increasing its resonant wavelength to 250 metres. Then all three tuning circuits are aligned to resonate at 250 metres.

But the difficulty does not end there. Even though the three condensers and their circuits are aligned at 250 metres,—the high frequency end of the band,—they may still lack alignment at 500 metres,—the low frequency end of the band. Here one section may tune to 500 another to 496 and the third to 501 metres. Evidently the three condensers do not follow each other exactly or "track" for the entire band. Other trimmer condensers, this time called "padders," cause the condensers to be aligned at the low frequency end of the band too. If the sections are "in tune" at the H. F. end of the band and also at the L. F. end of the band it is assumed and assured that they will "track" in between these positions.

The problem of tracking becomes increasingly important in modern superheterodynes. The problem of the three tuning condensers becomes more difficult. Here two sections of the tuning condensers must tune to exactly the same frequency on each point of the dial, but the third must tune to a higher frequency by an amount equal to the intermediate frequency of the set, usually about 460 Kc. Thus if the two sections of the condenser are tuned to 1500 Kc. (200 metres) the third section must be tuned to $1500 + 460 = 1960$ Kc. If the two sections are tuned to 600 Kc. (500 metres) the third section must be tuned to $600 + 460 = 1060$ Kc. The difference in the resonant frequency of the two sections must always be 460 Kc. This complicated tracking in a superheterodyne was so difficult of solution that it delayed the popularity of the superheterodyne for many years. The problem has been well solved but the accuracy of the tracking of a superheterodyne must be maintained if good results are required.

"That is all right" one critic says "but that was all attended to at the factory when my set was built. It was there aligned. Why should it now be realigned?" Why do tappets and valves of a car need resetting when they have been adjusted at the factory? Many things happen to the factory alignment of your set. First comes a trip of several thousand miles with its jostles and bumps, all tending to throw delicate trimmers and condensers out of adjustment. Heat expansion and contraction slowly throw trimmers out. Other circuit components such as coils deteriorate or become water impregnated, necessitating higher or lower condenser capacity values. Soon your various circuits are tuning to a dozen different stations instead of one with resulting confusion and inefficiency.

MADRAS FLYING CLUB NOTES

FLYING TIME FOR NOVEMBER 1938.

	H.M.
Dual instruction to members under training	9-10
Advanced dual to A & A-1 pilots by day	20-5
" " B pilots, by night	0-35
Solo flights by members under training	—
Solo flights by A, A-1 and B pilots by day	40-55
Solo flights by " " " by night	0-50
Pilot with passengers A, A-1 and B pilots	21-40
Joy rides	2-15
Cross country flights by the Club instructor	8-25
Other flying	0-20
Test flights	0-45
TOTAL HRS.	105-0

The following members took dual instruction during the month:—

Europeans:—

Mr. G. S. Kearney	Advanced dual.
Mr. H. T. Grubb	"
Mr. R. N. Rowson	"

NOVEMBER, the rainiest month of the year on the coast of Coromandel, but this year "an utter and absolute blank", like the chart that was found so useful by the Snark hunters. Even the Bay cyclone that strolled by just off shore for two days, swirling mighty winds over the Carnatic, was a bone dry affair so far as Madras was concerned. All very strange indeed. Unnatural in fact.

Two new members joined the flying club, in the persons of Mr. Nagarajan and Mr. Soundararajan, and started taking flying lessons. Mr. Narasimha Reddy performed his first solo and Mr. Mohamed Ismail Khan obtained his "A" Licence but these two last events strictly apply to the previous month from whose report they were omitted in error. Two members from Ceylon, Messrs. Aserappa and Fernando, qualified for their A-1 licences and so did Mr. Italia, each doing the stereotyped triangular cross country flight of 200 miles with the instructor, including 3 feint forced landings in the blue. The names of the places so selected is required for official purposes and is only obtained with the greatest difficulty by shouting for the information in Tamil, while still airborne, at any handy (and often scared) shepherd lad, and then making some sort of head and tail of his answer, if any. The capture of the name on each occasion has been indeed a triumph of airmanship. Mr. Krishnan did a solo flight to Cuddapah his first solo landing away. Mr. Mathews flew the Bangalore cross country test with the instructor and thereafter performed the flight to Cuddapah even as Mr. Krishnan had. Mr. Khan performed non-landing flights to Pondicherry, Gudur and Nellore in preparation for the test to Bangalore. Mr. Woodhouse of Tatas and Messrs. M. D. Sundararajan and Sundaram on Armistice night did the prescribed three night landings apiece to enable them to renew their 'B' licences for a further six months.

