

South India Motor
Owner

pl-1

NO.1.2

August, September-1929



32
13m21, N29
N29.1.1-2
162217

The

SOUTH INDIA

MOTOR OWNER

3-SEP 1929

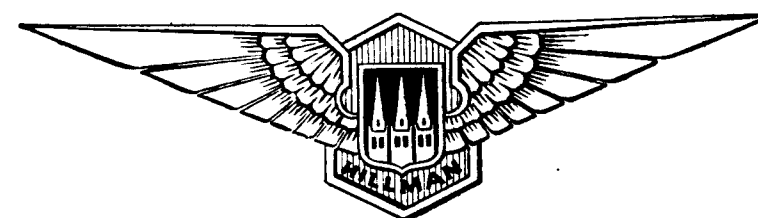
SINGLE COPIES

As. 8.

August, 1929.

Vol. I. No. 1.

299



HILLMAN

Incomparably the finest British Cars for India.

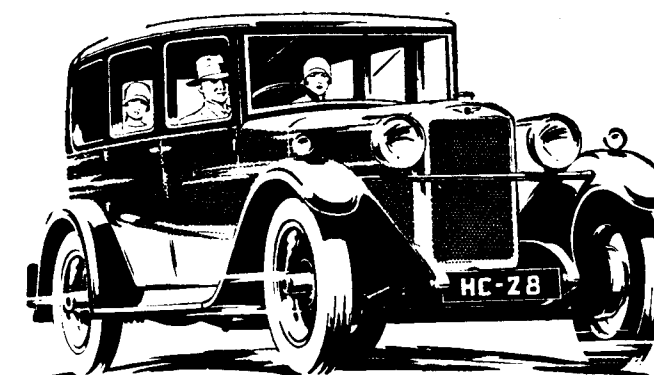
Entirely revolutionizing all previous ideas of speed, performance and comfort.

Withal reasonably priced.

May we send you further particulars of these remarkable cars.

Straight
Eight Saloon
Rs. 8,560

Straight
Eight Tourer
Rs. 7,500



14 H.P.
4-Cyl. Saloon
Rs. 6,500

14 H.P.
4-Cyl. Tourer
Rs. 5,650

Simpson & Co., Ltd.

MADRAS, OOTACAMUND AND TRICHINOPOLY.

The value of advertisement lies largely in the discretion the advertiser uses in choosing the medium whereby his announcement reaches the buying public—and it is quality of circulation which is of greater importance than quantity when the goods sold are luxury or high priced articles. This quality the South India Motor Owner offers to those who sell cars, because its circulation is confined to car owners or prospective owners in Southern India.

Full information on request

EASTERN TECHNICAL PUBLICATIONS

KHALEELI BUILDINGS, MOUNT ROAD

MADRAS

THE WORLD HAS A NEW AND FINER MOTOR CAR



For luxurious cross country travel— the NEW NASH "400"



YOUR first cross country trip in a new Nash "400" will convince you that the words "the world has a new and finer motor car" were well chosen.

Its new Twin Ignition motor gives you increased power and speed, with decreased fuel consumption.

Swung low to the road and fitted with big hydraulic shock absorbers, this car brings you in at the journey's end, relaxed and refreshed — never tired.

Its ease of steering and control makes driving a constant pleasure, no matter where you go or how long you drive.

Sole Distributors for Madras Presidency

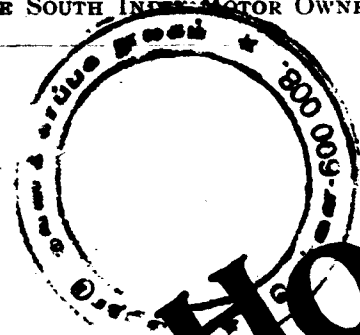
MOTOR RECONDITIONING STATION

161, Mount Road, Madras.

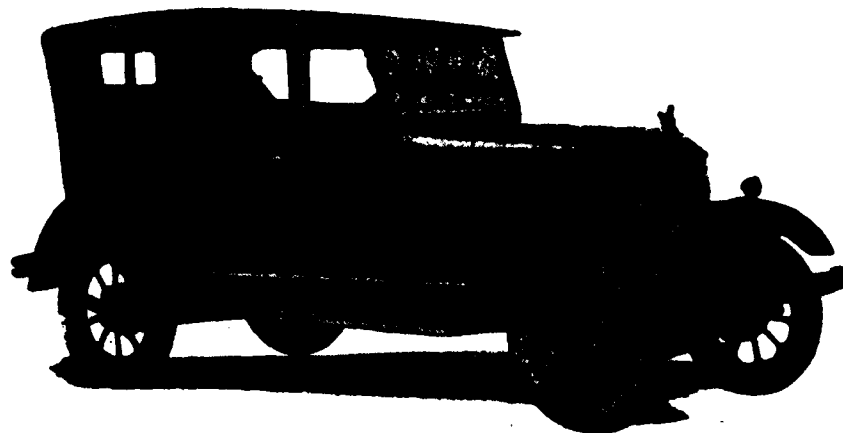
Tel. 'ALLMOTOR'

Tel. 3708.

(12-9 764)



**Honestly—
can you beat
a MORRIS?**



THE 14/28 H.P. MORRIS COWLEY

Go through the showrooms this year, and what do you find? There are cars much bigger than a Morris. Car that look slightly more luxurious—but costing a princely figure. There are cars, too, that claim to have climbed this and that freak hill.

But if you would buy a car that you can really trust, a car that will run year after year with an absolute minimum of attention and replacements, a car that is practical, up-to-date in every detail, comfortable to drive—and all this at moderate cost—what choice have you but a Morris?

For a Morris has all the workmanship and quality of materials in it that is usually found only in the highest priced cars. And, because of the world-wide demand, and the unrivalled resources of the Morris organization, it is possible to give all this (and all the latest equipment, too) at remarkably low prices.

... If you are out for real value, it's only a question of *which* Morris!

SOLE DISTRIBUTORS FOR SOUTHERN INDIA

ADDISON & CO., LTD.

MADRAS

Bangalore, Calicut, Trichinopoly and Kottayam.

Why not write for our leaflet describing the full range of MORRIS Cars? It will be forwarded gladly on receipt of your postcard.

259

A
MONTHLY
JOURNAL
DEVOTED TO THE
INTERESTS
OF
SOUTH INDIA
MOTOR VEHICLE
OWNERS

THE
SOUTH INDIA
**MOTOR
OWNER**

Proprietors

EASTERN TECHNICAL PUBLICATIONS
KHALEELI BUILDINGS, MOUNT ROAD, MADRAS

CAR
MANUFACTURERS
SETTING
THEMSELVES
A
NEW
STANDARD
PAGE
8

Vol. I, No. 1.

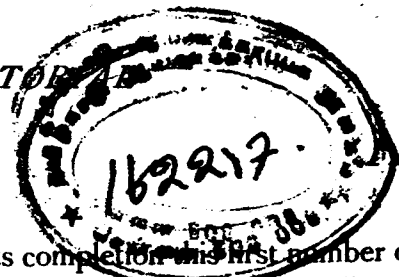
August, 1929

Price As. 8

Jottings from this Issue

PAGE	CONTENTS	PAGE	PAGE
8	Comfort considered the height of luxury a few years ago, quite commonplace to-day...	10	Lights dimmed gradually solve the dimming problem for both drivers ...
5	Tyres to-day help to reduce skidding to a minimum ...	15	A new device to help drivers who find difficulty in starting away on an incline ...
14	The arch enemy of the road builder is not so evident in Southern India ...	34	When a small mileage is run cheap vehicles may be an advantage commercially ...
18	Heat is just as important as speed in any calculation to ascertain the life of pneumatic tyres ...	20	An easy way of removing nickle dope ...
18	Car owners thoughtlessly waste thousands of gallons of petrol daily ...	14	Concrete roads refuse to degenerate into miniature switch-back railways ...
6	Every car owner should make a point of practising skidding and its prevention ...	32	Ford produces 2,00,000 a month ...
8	Line and colour become fetishes with motor manufacturers ...	38	A motor cycle test described ...
11	Empire auto-spirit from palm trees ...	21	Merger of manufacturing concerns benefit the motor owner ...
29	Which switch to switch I cannot for the life of me remember ...	28	Explorers Union demand all home comforts ...
40	Let us have more sports meetings for South Indian motorists ...	32	Used cars can as a general ruling be trusted to give good service if bought from a reputable firm ...
18	Metal polish cannot injure Chromium Plating ...	9	Cars at no advance in price are more beautiful, better furnished and cost less to run than ever before ...
11	We do not pay sufficient compliments to our batteries ...	11	Old ideas cannot be held up to the light of present day comparisons ...

EDITORIAL



About Ourselves

D 513 m 21, N 29

N 29.1-1-2

IN its completion this first number of *The South India Motor Owner* hardly suggests the amount of work and thought extended over many months which has been put into its production. It is modest in dimensions, this new journal, but a great deal of data has had to be sifted to provide the material from which it has been built. Simple as they may appear, many articles were several times rewritten before the final 'O.K.' entitled them to be put aside as ready for printing. Yet, though we have given a vast amount of care to the production of this first issue both in detail and as a whole, we are painfully cognizant of many shortcomings.

The building of this number—ever, of course, with an eye to future issues—has been a rich experience, teaching us much about this field in which we labour, more than a little about ourselves; and what and where were the weak spots in our initial conception—by the possession of which knowledge we shall improve.

We, therefore, put this first issue of *The South India Motor Owner* in the hands of our readers with the hope that, while it falls short of the ideals we had conceived for it, they will consider its production is nevertheless likely to be of assistance in building up the popularity of motoring in Southern India. Such was our intention when we commenced the task of its production, and if we have succeeded in creating even a new perspective, then we shall not have altogether failed of our purpose.

The finest thing that has come from this experience, however, is the measure of good

will expressed in the willingness of so many to help make this first number of *The South India Motor Owner* just what it ought to be. We hope that all who participated in any way will share our satisfaction in the knowledge that with their support and co-operation we have achieved at least a little of that which we—and they—so confidently expected. To all those friends who have put the seal of their approval upon our efforts to produce a Southern India motoring journal, and to those who have been so generous with their advertisements we are deeply grateful.

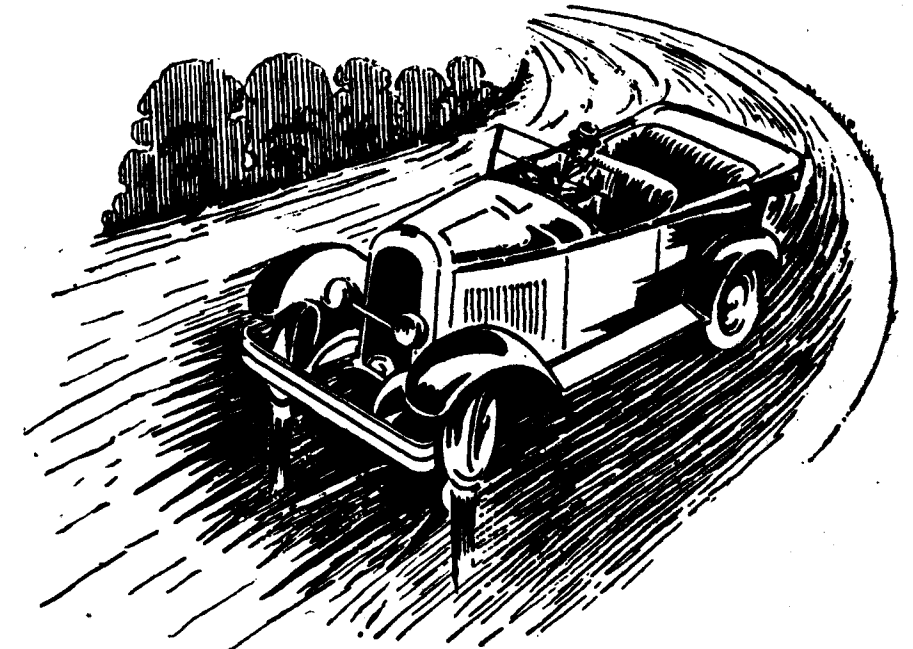
Without this encouragement at the outset *The South India Motor Owner* could never have been more than an idea in the back of our minds, but with continued support from old friends and new we hope to make this magazine of real service both to readers and advertisers.

To this end we propose to publish regularly articles from, and the views of experts on all matters which are of interest to South India's many motorists; we shall record the various performances of vehicles in the hands of their multitudinous owners; shall discuss new methods, new viewpoints and news; and the whole of our organization will strive to give readers every assistance toward obtaining the utmost pleasure and efficiency from their cars.

In general, we hope to conduct this magazine in such a practical manner that each publication date will be looked for with pleasurable anticipation. Whether all these things will be achieved remains to be seen, but we can assure our readers that a very keen organization will be doing its best to make good on this somewhat ambitious programme.

The Art of Skidding

The cause and prevention of skidding: an interesting topic discussed from a new angle :: ::



EVERY one who has driven a car must at some time or other have had the awful sensation which comes when the back of the car obviously wants to come 'way round to the front, and unless one instinctively does the right thing this tendency becomes worse—and anything may happen. All cars skid occasionally and it is very necessary that the driver should be prepared to deal effectively with the trouble whenever it may occur.

Why a Car Skids

Before going into the matter of skid prevention it is necessary that we should examine carefully the mechanics of the skid itself. A car may be taken, for ease of explanation, to consist primarily of two portions capable of movement independently of each other—a back axle and a front axle. Normally these two

parts behave themselves and the back axle follows the lead of the front one at the behest of the driver. It must be understood, however, that every deviation of the front wheels tends to spoil this harmony of action because the driver in turning the front wheels exerts a force on the rear axle which diverts it from the straight line of motion. If the back wheels have as much road adhesion as the front ones, then all will be well—they will follow without any trouble; but if the road adhesion is less than that of the front they will tend to continue along the straight course they have previously followed, with the result that the driver finds the back of the car doing exactly the reverse of what he expects.

Tyres to-day, however, go a long way to help reduce skidding to a minimum, as witness the screaming easily heard when one drives round

a corner too fast. This is the sign that the tyres are definitely keeping in check the tendency on the part of the rear wheels to keep a straight course. If a tyre in motion could be carefully examined it would be seen that on a straight course it would roughly resemble a condensed D. When a corner is rounded the rear wheel tyres must take on a form which is unsymmetrical induced by the lateral strain exerted by the road surface. It is this side strain which tears tyres from the wheels of speed cars when a corner is misjudged.

Given a certain concatenation of circumstances the *tendency* for the rear wheels to keep a straight course becomes so great as to become an actual fact—and the result is a pucca skid. These circumstances are usually all developed from one or more of the following causes which make road adhesion less than normal. A loose or sandy road surface; a wet or mud filmed road (both of which result in the wheel tyre having no hard surface to 'bite' upon); a change of direction made too suddenly; and, lastly, the violent application of brakes or violent acceleration. Each one of these is capable of causing a skid independent of the other, but as the normal thing for a driver to do, say, when he finds he has misjudged a corner,

is to apply the brakes, it will be seen that the first *tendency* to skid can be made actual fact by the driver's efforts to avoid other errors of perhaps a less dangerous nature.

Curing a Skid

The average driver wriggles out of a skid somehow or other but unless he has perfected his 'wriggling out' by constant unpremeditated practice he will one day fail to escape, and a serious accident may be the result. The best way of rectifying a skid, or the best method of schooling for so doing, is to *practice skidding*. A driver who can procure a skid at will and can then without hesitation right his car is assuredly the man who can deal effectively with an accidental skid.

The driver who has no knowledge of skidding is the most likely individual to become damaged when a skid occurs. If a driver has a real knowledge of the mechanics of the thing it must follow that he has a certain amount of confidence in himself to right a skid—and confidence is the one essential.

Every car owner should therefore make a point of practising skidding and its prevention. Take the car out on to some quiet road early one morning and set to work to make the car skid. First start away at about eighteen miles an hour, slip out the clutch, and brake violently with the hand brake, turning the wheel slightly to the right—and wait for what happens. The front wheels will have to turn with the wheel, but the rear wheels will try to keep straight on, and the general effect will be a sideways swing—the car lining up pretty nearly broadside across the road. It is of course necessary to choose a fairly wide road as a venue for your circus turn otherwise you may find yourself in the awkward position when you have to make about forty reverse-first gear changes before

you can drive away—to say nothing of the annoyance you may cause some other driver whom you keep waiting while you get back to a normal position. Even on a wide road drivers, particularly those coming up in the rear, should be watched for as they are certain to be unappreciative of your stunts if you perform a graceful skid five yards in front of their bumpers.

• How to Regain Control

Having learnt how to skid at varying speeds and under all conditions, you now have to learn how to stop the skid after getting into it. By this time you may have discovered for yourself that an equally effective skid can be procured by using the clutch as a brake. For purposes of experimental skidding the foot-brake is very nearly useless because on modern cars the four wheel brakes act equally on front and back wheels, which is not what we want for our manoeuvre. What is required is braking on the back wheels only and this is obtained by de-clutching when running about eighteen-twenty miles per hour and switching off the engine, then letting in the clutch whilst giving the wheel a slight turn to the right as before. To correct the skid which follows it is necessary to de-clutch again and turn the wheel towards the left sharply. This immediately corrects the skid, but until one becomes really practised the failing is over-correction. This whole stunt should be tried again and again until you can be certain to bring your car into its original path every time.

It will be noticed by the reader that uneven braking is the easiest way to procure a skid—the easiest way to cure by not braking at all. Instinct makes us all, when we find the car we are driving going anywhere but where we want it, eager to put on the brakes; and we now perhaps realize that nothing could be worse than the driver of a car braking when in a skid, more particularly if the car is one of the old models with two wheel brakes only.

Make up Your Mind

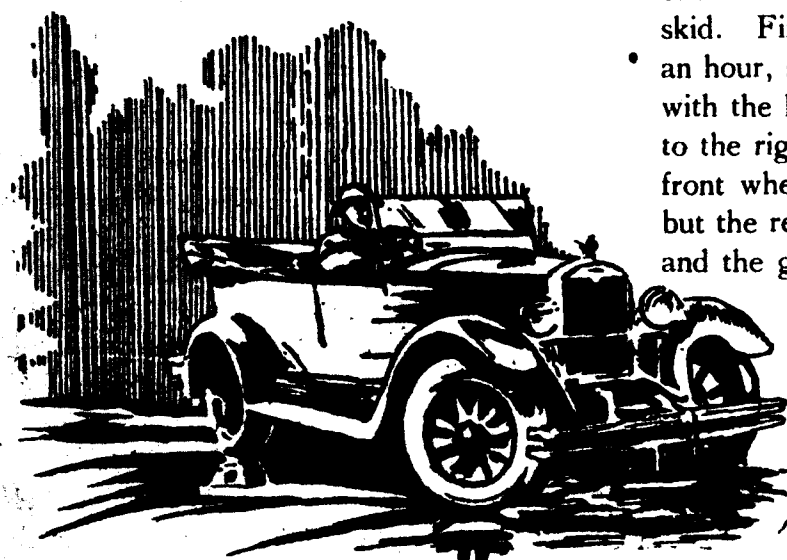
Every driver therefore who gets into an involuntary skid should firmly resolve not to touch the brake until the car has righted itself. Not until the driver has first directional control should the brake be touched or the clutch let in—rather let the car roll almost to a standstill than apply the brakes too soon.

It must be remembered, though, that over-correction is a trap which involves hasty drivers into even worse difficulties—sometimes into a real series of skids. Keep cool; don't brake; and correct gently but firmly.

The whole thing looks absurdly simple on paper, but there is not much chance of the novice skidder even keeping cool if he gets into a really bad slide. Good resolutions and experts' instructions are all forgotten when the back wheels try to play the lead, and the only sure way is to practise, and practise, skidding and its correction until one can take the car out on to the worst road, skid violently at thirty, and yet correct the trouble at once with confidence.

Once master the tricks of the skid and you remain its master. Pay no attention to skid correction, just be the man who 'wriggles out', and you will be liable at any time to come a nasty cropper—dangerous to yourself and dangerous to every other road user. Many professional drivers—testers and other skilled men—make it a rule always to test a car's skidding propensities as soon as possible, and many such men assert that if they know just how much a car is likely to skid, they feel confident in putting it to almost any test on any type of road.

In conclusion, there is nothing better in the way of advice for the prospective skidder than to urge him to practise until he can laugh to scorn almost any skid which comes his way.



... WRIGGLES OUT OF A SKID SOMEHOW OR OTHER ...

Progress in Car Comfort

Showing how all car manufacturers are setting themselves a new standard of beauty, comfort and safety

CARS are gradually evolving from the form which made them mere means of conveyance and are becoming productions which satisfy the eye of the most fastidious, both in beauty of line and of colour. British and American manufacturers have all set themselves a new standard which has been noticeably upheld during the past twelve months. In comfort too, the degree which was considered the height of luxury a few years ago is now quite common-place quality.



Brightness and Colour

With chromium plating, both objects have been attained—namely, labour-saving, and a bright and cheerful aspect. Once more we have cars which are resplendent in their shining armour, without entailing unnecessary labour and expense in upkeep. With the wide adoption of cellulose paint finish, labour in maintenance has been diminished; while with coming of the two-and-three-colour tone finishes, bright appearances have again been

attained with avoidance of the drawbacks ordinarily attached to brightness. This type of finish has had its influence upon body construction, and so upon line. Mouldings have in some cases been practically eliminated, and the tying effect usually secured by moulding lines is now obtained by a pronounced roll in the shell at the belt line. This plan is adopted by manufacturers of cars who are eager to improve appearance very considerably. The rolled edge of the body proper is prolonged in a flute at the side of the bonnet which is continued over the radiator. A feature of the body construction is the distinct separation of the superstructure, which, in effect, is mounted on the body proper. There is a separate inset panel, for contrasting colours, under each window. The one-piece wings are carried over with pronounced roll, and are finished off at the edge with a reinforcement that accentuates the outline. Trouble is even taken to make the wheels look smaller by fitting large aluminium hub caps. Line and colour are becoming fetishes with motor manufacturers, and provided they are not overdone and so become bizarre, this is not a bad thing.

The most outstanding characteristics of this new standard in beauty, safety and comfort are long, low body lines, neat colour schemes, ease and comfort of riding coupled with new, labour-saving gadgets wherever most needed.

A correspondent in *The Times* aptly sums up the whole trend of modern car design by saying that lines have been lengthened as much as possible, with the result that the tops of radiators have been raised. In many cases louvres, formerly vertically placed in the bonnet, are now horizontal, and bonnet and scuttle have been levelled up. Frames have been dropped, and thus, without sacrificing such important matters as ground and head clearance, long and low lines have been obtained. Valances have been done away with, and this elimination tends to distract the eye less and to give conformity to the general appearance of the car. Much attention has been paid also to body lines and curves, to the proportion of the sizes of doors and windows, to wheel appearance, and to the amount of overhang. The desire to lessen the amount of labour in the upkeep of the car was productive of a distinct dullness in the appearance of cars on account of the reduction of the number of bright external parts.

Marks of Progress

We come now to the question of comfort, and here, too, great progress has been made. Intimately connected with this quality is one of equal importance—namely, safety. The reduction in the width of the pillars in an enclosed car is an example. It provides a wider view, which is more pleasant for the passengers, while it reduces the range of 'blindness' for a driver. Pneumatic upholstery—and there is no more comfortable form of seating—capable of individual regulation and to a large extent self-adjusting at any given time, is being increasingly used by British manufacturers. There is also wider adoption of such small comfort features as arm-rests, while more attention is given to ventilation and interior lighting.

It is now almost universal practice to group the instruments together in front of the driver. They are indirectly lighted so that he can glance at his meters or gauges at night without being dazzled. The controls of the horn and the dipping or dimming headlamps or reflectors are often placed handily on the top of the steering wheel. Clear vision or one-piece screens have become popular. These conduce to safety, and provided they can be sufficiently opened to give direct vision of the road when required, they are to be recommended. Doors are wider, so that

easier entrance and exit are given. The handles of the doors and those for working the window glasses are in many cases more conveniently placed than formerly. Efforts are being made to reduce noise or undesirable heat from the mechanism. It is seldom now that fumes or odours are noticeable in a well-made closed car.

The American maker is backward in adapting the seating of his car to the individual. In Europe, the armchair or half-bucket type of seat is much employed in front and they can generally be quickly moved, even while in use. Some makers rightly fit a rear seat which can be altered to suit the different amounts of support which passengers of differing build require both by the seat and by the squab.

The real mark of progress in the motor industry is that cars which have been beautified, cost less to run, are better furnished, and are far more comfortable than hitherto are being offered at no advance in price and in some cases at less cost than ever before.

Here in Southern India where colour may without offence be employed liberally there is very little room for the dull and uninteresting car. We demand, and rightly so, that our cars be efficient, comfortable and pleasing to the eye—and it would appear that our ideas in this respect are more than justified when a mental comparison is made of the cars we used to drive with the cars we drive to-day.

Back Seat Philosophy

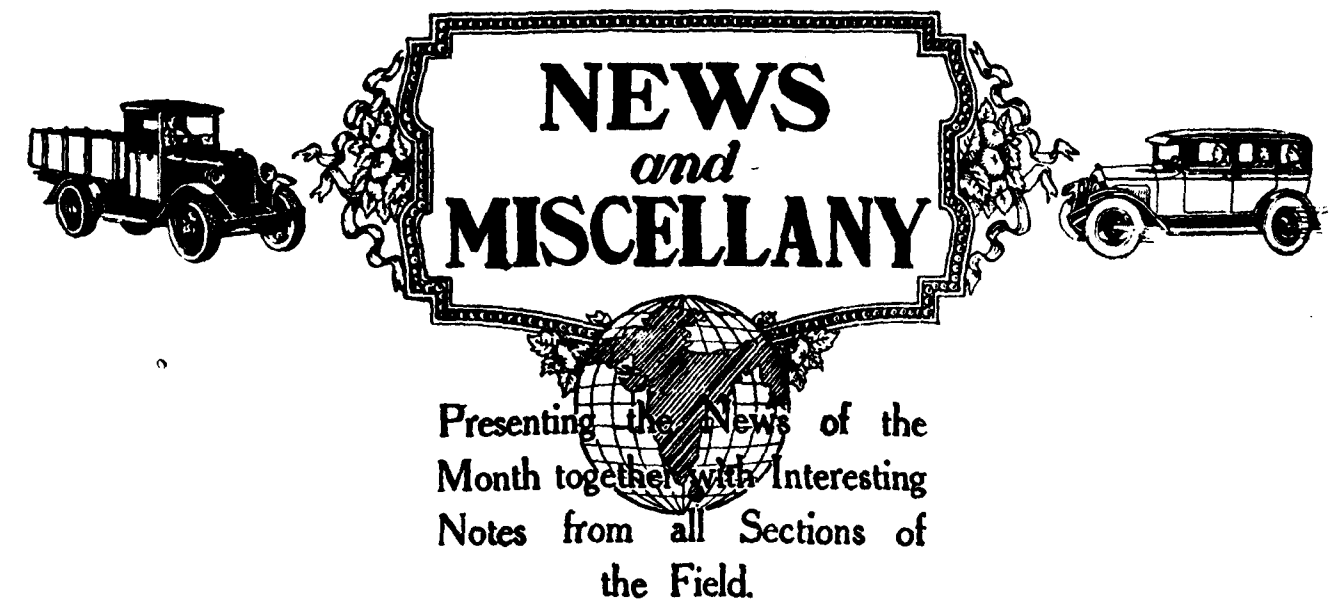
MY neighbour is of minor means, a man who guards the pence. Unnecessary outlay is, to him, a grave offence. Yet he has outlets for his cash that I do not admire, and aims at heights of affluence to which I can't aspire. For instance: He imagines that money may be made with ease by taking odds against the chance of certain of the gees, and when he drops a score of pounds on one left in the ruck, he moans across the fence to me of his 'confounded luck.' . . . It should have won, the horse he picked, and which he boldly backed, but something happened in the run—it couldn't come untracked. And so it failed, and finished back among the also-rans, upsetting all his fixed ideas and crumpling future plans. . . . To me he said: 'If you'd my luck a car you could not own. If it were raining silver-fish I could not pick a bone.' And this was, in a measure, true. He never seemed to win. His place was always in

the crowd of sports who dropped their tin. In business he is keen and cute; no sharp can take him down. On horses and their ways he is an ordinary clown, but still he puts the cash he makes on too slow-footed nags, to find its way, of course, into the beaming bookies' bags. . . . 'I don't know horse. I know I don't. No hard-earned coin of mine is staked on any gee-gee's back to give me cause to whine. I saved my pence till they were pounds, then bought myself a car and, with the wife and kids as freight, I travel near and far. It costs me little, gives them joy, puts ozone in my chest, to help me hump the load of life with energy and zest. And so, philosophising in my Morris, at mine ease. You cannot have it both ways—motor owning and the gees.'

The above has been 'lifted' from *Cheney Cheer*, a neat little Australian monthly issued by Messrs. S. A. Cheney Motors Ltd., Motor Dealers in South Australia and Victoria.

ANDHRA ENGINEERING CO., VIZAGAPATAM.
CHEVROLET
Sales and Service

ROW & BROS., GUNTUR.
CHEVROLET
Sales and Service



NEWS and MISCELLANY

Presenting the News of the
Month together with Interesting
Notes from all Sections of
the Field.

IT should be noted that the new Whippet Six in no way supersedes the Whippet Four, but that both are wonderfully improved cars of the latest design. Incidentally, it is interesting to read that a Whippet Four has recently completed an R.A.C. Trial from Land's End on top gear.

It is reported by one of our correspondents that the Singer Company are shortly going to enter the commercial vehicle field.

Where a car is lent, either by way of business or as an act of friendship, for any definite period of time, it is always wise to have definite terms in writing. There have been many cases in the courts which have arisen owing to a misunderstanding, especially over the question of insurance. Where the car is the subject of a hire-purchase agreement, other difficulties may arise, and it is a sound principle never to lend or borrow a car unless one is sure of the terms of the agreement.

A development which will almost certainly be widely copied has been started at the Piccadilly Circus Garage. Recently Miss Dorothy Dickson formally opened a dog creche where motorists can leave their dogs in proper care while they go about their own business. For a very moderate fee dogs can be left by the hour, day, week, or longer, in circumstances of complete comfort and security. The housing for the dogs is under the supervision of trained veterinary assistants.

The South African cricket team were, some short while ago, taken on a day tour of the Home counties

south of London. It was organized by Messrs. Rootes Ltd., who provided four new Hillman Straight Eight Saloons, a model which has been specially designed to appeal to India and the Dominions.

The route was one suggested by the Automobile Association and took the visitors to Windsor, through Windsor Great Park to Ascot, across Cobham Common to Guildford and thence eastwards past Newlands Corner with its famous view of Surrey and through the beautiful villages of Shere and Gomshall to Dorking, Reigate, Godstone, Oxted and Sevenoaks.

This trip was greatly appreciated by the cricketers, who, as a matter of fact, have had very little leisure since their arrival in England owing to the numerous matches which have been arranged. The younger members, who had not previously paid a visit to England, have had very little time and opportunities of seeing much of its delightful scenery, expressed themselves as highly delighted with London's countryside. The South Africans were favourably impressed and agreeably surprised with the performance of the Hillman Eights to which the route chosen by the Automobile Association gave many opportunities of demonstrating their excellent capabilities.

'Let us see some of these new Hillmans as soon as possible in South Africa' was one comment. And another was 'They certainly knock spots off many other cars we know'.

A photograph found elsewhere in this publication will illustrate the very successful outing given to the South African Cricket Team.

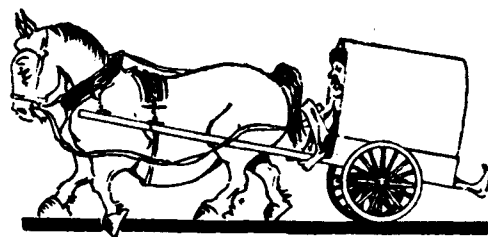
Cleanliness with Distilled Water

Last Sunday morning I remembered I had to put distilled water in the battery, and as my cleaner was busy with the greasing I decided to do the little job myself. Armed with the bottle, I yanked up the floor boards and proceeded to give the business the honour of my attention. Unfortunately, just at the crucial moment the smoke from my cheroot got into my eyes and I'm afraid the greater contents of the bottle went everywhere but in the battery. This was evident for there was a squeal from underneath the car and my cleaner scrambled out as if he had been scalded. At the same time his hurry caused him to bump his head on a particularly knobbly portion of the chassis. Believe me, it was an exceedingly sulky Madrasi who eventually satisfied himself it was only water which had been poured over his face.

I have decided to confine my Sunday mornings to my note book in future, or I may soon be looking for another cleaner—evidently mine isn't over-fond of distilled water.

Street Perils

The longer one lives—and drives—in Southern India the greater is the conviction that almost every other person who uses the road is an honorary member of the Suicide Club. In America, these road users with suicidal tendencies are called 'jay walkers'—but I cannot



A PONY AND A LARGE JUTKA

help but think I have heard much more expressive names than that! Only the other day I had a really instructive experience. My car was standing outside a well-known Madras shop, myself in the driving seat awaiting a friend who was inside the shop. Without the slightest warning a large jutka drawn by a small pony crashed right into my

rear wing, removing a lot of paint and badly damaging the mud-guard itself. My Tamil is weak, but I did my best to tell the driver just what I thought about him—and he did not seem to mind.

On another occasion a cyclist riding quite normally suddenly took fright when he heard my warning toot of the horn, and with a series of zig-zag manoeuvres he tried his best to make contact with my bumpers. My brakes, however, are pretty good and I was able to save him from himself.

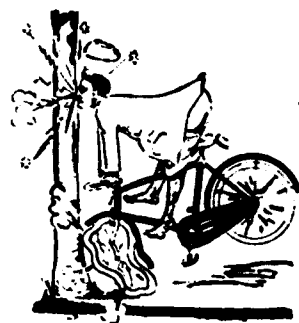
Not content with one miraculous escape, he concluded his rough riding by charging a handy tree, thereby damaging both himself and his cycle.

It is amazing that there are not many more really serious accidents when it is considered how utterly devoid of road-sense are so many Southern India people. I wonder whether good posters in Tamil, Telugu, etc., might be useful as a means of educating pedestrians to the necessity of careful road using.

The Pilfering Nuisance

Nothing seems to be too small for the person who devotes his attention to petty theft from standing cars. Tail-lamp glasses, aluminium numbers, horn bulbs and so on are quite everyday things to lose, but one cannot quite understand the idea prompting even a coolie to take the fastening studs from upholstery—and yet this happened to me the other evening.

The unfortunate part about the whole business is that the cases are too petty to warrant calling the attention of the police—and so it continues to be the fashion to allow all pilfering to go unreported, which to me savours of encouragement! If everybody made a point of notifying the police of every petty theft, the police would eventually realise that prevention is infinitely preferable to innumerable complaints.



'CHARGING A HANDY TREE'



For More Years and More Miles

Dodge Brothers Trucks and Buses are famous for their simplicity of design, ruggedness of construction and the high-grade material of which they are built.

These features represent basic value. Dodge Brothers, always vigilant for improvement, have augmented this base value with 6-cylinder engines and 4-wheel brakes—and 4-speed transmissions in the heavier chassis.

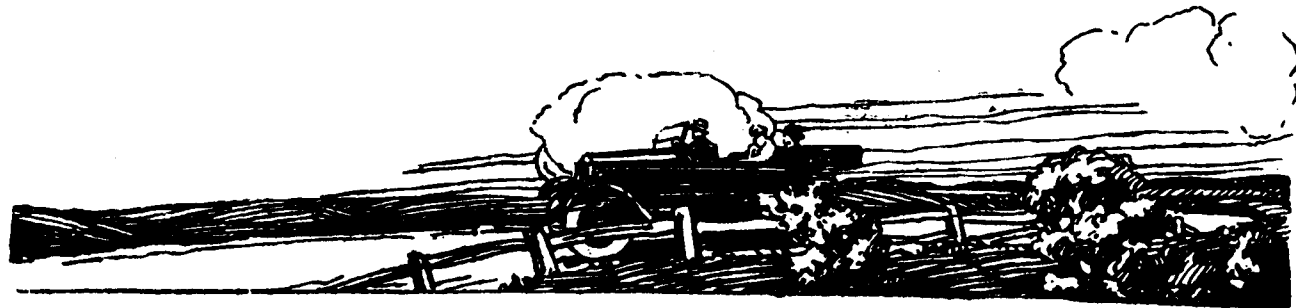
Owners, as a result, testify to their profitable operation year after year—wherever goods or people are carried.

ADDISON & CO., LTD.,

MADRAS, BANGALORE, CALICUT, TRICHINOPOLY AND KOTTAYAM

Dodge Brothers Trucks and Buses

Indian Roads of the Future



The concrete road and how it would solve our highway difficulties

IF there is one subject in which every motorist takes an increasing and unanimous interest, it is the subject of roads. Motorists in Southern India can safely be said to contribute by far the greater portion of the money which is spent annually on road making and road repair—yet what do they get for their money? Either a road so pot-holed and loose surfaced that a journey over it is a never ending succession of jolts, jars and skids, or else a road so primitive that it is often much more comfortable to ride with the near side wheels well off the beaten track. In our larger cities and towns, of course, the main roads leave little to be desired except that they provide during the monsoon a surface so slippery that a drive becomes a series of more or less graceful skids.

