

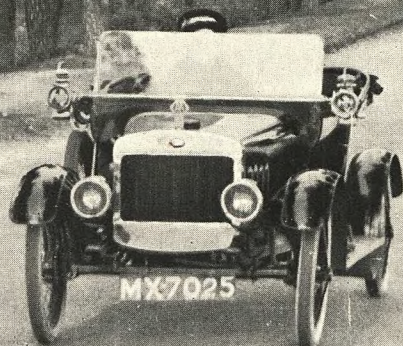
# *The* **Light Car** *and* **Cyclecar**

1<sup>p</sup>

Vol. VII, No. 182

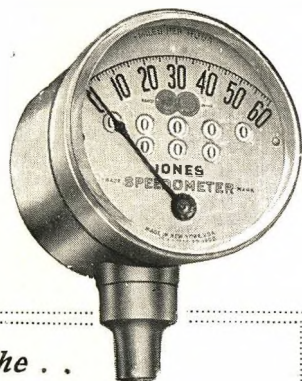
15<sup>th</sup> May 1916

*Registered at the G.P.O.  
as a Newspaper.*



Near Hartford Bridge Flats.





The . .  
**JONES**  
Speedometer

**A**CCURATE ALWAYS, because the centrifugal gyroscopic principle on which it is constructed scientifically prevents it being anything else—no weather, road, or magnetic influences have the slightest effect on its ever-dependable accuracy.

Won the Highest Award and Gold Medal R.A.C. only official speed trials & Gold Medal Turin Exhibition.

At Prices ranging from

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## THE RIGHT SIDE OF THE FENCE.

**B**ETWEEN comfort and discomfort in motoring lies the fence of equipment. The accessories shown here, if bought, place you for certain on the right side of the fence.



### INLAND HAND AIR PUMP

will keep your tyres inflated to the required pressure, ensuring the maximum of service and mileage. Note the long lever action giving greater leverage and power with less exertion. The most complete collapsible pump on the market.



**£2**

Write to-day for fuller particulars and Catalogues:—

**MARKT & CO. (London), Ltd.,**  
98-100, CLERKENWELL ROAD, E.C.

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**P**URELY MECHANICAL—HAND ACTUATED. Absolutely Reliable. Can be easily fixed to any make of car. There is nothing to get out of order and no expense incurred for upkeep as in the case of electric horns. Gives a firm note that ensures right of way.

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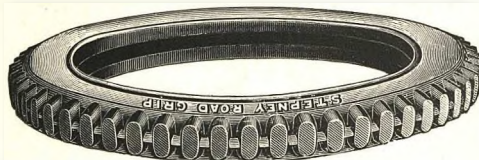
**£1:5:0**

# STEPNEY

## WHEELS & TYRES.



Immediate delivery can now be given of Stepney Combination Wheels for Cars having 30 x 3 front and 30 x 3½ back Wheels.

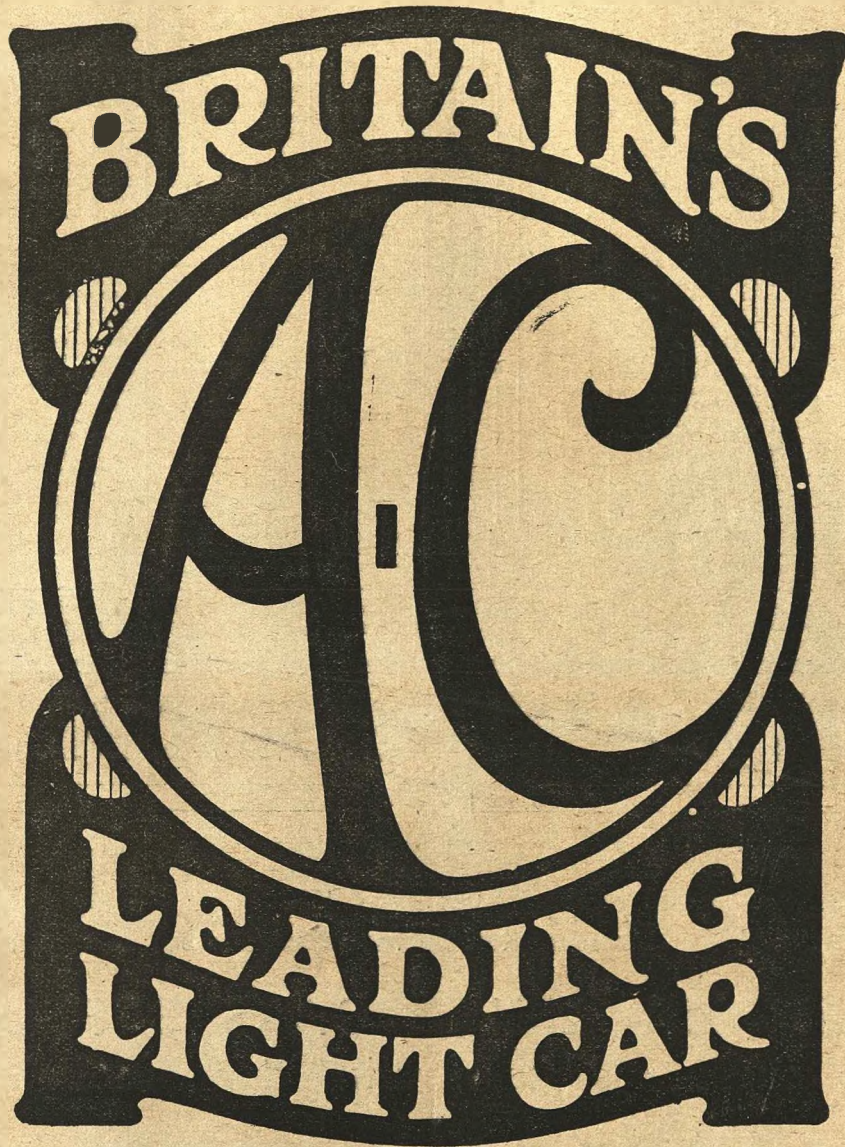


The most successful All-Rubber Non-skid Tyre. Grips the road better and wears longer than Steel-studded.

**THE STEPNEY SPARE MOTOR WHEEL, LTD.,**  
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*Works:*  
*Thames Ditton, Surrey.*

**TO THE  
READER**

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you will be working for the cause of the new motoring



Special  
Tyre  
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List.

Size.	Make.	Type.	List Price.	Clearance Price.	Size.	Make.	Type.	List Price.	Clearance Price.
mm.			£ s. d.	£ s. d.	mm.			£ s. d.	£ s. d.
550 x 65	Henley	Steel studded	2 8 9	1 16 6	700 x 65	Henley	Grooved	2 0 6	1 10 0
650 x 65	Henley	Steel studded	2 10 10	1 18 0	710 x 90	Abingdon	3-ribbed	3 2 6	2 4 0
	Goodrich	Safety tread	2 0 0	1 12 0		Avon	Round grooved	2 17 6	2 3 0
	Avon	3-ribbed (heavy)	1 17 6	1 12 6 to 1 7 6 to		Michelin	Square	2 9 9	2 6 0
	Avon	3-ribbed (ex. h'vy)	2 0 0	1 15 0		Michelin	Steel studded	3 10 8	3 5 0
	Avon	Sunstone grooved	1 17 9	1 12 6		Avon	Sunstone grooved	3 2 0	2 14 6
	Avon	Round grooved	1 17 8	1 7 0		Avon	Square tread	2 9 9	2 3 6
	Avon	Steel studded	2 9 6	2 3 0		Abingdon	Square tread	2 11 0	1 17 6
	Avon	Heavy square	1 9 9	1 6 0		Abingdon	Grooved	3 2 6	2 4 0
	Abingdon	Square tread	1 10 6	1 3 0		Continental	Steel studded	3 12 3	3 0 0
	Abingdon	Grooved	1 17 6	1 5 0		Spencer Moulton	Square tread	2 9 9	2 3 0
	Continental	Basket patt. n'skid	1 19 6	1 4 0		Goodrich	Safety tread	3 2 6	2 12 6
	Henley	Round tread	1 10 6	1 1 6	750 x 85	Goodyear	Dia. rub. non-skid	3 5 9	2 11 6
	Henley	Grooved	1 17 6	1 5 0		Avon	Grooved	2 4 6	1 15 6
700 x 80	Goodyear	Dia. rubber n'skid	2 10 0	2 0 0		Goodrich	Round Tread	1 18 0	1 5 0
O'size 650 x 65	Avon	3-ribbed	2 8 6	2 1 6		Avon	Square tread	1 17 0	1 11 0
	Avon	Sunstone grooved	2 9 6	1 16 6		Avon	Sunstone grooved	2 5 6	1 19 6
	Avon	Round and square	1 13 8	1 5 6		Avon	Steel studded	3 12 0	2 11 0
	Avon	Steel studded	3 0 0	2 11 0		Continental	Steel studded	3 12 0	2 19 6
	Goodrich	Round tread	1 14 0	1 7 0		Henley	Steel studded	3 4 9	2 6 0
	Avon	Combination n'skid	3 0 0	2 12 6	750 x 75 x 80	Henley	Round tread	1 18 0	1 7 6
	Henley	Steel studded	2 19 0	2 6 0		Avon	Square tread	1 16 6	1 11 6
700 x 85	Abingdon	Square tread	2 15 0	1 4 6		Avon	Sunstone grooved	2 5 6	1 19 6
	Goodyear	Round tread	2 0 0	1 14 0		Abingdon	Steel studded	3 4 9	2 6 6
	Goodyear	Dia. rubber n'skid	2 10 3	2 2 9	500 x 65	Avon	Steel studded	3 3 6	2 15 6
	Avon	Sunstone grooved	2 3 0	1 17 6		Henley	Grooved	2 2 6	1 5 0
	Avon	Square and round	1 14 0	1 10 0		Henley	Round tread	1 14 9	1 2 6
	Avon	Steel stud	3 3 0	2 12 0	28 x 3	Avon	Square tread	1 13 9	1 8 6
	Goodrich	Round tread	1 15 0	1 7 6		Avon	Round grooved	2 2 6	1 8 6
	Henley	Round tread	1 15 0	1 7 6		Michelin	Square tread	1 17 0	1 8 0
700 x 65	Clincher	Rubber stud	1 18 0	1 0 0	26 x 2 1/2	Michelin	Steel studded	3 1 9	2 6 6
						Victor	Square tread	1 2 6	0 15 0

Cover and Tube Repairs, also Retreading, best quality only. Prices on application.

BEST QUALITY AIR TUBES IN ALL ABOVE SIZES AT CLEARANCE PRICES.

ALL GOODS SENT ON APPROVAL—Cash to accompany order—immediately refunded if goods returned within 7 days.  
Orders by wire with remittance despatched by first passenger train.

ABINGDON RUBBER CO., LTD.  
100, CHARING CROSS ROAD - - - LONDON, W.C.  
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# STEWART & ARDERN LTD.

## MORRIS-OXFORD LIGHT CARS.

THE BEST LIGHT CARS SUPPLIED  
two or four seaters, with dynamo lighting,

FROM **£140** TO **£200**

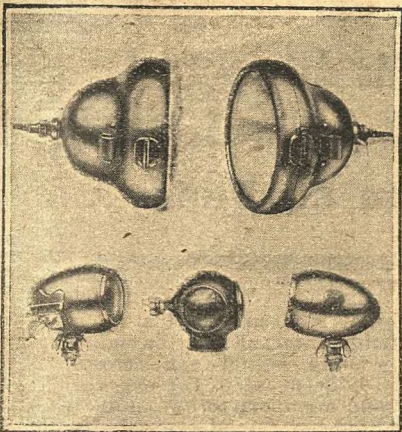
Full particulars upon application:

Telephone—5462 Mayfair.

Telegrams—  
"Essandaymo, London."

**18, Woodstock Street (off Oxford Street),  
Bond Street, . . . London, W.**





## 2 7/8-in. LAMPS

2 Sides,  
1 Tail,  
complete  
with bulbs,  
£6-0-0  
Exquisite  
finish.

1 pr. Sides,  
1 Tail, with  
switch and  
wire,  
59/6 Set.

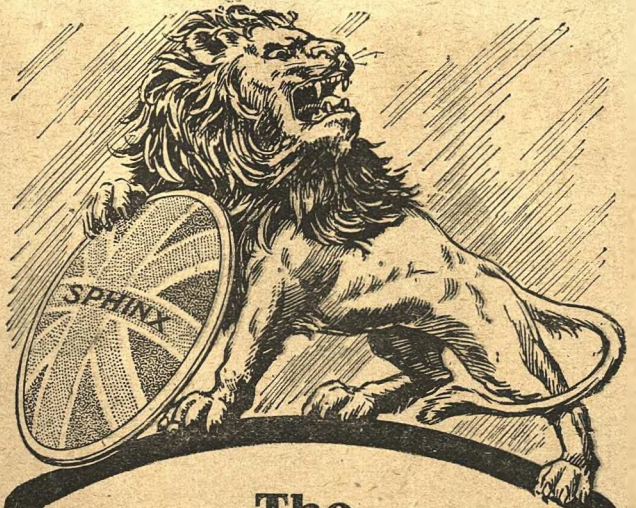
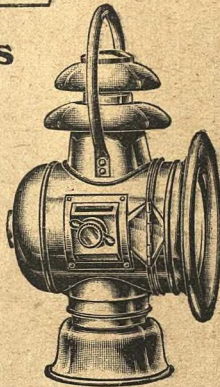
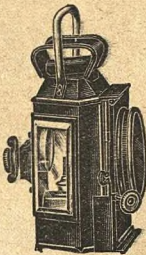
## OIL Side Lamps

All Brass, 22/6 each.

TAILS,  
15/6 each.  
All Brass.

**F.R.S.  
LAMPS**

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Birmingham



## The King of Plugs!

INSTINCT with strength and vigour,  
with power and lusty life, Sphinx  
British-made Plugs stand supreme—  
Lion-like among them all!

# SPHINX

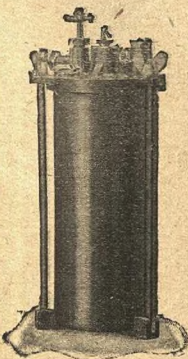
Plugs are British in conception and construction, made throughout in one factory, under one direction and one control (the only such manufactory in the British Empire). They are fashioned to endure every strain and stress of heat and vibration, and they are guaranteed *without time limit*.

Insist on having Sphinx Plugs and make satisfaction sure. All dealers of repute have Sphinx Plugs in stock. We invite correspondence on all matters of difficulty.



THE  
SPHINX  
MFG. CO.,  
BIRMINGHAM.

## THE NEW LIGHTING REGULATIONS



cause much less inconvenience and worry to the motorist who uses the Low Acetylene Gas Generator.

Lights can be turned up or down to any degree—just like coal gas—there is no need to be concerned about your discs, and you can obtain the maximum of light permitted under the new Order.

The Low Generator provides light at any moment, and stores gas under pressure until required.

Read the following extracts from letters, the originals of which can be seen at our office:

27th Feb.—"I am tremendously pleased with your generator. It is the best thing I have struck yet, and I've tried a lot."  
Capt. . . . . R.A.M.C.

2nd Feb.—" . . . It is working well and giving every satisfaction."  
Capt. . . . . R.E.

Of all Dealers, or

The Low Generator & Engineering Co., Ltd.,  
Craven House, Kingsway, London, W.C.  
Telephone—Gerrard 4467.

LIGHT CAR  
SIZE.

**55/-**

Capacity—11lb.  
of Carbide.  
Motorcycle size,  
35/-  
Car size, 75/-

May we send you  
full details?

*The*  
**LOW**

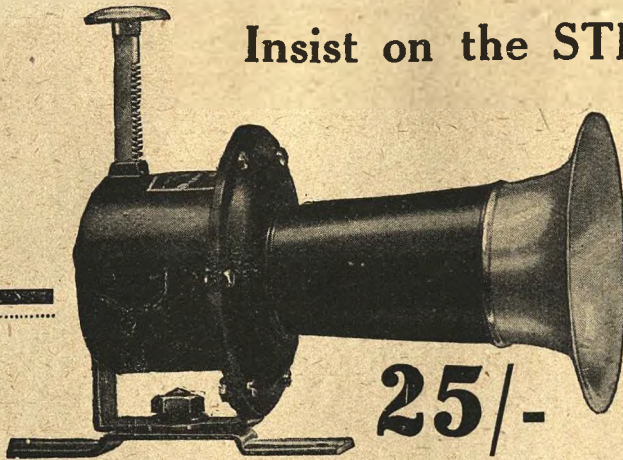
ACETYLENE GAS GENERATOR

TO THE  
READER

By mentioning "The Light Car and Cyclecar" when corresponding with advertisers, you will be working for the cause of the new motoring.

A3





25/-

Insist on the STEWART Warning Signal, which is going to be the ultimate warning signal used on all Motor Cars.

THE signal that is going to give you absolute satisfaction, the only signal that does all the work that a warning signal should do, is the Stewart Warning Signal.

It is a beauty in every way. Gives a loud and penetrating warning, with slightest pressure of hand or elbow.

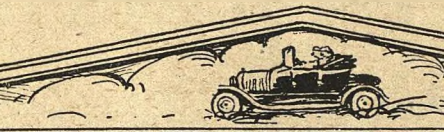
Made in Brass, Nickel and with all Black finish.

THE fact that you are considering a warning signal, means that the signal you now have is not satisfactory. You have already been put to the expense of one signal and are about to buy another signal. If you are not careful you may be misled into buying a second signal that is unsatisfactory, and which will be "mistake number two."

*Stewart*  
**Warning Signal**

OF ALL TRADERS, AND FROM

COOPER-STEWART ENGINEERING CO., LTD., 11, Broad St., Bloomsbury, LONDON, W.C.



**JULIANS OF READING** CAN DELIVER FROM STOCK  
NEW 1916 MODELS  
AS FOLLOWS:-

MORGAN Sporting Model, complete with hood, screen, lamps, horn, etc. ....	£114 9 6
MORGAN Grand Prix, with water-cooled J.A.P. engine, Stewart mechanical horn, etc. ....	130 8 0
PERRY, 8 h.p., 2-cylinder ....	147 0 0
1913 HUMBERETTE, repainted, Stepney wheel ....	65 guineas
1916 SINGER, 10 h.p., with hood, screen, electric lighting set, detachable wheels and spare, dicky seat, etc. Due 18th May ....	£255 0 0
1916 Grand Duke Michael CALTHORPE, double folding screen and dicky seat. Due September, 1915; expected daily ....	195 guineas

EXCHANGES  
EASY  
TERMS.  
PHONE:  
1024.

JULIANS, BROAD ST., READING.

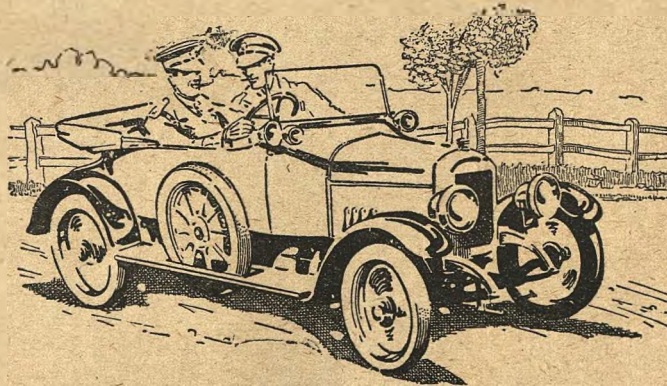
BIGGEST DEALERS  
IN THE SOUTH  
45 YEARS'  
REPUTATION



# The "Famine" in Chauffeurs and Mechanics

**H**ALF the pleasure of motoring is the possession of a car you can drive and keep in order yourself. And under existing conditions, with a famine in chauffeurs and motor mechanics, this pleasure becomes an advantage that can scarcely be over-estimated. No car is more easily driven and more easily looked after than the CALTHORPE Minor. With proper care in lubrication and attention to minor adjustments, it practically looks after itself. It is as conspicuous by its absence from the garage repair-shops as by its predominance on the road.

Prices from 185 Gns.



**NOW, if ever, is the time to secure your**

## Calthorpe

MINOR—10 H.P.

The CALTHORPE MOTOR CO. (1912), Ltd., Bordesley Green, Birmingham.

**TO THE  
READER**

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**B1**



# DREADNOUGHT

## LIGHT CAR INSURANCE

*Comprehensive Policy, covering—*

THIRD PARTY RISKS, Unlimited.  
ACCIDENTAL DAMAGE, FIRE,  
THEFT, and TRANSIT, including  
lamps, tyres and accessories.

10 % BONUS for no claim.

Premiums, 6 h.p., £4; 8 h.p., £4:5

THIRD PARTY RISK, FIRE and  
THEFT only,

Premiums, 6 h.p., £2:10; 8 h.p., £2:15

Write for Prospectus, giving full particulars of car, etc. :

Head Office: 14, Cornhill  
London, E.C.

Telephone—Avenue 8024 & 8025.

Birmingham	---	---	---	36, International Exchange
Rugby	---	---	---	3, Albert Street.
Manchester	---	---	---	26, Cooper Street.
Newcastle	---	---	---	26, Northumberland Street.
Edinburgh	---	---	---	15, Stafford Street.
Glasgow	---	---	---	144, St. Vincent Street.
Dundee	---	---	---	18, Commercial Street.
Dublin	---	---	---	Lloyd's Chambers.
Belfast	---	---	---	Northern Bank Buildings, Donegal Square West.