There was a solitary charter flight of the normal "A" to "B" type (and return) at the very beginning of the months by the instructor with Mr. Hodgson of Parry & Co., and one time Hony. Secretary of the Madras Flying Club, to Trivandrum. Later there was a charter to scatter a sack load of pink roses over the throng assembled at Ikkadu for the opening by H. E. the Governor of Madras of Miss Tweddle's new industrial hall. This was performed by Mr. Aserappa and the instructor. The diaphanous pink cloud descended slowly and ever expanding upon an enchanted crowd which, as the flowers began to fall amongst them, broke into a riot of scrambling. Photos of the new building were at the same time taken from the air.

On the last Sunday of the month a landing competition was held. There were eleven entrants and the winner, to every one's surprise, was Mr. N. T. Reddiar, almost the latest of the entrants to learn to fly and with the least flying experience. To him was presented the prize of a silver spoon amidst applause. Mr. Aserappa was one mark behind the winner and Mr. Ratnam came a good third.

On the last day of the month the club's advance guard for the Air Rally to be held at Karachi early in December set forth, Messrs. Sundaram and Saravanam in a Gipsy Moth proceeding by way of Hyderabad and Delhi. They succeeded in reaching Kamptee the same evening.



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KHALEELI MANSIONS MOUNT ROAD MADRAS

Mr. Paul T. Balasingham	Advanced dual.	Mr. Woodhouse	Advanced dual (by night)
Mr. N. T. Reddiar	"	Mr. Sundararajan	"
Mr. C. V. Mathews	" (cross country instructional).	Mr. V. Sundaram	"
		Mr. Nagarajan	Dual.
		Mr. Soundararajan	"
Mr. Mohamed Ismail Khan	"	Ceylonese:—	
Mr. J. D. Italia	" (cross country).	Mr. S. J. P. Fernando	Advanced dual (cross country).
Mr. K. S. Krishnan	"	Mr. Aserappa	"

CROSS COUNTRY FLIGHTS DURING THE MONTH OF NOVEMBER 1938

Date	Machine	Pilot	Passenger	Journey	Time
1-11-38	VT-AIL	Mr. Tyndale Biscoe	Mr. G. H. Hodgson	Madras-Trichy	1-25
	"	"	"	Trichy-Trivandrum	1-50
3-11-38	"	"	"	Trivandrum-Trichy	2-25
	"	"	"	Trichy-Madras	2-0
4-11-38	"	Aserappa	Tyndale Biscoe	Madras-Tirumalai-Arni and back	2-35
10-11-38	VT-ACU	Tyndale Biscoe	Mathews	Madras-Bangalore	2-30
	"	"	"	Bangalore-Madras	2-5
13-11-38	VT-ABH	Mohamed Ismail Khan	Nil	Madras-Pondicherry and back	2-10
14-11-38	"	K. S. Krishna	"	Madras-Cuddapah	1-55
	"	"	"	Cuddapah-Madras	2-5
16-11-38	"	Ismail Khan	"	Madras-Gudur and back without landing	2-20
19-11-38	"	"	"	Madras-Nellore and back without landing	2-50
20-11-38	VT-AIL	Aserappa	2 passengers	Madras-Bangalore	1-25
	"	"	"	Bangalore-Madras	1-45
21-11-38	VT-ABH	C. V. Mathews	Nil	Madras-Cuddapah	2-5
	"	"	"	Cuddapah-Madras	1-45
23-11-38	VT-AIL	Fernando	Tyndale Biscoe	Madras-Tirumalai-Arni and back without landing	2-30
29-11-38	VT-AJO	Italia	"	Madras-Tirumalai-Arni and back	2-30
	"	Balasingham	Nil	Madras-Pondicherry and back without landing	2-15
30-11-38	VT-ABH	Saravanam	V. Sundaram	Madras-Hyderabad-Kamptee	7-50

Bombay Flying Club

November Activities

THE Club Fleet has been busy throughout the month, principally occupied with dual instruction for the pupils of the season's 1st course. All members have gone solo, and on two occasions there were two first solos on one day.