It will be agreed by the majority of motorists that what is really required is a road that not only refuses to degenerate into a miniature switch back railway, but also refrains from taking a malicious advantage in skidding all its users into each other or a conveniently adjacent ditch. Such a road would merit serious consideration from the motoring world in general.

The modern concrete road is advocated by many engineers as the road which fulfils all these requirements—it is noiseless, dustless, non-slipping, easily cleansed, suited to all types of traffic, and whilst having a surface affording easy traction it is not subject to deformation in the form of waving or corrugation.

The concrete road must not be confused with those roads which have concrete merely for their foundations—this method of road making is now almost universal and calls for no comment beyond the fact

that it is this type of road which provides the slippery surface about which so much complaint is raised.

The all concrete road however is judged by many engineers to provide the solution to most of the problems which confront road builders who have to provide highways for all classes of traffic. There are many such roads in Europe and still more in America—the earlier constructions were very crude, being merely plain unsurfaced concrete, unreinforced and mixed very haphazardly. The modern concrete road is nearly always reinforced by one of the several methods now in use, and will also be skin-surfaced. This is a very thin surface consisting usually of tar and chippings, and suffices to detract from the bare, uncompromising rigidity that characterises plain concrete, and, in addition, acts as a shock absorber between traffic and concrete.

Summarised, the advantages of the all concrete road are that:—

1. It is smooth, but *not slippery* and offers but little resistance to tractive effort.
2. It is clean, gives off little dust and allows water to flow away readily.
3. Visibility is good at night, and glare is reduced by skin-surfacing.

Here in Southern India the laying of concrete roads could easily be accomplished—material and labour is cheap, and we have not that arch enemy of the road maker in our midst—the road breaker. There are no gas mains, no underground electric mains, no water works to speak of who can delve in our new patch of road. In the United States of America and Europe as soon as a new road is made the road breaker

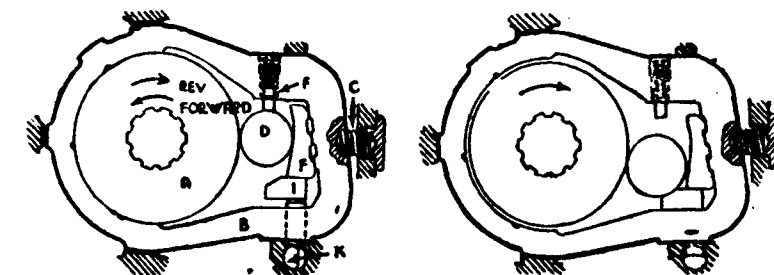
comes along and is immediately seized with a desire to dig holes in it. Naturally, if we did seriously begin the construction of first class new roads it would be the wisest thing to do as is done in some parts of America—forbid any tampering with a new road at least five years after its construction. The laying down of concrete roads is increasing all over the world. As they cannot be surpassed for

vehicular traffic, and as the number of people in Southern India using mechanical transport increases day by day, it seems distinctly feasible that our roads may soon be seriously under consideration both as to their inadequacy and their construction.

It will be of interest to observe which local highway authority attempts a really up-to-date main road in concrete.

To Prevent that Running Back

An Interesting Mechanism Now Used on Two American Cars



(Left) The positions taken up by the parts when the car tries to run back.
(Right) Free position when reverse gear is engaged (see text).

THAT well-known English journal *The Motor* has frequently advocated the use of some simple device on a car which would positively prevent the vehicle from running backwards down hill. Running back, following a missed gear-change, has caused quite a number of accidents, and apart from this aspect of the case, the tricky work involved in manipulating the clutch, hand brake and accelerator pedal simultaneously when starting away uphill is beyond the capabilities of many drivers if the gradient is really severe. Even in towns, on quite mild slopes, one frequently sees the inexperienced driver allowing his car to run back for a yard or so before getting away, and under the crowded traffic conditions which now obtain this may easily cause damage to wings, a rear petrol tank or the radiator of the car behind.

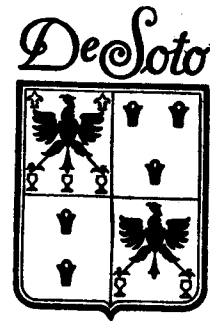
With the Millam free wheel, a feature of which is the incorporation of a spragging device to prevent the car from running backwards, matters are so arranged that engagement of reverse gear automatically locks the free wheel and at the same time releases the sprag. Now comes the news that two American cars—the Stutz and the Peerless—are being fitted with a spragging device placed behind the gearbox which is termed a 'no-back' mechanism, the word 'sprag' being, apparently, unknown in America.

Permits Reversing

This device is actually produced by the Detroit Gear and Machine Co., and is so arranged that it is thrown out of action when reverse is engaged; we are now able to give a description of the mechanism.

The diagrammatic drawing reproduced shows the device viewed from the back of the gearbox, the drum (A) being driven from the main gearshaft. When the car is running forwards the rotation of the drum tends to move the roller (D) upwards and takes place quite freely, the spring (C) pushing the cage (B) to the left, clear of the drum. If the car commences to run back the reversal of rotation of the drum carries the roller downwards against the wedge (F), which in turn is located by the stop (I), and the cage moves slightly to the right until it meets the drum. Consequently, a jamming action is produced which holds the car. It will be understood that the cage (B) is held by guides formed in the gearbox casting in such a way that it can slide laterally but cannot rotate.

When reverse gear is engaged, the cam (K) turns through 90 degrees, allowing the stop (I) to drop downwards. The wedge (F) also drops and can then move to the right owing to the provision of slots, so leaving the roller perfectly free and allowing the drum to rotate without opposition. At the same time the spring shifts the cage to the left.

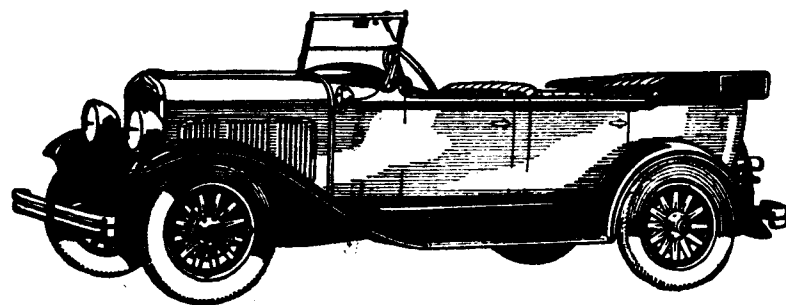


DE SOTO SIX

CHRYSLER MOTORS PRODUCT

CHRYSLER'S MASTERPIECE

AN INCOMPARABLE
LOW PRICED SIX
NOW ON VIEW



ASK FOR DEMONSTRATION

SOLE DISTRIBUTORS FOR SOUTH INDIA

JONES & CO., MADRAS.

Readers of the 'South India Motor Owner'

are invited to send their interesting photographs for publication on this page. These photos have not necessarily to have a motoring interest, but of course such as have will be of all the more interest to our greater number of readers. All such photographs which are

published here or elsewhere in the Journal will be paid for at the rate of Rs. 5 a



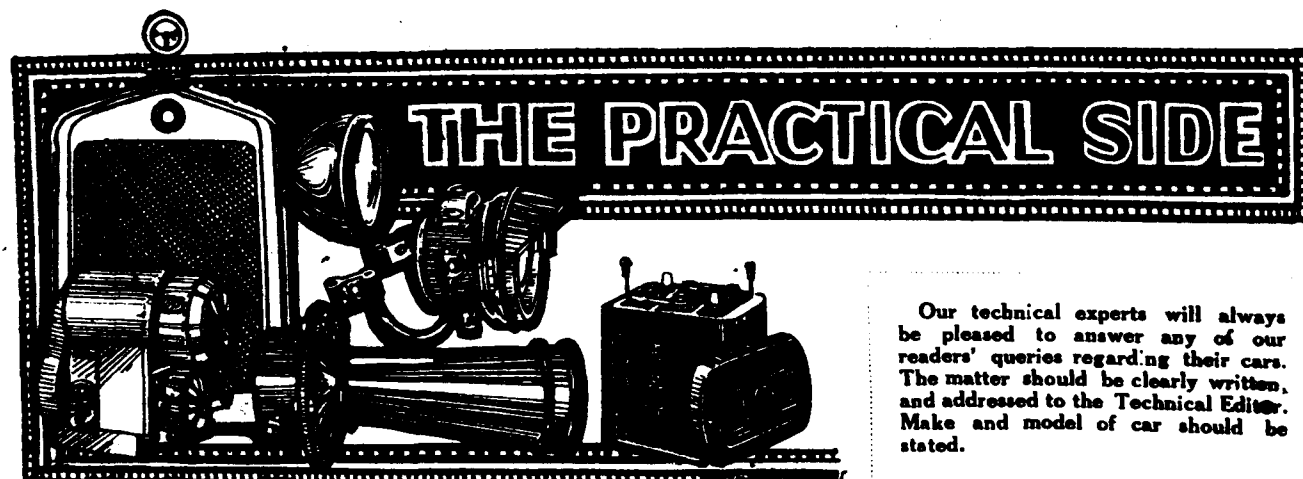
The Old and the New—Typical ancient and modern Madras transport.

photograph. Many Southern India motorists who are keen photographers, must have pictorial records which will help many others to decide which places of interest to visit in their cars. If we have the support of our readers in this matter, we feel our picture page can be of real assistance to many who have hitherto not used their cars to the best advantage, because they have no knowledge of the places of interest within easy reach of our bigger cities and towns.



Bullock Carts and Rickshaws—Two big hindrances to the progress of motoring in S. India.





Our technical experts will always be pleased to answer any of our readers' queries regarding their cars. The matter should be clearly written, and addressed to the Technical Editor. Make and model of car should be stated.

Chromium Needs No Polish

NOW that chromium plating is becoming almost standard many firms are issuing instructions that metal polish should not be used in cleaning the plated parts, but that all they require is slight rubbing with a damp chamois leather, polishing afterwards with a dry cloth.

This has been the obvious cause of a rumour that metal polishes are actually detrimental to chromium plating, but this has been emphatically denied by experts. There is no acid in any known polish which can do the slightest harm, and the film of chromium is far too hard to be affected by fine abrasive or any other ingredient in the polish.

In fact the use of polish is sheer waste of time—readers of the *South India Motor Owner* are advised to put their cleaners on some other job—they would be much better employed looking over the tyres, for instance!

Valve Clearances

The correct valve clearances for 1929 Ariels motorcycles are:—Side valve, inlet .002 in., exhaust .004 in.; O.H.V., neither the inlet nor the exhaust valves should show any appreciable clearance. It is as well to note however that these figures apply only when the engine is cold.

The Effect of Heat on Tyres

It has been definitely proved that heat is just as important as speed in any calculation to ascertain the life of pneumatic tyres on vehicles. This is of interest to our readers because all tyres used in South India

have of necessity to run at a greater temperature than would be the case, say, in Europe. How important is this heat factor can be gauged from the fact that recent American experiments has shown that a tyre running regularly at 20 m.p.h. at a temperature of 40 degrees Centigrade, has an effective life of 10,000 miles. The same tyre at a temperature of 60 degrees Centigrade, will last only 5,500 miles. The reduction now becomes more rapid; at 80 degrees the life is reduced to 3,200 miles and at 100 degrees to only 2,000 miles.

As the life of a tyre diminishes as the speed rises, it will be seen that at 40 m.p.h. a tyre will last 7,000 miles at 40 degrees, 3,800 miles at 60 degrees, 2,500, at 80 degrees and a mere 1,500 miles at 100 degrees.

Too Much Tickling

Few car owners realise that every time the carburettor is flooded excessively they waste a great deal of petrol—and how often waste occurs can be judged from the fact that most motorists jerk the float up and down until petrol actually appears and splashes over the engine.

If every car owner wastes by this means no more than a teaspoonful of petrol a day this must make approximately a gallon over the course of a year—and if a million car owners follow this example every day the loss will amount to two thousand gallons daily—and wise men are talking of a 'petrol shortage'!

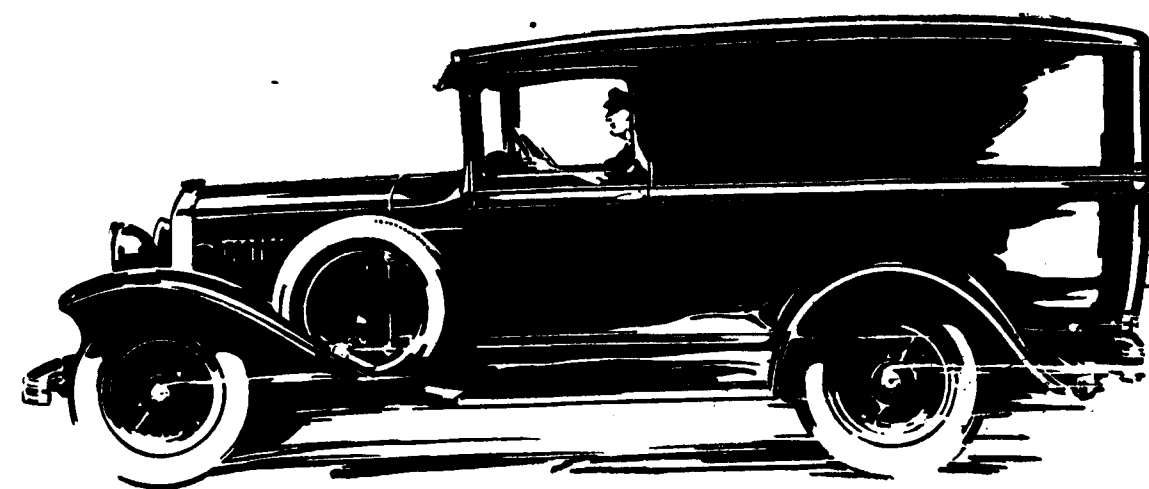
The whole point is that excessive flooding is entirely unnecessary because in this climate the engine of a car is always warm enough to start without it. Even in the hills, one flooding when starting early in the morning should be quite sufficient.

CHRYSLER FARGO COMMERCIAL CARS

PACKET CLIPPER FREIGHTER

14-15 SEATER 18-19 SEATER 21-23 SEATER

LET YOUR NEXT BUS BE A FARGO



CALL FOR A DEMONSTRATION

SOLE DISTRIBUTORS IN SOUTH INDIA

JONES & CO., MADRAS.

The Practical Side—(contd.)

If you want to save the world's supply of petrol, just 'stop your tickling.. Jock'.

Think of the Inside, Too

Do not neglect the internal woodwork of your car. An occasional rub over with a spot or two of furniture polish will preserve its surface and conceal the inevitable scratches. Both metal and wooden instrument boards look all the better for similar treatment.

A Sticking Valve

Misfiring is not always caused by the points of a sparking plug becoming fouled by carbon and oil. A more common cause is a sticking valve. What happens is that oil settles on the valve stem and becomes hard, preventing the valve closing properly. This upsets the compression in the cylinder to which it belongs. The mixture sometimes blows back in the carburetter, owing to late firing, which happens when the mixture is 'weak,' or may simply result in the characteristic engine thump and loss of power which is the usual intimation the driver has of one cylinder misfiring.

The remedy is to expose the valve stem by removing the cover plate and to lift the valve by means of the flat blade of a screwdriver or similar tool and then to clean the stem, petrol being useful for this purpose. Sometimes a squirt of petrol or kerosene while the engine is running will do the trick, as the valve often has a small amount of movement which soon enables it, thus assisted, to free itself of the carbon. If neglected, in the case of an exhaust valve, the head may be burnt, in which case it will not seat properly until it and its seating have been reground.

Cleaning off Nickel 'Dope'

Drivers who have become tired of constantly cleaning nickel work often have the bright parts of the car such as lamps and handles covered with one of the numerous 'dopes' sold for the purpose. This serves very well for a time but tends to become discoloured and streaky after a period. The difficulty then is to remove the old 'dope' prior to applying a new coat. Turpentine and methylated spirits are useless because the film is really a hard shell of celluloid, which is not soluble in these liquids. The best way to remove this celluloid film is to apply amyl acetate together with a mild abrasive such as rouge. This usually brings the desired result, except in those

cases where the 'dope' is not of celluloid base. In this event it is best to apply to the dope makers as they can often supply the correct solvent for removing it.

Preventing Mirror Dazzle

Many drivers complain that driving mirrors are a great nuisance during night running, because the headlights of an overtaking car are reflected directly into the driver's eyes if the mirror is correctly set to serve its purpose as a warning of overtaking vehicles. With inside mirrors the matter is easily remedied by changing the angle of the mirror, but this then does away with the gadgets' usefulness. A more satisfactory method is to have a cover of thin cloth or oiled silk made, which by means of elastic will fit easily over the mirror. This effectively prevents any dazzle from worrying the driver but at the same time enables him to see clearly any headlights' reflection. Naturally, the material must not be so thick as to prevent lights being seen, but must be of such a degree of opacity as will effectively prevent dazzle.

Lamp Setting is Simple

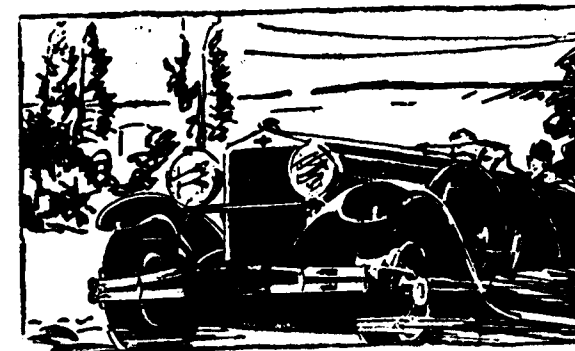
The road-testing of cars is done in the daytime, as a general rule. Consequently it often happens that the head-lamps are not 'set' quite correctly. In most cases the adjustments is a very simple one and the matter of only a few minutes with a wrench. Choose a long straight road, preferably narrow and bordered by trees. This enables the edges of the lights to be seen quite easily. Focus each lamp so that each gives its maximum illumination of the centre and sides of the road. But to get the beams properly directed makes all the difference to the pleasure and safety of night driving, and this is a job to which the owner of a new car is recommended to give attention.

Your Hand Throttle

There is no surer way of spoiling the running of a car than by allowing the hand throttle to be set so that, when idling, the engine goes round at an excessive speed. The idling revolutions should be kept as low as possible consistent with freedom from the liability of stopping. The engine that 'dies' quickly when the throttle pedal is released is a great simplifier of gear-changing.

The Value of Amalgamation

A brief explanation of the advantage to motorists which can be effected by the mergers of big car manufacturing concerns so common to-day



THE average motorist has sufficient troubles of his own without caring overmuch about the troubles which beset the car manufacturer, and all that the motorist worries about when he reads of the amalgamation of two big automobile makers, is whether he will get a better spares service than hitherto. Yet these mergers often mean much more to the motorist than he realizes, and he who takes the view that fusions of manufacturing concerns will eventually means less service has not the perception generally credited to the average motorist. Only the other day one of my acquaintances suggested to me that the merger of the Hillman, Humber and Commer concerns would do no good whatever. He said the time would come when he would only have five or six makes of car to choose from, and then later all the amalgamated groups would get together, put up their prices, and duly hold him up to ransom.

Now, as a matter of fact this motorist is not alone in his opinion. He, together with a considerable section of the motoring public, fails to appreciate what these co-ordinations of interests mean to himself, and thinks about this form of development from quite the wrong angle.

My answer to the extraordinary nonsensical outburst just mentioned was to recommend my acquaintance to take a brief glance at what has been happening during the last few years in the motor manufacturing industry of the United States. Here, he would quickly

see amalgamation schemes of the most gigantic order have been carried out, with two very conspicuous results: (1) There have been just as many, if not more, cars for the public to choose from; (2) prices have gone down and quality has gone up.

Thus we are instantly brought face to face with the proposition that, if co-ordination of effort and control can lead to this result, it must without delay be adopted as their guiding policy by those car constructors who mean to exploit all markets.

That was undoubtedly one of the reasons which impelled the three great British firms I have named to form themselves into a single, united, entity. And it is something of which the motorist ought to be glad.

There is another point, too. Recent experience has shown that the firms which design their cars with an eye to co-ordinated demand, make the best cars for the use of the general motorist throughout the world. But of that point I will write another time, for it deserves at least four pages to itself.

Now the question arises, why should amalgamation improve the cars concerned? The answer is simple enough. Because amalgamation leads to the pooling of resources and to the free interchange of technical ideas and experience. It is a case of two heads being wiser than one.

Too true it is that when a staff of engineers work together for years on end they are apt to get into the state in which they cannot see the wood for the trees.

We will suppose that the A car has a distinctly stiff steering—in fact, always has had. The A people do not notice it, because they have got used to it. Also they are largely unacquainted with the B car, which has a beautifully light steering.

The B car has always had a brutally difficult gear change. But the B people are now inured to it and will not admit its faults. They do not realize that the A gear change is a miracle of ease.

A and B amalgamate. What is the result? There is a friendly duel of criticism and counter-criticism, and very soon the stiff steering of A and the bad gear box of B are things of the past. Here is substantial betterment achieved without cost to either party. It is simply a sharing-out of valuable information.

In matters of administration, service organization, and so forth, organizations can learn a lot from one another, and their combined efforts can mean not a decline in efficiency but a very great opportunity of raising the standard considerably higher than could ever be aspired to by solitary effort.

Zackaria Sait & Sons, Madras Road, Cuddapah.
CHEVROLET
Sales and Services

For the small subscription of Rs. 3 the 'South India Motor Owner' will be sent to you post free for twelve months—there is a simple form on page 47 which is easily filled in.

FAFNIR

BALL BEARING SPRING SHACKLES

No squeaks—No rattles—No sideways

New car comfort is now no longer a feature which fades as the miles roll by. The inevitable wear of shackles and consequent uncomfortable riding are things of the past if Fafnir Ball Bearing Spring Shackles are fitted to your car.

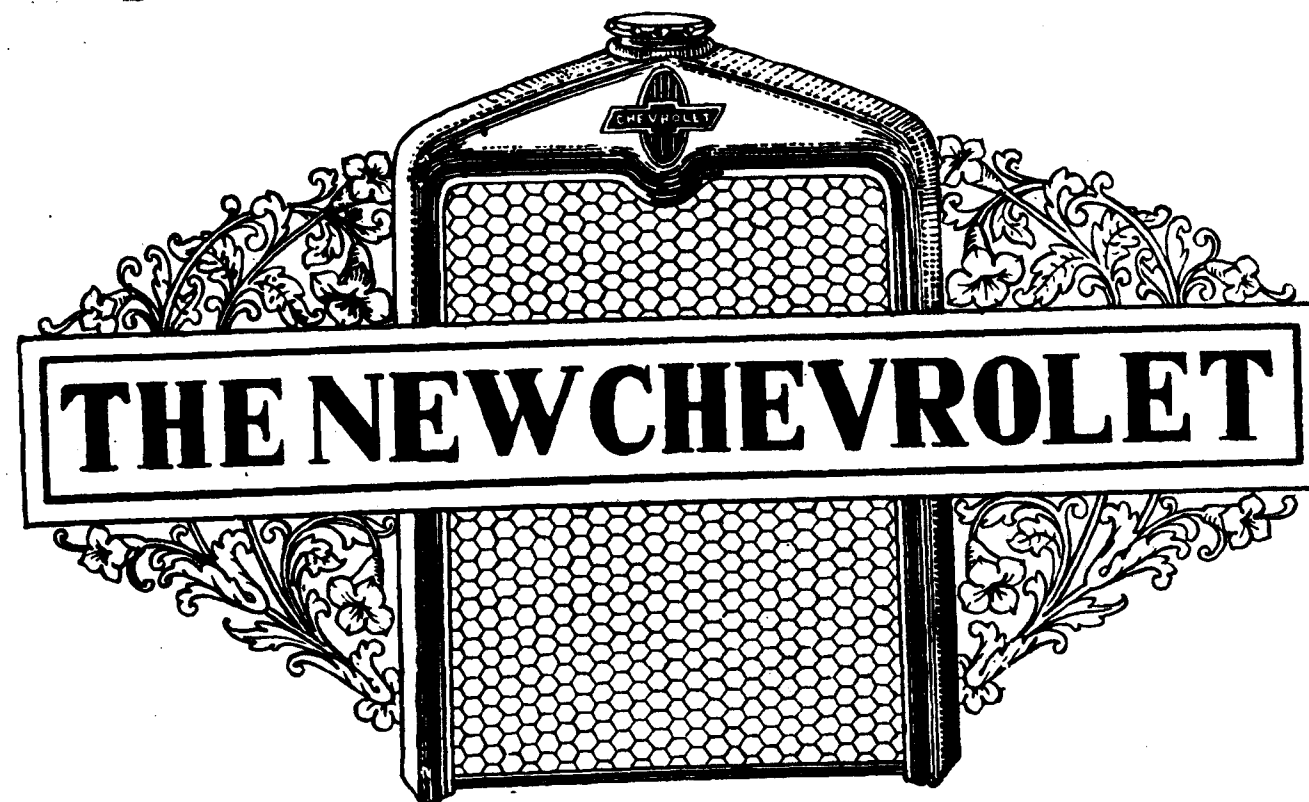


Shows the neat appearance of Fafnir shackles

Fafnir Shackles give freedom of spring action hitherto unknown—no sideways—no squeaks or rattles—and the shackle lubricant for the whole life of the car is sealed in each Fafnir Shackle—a vast advance over other systems of shackle lubrication.

Addison & Co., Ltd.

MADRAS, BANGALORE, CALICUT, TRICHINOPOLY AND KOTTAYAM



A Brief Description of General Motors' Low-priced Six

AFTER a really close examination of the new Chevrolet Six—both from the viewpoint of comfort and performance—one cannot help but reach the conclusion that it is an extraordinarily fine car, and though price must of necessity be taken into consideration in judging any car, in this case price adds to the good impression gained after the car had been tested.

There is a suppleness about the way the car handles, a nice responsiveness to the controlling hand, and a feeling of speed, power and solidity about its riding over typical Madras roads. Good as was the old Chevrolet four, there was always the feeling that one rode on it; with the new Six one seems to ride in—a difference which is subtle, but weighty indeed.

The car is pleasant to drive because the steering is light and has just the right degree of positiveness to ensure even the slightest touch being obeyed; the foot controls are intelligently placed, and the gears are such that the veriest novice could make almost any change confidently. The transmission is of the old Chevrolet sliding gear type which has been too well proved in the past to make radical changes. The Chevrolet dry disc clutch transmits all the engine power smoothly and operates with very light pedal pressure. This

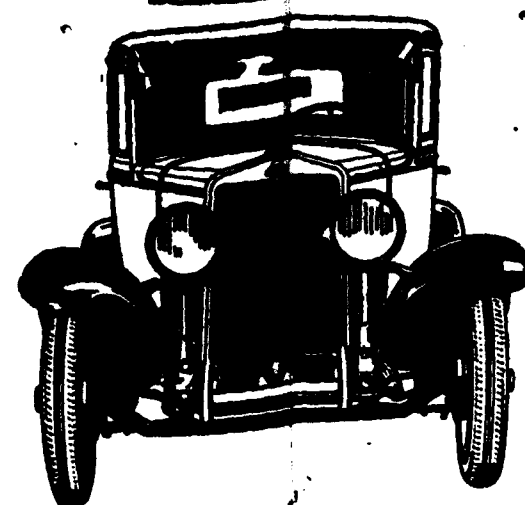
clutch has been so designed that it requires no lubrication and is self-adjusting. It is fully enclosed and protected against dust and dirt.

There is power in the engine—more than sufficient at quite high speeds—and the feeling of that little in reserve strengthens the impression that this is the best engine General Motors have ever built at the price. The power unit is of the overhead valve type with a bore and stroke of $3\frac{5}{16}'' \times 3\frac{1}{2}''$ giving a total cubic capacity of 194 inches against 171 in the old four cylinder engine. The new engine develops 46 horse power at 2,600 revolutions per minute which gives an added 32 per cent of power over its predecessor. The combustion chamber has been newly designed giving a high compression, non-detonating head. The camshaft is also of new design and the manufacturers have adopted a new type of spark plug for this engine.

Remarkable Acceleration

Exceptional acceleration qualities are to be noticed which is due to an innovation in the shape of a special accelerating pump. This device, when the accelerator pedal is suddenly depressed, forces a small quantity of fuel into the manifold of the carburettor which gives immediate power and a wonderful 'pick-up'.

for Economical Transportation



CHEVROLET
for
RELIABILITY

CHEVROLET
for
ENDURANCE

CHEVROLET
for
ECONOMY

CHEVROLET
for
COMFORT

SIX-CYLINDER ECONOMY 21.5 m.p.g. of PETROL

Read this unsolicited Testimonial

Srinivasa Clinic

B. V. SANJIVA RAO, M.B., B.S.,
VIZIANAGARAM.

VIZIANAGARAM,

22nd July, 1929.

DEAR SIR,

I have purchased your new model Chevrolet, on the 23rd June from your District Agents, Andhra Engineering Works, Vizianagaram. It is the first car in this district and has run 1,506 miles over rugged roads. There are 2 riverlets on either side of my town which have to be crossed at least once in a week for my moffusil work. Without the slightest trouble my car used to cross every time. Once we crossed the river in three feet of water while every other car failed. It is going so smoothly and noiseless that it is really a pleasure to have a drive in it. Perhaps it is the best to suit to our roads. It has consumed only 35 tins of petrol till now.

You can kindly use this for the information of the public.

Yours truly,

(Sd.) B. V. SANJIVA RAO, M.B., B.S.,
Medical Practitioner.

CHEVROLET
for
SPEED

CHEVROLET
for
SAFETY

SIMPSON & CO., LTD., MADRAS, OOTACAMUND AND TRICHINOPOLY.

The New Chevrolet—(contd.)

It should be clearly understood that because the new Chevrolet engine has six cylinders instead of four, the car is by no means correspondingly expensive. Numerous testimonials have been received by dealers acknowledging the wonderful economical powers of this new six cylinder Chevrolet. The reason for this economy is that although the new engine has a huge reserve power for all emergencies enabling one to obtain high speeds and faster acceleration than can be obtained by a 4 cylinder engine it does not follow that this power is always being used. In fact one will seldom have occasion to use all the power that this new six cylinder engine is capable of developing; but for emergency purposes the power is undoubtedly there—that is the important point.

We are informed that Chevrolet engineers have been designing and testing six cylinder engines for the past four years preparing for the day when this new low price Chevrolet Six has to be put before the motoring public. More than one hundred different six cylinder engines were designed and tested during these years and it was soon decided that by far the most suitable design was the over-head valve type already so thoroughly proved in the previous model four cylinder Chevrolets.

Before General Motors offered the new six cylinder Chevrolet to the public every feature of design and performance was thoroughly tested and proved by thousands of miles under the hardest driving conditions. Economy, speed, hill-climbing ability, acceleration, long life and freedom from repair were possible as a result of this research and experimental programme.

Under ordinary driving conditions the New Chevrolet Six is capable of easily reaching and maintaining a speed of sixty miles per hour, should such high speed be desired. The amount of petrol used in ordinary road work is claimed by the makers to be only about one gallon to twenty-four miles. This is remarkably low when around six cylinder performance is taken into consideration.

One reason for the economy of the Chevrolet is the smooth operation of the engine due largely to the automatic lubrication of the valve rockers. Quiet valve operation is obtained by thorough automatic lubrication of all moving valve parts. The oil pump delivers an ample quantity of oil to the valve mechanism. From the rocker arm shaft the oil is fed to the ball and socket joints at the upper end of the push rods by means of a wick which is saturated with oil. In this way oil is supplied to every point of contact and flows freely and constantly to all parts.

Another reason for the smooth, silent operation of the engine is that it has a crankshaft of unusually compact design weighing 46 lbs. Although it is carried on three main bearings, it is of very sturdy proportions and is dynamically balanced, with the result that the engine is particularly smooth even at the highest speeds.

Correct lubrication makes a great difference in upkeep cost and maintenance, and the lubrication system on the new Chevrolet is commendably complete and efficient for a car selling at this price.

In addition to the valve lubrication already described, the crank case oiling system is of special design ensuring a plentiful supply of oil to every bearing surface in the engine. At the base of the crank case is fitted a positive vane type oil pump which constantly carries a supply of oil to each throw of the crankshaft. The oil is also introduced inside the piston heads by means of the connecting rods where it effectively prevents overheating of the piston head mechanism. The piston heads themselves are, i.e., of Invar strut construction, they are made of a special alloy and to a special design which ensures both close fitting and constant clearance whether the engine is hot or cold.

There are several other exclusive advantages which make the Chevrolet more powerful on hills and harder wearing than other cars. One of these is a 'hotspot' manifold of special design. In order to obtain the maximum explosive force from the petrol which is put into the engines it is necessary that it is thoroughly vapourised. This manifold is heated by the exhaust gases leaving the engine and as the fuel comes through it is thoroughly vapourised and thus enabled to exert its utmost power when it reaches the piston chamber.

Exceptional buoyancy and riding comfort is secured by the careful design of the springs and the Chassis frame. This long, heavy frame extends well beyond the full length of the body, and is 150" in length having four rugged cross members. The exceptionally long springs are set parallel to the frame and are of semi-elliptic type, 36" long in front and 54" long at the rear. The braking system is of a four wheel design ensuring safety, quietness and positive action. The foot brake operates on all four wheels, front brakes of the internal expanding type and the rear of the contracting. The emergency brake is of the internal expanding type on the rear wheels only.

The new bodies are much larger and roomier than those in the predecessor and it will be found that owing to the increased leg room in the front seat there is complete comfort for the tallest of drivers. This is a particular point which should appeal to the owner-driver. The back seat too has a greater amount of leg room. A new feature is the folding windscreen which when the hood is in the down position and neatly booted, and the windscreen is folded down gives the car a very sporty appearance. All plated parts both in the exterior and the interior of the car are chromium plated. In fact nothing has been left undone to make the car as attractive as is possible. In the enclosed bodies a new feature is a front seat which is adjustable.

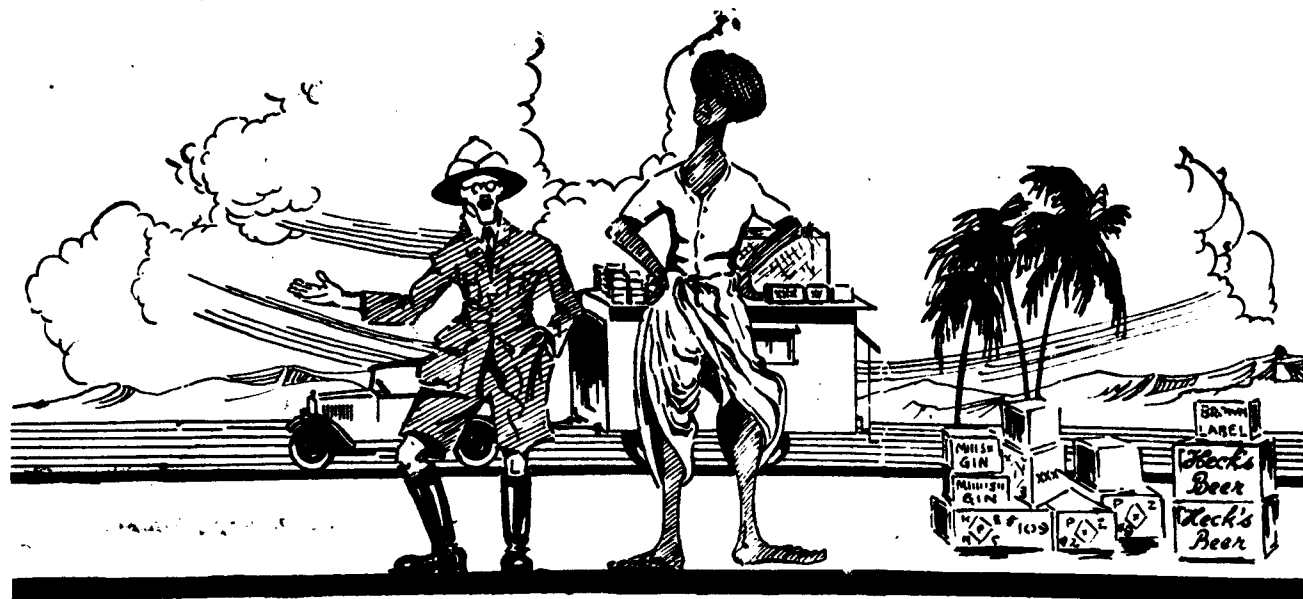
Messrs. Simpson & Co., who are the dealers for Chevrolets will be very pleased to give a trial run in the New Chevrolet Six to any readers of the *South India Motor Owner* without any obligation of purchase—an opportunity which prospective purchasers of cars should not neglect.