# MOTOR POLICIES

*- At Lloyd's.*



# Dr. LOW ON ORIGINALITY IN SPRINGING. (SEE PAGE 567.)



*The first touch of summer brings the leaves out.*

## NOTES, NEWS AND GOSSIP OF THE NEW MOTORING.

Put the clock on—

Exactly 60 minutes next Sunday

At or about the witching hour of 2 a.m.

Better still—do it when you go to bed on Saturday night.

And don't forget the clock on the dashboard as well as on your mantelpiece.

The "Summer Time Act" will give us one hour more of driving in daylight until 30th September.

"The times are out of joint," but those who forget to alter the time will be "out of joint with the times."

We have brought up-to-date our lighting-up times this week, by taking into account the operation of the new Act.

In the calculations of what the nation will save by the increase of daylight hours, we wonder if the amount that will be lost by the police in fines for having improper motorcar lights has been reckoned?

The "Summer Time Act" provides that "During the prescribed period in each year in which this Act is in force, the local time in Great Britain shall be one hour in advance of Greenwich mean time" (and for Ireland of Dublin mean time).

From the wording of the Act, it might be thought that lighting-up time will now be the same all over the country, as at Greenwich. This is not so. While local time is the same as Greenwich, or for Ireland, the same as Dublin, the time to light up varies according to the hour of sunset.

The third article in the series "From the Very Beginning" is held over until next week.

Extraordinary prices are being paid to obtain light cars of reputation; £275 is quite freely offered for new Singers.

"We may avoid the prohibitive tax [on big cars] by using small cars, cyclecars, three-wheeled vehicles, perhaps," says "The Globe."

The Chancellor of the Exchequer has definitely refused to adopt the suggestion that the value of cars should be the basis of the tax.

The front cover photograph last week, showing a scene in the Pyrenees, was enlarged from a negative measuring only  $1\frac{3}{4}$  in. by 2 ins., which may interest amateur photographers.

Says a Plymouth resident in a letter to "The Western Morning News": "If motor accidents are to be kept under, do have a law to keep people on the pavement except when they wish to cross the road."

The coroner at Grantham said at an inquest on a boy killed by a doctor's car, that he was horror-stricken at the number of children running in the street when he, in the course of his duty, had to travel by car.

In our next issue we shall publish an important illustrated article on "double clutching" when gear changing, why it is necessary, with illustrations of the types of gearboxes that require this practice, and how to make silent gear changes.

When you have finished with your copy of THE LIGHT CAR AND CYCLECAR hand it over the counter at any post office for forwarding, free of charge, to the troops. This is far better than throwing it away or lumbering up the house with old copies, and the copies are very welcome.

Motorists are rapidly appreciating the fact that lighting-up time half-an-hour after sunset is a very sensible rule. The light later than this is very uncertain for driving. We have always urged such a regulation, which, of course, is now in force in nearly every part of Great Britain, and should be made universal.

Reference in the House of Commons to the fact that not a single airman has been appointed to the special committee of inquiry into the air services prompts the suggestion that Capt. A. M. Low, who is in command of the experimental department of the R.F.C., and who has both practical and theoretical knowledge of all branches of flying, would be the very man for this body.

Mr. Runciman was asked in the House of Commons last week if the supply of petrol to private motorists, except for business purposes, was to be stopped, especially for the use of motorists attending race meetings. His reply was that the matter of restricting the supply was under consideration, but that in view of the strong representations made to him, it was considered desirable to allow a certain amount of horse racing to continue. "Strong representations"—will our motoring associations please note!



## THE TAXES PAYABLE ON NEW CARS.

### Important Statement.

**T**HERE is great uncertainty with regard to the procedure to be followed in paying the motor-car taxes now. The local authorities appear to have no information. In the circumstances we have communicated with Sir John Bradbury, of the Treasury, who states that instructions as to procedure have been circulated to postmasters. At present the old tax only is payable, and the balance after the Finance (No. 2) Bill has passed through. The reply received from Sir John Bradbury's secretary is as follows:—"In reply to your letter of the 10th inst, I am desired

by Sir John Bradbury to say that in purchasing a new car tax should be paid at the old rate provisionally, and the balance should be paid after the Finance (No. 2) Bill has passed through the Committee stage in the House of Commons. Sir John Bradbury understands that instructions as to procedure to be followed have been circulated to postmasters." We presume that the "balance" will be three-fourths of the difference between the old and new taxes, as for owners of cars who paid the old tax at the beginning of the year.

### It Wouldn't Work.

Said the Willesden magistrate last week:—"When a man has been on active service it wipes out previous convictions against him at the police court." Does it? Let not the motorist who returns from the Front and gets caught in a police trap expect to find all those endorsements on his licence wiped off—not even at Willesden.

### Depreciation of Cyclecars.

Some people seem ever anxious to sling a little mud at the cyclecar in the hope, perhaps, of discouraging the thousands of people who will never own a motor vehicle until the cyclecar is popularized. Thus we read:—"A Midland garage recently offered for sale a 1913 belt-driven cyclecar, which had cost over £100, for £20, and a 1913 Singer light car, which had cost £185, changed hands at £170." Now, the cyclecar might have been a home-built freak or an unknown and unsuccessful make, which shows how grossly misleading such statements are.

### Oh, For a Little Common Sense!

Mr. Fell asked in the House of Commons last week if, in face of there being 2000 motors at a recent race meeting, public money was to be spent in great posters on the hoardings begging people not to use motorcars for pleasure. [We like "begging."—Ed.] Mr. McKenna's reply was characteristic. It was to the effect that the reasons advanced appeared to him to be one for extending their efforts to create a healthy public sentiment on the subject! Is the Cabinet absolutely blind in this matter? Do they think that huge hoardings in the Italian ice-cream district achieve this purpose? Or sanctioning racing while refusing to permit race-goers to travel by rail?

### Special Features This Week.

A number of features of more than ordinary interest appear in this issue. Of these the most notable is Dr. Low's article on "Originality in Springing," in which he singles out the weakest feature of the modern light car. One suggested type of spring, which would provide ideal suspension, is novel. The article also gives the results of a series of springing experiments carried out by means of an apparatus specially designed by Dr. Low. Another contribution is the article on the post-bellum production of light cars in Germany, America, England and the allied countries. Other notable features are a report of the first cyclecar "T.T." race in Spain, illustrations of the new French cyclecar ambulance, a page for the amateur mechanic, and advice on purchase of second-hand cars. In our next issue we shall describe and illustrate a number of bargains in used light cars and cyclecars sought out by our special representatives.

### Name Withheld.

In a motor case at Epsom, expert evidence was called on both sides as to the reliability of a speedometer. The magistrates held that the speedometer was unreliable.

### Merely Stupid.

In the Commons last Wednesday:—

Mr. W. Thorne: Will not the Government prohibit horse racing altogether?

Mr. McKenna: My hon. friend should address that to the appropriate Minister, and I am sure he would receive an answer. (Laughter.)

Mr. Thorne: Who is the proper Minister? (Laughter.)

Mr. McKenna: I am unable to say without notice. (Laughter.)

Well might the British public suggest to Ministers to get on with the war.

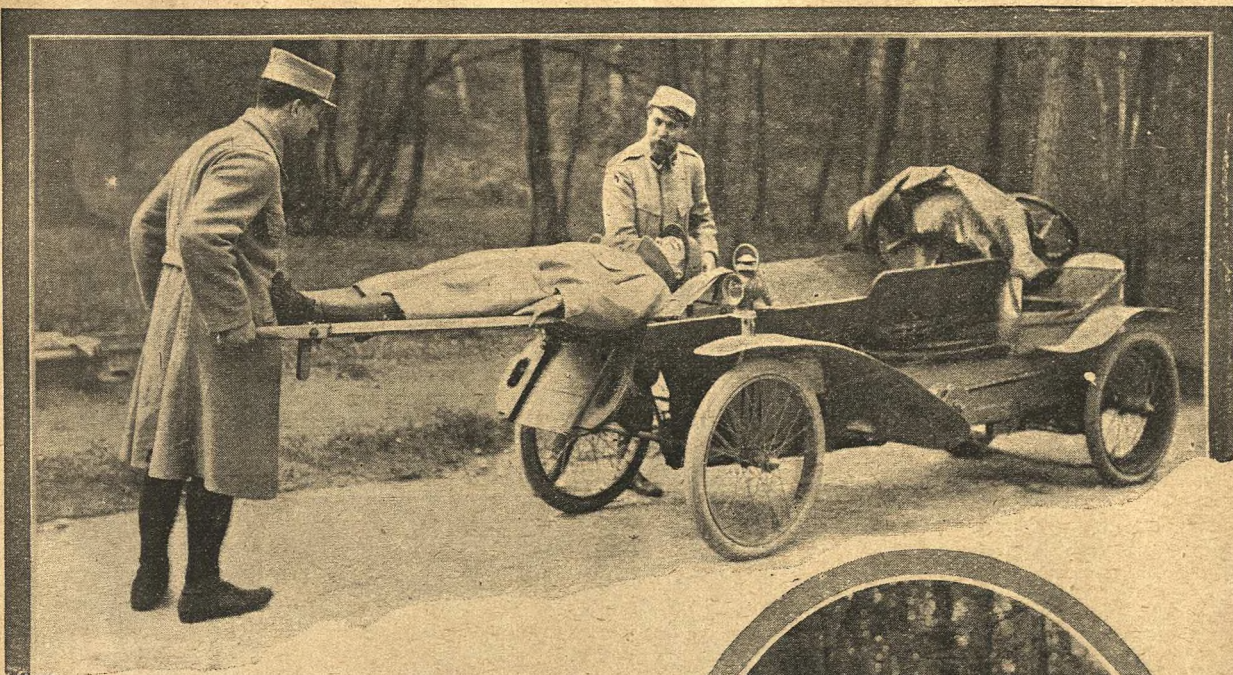
### Direct Sales.

We have an inquiry from a French commercial traveller at Biarritz who wants an English light car, with four-cylinder engine, price not to exceed £150, and the manufacturer must be willing to sell to him direct and give him the advantage of the agent's discount. He particularly wants an English car, which he thinks surpasses the French in appearance and quality. We are afraid the British manufacturers, even if they had a car to sell at this price, would faint at the mere suggestion of direct sales to the public, which is a quite impracticable proposition, and would be most unfair to the agents. Our correspondent says that British light cars are very expensive in France, as the agents' selling costs, freight, and duty add £80 to £100 to the British price. An American car selling at 375 dollars (say £78) costs £150 in this country, but £212 in France.

### Embarrassing Cheers.

There were few more popular members of our staff than Mr. A. P. Bradley, who used to run a Duo painted an atrocious shade of pink. He has had many lurid experiences in French Croix Rouge work, but the most embarrassing befell him after he returned from the Front, on the occasion of the reception given to the captain of the S.S. "Wandle." He formed one of the party, with Field-Marshal Sir Evelyn Wood and the chairman of the Wandsworth Gas Co. (Mr. H. E. Jones), who received the captain. Sir Evelyn and the chairman were in mufti, and were cheered heartily as they stepped off a launch to the wharf on which the reception was to take place. Then followed Lieut. Bradley, and on a burly individual raising "Three cheers for the man in khaki!" a deafening roar of cheers broke out from the employees of the company and the crowds on the banks of the river.

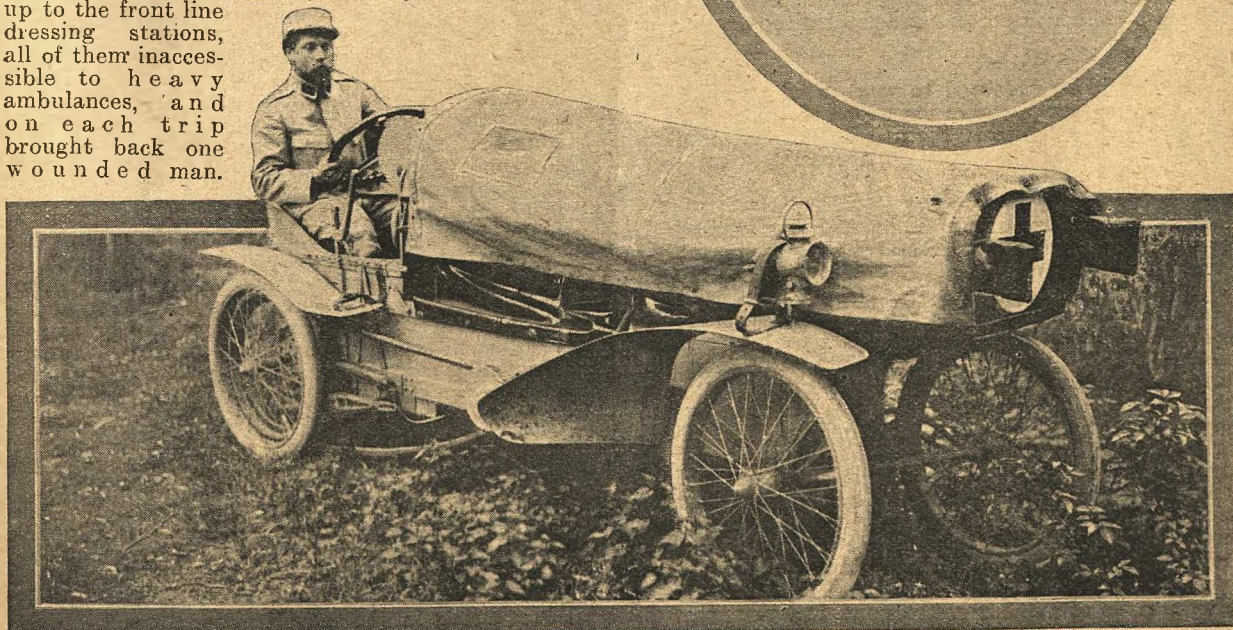




## FRENCH ARMY TESTS CYCLECAR AMBULANCE.

**H**EAVERY and powerful motor ambulances, carrying four to eight men, are found to be practically useless for first-aid work on certain portions of the Front in France. Where the only available roads leading to the firing line are narrow tracks in which it would be impossible for a car to turn round, or are mere paths across fields, where a heavy car might become bogged, it is customary for the ambulances to wait some distance at the rear, the wounded being brought to them by stretcher bearers.

In order to get the wounded men away with greater speed than is possible by hand, the French army has recently been experimenting with cyclecars as ambulances. These practical experiments under actual war conditions have been carried out in the Soissons district with Bedelia machines. The cyclecars were sent up to the front line dressing stations, all of them inaccessible to heavy ambulances, and on each trip brought back one wounded man.

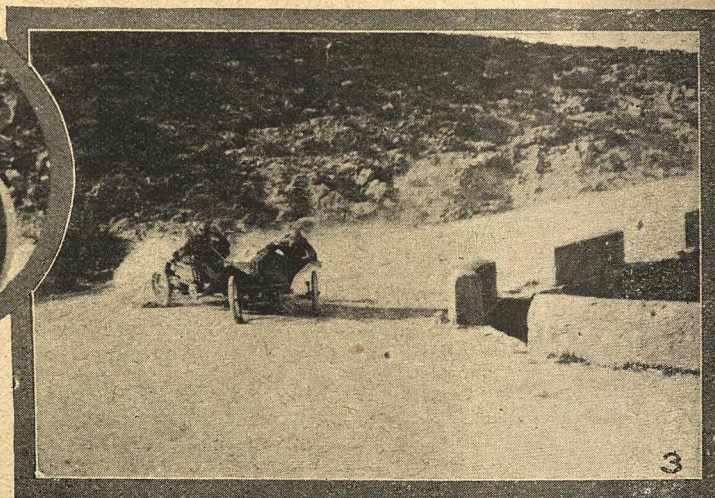
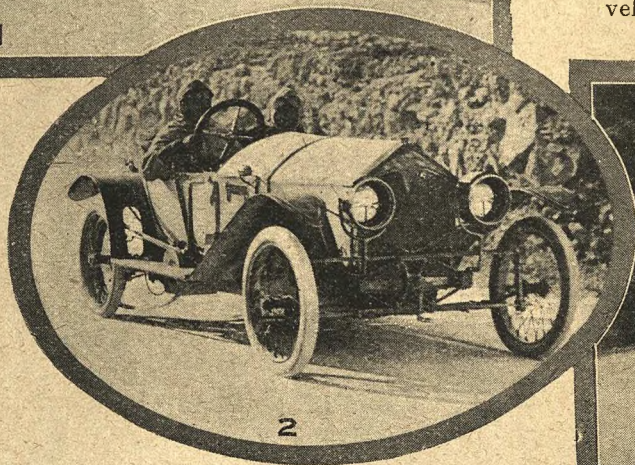
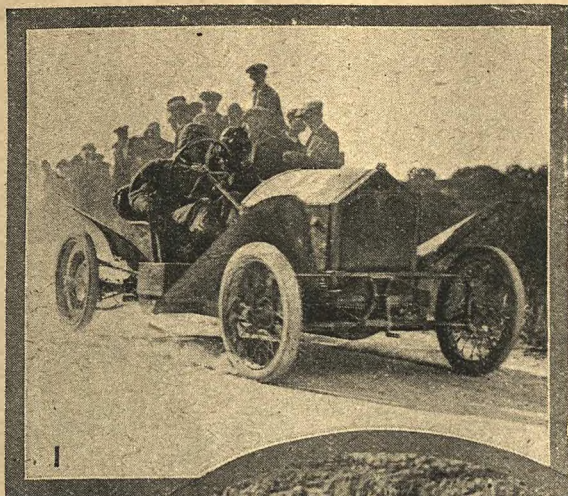




## A T.T. LIGHT CAR AND

FOR some time past cyclecarists in Spain, in which country the simpler types of machines are becoming very popular, have wanted a race on a circular course similar to the motorcycle Tourist Trophy races in the Isle of Man. One has now been held. There were 18 entries, of which 13 machines were of Spanish manufacture, 4 English, and 1 American. Two of the entrants were Señors J. M. Moré and D. J. Custals, who are rivals, the former believing in the cyclecar and the latter in the light car. It is realized to what stage the industry has approached, although why there should be rivalry between the two types, instead of their remaining in different classes, it is not easy to see.

Great crowds were attracted by the novelty of the event, for the start of which 10 small, low-bodied vehicles lined up, and the idea got about that it was



(1) Senor J. M. More, winner of the race. (2) A touring David cyclecar, which arrived sixth. (3) An exciting dry skid as the mechanic was leaning over the front wing to screw on the radiator cap that had loosened during the race.

### American Tyre Concerns Breathe Again.

It has been found impracticable to prohibit the importation of tyres, owing to certain arrangements between rubber importers and the United States.

### Pictures with Point.

We should be indebted to readers who would forward interesting photographs, especially from western and northern counties. Pictures with some point in them are preferred, especially if of topical interest.

### An Abjuration in Dutch.

A Dutch contemporary, "The Auto-Leven," which is published in the Hofwijkstraat 's-Gravenhage, has indicted three terrible pages against THE LIGHT CAR AND CYCLECAR in general, and our contributor, Miss Jean Faithful, in particular, for her article in a recent issue on touring in Holland. What seems to have made their hair stand on end more than anything else, and to have produced a truly terrifying array of consonants, is the illustration, intended to be humorous, of the encounter, which Miss Faithful related, with a Dutch vegetable cart drawn by a pair of dogs. It concludes with an abjuration to "Mrs." (?) Faithful in these kind terms:—"Ik vind uw artikeltje niet sportzusterlijk! Hopen we 'n volgenden keer beter!" Translated, it accuses our contributor of being very unsportsmanlike, and hopes for something better next time! Truly, the Dutch must be a race with a sense of humour entirely lacking.

B6

## THE DAYLIGHT Clocks to be Advanced

ON going to bed on Saturday, 20th May, all clocks and watches in the house must be put on one hour. That is if the hands point to 10 o'clock, they must be altered to 11 o'clock. By that simple alteration simultaneously it is expected that millions of money will be saved, the nation will be able to enjoy many more hours of daylight, while motorists will be saved many hours of vexatious lighting restrictions.

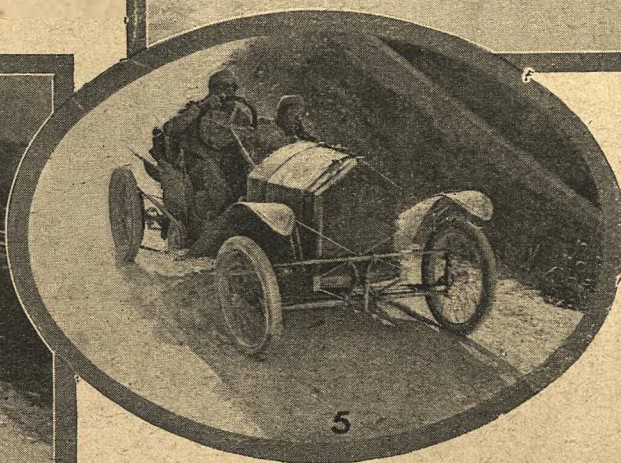
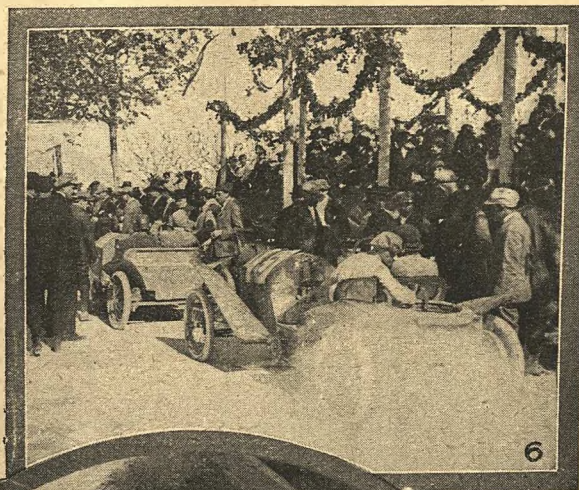
This week the lighting-up times, which form one of the regular features of THE LIGHT CAR AND CYCLECAR, are altered in accordance with the Daylight Saving scheme, and it is seen at once the advantage provided. We shall get up of a morning an hour earlier without realising that we are doing so, except to notice perhaps how fresh and sweet the early morning air is during the summer months, and we shall be able to drive our cars up to 9.20 p.m. (by the clock) on Sunday next before having to light up, thus making possible much longer excursions than have been the rule since the lighting restrictions came into force. At midsummer, in the north of Scotland, one will not have to light up until very nearly 11 o'clock! In London and the south lighting-up time in June will be delayed until 9.45.