A total of 216 hours 5 minutes flying was carried out during the month. This included one charter flight in the Club's Vega, to Nagpur and return.

On the 25th the Vega and one Moth flew up to Jaipur for the official opening of the State Club, the aircraft returning to Bombay on Monday the 28th.

Private aircraft owners carried out 52 hours 55 minutes flying in addition to the above mentioned flying in the Club aircraft, their machines being maintained by the Club.

The Engineering courses are full, and the 2nd Flying Course of the season is just opening and applicants are being considered, so those wishing to join should write in immediately.

U Z M

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SALES AND SERVICE GUIDE

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Hudson 112

MADRAS—B. R. Motors, Mount Road.

Austin Cars

COIMBATORE (& Branches)—Stanes Motors (S.I.) Ltd.

Humber Cars

BANGALORE—Automobiles Ltd.
MADRAS (& Branches)—Simpson & Co., Ltd.

Bedford Trucks

COIMBATORE—United Motors (Coimbatore) Ltd.
MADRAS—Heller & Co., 36 D, Mount Road.

Mercedes Benz Cars and Diesel Trucks

MADRAS—Heller & Co.

Buick Cars

COIMBATORE (& Branches)—Stanes Motors (S.I.) Ltd.
MADRAS (& Branches)—T. V. Sundram Iyengar & Sons Ltd.

M. G. Cars

MADRAS (& Branches)—Addison & Co., Ltd.

Chevrolet Cars and Trucks

BANGALORE—Automobiles Ltd.
COIMBATORE (& Branches)—Stanes Motors (S.I.) Ltd.
MADRAS (& Branches)—Simpson & Co., Ltd.
MADRAS (& Branches)—T. V. Sundram Iyengar & Sons Ltd.

Morris Cars

MADRAS (& Branches)—Addison & Co., Ltd.

Chrysler Cars

MADRAS (& Branches)—Addison & Co., Ltd.

Oldsmobile Trucks

MADRAS (& Branches)—Simpson & Co., Ltd.

Commer Trucks

BANGALORE—Automobiles Ltd.
MADRAS (& Branches)—Simpson & Co., Ltd.

Opel Cars

CALICUT—Stanes Motors (S. I.) Ltd.
COIMBATORE—United Motors (Coimbatore) Ltd.
MADRAS—Heller & Co., 36 D, Mount Road.
MADRAS (& Branches)—T. V. Sundram Iyengar & Sons Ltd.

Daimler and Lanchester Cars

MADRAS (& Branches)—Addison & Co., Ltd.

Plymouth Cars

MADRAS (& Branches)—Addison & Co., Ltd.

De Soto Cars

MADRAS (& Branches)—Addison & Co., Ltd.

Pontiac Cars

COIMBATORE (& Branches)—Stanes Motors (S.I.) Ltd.
MADRAS (& Branches)—Simpson & Co., Ltd.
MADRAS (& Branches)—T. V. Sundram Iyengar & Sons Ltd.

Dodge Cars and Trucks

MADRAS (& Branches)—Addison & Co., Ltd.

Triumph Motor Cycles

MADRAS (& Branches)—Addison & Co., Ltd.

Ford Cars and Trucks

MADRAS—Gordon Woodroffe (Motors) Ltd.

Hillman Cars

BANGALORE—Automobiles Ltd.
MADRAS (& Branches)—Simpson & Co., Ltd.

Vauxhall Cars

COIMBATORE (& Branches)—Stanes Motors (S.I.) Ltd.
MADRAS (& Branches)—Simpson & Co., Ltd.
MADRAS (& Branches)—T. V. Sundram Iyengar & Sons Ltd.