A FINE PHOTOGRAPH OF THE OLD NAWAB OF ARCOT'S PALACE, MADRAS.

THE CAR IS A DODGE VICTORY SIX SEDAN

A Motoring Pilgrim's Progress



Being a chronicle of his wanderings in the wilds

BY JOHN BUNION

IN the days of my early youth I read with awe and wondering the harrowing tale, 'Eric—or Little by Little'—a story which fired me with the ambition one day to write my own life story, and entitle it, 'Johnnie—or by Leaps and Bounds'. It is perhaps just as well that I have never had the opportunity because I feel that were I to write such a book the author of 'Eric' would, if he happened to read it, perspire more freely than is customary even in the place to which I am sure he has retired.

Ever since I was of spanking age I've had these queer ambitions, some of them more grotesque than others, and though I have achieved some of them, there are many others I have yet to reach. For instance my childhood days were filled with a desire to kill a maiden



'AMBITIOUS TO EXPLORE . . .'

aunt of mine, yet she still lives in Hackney, quite unaware that time has failed to dim the idea which was born so long ago.

Another ambition of mine has been to explore all the hitherto uncharted tracts of land throughout the globe, the one which always attracted me most being that vast and uncivilized territory which lies between Madras and Calicut.

Indeed, so little known is this land that geographers are quite undecided as to whether it is worth exploring or not—largely, I suspect due to the Explorer's Union remaining firm in their decision not to sanction any expedition unless their members are guaranteed all home comforts whilst away from their native land. In fact I believe the king or local chieftain of the land to be discovered has to sign a pretty

stiff agreement before an explorer enters his territory that everything of the best will be available—baths, hotels, right hand drive and all the other innumerable amenities of comparative civilization. Of course, one can but extend one's sympathy to those lands which remain undiscovered solely because of loose legislation and an unrestrainable and incurable practice such as cannibalism on the part of the inhabitants.

This being the case, there is undoubtedly a field for a free-lance explorer who is not afraid to face dangers, or to run away from natives whose chief desire is to make him feature as the meat portion of a stew.

It was, however, after reading an account of a journey through darkest Africa in a Baby Minor that I came suddenly to the conclusion that here was the very idea—the only reasonable means of transport which could be employed if the territory I have mentioned was to be successfully explored.

There was however one big fly in the lute—I mean rift in the ointment, and that was that I could not at that time drive a car. I confess this with shame, but the fact remains that even had I gone and bought my car and had the thing delivered at my door in a plain van I could not have driven it with any degree of accuracy. Perfectly frankly, I hardly knew one end of a car from another, and even to-day after months of practice I am decidedly rocky—my intentions are somewhat more intelligent than at one time, but my execution still leaves much to be desired.

Cecil—of whom more anon—has taught me the rudiments of the business but even now I have difficulty in stopping my car on a steep hill, and often have to run into a sign post, wall, village or other convenient obstacle. I have a bad habit, too, of treading heavily on the accelerator instead of the brake with the result that, I'm afraid, even my best friends frankly admit I'm no driver.

Why I cannot acquire the art I do not know. All I know is that I can't, no matter how hard I try, and the only thing from which I derive the slightest consolation is the thought that Julius Caesar probably couldn't play a trombone—if he could no one ever seems to hear about it, anyhow.

Immediately I step into a car I seem to lose



'THE MEAT PORTION OF A STEW.'

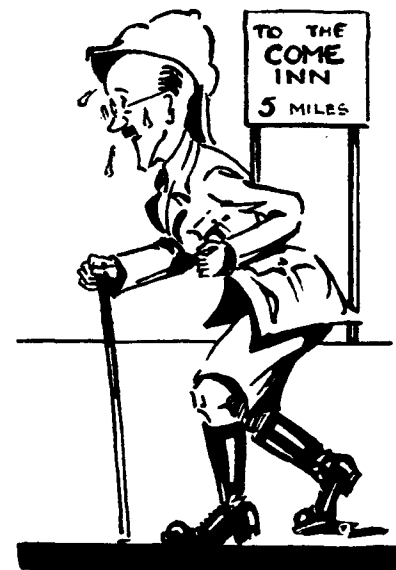
control of myself; all the little knobs and pedals and levers and things seem to have a demoralising effect upon me—if a thing has to be trodden on, I forget to do so; if a switch has to be switched, which switch to switch I can't for the life of me remember; and I inevitably twiddle when I shouldn't twiddle; stamp when I shouldn't stamp—in fact do all those things I ought not to have done, and leave undone the things I ought to have done. and though I seem miraculously to retain my health, the well-being of the car suffers considerably.

Naturally, I explained all this to the salesman who sold me the car I had chosen, and I decided to follow his advice to get a driver. As he explained, a car needs humouring for the first 50,000 miles, and my driving might ruin its constitution for life. So, thinking deeply on the matter, I got the sales chappie to select a perfectly reliable car, wrap it up, and send it to the bungalow. That was one thing settled anyway. All I had to do now was to find a driver and build a caravan, and then I could get on with my exploring.

I accordingly got in touch with a well known firm of caravan and bath chair manufacturers, ordering them to build a touring model caravan to my specification. This was very important because no explorer can afford to bumble off into the wilds unless he has made careful preparation regarding housing accommodation and so on, for nothing could be more unwise than to venture into a land well known to be devoid of hotels and breweries with no more iron rations than a pound of biscuits and a bottle of Evian water.

Many long nights, therefore, were spent in planning the interior equipment of my caravan, all of which was designed so as to afford the greatest possible comfort to a traveller many weary miles from food and drink—particularly drink.

The greatest possible care had to be taken in the construction of compact ice chests for carrying beer. More ice chests and almirahs for more beer, hooks for corkscrews and bottle openers, shelves for tumblers, and a special carbonating plant for making my own sodas—all had to be provided for. At the same time I



WEARY MILES FROM FOOD AND DRINK.

had to make provision for my other simple needs—my toothbrush and spare pyjamas were stowed away with my modest library, a Ruff's Guide and a box of chilblain ointment; my spare shirt was utilized most ingeniously as a curtain for the windows; whilst the other portions of my

wardrobe came in handy as draught excluders.

A large amount of room was also taken up in accommodating my scientific instruments and tools for archaeological and geological research. I had to take with me a compass, in case we found ourselves going in circles; a thermo-barograph, which is the latest gadget for boiling eggs, a sextant for sextanting; an electric hydrant for hydro electric development; a stomach pump in case we met cannibals; and a whole host of other useful apparatus.

You can well imagine then, that by the time we had finished everything inside the caravan there was hardly room for me to sneeze. However, as I only sneeze on Bank Holidays and Coronation Days that didn't matter very much. It was necessary for me to resign myself to

sleeping anywhere but inside the caravan, but I decided that this would present no difficulty because in the hills I could keep warm at night by sleeping under the car and letting the warm water from the radiator drip slowly upon my slumbering form; in the plains I could climb to the caravan roof (fitted with a neat mosquito net) and lie peacefully until morning with my head upon the spare petrol.

Yet I do not intend to tire my readers with a long and accurate list of my equipment and provisions—in fact I would not have given the details I have, save that it gives me the greatest pleasure to recall whilst writing all the numerous little incidents which occurred during the course of my preparations.

There is one tribute, however, which must be paid—and paid for—and this is to the various firms who supplied my supplies. In fact I would



'OPENED UP TO EXPECTATIONS.'

go so far as to say that out of the whole of my supplies I do not remember a solitary bottle which didn't open up to expectations. This is indeed a feather in the caps of the many distillers, brewers and aerated water manufacturers who so ably looked after the needs of my inner man. You can believe me that I often thought kindly of them as I drank my simple meals many miles from civilization and Spencers.

At the conclusion of my preparations I again bethought me of the necessity of procuring a

driver—preferably, of course, a man who could drive. After spending much money on advertising and touting around taxi stands I eventually obtained the services of a man in a manner unusual and peculiar.

Whilst walking down the road one evening I saw coming toward me a large truck which was behaving in rather a strange manner—going from side to side of the road, with a somewhat similar irregularity as I myself do occasionally when having dined too well. Suddenly this truck charged a lamp post, ran over two dogs, made a coolie run at a speed that would have left Nurmi standing; finally coming to rest with its radiator in a toddy shop.

The driver of the truck crawled quickly over the radiator, entered the toddy shop, and eventually emerged some fifteen minutes later looking less like the driver of the truck than before—a fact borne out by the way he spitefully kicked Lizzie's differential as he passed, cursing afterwards in fluent Tamil because of an ingrowing toenail.

Here then was the very man for me. I approached him, and a few tactful words convinced him that a journey into the wilds was infinitely preferable to a sojourn in the penitentiary. He leaped at the chance, and after he had finished leaping he lay down in the dust, first removing one of the dead dogs, and placed his neck beneath my foot as a token of eternal faithfulness. Unfortunately my mind wandered just at that moment and it was some few minutes later that I realized I was still standing on the fellow's neck. However, a hearty kick soon roused him from his coma.

I eventually concluded arrangements with him and he decided to leave his native heath and multitudinous relations for a wage of Rs. 20 a month.

All through my life I have made a point of never calling people by their names—which was just as well because this fellow's was absolutely unpronounceable, so I decided to call him Cecil. Let me say now I was decidedly lucky in choosing Cecil; I don't know whatever I should have done without him—perhaps I should have engaged someone else—but you can believe me Cecil was invaluable when difficult tasks had to

be accomplished and served me with a depth of devotion only hitherto attributed to rabbits for their young. In fact, for zeal, cheerfulness and politeness, Cecil reminded me of nothing so much as a professional debt collector. Though black and distinctly uncomely, Cecil's heart was as white as driven snow—that is to say, snow that has been driven over by every taxi in London.

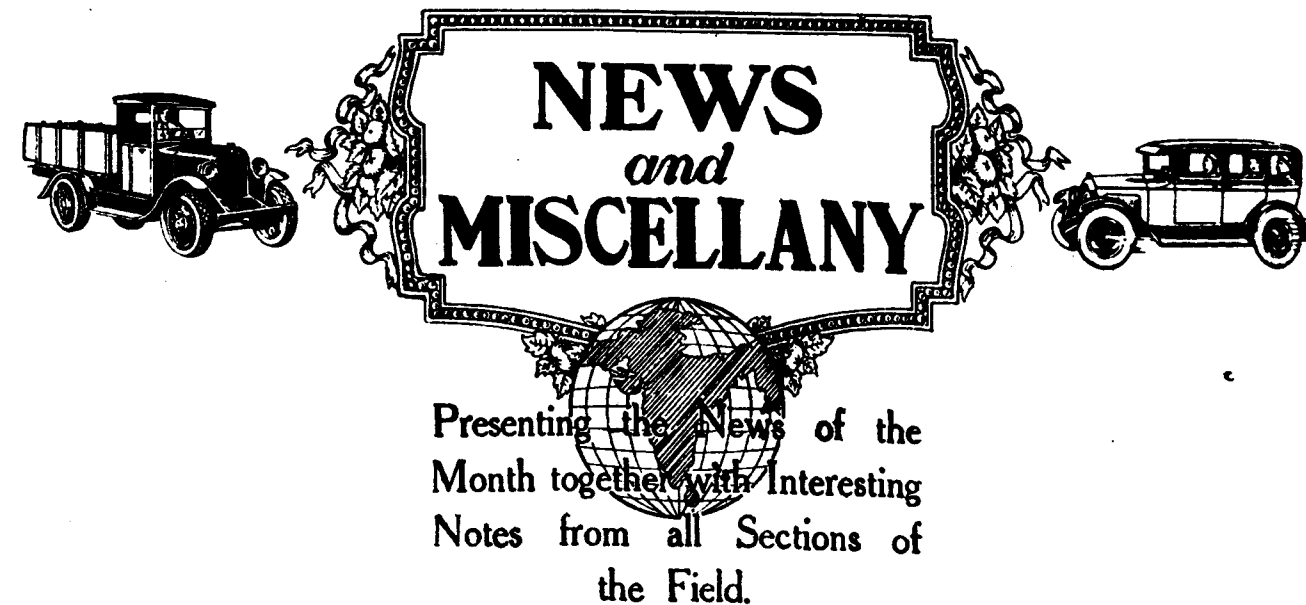
Other things too were very noticeable about Cecil. He had an aroma peculiarly his own, a trait which came in very useful as subsequent writing will prove. His English also was of the crudest, and his answer to my anxious query as the possible date of his next bath was that we still had eight hundred miles to go—I thought at the time he misunderstood me, but subsequent events proved me wrong.

It had been arranged that we should make a true start the following morning from a point some few miles from the city, and I gave Cecil leave to enable him to say farewell to all his relations and pay up arrears on his life policy. He returned at dawn surrounded by a large crowd—his relations apparently—in the midst of which he made an imposing figure. His head was swathed in a purple and green turban of monstrous dimensions and his legs were enveloped in the folds of an unusually clean dhotie; on his back he carried his personal belongings which consisted of a tiffin carrier, an empty whiskey bottle, a folding bedstead, and 'Health and Strength' in ten volumes. The sight was too much for my delicate nerves and I had to broach my supplies of health and strength in order to bear up. . . .

Some hours after, with a tootle on the horn and a delightful smell of gin, we made a start; and our momentous journey began with nobody to bid us *bon voyage* save Cecil's relations, and a buffalo which happened to be near.

(To be continued)

Simpson & Co. Ltd., Trichinopoly Cantonment,
Trichinopoly.
CHEVROLET
Sales and Services



THERE is a decided trend in favour of the low-priced car largely because improvements in low-priced cars make the advantages of medium priced cars less apparent—or make the extra value of the medium price class less pronounced. This also has the effect of making high-priced used cars difficult to dispose of because of the increasing number of low-priced used cars on the market, although, used car prices show a downward trend. Active trading in new cars a few months ago has augmented al used car stocks, and dealers are feeling the need of releasing capital by reducing the prices of these used cars. This is a condition to which all dealers, and private owners contemplating selling their cars, should give full consideration when estimating the value of any car in the used car market.

We hear that Mr. B. T. Squier, the Manager of Messrs. Addison's Calicut branch has just sailed from Colombo on Home leave. During his absence the Calicut depot will be taken over by Mr. A. W. Hopton who for some years has managed Addison's Bangalore branch.

Recollections of our last visit to the West Coast lead us to think that both will have to adjust themselves to different climatic conditions than those to which they have recently been accustomed.

Ford continues to top the production list with an output of approximately 200,000 a month and the total production figure for Model 4 cars and trucks is now well over the two million mark. Construction has been started on Ford's Indianapolis branch factory extension, and on the new £5,000,000 plant at Dagenham, England.

If South Indian registration returns are according to statistics, hundreds of new owners are coming on the roads every week. The economically minded man scarcely cares to try his hand on a brand new car, but he is nervous of getting his experience on a second-hand car which he is terrified may be a 'dud'. In days gone by, a used car often used to be a never ending source of trouble, but to-day, when dealing with a reputable firm, the used car can be trusted. The secret of this excellent condition is to be found in the words 'part exchange'. Nowadays, a motorist wants a change of car—not because it has been knocked about, and not because it has been unsatisfactory—but because he wants something different. When beginning motoring, try a used car.

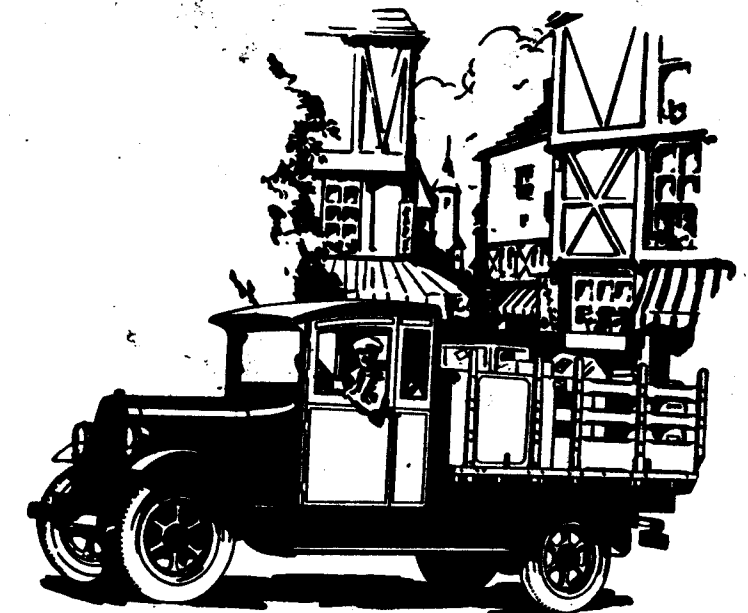
Lady Haig and Sir Harry Verney, Private Secretary to H.M. the Queen, are, it is announced, among recent purchasers of straight eight Hillman cars.

In a recent week the Morris Works at Cowley made, sold and delivered over 2,000 cars. This is a record week's work for any British motor car manufacturing concern.

Contrary to the general opinion that high inflation of motor tyres is harmful, Mr. F. Wright, the service manager of General Motors, Ltd., advises car owners to keep their tyres at a pressure some five pounds above the scheduled scale. By this means, says Mr. Wright, the life of the tyres is prolonged, and a saving in petrol is effected. Fewer punctures are also obtained, the car handles easier, and there is a marked lessening of sway at high speeds. Mr. Wright points out, too, that this five pounds extra pressure will not greatly increase bumpiness, but that it will undoubtedly add much to the safety and economy of motoring.

The Commercial Motor Owner

Advice in
obtaining
Maximum
Efficiency from
Transport
Vehicles



The Selection of Goods-carrying Chassis and Bodies*

MANY vehicle owners lose a considerable sum of money annually by using vehicles on which are fitted bodies of either too big or too small carrying capacity. Take the case where an average of nine tons a day has to be moved ten miles. If nine tons are available every day, they can be transported by means of a three-ton lorry running a daily mileage of about sixty. It may be, however, that only seven tons are available one day and eleven tons the next. This being so, and should it be impossible to leave over to a following day the extra two tons, it will be necessary to provide a body having a capacity of four tons. A careful operator will never carry four tons on a vehicle designed to carry three tons. It cannot be denied, however, that this is frequently done, but usually with disastrous results to the vehicle, involving a considerable increase in the maintenance cost.

THE importance of selecting bodies of suitable capacity and design for special work, and chassis for speed on economy—not for both. The need for accessibility and the advantages of standardising fleets.

concerns the internal construction; and, secondly, the advertising value of the body—that, of course, concerns the external construction.

As a general rule, it can be accepted that the formation of the inside of the body should be absolutely rectangular with no projections such as wheel arches showing through the floor. The external appearance of this body, however, is not very attractive, so that its advertising value is not as great as would be the case if it were constructed on more pleasing lines. It had to be decided, therefore, whether it will be advantageous to increase the advertising value at the expense of loading capacity.

Each different business demands that its goods must be handled in a particular way, consequently it is necessary to consider carefully what type of body is most suitable for the class of work in hand.

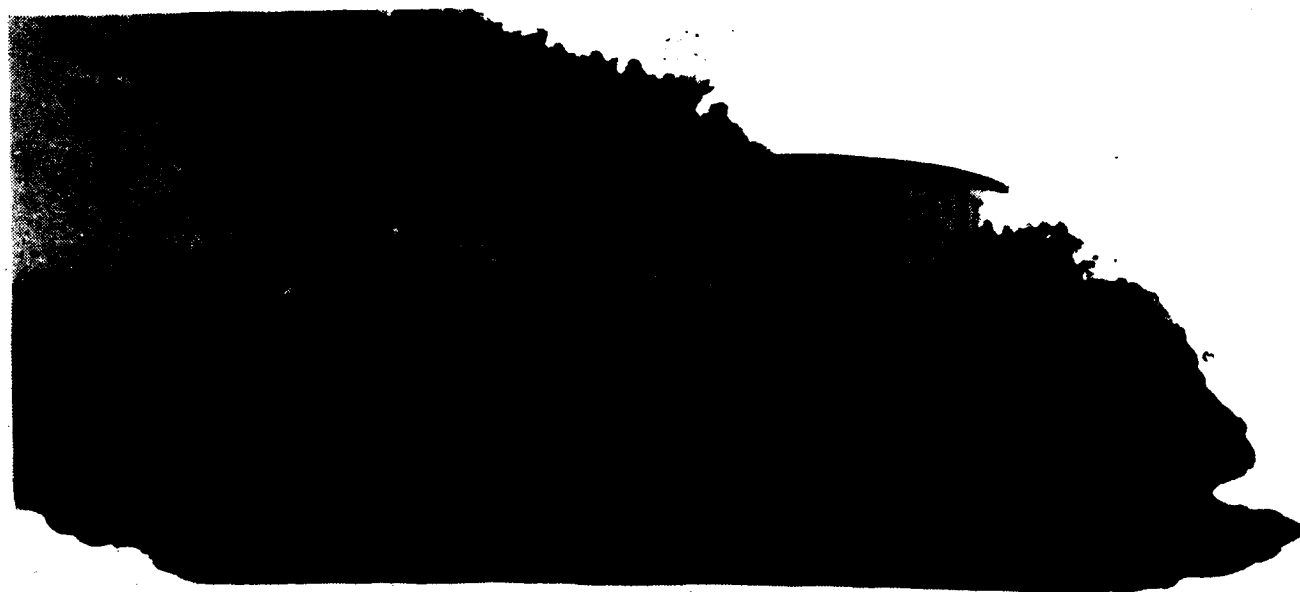
The Container System

In order to provide a direct door-to-door delivery for long distances British railway companies are at present encouraging the use of containers, or what might be called demountable bodies. A container is

Design of the Body

The design and construction of the body have a very important bearing on the cost of the carriage of goods. There are two important points to be thought of when considering the design to be adopted. They are, first, the suitability of the body for the load to be carried, including loading and off loading facilities—that

* Extracts from a paper read before the Institution of Engineers-in-Charge, by Jas. B. Osler, O.B.E., M.Inst.T., M.I.A.E., etc., Chief Mechanical Engineer to Carter, Paterson and Co., Ltd., the well-known haulage contractors.



A TYPICAL VEHICLE FOR GENERAL HAULAGE. A DODGE CHASSIS WITH MADRAS BUILT SPECIALLY DESIGNED BODYWORK

The Selection of Goods-carrying Chassis and Bodies—(contd.)

supplied to a customer, who fills it up on his own premises, sends it to the railway station by road, where it is lifted from the road transport vehicle and placed upon a railway truck. At the station nearest its destination it is taken from the railway truck, placed on a road transport vehicle, and despatched to its final destination. By this means the goods have not to be handled between despatch and delivery. This system is also used on road transport vehicles running between certain fixed points where lifting tackle is available for taking the demountable bodies off the vehicles, and lifting on fresh bodies which have already been loaded. By this system the expensive mechanical part of the vehicle can be kept always on the move.

In Germany the post office use vehicles which are loaded from the side. They drive alongside a platform and the load is pulled out in containers mounted on wheels, and loaded in a very short space of time with another lot of containers carrying the outgoing letters and parcels. There are three-four containers for each vehicle, each being easily handled by two men.

Choice of Chassis

The question which must first be answered by anyone wishing to buy a vehicle for commercial purpose is: 'Do I want maximum speed or do I want maximum economy?' The one is incompatible with the other.

There are, to-day, a large number of chassis on the market, among which there are many of the same stated carrying capacity. When some of these are

placed side by side, marked differences in essential parts can be easily discovered. When this is the case there is usually a marked difference in price. The question is then: Which is the correct vehicle to buy? A very difficult question indeed to answer. I have never been very successful with the cheap type of vehicle. Each of these vehicles is capable of running a certain mileage carrying the same load before it is placed on the scrap-heap. I think it is the case that the more expensive vehicle will usually be found to run for a much longer mileage.

In cases where only a small mileage is run by the vehicle annually the cheaper vehicle may be an advantage. The rate of depreciation of the larger vehicle being so much slower, it is possible that before it reaches the end of its economical life, it may be out of date and uneconomical to operate.

A great deal of the cost of maintaining a vehicle is involved in the regular daily and weekly attentions which are necessary if it is to be kept in good running order. Greasing is one of the most important of these, and yet in the majority of vehicles there are a large number of points which have to be greased which are almost impossible to be got at once the body is in position on the chassis. Elimination of the necessity for greasing is a very great advantage.

It should be possible to remove the engine from the frame without having to disturb such items as the steering and dash-board. The magneto and carburettor should be in readily accessible positions, and the make and break of the magneto should be capable of being examined without having to perform any acrobatic feats.

It will have to be decided whether the vehicle is to be run on solid or pneumatic tyres. The speed

INTERNATIONAL

HARVESTER

TRUCKS

COMPANY

1 AND 1½ TON MODELS NOW IN STOCK



The Truck that crossed 3,000 miles of desert. International trucks are built as trucks for truck work and are not fitted with high speed pleasure car engines but with a sturdy 4-cylinder engine with magneto ignition.

LARGE STOCKS OF SPARE PARTS

CARRIED BY

THE MADRAS MOTOR SALES CO.

28, GENERAL PATTERS ROAD, MADRAS

Sole Distributors for Madras Presidency including Southern Native States.

permissible on pneumatic tyres is higher than that allowed with solids, and the wear and tear of the whole vehicle is considerably less. Taking all these points into consideration, I am of opinion that, although in themselves the pneumatic tyres are more expensive than the solids, it will be found more economical to fit pneumatic tyres to vehicles carrying loads up to four tons.

The compression ratio of the engine should be such that when it is running under a full load with at least half throttle opening on the spirit which is available for use, no pinking should take place due to detonation. It is the general practice in design at the present time to increase the compression ratio as far as one possibly can. This, however, is sometimes a disadvantage, in view of the fact that the petrol companies on their side are not supplying a spirit suitable for such high compressions. This results in the necessity of changing down on hills much earlier than should be necessary, instead of fully opening the throttle and allowing the engine to develop its full power. Detachable cylinder heads, if fitted, should be capable of being quickly dismantled without disturbing other fittings, such as inlet and exhaust manifolds. In my opinion, the cylinder should be separate from the crank case. On vehicles which have to do a considerable amount of stopping and starting, and which are not running for any length of time between stops, thermostatic control of water-cooling temperature is an advantage. It should be possible to dismantle the gear box from the chassis without having to interfere with the change-speed control, and I still favour the right-hand control on commercial

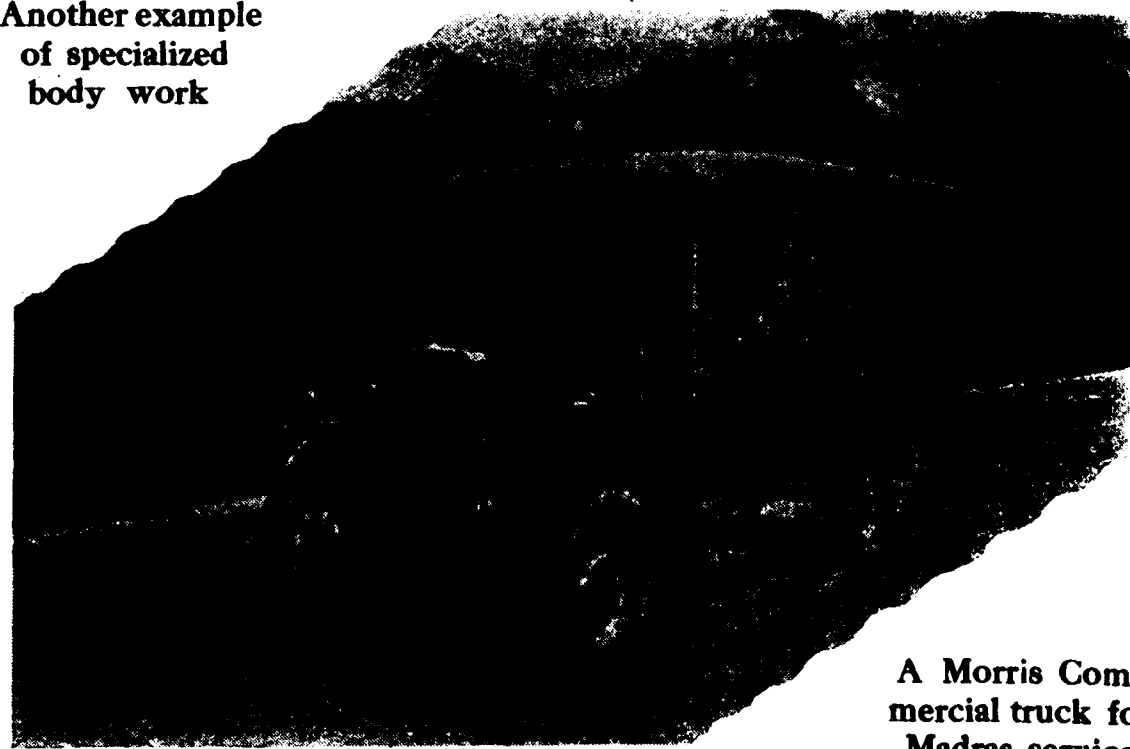
vehicles. It should be possible to dismantle the differential as a unit from the back axle even when a fully loaded body is on the chassis. Manufacturers very frequently make provision for this work to be done through the floor of the body, but in most cases where I have had any necessity to do this quickly it has usually been out on the road with the vehicle fully loaded.

Standardisation

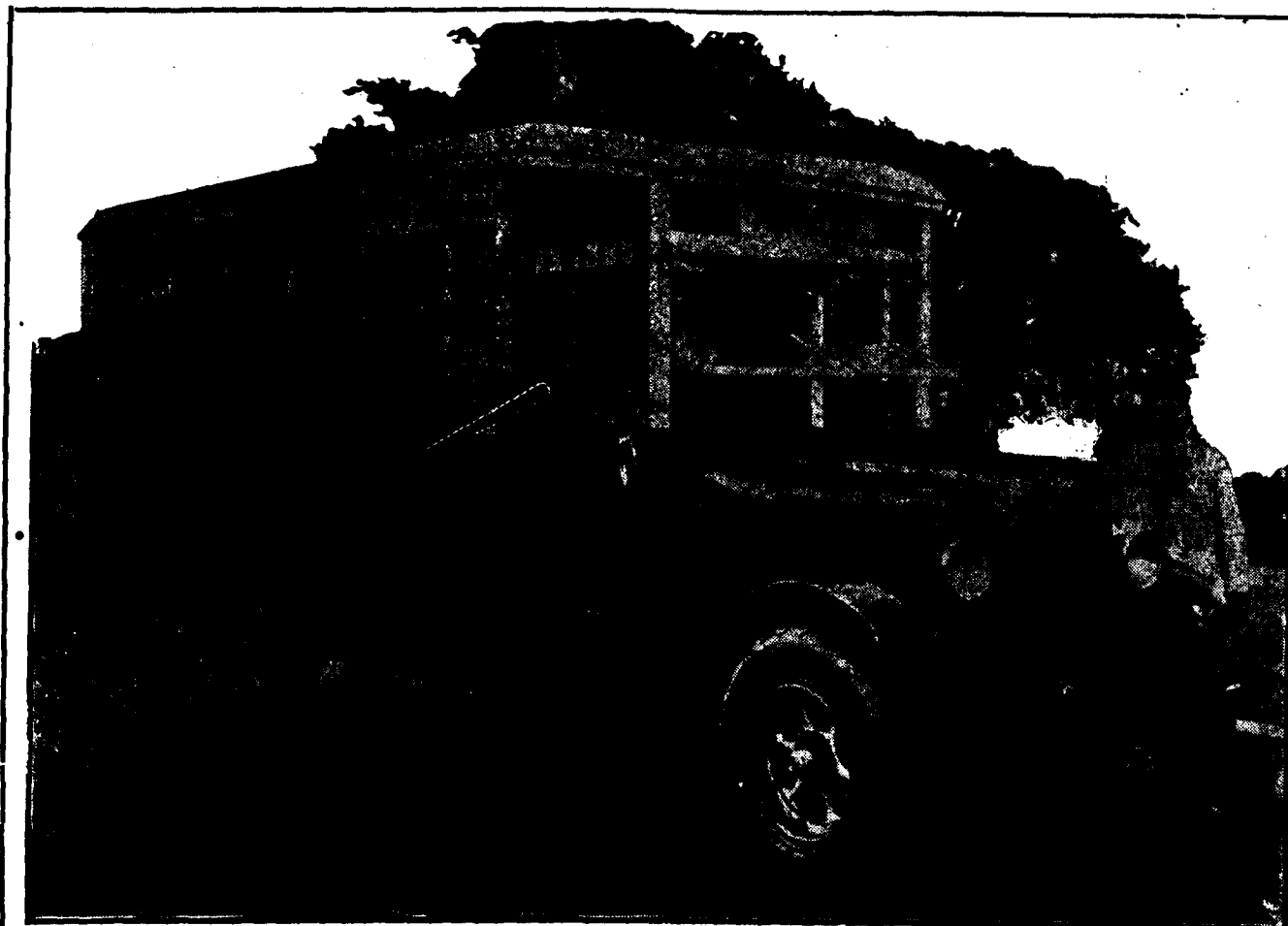
It is desirable as far as possible that all bodies of the same carrying capacity should be constructed on chassis of exactly the same design and type. The man in the workshop becomes an expert on certain jobs on account of its having to be done always in exactly the same way. Vehicles of the same pattern, therefore, can be passed through the workshops more quickly than would be possible if they were of mixed design.

In cases where a fleet comprises a number of vehicles of exactly the same type it will be found an economy to construct special jigs and tools to handle the work. No difficulty is experienced in changing drivers from one vehicle to another on similar type vehicles. In case of breakdown on the road there is no difficulty in picking out the correct part which is required to put the vehicle right; and should it be the case that this particular part is not actually in stock when required, it would be possible to take one off a spare vehicle and send it out to the vehicle which is broken down, thus enabling it to proceed on its journey.

Another example
of specialized
body work



A Morris Com-
mercial truck for
Madras service



Progress of Passenger Transport in Madras

ONE of the most interesting developments of recent years has lately taken place in Madras with the inauguration of a bus service using high capacity buses modelled on those in use in Calcutta. Two of these buses are at the present in service in Madras and are carrying regularly large numbers of passengers in and around the city; but some 12 more similar vehicles are almost completed and these will also shortly be put into commission!

Until the advent of these buses, passenger transport in South India had hardly been what may be termed first class, but there is no doubt that large buses similar to the one illustrated will shortly be the rule rather than the exception on South Indian roads. The owners of this new bus service are the Ranga Transport Company of Gengu Reddy Road, Egmore, Madras, and they hope when the whole fleet of vehicles is working, to give Madras a service which will be both comfortable, economical and speedy.

The Ranga Transport Company are always prepared to hire their buses for transport of parties

All therefore who are interested in passenger transport by bus should communicate with—

THE RANGA TRANSPORT COMPANY,

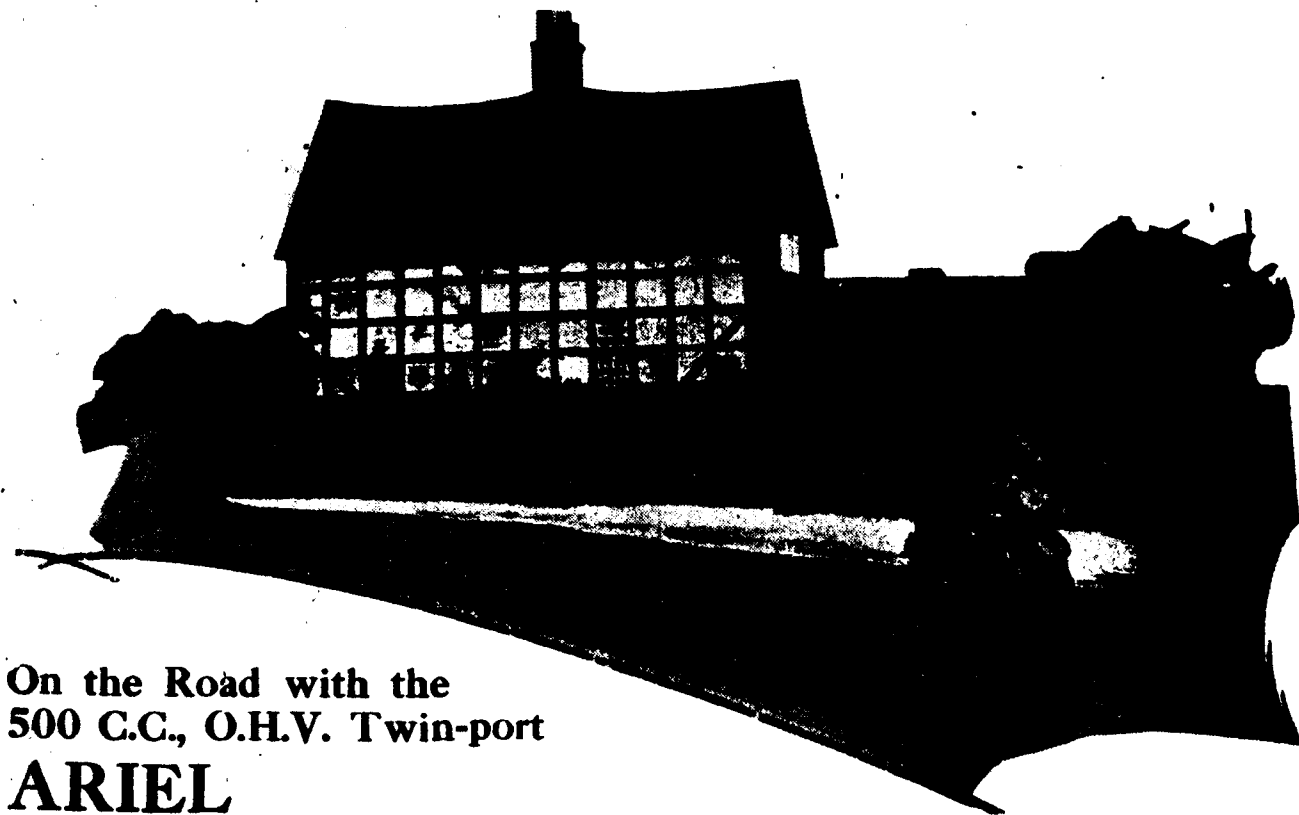
Gengu Reddy Road, Egmore, MADRAS.

for marriages, picnics, etc., at any time to cover any reasonable distance, and the terms for such service can be obtained on communicating either with the Ranga Transport Company or Mr. V. R. Gopal, 22, General Muthiah Mudaly Street, G. T., Madras.