Normal time will be restored on the night of 30th September-1st October, and in future years the clock will be altered presumably on the first Sunday in May. Thus, for the best six months of the year, we shall all be enjoying one hour more sunshine per day without being in the least inconvenienced. It is a

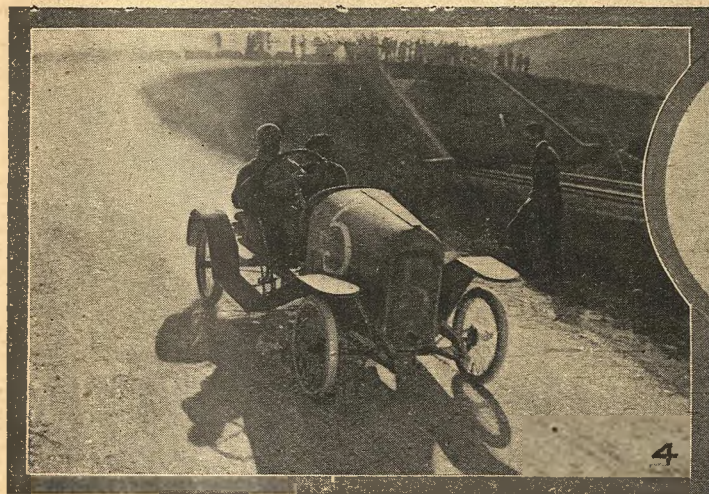


## CYCLECAR RACE IN SPAIN.

a test for supremacy of the cyclecar and light car. The cyclecars easily revealed a superiority of speed in the very first round, and the enthusiasm of the spectators knew no bounds. In the second round Señor Moré overtook Señor Custalls some 300 yds. from the grand-stand, thus causing a renewal of the bursts of applause which had greeted the cyclecarists in the previous round. Each circuit was 23 kiloms. in length; the race was over four circuits, 112 kiloms., or 70 miles. The winner proved to be J. M. Moré, on a David cyclecar, whose time was 1 hr. 55 mins. 2 secs., beating the time of the fastest motorcyclist in a previous race, followed by J. Andreu and E. Bernardo, also on David cyclecars, and Custalls on an Ideal light car, who was nearly 23 mins. slower. One of the advantages of the cyclecars was their ability to take corners faster.



(4) One of the Ideal light cars, made in Spain, that competed. (5) Señor Juanito Andreu, a gentleman driver of a David who gained second prize. (6) At the start of the race. It would have been a more interesting event if British light cars had competed.



## SAVING BILL.

One Hour 20th May.

pity that the author of the Daylight Saving scheme, the late Mr. William Willett, never lived to see his ideas fructify, and that his scheme should first of all be adopted by Germany, after vainly endeavouring to get it passed into law in peace time. It has taken a great war to make the House of Commons realise the importance of the scheme.

### Duty on Fords Only £15.

The import duty paid on Ford cars—or the parts, as they are assembled here—is given as only £15. This places the value of the imported parts of each Ford car at only £45, the duty being 33½ per cent. of the value. As it is stated that the value of the Ford “created in this country” is 50 per cent., we get a cost of £90 and a selling price of £135. The interesting point, however, if the Government really wish to keep out imported cars after the war (their importation is prohibited at present) is that a duty of £15 on a car selling at £135 is absolutely inadequate, and would in no way assist the British manufacturer.

### Another Huge After-War Output.

An Anglo-Australasian syndicate is now at work on a plan to produce a British light car at a moderate price in huge quantities. It will be largely an assembled proposition, and quite different from the car which we recently stated is to be produced at the rate of 50 a week.

### Our Front Cover.

Our front cover picture depicts a lady-driven de luxe model G.W.K. on one of the fine stretches of the Basingstoke road near Hartford Bridge Flats.

### “Up-to-Date”!

Under the heading of “Up-to-Date Motor Notes (Weekly Special),” “The Financial News” quotes (without acknowledgment) our paragraph about the concern in the Midlands which is making preparations to turn out 26,000 light cars per annum. The unkindest cut of all, however, is the mention of a reference to the news, which we gave as a positive fact, as a “rumour.” If this is an “up-to-date” example of motor notes, we do not think much of it.

### Another Appeal.

The National War Savings Committee has issued another appeal. This time it is to point out that it is not only necessary to avoid buying imported goods, but home-made articles as well. The net result of this will be that the “man in the street” who, for instance, wants a car for business purposes, will say: “Well, it does not matter whether I buy a British or American one,” and promptly he will invest his money in the latter. This body also accuses those who motor of “helping the enemy,” a statement for which there is not the slightest foundation. The Committee is only succeeding in stirring up class prejudice.



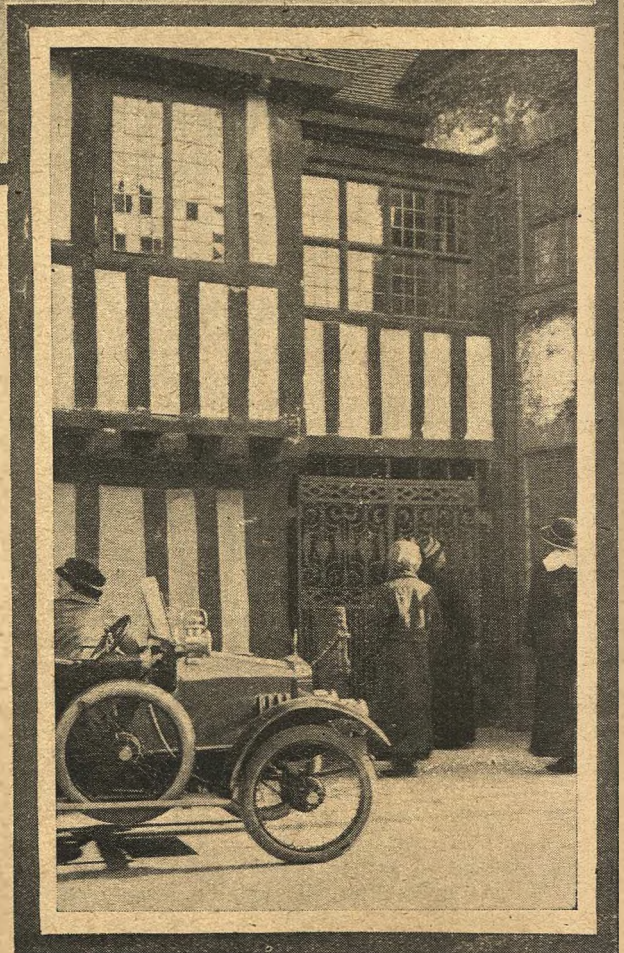
## An Artist-Haunted Village



### BRAMBER IN SUSSEX.

**B**RAMBER, a most picturesque village, haunted by artists, lying in a hollow of the South Downs, which in days gone by made it vulnerable to many a foe, is always worth a visit. It lies close to Steyning and Shoreham in Sussex. It was defended by its castle, a Norman fortress, the tower of which still remains, although in the Civil War it was blown up by the Royalists. The most interesting building is the ancient chapel house of St. Mary's. Its principal features are the flagged courtyard and Elizabethan garden, a fine iron gate, a man-trap, now used as a boot-scraper, and many quaint examples of carved woodwork. Near the Castle Hotel is an interesting museum and taxidermy, with collections of stuffed birds, bottled snakes and representations of familiar children's stories, such as the "Babes in the Wood," carried out with great insight of human and animal character. The proprietor appeals skilfully to his patrons with a notice: "Admission 2d.; children 1d.; ladies and gentlemen their own generosity."

The photographs show the picturesque village street, with St. Mary's on the left and the castle tower in the distance; a griffin, and the beautiful iron gates of St. Mary's.





# The Light Car and Cyclecar

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**Mondays—1d.**

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## NATIONAL PAPER ECONOMY.

In order that the minimum of paper shall be wasted, readers can co-operate by always purchasing their copy of "The Light Car and Cyclecar" at the same place, or, better still, by placing a definite order for the journal to be sent to them. In this way waste of paper will be prevented, as the publishers will be in a better position to calculate the exact demand.

## Letters.

EDITORIAL Communications should be addressed to The Editor, "The Light Car and Cyclecar," 7, 9, 11, 13 and 15, Rosebery Avenue, London, E.C.

Letters relating to ADVERTISEMENT and PUBLISHING Departments should be addressed to The Manager. SUBSCRIPTIONS should be forwarded to the Manager (rate, 6s. 6d. per annum, or pro rata).

ADVERTISEMENT COPY, Blocks, &c., should come to hand by Tuesday morning to ensure careful attention and allow time to submit proofs, except when an earlier time is specified.

## Return of MSS., &c.

Drawings, Photographs and MSS. not suitable for publication will be returned if sufficient stamps are enclosed for this purpose, but the Publishers cannot hold themselves responsible for the safe keeping or return of contributions.

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	12 ms.	6 ms.	3 ms.
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Canada	8s. 8d.	4s. 4d.	2s. 2d.
Elsewhere	10s. 0d.	5s. 0d.	2s. 6d.

## LIGHTING-UP TIMES.

London	9.18	Edinburgh	9.54
Newcastle	9.41	Liverpool	9.40
Birmingham	9.30	Bristol	9.28
Dublin	9.58		

On Saturday, 20th May, deduct one hour, the times being approximately correct for Sunday, 21st May, when the Daylight Saving Scheme will be in operation.

For Dublin the local mean time (one hour after sunset) is given. If Greenwich time is required 25 minutes must be added.

MOON.—Past full; does not rise until 11.36 p.m. (or 1.0 a.m., Sunday, new time).

# Topics of the Day

## Daylight Saving.

IT is one of the surprises of the war that the Daylight Saving Bill of the late Mr. W. Willett, scorned by politicians in peace time, though welcomed by most sections of the community, should at last be within measurable distance of the Statute Book. That it will mean a great deal to motorists goes without saying. From the day it comes into force it will provide an extra hour of daylight without imposing any inconvenience on the individual, which in these days, or rather nights, of restricted lighting regulations is important. We shall rise at 6 a.m. and reckon it 7 a.m., and find new joys in the freshness of the early hours of the morning from May to September. And we shall be able, in midsummer, to motor until nearly 10 p.m. in daylight (by the new official time) or later still in northern latitudes. There will be no difficulty in carrying out the innovation, once, on the appointed day, all clocks are advanced one hour. The wonder is that such a simple and sensible plan was not adopted a century ago.

## Originality in Springing.

THE springing-experiments carried out by Dr. Low and illustrated in this issue, together with the novel suggestions he puts forward, form a timely contribution on a subject that is becoming of greater importance every day. There is absolutely no reason why the modern light car should not be suspended as luxuriously as a Rolls-Royce, not even the limitation of cost, and it is only in cars that are really well sprung that we shall obtain comfort and reliability on the execrable surfaces which will be one of the legacies of the war for several years to come. There is no difficulty in providing adequate and suitable springing, except that the peculiar features of the modern light car demand that the subject shall be tackled in an original manner, without that slavish copying of the springing of bigger cars, which is as far as most designers go at present. It is to be hoped, therefore, that the attention drawn to this important matter will lead to some improvement in springing in the 1917 and post-bellum models of the many light cars that fail lamentably in this one important respect.

## "Pay Up and Look Pleasant."

THIS has been the advice, coupled with a certain amount of smug satisfaction with regard to the taxes, on the part of a group of our contemporaries and some daily newspaper journalists. The increased taxation of light cars was actually welcomed as being eminently desirable, which, surely, is a very singular view to put before motoring readers. Well might they cry, "Save us from our friends." However, a number of them have been addressing some vigorous letters to the Press on the subject of taxation of cars, showing that they by no means endorse the recommendation to "pay up and look pleasant," nor are they to be blamed for what, at first, our contemporaries would have termed such an unpatriotic attitude. We say "at first" advisedly, because we notice that there are indications of a revised policy, possibly brought about by the number of letters published in such journals as "The Motor," putting forward some striking examples of the hardships inflicted by the incidence of doubling or trebling taxes on a basis which is already unfair. In fact, one of our contemporaries goes so far as to state now: "As a matter of fact, the system of taxation adopted for motorcars has never been fair, and now that it is proposed to double and treble these taxes the unfairness has become doubly and trebly apparent." We trust that the journal that thinks a six-guinea tax on light cars is an actual advantage, and urges its readers to "pay up and look pleasant," will, even somewhat late, duly note this. Possibly our motoring associations also will take vigorous action to oppose these taxes, and not leave personal representations to the Treasury solely to "The Motor" and its associated journals.



## THE CALL OF THE ROAD.



## THE JOTTINGS OF JOHN GILPIN, JNR.

### THE ART OF HILL-CLIMBING.

**B**ACK in the days before the war—how long ago that seems—we were discussing the respective hill-climbing powers—or the lack of them—of the different early model light cars, after one of the impromptu hill-climbs run off by the Cyclecar Club. Now, in those days, and this was in the very beginning of the new motoring movement, most light cars were atrociously bad hill-climbers, comparing them with what we know they can do to-day, and the cyclecars were remarkably good (by the same doubtful standard). Indeed, the name of one famous light car used to be a byword of reproach upon the industry, and the tales that were told form a sad chapter in the history of the new motoring movement. The designer and works manager performed miracles, however, and as each batch of cars came through it was announced (very privately) that this or that hill could now be climbed (on bottom gear and a very low bottom gear, too) until at last, and it was a long last, there was no main-road hill in the country that could not be ascended with more or less skill, given a dry surface, a following wind, and a driver who really could handle a car. All of which, if I revealed the make, would sound very strange to those who know the extraordinary power this car possesses to-day, especially as it has the very same engine.

#### A CHALLENGE.

The competition had been run on a very easy hill, according to present-day standards, to demonstrate the top-gear hill-climbing advantages of the very latest types of motors. It proved a walk-over for the cyclecars, although I might remark, there were some, the owners of which discreetly refrained from making an attempt on even their very lowest ratio, let alone top. One owner of a light car had made a lamentable failure, and was loud in his protests that the carburettor was always choking, that certain brands of petrol were really no use for hill-climbing, while the ignition was not what it should be; and he regaled us at length with what he had done on much more terrible gradients. Somebody mildly suggested that perhaps he did not know how to get the best out of his engine on a hill, to which he retorted that if any member of the Club could improve upon his driving he would freely bestow upon him in his own right, for his use for evermore, the sum of 2s. 6d. sterling.

"Done," said a well-known driver, who offered to double the bet. After much more conversation and considerable qualification of the issue at stake, as was the manner of the times, it was decided that the wager must be settled forthwith. Accordingly, we trooped out to the scene of the hill-climb once more, and the preliminaries having been settled to the satisfaction of all parties (for the time being), the test began. The gradient of the hill was about 1 in 15 at the steepest bend, and the question was not who could ascend it in the fastest time, but who could postpone changing down to the latest possible moment. (Incidentally, such a remarkable rule in

the previous hill-climb led to one member completely burning out his clutch and finishing the day's run at the wrong end of a tow-rope.)

Thus the tests began. The first was abortive owing to the fact that the unfortunate driver used his gear lever as a brake! Test number 2 was also held (by the driver) not to count, the gentleman this time having his hand brake on (so he said). Test number 3 was better. Second speed had to be used, and the point where the change was made (with the engine piping a horrid protest) was duly recorded—and hotly disputed for the next 10 minutes. The challenger having done his best, the acceptor took charge and sailed up the hill at an alarming speed without recourse to second gear at all!

#### "GEAR-SLAMMERS" ON REIGATE HILL.

The other Saturday I stopped for an hour or so on Reigate Hill, which is a regular "gear-slammer's" paradise. (Incidentally, I should hate to have a house near the worst bend on a hill like this, which is one that the average owner imagines that he can take on top, but often winds up on first.) It was not a very busy day, but the traffic was fairly continuous; no sooner one car being out of sight than another appeared in view, or the reverberations of its engine could be heard in the distance. Curiously enough, although many big cars passed, during the whole time I saw less than half a dozen light cars. Probably on another day the numbers would be exactly reversed. However, the performances of the drivers of the bigger cars were sufficiently illuminating on the art of hill-climbing.

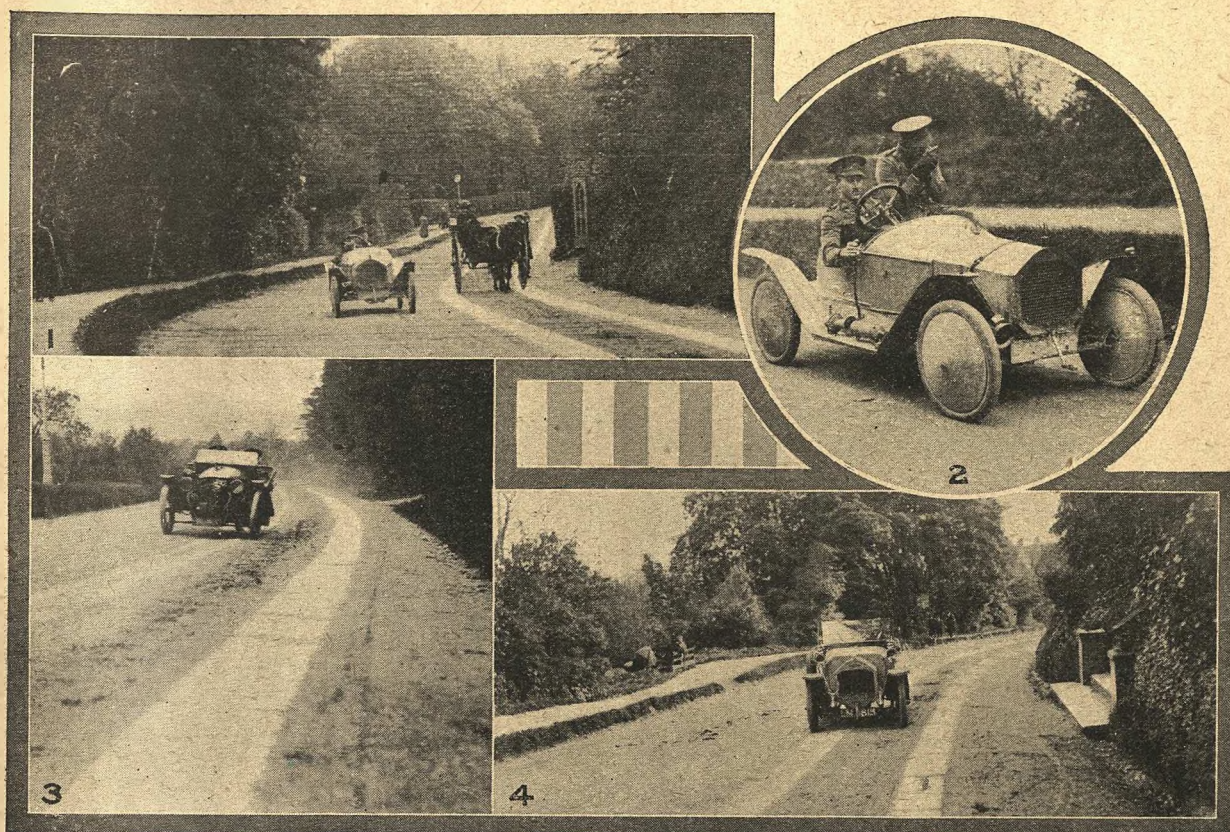
The first "gear-slammer" was a driver of a very old car. It will be recalled that the hill is roughly in the shape of an "S," the gradient approximately being 1 in 15 on the first part of the letter, about 1 in 30 in the centre, and then a further steepening of the gradient to 1 in 13 immediately the final bend of the "S" comes into view. The latter part of the hill has a double layer of stones on the left-hand side to assist horsed traffic. On the lower bend of the "S" we heard the car driver change his gears with a terrible crash. As he came into view on the level portion, he was apparently intending to complete the rest of the hill on top, for he hung frigidly on to that gear until the engine began to "pink," when he hurriedly changed down to second with a noise like a railway collision, failed to get in second speed, and finally resorted to first. He disappeared, looking somewhat annoyed.

He was followed by a benevolent old gentleman, driving a Hillman, who had evidently engaged first speed right at the very bottom of the hill. His attitude on the subject of changing up, or venturing to tackle the gradient on anything higher than first speed, appeared to be that, although the heavens might fall, nothing would tempt him to take the risk.