At the same time the proprietors of this service are prepared to consider establishing similar services in other South Indian centres, and enquiries are solicited from all Municipalities and District Boards with a view to establishing first class up-to-date transport services in various districts.

It is interesting to point out that the Ranga Transport Company have for many years conducted an ultra-efficient bus service in Calcutta where, as is well known, passenger transport is considerably more advanced than it is anywhere in South India, and the Ranga Transport Company are of the opinion that similar services can be established throughout Southern India to the advantage of bus users.

Motor Cycling Topics



On the Road with the 500 C.C., O.H.V. Twin-port ARIEL

SINCE the makers of the Ariel completely redesigned their range of models in the autumn of 1926, the general appearance has not been vastly changed in the eyes of the lay onlooker, though in actual fact considerable improvement has taken place over the whole of the layout. Taking no account, therefore, of the improvements in design, finish, and appearance during the last three years, it is surely remarkable enough that the price of the two-port model has been reduced in the interim by no less than Rs. 100. To-day few machines on the market provide more for Rs. 1,000 than does the two-port Ariel.

The machine tested was taken straight from the assembling track, a typical one of the 800 to 1,000 turned out every week at the Selly Oak works. Circumstances did not permit giving the machine quite the easy start in life that it should, by rights, have had, and a mild form of piston trouble was therefore experienced.

Straight to a 'Six Days'

After this had been rectified, however, no attempt whatever was made to nurse the engine, and it was driven really hard without any ill effects whatever. It is significant that this perfectly standard machine, with, of course, a change in tyre equipment, was taken straight away from *The Motor Cycle* test to run in the Scottish Six Days Trials.

A trip to Cornwall and back, from the Midlands, proved that few machines could be more comfortable over a long journey, and the inoffensive boom from the exhaust had none of those tiring qualities which are often so prominent in the war-song of fast machines. A continuous chain hum and tappet rattle are even more annoying, and here, again, the Ariel was found to be markedly superior to many machines of its class.

With the damper lightly screwed down, road-holding and steering were such that it was safe for the rider to allow his eyes to wander from the road surface immediately ahead; potholes and irregularities went almost unnoticed, even when the speedometer needle was ranging the forties. The riding position was exceptionally comfortable, gave good control, and was so arranged that even a tall rider did not suffer through the gear gate coming into contact with his right knee.

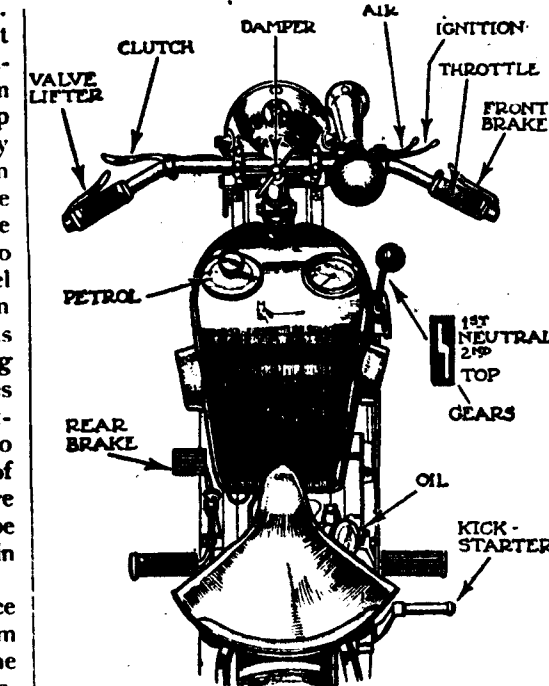
A Question of Flexibility

Gear changing on a new machine nearly always requires a certain amount of effort, and the Ariel proved no exception. However, the clutch was very sweet and light, and it was quite impossible to miss a gear, though the change down from top to second could never be made perfectly quietly. Actually, however, a great deal of gear changing was not called for, as the machine behaved very much like a 1,000 c.c. twin

in pulling power and flexibility. It was possible, provided that the throttle was used intelligently, to accelerate from phenomenally low speeds in top gear without there being any sign of snatch or harshness; in fact, the thought crossed the rider's mind that it would have been a wonderful experience to have handled this o.h.v. Ariel power unit in the days when the swift, direct-belt-driver was the last word in sporting models. Such flexibility makes the machine particularly suitable for the type of man who does not ride for the sake of riding only, and who therefore requires his mount to be reasonably straightforward in control.

An all-round performance rather than sheer maximum speed has been the aim of the designers, but, nevertheless, the Ariel should top the 70 m.p.h. mark under favourable conditions. During the test the maximum attained was 68 m.p.h. in top gear and 47 m.p.h. in second, and the most comfortable cruising speed was found to be in the neighbourhood of 48 m.p.h. At this last speed, and, indeed, until well on in the 'sixties,' the running of the engine was dead smooth.

As was remarked earlier, the valve gear was pleasantly quiet; the whole mechanism is properly enclosed and lubri-



Control plan of the o.h.v. Ariel.

SPECIFICATION.

ENGINE: 81.8 mm. x 95 mm. (497 c.c.) Ariel single cylinder, with overhead valves and enclosed rockers and push rods.

TRANSMISSION: Chain; $\frac{1}{2}$ in. x $\frac{1}{8}$ in. front; $\frac{1}{2}$ in. x $\frac{1}{8}$ in. rear.

LUBRICATION: Ariel dry-sump system, with pressure feed to big end.

GEAR BOX: Burman three-speed, with clutch and kick-starter. Ratios: 4.75, 7.6 and 13 to 1.

CARBURETTER: Amal two-lever, with twist grip throttle control.

BRAKES: Internal expanding, 7 in. front and rear.

TYRES: 26 in. x 3.25 in.

WRIGHT (in touring trim): 371 lb.

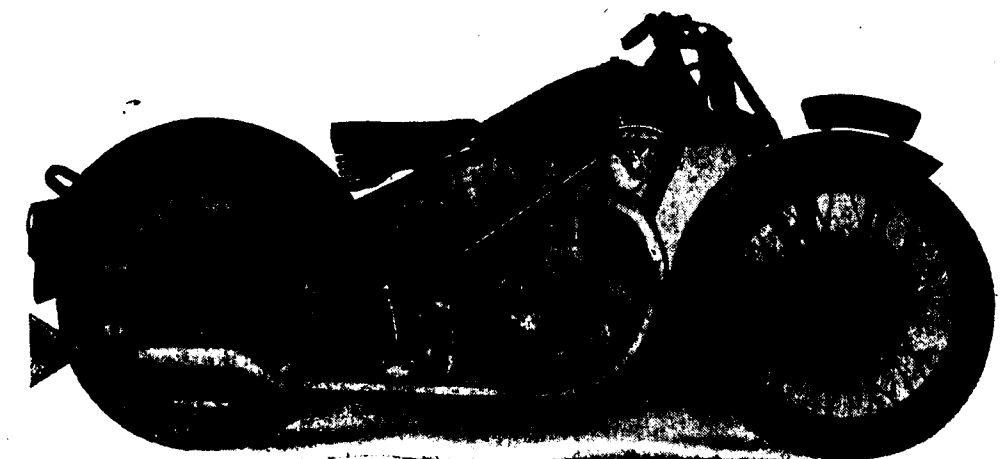
cated by oil mist. By the enclosure of the oil pump a neat exterior to the crank case has also been achieved, though a dry sump system of lubrication means, of necessity, a certain number of pipe lines; these, however, are very tidily arranged. Incidentally, the oiling system functioned perfectly at all times, and a remarkably low oil consumption figure was attained; it worked out at well over 3,000 miles per gallon.

Chain Lubrication

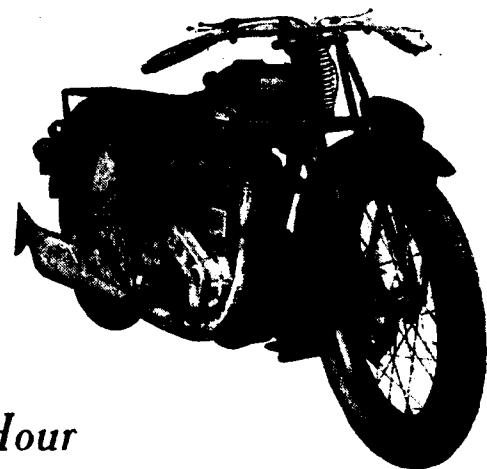
Another point about the lubrication of the machine is that both chains are kept properly lubricated by oil mist from the crank case, and it was particularly pleasant to find after a long ride that the rear chain was not dry and dusty.

Braking was smooth and progressive, the front brake in particular being immensely powerful, yet never giving any sensation that it was likely to lock the wheel. The rear brake, though excellent, required rather too much pressure for really delicate work. This tendency, however, disappeared towards the conclusion of the test. In all probability it was due to some slight inequality in the level of the brake lining, which later became smoothed out with use.

A certain amount of knack is required in lifting the



A docile, powerful sports mount. The 500 c.c. Ariel.



Hour
after Hour—

Mile after mile ceaselessly ARIEL will give you all the power and speed you want. It is a real pleasure to own—to ride—an ARIEL and know you have the best that skilled hands and brains can produce. Not until you get at the throttle of the ARIEL can you really judge its silent, silky speed.

Own an

ARIEL

—the mount that never tires.

Model 'LB' 250 cc. S.V.	Rs. 775
Model 'LF' 250 cc. O.H.V.	" 815
Model 'A' 550 cc. S.V.	" 925
Model 'B' 550 cc. S.V. De Luxe	" 965
Model 'E' 550 cc. O.H.V. Twin Port	" 995
Model 'F' 500 cc. O.H.V. Twin Port, De Luxe	" 1,025

ADDISON & CO., LTD.

Madras, Bangalore, Calicut, Trichinopoly.

machine on to the central stand, and at first it was found difficult to do this. However, it was discovered that, with the left foot on the stand and the right hand on the loop at the rear (not on the carrier), a sharp tug would bring the machine over 'top dead centre' of the stand without any straining.

Fuel Consumption

When the throttle was used with discretion, and the speed, except when running light, kept at or below 40 m.p.h., the petrol consumption worked out at more than 100 m.p.g., which, for such a machine, is an excellent figure. When high averages were maintained and no attempt made to obtain a good consumption, the figure dropped to 80 m.p.g. Fuel consumption figures naturally depend almost entirely on the manner in which a machine is driven, and two different riders can get totally different results from the same machine. The second figure mentioned above includes a period of experimental top gear work—driving not entirely conducive to satisfactory consumption.

The Ariel was remarkably free from rattles in the cycle parts and elsewhere; probably the sturdy and compact general construction has a good deal to do with this. Yet the compactness does not interfere with accessibility; the machine is probably above the average in this respect.

Altogether, it may be said that, though its outstanding feature is undoubtedly value-for-money, the 500 c.c. Ariel is not merely a machine brought down to a price, but one with a large number of extremely charming traits.

NOTES

It has been suggested by a band of keen Madras motorcycleists that *The South India Motor Owner* try to organize reliability runs and hill climbs periodically. This suggestion should be seriously considered as it brings forward a subject which has long been neglected in Southern India. Calcutta and Bombay all have their motor cycling clubs whose members take part in really sporting up-to-date trials, and there is no reason why Madras should be behind in the matter.

If motorcycleists who are interested would write to the editor giving their opinion it is likely that something may be done towards establishing sporting clubs in the near future.

ROW & BROS.,
BEZWADA,
KISTNA DISTRICT.

CHEVROLET
SALES AND SERVICES

THE
SOUTH INDIA
**MOTOR
OWNER**

ROW & BROS.,
RAJAHMUNDRY,
EAST GODAVARI

CHEVROLET
SALES AND SERVICES

Second-hand Cars for Sale and Wanted

NOTICES.

Prepaid Advertisements for Cars, Accessories, etc., may be inserted in this section at the following rate

Fifteen words for Rs. 3/- (minimum)
and 3 As. for each additional word.

All small paragraph advertisements whether of fifteen words or less will be charged for at a minimum rate of Rs. 3/- and all such advertisements are strictly prepayable.

Box Numbers are available for those advertisers who desire to utilise them, and a nominal charge of 4 As. will be made to cover cost of booking

and posting replies. The words Box No. XXX, c/o 'The S. I. Motor Owner', must be included in the advertisement and will be charged for.

The last day on which copy will be accepted for inclusion in this section is the 20th of the month preceding any issue. Whilst every care will be taken to ensure accuracy, the publishers will not be responsible for printer's errors or for non-inclusion. In this regard it should be noted that advertisement copy, received early will obtain closer attention than that rushed through for inclusion at the last moment. Other business and advertisement notes will be found on page 45.

MORRIS OXFORD five seater. Re-painted and overhauled. Model 1927. A real bargain for Rs. 2,000 nett. Apply Box No. A c/o South India Motor Owner

OVERLAND WHIPPET Tourer. 1927 model. In good all round condition. Is sacrificed for Rs. 1,500 nett. No brokers. Demonstration by appointment with. Box No. B c/o South India Motor Owner

FIAT TOURER. Old model. Believed to be the finest ever built is for sale at Rs. 2,000. Completely overhauled and reconditioned. Apply Box No. C c/o South India Motor Owner

DODGE BARGAINS. Owner has two Dodge Tourers for sale. 1927 vintage. Both overhauled and reconditioned. Can

When writing a small Advertisement

Imagine you are buying a car—and then put down all the facts *you* would want to know.

Give full particulars of the make, model and year of manufacture with any points about speciality fittings which may interest the buyer.

Use a box number it insures privacy.

be inspected in Madras. Price Rs. 1,800 each. No offers.

Apply Box No. D c/o South India Motor Owner

HUPMOBILE Tourer. 1928 model. Five seater. In excellent condition. Is offered at Rs. 3,950. Trial and inspection in Madras.

Apply Box No. E c/o South India Motor Owner

ESSEX two seater. English coach built body. In super-excellent condition all round. Latest fittings and devices. Cost Rs. 6,800 delivered Madras. Will accept cash Rs. 1,650. Monthly payments arranged if necessary. Trial and inspection, Madras.

Apply Box No. F c/o South India Motor Owner

OVERLAND '4'. In real tip-top order. Self-starter and lights. New hood. Re-painted. No brokers. Cash Rs. 550. Apply Box No. G

c/o South India Motor Owner

CADILLAC IMPERIAL Sedan. Seven seater. Complete with many additional fittings. Rs. 17,000. A really high class car in tip-top condition.

Apply Post Office Box No. 309, Mount Road, Madras.

TAXI OWNERS. Five seater Chandler-Six tourer. In excellent condition. Less than six months old. Suitable for Taxi work. Price Rs. 3,500, or nearest offer.

Apply Box No. J
c/o South India Motor Owner

A BARGAIN. A.J.S. 1928 Motor Cycle. 3-49 h.p. Complete with all fittings. Rs. 580. Owner going in for a car.

Apply Box No. J
c/o South India Motor Owner

A REAL BARGAIN. Six cylinder Armstrong Siddeley Saloon Landulette. With many additional fittings. Owner going Home on leave, and will sacrifice for Rs. 5,500. Cost Rs. 7,000 four months ago.

Apply Box No. K
c/o South India Motor Owner

OVERLAND WHIPPET Tourer. In excellent condition. Done 2,000 miles. Price Rs. 1,500.

Apply Box No. L
c/o South India Motor Owner

MORRIS OXFORD five seater. 1927 model. Owner shortly going Home on leave and will dispose for Rs. 1,500. No brokers.

Apply Box No. M
c/o South India Motor Owner

HANOMAG two seater. Has not been a month on the road. Price Rs. 800.

Apply Box No. N
c/o South India Motor Owner

DURANT SALOON. Had only three months' running. Appearance and condition throughout really excellent. Rs. 3,850.

Apply Box No. O
c/o South India Motor Owner

MORRIS COMMERCIAL BUS.

Twenty-five seater. Six months old. In first class condition. Guaranteed in perfect running order. Price Rs. 4,000. Can be inspected at Mutual Indemnity & Finance Corporation (India), Ltd., Godown, 17, Mount Road. Next to Romer Dan & Co.

The Mutual Indemnity and Finance Corporation (India), Ltd., 1/35, Mount Road, Madras, have for sale second-hand cars and buses. Full particulars on application.

Palany Andavar & Co.

Bus Body Builders & Commission Agents

8, General Patters Road, Mount Road P.O.

MADRAS.

Branch at:

No. 112, Thayar Sahib Street
General Patters Road
Mount Road, MADRAS.

Manager,
M. G. SAWMY.

ROW & BROS.,
TADEPALLIGUDEM,
WEST GODAVARI.
CHEVROLET
SALES AND SERVICES.

THE
SOUTH INDIA
MOTOR
OWNER

VELKUR ELLIAH CHETTY,
NANDYAL,
KURNOOL.
CHEVROLET
SALES AND SERVICES.

Sales and Service Guide

Arranged alphabetically under vehicle headings columns is charged for at the rate of Re. 1 per this guide should prove extremely useful to motor line, but no contract can be accepted for less owners throughout Southern India. The up- than six consecutive insertions. Correspondence to-date Service Station and Sub-Dealer will find both from Dealers and Car Owners invited in entries in this section to be a profitable method of order to make this section as useful as inexpensive advertisement. Each entry in these possible.

CARS.

Armstrong-Siddeley.

BANGALORE ... Addison & Co., Ltd.
CALICUT ... Addison & Co., Ltd.
KOTTAYAM ... Addison & Co. Ltd.
MADRAS ... Addison & Co., Ltd.
OOTACAMUND ... George Oakes.

Chevrolet.

ANANTAPUR ... Neo Auto Works.
BEZWADA ... Row & Bros.
CHITTOOR ... B. Krishna & Bros.
CONJEEVERAM ... Simon & Bros.
CUDDALORE ... K. J. Dhanam & Co.
CUDDAPAH ... Zacriaka Sait & Sons
GUNTUR ... Row & Bros.
KUMBakonam ... T. S. Ramanuja Iyengar.
MADRAS ... Simpson & Co., Ltd.
MADURA ... M. Sunderasamy Iyer.
MALABAR ... Dhanalakshmi Motor Service.
NANDYAL ... Velkur Elliah Chetty.
NELLORE ... A. K. Prasada Rao & Co.

OOTACAMUND ... Simpson & Co., Ltd.
PUDUKOTAH ... S. K. Moorthy Bros.
RAJAHMUNDY ... Row & Bros.
RAMNAD ... M. Sunderasamy Iyer.
SALEM ... Salem Automobiles
TADEPALLIGUDEM ... Row & Bros.
TINNEVELLY ... Tinnevelly Petrol Supply Agency.

TRICHINOPOLY ... Simpson & Co., Ltd., Trichinopoly.
VELLORE ... K. J. Dhanam & Co.
VIZAGAPATAM ... Andhra Engineering Co.

Chrysler.

MADRAS ... Jones & Co.

Chrysler De Soto.

MADRAS ... Jones & Co.

Chrysler Plymouth.

BANGALORE ... Addison & Co., Ltd.
CALICUT ... Addison & Co., Ltd.
KOTTAYAM ... Addison & Co., Ltd.
MADRAS ... Addison & Co., Ltd.
OOTACAMUND ... George Oakes.

Dodge.

BANGALORE ... Addison & Co., Ltd.
CALICUT ... Addison & Co., Ltd.
COIMBATORE ... United Motors.
KOTTAYAM ... Addison & Co., Ltd.
MADRAS ... Addison & Co., Ltd.
OOTACAMUND ... George Oakes.

Essex.

BEZWADA ... The Andhra Automobiles

Ford.

BEZWADA ... Ford Stores and Service Station.
CUDDALORE ... S. Gopala Iyer.
KATPADI ... V. M. Rathevalu & Bros.
VELLORE ... V. M. Ratnavelu & Bros.

Hillman.

MADRAS ... Simpson & Co., Ltd.

Hupmobile.

BANGALORE ... Addison & Co., Ltd.
CALICUT ... Addison & Co., Ltd.
COTTAYAM ... Addison & Co., Ltd.
MADRAS ... Addison & Co., Ltd.
OOTACAMUND ... George Oakes.

Morris.

BANGALORE ... Addison & Co., Ltd.
CALICUT ... Addison & Co., Ltd.
COIMBATORE ... United Motors.
KOTTAYAM ... Addison & Co., Ltd.
MADRAS ... Addison & Co., Ltd.
OOTACAMUND ... George Oakes.

Nash.

MADRAS ... Motor Reconditioning Station.

Oakland.

MADRAS ... Madras Motor Sales

Overland.

BANGALORE	...	Addison & Co., Ltd.	MADRAS
CALICUT	...	Addison & Co., Ltd.	
COIMBATORE	...	United Motors.	MADRAS
KOTTAYAM	...	Addison & Co., Ltd.	
MADRAS	...	Addison & Co., Ltd.	
OOTACAMUND	...	George Oakes.	MADRAS

Pontiac.

... Madras Motor Sales.

Singer.

... Simpson & Co., Ltd.

Vauxhall.

... Madras Motor Sales.

Willys-Knight.

BANGALORE	...	Addison & Co., Ltd.
CALICUT	...	Addison & Co., Ltd.
COIMBATORE	...	United Motors.
KOTTAYAM	...	Addison & Co., Ltd.
MADRAS	...	Addison & Co., Ltd.
OOTACAMUND	...	George Oakes.

TRUCKS.**Chevrolet Trucks.**

ANANTAPUR	...	Neo Auto Works.
BEZWADA	...	Row & Bros.
CHITTOOR	...	B. Krishna & Bros.
CONJEEVARAM	...	Simon & Bros.
CUDDALORE	...	K. J. Dhanam & Co.
CUDDAPAH	...	Zackria Sait & Sons.
GUNTUR	...	Row & Bros.
KUMBAKONAM	...	T. S. Ramannuja Iyengar.

MADRAS	...	Simpson & Co., Ltd.
MADURA	...	M. Sunderasamy Iyer.
MALABAR	...	Dhanalakshmi Motor Service.
NANDYAL	...	Yelkur Elliah Chetty.
NELLORE	...	A. K. Prasada Rao & Co.

OOTACAMUND	...	Simpson & Co., Ltd.
PUDUKOTAH	...	S. K. Moorthy Bros.
RAJAHMUNDRY	...	Row & Bros.
RAMNAD	...	M. Sunderasamy Iyer.

SALEM	...	Salem Automobiles.
TADEPALLIGUDEM	...	Row & Bros.

TINNEVELLY	...	Tinnevelly Petrol Supply Agency.
TRICHINOPOLY	...	Simpson & Co., Ltd., Trichinopoly.
VELLORE	...	K. J. Dhanam & Co.
VIZAGAPATAM	...	Andhra Engineering Co.

Dodge Trucks.

BANGALORE	...	Addison & Co., Ltd.
CALICUT	...	Addison & Co., Ltd.
COIMBATORE	...	United Motors.
KOTTAYAM	...	Addison & Co., Ltd.
MADRAS	...	Addison & Co., Ltd.
OOTACAMUND	...	George Oakes.

Federal Trucks.

MADRAS	...	Simpson & Co., Ltd.
--------	-----	---------------------

Ford Trucks.

BEZWADA	...	Ford Stores and Service Station.
---------	-----	----------------------------------

MOTOR CYCLES.**Ariel.**

BANGALORE	...	Addison & Co., Ltd.
CALICUT	...	Addison & Co., Ltd.
KOTTAYAM	...	Addison & Co., Ltd.
MADRAS	...	Addison & Co., Ltd.

Triumph.

BANGALORE	...	Addison & Co., Ltd.
CALICUT	...	Addison & Co., Ltd.
KOTTAYAM	...	Addison & Co., Ltd.
MADRAS	...	Addison & Co., Ltd.

B. Krishna & Bros., Madanapalle, Chittoor.
CHEVROLET
Sales and Services

Dhanalakshmi Motor Service, Malabar.
CHEVROLET
Sales and Services

Publisher's Notices**The South India Motor Owner**

Published monthly by

Eastern Technical Publications,

Khaleeli Buildings, Mount Road, Madras

'THE South India Motor Owner' is issued on the 15th of each month. It aims to furnish the latest and most authoritative information on all matters relating to motors and motoring under South India conditions. Contributions and correspondence on all matters coming within the scope of this journal are solicited and prompt remittance will be made for all acceptable matter. Contributions should preferably be illustrated.

Subscription Rates

One year . . . Rs. 3 postage free payable in advance or recoverable by V.P.P. with the first issue mailed. Sample copies annas eight each plus postage. All remittances for subscriptions should be made payable to the Eastern Technical Publications, Madras.

When subscriptions expire, unless previous notification has been received from the subscriber the first issue following the expiry will be sent to the subscriber V.P.P. for a further twelve months' subscription. It is therefore advisable, if any subscriber wishes to discontinue *The South India Motor Owner*, to notify the publishers a month in advance.

Advertising Rates

Rates for display space will be furnished on application. For small advertisements and entries under 'Sales and Service Guide', see pages 41 and 43.

Advertisements to secure insertion in any month's issue should reach this office not later than the 20th of the month preceding. The publishers of *The South India Motor Owner* reserve the right to reject any advertisement for any cause.

Neo Auto Works, Town Extension, Anantapur.
CHEVROLET
Sales and Services

K. J. Dhanam & Co., Vellore, North Arcot District.
CHEVROLET
Sales and Services

K. J. Dhanam & Co., Cuddalore, South Arcot District.
CHEVROLET
Sales and Services

Salem Automobiles, Salem.
CHEVROLET
Sales and Services

T. S. Ramanuja Iyengar, Kumbakonam, Tanjore District.
CHEVROLET
Sales and Services

S. K. Moorthy Bros., Pudukotah.
CHEVROLET
Sales and Services

M. Sunderasamy Iyer, 10 Perumal Teppakulam Street, Madura.
CHEVROLET
Sales and Services

M. Sunderasamy Iyer, Ramnad.
CHEVROLET
Sales and Services

Tinnevelly Petrol Supply Agency, Hindu College View, Tinnevelly.
CHEVROLET
Sales and Services

Simpson & Co. Ltd., Ootacamund, Nilgiris.
CHEVROLET
Sales and Services

Simon & Bros., Conjeevaram, Chininglepet.
CHEVROLET
Sales and Services

A. K. Prasada Rao & Co., Nellore.
CHEVROLET
Sales and Services

Good Printing

The difference in cost between good paper and print and cheap paper and cheap ink is slight—but what a difference there is in the results ∴ ∴

The house of Charles Morgan & Co., Ltd., has been built upon their ability to supply good paper and good ink at a price which gives the customer every benefit gained by careful buying ∴

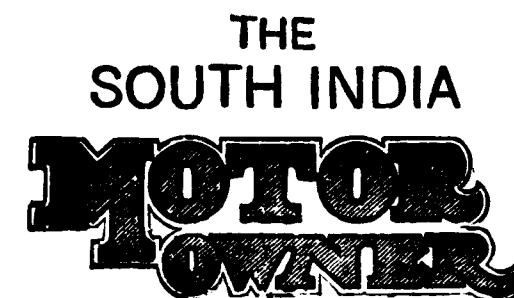
Remember, if you are a buyer of printed matter or a printer, always specify ∴

Morgan Papers: Manders Inks

CHARLES MORGAN & CO., LTD.

Linghi Chetty Street G. T., Madras.

Fill in this Form



Motorists throughout Southern India will find the **South India Motor Owner** a valuable aid to them in all matters connected with motoring, and at the same time will find its pages entertaining and instructive every month. Three rupees per annum will bring this journal to you by post month by month. Fill in the form below and post it on to us.

SUBSCRIPTION ORDER.

To EASTERN TECHNICAL PUBLICATIONS,
KHALEELI BUILDINGS,
MOUNT ROAD, MADRAS.

Please place my name on the subscription list of the South India Motor Owner for twelve months commencing..... 19 ..

I enclose Rs. being the post-free subscription for the period.

Name

Address

Post-free Subscription Rates:

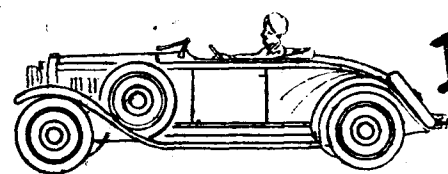
India, Burma and Ceylon, Rs. 3 per annum.

Foreign: Rs. 10 per annum.

(Block letters are preferable.)

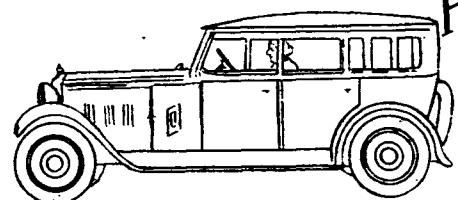
Subscribers may, if they wish, have the first issue sent to them V.P.P. for the full twelve months' subscription. Unless therefore cash or cheque accompanies this form, the V.P.P. method will be followed.

CHOOSE ANY CAR



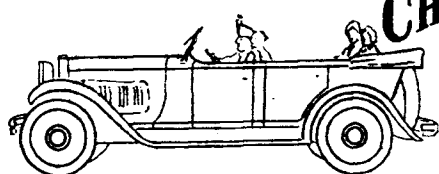
DODGE

DODGE cars, which have for so long been renowned for their dependability under South Indian conditions are good medium priced cars.



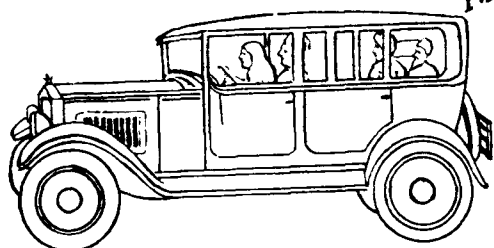
HILLMAN

HILLMAN—the car which 'costs less than it should'—both 4 cylinder and straight 8 models are available for purchase in Madras.



CHEVROLET

ONE of the most outstanding low priced 6-cylinder cars on the market.



MORRIS

THE most reliable British built medium priced car for South Indian conditions.

There must be many members of the community who can really afford to buy a car, but do not care to lay out three or four thousand rupees cash immediately, with the result that prospective car owners remain merely prospective for many years, thus depriving themselves of the pleasure and convenience of modern car owning.

To-day the Hire Purchase of motor vehicles solves this problem in a very simple and economical manner. Various terms can be arranged, all of which are constructed to suit the convenience of the buyer.

If, therefore, you are contemplating purchasing a car, but do not wish to lay out the total purchase price in cash, we shall be very pleased to give you full particulars regarding our Hire Purchase system covering all makes of cars or commercial vehicles.

THE Mutual Indemnity and Finance Corporation (India), Ltd. have for many years been established in various centres in India and have a thorough knowledge of conditions of motoring in the various districts. South India motor owners can rely upon our advice in purchasing a car for particular work and it must be always taken into consideration that our advice is, above anything else, strictly impartial.

The

SOUTH INDIA

No. M. 2515

MOTOR OWNER

SINGLE COPIES

As. 8.

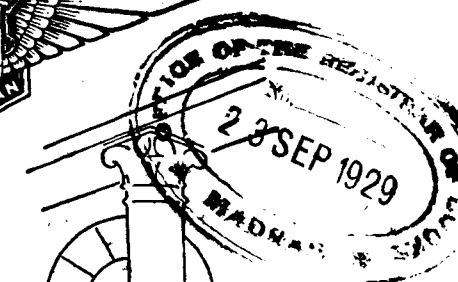
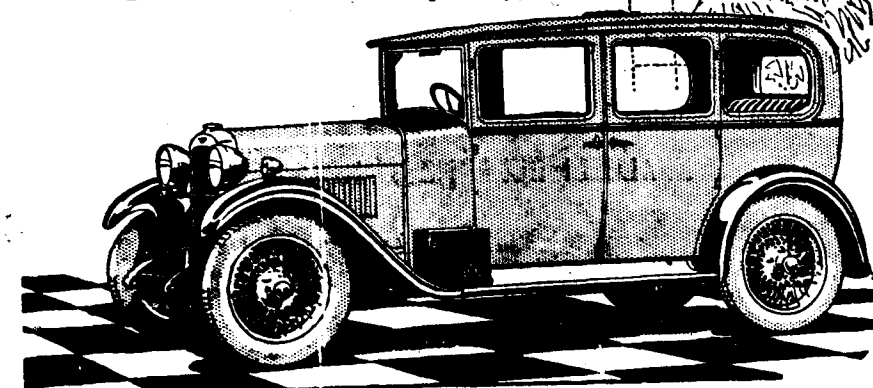
September, 1929.

Vol. I. No. 2.

HAVE YOU SEEN
The
HILLMAN

with the world-wide reputation of being the ideal combination of appearance, comfort, performance and price? See and try them—now.

PRICES Tourers Rs. 5,650
FROM Saloons Rs. 6,500



The value of advertisement lies largely in the discretion the advertiser uses in choosing the medium whereby his announcement reaches the buying public—and it is quality of circulation which is of greater importance than quantity when the goods sold are luxury or high priced articles. This quality the South India Motor Owner offers to those who sell cars, because its circulation is confined to car owners or prospective owners in Southern India.

Full information on request

EASTERN TECHNICAL PUBLICATIONS

KHALEELI BUILDINGS, MOUNT ROAD

MADRAS



NEW!

TRUCKS *for*

South India Commercial Vehicle Owners.

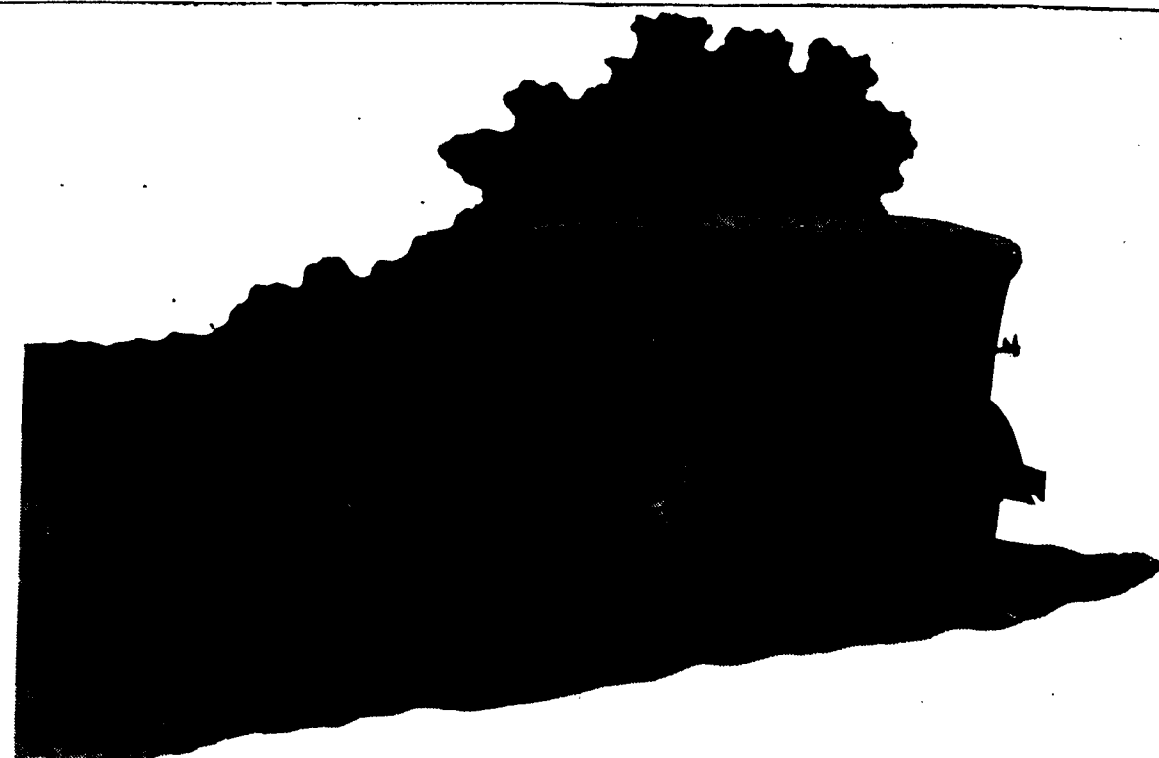
Bus and truck operators in South India now have the opportunity of putting to their service one of America's finest commercial vehicles. The Selden truck—a vehicle designed by engineers with the experience of commercial vehicle design right from the early days behind them—is built to give unfailing service and reliable performance.