As a contrast, he was followed by a military driver of a red Morgan that fairly swent up the hill over the legal limit, and a big F.I.A.T., the chauffeur of



## OBSERVATIONS ON A WELL-KNOWN HILL.



(1) A strange-looking sporting Humberette reverses in the manner of the cyclecar, and (2), on inspection, proves to be a very interesting example of perverted ingenuity. (3) A Morgan on the final bend ascends at speed. (4) The critical point where most drivers change gear, instead of 100 yards lower down the hill.

which, while changing down too late, made, however, the best change of the afternoon. While we watched an old landaulet carrying no fewer than eight persons, there sounded above the clash of sorrowing gearwheels the burble of an exhaust of unrecognized note, and presently there hove in sight the strangest of vehicles. "A Humberette," said one. "A four-wheeled Morgan," said the other. "What is it?" was all we could ask as it swept by at a good speed, with a very healthy bark from a twin in obviously the best of health. The owner, an officer, was only testing the car after making an adjustment, and presently he returned, and we stopped him. It proved to be an air-cooled Humberette, with a dummy radiator, pointed back, the body cut down, and disc wheels, with which alterations, and a specially-tuned engine, we were told 50 m.p.h. could be obtained on the level. The driver had also apparently cut out the reverse also, for, later on, when he made another ascent of the hill, we observed him run back in the manner of cyclecarists in the early days, until a convenient gateway, up which he shot backwards, enabled him to get the front of his car pointing down the hill again, a method which is simple, spectacular and silent, but calls for some judgment.

Drivers new to the hill were easily detected by those who hesitated between the paved carriage way on the near side and the ordinary macadam on the off side, uncertain whether to risk the bumps of the some-

what uneven flagstones or the prospect of meeting fast traffic coming down on the off side. The reckless and those who knew the hill make no bones about taking the off side of the road.

A sporting Vauxhall that tore up the hill with crackling exhaust, and an Alpine model Rolls-Royce, that sped up equally swiftly but silently, made the owner of a normal light car sigh for such power. However, little skill is required in driving powerful cars on easy main-road hills. It is only when you have a car that, properly handled, will take a hill almost as fast, but badly handled only crawl up on first speed, that one appreciates the true art of driving.

For a revving engine Reigate Hill demands early changing before reaching the steep part on the first bend of the "S," a rapid change to top when this is surmounted, and a quick change down to second without letting the speed drop off to surmount the remaining part of the hill, when a speed of 30 m.p.h. is not impossible. Not that I suggest that everyone should tear up Reigate Hill so fast, and in any case the police have been known to trap up the hill, which, by the way, should be taken as a remarkable tribute to the efficiency of the internal-combustion engine.

Altogether, there are worse amusements these days than watching the antics of drivers on main-road hills, and listening to the novice changing gear. One may learn much from their performances.

JOHN GILPIN, JNR.

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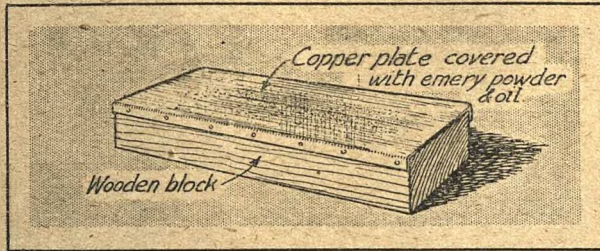
## AMATEUR MECHANICS.

For the owner-driver who likes to potter about in the garage on dull days, turning his attention to constructing little improvements for his car, and who does not want to be at a loss for a means of getting home in the event of a breakdown.

*Contributions to these Columns Invited.*

### A Tool-sharpening Block.

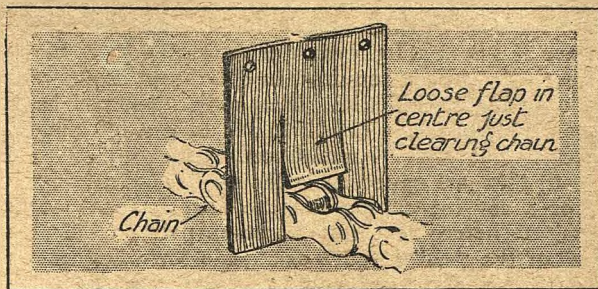
No matter how small a garage the private owner may possess, it should contain some means for readily and quickly putting a new edge on cutting tools. Many people, for lack of room, or on the score of expense, jib at the purchase of a small grindstone or



A tool-sharpening block.

an emery wheel. The common whetstone is not really fierce enough to put a sharp edge on most tools, though it is excellent for producing the finishing touch of refinement. Working on similar lines, however, a very passable substitute can be made by anyone with very little trouble. The requirements are only a block of wood about 8 ins. by 3 ins., a sheet of copper or zinc, slightly larger than the wood, and a small quantity of emery powder. The metal plate is bent over the edges of the wooden block and neatly tacked in position. A little oil is then rubbed over the face of the metal plate and a small quantity of the emery powder dusted on. This will produce an excellent cutting surface, and the more the block is used the better it will become, for the soft metal gradually becomes embedded with particles of the abrasive, and as time goes on it will be found that less and less additions of the emery powder will need to be made.

C.W.F.



A leather shield to protect the chains on a Morgan.

### Keeping the Morgan Chains Clean.

I recently saw a little dodge that I am going to use at an early date, and might also be useful to your readers who own Morgans. It was simply a piece of thin leather (kid), cut as illustrated and tacked on—in the only place where it can be—just over the chains. Two should be made, one for each chain, on either side. They wipe off all the dust and keep the chains tolerably clean.

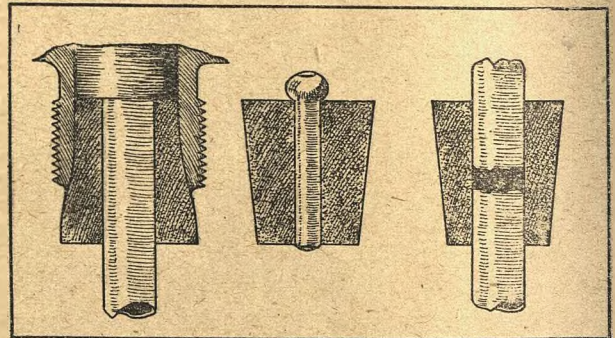
F.D.

B12

### Novel Repair for a Broken Petrol Pipe

When a petrol pipe breaks off short at the union, it is easy to get home, provided there is an accumulator on the car. If so take out one of the rubber vent plugs, and remove the glass tube from it. Pass the larger end over the petrol pipe, forcing it on, until the smaller end is flush with the pipe. Then remove the nut and broken nipple from the union and press the plug in as far as possible, and make it fast by tying it with string to the top of the float chamber. This repair is also applicable to a fracture of the pipe itself, each end being pushed half way into the plug, and made fast with string or copper wire.

S.F.J.

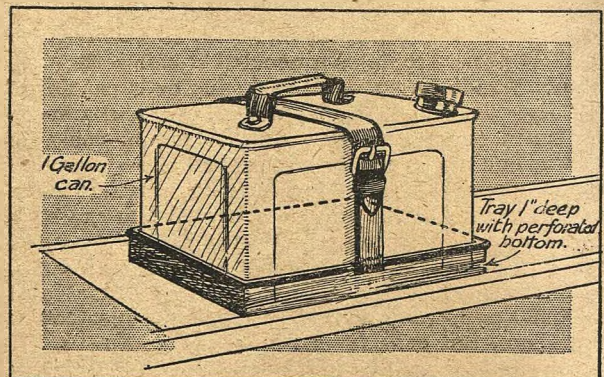


A method of temporarily repairing a broken petrol pipe with one of the rubber vent plugs from an accumulator.

### A Spare One-gallon Can.

I find that one gallon of petrol is quite enough to carry as an extra supply, and have adopted the following method of providing a spare can. One often comes across a leaky two-gallon can. A tinsmith can cut this in half, fit a new bottom, and make a flat tray with wired edges about 1 in. deep to fit the can. The tray is fastened with screws to the running board, and lined with thick hair felt. The edges being rolled over a wire, loops for a strap are made by piercing the tray just below the edges. There should be a few holes in the tray to drain off rain-water. When completed, tray and can may be painted to match the colour of the car.

S.E.H.



A spare one-gallon can, improvised from a leaky two-gallon can.



## BACK FROM THE FRONT.

### Touring in England After 15 Months at the Front.

**A** BABY Peugeot, the body as yet unpainted, was in a state of desolate incompleteness in the workshops of Peugeot (England), Ltd., when I arrived to take it over for a week-end trip on English roads after 15 months at the Front. It was minus the magneto, the carburetter and the tyres, but it was not many minutes before these essentials were in position, and the engine started up with the first pull of the starting handle. With a few adjustments of the magneto and the throttle, the little machine was ready for the road for its very first test, as it had but just recently arrived from France. There are not many cars that one would care to drive under such conditions, but this diminutive Peugeot gave no trouble throughout the week-end. If one knew the reputation of the products of the famous house of Peugeot Frères in France, where all types of vehicles, from the "Baby" to mammoth lorries, are performing martial tasks, one would not expect any. Every day, where I am stationed, the big Peugeot lorries, or, as the French call them, "camions," may be seen climbing up over the mountain passes heavily laden, taking the 10-mile gradients on full throttle the whole time, and only once have I seen one fail. Officers fly about in cars of the same make, while the little Baby is extensively used for despatch work. It may not be so in other parts of the Front, but nine out of every ten motors where I am quartered are of Peugeot manufacture.

While I have been in France we have heard all sorts of stories of the heavy traffic that the British main roads have been called upon to bear, and the deplorable condition into which they have fallen. Well, we had a pretty good experience of what bad roads can be like in France, and all I can say is that after a good many miles of English roads those I have recently travelled over appear, for the most part, almost like billiard tables in comparison.



Lieut. A. P. Bradley, a former assistant secretary of the Cyclecar Club, now doing Red Cross work for the British Ambulance Committee in France.

### Impressions of a Well-known Cyclecarist.

A friend, also recently returned from the Front, was my passenger, and, having unearthed him from his "dug-out," we set the tiny front wheels of the Baby towards Uxbridge, driving with the, as yet uneradicated habit of France on the off instead of the near side of the road. Really it is quite difficult to get back to the English rule of the road after driving a great deal on the Continent. At every bump or so, and there are a few between

London and Uxbridge, I would involuntarily slow down, until it dawned upon me that my passenger was not a blessé with a broken leg or a shattered thigh, and I could really open the throttle. And what a relief it was to be able to hurtle along without having to consider the feelings of the passenger!

What an extraordinary change the war has made in motoring. The roads were, comparatively speaking, deserted, and those cars we did come across were either driven by ladies or men in khaki. There was certainly very little motoring for pleasure that I could see, a fact which was rather distressing, as it seemed as if those much-discussed posters were aimed at me, and me alone—for was I not deliberately motoring for "pleasure"?

The Bath road was no busier than the Uxbridge road, and beyond Maidenhead I turned off for Henley, which was soon reached and passed, the little car going splendidly all the time. Eventually we reached Alms Hill, the last few miles over a series of miniature watercourses, the last trace, I am told, of the recent heavy snowfalls.

At Alms Hill another change, for instead of civilian attempts at this notorious gradient, a number of officers in the Royal Flying Corps had come to try it, and they literally flew up the hill, not on aeroplanes but on motorcycles. It did not seem to be quite the right sort of thing to test the Baby Peugeot on such a hill with a brand new engine, not yet run in, and so the attempt was not made.







Snow was still lying on the hills in the North of England at the beginning of May, and a heavy fall occurred in several places in the first week of the month. The photo. is of the moor near Whitby. The car is a four-cylinder Swift.

After watching this climb for some time the next consideration was tea, and we returned towards town. It still seems just as difficult to find a place where a cheap dainty afternoon tea can be obtained. A dark tea room, walls hung with antiquated prints in huge, gaudy, gilt frames is not an inviting setting for a very plain tea, with particularly solid cake, and this was on a main road over which more traffic passes than probably any other. Why does not some enterprising concern open bright tea shops along some of the most frequented roads?

### The Portsmouth Road.

No week-end in England would be complete without visiting such a famous highway as the one to Portsmouth. My destination next day was Hindhead, the weather still being of a semi-tropical turn, a strange contrast to the blizzard in which I left the south-east of France. I am fain to admit that some parts of the Portsmouth road were in a distressing condition, but being seated on a comfortable cushion, with a very efficient suspension, the bumps were not felt to any great extent. Owing to the short wheel-base of the Baby Peugeot many people imagine that on a pot-hole road it must bounce about a great deal. Such is not the case. At speed it is remarkably steady, and we could exceed the legal limit with much less discomfort than most car drivers could bump along at only 10 m.p.h. In spite of the notorious character of this road, I somehow managed to avoid falling foul of the police, although, owing to having forgotten so many of the regulations after the freer existence of motorists in France, they would have had the haul of their life.

Notwithstanding the fact that the engine was absorbed

lutely new, the greater part of the long rise to Hindhead from Milford was taken on top gear, while on second gear the speed was extraordinary. Both second and top gears have a direct drive which accounts for the high speed that can be obtained on the middle gear, especially when it is stated that the engine will rev. at 4000 r.p.m. It will, however, pull well at low speeds.

Hindhead was looking at its best, bathed in glorious sunshine, tempered by a gentle breeze, and we made an ideal picnic luncheon. Picnics at Hindhead seem to be quite popular just now, for there were a number of cars and motorcycles drawn up for the same purpose by the roadside.

### The Novelty of Speeding Up.

On the return journey there were certainly more motors on the road, a great percentage of them being light cars. Guildford High Street was taken on second gear with plenty of power in hand, but having left this 10-mile limit, the fine run thereafter gave me a splendid opportunity of speeding up. I must confess that the sensation was a novel and an enjoyable one, for over the tracks in the mountains it is always first and second gear, and top is never used, not even downhill.

At the Hut I saw the first sign of something approaching pre-war conditions. Big cars, small cars and motorcycles appeared to be as numerous as ever, although I am told that at the preceding week-end the place was deserted. After tea—incidentally, the same old cake: why don't the proprietors try a new model?—we returned to town before lighting up with the musical hum of that wonderful little engine still booming in our ears.

A.P.B.



# ORIGINALITY IN SPRINGING.

## IMPORTANT NEW EXPERIMENTS ILLUSTRATED and Novel Thoughts on Springing for Comfort and Efficiency.

By Capt. A. M. LOW, R.F.C., D.Sc., A.C.G.I., etc.

*Springing has been the most neglected question on the majority of modern light cars, but it is receiving very considerable attention in post-bellum models, on some of which it almost reaches the standard of the Rolls-Royce and Lanchester cars. The coil-assisted cantilever spring suggested by Dr. Low is novel, and would provide almost perfect springing for a light car. The experiments carried out are described and illustrated for the first time.*

THE subject of road vehicle springing is really one of considerable complication, and one that requires much originality to attain any degree of success in design. Originality in the original design of spring itself is not of so much importance as is a reasonable understanding of what is required and the first principles necessary to obtain, not the springs, but the results therefrom. There is very little use in merely selecting different types of springs and trying them out, because road and loading conditions may alter the entire aspect of the case; for example, one of the finest springs possible to conceive is an air spring, but it is by no means easy to ensure simplicity, cheapness, and absolute freedom from attention, which is essential for any real advance in cheap motoring.

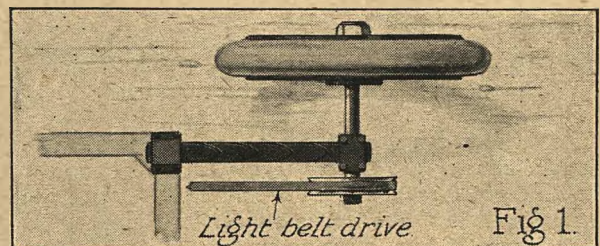
I have conducted a great many experiments on road wear and road waves, and I have determined the effect of bouncing vehicles on road waves of different hardness. Taking the fact that roads are bound to be always bad we have to remember exactly what conditions are wanted. For this purpose it will be easier to picture a car or wheel standing still, and the road passing underneath it, because the sum total effect is precisely the same, it being only a question of relative motion to determine which is actually taken to be the moving object. One should always endeavour to look at these questions from a relative standpoint, because everything is purely relative, and we should imagine ourselves travelling round on a wheel or else sitting on the axle or running along the road and kicking the tyre every now and then to represent an equality of surface.

Now, particularly with light cars, I would go so far as to say that it is exceedingly unusual to find one that is really comfortable. Most small cars not only give one a very unpleasant jolt when passing over a bump, but, what is almost worse, they make the driver feel that he is sitting on an unsprung motorcycle, and that he is being constantly vibrated about at high speed. The effect is very noticeable when changing from a small to a large car, just as when a car has travelled up a hill on second gear, there is the extraordinary feeling of softness and general comfort to be obtained by allowing the machine to glide down a hill without any loading on the gears or engine.

Comfort is a very important part of efficiency, for not only does it improve the driver's peace of mind and effectiveness of transport from place to place,

but it also adds enormously to the general life of the transmission, tyres, and certainly to the engine. Suppose we set to work and consider what is necessary for comfort; the body of the driver has got to be transported from place to place without being shaken; that is the first condition. Secondly, for general durability of the car, the main weight of the whole machine must be transported also without being very much jarred.

Now let us think what happens on the road. Suppose we have a wheel and it is of practically negligible weight. If we could attach it to the chassis by a spring of negligible weight also, and do without any heavy appliances for driving, then every time a bump came along the road and struck this wheel, it would simply spring straight up into the air, or, rather, it would spring forward into the air, and, owing to not having any weight to speak of, its motion would not react in any way upon the car, which would simply continue to glide along riding very much "on air," as the advertisements say! This, unfortunately, is exactly what cannot happen,



Where there is little unsprung weight.

although the nearest approach to it is a wheel supported independently of all the others, and driven by a belt so arranged to have as little as possible of the driving weight near to the actual point of contact with the ground.

Except in the case of a very light belt or chain drive (Fig. 1)—and even here one has the whole weight of the wheel and much of the spring to support—we have got two wheels with tyres, part of a propeller shaft resting on the axle, the whole axle itself, sometimes made heavier still by the addition of a gearbox, all the brakes, and much of their operating gear. All this enormous weight is calmly left alone to be bounced and thrown about into the

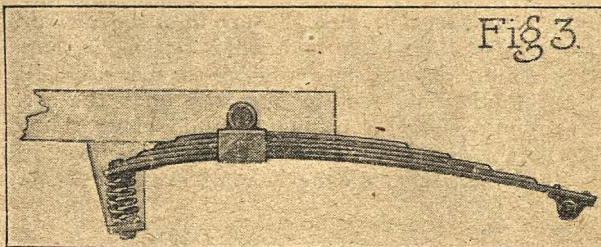


## ORIGINALITY IN SPRINGING (contd.).

air, so that, naturally, having a large inertia effect, the car on springs is thrown and bounced about also. This is not all, because if one wheel meets a bump it rises; consequently the axle, having mass, tries to push the other wheel down, so that there is a general fight going on between the road and the wheels, greatly to the detriment to both of them and much to the agony of the passenger.

Having once seen that it is impossible to receive these shocks without transmitting them in some way beyond the road, it would appear that we might be able to damp them out by means of a series of springs, and this, of course, is what most manufacturers try to do, but, unfortunately, they do not attach sufficient importance to the fact that there are shocks of different types, and, therefore, springs of different types are actually required to take them up. It is not practicable to have a vast series of complicated and ungetatable springs on a car, so let us see how it appears best to tackle the problem from the exact details we have available for car and personal comfort efficiency.

In the first place, to be able to use a reasonable transmission, the wheel, when moving relative to the car, must have a definite path, and therefore it seems strange that we do not try as much as possible to allow the wheel to move where it wants to when struck by the road so long as it does not interfere with our transmission. Fig. 2 and Fig. 3 carry out these conditions.

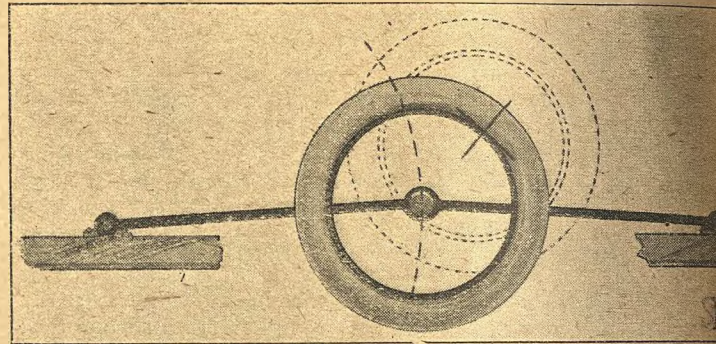


Springing such as this would take up shocks of most kinds, particularly if enclosed or lubricated.

The brakes are in the same boat as the transmission, as they are merely trying to propel the car in a different direction from the point of view of the wheel. When the wheel is struck by the bump it naturally would like to spring away from it, as I have somewhat incorrectly shown in Fig. 4. In the first place we will imagine the bump to consist of a large and a small blow, which may be delivered together or separately. To take the large shock first, it is evident that the unsprung part of the spring must have as little weight as possible, and it must also be able to respond more or less quickly, so that, whilst it allows the wheel to leap into the air, it must also absorb the shock in order not to cause constant bouncing, such as is often obtained in the form of rolling by centre-point suspension. It is not exactly convenient to allow the bumps to do any mechanical work, but we can at least absorb them by friction, and a leaf spring is one of the most convenient ways of doing this. Now, clearly, the form of spring which adds but little weight and allows of quick move-

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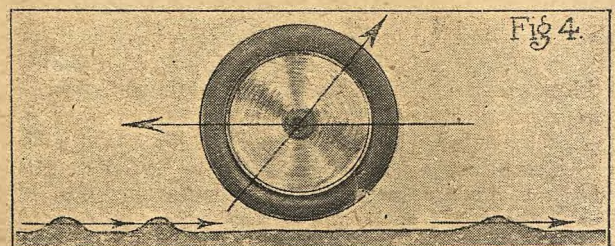
ment is likely to be one that gives a slightly increasing regular force to press the wheel down the higher it rises, and the simpler form of this is a flat spring so gripped that it has two natural periods (Fig. 5). In other words, it must be gripped at some unequal point in its length, because, otherwise, it might tend



A suspension like this would permit the wheel to move in any direction it wishes to go, but is impracticable.

to act like a weight at the end of a light coil spring, which will simply pop up and down almost indefinitely. This idea is sometimes carried still further by inter-connecting two back springs, or, further still, by splitting up the end sprung weight and using a divided axle.

In almost any other form there will be a considerable amount of weight and additional bouncing complication, although this action is curable by using, for example, three-quarter elliptic, in which case the lower spring takes part of the shock slightly in advance of the main body owing to its lighter personal mass (Fig. 6). Now, this big spring—I am speaking very plainly, simply arguing on first principles—has got to bear the weight of the car, and it must not unduly deflect. It cannot respond to a very high speed period, and if I strike it with a hammer it has no effect on it at all to speak of. Now, every little tiny bump on the road is going to give it a smart hammer blow, and yet nothing is usually done to absorb it beyond a miserable thin cushion and 2 ins. of tyre on most makes of light cars and cyclecars. Surely in the first place we ought to have big tyres, and this point has always received pretty fair attention, but large tyres mean a higher outlay. A rubber tyre is not only good from the point of view that it helps to soften the actual path of the wheel; it is good for getting an efficient drive, and the large solid-tyred wheels of the old Duryea light car in many ways were quite effective, because their



When a wheel is struck by a bump it would naturally like to spring away from it.



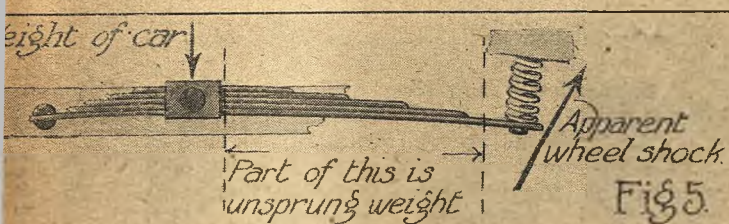
big diameter helped them to "swallow up" shocks, if such an unscientific expression may be allowed.

In very many cases, the comfort of a car can be enormously increased by adding some form of spring which can take up a high period shock and generally ease it off. A coil spring, if light, would respond very well, but it would not stand the total, or even a quarter, of the load, but even a heavy coil spring will respond to a smart blow. Therefore, although, from the point of view of ideal design, a coil spring might increase rolling if not suitably corrected, and although it is not really essential, I have found that rather than have very weak leaf springs and guard them from fracture by means of shock absorbers, which must give freely in one direction, it is better to have a subsidiary spring which is frequently spoken of as a shock absorber. Certainly it is a shock softener!

One of the most comfortable forms of springing imaginable is through the cantilever type, which is very often so good, particularly when compensated, that no additional springing is required, but a cantilever or any plain spring with the addition of a coil

over the seat itself. On many light cars which are most comfortable, the addition of an old inner tube under the seat, or the addition of a sprung cushion about 9 ins. deep, as distinct from a mere pressure distributing pad, will make the car quite a different thing on any ordinary bad road.

So bad have most roads become recently—we are lucky enough to be able to use them at all—that I conducted a short time ago some little experiments following on my previous road-wave tests, in which I used a machine to record the bouncing of a car. In this more recent case I have made use of my own Calthorpe Minor. This is a very reliable little car in every way, but when I first took this car into use I found that it was so exceedingly fast that a small shock at high speed was liable to cause undue deflection. As I am running the car now, I have reduced the strength of the main-leaf springs, which gives far greater comfort and durability, and at the same time I have added a pair of J.M. shock absorbers. These shock absorbers are, of course, not an integral part of the car, and as at present no correction is ever made for the fact that the driver often uses the car alone, I have been able slightly to improve matters by fitting stronger springs on the rider's side, although, being a permanent dead weight, this correction should be made on the leaf spring, and any wear may cause a deflection of the high-period absorber, which takes up for a rapid, unexpected blow. In the first place I fitted up a small mirror, and with its help I could easily see that my J.M.s were really working quite hard, but this was not sufficiently definite, so I fixed up on the car the arrangement shown in Fig. 7, which is very much like a brush used for marking out a tennis court. Notice that in this case I did not want to measure the chatter motion of the spring by means of a pencil and drum, as this merely confirms the results of a more direct test, but as will be seen from the photo., by keeping the tyre evenly wet with whitewash and allowing the car to run over a smooth surface, I could

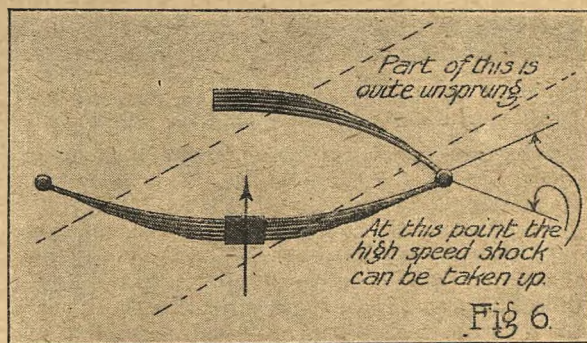


A flat spring so gripped that it has two natural periods.

spring is extremely effective if suited to chassis weight and balance. Jumping on footboards is, of course, no test. It might be thought that this is only practicable for a heavy car, but this is easily seen to be a statement which does not rest on correct principles, and if further proof were required now that the ideals are understood, and now that the means for obtaining them have been briefly laid down, a reference has only to be made to the A.-C. light car. The A.-C. light car is in my humble opinion one of the very best-sprung small cars that has ever been put upon the road, and to obtain equally good springing as in other cars with well-designed springs, such as the Hillman, means far more careful design and balancing and absorbing of unexpected shocks.

Even so light a vehicle as a motorcycle can, of course, be perfectly well sprung, and for an example of this we have the A.B.C., which can be ridden with almost absolute comfort over a normal full-sized brick. Surely no more striking example of what is wanted can be given, and yet after all these years of practice one is constantly sitting in light cars and being thrown about all over the road, whilst one's unfortunate body is bounced and vibrated on a totally inadequate seat.

Let me now point out what is necessary a little nearer home; in other words, on the actual seat of the car. The seat should certainly be designed like a comfortable chair, and it should be sprung or padded on deep coil springs, both over the back and



A three-quarter elliptic spring. The lower spring takes part of the shock slightly in advance of the main body.

place an imitation obstacle or lump on the surface, and as the car was running down a hill from the same spot with the gear in neutral, the wheel would always cross the obstacle at roughly the same speed. As soon as the wheel strikes the bump it bounces along the track, and reproduces a nice picture showing just what has happened. In Fig. 8, A is a sketch showing a plain line of equal width without any bump. Then



## ORIGINALITY IN SPRINGING (contd.).

B shows the result of gentle undulation; notice that the waves are more or less of the leaf-spring period, very slightly damped no doubt by the J.M.s. Next, C shows what happens when the car strikes a bump without the J.M.s. The wheel leaves the ground slightly, wears out tyres when it strikes the ground again, and then falls straight on to the tyre finally, giving a big patch of tyre deflection, and jarring the whole car, leaving the main spring undulation constant, so that whilst some of the slow blow is taken the wheel is still allowed to leave the ground. Again, D shows

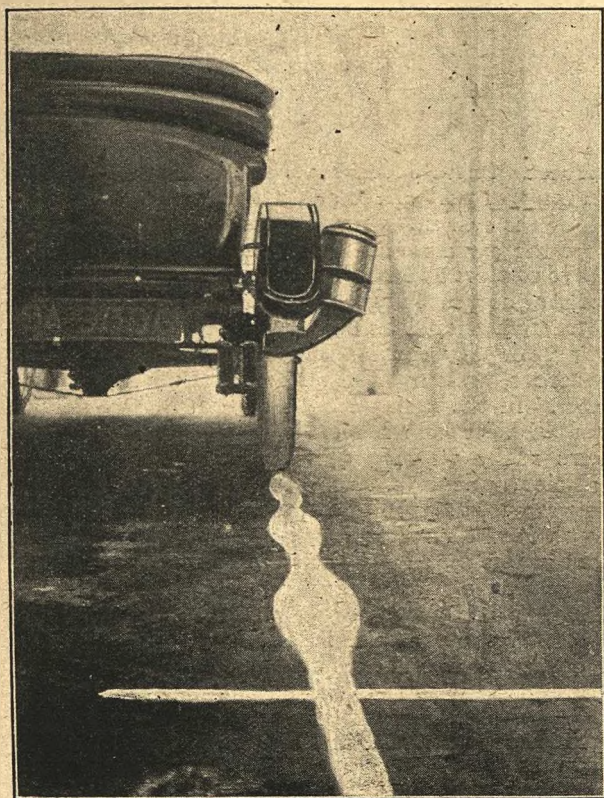


Fig. 7.—A photograph of a device for recording the bouncing of the wheels used by Dr. Low. (See Fig. 8.)

what happens when the wheel, without shock absorbers, strikes a small obstacle. This is particularly interesting because the effect is very little different from that of the slow undulation effect. In other words, the car gives a general rock, but not until after it has transmitted a sudden sharp jerk to the driver. The last diagram (E) shows the effect of a short, sharp blow when shock absorbers are fitted, and this is one of the most important cases. The main spring deflects very slightly, but the shock absorber smooths out the bumps to a series of short undulations, and thus takes the edge off the "kick" given to the car; these short undulations, which are imparted to the chassis, will be largely smoothed out by the use of a proper cushion, and then we are provided with adequate comfort.

It will be noted that these experiments were done when the driving wheels were not under load, except that due to their initial push. When the engine is driving the car hard, the effect is very much the same, but bouncing is even more accelerated—always assum-

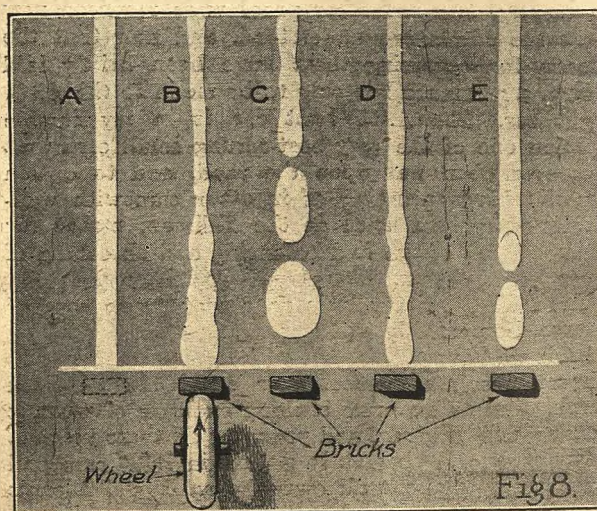
ing that the main springs of the car are not already so soft as to be thrown out of balance and into a condition of rock by the addition of any softening device.

To this day, leaf and other springs are not properly lubricated, but there is no reason why they should not be enclosed and kept oiled, or greased, other than the fact that we still take the old farm-cart as our shining example in motor construction. This applies to an astounding number of cars, the most noticeable exceptions undoubtedly being the Rolls-Royce and Lanchester. If people will take the trouble, however, to remember that a light car carries loads varying enormously, compared with a large one, they will see what an improvement can be effected by an absorber of a satisfactory kind.

One might almost arrive at a condition of springing in which springs of different degrees of flexibility were fastened one above the other, but this would lead to far too great a complication. On nearly every good car we finish off with coil springs under the seat to take the trembling motion, so why not have some form of soft spring to help the chassis as well as the driver? If an indication is made of the movement of the actual top of the driving seat, it will be found that the chassis boards are dithering up and down all the time, with their motion being partially taken up by the coils in the seat.

It is extraordinary how slight differences in tyre hardness and tyre surface will affect the result, and I have found that a hard though flexible band, such as is provided by the tread of a Stelastic tyre, not only shows on the cover vibration indicator that more damping effect is obtained, but is proved to absorb slightly less power for the purpose of propulsion. A similar effect is sometimes noticeable on a wet road, because the harshness of drive is taken up by slip, and the springing of the car is benefited.

Springing is a most important problem. It affects comfort and life of every part of the car, and it is surprising to find the number of people who are driving about in a condition of unholy vibration. Once



A diagram of the effects with and without shock absorbers, etc. The bricks are of different height.

try a well-sprung large car and they will realize what can be done, with the result that they will look around and find how few light cars have received attention in this respect.



# THE POST-BELLUM LIGHT CAR.

What Germany, America, Britain and the Allies are Doing.

*Last week we announced a new British trade move to book up contracts for a post-bellum output. A correspondent, with world-wide knowledge of motorcar production, reveals a few of the experimental productions which are now in hand for a great trade war in peace time.*

[SPECIALLY CONTRIBUTED.]

**I**N the midst of war many far-seeing minds are already in the midst of peace—on economic considerations. We have been told by a number of leading people that the war is not merely one of a gigantic struggle at arms; but that when this appalling phase of the encounter is finished we shall find ourselves embarked on an equally large, though less gruesome, struggle for economical superiority. This is not the place to go into the financial side of the question, even so far as it appertains to the motorcar trade, and more specifically the light car trade. It is well, however, briefly to review in general outline the possibilities of development in the light car line, based on the evidence of present experiment, which may reasonably be assumed to have a more or less direct bearing on future trading. We will endeavour to look at the question from an international standpoint, even going so far as to admit Germany into the scope of such considerations! It may be assumed that our arch enemy is not behind hand in preparing for the economic struggle of the distant future, though, naturally, not very much is known definitely over here of their intentions.

## What They Are Doing in Germany.

It may be assumed that considerable activity prevails in the leading motor works in Germany at the present time. In the main it will probably be confined to the larger type of car, more especially one adapted to Colonial use. Rumour has it, however, that the German concerns are also taking an interest in the light car proposition, two leading manufacturers being mentioned particularly in this connection. In one case the product is a high-class light car, built throughout on standard car lines, being in fact a car de luxe in miniature, with electric lighting and starting apparatus. The engine is a high-speed one with overhead valves. According to an informant (who admittedly only obtained his information second-hand) four speeds are provided, the third being direct, and the fourth a geared-up drive. If this is so, the car would probably be a very sporting one, and as it is only a two-seater it may be capable of attaining the 65 m.p.h. which is claimed for it. The make is one that was well known in this country before the war.

## A New Petrol-Electric Car.

A more interesting development in German light cars, however, is the reported combination of two very large concerns in the production of quite a new design. If the information in this respect is reliable, the new proposition is one which may lead to interesting developments. The light car in question is a petrol-electric machine for which remarkable claims are made. Enough is known of German claims to treat them with the proverbial grain of salt, but the two manufacturers concerned in this new production are of such undoubted renown in their respective spheres, that it would be unwise unduly to discount the possibilities of the new comer. The engine is a four-cylinder one with the electric motor built up as a unit with the engine. A cold-drawn tubular steel tailshaft of 1 mm. thick and 3½ in. diameter transmits the drive to the rear axle, which is of the ordinary

bevel type, but with a leather plate friction-slip differential gear. Everything is done by electricity, even the main brake being electrical. Such a light car, if successful, should be a remarkably refined machine. Whilst these two potential developments in Germany are the only two in connection with which there is any information, it would be unwise to assume that German motor manufacturers are not busy on the light car proposition in other directions. We may now turn our attention to what is being done in the civilized part of the world.

## An Eight-cylinder Light Car.

We have been accustomed in recent years to look to America for development tendencies. So far American manufacturers have not taken a very prominent part in the light car world, but when they do tackle the question seriously, they may be expected to produce some interesting vehicles. As an indication of this we may point out that an important English concern had booked up the sole concession for an eight-cylinder light car de luxe, prior to the recent Order in Council prohibiting imports. The eight cylinders are in two groups of four, cast monobloc, and set at 45 degrees from the vertical. Three speeds and a reverse are provided, electric lighting and starting apparatus are installed, and the rear springs are of the cantilever type; detachable wire wheels, with a spare complete, are also part of the standard equipment. Admittedly, this light car is of the super de luxe type, and may come out in price and size above the British standard, in which case it will only compete with cars in the larger class.

## What is Being Done at Home.

There is a section of the motoring community at home who take a pessimistic view of the situation and think that all motor and light car firms are so busy making munitions (and, some of them, money) that they are not concerned with the future. Such a supposition is quite erroneous. In spite of the prior calls of the nation's needs, time is yet found to consider future economic questions, and the development necessary to ensure success in this direction. There is very considerable activity in the light car experimental departments of many large concerns. The main activities in this connection are to be found in the Midlands. Since the war began one new light car made by a concern noted for motor-bicycle productions has been tested. It is designed by an eminent engineer who has had an exceptional experience of high-efficiency engines, and the little motor in this new production is a revelation in what such engines can do. One does not wish to be unduly enthusiastic, but the writer, who has had very considerable experience of all sorts of motorcar engines, has never seen anything quite so remarkable before. It is a triumph of high-efficiency internal-combustion engine production.

Another important company have developed their light car to such an extent that the abandonment of their larger cars in order to concentrate on the light car is not an impossible happening—when peace arrives. A well-known concern, noted for a high-grade and speedy light car, is managing to store by



*THE POST-BELLUM LIGHT CAR (contd.).*

a large quantity of parts in readiness for the boom which is anticipated for their product after the war.

More interesting still are the experiments being carried out by two very noted manufacturers, both of whose names are household words in the world of automobilism. One will be more or less a light car de luxe, and will be very fast, although, all things considered, the price will not be so high as might be expected. The other production, which has not as yet got down to its final lines, is somewhat à la Ford, although nothing of a cheap character has ever before been attempted by this particular concern. It is too early as yet to say whether this latter product is likely to come on the market, but the experiment is an interesting one.

**On Ford Lines.**

It is generally accepted that if a large British concern tackled seriously the cheap car problem, on a reasonably large scale, it would be found at least to equal American achievements in this connection, if not to surpass them. It is imagined that for really cheap car production, it is necessary to turn out 50,000 or 100,000 cars a year. As a matter of fact the limit of cheap pro rata production is reached on an output of about 10,000 cars a year. A British light car on Ford lines, to sell at about £130, should easily command a sale of this magnitude in Britain and her Colonies, after the war.

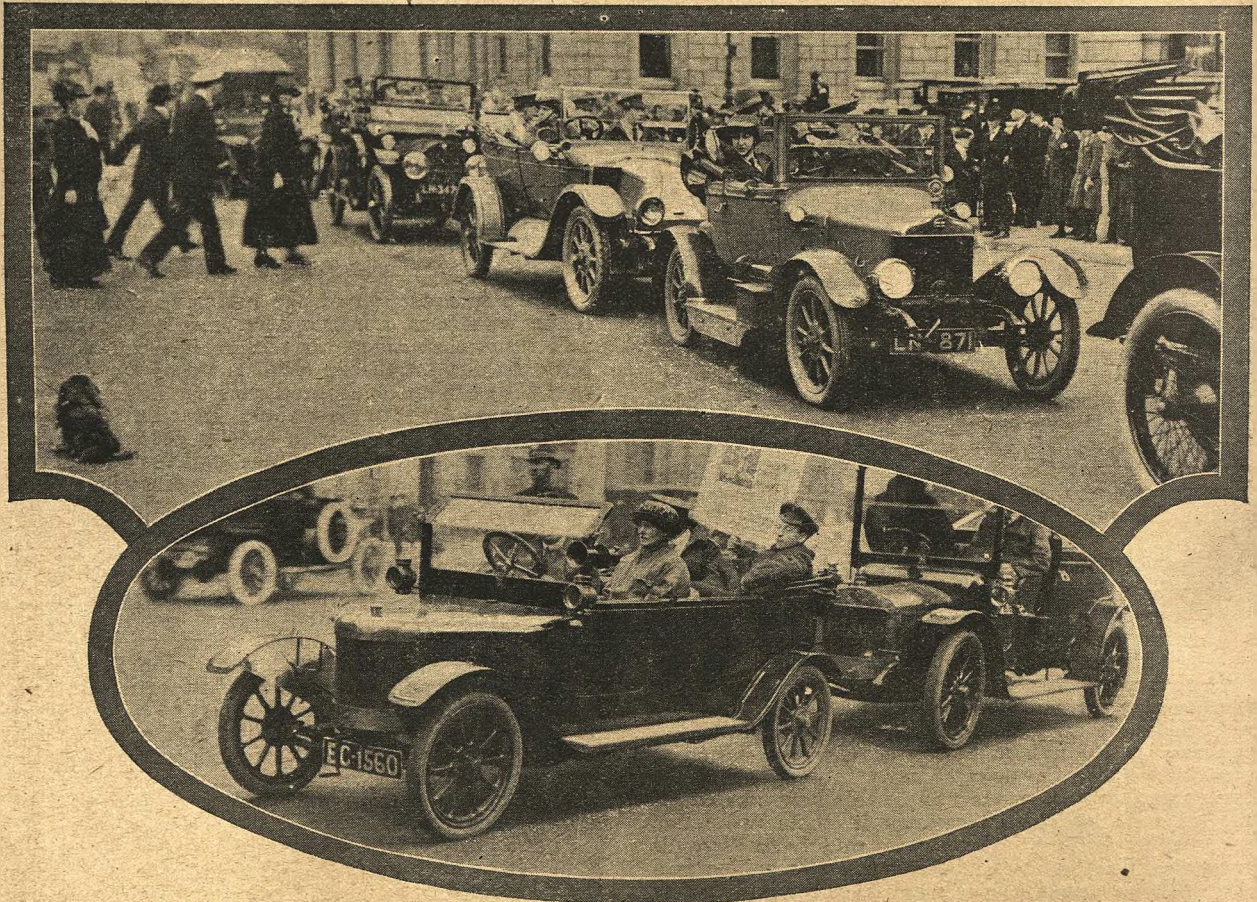
An even more interesting light car proposition is

so far only produced mentally, though commanding attention already on paper. Once again the makers are of world renown, though nothing definite is settled yet. The proposition embodies an eight-cylinder engine, with automatic isothermal cooling, a two-speed gear, and a press-the-button change. Cantilever springs and detachable wire wheels are also part of the scheme. Whether this will be proceeded with or not we cannot say, but the writer would imagine that such a car would provide the maximum of fascination from a driving point of view. In addition to these potential developments in this country, it must be remembered that there are also many other manufacturers improving their chassis, and endeavouring to provide still better value for money.