You, as one of South India's progressive commercial transport owners, must first inspect the Selden truck before deciding to buy your new vehicle.

Write for particulars to

MOTOR RECONDITIONING STATION
Mount Road, Madras.

Selden Trucks



EVEN FINER than the name implies

Thousands of motorists are buying the new Dodge Brothers Six on the sole recommendation of its name. To them, the new Dodge Brothers Six means far more than any detailed recital of its many advanced engineering features and style attractions.

But, confident as these buyers are, not until they experience the performance of this splendid new car do they fully appreciate its comfort, its ease of control, its smooth, eager power and the roominess of its newly designed body. The new Dodge Brothers Six offers the world a new conception of motor car value.

NEW DODGE BROTHERS SIX



CHRYSLER MOTORS PRODUCT

ADDISON & CO., LTD.

Madras, Bangalore, Calcutta, Kottayam and Trichinopoly.

A
MONTHLY
JOURNAL
DEVOTED TO THE
INTERESTS
OF
SOUTH INDIA
MOTOR VEHICLE
OWNERS

THE
SOUTH INDIA

**MOTOR
OWNER**

Proprietors

EASTERN TECHNICAL PUBLICATIONS
KHALEELI BUILDINGS, MOUNT ROAD, MADRAS

PACKING

MORRIS

CARS

FOR

SHIPMENT

PAGE 76

Vol. I, No. 2.

September, 1929

Price As. 8

Jottings from this Issue

3L
D 513 m 23, 129
129.1.1-2

PAGE	CONTENTS	PAGE	PAGE
Paying cheerfully for the pleasure of posterity 52	With Car and Camera around Madras 54	Clutch pedal should have 1" free movement 67	
Conjuror produces rabbit with dramatic effect 68	Owner Driver's Note Book ... 58	Life of an engine depends largely on early treatment... 70	
Hobby most suited to fit in with motoring 54	Gentlemen of the Road ... 62	Madras Sports model, a car for the enthusiast 73	
We all wish for a third leg occasionally 57	Front Wheel Drive Car ... 65	Side valve engines have four places where compression leakage may occur 71	
Sympathise with the vast majority of dealers 59	Conjuring Tricks with New Car 68	Shipping cars necessitates careful packing 76	
Impecunious buyer has more opportunities of a bargain... 60	Tuning Hints 70	Women drivers the greatest culprits 78	
Bad manners on the road ... 62	A Car for the Enthusiast ... 72	Fuel oil cheaper than petrol for commercial vehicles ... 85	
Cars which pull instead of pushing 65	Packing Cars for Shipment 76		
	Careful Signalling 78		
	News and Miscellany ... 79		
	Motoring Pilgrim's Progress. 80		
	Characteristics of Singer Junior 84		
	Running on Fuel Oil or Petrol 85		
Does free service help either dealer or customer. 59	Eight cylinders help a car in sand... .. 59		
Oil viscosity now shown by numbers 74	Road paved with amethyst... .. 74		
Tolls detract from pleasures of motoring ... 60	Moisture on the plugs hinders starting 75		

EDITORIAL

Political Power of the Motor Owner

HITHERTO, in politics, main parties have been of divided opinion on a number of big, or so-called big, and wide questions, and a person attached himself to this or that party on the strength of his belief or disbelief in its ability to deal effectively with these wide subjects. In the words of Gilbert, a man was 'born a little Liberal or else a little Conservative' and though titles of parties may not have been the same the world over, there is little doubt that this was a decade ago, the hinge of all politics. Thus it happens that the vast majority of motor owners the world over have voted for their man regardless of how this man or his party would regard motoring. In fact the motor owner of Southern India has hitherto borne very philosophically burdens in the way of restrictions, taxes and tolls which are not shared by the non-motoring community, and grumbles quite cheerfully when the candidate he has helped to office blandly votes away still more of the motorist's money or liberty.

The truth is that the motorists of a few years ago did not realize their power—they voted as their forefathers voted, on wide political grounds, overlooking the fact that they alone were largely responsible for the progress of civilization. 'Transport is civilization', and the motor owning community have made road transport.

To-day we are all motorists in one way or another, since those who do not own cars use either their friends' cars or else they patronize buses. But there is a rapidly growing section of South India motor owners who may with truth be styled the motoring community of this area, a body of people keenly interested in all matters connected with motoring, and eager to see motoring facilities in Southern India equal

to any in the world. The political power of this community must be immense, but it has hitherto never been exercised—not because of the motorist's apathy, but solely because they realize that the task of civilization building by means of road transport is almost a self set one. They are building the skeletons of future road systems, paying cheerfully not only for their own pleasure but for the pleasure of posterity.

This is what we, the older generation of voting motorists, have been doing. But what of the generation now coming into electoral power?

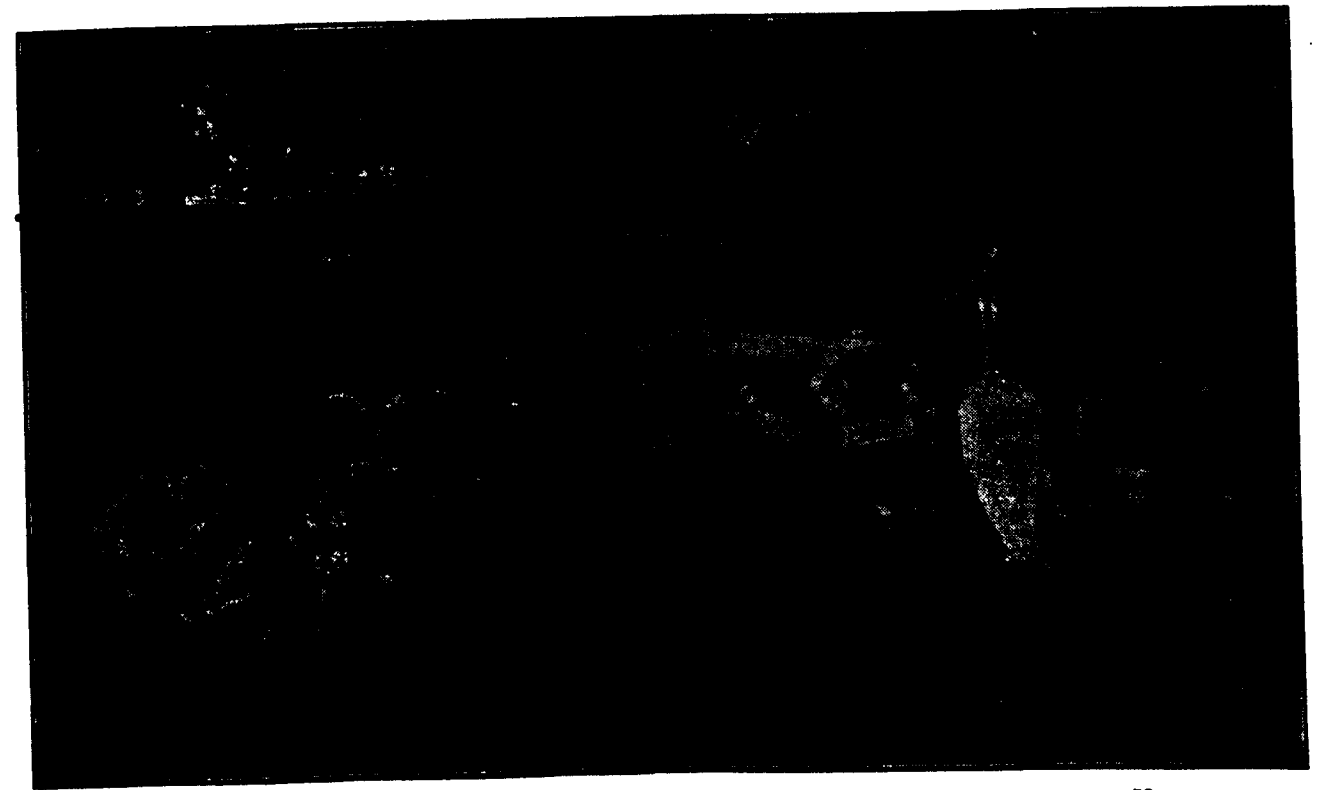
Reverting to our first premise: that broad questions of pure politics decided the older generation's vote, we have to admit that a tremendous change has taken place in politics since the war. The new generation of voters is, frankly, profoundly indifferent to politics and politicians; the old glamour had faded, and parties and their plans no longer hold the public interest as in days gone by. There is undoubtedly a marked decline in politics in favour of more physical diversions, and the normal young motor cyclist or motorist of to-day hardly ever worries his head about actual policy; the only interest he displays is when he is asked to bear yet another form of imposition in the way of taxes—imposed by the politicians and bureaucrats he has helped to return at the previous election.

To the youngster running a motor cycle out of his hard earned pay, it is easy to demonstrate that the vote he registered for a party at the last election is deliberately being used to take away that which he can ill afford. He had proved he can run a machine by dint of real personal restriction in other personal ways, yet he is continually discouraged by taxation for

which his means—were it levied on any other excuse but his machine—would seem totally inadequate. Even wealthy people detest paying taxes and to the poor man the imposition is much harder. The young man—Indian, Anglo-Indian or European—who is coming into voting power, is thinking all these matters over, very quietly and deeply, but still clearly, and he cannot help but realize the obvious fact that he is paying more than his fair share in taxation just because he owns a motor cycle or small car. He realizes, too, that men of politics do not quite understand this preference of his for a run in the open air rather than listen to a lecture on politics. He realizes, too, that men of politics have hit him time and time again where he can least afford to be hit—in the pocket. This is the last place to strike a youngster striving for independence, and the politician will one of these days awaken to this incontrovertible fact. That the awakening will be rude is betokened by the fact that so far the new generation of voting motorists have said

very little—this silence and seeming apathy are signs of danger in themselves—but one day the young men of India, England, and other countries too, will, with just one sudden movement, upset the running of the nicely oiled electoral machine and there will be an upheaval which will leave the old party politicians wondering just what had happened.

For some months now we have been paying more for our petrol believing that tolls were to be abolished almost immediately, yet there is apparently no indication except a deal of aimless talking that the promised freeing of the roads is shortly to be expected. Just how long this dilly-dallying will continue can only be surmised by comparing similar cases which have happened in the past. But there is one thing certain: unless some definite decision is reached soon, politicians will, as we have said, find the motorist exercise his power even though it hinders him temporarily in that which he has long been striving for—the progress of road transport and the building of real roads for South India.



A PHOTOGRAPH OF THE SOUTH AFRICA CRICKET TEAM WITH A HILLMAN CAR. SEE PAGE 79.

With Car and Camera

Around Madras

Exploring the Bangalore Road

IF I were asked which hobby I should choose as the one most suited to fit in with motoring, I would most emphatically answer—photography. For one thing, any one can obtain good results with the neat roll film cameras on the market to-day, and motorists with no technical or artistic knowledge can obtain really excellent results by merely pressing the trigger. Looking at it the other way round, too, there are hundreds of reasons why motoring is the ideal pastime for enthusiastic photographers.

Any one can make their motoring more interesting by taking a camera along with them on each trip, and because of this I propose to describe from time to time various runs around Madras all of which can be made comfortably in one day, and each description will be illustrated by reproductions of photographs taken *en route*.

Although my car is only a two-seater Baby, she seats three in comfort, and on all the trips of any importance three up plus provisions is invariably the load.

Picture, then, three blithe spirits, Bill and Jimmy (not to mention the ukelele) and I, setting out along the Bangalore road armed with an obsolete map and the latest thing in cameras, and—most important of all—a dozen or so bottles to lay the dust.

Making the most of the Mount Road stretch, and exercising the agility of several dogs who disputed our right of way, we ran easily towards St. Thomas' Mount, and there branched off on the road to Poonnemallee; which way, we had been assured, was the best road. From the Mount the road was in a bad condition, but as we neared Poonnemallee, the road changed from water-bound flints to a red, hard-packed dust road, delightful to drive upon where good, but which, however, suffered from patches of loose spots. These loose spots were very difficult to detect as the sun was nearly directly overhead, and there were no shadows to throw the holes into relief, such as one



LOOKING ACROSS THE TANK TOWARDS CONJEEVARAM.

gets while driving with head lights or the sun to one side.

Up to Poonnemallee the road is uninteresting, being merely flat country unrelieved by scenery or objects worth recording on a film. Nearing the town, a stretch of newly-laid tarmac raised our hopes as to the road in the future, only to disappoint us as we got into the town, where the road became really bad. Still, the old bus loves a bad road; so holding down the gas, we worked the grease well into the springs. Round about this portion of the route, the road is infested with specimens of the genus goat in abundance, which, together with sprightly bullocks and deliberate buffaloes make driving a thing of joy. All set, we wriggled our way through the town, and settled down on the air-cushions in anticipation of the run to come, which, we had been told, lay along a good road.

Jimmy twanged on the uke, while Bill crooned softly to Jimmy's haunting melodies, and I—well, I dreamed far-fetched dreams of ice-cold palliatives to non-assuageable

thirsts, and kept up a running commentary on things in general, and deaf and sightless jay-walkers in the middle of the road in particular.

Some miles out of Poonnemallee the countryside began to get more interesting, and although several times we stopped with the idea of taking photographs, we found the sun in such a position that the negatives would have been useless from the pictorial point of view. Carrying on on three-quarter throttle, we came to a town of some size,—Sriperambadur. Here we were held up at a toll-gate, and having paid our dues, we went slowly on stopping a short way further ahead beside the picturesque village tank. There are several fine temples here, mostly, however, in a bad state of repair, and some juggernaut cars of varying size, some of which were in process of decoration, but of which it was not possible to get good pictures owing to their situation in the narrow streets.



JUGGERNAUT CAR IN PROCESS OF REDECORATION.

Leaving the car for a while, we wandered around the temples taking a few snaps of the buildings from various angles. Presently Jimmy and I wandered back to the car, and whilst I sat and changed a film, Jimmy wandered around the bazaar, occasionally twanging his inseparable companion, the uke, followed by an admiring tail of chokras and oldest inhabitants. Seeing some fine mangoes on a tray, presided over by an old woman, I decided to speculate, to help in a measure to relieve the thirst that was rapidly growing to sizable proportions, and after some bargaining succeeded in obtaining a large specimen—red, ripe and juicy—for the sum of one anna. I caught a glimpse of Bill far up the road busy focussing up his camera, and quite happy. Jimmy came over to see what the bargaining was about and also decided to invest. And so we sat down on the moss-grown bricks of the tank and, while admiring the view presented by some stone-thumping dhobis in their endeavour to clear the arrears of the weekly wash, scrutinized the outside of the mangoes. Mangoes of this type are famous for the toughness of their outside skin, and how to get inside them was the problem! We had no working tools to negotiate the fruit with, apart from a pair of tyre levers. Jimmy suggested a really honest bite, but I, who remembered an episode of a well-filled cream pastry some years before, forbore, and let Jimmy bite first. He did; and carried the marks about him for the rest of the day!

Leaving the village behind us, we pushed on, and finding nothing much of interest *en route*, we continued on an easy throttle until the cross-roads to Conjeevaram were reached, where we branched aside off the Bangalore road, in order to inspect the five historic temples which are here. As it happened, however, there was a big festival in full swing at Conjeevaram and, the town being full, we decided not to stop. We turned round with the idea of finding a nice, shady tree of the good old English elm variety and a mossy bank of nice, cool grass on which to rest ourselves. Instead, however, we found parched and shrivelled-up trees with hard and knobbly roots about their bases, further enriched with a good sprinkling of flints and

other hard objects. At last, in desperation, we turned off the road and entered a small palm grove, where it was at least cool, and where there was some measure of shade. Carefully searching the sparse grass for scorpions and snakes and other specimens of this type, we squatted, and—well, honestly, I could write volumes around that glass of shandy!

Conquering the desire for sleep, we packed up in readiness for the road again, which hereabouts had been constructed of water-bound flints, a splendid road in its youth, but at this time suffering severely from senile decay—the decayed bits from the holes being scattered far and wide over the surface. As we had previously been travelling over these loose flints for miles, I inspected the tyres for cuts, etc., prior to embarking, but found that they were standing up to the rough going very well indeed, and were not noticeably marked.

The Bangalore road is uninteresting in daylight, and when I next travel to Bangalore by car, it will be by night, as the road is more easily negotiable by headlight, and there is not so much loose traffic about, while the herds of goats that bound across the road in front of one's wheels must surely sleep at night. Now and again we did come across some pretty scenery, and at one spot we came across some monkeys gambolling among the trees by the wayside. This was too good an opportunity to miss, and hastily jamming on the brakes, we tumbled out unleashing cameras on the run. We prepared to stalk the monkeys, but to no purpose, for, as fast as we came on, so would they retreat, and subterfuge had to be resorted to. Bill and I hid among the trees, and Jimmy walked back to the car and drove it some way down the road, while Bill and I prepared to shoot. Curiosity brought the monkeys back to the trees near by where we were in hiding. Bill got in one or two good shots from his tree, and I got a splendid exposure of a monkey hanging by his tail from the lower branch of a tree about seven yards away, in silhouette against a good background.

It was the picture of the year, and I was feeling pleased about it, until when, on turning the film, I



INTERESTING STONE CARVINGS PASSED ON THE ROAD.



THE FORT AT VELLORE: ONE OF THE CORNER KEEPS.
A VIEW TAKEN FROM THE ROADWAY.

found in the excitement of the moment the picture had been taken on blank paper. When putting in the new film, I had merely given it an initial turn or two and then left it, intending to turn it on to 1 when ready to snap. Still, these things will happen! Jimmy came back and enquired as to the results, and I had to confess my failure. By this time the monkeys had climbed up aloft and were regarding us with watchful eyes, and although a few hefty stones were hurled among the branches, we did not succeed in bringing them into the open again.

There are any amount of small hills on either side of the road nearing Ranipet and onwards, and a long causeway has to be negotiated where the going is very rough. In fact, the causeway consists in part of large boulders which make steering very difficult and likens the motion of the car to that of a liftman's life—full of ups and downs! The causeway crossed, however the road is good and continues so, except that in the villages there are bad patches, but these are for short distances only.

Ranipet is a fairly large town, but contains nothing of interest, and so, giving it but a cursory inspection, we pushed on to Vellore where we were informed there was a station restaurant where meals could be obtained. By this time our stock of drink was getting low, and moreover something in the way of eatables seemed to be indicated. One more photo we took, that shown here away up in a field by the side of the road. The size of the figures and general beauty of carving seemed to warrant inclusion in the pictorial record of our tour.

All our wanderings and explorations had taken time and it was now late afternoon as we neared Vellore, but not too dark to take a few pictures of the historic old fort, which, I think, is one of the most beautiful in this part of the country. Certainly, the calm peaceful waters of the old moat serve to remind one of the old castles of England. We were not able to take any photos of the fort itself, but secured one or two excellent pictures of the outer walls and keeps.

Vellore itself is the usual motley collection of bazaars, smells and noise and, apart from the fort, has nothing to commend itself. As far as we could judge from our hasty tour round, there is little likely to attract the attention of visitors. Outside, and overshadowing the town is a mass of hills, on the sides of which are to be noted small temples, with a large temple at the top. Whether it was festival time there or not we cannot say, but at night they presented a pretty spectacle all lit up with tiny fairy lights, and as we passed through on our journey back, we paused to admire them.

Contrary to expectation, we were not able to obtain any food at the station, nor indeed has the station any buffet, but instead we were referred to the junction at Katpadi, further along the road. The railway station at Katpadi is of some size, and possesses a good and well-appointed buffet, at which we obtained an excellent high tea, and afterwards, while indulging in a little community singing (to the curiosity of the waiting passengers, to whom the spectacle of three dorais in holiday mood was something new!), we enjoyed a well-earned chota peg, what time the little Standard cooled her heels in the station compound.

All day the car had been running but never once, in spite of some long stretches nearly all out, did she ever show any tendency to boil or heat up at all. On the run home, when, owing to the darkness, the country-side lost its interest, we let her have her head, and some good averages were put up. The going was considerably easier with the headlights showing up the road, enabling the potholes to be avoided, and giving visible warning to jay-walkers on the road.

The road is well sign-posted, and we had no difficulty whatever in finding our way, in spite of some tortuous ways through some of the towns, and there are ample warning signs at dangerous corners so that a good average speed may be maintained with safety. On our way back, we pulled up at the 30th milestone from Madras, and ate the remains of the cold breakfast we had taken with us, together with the contents

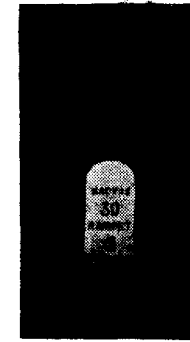


THE UKULELE ATTRACTS A DEAL OF ATTENTION

of the last bottle of beer, and very enjoyable did we find this all frescos upper by the way-side. So momentous was the occasion that we took a photo of the milestone by the wayside by the light of the head lamps, but another picture of the party picnicking did not come out so well, owing to insufficient exposure. That of the milestone was given three minutes.

On again, and thirty miles to go! Feeling tired, dusty and dry, we tried to make the journey shorter. Instead of taking the Mount Road route, we took the regular Poonamallee-Madras road, which we did not think could be any worse than the other road. Experience, however, proved our guess to be wrong, for the road was much worse.

We had covered 310 miles during the day, and the



THE LAST HALT.

petrol consumption worked out at 34 miles per gallon. We had no trouble whatever with tyres in spite of the bad roads, and during the whole of the run the car behaved splendidly.

Nearing our destination, we were troubled at times by strings of bullock carts, which ambled all over the road, the drivers for the most part asleep, and oblivious to the most modern thing in electric horns. In fact, one pair of bullocks decided they had done enough walking for that night, and simply sat down in the middle of the fairway, cart up-ended, and driver asleep on top! Goodness only knows where the rest of the convoy were, for bullock carts seldom travel alone at night.

And so home 'Boy! Bring me a peg!'
SCRIBENDI.

The Mobilator

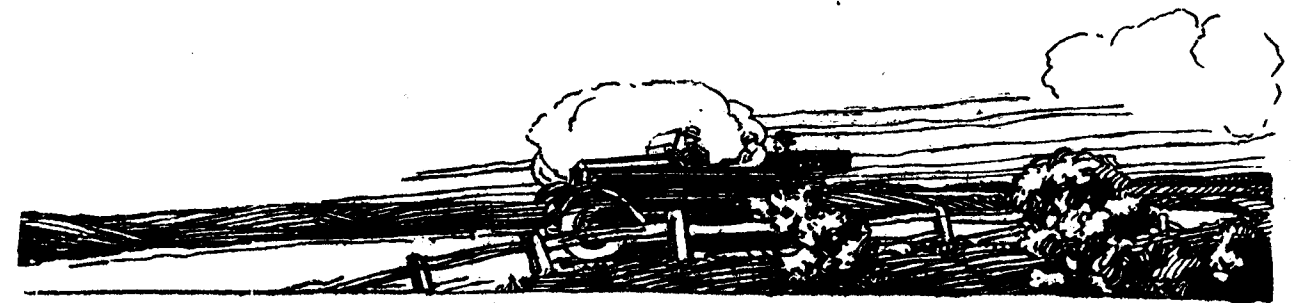
'How often', ask the makers of this device, 'have we all wished for a third leg to re-start a "stalled" motor on a hilly country road when both feet were busy on the brakes and clutch keeping the car from sliding back downhill and into the ditch? How many times have we narrowly escaped being stampeded by the on-rush of cars or rammed in the back by a street car because we "killed" the engine just when we wanted it going the most? It may not be often, but it happens even with the best of drivers, and if fate is against you—once is enough.

'Now a simple, fool-proof, automatic attachment called Mobilator automatically takes care of the starting of your motor for you. With a Mobilator attached to the starting system, you can forget you have a starter or about starting your motor. The Mobilator automatically does all the thinking and acting for you, yet you have full control over it. If you "kill" the motor at a stop signal, in the middle of congested traffic, on a steep dangerous hill, or at any place, the Mobilator will automatically re-start it in a flash and without your ever taking your feet off the pedal controls. All of us, and particularly women drivers, can appreciate the great convenience and safety such a device offers.'

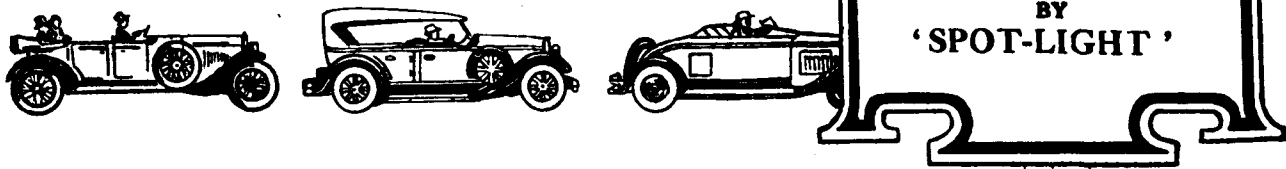
This new automatic starter control has been designed to fit on all makes and models of cars having the Bendix or electric type of starter. It consists of only three parts and is easily attached to the present starting system. The magnetic contactor may be attached either to the present floor starter button switch or to the starting motor direct, depending upon whether the present floor starting button switch is desired left in operation or not. This magnetic contactor is automatically controlled by the engine and operation of the clutch pedal.

The vacuum or governor switch which operates from the natural vacuum of the motor is mounted on to the in-take manifold or anywhere along the vacuum line by means of a T. nipple. This switch automatically controls the magnetic contactor, keeping it from operating starter when engine is running.

The Mobilator Corporation, manufacturers of Mobilator, say they have spent more than two years in perfecting, testing and securing engineer's approval of their product on practically every make of car and under every possible driving condition before putting it on the market. Now their production is in full swing with a seemingly endless road ahead for sales.



From an Owner Driver's Note Book



Fuel Economy

It is only natural that, with the increased price of fuel, many motor owners who have to consider ways and means are desirous of making some combustion adjustment that will give them enhanced economy. As a rule, it is best to leave the carburettor alone, or at least to have any adjustments carried out by an expert. It is easy enough to get an increased mileage per gallon, but an adjustment with this object defeats its own interest if, as is so often the case, it reduces acceleration. The average car should do about 35 ton-miles to the gallon over give and take country. If your car does this, you should be satisfied with its performance.

Standardising Extra Fittings

Most motorists will have noticed that gadgets and what-not, which were matters of individual driver's taste some little while ago, are now being adopted by car makers as standard fittings. I presume that this tendency will become greater year by year until standard models of any make will be complete in every detail. Even then, I suppose, the ingenious and indefatigable inventor will still be giving us novelties to retain our originality. Which is just as well, because I—and I suppose others too—like to think we've got just a little something which the other fellow hasn't.

Which reminds me that we can probably hope in the near future to have, 'safety glass' fitted to our cars quite as standard practice. Within the last few months wonderful improvements have been made in the production of this valuable material, the advantages of which have already been recognized by every far-seeing motorist.

A Cheap Continental Tour

Comparatively few owners realize how inexpensively one can tour abroad. Some interesting figures on this subject have reached me from an owner of a 12 H. P. Armstrong Siddeley Six, who recently covered 2,300 miles in the course of a 17 days tour in France. There were four people in the car and the total expenses, which included crossing the Channel, only came to £65 which works out at well under £1 a head per day. My correspondent assures me that this figure represents no particular attempt at economy and includes



CROSSING THE CHANNEL ?

a considerable proportion which was spent on amusements in what are generally supposed to be the most expensive resorts on the Riviera. Six days of the seventeen were spent in a chalet on the Mediterranean, where the total charges only came to six shillings a day per person. The petrol consumption worked out

at 24 m.p.g. and the oil consumption of this little six was practically negligible. If any of my readers would like fuller particulars of this trip I shall be only too pleased to obtain them from my correspondent and publish the whole story. Frankly, I am of the opinion that readers of motor journals, get rather bored with long 'travelogues' unless they are particularly interested in the locality under review. So I have avoided such matters hitherto.

Knowing How

I am not quite sure whether all this 'free service' business does much good to either the dealer or to the customer. Lots of people expect far too much from dealers under the pretext of 'Service', and on the other hand many dealers expect far less service calls than they ought. Nevertheless, my sympathies are with the vast majority of dealers. One often hears of cases where a motorist purchases some accessory and expects to have it fitted free. When the dealer demurs, the customer stalks off in high dudgeon determined to do the seemingly simple affixing himself. The result is usually a skimpy job, wasted time and a tattered temper.

After one experience like this the motorist is usually appreciative of the value of jobs done by the dealers. Granted, the accumulated knowledge of experienced motor engineers makes some tasks look simple, but that is no reason why the motorist should expect something for nothing.

It reminds one of the old story of the Yankee village blacksmith who repaired the local pump after everybody else had a try—and failed. His bill was the approximate equivalent of Rs. 25-8-0, and there was a loud protest about paying such a large sum for so simple a job. When asked to explain, he did so by submitting a detailed bill:—

	RS	A	P
To adjusting pump and supply-			
ing washer	0	8	0
To knowing how	25	0	0
Total	25	8	0

Now the motor repairer 'knows how', and it is hardly fair for the motoring public to expect him to give his knowledge free to all who may be thoughtless enough to ask.

Eight Cylinders Good in Sand

I recently had the pleasure of testing one of the Hillman Straight Eights under unusually strenuous conditions. This gave me the impression, by virtue of its comparison with the performance of engines with a less number of cylinders, that the eight-cylinder is remarkably good in loose sand. Every motorist, who has tried to work his way through a stretch of this, knows how quickly the back wheels are disposed to dig themselves in. It is evident that this action is largely due to discontinuity of torque. When the back wheels are driven with the even turning effort that the Straight Eight engine provides, they maintain their grip even on this elusive surface and the car is thus able to make progress without any special being brought to it.



'UNUSUALLY STRENUOUS CONDITIONS'

I realize, of course, as I write this, that immediately on publication I shall be involved in a furious argument with my colleague who conducts the Practical Page. If ever I mention—even in a whisper—anything bordering on the technical, he swoops down upon me and forthwith entangles me in a net of figures, formulæ and what not, much to his pleasure and my discomfiture.

Can You Afford to be Without a Car

There are thousands of over-timid or cautious members of the community who refrain from purchasing a car solely because they are of the

opinion that car owning and running is an expensive business. In fact they consider they cannot afford to run a car, when in reality they can do so at a much cheaper rate than they at present expend on taxis and other means of casual transport.

The habit of looking ahead is always to be commended whenever financial considerations are concerned, but there can be no question that a great number of people who can afford cars—particularly the low priced cars of proved reliability on the market to-day—miss a great deal of pleasure, entertainment and convenience purely because they, when making their calculations, fail to take into consideration the money they spend on taxis, tramcars, buses or other means of conveyance. A car to-day is ridiculously cheap to run—granted of course that one is wise in the choice of a vehicle; petrol and oil could not be very much cheaper than they are, tyres are low priced and wonderfully reliable, so that the cost of running a car to-day is surprisingly low.

Railway fares, too, take up quite a lot of money and if a family of, say, three or four persons decide to take a short holiday in one of the hill stations, then the expense of railway travelling is quite considerable. There is a great deal more pleasure in travelling by road than by rail, though in all fairness it must be conceded that the toll system in force in Southern India detracts a great deal from the pleasure of long distance motoring. Nevertheless, even under these circumstances, motoring is more comfortable and congenial than railway travelling.

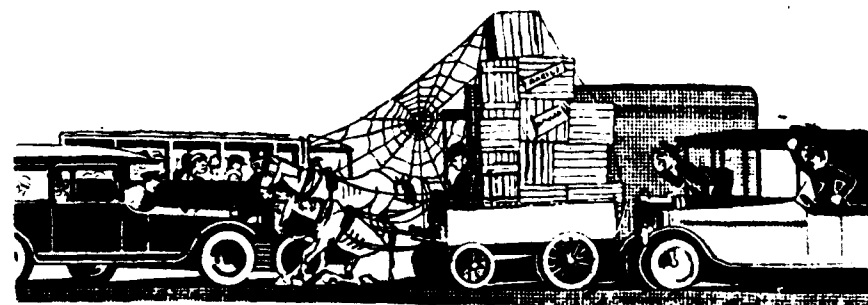
Over a period of, say, 12 months, one could

imagine that the cost of running a car would be very little more than is normally expended on other forms of transport, and this leads one to wonder whether the question 'Can we afford a car?' should not be altered into the entirely different 'Can we afford to be without one?'

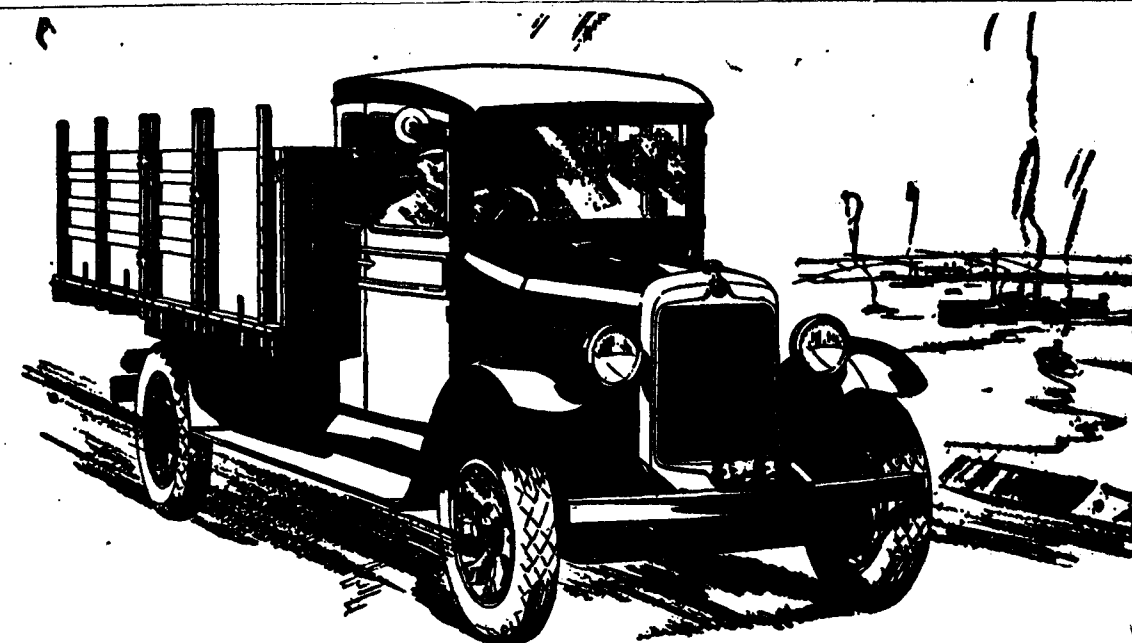
Second-hand Motor Cycles

Chatting the other day with a well known Madras dealer who sells one of the popular motor cycles, I was told that he was exceptionally busy with sales of second-hand machines. He is busier, in fact, than he has been for some years, due, he says, to the determination of keen, would-be motor cyclists to own a machine of some description immediately, without waiting until they can afford new models.

Unquestionably the impecunious buyer has an excellent opportunity of a bargain these days in the second-hand market, and the truth of this is becoming more generally recognized than has been the case in the past. If the would-be motor-cyclist deals with a well known and reputable firm he is really perfectly safe in purchasing a used machine, and at the prices now being asked he should be tolerably certain of getting value for his money. This, of course, applies at the moment to cars as well as motor cycles and I have no hesitation in advising anyone to purchase either second-hand. The dealer, too, doesn't for one instant object to selling second-hand—he knows that satisfaction with this your first purchase is his best recommendation when you come along to buy your new machine after many pleasant 'prenticeship days spent on the old one.



'MORE PLEASURE IN TRAVELLING BY ROAD.'