**Our Allies Active.**

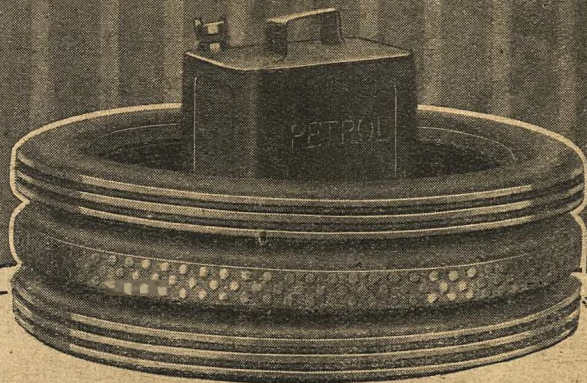
Our Allies are not backward in this question of preparing for the future. Several new light cars are being experimented with in France, and the output of older vehicles of this class still exists in a small way, so that the firms may not lose their skill in the distinctive automobile touch in regard to fitters and such like human elements necessary to a successful tout ensemble. News is also to hand of a very high-class light car produced in Italy, by manufacturers well known in the motor world.

Viewing the question of present experiment and post-war development in the light car trade as an international matter, or purely as a British affair, it is seen from these notes, that the future is full of promise for light car purchasers.



Lusitania day in London. A lady-driven Standard coupe and a four-seater Lagonda carrying wounded soldiers in the procession.





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ALL Lightcarists keen on increasing efficiency and reducing cost of upkeep — and who is not, these days? — should send for the booklet (with an interesting series of diagrams), entitled "Palmers, Petrol and Power." It describes efficiency comparisons between a car fitted with ordinary canvas tyres, and the same car fitted with British-made Palmer Cord Tyres. It proves the saving of 10% of Petrol — equivalent to 6d. per tin; it proves

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## PURCHASING A USED CAR.

### Dealer or Private Seller?—How to Examine a Car for Defects.—The Present Abnormal Conditions.

**F**OR those who have decided to obtain a used car there are usually three courses open. They can purchase direct from a private advertiser, relying upon their own judgment; they can induce an experienced friend, or pay a good mechanic, to inspect and test the car; or they can go to concerns of repute who deal in second-hand cars and buy from them, probably on an overhaul guarantee.

From the point of view of economy, the first might be the best way, if the buyer can be sure of judging accurately the value and condition of any car offered. The appearance of a light car, and even its performance, in the hands of its owner are of less importance than its mechanical condition, and the real difficulty in deciding this is not so much in knowing what to examine, for the points are simple enough, but in estimating the degree of wear; to know, let us say, if the differential play is really normal or if the second-speed gearwheel has been seriously worn. Many things can be learned from motor manuals, but there are tests, particularly in the feel of bearings, which are difficult to be sure of, unless the buyer has had "shop" experience or has had an opportunity of examining and comparing a number of cars in different stages of wear.

If the buyer thinks the second alternative safer, he will have to be prepared to take a competent person round with him to test the mechanical condition of each car. There are also consulting engineers, some private and some connected with the motor associations, who, for a fixed fee, according to the value of the car, will make a written report on the whole condition, mechanical and otherwise, but while one waits for this, in these days of quick sales, the car may be sold.

#### Purchasing Through a Dealer.

The third alternative means, of course, that the buyer will go to a dealer who has himself bought cars from various sources at a moderate price and is ready to resell them at the best price he can get. It is, in fact, a mild speculation on his part, which may turn out well: for instance, he buys a rather worn and shabby-looking car, which is, nevertheless, mechanically sound, and at the cost of a few pounds for repainting and repairs, it will sell again very profitably.

Some dealers specialize in overhauled second-hand cars, which, if it adds to the price (not in every case), is at least a guarantee that the car is in good order. Others simply sell the car for what it is worth, and a low price is usually indicative that it has been bought cheaply because of its condition. Thoroughly unsound cars do not come on to the ordinary market very often, for the dealer values his reputation and light car owners are discriminating, but are usually got rid of at auction sales at low prices.

If the car runs well and is offered at a fair price, we should have very little hesitation in accepting it, whether purchased from a dealer or privately. If any guarantee is given—for instance, that it has been thoroughly overhauled—so much the better, of course. Should the car turn out to be unsatisfactory, well, the only thing to do is to sell it and try again, and probably little would be lost in the transaction; indeed, prices fluctuate so extraordinarily nowadays that a profit might be made. Whether a car is purchased through a dealer or privately, we would point out that there is only one medium for this purpose, viz., *THE LIGHT CAR AND CYCLECAR*, which, owing to its large circulation, has far and away more advertisements of used light cars and cyclecars than any other motor

journal. The choice is wide, and a perusal of the classified advertisement columns will give a very good idea of the average prices.

At the present time the second-hand market is under abnormal conditions, and light cars of good make, particularly of 1914 and 1915, are fetching prices much higher than are usually obtained, owing to their small depreciation.

In a really thorough examination of a car, the eye is only a guide to the superficialities, the condition of paint and upholstery, whether the hood is worn, if rust on metal or cracking of woodwork is apparent, and, roughly, to the condition of the tyres.

#### A Mechanical Examination.

Having noted these points, the car can be gone over systematically, keeping in mind that its condition may have been influenced by three things—legitimate wear, lack of lubrication, or definite accidents. See if there are marks of the radiator having leaked. Listen carefully to the beat of the engine running free, and if anything unusual is heard, it is imperative that it be traced before the deal goes any further. The main shaft bearing is not always easy to test, but by using some strength any shake in the flywheel will reveal a worn bearing. Front wheel hub bearings were a weak point on some of the earlier cars, the less reliable cup-and-cone type being used, but in testing with the wheel jacked up this must be distinguished from play in the pivot bearing on which the wheel swivels or in the other joints of the steering system. Back-lash in the steering is a bad feature.

Going next to the gearbox, the cover will be taken off, and the edges both of gearwheels and dog clutches felt with the finger tips, but, as with other points, this is a matter which can only be judged accurately from experience. The corners of the teeth, etc., may be chipped from clumsy gear changing, or there may be wear all over, either from legitimate use or from lack of lubrication. Some light cars make considerably more noise than others on the lower gears, but serious wear is usually to be traced by the characteristic roaring sound if the car is driven on first or second gear with the engine "revving" fast, and wear at the differential end is indicated by a peculiar whine. A clutch that is really fierce needs to be investigated further, since the origin of the trouble may be simple or complex; but even more important is the condition of the universal joints when constructed of metal. These between gearbox and axle should be specially noted, and it is here that a careless owner may have shirked the lubrication as they are often inaccessible.

While the floorboards are up, the brake rods can be examined and the amount of adjustment still available will give an idea of the condition of the brake shoes, though wear in these is of lesser importance if they are fitted with replaceable fabric linings.

The testing of a back axle is rather a complicated business, since first of all there are the hub bearings, which might be worn; then there is the condition of the differential in relation to the axle shafts; and, thirdly, the drive as transmitted by the pinion at the end of the propeller shaft to the crown wheel. The procedure is to jack up the wheels in turn, and by gripping the spokes firmly, to feel the wheel movement every way, both in their free state and with a gear engaged, but a successful handling cannot possibly be acquired from description or from rule of thumb. The springing cannot be tested by stepping on and off the running boards, but even if the springs are a little



## PURCHASING A USED CAR (contd.).

rusty, they do not easily suffer harm, and a careful lubrication will restore them (unless the car is very old and they have lost their resilience) to normal condition. Tyre condition must be largely judged by externals, and the buyer takes a certain risk as to whether rotting may have already taken place, owing to the wet having entered at some small cut. A good many light cars come on the second-hand market when their tyres are very much worn, and a buyer does well to remember that replacing three or four covers within the first 12 months means a considerable increase in running costs.

An actual road test with the prospective buyer or board is customary, and the general comfort of the car is soon shown. The driver should be asked to drive slowly, then to accelerate sharply, and also to

take the car up-hill, holding on as long as possible on top gear, to see if any knock or "pinking" results.

As compared with the purchase of a new car, the buyer of a second-hand car saves appreciably in having usually several extra essentials or conveniences thrown in, such as a speedometer, a mat, repair outfit, tyre levers, hood cover, spare valve, etc., included in the price. On the other hand, some owners seem to expect a high price for their car because it is fitted with a number of minor accessories or fancies which they fail to realize have been largely a matter of individual taste. If an owner expects to keep his car for a number of years, there is a pleasure and satisfaction in fitting various small refinements gradually, but it is useless to expect that they will enhance the car's value to anyone but himself, and dealers in particular pay little attention to the extras a car may have beyond the customary outfit.

## NOTABLE SECOND-HAND LIGHT CARS ON SALE.

NOW that the output of most light cars is restricted by munition work, prices of used cars are greatly enhanced. At the same time it looks as if prices will advance, rather than recede, which means small depreciation when the car is resold.

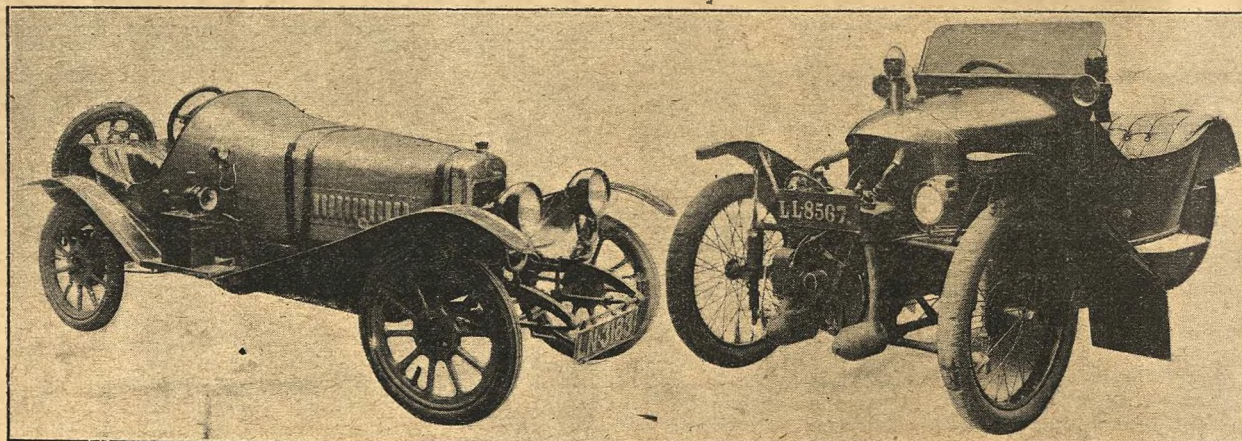
One of the best-known dealers, who usually have very big stocks, is R. E. Jones Garages, Ltd., of Swansea, Cardiff and London (Great Portland Street). Messrs. G. N. Higgs, of Vauxhall Bridge Road, London, S.W., specialize in overhauled second-hand light cars and cyclecars. Messrs. Stewart and Arden, Woodstock Street, London, W., is the place to find a second-hand Morris-Oxford, and also other

smart with a black chassis and wings and grey finish to the body, lamps and radiator.

The special sporting element is provided for by "Toddles," the Isle of Man model Calthorpe racer still in its racing guise, offered with a guarantee of 70 m.p.h., at £250 after it has been overhauled. It has a dynamo lighting set fitted.

A. P. Rey, of Euston Road, London, N.W., had in stock a great number of light cars of standard design. One bargain was a 1915 Calcott in excellent trim, with a lighting set, offered at £180; a Standard at £140 was also picked out as a bargain.

Cass' Motor Mart, Warren Street, Tottenham



"Toddles," the famous Calthorpe T.T. racer, which is now for sale at Messrs. Storey's, Great Portland Street, and the red Morgan, which went through the Birmingham M.C.C. Easter Monday trial, now offered for sale at Messrs. Cass Motor Mart.

cars. We expect to describe and illustrate some current bargains of these concerns in our next issue.

Last week Messrs. Storey and Co., of Great Portland Street, had a number of interesting second-hand light cars, notably a Calthorpe coupé, overhauled, with dynamo lighting set, to be repainted blue and black, and priced, when ready, at £225.

A Calcott which had some special refinements fitted, such as a large windscreen, a dynamo lighting set and a dickey seat, was priced at £230.

A 1915 four-seated Calthorpe at £200, with nearly new Palmer cord tyres, was distinctly a bargain, and an all-weather 10 h.p. Swift at £230 looked very

Court Road, deals more especially with cyclecars, the most notable being the red Morgan which ran so successfully in the Birmingham M.C.C. trial. It has several 1916 improvements, such as a hot water jacket on the inlet pipe and electric and paraffin lamps. The price is £120. Three other water-cooled Morgans, a G.N. and a G.W.K. were also seen. The G.N., with a few home improvements, seemed low-priced at £80, being a 1914 model with three speeds forward and reverse. The G.W.K. was a 1912 model and offered at £67 10s., and no fault could be found with it from outward inspection, although the price is low.



# THOUGHTS & OPINIONS

## The Suggestions of To-day may be the Realities of To-morrow

### NOTICE TO CORRESPONDENTS.

Preference is given to letters intended for publication which are to appear above the writer's name and address, but where this is not desired, initials or a nom de plume will be substituted if requested. In view of the

peculiarly wide publicity afforded to letters on light car and cyclecar subjects appearing in these columns, readers are asked to make their letters as brief as possible so that a greater number may be published. Letters received up to Wednesday morning first post usually appear in the following Monday's issue.

## WHERE IS THE MODERN STEAM LIGHT CAR?

Where is the steam car? It seems extraordinary that in these days we should have to ask that question, but yet there certainly is no doubt as to the truth of it. How many steam cars have readers seen on the roads during the last few years? Personally, I can count the ones I have seen on the fingers of one hand.

There are several points in the steam car worthy of notice. In competitions and trials the steam car has been unfairly handicapped. Certainly it is true that the choice of the car rests entirely with the purchaser, who, apparently, to-day in 99.99 per cent. of cases chooses the petrol system. There are several things a steam car can do which a petrol car cannot. Of course, it is equally true to say that there are things a steam car cannot do which a petrol car can, but rules are almost invariably drawn up so that the former fact shall be no bar to the petrol car in official trials and competitions, but at the same time the latter fact effectively prevents the steam car from taking part. Is this fair? If not, why is it not remedied?

In a reliability trial I cannot see that it is any fairer for one car to have a change-speed gear to enable it to climb steep hills than it is for another car to have to stop every 50 miles for water. The former is a matter of reliability; the latter a matter of convenience. A petrol car cannot climb steep hills without a change-speed gear, but it does not have to stop every 50 miles to fill up the petrol tank. The authorities, however, permit change-speed gears, very often employing freak ratios—without loss of reliability marks. The steam car, however, can climb the worst hill in the country without a change-speed gear (and it uses a much higher gear than is possible on a petrol car—about 1½-2 to 1. It has to stop every 50 miles, though, for water. The authorities, however, will not permit the stop. Hence the steam car is effectually barred from entering any long reliability trials.

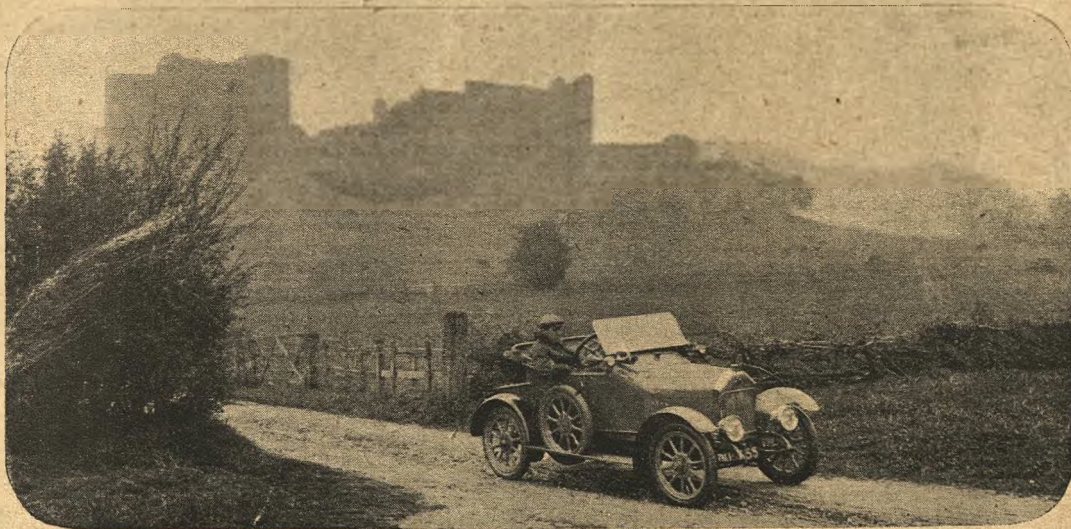
Cannot some of our leading light car manufacturers take the

matter up and improve upon and turn out a steam light car? I say improve, because four years ago, when the manufacture of steam cars was practically discontinued, there certainly was room for improvement. It would certainly be a step towards the ideal light car. There would be no troubles about carburation, ignition, breaking valves, and dirty engines. It glides along silently and without vibration, and shoots forward like a thing of life when the throttle valve is opened on reaching a hill. There is nothing like changing gear half way up; it climbs silently and smoothly all the way. Its smoothness of running can only be equalled by a "twin-four" petrol car engine.

When in its infancy, steam was only applicable to big cars, but now, with motor engineering so far advanced, I cannot see any reason why an efficient 10 h.p. light car should not be produced. In fact, four years ago there was a 10 h.p. Stanley steam car which had a flash-boiler and a two-cylinder horizontal locomotive engine.

The disadvantages of the steam car are (1) that it takes some little time to start, but that is partly counteracted by knowing that once steam is raised you can go straight off and that there is no chance of failure to start owing to sooted plugs or air leaks in the carburetter; (2) the necessity of having to stop every 50 miles for water (not of much importance unless one happens to be in a great hurry); and (3) a rather high petrol consumption (about 18-20 m.p.g. for a 20 h.p. car), but if a suitable paraffin burner could be made, the high consumption would not matter so much. Against the high cost of petrol, you have the saving on small parts, as sparking plugs, etc., tyres being about the only items which need replacing. I should like to see some manufacturer produce a steam light car, as I am sure it would mark a new era in light car construction. I should like to hear other readers' views of the matter.

H.M.S. "Dominion."



Kenilworth Castle. The car is a 10 h.p. Swift, an extended trial of which has been completed by "John Gilpin, Jnr.," who will give his experiences of it next week. Its great feature is its silent, flexible and powerful engine.



## THE BIRD-FEED OILING SYSTEM.

### Instructions to be Observed.

After 5000 miles experience of the bird-feed oiling system, I have found it eminently satisfactory, and on a 67 mm. by 102 mm. four-cylinder engine the consumption is about 800 miles per gallon. I suggest that "M.L." has an oil container that is not airtight or does not fill it right up. The following are the makers' instructions:—

"Shut off cock leading into crankcase, take out plug at top of container, fill up with oil to point of actually overflowing, screw in filler plug down tight, and then open cock leading to crankcase. Special attention is called to the danger of having any air in the oil tank. Therefore, whenever the filler plug is taken out or even loosened, the tank should be refilled to the point of overflowing."

I have read the short article on treating scored cylinders with graphite, and should like to say that graphite mixed with oil is good for any cylinder, and when used in the form supplied by the Acheson Co. is one of the best lubricants known. It is not at all likely to clog any pipes, as the graphite is in perfect suspension. I have now used it for 5000 miles on my car, and on removing the lower half of the bass chamber after 2000 miles I found no sign of gumminess; in fact, it is cleaner than when ordinary oil is used. The important point is to obtain the ready-mixed Oildag, which is supplied in drums like any other oil. I may say I have no connection with this company, but, as they do not advertise, it is only right to give one's experience for the benefit of others.

NOEL PLEVIUS.

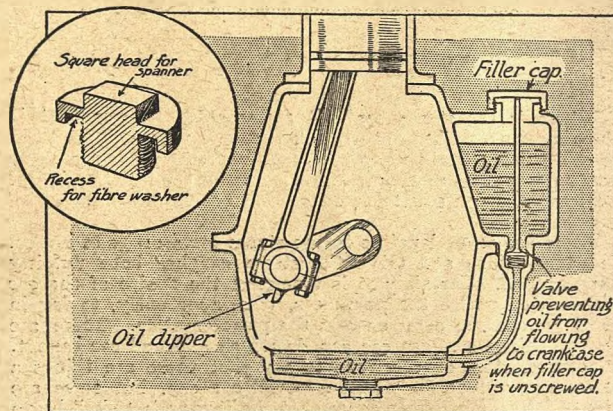
Exhall, Coventry.