As If Built To Your Order

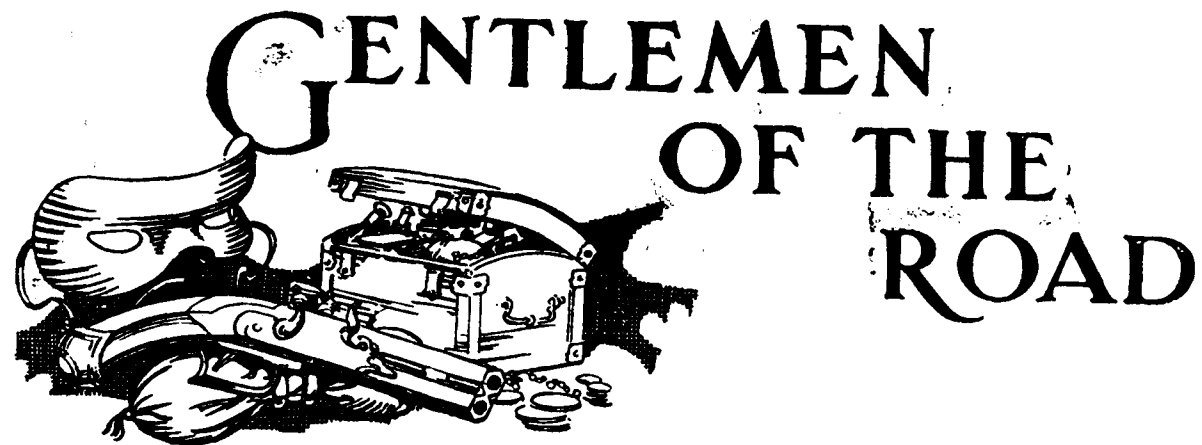
The range of sizes and types in which Dodge Brothers Trucks and Buses are built is so great that you can get one to fit almost any hauling requirement as if it were built to your order.

And your saving is commensurate with the economies of Dodge Brothers great volume production. Inspect these fast, powerful, dependable money makers—then put one to work for you.

ADDISON & CO., LTD.

Madras, Bangalore, Calicut, Kottayam and Trichinopoly.

DODGE BROTHERS TRUCKS AND BUSES



Ralph Wade, writing in MODERN MOTORING, makes an appeal for courtesy on the road. We make no apology for reproducing the article in entirety.

OUR coach-riding ancestors used to think with dread of the possibility of an encounter with one of the 'gentlemen of the road' of their day, and the term conjured up visions of a black mask, a pair of pistols—or maybe a blunderbuss—and a polite request to hand over anything valuable. To-day quite a different state of affairs exists and I, for one at any rate, think of the phrase in its more literal meaning and welcome with metaphorical open arms any instances of manners which I may be fortunate enough to encounter at the hands of fellow motorists—including the paid chauffeur.

I frequently, but not always, drive one of the present-day 'baby' cars which are deservedly so popular, and I cannot help remarking that the treatment usually meted out to such 'small fry' by those in charge of the largest type of saloon or limousine is, to say the least of it, careless. What joy is it, therefore, when one encounters a driver of a big bus who does not indulge in such tricks as overtaking in traffic and immediately cutting diagonally across to the near side so that the small car has either to pull up or risk trying a battle of wings—with foregone result. Another trick of the big brother—especially it seems the American brand—is to play strident notes on its hooter behind the small car until the latter readjusts his own scheme of necessity to enable the noisy beast to plough its blatant way onward. Again I say, what a pleasure it is to meet a modern gentleman of the road who realises that speed isn't everything in this world.

I honestly endeavour to model my own driving on what I should like everyone else's to be and, whilst I by no means claim perfection, I do at least realize when circumstances land me into a position where I know I have annoyed another driver, and if opportunity permitted I would always apologise, and am always ready to kick myself.

I hope it won't be thought that I am a disgruntled small-car owner and that I have an inherent dislike of those who can afford 70 h.p. or a chauffeur—oh dear no! Many of the most offensive drivers I have met or been passed by—are seated in 7 h.p. cars some of them with noisy open exhausts to boot.

I wonder what percentage of those who practise the ignoble art of cutting in would elbow their way through a doorway in front of someone else who was just about to go through the same door? Very few, I expect, and yet they do not seem to realize that their cut in is equally ill-mannered—and incidentally far more dangerous. It must be seldom that time is so precious that one must behave like a boor in order to gain a minute—besides, how can it be assumed that 'the other fellow' isn't in an equally important hurry?

I have sometimes thought whether it would be practicable for one of the motoring organizations—or the motor press—to keep a black list and to accept reports from motorists of the registered numbers of offending cars. Such a report as 'XYZ 12345 guilty of boring Austin 7 into the gutter on August 10, 1929'—the report to be signed by the sufferer. The list could be published under a general heading such as 'Ill-mannered driving reported,' and the number of the car only given. I imagine road hogs aren't proud of their vice and wouldn't like their friends to see their driving publicly branded. It might also happen sometimes that the lack of manners was genuinely unintentional, and perhaps unknown, in which case the 'offender' would no doubt like to inquire for further details and perhaps even offer an apology. Such a list might also on occasions be an assistance to the police in support of prosecutions for dangerous driving—a form of police activity which decent motorists should always welcome.

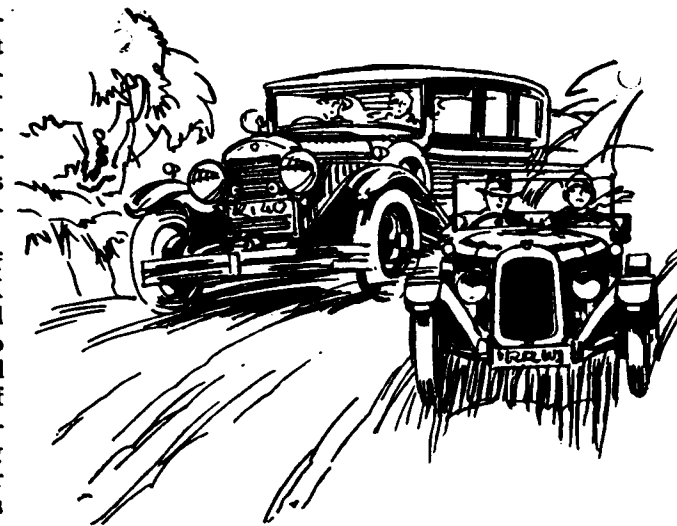
I doubt if anyone submitting such a report would be laying themselves open to action for libel—even if inadvertently wrong in their facts—but I have no expectations of seeing the idea adopted!

I believe quite a lot of bad driving of the kind I have mentioned is caused by motorists falling into the habit of thinking of all traffic as just a matter of so many cars to be negotiated, quite forgetting that each car has a driver with his, or her, own ideas and needs of the moment.

I know a man who habitually, and I am afraid almost instinctively, pits his car against any other which happens to pass him on the road; he always boasts in terms of cars and I'm quite sure he doesn't appreciate what an infernal nuisance he must be to the *drivers* of his numerous 'scalps.' He is an extreme case I admit, but there are many gradations between him and the type of motorist who feels upset because he has unintentionally 'taken someone else's road.'

Talking of right of way reminds me of the warm glow of appreciation which I experience when another car-owner deliberately stands aside, as it were, to let me through, even though it may entail a momentary check on his own progress. The courtesy of an acknowledging salute when one does the same thing oneself is a little thing in itself, but is one of those minor incidents of life which count.

I always hold that when driving in towns one shouldn't consider it a right of way to pass another car on its near side—although perfectly legitimate if circumstances properly permit. I find it is, however, quite usual for others literally to force their way up



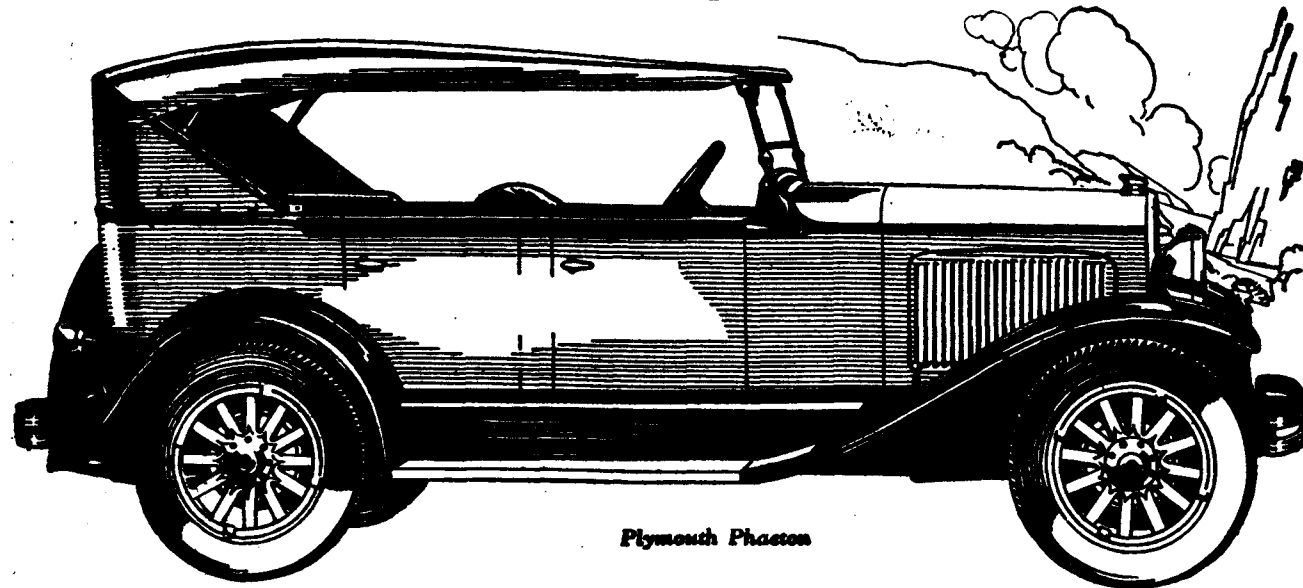
'PITS HIS CAR AGAINST ANOTHER'

my wife were driving a few hundred yards in front of another car—also with two occupants. On reaching the first gate my wife got out to open it and waited in the heavy rain whilst the other car came up to hold the gate for them. Naturally they passed my car whilst my wife was remounting, and our respective positions were approximately reversed. Equally naturally we expected a similar courtesy from them at the second gate. Need I complete the story? It is, however, a solemn fact that that second gate was allowed to bang shut almost on to my radiator! I suppose I may truly be told that such people's behaviour had nothing to do with the fact that they happened to be motoring. True, but in the pre-war days when I first took up driving there existed an esprit-de-road, and people didn't seem to take up the pastime unless they had that spirit. It was almost as unthinkable in those days to find the utterly selfish driver we know to-day as it still is to-day to find a man who would deliberately cheat at cricket. I hope 'progress' isn't eventually going to give us the latter too!

The Annual Subscription
to the South India Motor Owner
is only Rs. 3
There's a convenient form on page 95



PLYMOUTH



Plymouth Phaeton

Plymouth's full-size something totally new in the lowest-priced field

THE full-size of the Chrysler-built Plymouth comes as a distinct revelation to motorists long accustomed to crowded seating space and discomfort in low-priced cars.

Plymouth chassis and bodies are not only longer and lower, but seats are wider and deeper, giving greater leg room and greater head room for all adult passengers.

The Plymouth unquestionably leads in the lowest-priced field for distinctive style and beauty and sustains the Chrysler reputation for power, speed and smoothness.

See and drive the new Plymouth to know the generous margin by which it exceeds other cars in actual value.

DISTRIBUTORS:

ADDISON & CO., LTD.

Madras, Bangalore, Calcut, Kottayam and Trichinopoly.

A Front Wheel Drive Car

An interesting description of car which 'pulls' instead of 'pushing'

ALL this year there have been constant rumours in the motor car world regarding an American car to be operated on the front wheel drive principle, and that rumour for once was not the 'lying jade' she is reputed to be is evidenced by the announcement that the Auburn Company have built and brought upon the market the first car of this type.

It is a car that 'pulls' instead of 'pushing', driving through the front wheels, and introducing for the first time the unit power plant on a passenger automobile. This permits the application of power near its source, adding greatly to efficiency and ease of operation, inasmuch as the power is always applied in the direction which the front or guiding wheels are turned.

The chassis frame is straight, no elbow being needed at the rear to clear a rear axle gear housing. Thus the body is built much lower than in conventional automobiles, and the centre of gravity of the car is consequently lower, reducing skidding and sidesway. Transmission, differential, short drive shaft, and front brake drums are all mounted on the chassis frame of the car, reducing the 'unsprung' weight several hundred pounds and giving better distribution.

The front axle is of three-quarter floating which consists of a latitudinally bowed tubular member joining the steering knuckles. The propeller shafts are entirely separate from this, entering only at the ends where the steering knuckles are attached. The transmission, differential and short drive shaft are all located back of the front axle, and are mounted on the frame of the car, becoming sprung weight.

Universal joints are provided in the propeller shafts, the two inner ones being of the Universal Products

type, and the two outer ones of a special constant velocity type, patented, and used for the first time by Auburn in the front drive car. It is this special universal joint of which Auburn holds the patents that has made the Cord car possible. Heretofore, designers of front drive cars have been hampered by their inability to obtain a universal joint which would

give constant velocity to the front wheels when making a turn. Race drivers who have used front drive cars were under the handicap of having to make wide turns. Through the use of this new type universal, the turning radius has been reduced to 21 feet.

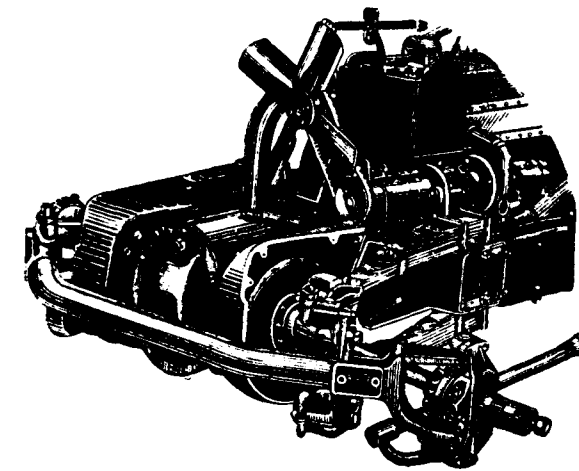
The car has been made possible through two years of experimentation with the front drive principle by Auburn engineers.

No change will be made in the present Auburn line. The new front wheel drive will be separate and distinct,

distinct, of higher price and built for the men who can afford it, he explained.

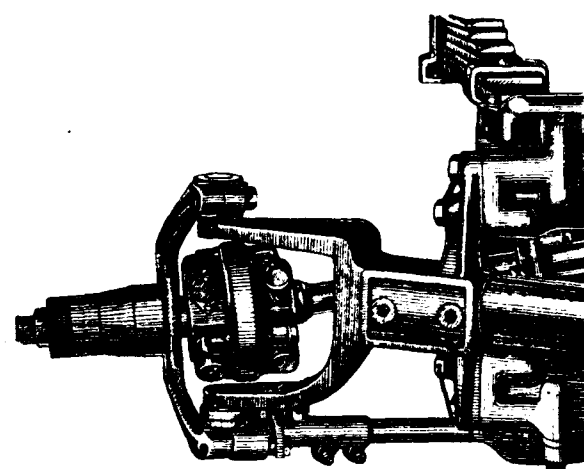
'In offering this front wheel drive car to the public,' Mr. Cord said, 'we are in no way attempting to obsolete the present reardrive type, nor, to throw a wrench into the automobile industry's machinery. The best answer to that is that we will continue to build reardrive Auburns in greater number than ever before. Our newest product, which has its own inherent advantages, will be built for a distinct field.'

The new front drive, according to all accounts, provides increased safety in operation and roadability, increased comfort in driving and riding and economy of operation and upkeep. Through the 'pulling' traction, front drive makes possible easier steering, reduced strain on chassis frame, reduced thrust on front wheel bearings and reduced skidding likelihood.



FRONT SECTION OF POWER PLANT UNIT IN THE FRONT WHEEL DRIVE

Note that differential, transmission and clutch are all in front of the motor.



SPECIAL UNIVERSAL DRIVE SHAFT
ASSEMBLY OF THE CORD

*It is this patented feature that has made
front drive possible.*

The principle of front drive propulsion is not new. The fact is it dates back to the ox cart and the Roman chariot. The locomotive has always applied it and the airplane adopted it early in development. In the automobile industry front drives were experimented with as early as 1912.

The difficulty which manufacturers have met with has been to design a universal joint which would permit the transmission of power to the front wheels and at the same time permit these wheels to be steered at a sharp angle. Perfection of such a universal joint by Auburn engineers has completely overcome this and the Cord front wheels can angle at 42 degrees, while in motion, or greater than that of the average rear drive car.

Probably the most noticeable feature of the car is the closeness with which it hangs to the ground, and yet it has a road clearance equal to most rear drive cars. An ordinary sized man standing alongside it can look over the top. The sedan, for instance, is only 61 inches high at the peak point, but even with this low construction, head room is a full 38 inches. The average rear drive sedan stands 70 to 73 inches with the same amount of head room.

Striking in appearance also is the long hood, which is 46 inches in length, giving the car an unusual fleet and powerful appearance. The front fenders likewise are the longest used on any production car, with an overall length of 80 inches. They are of the one

piece type and their long, sweeping lines add again to the fleet appearance. Radiator is the 'V' type, similar to the design used on Miller racing cars, although much larger, with the top line of the hood practically parallel.

The body itself is streamlined throughout with the rear seat on the same level as the front. Harmony and symmetry are the keynotes of design, sharp corners being avoided and all lines softened in a pleasing way. Finish is in two tone lacquer on most models, bumpers, tire carriers, etc. are all in chrome.

In the performance of the car, skidding has been reduced to a minimum, and the reduction of unsprung weight makes riding unusually easy and comfortable. The fact that the power is applied always in the direction the front wheels are turned, makes it possible to easily steer the car out of ruts and over road obstacles at will.

Pitching and skimming have likewise been reduced through the front drive traction, and the fine balance of the car gives it cushionlike riding qualities.

From a mechanical and engineering standpoint, the front axle and method of drive are of chief interest.

With the new Cord front drive, the engine, transmission, drive shaft, differential and the driving axle become a single unit of power.

The car is powered by a straight-eight 125 horsepower Lycoming motor, which had been developed especially for this model. This engine is reversed from the usual type, the flywheel being in front, next to the transmission. Bore of the engine is $3\frac{1}{4}$ inches and the stroke $4\frac{1}{2}$ inches, the official horse-power rating being 33.8 and the piston displacement 298.6 cubic inches. Pistons are Bohnalite of the Invar Strut type. Five main bearings are used and all torsional vibrations are minimized by a Lanchester vibration dampener and counterbalanced crankshaft. Cam shaft and accessory drive are driven by a link belt, which automatically adjusts itself.

Dual carburetion and dual manifolding are also used. The transmission is located directly in front of the engine, and is operated by a short drive shaft. The gear shift lever mounted on the dash extends through the instrument board and operates by a thrust turn. Three speeds forward and one reverse are used.



Motor cars, furniture, boats—these are only a few of the things on which you can restore the faded colour, renew the lustrous finish, and give protection with a coat of serviceable enamel.

Why Drive a Shabby Car?

Bright and gleaming, as if fresh from the showroom—the old car changed beyond recognition! The rich colour and bright lustre make it 'look like new'. And all with one coat of Valspar-Enamel.

A Valspar-Enamel finish does not grow dull and 'shabby'. Its brand-new look lasts. Lasts long after ordinary finishes have lost their beauty and usefulness. Valspar-Enamels are full covering colours, made from finest pigments ground in clear Valspar—THE FAMOUS VARNISH THAT WON'T TURN WHITE.

VALENTINE'S
VALSPAR
ENAMEL

Addison & Co., Ltd., Madras

... Bangalore, Calicut, Trichinopoly and Kottayam

Chevrolet Ignition Lock Keys

Owners of 1929 six-cylinder Chevrolet cars are advised by the General Motors concern to make permanent record of their special ignition lock key number so that in the event of loss of the key a new one can be cut without difficulty. If the key be mislaid, the number not being known, and the lock plunger is in the 'in' position, it is impossible to remove the lock barrel to find the key number without destroying the lock assembly.

Morris Minor Clutch

Lubrication and adjustment of the clutch of the Morris Minor is quite simple, but as the clutch runs dry, excessive lubrication must be avoided, otherwise oil may find a way on to the friction linings and cause a slip. After removing the clutch inspection cover, a few drops of engine oil should be given to the clutch thrust race, and to the splined shaft in order that the

driven plate of the clutch may slide freely; on the latest models an oil hole is drilled in the hub of the driven plate. A few drops of oil should also be given to the left-hand bearing of the clutch withdrawal fork. The right-hand bearing should also be lubricated, but this is accessible without removing the inspection cover, as an oil hole is provided. One drop of oil should also be given to the felt washers on each of the bearing pins of the withdrawal levers.

Adjustment should seldom be required after the friction surfaces have bedded in. The clutch pedal should, however, have at least $\frac{1}{4}$ in. free movement. The withdrawal levers have their movement restricted by keeps, and should be adjusted until the toes of the levers are within $\frac{3}{32}$ in. of the thrust bearing. It may be necessary to bend the keeps out slightly with a screwdriver to allow this. With the withdrawal levers held back against the keeps, the screw and lock nut in each lever should then be adjusted until there is an equal clearance from .01 in. to .015 in. between the adjusting screws and the pressure pins.

Conjuring Trick with New British Car

Sir W. Morris's magic at London dinner

A TRIUMPH of secrecy has been achieved by Morris Motors.

An entirely new model, built specially for overseas markets, has not only been designed and built at the famous Oxford works, and put through its trials in some of the roughest parts of Wales, but it is already 'in production', and the first consignment arrived in India some weeks ago.

Models are now on their way to, or have already arrived in, all the Dominions, and the car is also being supplied to other countries.

And until two or three days before shipment not a soul outside the Morris organization knew anything about the new car.

First News To-day

Until then no rumour of its existence had reached the public, though in Canada the first models are perhaps now on the roads.

Recently a hundred motor dealers were invited to dine with Sir William Morris at the Holborn Restaurant. When he rose to address them, they expected to hear a typical speech about ordinary manufacturing and sales matters. They had the surprise of their lives.

Sir William spoke about the need for getting into the overseas market on a big scale.

'We have built the car to do it,' he told his hearers, 'and, gentlemen—there it is.'

Two curtains swung apart at one end of the banquetting hall, and revealed a shining saloon, of impressive dimensions, standing on a platform. Two hundred eyes stared at it—fascinated.

Spectacular

No conjurer had ever produced a rabbit from his hat at a children's party with more dramatic effect than when Sir William, the super-magician, produced a fully-equipped motor-car at that dinner party.

Henry Ford at his best never did anything so spectacular as this.

Their first surprise over, the guests crowded round the car and examined it in detail.

They found it was an all-steel saloon, the body of which is built integral with the chassis. It is a new principle in British manufacture, and instead of developing rattles and shaking apart, ensures good wearing qualities in the bodywork, as the steel shell acts as a girder and strengthens the whole construction.

20-H.P. Engine

Further details provide a fairly clear picture of the new Morris 'Isis', as it is to be called.

The engine is of 20 h.p., with six cylinders on the overhead valve principle, developing over 50 h.p. Four-wheel brakes are hydraulic in action, safety glass is fitted, and the equipment includes radiator, shutter, thermostat, rear stoplight, sun and rain visor, and bumpers fore and aft.

An ample ground clearance has been secured without sacrificing the general appearance of the car, the body being low-built, with exceptionally long springs to ensure easy riding over the roughest roads. Special steering gear makes control of the car extremely light.

A Film Display

It is a full-size five-seater model, with a wheelbase of 10 ft. and a track of 4 ft. 8 in. Pneumatic upholstery and an extra large and strong luggage grid are other features of the overseas model.

Carburettor and ignition are mounted very high to allow of shallow rivers being forded without trouble. While the car was on its trials in Wales, it was found that still water of a depth of 2 ft. 6 ins. could be forded without interference with the running of the engine.

A film taken of the car on its trials was shown to the dealers entertained by Sir William Morris. They saw it crossing streams, climbing steep hills, and traversing the roughest ground that could be found.

Restaurant Workshop

Sir William's conjuring trick was not achieved without a good deal of preparation.

For a week before the dinner—during the hours when comparatively few people were about—mechanics could have been observed by a hidden watcher



going up and down the carpeted staircase of the hotel, carrying wheels, shafts, and other machinery, which all went into the building of the Holborn Restaurant model.

For the time being the restaurant was an annexe of the Cowley works. It was a department which was shut down after one model had been produced. Then every bolt and nut was removed and all the parts were carried away.

Waiters' Secrecy Pledge

Waiters and others having business in the building were all pledged to secrecy.

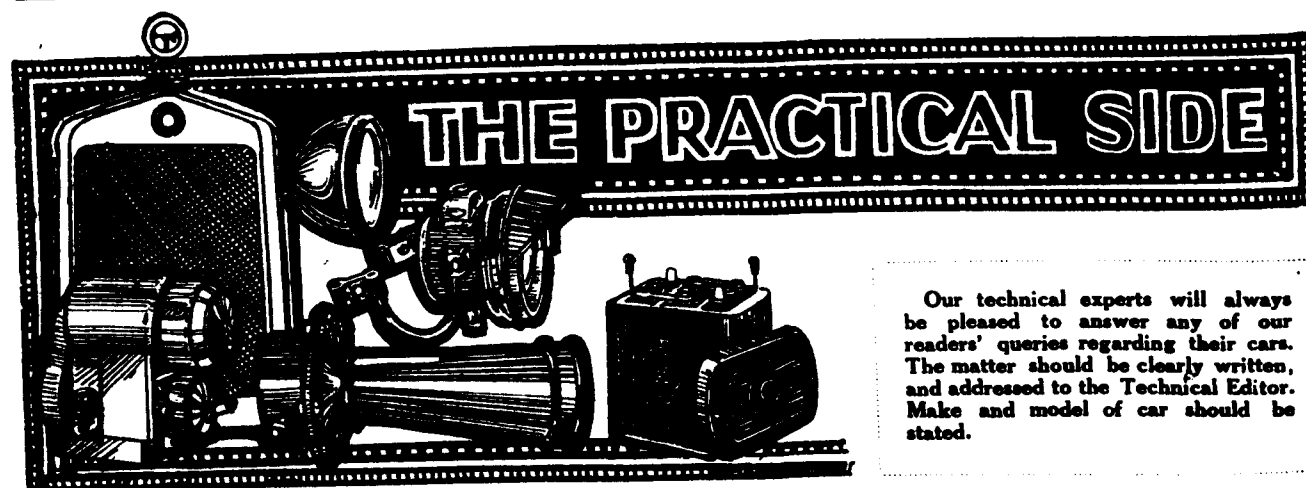
The 'Isis' model is a quality car. It is not likely to sell cheaply in this country, but it is a well-built and sound piece of engineering, designed and made to stand up to exceptionally hard conditions, and to last.

At present only saloons are being produced. On this one model so much attention has been concentrated that high production figures will be realized almost at once. It is now believed that the demands for the new car will exceed first expectations. Colonial experts who have examined and tested the 'Isis' are convinced that it will make a world-wide appeal.

When overseas demands and manufacturing conditions permit, a touring model, as well as the saloon, will be produced for home use.



Addison & Co., Ltd., Madras, Bangalore, Calicut, Trichinopoly



Our technical experts will always be pleased to answer any of our readers' queries regarding their cars. The matter should be clearly written, and addressed to the Technical Editor. Make and model of car should be stated.

Tuning Hints

A series of articles written entirely to aid motorists who are in the 'back of beyond' where technical advice is not available

BY

E. F. LOWMAN, A.M.I.A.R.

Until a few years ago nobody could have quarrelled with the definition of motoring as 'Sport'. Owners were for the most part enthusiastic drivers, who took a pride in keeping their cars up to concert pitch. Such men as Ford and Morris, however, have changed all this; and while some people may complain of the fall of motoring from a sporting to a utility level, such change is really in the best interests of the population as a whole.

The spread of motoring and the mass production of cars, have engendered a new view-point. A motor car is now merely a means of transport. The ideal product would need nothing at all in the way of attention except replenishment with fuel, oil and water once a week.

We are, it is true, fast approaching this ideal design, yet we have not so far found material that will resist inattention. The owner driver, using his car regularly, may or may not have that mechanical sense which tells when some slight adjustment is required. If he has it, all well and good. If he has not that fine sense, then neglect may after a time cause some trouble to set in, resulting in a fairly heavy repair bill.

This mechanical perception is often born in a man, yet there is no doubt that a sympathy with the feelings of an engine is in many cases acquired after a certain

amount of driving experience. It is the writer's idea to give some hints on tuning to those who have reached this stage.

Running-In

The life of an engine, and the service given by it, depend very largely on the treatment it receives in the first five hundred miles or so. An engine, newly bench-tested and mounted in its chassis, is always tried out thoroughly by works testers to make sure that its performance is up to standard. Thereafter, in the hands of its owner, it must be allowed a little time of 'light duty', so that the bearings and other frictional surfaces may bed down evenly and smoothly. When an old engine is dismantled it is nearly always possible to tell what kind of treatment it received in the early days of its life. The cylinder bores of an engine that has been 'run-in' carefully have a dead smooth and mirror-like polish, without a single scratch or score.

The First Five Hundred Miles

Of course, during the first five hundred miles, little or no attention is required. The engine has been issued from the works in perfect mechanical condition, and nothing except perhaps some slight adjustment of the

Tuning Hints—(contd.)

slow-running device on the carburettor, need be done. After this period is over, however, there are several points which it is worth while to watch in order to secure the best tuning; and, in fact, the enthusiastic owner with sufficient mechanical sense may even carry out an overhaul on the lines suggested here, to obtain improved running, and, as some of the later notes will indicate, a little extra speed.

Compression

The most important quality in an engine is good compression. Without it there would be some difficulty in igniting present-day petrols, and the power obtained from the explosion would be small. There is actually a definite relation between the compression pressure and the power produced on the expansion stroke; so that on modern engines much higher pressures are used than was formerly the case. As a result, valves, pistons and piston rings must fit much better than before in order to retain the compression and it is a good plan to test each cylinder periodically to make sure there is no leakage.

On an engine fitted with side-by-side valves, there are four places where compression may leak away. The first is past the piston. This is tested by listening at the crank-case breather while the engine is turned over slowly and with throttle wide open. The second is past the valves. This is tested by listening at the carburettor, and also at the exhaust pipe, in order to test both valves. The third is past the sparking plug. This is easily tested, and easily cured. Finally, past the cylinder head gasket, or past the valve caps (where fitted). Leakage at the valve caps can be tested by smearing oil around the flange, bubbles appearing, if there is any escape of gas, a new washer being a cure.

A More Definite Test

To make quite certain about valve leakage, there is a more definite test than by ear. Remove the inlet and exhaust manifolds, and place a piece of paper well coated with oil over the suspected valve port. On the compression stroke the paper will lift away from the cylinder, if there is any leakage. If there is even only a slight escape, especially past the exhaust valve, it is well to make a compression tight seating at once, since a leakage of flaming gas scorches the seating badly. Grind in with coarse paste first, finishing with fine paste and then with metal polish, to obtain a really bright surface.

Leakage of compression past the piston is just as serious as valve leakage, and neglect here may cause actual scoring of the cylinder bore. It is generally due to the wear of the piston or piston rings, wear of the cylinder, piston rings carboned up in their grooves, or the slots in the piston rings moving round in lines. Taking last alternative first, if three rings are fitted above the gudgeon pin the slots should be spaced out 120 degrees apart; while if there are only two rings, slots should be on opposite sides in the fore and aft-line of the engine.

Worn piston rings that are very slack in their groove, or have too wide a gap, should be replaced with new oversized rings. This will ensure economical oil consumption, and preservation of a finely polished cylinder bore.

After a considerable mileage, however, the cylinders on inspection are generally found to have worn oval, due to the side thrust, and it is then best to have the block re-ground and fitted with new pistons and rings.

(To be continued)

Good Brakes

It is not a little dangerous to drive with unevenly adjusted brakes, and frequent attention to this part of the machine is well repaid. On the 9 h.p. Fiat the adjustment for the front brakes is effected by means of butterfly nuts on the cam-operating shafts just below the radiator. The rear brakes are adjusted by hexagonal nuts which are screwed outwards to take up play in the cable. If this cable has stretched more than the adjustment can take up, they should be eased off completely, the clips on the camshaft arms on the back axle released, and the cable shortened at the rear end until the main adjustment can come into play once more. Both the hand lever and the pedal on this model operate the same shoes in the rear brake drums. Care should be taken not to put too much power on the front brake shoes.

If it is necessary to inspect these shoes, the wheel should be removed in the ordinary manner, the hub cap unscrewed, the split pin of the central hexagon nut on the stub axle spindle withdrawn, and the nut undone—it has a left-hand thread on the near side and a right-hand thread on the off side. A hub withdrawing tool slides the hub, complete with the brake drum, off the spindle, and the shoes are exposed.

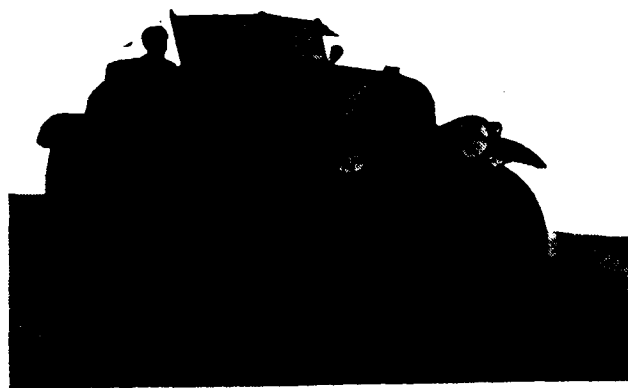
A Car for the Enthusiast

Describing the Madras-built Sports Model Ford and an Account of its Remarkable Performance

MMOTORISTS may be divided into three classes.

The enthusiasts, professionals and those who are 'just motorists'. These last named are important even if only because of their potentiality; the professional in carrying out his definite tasks performs an estimable service to the industry as a whole; there remains the enthusiasts, and they are those who by their desire to have everything just right, by their demands for efficiency, accessibility and general excellence of performance encourage motor manufacturers and dealers to turn out cars of which an owner may be justly proud. It is these enthusiasts who are mainly responsible for the production of two types of machines. One is the larger sports model which appeals only to the man with money, enthusiasm and leisure to run a car of this description; the other is the low priced sports car built for economy, performance and general all round sporting performance. It is to these last named enthusiasts that the Ford Madras Sports Model will appeal. To the driver who must, above all, have lively performance, this Sports Ford offers exceptional opportunities, yet at the same time it is a car which can serve the sober tourist just as well.

As can be seen from the illustrations, the appearance of the car is such that one immediately gets an impression of speed and power, yet at the same time a cursory examination is likely to leave the impression that the car is slightly too high for perfect road worthiness. This impression is, however, disproved by subsequent test, and I have little hesitation in affirming that the new model is extremely fast, has wonderful acceleration, holds the road perfectly and



THE OAKSFORD SPECIAL

corners without the slightest suggestion of uncomfortable rolling.

It was with a certain amount of diffidence that I accepted the invitation of Messrs. Oakes & Co., to try out this model as I have had previous experience of old models of this make which have been imagined by their owners to have been converted into sports models.

Early one recent evening, however, I decided that the car would have to be tried out, and the first impression I gained on driving from the local dealer's workshop was that, even though the standard model is remarkable for its acceleration, this 'hotted up' sports model is infinitely better. It is not here, however, that we bothered to take any acceleration figures as this part of the test was to be deferred until less crowded parts of the road were reached. After a run around Madras, over rough roads, through traffic and round tortuous corners, I eventually brought the car on to the Marina, and there found the acceleration was better than I supposed. Good road holding is an essential feature of such a type of car, and this model

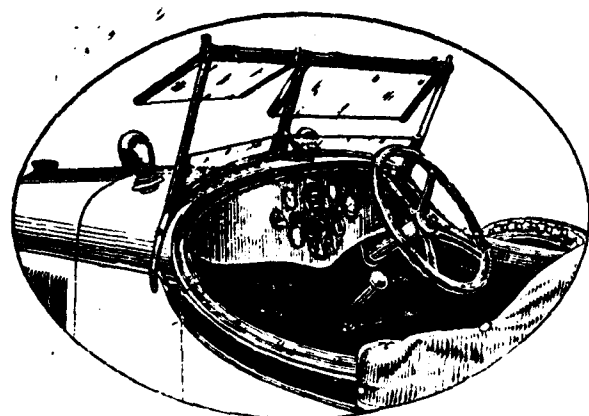
possesses it to the full. Corners may be taken fast without any tendency for the car to deviate from the chosen path and without any roll or sway. With the steering, there is no fault to find, and the brakes seemed good although they were badly adjusted during the test. A subsequent trial, however, after the car had returned to the workshops for the necessary adjustment, proved that the fault was purely accidental. Of speed there is plenty, and the easy touring speed of 45 or 50 m.p.h. can apparently be kept up indefinitely. Even prolonged hard driving does not raise the temperature of the cooling water much above normal, and this despite the fact that most cornering on the speed test was done in second gear.

A few seconds from changing into top from second saw the car touching 60, and at this speed it is very evident there was another 10 miles per hour well in hand. Such performance for a standard 4-cylinder car is indeed extraordinary, and I can well understand now the enthusiasm of Mr. E. F. Lowman, the engineer who was responsible for the design of the model.

Keeping at this speed we took a long run out of Madras some 10 or 15 miles over whatever roads we happened to find on our entirely unplanned route. It was found, however, that for really comfortable cruising the best speed is round 45 to 50 miles per hour, at which speed there is not the least suggestion of striving or pulling; in fact the car feels at this speed exactly like any standard model 6-cylinder car being driven at about 30 miles per hour.

The car itself has an extremely neat appearance and the body work which has been built in Madras is of a very high standard indeed, entirely free from squeaks and rattles giving at the same time that impression of solidity which is so often absent from present day steel body work. It will be seen from the illustrations that the body is constructed on generally recognized sporting lines, and that the appearance is not spoiled by an ugly dickey seat or hood. The latter is concealed within the body work itself and yet is easily raised from its housing in a few seconds. The dickey seat itself is constructed in exactly the same way as an aeroplane cock-pit, and this also, when not in use, is covered by waterproof material. There is comfortable seating beside the driver for two passengers and a fourth person has ample room in the rear compartment. The driving position is particularly comfortable, and I must admit I felt immediately 'at home' directly I took the wheel.





SHOWING THE DASH BOARD AND WINDSCREEN.

The engine, chassis and all other mechanical features are absolutely standard, and the following particulars will probably serve to emphasise the fact that the performance described above is really remarkable for a car of this description.

4-cylinder, unit construction.
 Pump and Thermo-Syphon cooling.
 Pump and splash lubrication.
 Single coil distributor ignition.
 Sliding gear (3 speed) transmission.
 Single plate clutch.
 Dynamically balanced crankshaft.
 Aluminium alloy pistons.
 Two blade aeroplane type fan.
 Carbon chrome nickel alloy valves.
 Bakelized fabric timing gear.
 R.A.C. rating 24.03 H.P.
 Develops 40 H.P. at 2,200 R.P.M.

Performance.

70 miles per hour.
 45 " " second gear.
 Acceleration 5 to 25 M.P.H.
 6 seconds.

As mentioned earlier in this article, this is a car for the enthusiast, particularly for the enthusiast who desires a car at a low price which will give him speed, power and reliability at the same time. We understand that Messrs. Oakes & Co. are putting in hand immediately some further models of this type and we can honestly advise any motorist to test out one of these cars before definitely deciding on the much higher priced English or American pucca sporting models.

In conclusion, it may be said that the car has a good and quite lively performance, which it can give in a very pleasing manner. It should appeal to the enthusiast and to the ordinary owner alike, and should require but little attention, as the Ford has now a real reputation for robustness of construction and for reliability which should be enhanced by the treatment Messrs. Oakes & Co.'s engineers have given to this particular model.

Jewelled Roads

A street almost literally paved with amethyst is reported to the Berlin Geographical Society by Professor Otto Quelle of Bonn University.

He found it in Brazil, in the province of Bahia, where he visited German gem cutters' and polishers' colonies that have mined and handled 9,000 hundred-weight of amethyst.

Whole streets, he said, are paved with the waste material, that gives them a lovely violet sheen. Dr. Quelle said he knows of a place in Siberia where opals are so plentiful that the coarser grades are used as road material.

The *Deutsche Allgemeine Zeitung* reports roads at Bernstein, in the Austrian Burgenland, gravelled with waste from the semi-precious serpentine stone.

In the same country, near Rejnitz, are roads of a beautiful green shade, said to be free from dust. They are surfaced with waste from asbestic stone.

Oil Viscosity Now Shown by Numbers

Use of the proper engine lubricant is essential in prolonging the useful life of a car. This fact is recognized by car owners and oil companies alike. In order to provide a simple classification of motor oils, that takes into consideration their essential lubricating properties, the Society of Automotive Engineers has adopted a system of crankcase lubricating-oil viscosity numbers. This enables oil companies to mark their oils without loss of brand name, advertising prestige, or trademark good will. It should be possible for automobile companies to specify the viscosity of an oil desired for use in the cars they make, leaving such matters as flash-point, fire test, Conradson carbon and the like to be mutually satisfactory to the buyer and seller.

The S. A. E. viscosity numbers are a means of enabling the automobile owners to obtain oil of the proper viscosity.

During the last eighteen months, ninety-nine refiners and oil companies in the United States and Canada have advised the society that they are using these numbers in conjunction with their brand names as an additional means of designating the viscosity of the oils supplied in their containers. Many of these refiners have incorporated the numbers in their lubrication charts, both separately from their brand names and in conjunction with them.

Automobile manufacturers in the United States whose output constitutes the majority of the cars made the world over, and also several industrial engine and tractor manufacturers, are using the S. A. E. viscosity numbers as a means for recommending suitable grades of oil for their engines.

BUY BAR-LOCK TYPEWRITERS

THE BRITISH MADE TYPEWRITER

A Machine that Combines all the latest Improvements with many Special Features

The Government of Madras have placed an order this year for
150 BAR-LOCKS

Sole Distributors for South India :

THE BAR-LOCK TYPEWRITER AGENCY

WOODS ROAD, MOUNT ROAD, MADRAS.

(Post Box No. 302, Mount Road.)

Difficult Starting

ONE or two instances of difficult starting that have recently come under our notice have been due to the circumstances that the car has been housed in a not-too-weatherproof garage, and that the humid atmosphere entering through the louvres of the bonnet has condensed a thin film of moisture on the porcelain or mica of the sparking plugs.

This, of course, means that the current is provided with a much easier path than that across the points, and consequently no spark occurs. During the hot months of the year the temperature of the motor house naturally does not fall to the same extent, and thus it comes about that a car which has behaved perfectly all through the warmer weather may become a bad starter during the monsoon. Should the engine, therefore, not start immediately upon pressure of the starter pedal, following a few revolutions with the starting handle to ease the task of the battery, wiping the insulators of the plugs with a clean duster is indicated before further investigations are pursued.

It is to be feared that the carburettor is often accused unjustly when the real cause of the trouble is condensed moisture on the plugs, for raising the bonnet, probably in front of the open garage door, gives the insulator a chance to dry by the time quite unnecessary operations on the carburettor have been completed.

Austin Modifications

ONE or two modifications have recently been incorporated in certain of the cars which are now issuing from the Austin works in a flood stream of production. Of these modifications, the more important one applies to the Austin Seven, to the back axle of which a slight change has been made. The tube which surrounds the propeller-shaft is now screwed into the centre casing of the axle, and this arrangement is adapted to provide an adjustment for the meshing of the bevel pinion. The socket into which the tube fits on the axle is split and provided with a pinch bolt which effectually prevents the tube from moving after the adjustment has been made. This adjustment is welcome as it will enable the rear axle drive to retain its pristine silence, which in course of time it tends to lose.

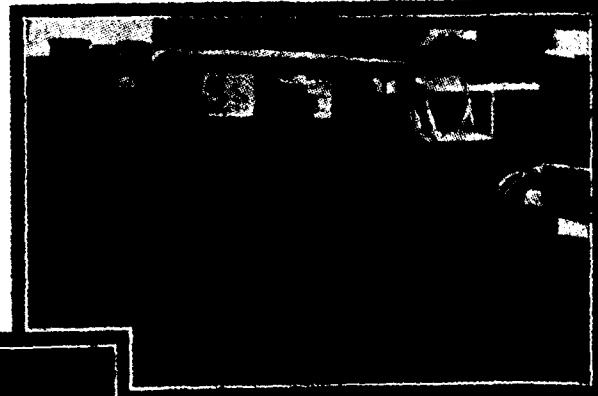
All the 12 h. p. Austin chassis now coming through have a gear lever of considerably greater length than used to be fitted. This same longer gear lever is now standardised on the popular 16 h. p. six-cylinder car, but to the 16 h. p. there is another modification also, in that a new type of control for ignition and throttle is placed in the centre of the steering wheel. The new control consists of a circular casing from which neat knobs project, taking the place of the dished 'plate' with long levers hitherto employed.

Packing Cars for Shipment

A description of the recently acquired Packing Department at Cowley where Morris Cars are packed for Export.

IN order that export deliveries may be executed with the utmost dispatch, the makers of Morris cars have made important changes in packing and forwarding procedure. Formerly, the cars destined for export were run by road to the wharf in London. Now, however, the packing is carried out at Cowley, a new building, replete with the necessary cranes, woodwork machinery, etc., having been erected and a siding from the railway brought to its very door.

The cars and chassis upon completion of their test are run into the packing shop, which is organized after the manner



A car in its case leaving the packing shop on route for the railway truck.

the case, standing ready in one piece, are nailed into position. After which, following the addition of any packing material deemed necessary, the top is fastened on and the case is ready

for its journey to the particular corner of the earth in which Fate has ordained that it shall spend its useful life.

On the Crane

By this time the operator has his three-ton Royce overhead crane hovering above the case, and as soon as the packers have finished their job the pulley descends, loops two sturdy lengths of cable around the corners and the case rises upwards. It is then carried to the end of the building, where, if necessary, it descends on to a weighbridge.

As soon as the gross weight has been recorded by a clerk, it rises once more and disappears out of an opening under the roof, travelling some 30 or 40 yards to a waiting railway truck. Each individual car, between its entry to the packing shop and its arrival at the railway truck, in the ordinary course of events occupies a matter of two and a half to three hours.

It now journeys by rail to Erentford Dock, where, with the utmost possible dispatch, its truck is shunted to the Morris bay and, in due course,

The wheels having been removed the axles are firmly secured by means of wood blocks to the base of the case.



Descending on to the scale, the weight is recorded for insertion in the bills of lading.

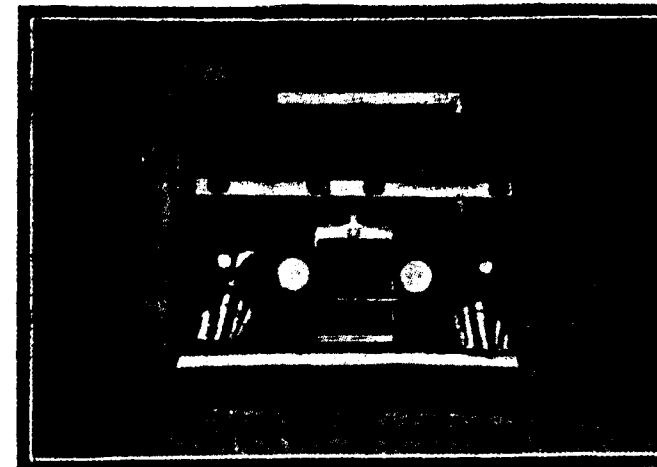
of an assembly line. Here the complete cars are run on to the base of a packing case, where the packers, experts at their job, proceed to take off the wheels, windscreen (of open cars) and other protruding fittings, and nail down the necessary securing blocks. As soon as the car is securely fixed to the base and the various detached components anchored in position around it, the sides of



Packing Cars for Shipment.—(contd.)

is lowered into a barge and conveyed down London's river to the dock from which its ocean journey is to be begun.

The procedure with chassis is much the same, except that wherever possible an endeavour is made to pack four together in one large and one small case.



A stage farther in the packing operations. Here the wheels have been fixed in position and three sides of the case nailed on.

The chassis is driven on to what may be called a 'dis-assembly' line, where one group of mechanics take off such items as wheels, radiator and tank and push it along to another group who account for the steering gear, controls and running-board supports.

At the next stage it loses its axle, torque tube, springs, gear levers and a few other items, and finally arrives below an overhead crane which, after removing the engine and placing it on an engine stand in readiness for the smaller case of the two, lifts the chassis on to a waiting table until the fourth shall have passed through its stripping stages.

Packing Chassis

As soon as the total of four chassis has been reached these are lowered on to the base of a packing case already waiting its turn, supported on a twin set of rollers. This base is then pushed along the line, collecting at each stage the various components, which are suitably disposed with the necessary packing material. At the end of the line the sides and top are nailed into position and this case makes its journey in a manner similar to that of the car already described.

All the packing cases are made on the premises and keep a battery of pendulum saws, band saws, wood drills and other modern machinery fully employed. This department is to all intents and purposes a sub-assembly line, the operations of which have to fit in with the packing process as a whole, just as the sub-assembly lines feed the main during the building of the car.

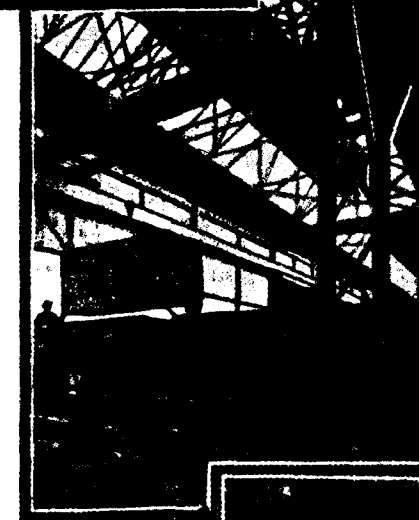
Progress

The packing shop has already shown that this further addition to the Morris organization will amply justify the very considerable sum of money expended in its erection, and has effected a saving of several hours in getting the tested car to its destination, hours which may be of vital importance in catching a boat, particularly in the case of vehicles en route to the more distant parts of the globe, where missing a specific steamer may entail weeks of waiting.

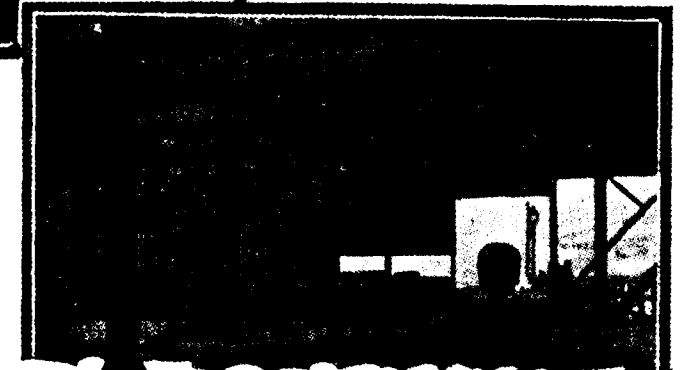
Thus is one more stout link forged in the chain of communications between the motor owner and the assembly line, one indeed that must play its part in carrying the economical efficient British car still farther afield and lessen to some small extent the advantages possessed by sponsors of the inefficient 'woolly' type of car in the matter of comparative proximity to Dominion markets.

As mentioned elsewhere, the facilities offered by this new department are available to overseas visitors buying cars in England and wishing to take them abroad. As specialists in the handling of Morris cars, this department has many advantages over the shipping companies.

It is sincerely to be hoped



The last phase at Cowley. A case being lowered into the waiting truck.



The Morris bay at Brentford dock. The edge of the wharf is marked by railings on the right, below which the barges are waiting.

that all in India who have the time to visit Cowley will make a point of inspecting this new building installed largely for their benefit.

The Importance of Careful Signalling

Showing how incorrect signalling can be a real danger both to yourself and other road users

MANY of us who are driving our cars in and around Madras are struck by the gross neglect of other drivers in the matter of signalling their intentions to us or other users of the road. When thinking of this subject one mentally divides road users into four categories:—those who signal clearly and correctly, those who do so in a careless and haphazard manner, those who fail to signal at all, and lastly, the man who plainly signals, say, a turn to the right and then deliberately and without further warning turns sharply to the left. How often is this last fault seen, and how often does the offender turn a wondering eye upon any one who may be bold enough to call his attention to the case. Really, if there is one road fault which annoys me more than any other it is this one of signalling one thing and doing another. The driver who makes an indefinite sort of signal warns one to be wary—its very indefiniteness tells one to be careful, but a clearly given and definitely legible signal followed by an entirely different and consequently unexpected move is a pitfall into which even the most wary may fall.

On a wide road the danger is caused by the driver of the rear car turning into the left in order to pass the car which has given the right turn signal—a perfectly normal and legitimate move—with the result that the driver of the front car, on changing his mind, suddenly finds himself rammed, or nearly so, by the rear car. What usually happens then is that the driver of the rammed car remonstrates volubly that no matter whether he changed his mind or not, the rear car had no right to pass on the near side.

Of course he is absolutely wrong. It is a generally recognized rule that straight traffic is permitted to pass slowed down traffic on the rear side when the outer traffic has definitely signalled its intention of turning to the right.

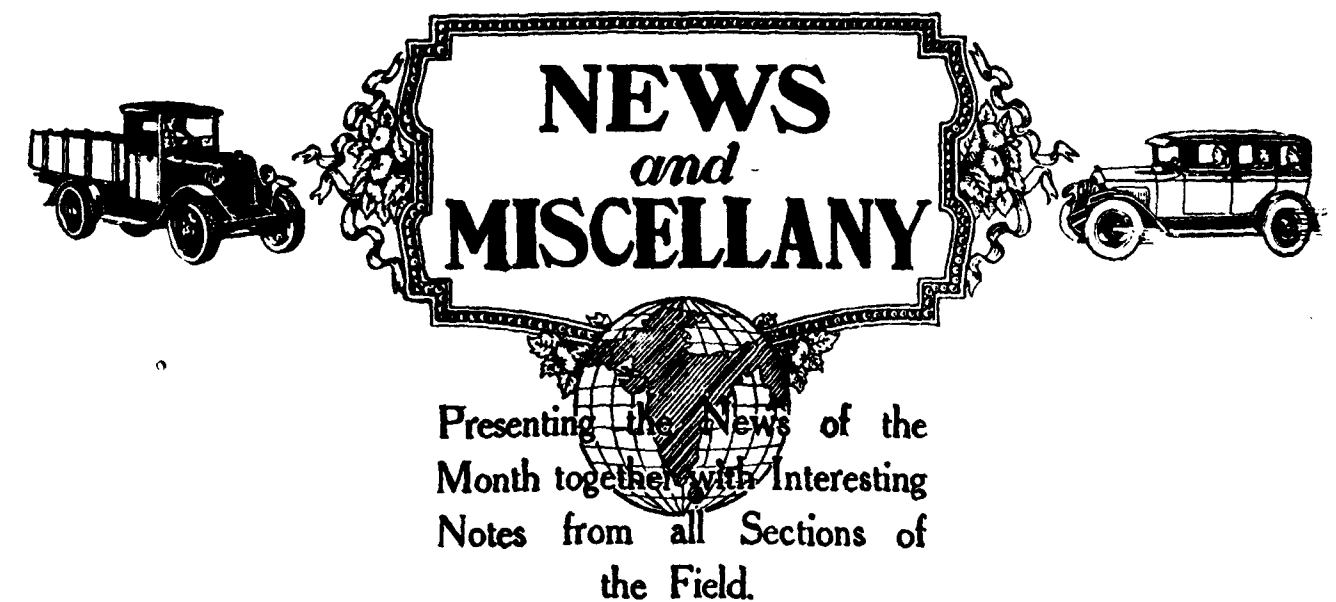
In fact it has long been a rule that right hand turning traffic shall get over to the right in order to permit other traffic clear road without delay. It is an unwritten law, mind you, but none the less obeyed implicitly by all who strive to make modern motoring safer and speedier.

On a fairly narrow road the fault is not so dangerous, because there is perhaps little or no chance of any car in the rear attempting to pass on the near side, but, there is still the danger that the following car may not have brakes as efficient as they could be.

On wide roads, however, the matter is, as will have been realized, much more serious and may involve three or four cars in a serious accident.

It is obvious that the fault is not confined to any certain type of motorist. Women drivers are perhaps the greatest culprits, and then novices are apt to be at fault more frequently than is pleasant. Nevertheless even experienced motorists, drivers who have held licences many, many years, do it—and for them there is not the slightest excuse. In fact there is no excuse for old hand or novice which will explain such a dangerous and misleading practice. Signals are invented to give warning of intended movements and they should be given with the greatest care, not only because of the greater safety engendered, but also because a signal carelessly given may do more harm than no signal at all.

E.F.P.



It should be noted that the new Whippet Six in no way supersedes the Whippet Four, but that both are wonderfully improved cars of the latest design. Incidentally, it is interesting to read that a Whippet Four has recently completed an R.A.C. Trial from Land's End on top gear.

It is reported by one of our correspondents that the Singer Company are shortly going to enter the commercial vehicle field.

Where a car is lent, either by way of business or as an act of friendship, for any definite period of time, it is always wise to have definite terms in writing. There have been many cases in the courts which have arisen owing to a misunderstanding, especially over the question of insurance. Where the car is the subject of a hire-purchase agreement, other difficulties may arise, and it is a sound principle never to lend or borrow a car unless one is sure of the terms of the agreement.

A development which will almost certainly be widely copied has been started at the Piccadilly Circus Garage. Recently Miss Dorothy Dickson formally opened a dog creche where motorists can leave their dogs in proper care while they go about their own business. For a very moderate fee dogs can be left by the hour, day, week, or longer, in circumstances of complete comfort and security. The housing for the dogs is under the supervision of trained veterinary assistants.

The South African cricket team were, some short while ago, taken on a day tour of the Home counties

south of London. It was organized by Messrs. Rootes Ltd., who provided four new Hillman Straight Eight Saloons, a model which has been specially designed to appeal to India and the Dominions.

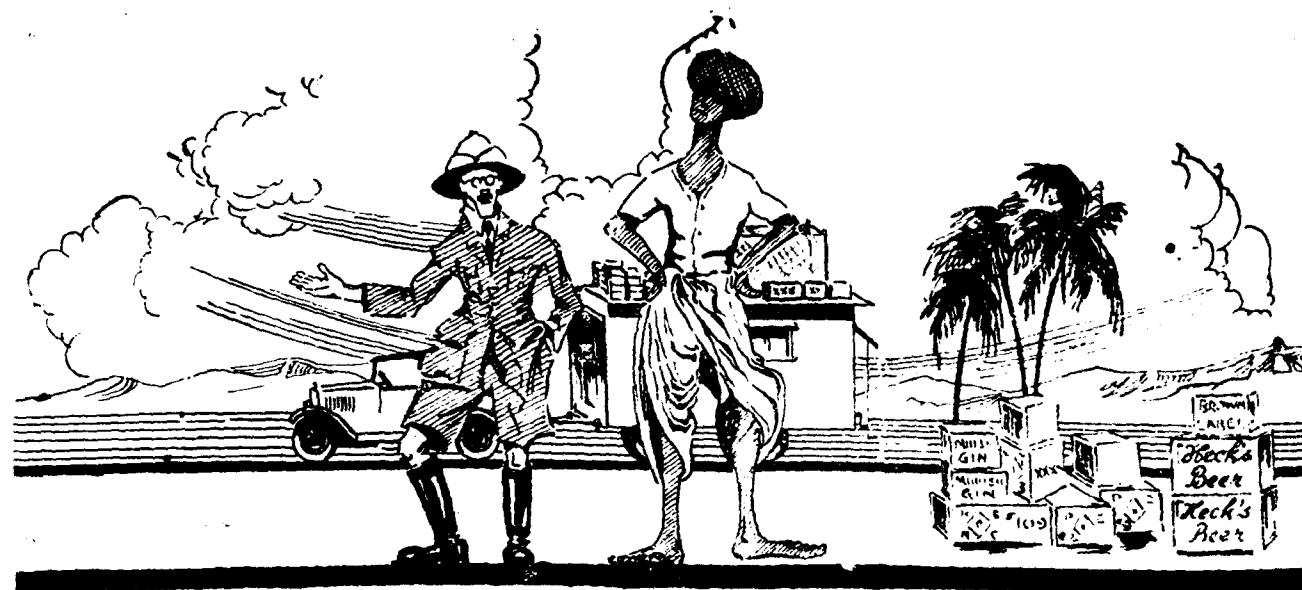
The route was one suggested by the Automobile Association and took the visitors to Windsor, through Windsor Great Park to Ascot, across Cobham Common to Guildford and thence eastwards past Newlands Corner with its famous view of Surrey and through the beautiful villages of Shere and Gomshall to Dorking, Reigate, Godstone, Oxted and Sevenoaks.

This trip was greatly appreciated by the cricketers, who, as a matter of fact, have had very little leisure since their arrival in England owing to the numerous matches which have been arranged. The younger members, who had not previously paid a visit to England, have had very little time and opportunities of seeing much of its delightful scenery, expressed themselves as highly delighted with London's countryside. The South Africans were favourably impressed and agreeably surprised with the performance of the Hillman Eights to which the route chosen by the Automobile Association gave many opportunities of demonstrating their excellent capabilities.

'Let us see some of these new Hillmans as soon as possible in South Africa' was one comment. And another was 'They certainly knock spots off many other cars we know'.

A photograph found elsewhere in this publication will illustrate the very successful outing given to the South African Cricket Team.

A Motoring Pilgrim's Progress

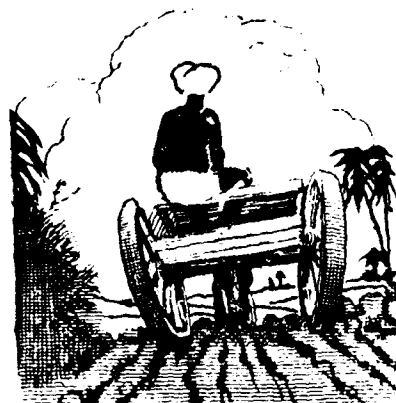


Being a chronicle of his wanderings in the wilds

BY JOHN BUNION

II

AMONGST ignorant people whose practical experience of exploring has been confined to finding the light switch in the dark, there seems to be the impression that the way of the pioneer in strange territory is an easy, well defined path. These people seem to overlook the fact that the explorer's life is filled with dangers such as are hardly ever found under civilized conditions, and imagine that the lot of the prospector is a comfortable, happy-go-lucky, beer-and-skittles sort of existence. In my own case, this is only true in so far as the beer is concerned (I have no time for skittles) and I found every minute of the trip I am describing filled with high adventure. Continually I carried my life in my hands—unless there was something else to carry—and was continually exposed to dire perils such as stay-at-home people rarely ever imagine.



'EASY, WELL DEFINED PATH'

There was, for instance, the catastrophe which overtook us when we were two days journey from the point of our departure. Up to this time our task had been comparatively easy, the journey proceeding over fairly good country, and nothing untoward had happened unless one can count the unfortunate occurrence when Cecil got out of the car to gather flowers—a failing on Cecil's part for which I had regularly to fine him. Just as Cecil was stooping to gather his first dandelion a goat which happened to be near decided that Cecil's dhoti was offensive and at once gave battle—Cecil lost!

However he soon decided to forget the loss of the dandelion after I made a promise to give him a tumbler full of petrol later in the day. Frankly, I really believe Cecil would have sold his soul for a gallon of petrol; so fond of it was he.

To revert however to the catastrophe which occurred about this time: one of the principal difficulties which beset the pioneer in an unknown land is the lack of sign posts. When one is once clear of tramlines and travelling amid unmapped scenery consisting of large trees and bushes and so on, one track is exactly like another. Occasionally the resemblance is even closer than that, so that it is easily possible to travel hundreds of miles without being aware of it. When also one's vehicle seems to be possessed of a very strong homing-instinct, such as is usually attributed only to cats, pigeons and boomerangs, the difficulty of going anywhere at all is considerably enhanced.

Not being quite sure of our whereabouts I struck on the happy expedient of dropping bottles (empty) overboard to mark our path. Lucky for us I did, because after five hours of slow travel through impenetrable jungle we happened to descry in the very near distance my first bottles! This happened on three distinct occasions, and each time Cecil's face grew longer and longer because of the valuable petrol we were wasting on our aimless, circular wanderings.

It was only when starting off again the third time that I bethought myself of directing our course by compass. I accordingly went to my case of instruments and obtained what was wanted. To all outward appearances I was unmoved—my habitual serene self—but inwardly I was fuming because the fault was absolutely my own. When planning my journey I had absent-mindedly assumed that ascertaining direction was simply a matter of asking a policeman, absolutely overlooking the fact that these wilds would almost certainly be unpoliced.

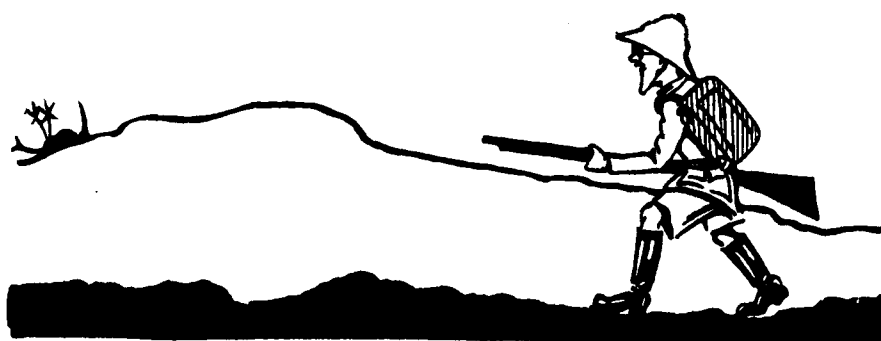
By the time we were once more on our way the sun was high and the heat terrific. Indeed so hot was it that I crawled into the caravan and leaned against the refrigerator. On Cecil, however, the intense heat had no effect. His eight marriages had long since deprived him of any feelings of warmth, and even when the midday sun beat pitilessly down upon his unprotected head, and ignited his right ear, he remained quite unaware of the circumstance until the unaccustomed smell of roasting apprised him of the fact.

We had traversed some ten miles in a



'ONE IS EXACTLY LIKE ANOTHER.'

northerly direction (we couldn't travel in any other because the compass turned out to be a fraud and would only point north), when we emerged from the jungle and found ourselves on the verge of a vast sandy plain which reminded me of nothing so much as Elliotts Beach. Here an extraordinary sight met our gaze—a huge flock or community of Lesser Antilles fast asleep with their wings folded and their feet in the air. I had often heard of the peculiar habits of these creatures when in their native haunts, but had hardly hoped to see such a large flock so near civilization. The peculiarity of these large birds is that they fly, eat, rest and, in short, conduct the whole of their earthly existence in an inverted manner. Those in captivity, however, seem to forget the habits of childhood and behave as other birds. Perhaps it may be that they acquire a nicer sense of decorum from their civilized surroundings, for it is certain that Lesser Antilles in captivity never lie on their backs with their legs in the air. Whispering to Cecil, therefore, to keep quiet I crept toward them with my gun in one hand and my camera in the other, hoping to get a photograph of the strange creatures as well as a specimen to send home to the Geographical Society.



'I CREEPT TOWARD THEM WITH MY GUN'

I hastily fitted a film into my camera, focused up and took a photograph which I fondly imagined would make my name for ever famous. But, alas! In my hurry I had put the film in upside down with the result that subsequent development showed the Antilles all the right way up, thus robbing the photograph of its unique feature.

These little disappointments happen, however, to all who take their life in their hands in the wilderness, so I remained as calm as I could and only fined Cecil two annas for sneezing just as I was about to shoot.

For three days we journeyed across the desert, living entirely on water out of the radiator and reduced rations of pork and beans. The pork and beans became very monotonous after a while, but it was entirely my fault that we had nothing else, because I inadvertently omitted to give explicit instructions to the suppliers and they forgot the other 56 varieties. Just as I was fearing we would have to dig a well to find water I descried at a distance what I judged from my experience of crossword puzzles to be a fertile spot or oasis, so I headed Clarice (as I had by this time come affectionately to call my staunch car) in this direction, hoping against hope that there would be a public parking place at the oasis. Naturally I have always been most careful about avoiding violation of any traffic regulations which may be in force in the districts we traversed, and here again I was hesitant about running the risk of being fined, imprisoned, or worse still, given the Order of the Stew for any transgression. However, as Cecil very soundly pointed out, the only living thing then discernible upon the fertile spot (or oasis) was an old woman, who, even if invested with mandatory powers, could probably be bribed with a

necklace of beans—without the pork, of course; so we decided to risk it.

Any traveller of the wide open spaces will be only too pleased to tell you that the clear atmosphere of the tropics tends to make distances very deceptive. That is to say one may espy a stationery object, such as a lamp-post or a coolie, apparently within a

stone's throw of one, only to find that what one took to be a matter of yards is in reality a matter of miles. It is a nuisance, but one has to put up with it. Anyhow, whether it is merely a nuisance or all the other things I call it, the result in this case was that it took us all the rest of the day to reach the oasis (or fertile spot) during which time I had to sacrifice a whole bottle of beer for Clarice's radiator—an unselfish act which enabled us at last to reach the welcome shade of the palms.

Tethering Clarice to a tree, I approached the old woman, who seemed to be the sole inhabitant of the place, and endeavoured to engage her in conversation, but without avail, despite the fact that I extended my linguistic powers to the fullest. After some time I perceived she must have been deaf so I tried to indicate by means of signs that we required water. Taking a stick I drew in the sands the simplest symbol I could think of illustrating our requirements—just a neat H₂O—and with surprising intelligence for one so low in the social scale, she picked up her withered form and went at once to minister to our simple needs—or so I imagined.

Judge of my surprise, therefore, when she returned after a short time bearing a large volume in her hands which subsequent examination proved to be 'Chemistry—Organic and Inorganic' by Schtinck. This she at once commenced to read, and by a gradual process of elimination eventually discovered the significance of my hieroglyphic in the sand. With a grunt of satisfaction she once more arose to vanish into the dark of her hut, returning in a moment with a large pot of water. . . .

With an involuntary cry of pleasure I buried my head in the pot and drank water as I have never drunk it before.—(To be continued)

JUNIOR TOURER.

SENIOR SALOON.

Drop in and
have a quiet chat
about Singer cars, have a
look round and think things
over—we shall be glad to see
you in our Showrooms.

Singer Junior Touter
Rs. 2,650

Singer Senior Coach built
Saloon Rs. 5,250

Singer Senior Sunshine Saloon
Rs. 5,450

All the above are available for
immediate delivery.

SIMPSON & CO., LTD.

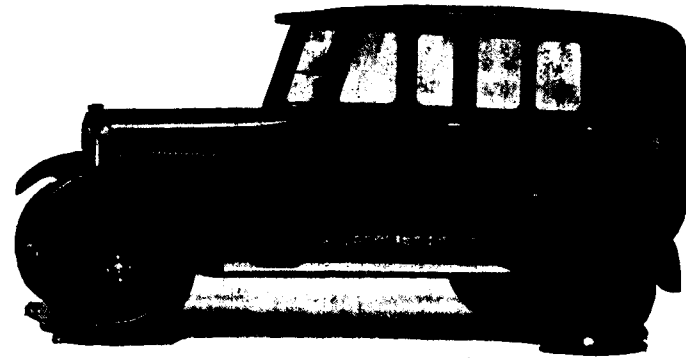
Showrooms: 34, Mount Road

Head Office and Works: 201, Mount Road

MADRAS.

Branches at:—OOTACAMUND AND TRICHINOPOLY.

Road Test Showing Principal Characteristics of the Singer Junior 4 Seater



THE Singer Junior has a history. It is the logical development of a line of small cars which were very prominent even in the days before the Great European War; small wonder then that the modern Singer is a popular type. Like its predecessors, the latest Singer Junior is a true representative of a large car in miniature, in that all the main features of the lay-out are similar, save for dimensions, to the *de luxe* type of vehicle, yet the price for the four seater touring car is but Rs. 2,650.

The design of the overhead camshaft four-cylinder engine is thoroughly up-to-date, as is testified by the power output. Although the capacity of the cylinders is but 848 c. c., 16.5 brake horse power is developed at 3,250 revolutions per minute. All 1929 models are equipped with Newton patent hydraulic shock absorbers which, in conjunction with the exceptional flexibility of the semi-elliptic springs all round, have greatly added to the riding qualities.

Gear changing both up and down is absurdly simple and the Singer handles in traffic with great facility for it has a wheelbase of 7' 6" and a track of 3' 8". The steering lock, too, is quite satisfactory and the car can be turned completely round in a very limited space.

On the open road the manner in which 40 miles per hour can be obtained without fussiness or noise has to be experienced to be appreciated. The best cruising speeds seem to lie between 30 miles per hour and 40 miles per hour (which, for a small car is quite high). Ordinary main road inclines can be negotiated with very little loss of speed merely by depressing the

accelerator a little farther, while hills of the steeper and longer variety are climbed better if second gear is employed, at any rate for the upper reaches. The car which we recently had for test purposes was brand new when taken from the distributors and, in consequence, was not properly run-in. With a properly run-in engine we think that the hill climbing abilities would leave nothing to be desired.

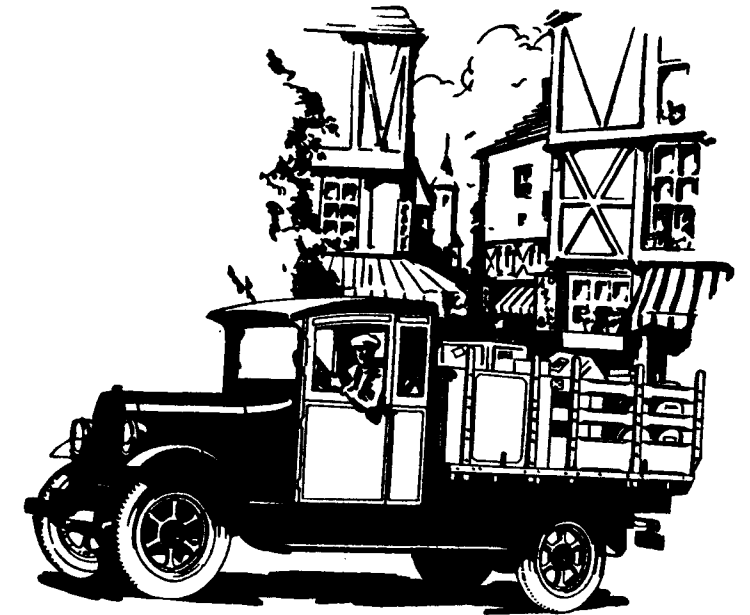
Mention must be made of the suspension. At no time, even when negotiating roads having a very uneven surface at high speeds, is any discomfort experienced by the occupants. On the other hand, despite the apparent softness, the car does not roll when corners are taken fast. The car holds the road in a very desirable manner, and even at high speeds, around the 50 miles per hour, there is no sensation of lack of control. The four wheel brakes being controlled by the pedal which operates on internal-expanding shoes, in all four drums and this is very effective. The hand brake is capable of holding the car in either a forward or backward direction with equal facility.