### The Cause of the Trouble.

I note the letter from "M.L.," Roscrea, with reference to the bird-feed oiling system. I have a Saxon, which I bought in May, 1914, and for 12 months had exactly the same trouble. In fact, I used to turn on the oil, run a mile, and then turn it off, and do the next 20 miles on what was in the sump. Ultimately I discovered the cause and remedied it, and at present am actually doing between 800 and 1000 miles per gallon.

The first cause was the stopper, which has to be airtight after filling with oil. It was a cast one, none too true, and the washer was apt to squeeze out over the side. My garage made me a turned one out of brass, with a recess for the washer, which is now of fibre. I can make it positively airtight almost without a spanner. This was the chief trouble. Next I was using too thin an oil, so that going up or down a

steep hill the oil flowed to the front and the back of the sump, and, the end of the pipe being uncovered, a good quantity of oil quickly ran through. I now use a comparatively heavy oil, which flows slowly even into an empty sump, so that on a hill, even a long one, comparatively little has time to get through. I presume that the pipe on your correspondent's car is set for a proper level. On the Saxon there is a hole, up to which the oil must rise. By removing a plug it is easily possible to gauge this. Every time the filler plug is removed the tank must be filled to the top before replacing



A diagram of the bird-feed oiling system, and, inset, a drawing of the filler cap which "S.R.H." has made to overcome his difficulty.

it. If not quite full, the air in the tank allows the oil to run out. Given a positively airtight tank and a proper level, I have proved this to be an unusually economical system. The fact of it issuing from the exhaust shows extreme over-oiling, and it is ridiculous to suggest that any engine requires such a condition. I discovered the fact of an air leak in the filler hole plug by removing the tank and emptying it. The garage people then applied air pressure through the pipe hole, which revealed that it was almost impossible to get the cap airtight.

Swindon.

S.R.H.

### Increasing Number of Lady Drivers.

One cannot help noticing the increasing number of light cars on the road driven by ladies. Surely this speaks well for the simplicity and handiness of these miniature automobiles. The light car is coming into its own at last. I consider your journal the best motor paper published.

Warrington.

G. BENNETT.

### A Plea for a Car with £4 4s. Tax.

The remarks by "Eight Horse Power" on the trend of design are timely, and he voices the opinion of the majority of motor users. What is nicer than a Baby Peugeot or a Perry 8 h.p., its size being so ideal for dustless, narrow country lanes, free from the maddening traffic? Another consideration is the stabling space and its approaches. Tax and petrol, also repairs, are items which call for more money as time goes on. Now, the Perry is a nice-looking, solid car, and because of its engine simplicity and accessibility the owner can look after it himself. The Baby Peugeot, with engine bore the same as the Perry, would be ideal with a smaller tax. Much is made of the 10-12 h.p., but I run a four-cylinder 8-10 h.p., and it takes three persons very comfortably. If the 8 h.p. Perry model is geared less on one of its gears, three persons would be no material injury to its durability, and a corresponding gain in power on steep hills would be the result. The aforementioned economies are well worth consideration, for the cost of motoring wants to be kept down to its narrowest limits, otherwise one has to give up motoring or fall back to the motorcycle owing to the present cost of living. It behoves us to have less horse-power, less speed, and an economical car giving economical running.

46, Follywell Street, Blackburn.

H. M. PARSONS.

B26

### Motoring in Toowoomba.

I should be greatly obliged if manufacturers would forward to me catalogues of components and engines.

In England you are very fortunate as regards roads, as here, in Toowoomba, the streets are awful. I know a doctor who has had four sets of back tyres in only 8000 miles, and as petrol is now £1 a case of eight gallons, you can see that motoring here is very expensive.

While writing, I should like to say how much I appreciate your paper. I can hardly wait one week over the other for it.

ALBERT J. COLEMAN.

Stonehenge, Bridge Street East, Toowoomba.

\* \* In England we pay £1 1s. 4d. for eight gallons of petrol, \* so our friend is not so badly off.—ED.

### 62 M.P.G. on a 1914 Humberette.

The following note may be of interest to Humberette owners. I bought an air-cooled Humberette, 1914 model, at the cyclecar exhibition in November, 1913. It has now run 9500 miles. The number of miles per gallon has always been well up in the fifties, and recently, after grinding in the valves and washing out the crankcase, I have been getting 62 miles per gallon over ordinary give-and-take Surrey roads. This sounds almost too good to be true, but the speedometer is a Stewart, and quite reliable, and filling up the tank, after a run, is done from an accurately graduated measure. As I am using over-size tyres (710 mm. by 85 mm. Palmers), the speedometer probably registers somewhat less than the actual mileage run, and careful measurements on the ordnance map tend to confirm this; but I am content to leave the figures as they stand. The machine is standard in every way. Can any other Humberette owner beat my figures?

A. W. HARRISON, M.D.

Colliers Wood, Merton, S.W.



# R. E. JONES

## GARAGES LTD

### THE LIGHT CAR SPECIALISTS

6 GUINEA TAX.



100

1915, 10 h.p. **CALTHORPE**, chassis No. 2159, gate change, 3 speeds and reverse, body French grey, black wings, upholstery dark green, 700 x 85 Palmer cord tyres, detachable wheels with spare and tyre, hood, screen, horn, 12 volt Drott dynamo lighting set, clock, in very good condition throughout ... .. **£200**

6 GUINEA TAX.



101

Late 1915 **SINGER**, dynamo lighting set, new condition ... .. **£240**

6 GUINEA TAX.



108

1919, 10 h.p. **CALTHORPE**, sporting model, with special engine, detachable wheels with spare and tyre, Rally discs enamelled black, body white enamelled, detachable hood, Drott dynamo lighting set (nominally second) ... .. **£260**

6 GUINEA TAX.



109

1914, 9.5 h.p. **STANDARD**, with Rhyd body, detachable wheels, spare and tyre, acetylene headlamps, separate generator, oil side and tail lamps, just repainted azure blue, and in perfect mechanical condition ... .. **£185**

We are **CASH BUYERS**  
... FOR ...  
**MODERN LIGHT CARS**

#### NEW CARS.

**SINGER**, standard model,  
just delivered, dynamo  
lighting ... .. **£250**

**McKENZIE**, just delivered,  
C.A.V. dynamo lighting... **£220**

**CALTHORPE**, G.D.M., C.A.V.  
dynamo lighting ... **£221 19**

**LA PONETTE**, C.A.V. dy-  
namo lighting ... .. **£310**

**LA PONETTE**, coupe, C.A.V.  
dynamo lighting ... .. **£390**

**G.W.K.**, standard model ... **185 Gns.**

**SAXON**, self-starter and elec-  
tric light ... .. **£175**

**WHITING-GRANT**, electric  
light ... .. **£160**

**BABY PEUGEOT**, sporting  
model, fitted with hood,  
screen, and boot ... .. **£165**

*Delivery Charges Extra.*

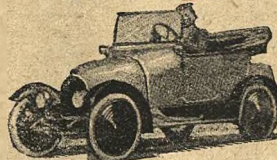
6 GUINEA TAX.



110

Late model 4-seater **LAGONDA**, done  
very little mileage, condition  
as new ... .. **£170**

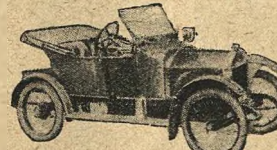
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111

**BABY PEUGEOT**, with our special  
design body, racing model, disc wheels,  
hood, screen, speedometer, many extras,  
scarcely used. Property of an  
officer ... .. **£180**

6 GUINEA TAX.



112

7.0 h.p., 2 cyl. **SWIFT** cyclecar, 1913  
model, 3 speeds and reverse, staggered  
seats, luggage box at rear, Stewart speed-  
ometer, horn, acetylene side lamps with  
generator, large ditto headlamps with  
generator, clock, repainted Norfolk  
Grey, splendid condition ... **£95**

6 GUINEA TAX.



113

7.0 h.p. **SWIFT**, wide 2-seater body, single  
cylinder, accumulator and Bosch magneto,  
hood, double folding screen, horn, Stepney  
with new Dunlop gvd. Car repainted dark  
green, and in splendid mechanical  
condition. Tyres good ... .. **£50**

**LONDON: 143-5, Gt. Portland St., W.**

**CARDIFF: City Road.**

**SWANSEA: (Head Office) Dillwyn St.**

Telephone: Mayfair 2826.

Telegrams: "Erjonegara, Wesdo."

Telephone: 4686.

Telegrams: "Petrol, Cardiff."

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Telegrams: "Petrol, Swansea."



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THE best relaxation in time of war is working in the garden. It is, besides, everybody's duty to grow more vegetables and thus contribute to the general food supply. The best book on gardening, containing a useful section on vegetable growing, is

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FOR CUPS AND HUBS

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for cups and hubs;

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for your gears.  
"It makes them dumb."  
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**GEAR-EASE**  
MAKES THE GEAR DUMB

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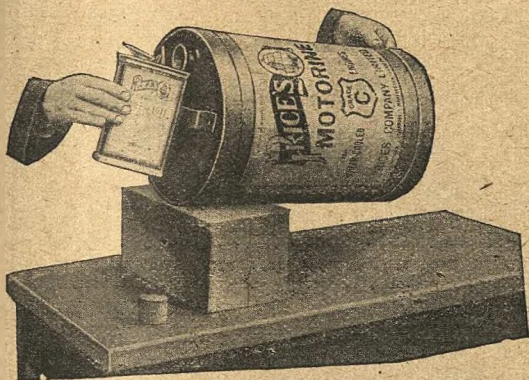
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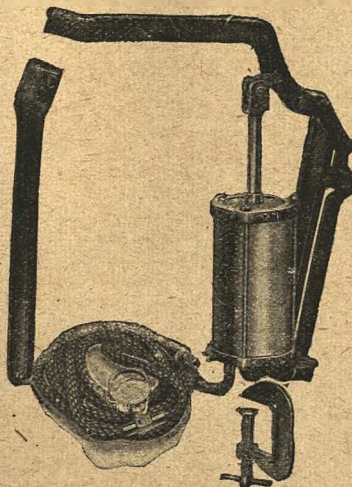
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GUARANTEED.**

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A new and exceptionally powerful  
**Pump** for the foot-board. Worked by  
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with a  
screw  
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which  
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takes all dust from the  
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a fine polish. Chemi-  
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A new and un-  
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brush for car  
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rugs, etc. The  
brush, the bristles of which are of wire, will last  
a lifetime. A very light touch will remove dust  
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72, St. Vincent Street,  
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**TO THE  
READER**

By mentioning "The Light Car and Cyclecar" when corresponding with advertisers,  
you will be working for the cause of the new motoring.



# NEW OR SECOND-HAND LIGHT CARS, CYCLECARS, ACCESSORIES FOR SALE AND Sundry Advertisements

**RATE FOR ADVERTISEMENTS IN THIS SECTION**  
SIXTEEN WORDS, 1/- (MINIMUM).

6d. per eight words after.

The Rates for Trade Advertisements are 18 words 1/6, and 1d. per word after. These are designated "TRADE," for the guidance of the reader. Subject to a discount of 5 per cent. for 13 consecutive insertions, 10 per cent. for 26, 15 per cent. for 52. Terms: Cash with order, and otherwise net. N.B.—In the interests of our readers we shall not hesitate to take proceedings against any persons in the trade who succeed in obtaining the insertion of their advertisements as "Private" and shall insist to the utmost upon the payment of all law costs incurred.

**BOX NUMBERS.**—Advertisers desiring to have replies sent care of "The Light Car and Cyclecar" may do so on payment of a nominal fee of 6d. to cover booking and cost of forwarding such replies. The words Box , c/o "The Light Car and Cyclecar," count part of the advertisement.

**DISPLAY ADVERTISEMENTS.** ordinary issues, £14-0-0 per page. Scale of charges with reduction for series. sent on application.

Copy for, and all matter relating to, advertisements must reach the offices first post Wednesday, and should be addressed to THE MANAGER, "THE LIGHT CAR AND CYCLECAR," 7-15, ROSEBERY AVENUE, LONDON, E.C., to whom all communications concerning advertisements should be sent. If proof of displayed advertisements is required, copy should be forwarded in sufficient time to allow of it being submitted and returned.

**Head Offices:**—7-15, Rosebery Avenue, London, E.C. Telephone No. 5292 Holborn (four lines). Telegrams: "Pressimus, Holb., London."

**Midland Offices:**—9 & 10, Burlington Chambers, New St., Birmingham. Telephone No. 2498 Midland. Telegrams: "Presswork, Birmingham." 6, Warwick Row, Coventry. Telephone No. 983, Coventry. Telegrams: "Presswork, Coventry."

**Northern Offices:**—196, Deansgate, Manchester. Telephone: Central 2467. Telegrams: "Presswork, Manchester."

*These advertisements are now set in smaller type to meet the Government demand for economy in paper. At the same time the distinctive style of the setting makes it as easy as before to find the advertisement of any particular make of car.*

## LIGHT CARS AND CYCLECARS FOR SALE.

**A.-C.** Sociable, repainted and overhauled, splendid condition, hood and lamps, £35. Croft, The Limes, Rochford, Essex. 184-d992

**A.-C.** Sociable, 1912, hood, screen, side curtains, lamps, B. and B. variable, spare tyre, etc., trial, £35 lowest. 65 Marlboro' Rd., Merton, S.W. 182-e411

**A.-C.** Sociable, October, 1912, hood, screen, 3 lamps, all tools, engine perfect, tyres excellent, thorough sound car, £35. Cattle, 28 Streatley Rd., Brondesbury, N.W. 182-e406

**A.-C.** Sociable, modele de luxe, large body, takes 3, specially fitted wheel steering, recently coach-painted and varnished, Binks carburettor, hood, adjustable screen, side curtains, large acetylene headlight, generator, side and tail lamps, luggage carrier, smart little turnout, £48. Roberts, Littlethorpe, Ripon. 182-c385

**A.-C.** Sociable, 1913, 3-seater, screen, hood, side curtains, 2 front wheel brakes, 4 lamps, splendid condition, £55, offers. James, "Emshym," Abersychan, Mon. 182-e326

**A.-C.** 1914, 5hp, 2 speeds, handle starter, complete, hood, screen, lamps and horn, exceptionally good condition, £35. P. J. Evans, John Bright St., Birmingham. Trade 182-940

**A.-C.** 10hp, 1913, Stepney, 4 lamps, speedometer, just overhauled, fine condition, £115. Auto Mart, 133 Hammersmith Rd., W. Trade 182-e404

**A.-C.** 10hp, late 1914, 2-seater, with dickey seat, hood, side valance, screen, horn, speedometer, 5 detachable wheels, just like new, price £155, or nearest offer. Bainbridge Barker, Skinnergate and Blackwellgate, Darlington. 182-c321

**A.-C.** 1914, 10hp, 2-seater and dickey seat, just repainted grey, clock, speedometer, 5 detachable wheels, 4 lamps, generator, £165, 3 months guarantee, 12 months insurance free, tuition free, exchanges and deferred terms 5 per cent. Cass's Motor Mart, only address 5 Warren St., Euston Rd., W. Museum 623. Trade 182-34

## LIGHT CARS AND CYCLECARS FOR SALE (continued).

**A.-C.** 10 h.p., late 1913, two-seated torpedo, large size headlamp, speedometer, mirror, petrol gauge, extra air, Stepney wheel, wire wheels, painted grey, black wings, good tyres, mechanically perfect, fully equipped, offers. Mebes, Light Car Specialists, 156 Gt. Portland St., W. Telephone, 3426 Mayfair. Trade 182-998

**A.-C.** 1913, hood, screen, speedometer, lamps, tools and spares, upholstered red, painted green, luggage carrier, good condition, £42, any trial or photo. H. W. Gardiner, Thurland St., Nottingham. Trade 182-c325

**ALLDAYS**, 1914, 10hp, 4-cylinder light car, 5 lamps, horn, speedometer, etc., fine condition, £130. Main, 36 Parade, Leamington. Trade 182-e167

**ALLDAYS** Midget, 1913, 2 cylinders, 8-10hp, 45 m.p.g., fully equipped, splendid condition, £85. Group 45, 13 Market St., Oxford. 182-e423

**ALLDAYS**, 1915, 10hp, perfect condition, dynamo lighting, under 3000 miles, £175, near offer, private owner. Dan Morgan, Spalding. 182-c339

**ALLDAYS**, late 1914, 4-cylinder, 10hp light car, dickey seat, privately owned and in new condition, price £135. Ingham, 9 Station Rd., Blackpool. 182-c337

**BABY PEUGEOT**, immediate delivery from stock, £131 model, exchanges entertained. R. Bamber and Co., Ltd., 33 Liverpool Rd., Southport. Trade 182-464

**BABY PEUGEOT**, the most economical light car, 45 miles per gallon, light on tyres; we can deliver from stock the standard model, fitted with sporting 2-seater body, lamps, horn, tools, etc., £170. For careful attention and early delivery, buy direct from the Sole Midland Agents, the Premier Motor Co., Aston Rd., Birmingham. Trade 182-930

**BABY PEUGEOT**, 1914, de luxe model, very complete and in excellent condition, £85. The Light Car Co., 331 Euston Rd., London. Phone, Museum 3143. Trade 182-24

**BABY PEUGEOT**, 1916, Sheffield model, with hinge back, over seat, tool-case, hood, screen, etc., all complete, only a few weeks old, as new, cost £160, will accept £140, or nearest offer. Bingham, Harboro' Rd., Doncaster. 182-e431

**BABY PEUGEOT**. The call of the moment is "Be economical." 50 miles to the gallon, latest model complete, with 3 lamps, horn, tools, good hill-climber, £168; seen by appointment. Madge M. Allen, 363 Croydon Rd., Caterham Valley, Surrey. Trade 184-e404

**BABY PEUGEOT**, 1916, sporting model, painted brown, only few weeks old, and as good as new, £135. P. J. Evans, John Bright St., Birmingham. Trade 182-936

**BABY PEUGEOT**, latest 1916 models, in stock for immediate delivery, sporting two-seater body, complete with three lamps, horn, and full tool equipment, £170; bodies specially built to suit customers' own requirements; delivery from stock, painted khaki, white, or blue, special colours within 14 days. Sole Midland Agents, The Premier Motor Co., Aston Rd., Birmingham. Trade 182-933

**BEDELIA**, 8hp, racing cyclecar, sociable, engine recently overhauled, torpedo body, painted blue, hood, adjustable screen, speedometer, electric lamps and horn, also mechanical fittings in polished brass, tyres nearly new, a real bargain for £60, photo. 293 Portland Rd., S. Norwood. Trade 182-c332

**BUCKINGHAM**, late 1914, special racing engine, Stewart speedometer, hood, screen, two headlights, electric tail lamp, many spares, very fast, sacrifice £85. C. Jones, Air Station, East Fortune, N.B. 183-c318

**CALCOTT** cars. Watkins and Doncaster, Ltd., The Hall, 95 Great Portland St., authorized retail and sole wholesale agents for London and the Home Counties. Telephone, 6565-6 Mayfair. Trade zzz-345

**CALCOTT** latest 1915 model, very little used, paintwork and mechanical condition practically as new, speedometer, clock, exhaust cut-out, cocoa floor mat, electric and bulb horns, dynamo lighting, hood, screen, etc.; one of the best Calcotts turned out; first cheque £235. Castle Motor Co., Kidderminster. Trade zzz-332

**CALCOTT**, 1914, 10hp light car, fully equipped, 5 lamps, etc., splendid hill-climber, £185. Main, 36 Parade, Leamington. Trade 182-e165

**CALCOTT**, late 1914, wide 2-seated torpedo, hood, screen, electric side and tail lamps, acetylene headlamps, generator, speedometer, dickey seat, 5 Sankey detachable wheels, fully equipped, perfect condition, bargain, £195. Mebes, Light Car Specialists, 156 Gt. Portland St., W. Telephone, 3426 Mayfair. Trade 182-7

**CALCOTT**, late 1915, 2-seated torpedo, hood, screen, dynamo lighting set, dickey, speedometer, fully equipped, indistinguishable from new. Mebes, Light Car Specialists, 156 Gt. Portland St., W. Telephone, 3426 Mayfair. Trade 182-4

**CALCOTT**, 1914, thoroughly overhauled and repainted, beautiful running car, any trial, £170. Rey, 378 Euston Rd., N.W. Telephone, Regent 4219. Trade 182-981

**CALCOTT**, 1914, complete with 5 lamps, 5 wheels, nice condition, ready for the road, £160. Rey, 378 Euston Rd., N.W. Telephone, Regent 4219. Trade 182-983

**CALCOTT**, 1915, 2-seater, dickey, dynamo lighting, in excellent order. Storey's, 118 Gt. Portland St., W. Trade 182-16

**CALCOTT** cars. Appointed agents, special list, with particulars. English Light Car Specialists, Robinson's Garage, Green St., Cambridge. Telephone 388. Telegrams, "Cars." Trade 182-966

**CALCOTT**, 1915, latest model, new August, dynamo lighting, 5 lamps, hood, screen, spare wheel with tyre, speedometer, Klaxon, tools, jack, pump, etc., absolutely as new, mileage only 2500, with most careful private owner, £235. 94 Gloucester Rd., S.W. Trade 182-960

**CALCOTT**, 1915, dynamo lighting, spare wheel, very fine condition throughout, paintwork unscratched, £225. Below.

**CALCOTT**, 1914, 5 lamps, speedometer, dickey, car carrier, etc., engine just overhauled, £185. Stretton and Smith, 23 Woodstock St., Bond St., W. Trade 182-973

**CALCOTT**, 1915, 2-seater, dynamo lighting, dickey, speedometer, clock, Klaxon and bulb horns, repainted and overhauled, £235. Smith and Hunter, 15 Little Portland St., Oxford Circus. Trade 182-951

*One of many  
similar  
letters:—*

BIRMINGHAM, 21st Sept., 1915  
Dear Sirs,—Please cancel further advertisements for Cars as per cuttings enclosed, as these Cars are sold. Thanks for the medium of your excellent paper. Yours faithfully,



## LIGHT CARS AND CYCLECARS FOR SALE

(continued).