The equipment is very complete, and includes a six-volt lighting (two head-lamps, two front mudguard-lamps, one rear lamp) and starting system, electric and bulb horns, a Jaeger speedometer and shock absorbers.

The distributors for Singer products in the Madras Presidency and Mysore are Messrs. Simpson & Co. Ltd., motor engineers and coach builders. A range of Singer Juniors and Seniors may be viewed and tried at any time at their Madras show rooms.

The Commercial Motor Owner

Promising Results
Obtained in Phila-
delphia with a new
Heavy Oil Gas
Generator fitted to
Buses in Regular
Service



Running on Petrol or Fuel Oil

ENGINEERS in the United States are turning over in their minds the possible consequences of experiments which have been conducted for several years by the Philadelphia Rapid Transit Company with a view to using low-grade fuel oil as a substitute for petrol in motor bus engines. The fuel oil does not actually enter the engine, but is vaporized in an outside retort. The device tried by the Philadelphia Company is known as the Godward gas generator, and uses a 38-42 Baumé oil, available as a furnace oil in practically all cities, and delivered by dealers to large consumers just as is petrol. It is regarded as particularly significant that the buses can operate on either petrol or fuel oil without any change of carburettor or exhaust settings. Thus if a bus should need to replenish its supply of fuel before returning to the garage, petrol could be used. The Philadelphia Rapid Transit Company proposes to equip all of its 570 city and inter-urban buses for using fuel oil within the present year.

Economy for Fleet Owners

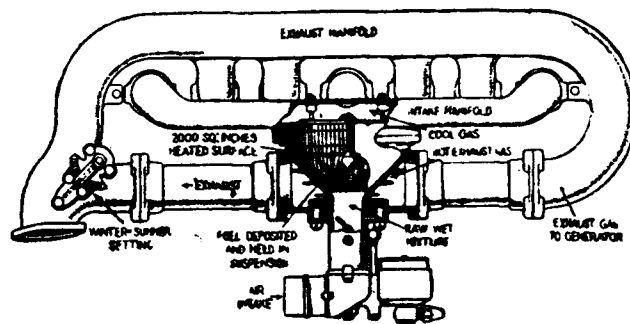
It is, of course, unlikely that the development of this apparatus for using fuel oil in place of petrol will revolutionize automotive engine design. As one commentator put it, manufacturers of private automobiles have investigated this question thoroughly, and have come to the conclusion that petrol is a more satisfactory fuel. To the individual automobile owner

in the United States the price of fuel is a comparatively unimportant matter. With a bus operator, however, the situation is quite different. As this commentator pointed out, a saving of only a few cents per gallon in the fuel bill with vehicles in service of this kind amounts to a tremendous sum in the course of a year. If a saving of this kind can be made by means of this device for burning fuel oil its popularity would appear to be assured by large users of motor vehicles.

Details of the Device

The results of the experiments in Philadelphia were made public by J. A. Queeney, Vice-President of Mitten Management, which is in charge of the electric railways in Philadelphia. In a talk which he made before the Engineers' Club of that city Mr. Queeney said that as long ago as January, 1927, he was requested by Mr. Mitten to investigate the Godward gas generator, a strange-looking device that somewhat resembles a miniature steam turbine of an early design.

The device consists of an aluminium pot in which is set a nest of stationary thin curved plates radiating from a central core. The lower edges of the plates are in contact with the aluminium pot, which is heated by the exhaust gases of the engine. The fuel is drawn from a standard carburettor through the inside of the pot over the surface of the warm plates, where it



is converted into a dry gas and is passed through the intake manifold into the cylinders. Observations made through a glass window inserted in the intake manifold showed that with petrol and a standard carburettor and manifold, under all running conditions, wet petrol is carried into the engine cylinder, but with a Godward generator there was no evidence of a wet mixture in the manifold.

Performance on the Road

Mr. Queeney said that the officers of his company concluded that this gas generator could be modified and used as a basis of the equipment necessary in order to operate successfully on fuel oil. After numerous experiments and tests, the present equipment was developed, and the company with which he was connected now had twenty buses which have operated over more than 250,000 miles on fuel oil. Six of the company's buses, however, are now equipped with an improved device, including all modifications and changes made up to date.

Among other things he said: 'We can fill the tank of one of these buses with fuel oil and send it out across the country, and if there is no fuel oil available when it reaches a point where it is necessary to replenish the supply, the tank may be filled with

petrol, and without any adjustments the bus will proceed, and neither the driver nor the passengers will notice any difference, as there will be no perceptible change in the performance of the vehicle. The fuel which we are now using is 38-42 Baumé oil. The performance of the engine operating on this fuel compares very favourably with the performance secured with petrol. Idling speed, acceleration and power, all essential to good operation, are attained through this device, with a fixed carburettor setting.

'The economy in quarts per kw. hour with fuel oil is 5½ per cent. better than with petrol, with the same carburettor setting. The economy effected, due to the difference in the cost of fuel oil and petrol is about 29 per cent. As there are approximately 85,000 buses in operation in the United States at the present time, the possible saving in the cost of fuel represents more than \$50,000,00 per annum.'

No Additional Effects on Engines

Since Mr. Queeney felt that many of his hearers had in mind the question as to what effect the use of fuel oil has on the maintenance of the engine, he said that his company had given this matter close attention, and that after more than 250,000 miles of operation the engineers could find nothing that indicated in any way any additional wear or any change in the condition of the engine. The buses on which the fuel oil was being burned are on the same maintenance schedule as those buses which use petrol. Some trouble was experienced with smoke when fuel oil was first used, particularly when the engine was idling, but this trouble was remedied by the simple expedient of removing the throttle valve from the conventional location in the carburettor below the gas generator to a point where the mixture enters the intake manifold.

The £40/-Car

CLOSE on the heels of the announcement by Reuter that a British automobile firm will, within a few months, put a £100/- car in the market, comes the sensational news from America that a manufacturer in that country is about to put on the market a £40/- car.

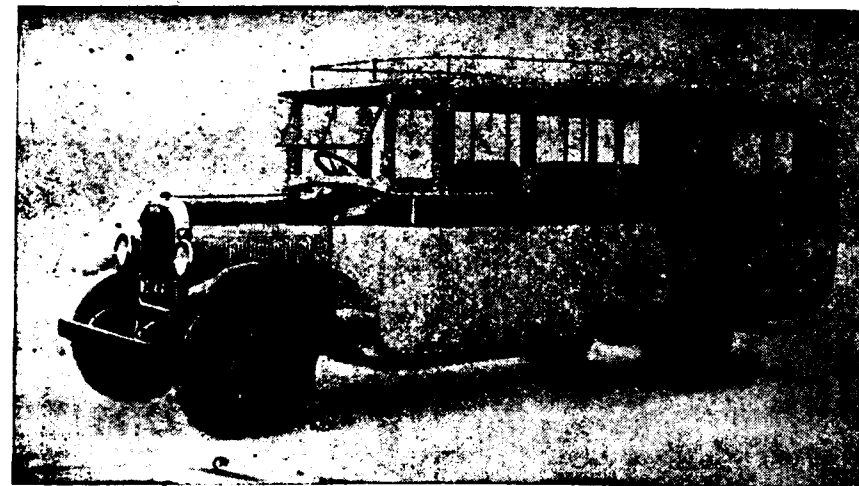
£40/- for a car? It is absurdly little for a machine which will give years of service and pleasure at a moderate monthly recurring expenditure. One is almost tempted to disbelieve it. But whether you or I believe it or not, it is certain to be put on the market within another year. The fragmentary information that is available in this country shows that the usual chassis frame is dispensed with and that the engine is bolted directly on the body. 'There are no springs;

instead, each wheel is independently suspended by means of the elastic used for suspending aeroplane wheels. This lasts a good time and can be replaced cheaply. Obviously there is a minimum of oiling and it is said that the few moving parts are lubricated at the factory before dispatch and require no further attention for many months. The car's wheel base is 60 inches, as compared with the Austin Seven's 75 inches, and it is delivered in a hinged packing case which can subsequently be used as a garage.'

Commenting upon this announcement, one writer in an English automobile journal says, 'I wonder how long it will be before one can send a postcard to the makers and get the car C.O.D.'

R.K.N.

VALUE



From STEM to STERN

Low in first cost. Low running costs. Reliability up to the hilt. FEDERALs offer the best all-round value in bus and heavy haulage transport. 'Greater profits per mile' is the FEDERAL owners' slogan, and they get it. For extreme economy, especially from the maintenance point of view, there is nothing to touch them.

'Decide on'

FEDERAL MOTOR TRUCKS

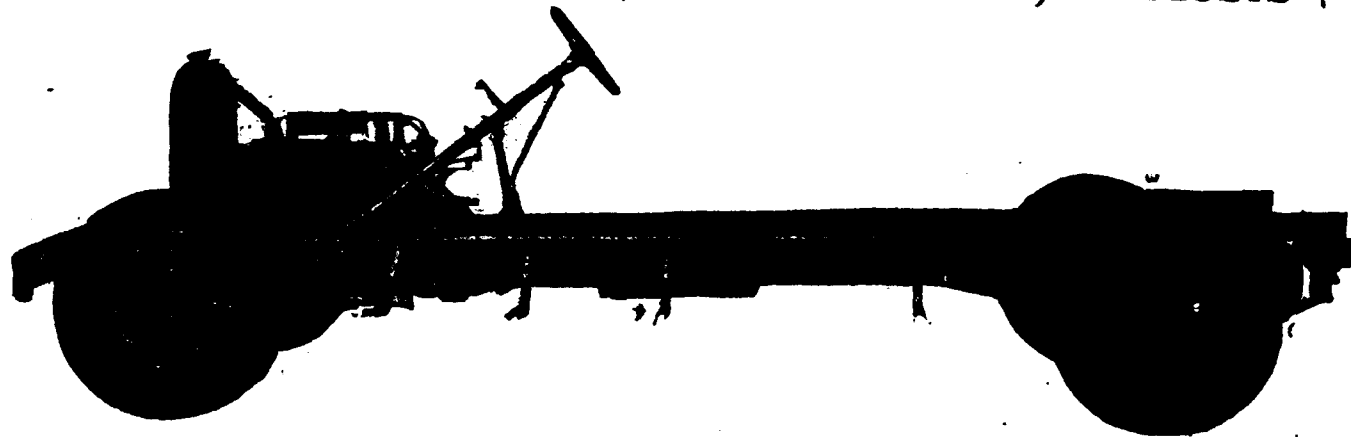
1-Ton 4-cyl. Chassis Rs. 3,600 1½-Ton 4-cyl. Chassis Rs. 3,850
1½-Ton 6-cyl. Chassis Rs. 5,250

Quotations for body work gladly submitted

Write for further particulars

SIMPSON & Co., Ltd.
MADRAS, OOTACAMUND AND TRICHINOPOLY.

THE STUDEBAKER (146" Commercial) CHASSIS



ABUNDANT
POWER

75 H.P. 6 CYLINDERS
FOUR WHEEL BRAKES
HIGH PRESSURE TYRES
146" WHEEL BASE

ADVANCED
DESIGN

Telegrams
'ROMERDAN'

ROMER DAN & COMPANY
2-17 MOUNT ROAD, MADRAS

Telephone
3567

THE DIOCESAN PRESS,
Madras, invite applications to quote for the complete production of Books, Magazines, or Printing of any kind. The plants in Composing, Printing, and Binding are up-to-date and provide facilities to meet all demands of rapid production

Specimen page with dummies and
Estimates supplied without commitment to the prospective customer

THE DIOCESAN PRESS

Manager: George Kenneth

Post Box 455

Vepery, Madras.

THE SOUTH INDIA MOTOR OWNER

Second-hand Cars for Sale and Wanted

NOTICES.

Prepaid Advertisements for Cars, Accessories, etc., may be inserted in this section at the following rate
Fifteen words for Rs. 3/- (minimum)
and 3 As. for each additional word.

All small paragraph advertisements whether of fifteen words or less will be charged for at a minimum rate of Rs. 3/- and all such advertisements are strictly prepayable.

Box Numbers are available for those advertisers who desire to utilise them, and a nominal charge of 4 As. will be made to cover cost of booking

and posting replies. The words Box No. XXX, c/o 'The S. I. Motor Owner', must be included in the advertisement and will be charged for.

The last day on which copy will be accepted for inclusion in this section is the 20th of the month preceding any issue. Whilst every care will be taken to ensure accuracy, the publishers will not be responsible for printer's errors or for non-inclusion. In this regard it should be noted that advertisement copy, received early will obtain closer attention than that rushed through for inclusion at the last moment. Other business and advertisement notes will be found on page 4.

For sale

B UICK 6-cylinder tourer. Bought 1926. Excellent condition. Most carefully used. Any trials in Madras. Fully insured. Rs. 2,500 or near offer.

Apply Box No. B3
c/o South India Motor Owner

M ORRIS OXFORD five seater. Repainted and overhauled. Model 1927. A real bargain for Rs. 2,000 nett.

Apply Box No. A
c/o South India Motor Owner

O VERLAND WHIPPET Tourer. 1927 model. In good all round condition. Is sacrificed for Rs. 1,500 nett. No brokers. Demonstration by appointment with.

Box No. B
c/o South India Motor Owner

F IAT TOURER. Old model. Believed to be the finest ever built is for sale at Rs. 2,000. Completely overhauled and reconditioned.

Apply Box No. C
c/o South India Motor Owner

When writing a small Advertisement

Imagine you are buying a car—and then put down all the facts you would want to know.

Give full particulars of the make, model and year of manufacture with any points about speciality fittings which may interest the buyer.

Use a box number: it insures privacy.

D ODGE BARGAINS. Owner has two Dodge Tourers for sale. 1927 vintage. Both overhauled and reconditioned. Can be inspected in Madras. Price Rs. 1,800 each. No offers.

Apply Box No. D
c/o South India Motor Owner

H UPMOBILE Tourer. 1928 model. Five seater. In excellent condition. Is offered at Rs. 3,950. Trial and inspection in Madras.

Apply Box No. E
c/o South India Motor Owner

E SSEX two seater. English coach built body. In super-excellent condition all round. Latest fittings and devices. Cost Rs. 6,600 delivered Madras. Will accept cash Rs. 2,650. Monthly payments arranged if necessary. Trial and inspection, Madras.

Apply Box No. F
c/o South India Motor Owner

OVERLAND '4'. In real tip-top order. Self-starter and lights. New hood. Re-painted. No brokers. Cash Rs. 550. Apply Box No. G
c/o South India Motor Owner

List of Second-hand Cars

A.C. two seater with dickey seat, mechanically sound, paint, upholstery and hood in perfect condition, new battery, many spares. Rs. 1,750.

HUMBER five seater touring car, mechanically sound, good tyres, paint-work, upholstery and hood in good condition. Rs. 1,750.

STANDARD four seater recently re-painted and with new hood, tyres good, mechanism sound. Rs. 1,500.

TALBOT-DARRACQ exceptional bargain very fine appearance, tyres, paintwork, upholstery and hood as new. Rs. 2,000.

STANDARD two seater, with dickey seat, good tyres, excellent condition throughout. Rs. 1,500.

MAXWELL five seater, in sound condition, good tyres. Rs. 800.

Apply Box S2
c/o South India Motor Owner

GRAHAM PAIGE MC/P. 1286, done 800 miles. Perfect new condition. Rs. 3,000 or nearest offer.

OVERLAND WHIPPET NA. 388. Six months old, done 6,000 miles. Good

condition. Rs. 1,750 or nearest offer. (Last model.)

OVERLAND WHIPPET (last model) MC/P. 63, run 5,000 miles, newly painted and decarbonized. Rs. 1,650 or nearest offer.

WILLYS KNIGHT four cylinder. Newly painted. Good condition. Rs. 1,250. No offers.

WOLSELEY SEDAN, old model. Rs. 850 or nearest offer.

VULCAN two seater. Good condition. Rs. 1,250 or nearest offer.

BABY FIAT four seater. Good condition. Rs. 1,750. No offers.

Box No. XI
c/o South India Motor Owner

THE
SOUTH INDIA
**MOTOR
OWNER**

Sales and Service Guide

Arranged alphabetically under vehicle headings columns is charged for at the rate of Re. 1 per line, but no contract can be accepted for less than six consecutive insertions. Correspondence both from Dealers and Car Owners invited in order to make this section as useful as possible.

Armstrong-Siddeley.

BANGALORE ... Addison & Co., Ltd.
BERHAMPORE ... K. M. Paul & Sons.
BEZWADA ... Motor & General Engineering Co.
CALICUT ... Addison & Co., Ltd.
KOTTAYAM ... Addison & Co., Ltd.
MADRAS ... Addison & Co., Ltd.
OOTACAMUND ... George Oakes.

Chevrolet.

TINNEVELLY ... Tinnevelly Petrol Supply Agency.

Chrysler.

MADRAS ... Jones & Co.

Chrysler De Soto.

MADRAS ... Jones & Co.

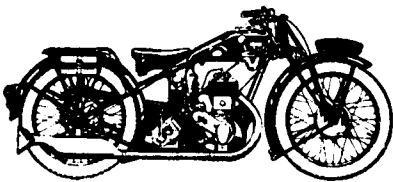
Chrysler Plymouth.

BANGALORE ... Addison & Co., Ltd.
BERHAMPORE ... K. M. Paul & Sons.
CALICUT ... Addison & Co., Ltd.
KOTTAYAM ... Addison & Co., Ltd.
MADRAS ... Addison & Co., Ltd.
OOTACAMUND ... George Oakes.

Dodge.

BANGALORE ... Addison & Co., Ltd.
BERHAMPORE ... K. M. Paul & Sons.
CALICUT ... Addison & Co., Ltd.

ARIEL



ARIEL MOTOR CYCLE PRICES

Model 'LB' 250 c.c. S.V. ...	Rs. 775
Model 'LF' 250 c.c. O.H.V. ...	
Twin Port ...	815
Model 'A' 550 c.c. S.V. ...	925
Model 'B' 550 c.c. S.V. ...	
De Luxe ...	965
Model 'E' 500 c.c. O.H.V. ...	
Twin Port ...	995
Model 'F' 500 c.c. O.H.V. ...	
Twin Port, De Luxe ...	1,025

Rs. 100 extra for Electric Lighting Equipment.

**Addison & Co., Ltd,
MADRAS.**

Bangalore, Calicut, Trichinopoly.

COIMBATORE ... United Motors.
KOTTAYAM ... Addison & Co., Ltd.
MADRAS ... Addison & Co., Ltd.
OOTACAMUND ... George Oakes.

Essex.

BEZWADA ... The Andhra Automobiles.

Ford.

BEZWADA ... Ford Stores and Service Station.
CUDDALORE ... S. Gopala Iyer.
KATPADI ... V. M. Ratnavelu & Bros.
VELLORE ... V. M. Ratnavelu & Bros.

Hillman.

MADRAS ... Simpson & Co., Ltd.

Hupmobile.

BANGALORE ... Addison & Co., Ltd.
BERHAMPORE ... K. M. Paul & Sons.
CALICUT ... Addison & Co., Ltd.
KOTTAYAM ... Addison & Co., Ltd.
MADRAS ... Addison & Co., Ltd.
OOTACAMUND ... George Oakes.

Morris.

BANGALORE ... Addison & Co., Ltd.
BERHAMPORE ... K. M. Paul & Sons.
CALICUT ... Addison & Co., Ltd.
COIMBATORE ... United Motors.
KOTTAYAM ... Addison & Co., Ltd.
MADRAS ... Addison & Co., Ltd.
OOTACAMUND ... George Oakes

Palany Andavar & Co.

Bus Body Builders & Commission Agents

8, General Patters Road, Mount Road P.O.

MADRAS.

Branch at:

**No. 112, Thayar Sahib Street
General Patters Road
Mount Road, MADRAS.**

Manager,

M. G. SAWMY.

Nash.

MADRAS ... Motor Reconditioning Station.

Overland.

BANGALORE ... Addison & Co., Ltd.
 BERHAMPORE ... K. M. Paul & Sons.
 CALICUT ... Addison & Co., Ltd.
 COIMBATORE ... United Motors.
 KOTTAYAM ... Addison & Co., Ltd.
 MADRAS ... Addison & Co., Ltd.
 OOTACAMUND ... George Oakes.

Singer.

MADRAS ... Simpson & Co., Ltd.

Willys-Knight.

BANGALORE ... Addison & Co., Ltd.
 BERHAMPORE ... K. M. Paul & Sons.
 CALICUT ... Addison & Co., Ltd.
 COIMBATORE ... United Motors.
 KOTTAYAM ... Addison & Co., Ltd.
 MADRAS ... Addison & Co., Ltd.
 OOTACAMUND ... George Oakes.

TRUCKS.**Chevrolet Trucks.**

TINNEVELLY ... Tinnevelly Petrol Supply Agency.

Dodge Trucks.

BANGALORE ... Addison & Co., Ltd.
 BERHAMPORE ... K. M. Paul & Sons.
 CALICUT ... Addison & Co., Ltd.
 COIMBATORE ... United Motors.
 KOTTAYAM ... Addison & Co., Ltd.
 MADRAS ... Addison & Co., Ltd.
 OOTACAMUND ... George Oakes.

Federal Trucks.

MADRAS ... Simpson & Co., Ltd.

Ford Trucks.

BEZWADA ... Ford Stores and Service Station.

**BATTERIES**

are greatly renowned for unfailing service throughout their long life. Fit a C.A.V. and ensure immunity from battery troubles for a long time to come.

South India Distributors:

Addison & Co., Ltd.
MADRAS

Bangalore, Calicut and Trichinopoly.

**Have you Sent
 us your
 Subscription?**

Fill in the form on page 95
 NOW

FIT and FORGET

K.L.G.
SPARKING PLUGS

They cost a little more to buy because they cost a little more to make but judged by the service they give, they are the Cheapest in the World, and certainly the best.

Local Wholesale Distributors—

Addison & Co., Ltd.,
MADRAS

Bangalore, Calicut and Trichinopoly

CUDDALORE... S. Gopala Iyer.
 KATPADI ... V. M. Ratnavel & Bros.
 VELLORE ... V. M. Ratnavel & Bros.

International Trucks.

MADRAS ... Madras Motor Sales.

Morris Commercial.

BANGALORE ... Addison & Co., Ltd.
 BERHAMPORE ... K. M. Paul & Sons.
 CALICUT ... Addison & Co., Ltd.
 KOTTAYAM ... Addison & Co., Ltd.
 MADRAS ... Addison & Co., Ltd.
 OOTACAMUND ... George Oakes.

Overland Buses.

BANGALORE ... Addison & Co., Ltd.
 BERHAMPORE ... K. M. Paul & Sons.
 CALICUT ... Addison & Co., Ltd.
 COIMBATORE ... United Motors.
 KOTTAYAM ... Addison & Co., Ltd.
 MADRAS ... Addison & Co., Ltd.
 OOTACAMUND ... George Oakes.

Selden Trucks.

MADRAS ... Motor Reconditioning Station.

MOTOR CYCLES.**Ariel.**

BANGALORE ... Addison & Co., Ltd.
 BERHAMPORE ... K. M. Paul & Sons.
 CALICUT ... Addison & Co., Ltd.
 KOTTAYAM ... Addison & Co., Ltd.
 MADRAS ... Addison & Co., Ltd.

Triumph.

BANGALORE ... Addison & Co., Ltd.
 BERHAMPORE ... K. M. Paul & Sons.
 CALICUT ... Addison & Co., Ltd.
 KOTTAYAM ... Addison & Co., Ltd.
 MADRAS ... Addison & Co., Ltd.

MOTOR ACCESSORIES.

MADRAS ... Rane Ltd.

Publisher's Notices**The South India Motor Owner**

Published monthly by

Eastern Technical Publications,

Khaleeli Buildings, Mount Road, Madras

'The South India Motor Owner' is issued on the 15th of each month. It aims to furnish the latest and most authoritative information on all matters relating to motors and motoring under South India conditions. Contributions and correspondence on all matters coming within the scope of this journal are solicited and prompt remittance will be made for all acceptable matter. Contributions should preferably be illustrated.

Subscription Rates

One year . . . Rs. 3 postage free payable in advance or recoverable by V.P.P. with the first issue mailed. Sample copies annas eight each plus postage. All remittances for subscriptions should be made payable to the Eastern Technical Publications, Madras.

When subscriptions expire, unless previous notification has been received from the subscriber the first issue following the expiry will be sent to the subscriber V.P.P. for a further twelve months' subscription. It is therefore advisable, if any subscriber wishes to discontinue *The South India Motor Owner*, to notify the publishers a month in advance.

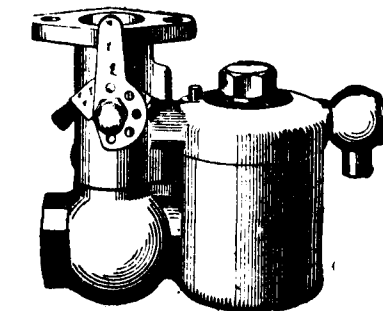
Advertising Rates

Rates for display space will be furnished on application. For small advertisements and entries under 'Sales and Service Guide,' see pages 89 and 91.

Advertisements to secure insertion in any month's issue should reach this office not later than the 20th of the month preceding. The publishers of *The South India Motor Owner* reserve the right to reject any advertisement for any cause.

Fit SOLEX

AND NOTE THE DIFFERENCE!



A package equipment for every car or truck.

SOLEX does actually reduce running cost considerably.

SOLEX does use far less petrol than other makes.

SOLEX is actually by far the simplest in design and construction.

SOLEX can be disassembled by unscrewing a single nut.

SOLEX does provide added power and acceleration for any emergency.

Write for full particulars to Sole India Distributors:

RANE LIMITED,

MOUNT ROAD, MADRAS.

Phone : 3595.

'Grams : AUTO WORKS.'

THE PREMIER AUTO-ACCESSORY HOUSE IN INDIA

THIS IS THE BEST BATTERY**BECAUSE,**

The materials which go into the construction of UNIVERSAL BATTERIES are huskier and more genuine. Compare the plates of the average battery with the plates of UNIVERSAL.

We carry UNIVERSAL BATTERIES because, they have longer life and greater power. When you are next in the market for a battery remember the name UNIVERSAL.

'Phone 3840.

Telegrams 'DYNAMO.'

Sole Distributors:
THE STANDARD MOTOR ELECTRIC WORKS,
 AUTO-ELECTRICAL ENGINEERS,
 33, Mount Road **MADRAS**

Good Printing

The difference in cost between good paper and print and cheap paper and cheap ink is slight—but what a difference there is in the results ∴ ∴

The house of Charles Morgan & Co., Ltd., has been built upon their ability to supply good paper and good ink at a price which gives the customer every benefit gained by careful buying ∴ ∴ Remember, if you are a buyer of printed matter or a printer, always specify ∴ ∴

Morgan Papers: Manders Inks

CHARLES MORGAN & CO., LTD.
Linghi Chetty Street G. T., Madras.

Fill in this Form

THE
SOUTH INDIA
**MOTOR
OWNER**
Annual Subscription Rs. 3

Motorists throughout Southern India will find the **South India Motor Owner** a valuable aid to them in all matters connected with motoring, and at the same time will find its pages entertaining and instructive every month. Three rupees per annum will bring this journal to you by post month by month. Fill in the form below and post it on to us.

SUBSCRIPTION ORDER.

To EASTERN TECHNICAL PUBLICATIONS,
KHALEELI BUILDINGS,
MOUNT ROAD, MADRAS.

Please place my name on the subscription list of the **South India Motor Owner** for twelve months commencing.....19 ..

I enclose Rs. being the post-free subscription for the period.

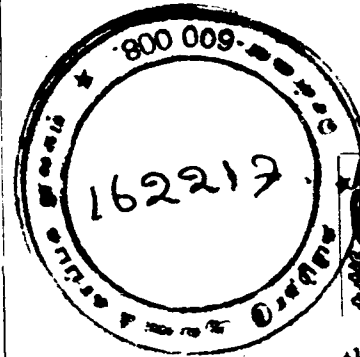
Name

Address

Post-free Subscription Rates:
India, Burma and Ceylon, Rs. 3 per annum.
Foreign: Rs. 10 per annum.

(Block letters are preferable.)

Subscribers may, if they wish, have the first issue sent to them V.P.P. for the full twelve months' subscription. Unless therefore cash or cheque accompanies this form, the V.P.P. method will be followed.



HERE is a new force shaping
and directing the intellectual
and material life of mankind,
guiding with a strong hand
the destinies of the world—ADVERTISING.

LET US HELP YOU TO PLAN YOUR ADVERTISING

Advertisement Manager:

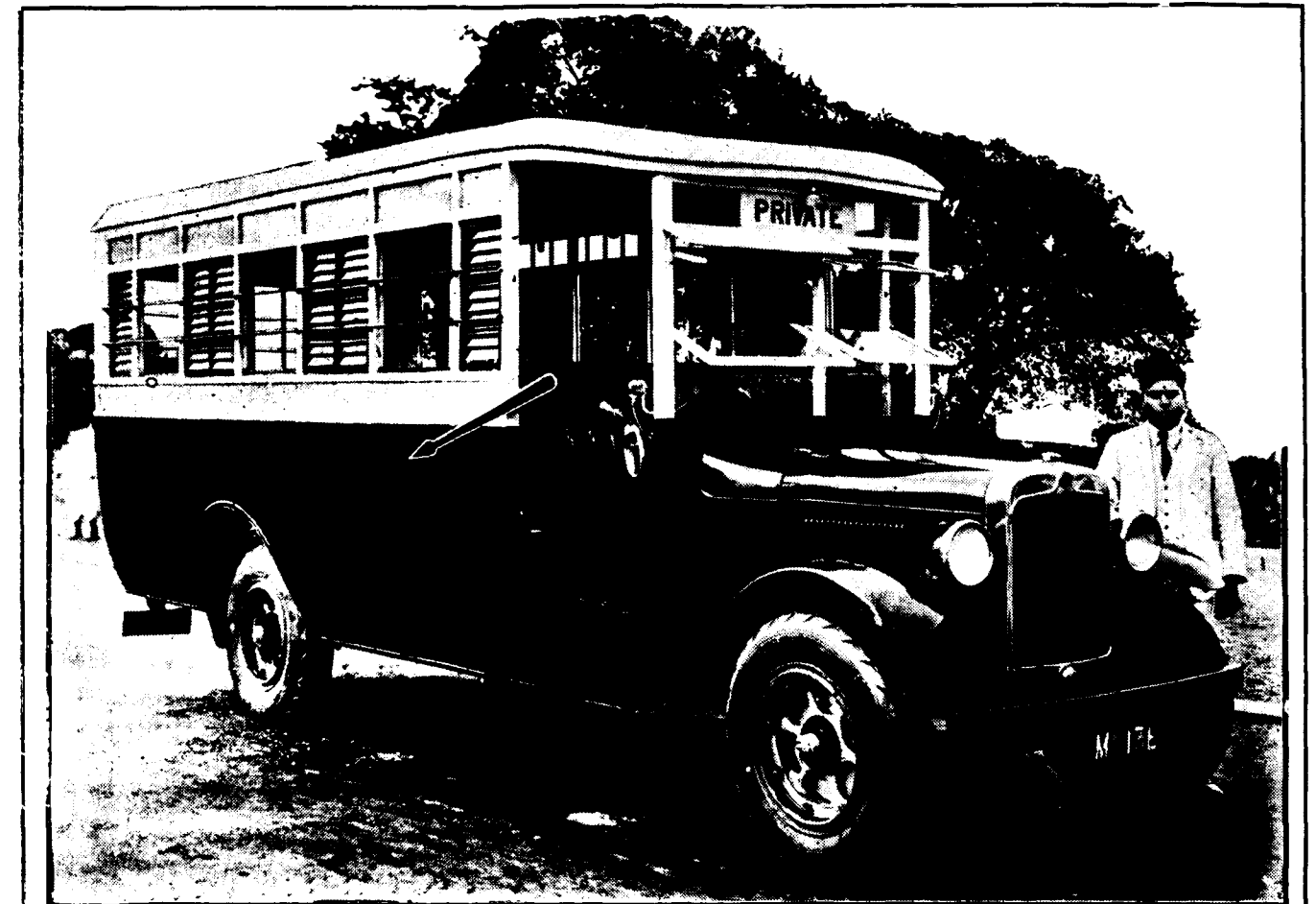
THE SOUTH INDIA MOTOR OWNER
MOUNT ROAD - - - MADRAS

INDEX TO ADVERTISERS

	PAGE		PAGE
Addison & Co., Ltd.	50, 61, 91, 92	Palany Andavar & Co.	90
Andhra Engineering Co.	...	Prasada Rao & Co., A. K.	...
Bar-lock Typewriter Agency	75	Ramanuja Iyengar, T. S.	...
Charles Morgan & Co., Ltd.	94	Rane Ltd.	93
Continental Tyre Co., Ltd.	iv cover	Ranga Transport Company	iii cover
Dhanalakshmi Motor Service	...	Romer Dan & Co.	88
Dhanam & Co., K. J.	...	Row Bros.	...
Diocesan Press	88	Salem Automobiles	...
Jones & Co.	...	Simpson & Co., Ltd.	Front cover 83, 87
Krishna & Bros., B.	...	Simon & Bros.	...
Madras Motor Sales Co.	...	Standard Motor Electric Works	93
Motor Reconditioning Station	49	Sunderasamy Iyer, M.	...
Moorthy Bros., S. K.	...	Tinnevely Petrol Supply Agency ...	...
Mutual Indemnity & Finance Corporation (India), Ltd.	...	Yelkur Elliah Chetty	...
Neo Auto Works	...	Zackaria Sait & Sons	...

INDEX TO ADVERTISEMENTS

	PAGE		PAGE
Advertising ...	ii cover 96	Hire Purchase ...	...
Ariel Motor Cycles ...	91	International Trucks ...	...
Bar-lock Typewriters ...	75	K. L. G. Plugs ...	92
Bus Body Building ...	90	Morris Cars ...	...
C. A. V. Batteries ...	92	Nash Cars ...	...
Castrol ...	69	Plymouth Car ...	64
Chevrolet Cars ...	...	Printing ...	88
Chrysler De Soto Cars ...	...	Singer Cars ...	83
Continental Tyres ...	iv cover	Selden Trucks ...	49
Dodge Trucks and Buses ...	50, 61	Studebaker Trucks ...	88
Fafnir Ball Bearing Shackles ...	...	Solex Carburettors ...	93
Fargo Trucks ...	...	Subscription Form ...	95
Federal Trucks ...	87	Transport ...	iii cover
Good Printing ...	94	Universal Batteries ...	93
Hillman Cars ...	Front cover	Valspar Varnish ...	67



Progress of Passenger Transport in Madras

ONE of the most interesting developments of recent years has lately taken place in Madras with the inauguration of a bus service using high capacity buses modelled on those in use in Calcutta. Two of these buses are at the present in service in Madras and are carrying regularly large numbers of passengers in and around the city; but some 12 more similar vehicles are almost completed and these will also shortly be put into commission!

Until the advent of these buses, passenger transport in South India had hardly been what may be termed first class, but there is no doubt that large buses similar to the one illustrated will shortly be the rule rather than the exception on South Indian roads. The owners of this new bus service are the Ranga Transport Company of Gengu Reddy Road, Egmore, Madras, and they hope when the whole fleet of vehicles is working, to give Madras a service which will be both comfortable, economical and speedy.

The Ranga Transport Company are always prepared to hire their buses for transport of parties

All therefore who are interested in passenger transport by bus should communicate with—

THE RANGA TRANSPORT COMPANY,

Gengu Reddy Road, Egmore, MADRAS.

for marriages, picnics, etc., at any time to cover any reasonable distance, and the terms for such service can be obtained on communicating either with the Ranga Transport Company or Mr. V. R. Gopal, 22, General Muthiah Mudaly Street, G. T., Madras.

At the same time the proprietors of this service are prepared to consider establishing similar services in other South Indian centres, and enquiries are solicited from all Municipalities and District Boards with a view to establishing first class up-to-date transport services in various districts.

It is interesting to point out that the Ranga Transport Company have for many years conducted an ultra-efficient bus service in Calcutta where, as is well known, passenger transport is considerably more advanced than it is anywhere in South India, and the Ranga Transport Company are of the opinion that similar services can be established throughout Southern India to the advantage of bus users.

[illegible]