**CALCOTT**, 1915, July, dynamo lighting, in excellent condition, mileage under 2000, price £225. Box No. 8171, c/o "The Light Car and Cyclecar." Trade 183-6336

**CALCOTT**, 1914, No. 266, perfect, laid up 6 months, £180. Captain Girdlestone, 12 Merton St., Oxford. Trade 182-6317

**CALTHORPE**, 1916, 4-seater, immediate delivery, 205 guineas. Freeman, Oakes and Co., Sheffield. Trade 222-677

**CALTHORPE**, 1916, Grand Duke Michael model, with double folding screen and dickey seat, 195 guineas. Julian's, Broad St., Reading. Biggest motorcycle and light car dealers in the South. Phone, 1024. Trade 222-687

**CALTHORPE**, 10hp, late 1915, 4-seater torpedo, painted grey, one-man hood, side curtains, screen, 5 Sankey detachable wheels, electric side and tail lamps, acetylene headlamps, generator, good tyres, perfect mechanical condition, car only done 3000 miles, genuine bargain, £225. Mebes, Light Car Specialists, 156 Gt. Portland St., W. Telephone, 3426 Mayfair. Trade 182-6

**CALTHORPE** coupe, 1914, overhauled and repainted, upholstered in Bedford cord; very smart coupe, bargain, £165. Rey, 378 Euston Rd., N.W. Telephone, Regent 4219. Trade 182-982

**CALTHORPE** Isle of Man racer, dynamo lighting, in good order. Storey's.

**CALTHORPE** 2-seater, 1915, dynamo lighting, self-starter, in splendid order. Storey's.

**CALTHORPE** coupe, 1915, dickey, dynamo lighting, in good order. Storey's.

**CALTHORPE** 4-seater, 1915, completely equipped, in excellent order. Storey's, 118 Gt. Portland St., W. Trade 182-14

**CALTHORPE** 1916 new G.D.M., dynamo lighting, in stock. Storey's.

**CALTHORPE**, 1916, new 4-seater, dynamo lighting, in stock. Storey's.

**CALTHORPE** coupe, 1916, new dynamo lighting, in stock.

**CALTHORPE** new 1916 sporting chassis, fitted with our special design 3-seated body, concealed hood, dynamo lighting, in stock. Storey's, 118 Gt., Portland St., W. Trade 182-9

**CALTHORPE**, 1916, 10hp. Minor cars, illustrated list, with particulars and prices on application. Military order particularly solicited. Special precedence in delivery. English Light Car Specialists, Robinson's Garage, Green St., Cambridge. Telephone 388. Telegrams, "Cars." Trade 182-967

**CALTHORPE**, 1914, in exceptional order, painted grey, £145. Bradshaw's, The Motor House, Preston. Tel., 988. Trade 182-641

**CALTHORPE** Minor, 1914 model, in perfect condition, done only 4000 miles, new set Michelin tyres and tubes, repainted, 40 miles per gallon, Sankey detachable wheels, hood, electric lamps, Klaxon horn, £130, or near offer; seen and tried any Sunday. Martin's Garage, Crowborough. Trade 182-634

**CALTHORPE** coupe, 1915, 12-volt Brolt dynamo lighting set, 710 by 85 Palmer cord tyres, luggage rail, run 1000 miles, £270 or near offer, cost £310. K., 74 Cheapside, London. Trade 182-633

**CALTHORPE**. P. J. Evans, John Bright St., Birmingham. Immediate and prompt delivery 4-seater, coupe, Grand Duke Michael and sporting models. Trade 182-937

**CARDEN** monocar, 1914, single speed, good condition, fast, lamps, horn, windscreens, accessories, £55. Hurstwood, Camberley, Surrey. Trade 182-638

**CHARRONETTE**, 2-seater Charronette, sports 2-seater, £250 and £270 respectively, with C.A.V. lighting set. 65 Piccadilly, W. Trade 187-708

**CHATER LEA** 8 h.p. standard light car, with specially built body, dickey seat, fully equipped, speedometer, clock, hood, and screen, newly painted and in perfect condition, £35. 10 Oak Villas, Ferriby Rd., Hessle, E. Yorks. Trade 182-605

**CHATER LEA**, 1914, 8hp, 3 speeds, reverse, 1916, worm drive, bargain, £97 10s. Charles Taylor, 74 Chancery Lane, W.C. Trade 182-631

**CROUCH** car, 1914, not run 500 miles, fine condition, reliable and economical, £35. Hodgson, Draper, Knaresborough. Trade 182-628

**DEEMSTER**, 1914, 10hp, 4-cylinder, light car, smart little car, hood, screen, electric lamps, speedometer, Stepney, etc., bargain, £115. Maxwell Agency, Crown St., Ipswich. Trade 182-965

**DEEMSTER**, September, 1914, 4-cylinder, 2-seater, green, 40 m.p.g., £120. Graham, 104 Victoria St. Trade 184-630

**D'ULTRAS** for immediate delivery, 3 just released, standard 2-seaters, disc wheels, underslung, 8 h.p., 50 m.p.g., new tax, £6 6s., by appointment at our London warehouse, £115. Charlotte Place, North St., Clapham, S.W. Trade inquiries. Exchanges entertained. Trade 183-639

**ENFIELD**, 1915, 2-seater, 10hp, 4-cylinder, 5 detachable wheels, dynamo lighting set, speedometer, clock, electric horn, and other extras, just repainted grey, and guaranteed in thoroughly good running order. £185; exchange or deferred terms considered. Service Co., 292 High Holborn, London. Trade 222-603

**ENFIELD** 1916 light cars, 10hp, 4 cylinders, spare wheel and tyre, dynamo lighting set, 2-seater £215, 3-seater £230, coupe £255; cash, exchange and extended payments; 2-seater, £43 deposit and 12 monthly payments of £14 13s. 10d.; similar terms for other models, or other figures considered; quick delivery. Sole London Agents, Service Co., 292 High Holborn, W.C. Trade 222-570

**ENFIELD**, 10hp, 4-cylinder, 5 detachable wheels, nickel finish, painted biscuit and black, several extras, only used for demonstration, splendid condition, £150. Roper and Wrecks, 112 Arundel St., Sheffield. Trade 222-922

**ENFIELD**, 1915, 10hp, 2-3-seater, double dickey, hood, screen, painted green, dynamo outfit, 5 lamps, speedometer, clock, 2 horns, 5 wheels, bargain, £170, 3 months guarantee, 12 months insurance free, tuition free, exchanges, deferred terms 5 per cent. Cass's Motor Mart, 5 Warren St., Euston Rd., W. Museum 623. Trade 182-29

**ENFIELD**, 10hp, 3-seater body, clover leaf type, dynamo lighting, 5 Sankey wheels, speedometer, etc., hardly used, guaranteed, £190 cash, deferred payments or exchange. Service Co., 292 High Holborn, London. Trade 222-364

**ENFIELD** Antiolette, 1914, 8hp, 3 speeds, 5 lamps, hood, screen, Stepney, excellent condition, £85. P. J. Evans, John Bright St., Birmingham. Trade 182-938

**GLOBE** cars and vans, new and second-hand, in stock; also all components; overhauls undertaken. Tuke and Bell, Ltd., Globe Car Manufacturers, Carlton Engineering Works, High Rd., Tottenham. Trade 182-27

## LIGHT CARS AND CYCLECARS FOR SALE

(continued).

**G.N.**, 10hp, first-class condition, just thoroughly overhauled, 4 lamps, generator, 6 tyres, all accessories, £50 or near offer. 14 Rosenau Crescent, Battersea Park, S.W. Trade 182-635

**G.N.**, 1914, Grand Prix, completely equipped, spare wheel, excellent condition, £65. L., 26 Greenhill Rd., Grantham. Trade 182-686

**G.N.**, 1914, 8hp, 3 speeds, 2-seater, hood, screen, 3 lamps and generator, excellent condition, £80. Cass's Motor Mart, only address 5 Warren St., Euston Rd., W. Museum 623. Trade 182-32

**G.W.K.**, 1916 models, buff or blue finish, in stock. Palmer, 202 Great Portland St., London, W. Mayfair 4942. Trade 183-297

**G.W.K.**, 8hp, 2-seater, just repainted buff, lamps and generator, etc., bargain, £78. 7 Hencroft St., Slough, Bucks. Trade 182-4977

**G.W.K.** 2-seater light car, Coventry-Simplex engine, complete with hood, screen, lamps, headlights, and horn, £92 10s. Collier, Deal Street, Halifax. Trade 184-943

**G.W.K.** G.W.K. light car, 1916, latest model, just arrived from works, immediate delivery, 5 detachable wheels, 5 lamps, horn, etc. The cheapest car to run. Make sure of this now. Wilkins, Simpson and Co., 11 Hammersmith Rd., London. Trade 182-6353

**G.W.K.** A Car without a gearbox. Sole agent for Manchester, Gourlay, Fallowfield. Trade 189-6334

**G.W.K.**, late 1912, newly painted and overhauled, perfect condition, £80. Rev. A. Barton, Strandtown, Belfast. Trade 182-6322

**G.W.K.**, 1913, complete with hood, screen, lamps, speedometer, spare wheel, watch, finished Service grey, disc wheels, £35. Elce and Co., 15-18 Bishopsgate Av., Camomile St., E.C. Trade 182-25

**G.W.K.**, with lamps, mechanical horn, etc., excellent condition, £100. Hayes, 344 Euston Rd. Trade 182-958

**G.W.K.**, 1913-14, 2-seater, hood, screen, painted biscuit and black, 4 lamps, speedometer, 700 by 80 tyres all round, £105, 3 months guarantee, 12 months insurance free, tuition free, exchanges and deferred terms 5 per cent. Below.

**G.W.K.**, 1913, 2-seater, hood, screen, 5 lamps, just overhauled and repainted, £105, 3 months guarantee, 12 months insurance free, tuition free, exchanges and deferred terms 5 per cent. Below.

**G.W.K.**, 1912, 2-seater, screen, 2 lamps, mechanical horn, in excellent order, bargain, £105. Cass's Motor Mart, only address 5 Warren St., Euston Rd., W. Museum 623. Trade 182-33

**G.W.K.**, 1914, sporting body, 5 lamps, spare rim and tyre, oversize tyres, just repainted, fast, in fine condition, £120. Stretton and Smith, 23 Woodstock St., Bond St., W. Trade 182-972

**HILLMAN**, 1914, 9hp, light steel, pistons, Lucas lighting set, dickey seat, speedometer, 8-day clock, Bowden extra-air on inlet pipe, five 710 by 90 Sankey Dunlops, biscuit colour, black mudguards, perfect condition, recently overhauled at Hillman's, fast, silent car, £165. Duncan, 9 Cape Hill, Smethwick, Birmingham. Trade 182-331

**HILLMAN**, 1914, dynamo lighting, thoroughly overhauled, repainted buff colour, top-hole, bargain, £175. Rey, 378 Euston Rd., N.W. Telephone, Regent 4219. Trade 182-980

**HILLMAN**, nearly new, 1915, self-starter, dynamo lighting, dickey, Storey's, 118 Gt. Portland St., W. Trade 182-1

**HORSTMANN**. The best light car irrespective of price, luxurious economy combined with efficiency. Edwards and Parry, the special London agents, can give delivery from stock; every car specially tuned and tested by our Brooklands racing expert, increased power and more miles per gallon for no extra cost; trial runs by appointment. Write for illustrated catalogues, or call at 69 Great Queen St., Kingsway. Regent 5066. Trade 222-399

**HORSTMANN**, 1916, 10hp, electric light and seat starter, run 150 miles, £180, cash or easy terms. R. E. Jones (Garages), Ltd., Swansea. Trade 222-460

**HORSTMANN**. Edwards and Parry can give immediate delivery from stock of one new 1916 standard model; first come first served. 69 Gt. Queen St., Kingsway. Regent 5066. Trade 182-995

**HUMBERETTE**, 1913, air cooled, good condition, £75 cash, or easy terms. R. E. Jones (Garages), Ltd., Swansea. Trade 222-686

**HUMBERETTE**, 1913½, a.c., recent £10 overhaul by Humbers, all accessories, fast, economical, excellent tyres, thorough good order, £59, owner serving. 9 Airline Gdns., W. Trade 182-697

**HUMBERETTE**, 1914, w.c., standard grey colour, perfect appearance and running, complete with 2 spare tyres, all tools, jack, pump, 3 lamps, hood, screen, horn, £100. Owner, Ridge, 42 Derwent Rd., Palmer's Green, N. Phone, Holborn 638. Trade 182-612

**HUMBERETTE**, overhauled and in good condition, expert examination and trial run arranged, £60, could take modern motorcycle part payment. Coles, Glenthorp, Highdale Avenue, Clevedon. Trade 182-636

**HUMBERETTE**, 1914, water-cooled, complete, like new, £90. Freeman, Oakes and Co., Sheffield. Trade 222-921

**HUMBERETTE**, 1913-14, 2-seater, 8-10, twin, magneto, hood, screen, £68 10s., quarter down, 12 monthly payments. Wandsworth Motor Exchange, Ebner St., Wandsworth Town Station. Phone, Battersea 327. Trade 182-663

**HUMBERETTE**, 1913, air-cooled, 5 oversize tyres, under 3500, purchased June, 1914, excellent condition, £60. Lieut. Curry, care of Campbell's Garage, Cambridge Rd., Hastings. Trade 182-638

**HUMBERETTE**, 1914, air-cooled, all accessories, 5 lamps, exhaust horn, speedometer, mirror, overhauled, splendid condition, £60. 14 Chosen Villas, Collindale Avenue, Hendon, N.W. Trade 182-345

**HUMBERETTE**, 1913-14, smart 2-seater, 8-10hp, owner-driven, perfect condition, just overhauled, everything complete, Stepney, 2 each spare covers and tubes, electric dash light, speedometer, mirror, 4 lamps, trial any time, 67 guineas. Taylor, 9 South Parade, Oxford. Trade 182-632

**HUMBERETTE**, 1914, July, water-cooled model, painted buff, upholstered brown, very completely equipped, hood, screen, lamps, horn, speedometer, Stepney, tools, spares, carefully driven, practically new condition throughout, price £80. Bradbury, Heath Grove, Buxton. Trade 182-622

**HUMBERETTE**, 1914, electric lights, lately overhauled and repainted by makers, clock, speedometer, spares, tyres, any trial, £85. Private. 179 Brixton Rd., London, S.W. Trade 183-639

**HUMBERETTE**, complete with all requirements, in good condition, £65, or exchange motorcycle. P. T. Armstrong, 56 Huddersfield Rd., Barnsley. Trade 182-956

"THE LIGHT CAR AND CYCLECAR" is the best medium and has the largest circulation.



## LIGHT CARS AND CYCLECARS FOR SALE

(continued).

**HUMBERTTE**, 1913, in splendid condition, recently overhauled and new gears, tyres, almost new, £65. Knibbs, High St., Weybridge. 182-c331

**HUMBERTTE**, 1913, a.c., good condition, overhauled December by Humbers, green with black wings, full equipment, new tyres, extra-air valve, any trial, £65. 18 Alexandra Rd., East Twickenham. 182-e416

**HUMBERTTES**, 1914, air-cooled, £70; 1914, water-cooled, £90; 1913, air-cooled, £65. Phone, or call, Hayes, 103 and 344 Euston Rd. Museum 3541. Trade 182-957

**HUMBERTTE**, 1914 model, 5 lamps, 2 spare tyres, just repainted and overhauled, £70. 15 Little Portland St., Oxford Circus. Trade 182-953

**HUMBERTTE**, late 1914, water-cooled, 2-seated torpedo, painted buff, hood, screen, acetylene lamps, generator, wire wheels, Stepney wheel, fully equipped and in perfect condition, bargain, £105. Mebes, Light Car Specialists, 156 Gt. Portland St., W. Telephone, 3426 Mayfair. Trade 182-2

**HUMBERTTE**, 1913, a.c., just overhauled and repainted, ready for road, £60. Rey, 378 Euston Rd., N.W. Telephone, Regent 4219. Trade 182-978

**HUMBERTTE**, 1914, w.c., very good condition, hood, screen, lamps, all accessories, bargain, £90. Rey, 378 Euston Rd., N.W. Telephone, Regent 4219. Trade 182-979

**HUMBERTTE**, 1915, 8hp, 2-cylinder, 2-seater, completely equipped, in excellent order, £120. Storey's, 118 Gt. Portland St., W. Trade 182-10

**HUMBERTTES**. The largest stock in England of these popular cyclecars, all models, all prices from £50; one brand new. Percy and Co., 337 Euston Rd., London. Trade 182-989

**HUMBERTTE**, 1913, complete with hood, screen, lamps, horn, in magnificent condition, just overhauled, including Stepney wheel and tyre, repainted and revarnished, indistinguishable from new, 85 guineas, most wonderful bargain; light car or motorcycle taken in part payment. Julian's, Broad St., Reading. Biggest motorcycle and light car dealers in the South. Phone, 1024. Trade zzz-517

**LAGONDA** coupe, July, 1914, 5 lamps, 5 detachable wheels, 700 by 80 tyres, speedometer, clock, spares, owner-driven, in thorough condition, accept £115, no offers entertained. B. Wilson, 226 Shirley Rd., Southampton. 182-e27

**LAGONDA** coupe, 1915, recently repainted and just thoroughly overhauled, 5 wheels and 700 by 80 tyres, in new condition, one steel-studded, 5 lamps, speedometer, etc., £135. Fox, Benlond House, Downshire Hill, Hampstead, N.W. 182-e420

**LAGONDA** coupe, only run 3000 miles, fully equipped with accessories and tools, price £115. W. G., "Rhondale," Flower Lane, Mill Hill, N.W. Trade 182-e413

**LAGONDA** 1915 coupe, £135; a 1915 small attractive 4-seater, £145. Percy and Co., 337 Euston Rd., London. Trade 182-991

**LUCAR**, 1915, 10hp, dynamo lighting, detachable wheels and spare, double dickey, £210. Maudes', 10 Gt. Portland St., London, W. Trade 182-932

**MARLBOROUGH**, late 1914, Sankey wheels, spare wheel and tyre full tool kit, 5 lamps, hooter, speedometer, clock, hood, dickey seat, numerous accessories, little used, perfect condition, owner in Army since March, 1915, genuine bargain, nearest £180 seconds. To be seen at 1 Craignish Avenue, Norbury, S.W. To make appointment ring up Cowling, Central 5733. Trade 182-c350

**MARLBOROUGH**, 2-seater, smart little car, very quiet engine, price £150 or near offer, particulars and photo. Orr, Edindarroch, Tarbet, Loch Lomond. 182-c333

**MARLBOROUGH** 10hp sporting 2-seater, 5 detachable rims and tyres, dynamo lighting, in excellent order, £175. Storey's, 118 Gt. Portland St., W. Trade 182-11

**MARLBOROUGH** engine, 10hp, 4-cylinder, water-cooled, two-seater, late model, wire wheels, painted mauve, new condition, £110. Beardshaw, Auctioneer, Wood Green. Trade 182-e417

**MORGAN** for comfort, safety and economy. Early delivery all models. Free trials and driving lessons. Spare parts stocked. Repairs and overhauls; satisfaction guaranteed. Boddington, Morgan Specialist, Worcester. Telegrams, Compression, Worcester." Code A.B.C. 5th. Phone, 370. Trade 182-a608

**MORGANS**. We are contracting agents. Book for early delivery. Repairs and overhauls guaranteed. Burelli's, 2 Albany Rd., Cardiff. Trade 187-c176

**MORGAN**, G.P., 10hp, disc wheels, just delivered, officer ordered abroad, for sale listed price. Particulars, Gaston, 30 Evelyn Gardens, London. zzz-314

**MORGAN**, latest 1915 sporting model, absolutely guaranteed in stock. This little car, complete with hood, screen, lamps, Stewart horn, etc., is supplied at maker's price, no premium; motorcycle or light car taken in part payment. Julian's, Morgan Specialists, Broad St., Reading. Biggest Motorcycle and Light Car Dealers in the South. Contracting agents for Morgans for the South of England; 45 years reputation. Phone, 1024. Trade zzz-466

**MORGAN** latest model 1916 Grand Prix, received from works 26th April, complete with hood, screen, lamps, horn, etc., makers' list price, no premium, light car or motorcycle taken in part payment. Julians, Morgan Specialists, Broad St., Reading. Biggest motorcycle and light car dealers in the south. Phone, 1024. Trade zzz-760

**MORGAN**, 8hp J.A.P., air-cooled special Grand Prix type body, with bulbous back, excellent condition, £56. Crow Bros., Guildford, T'de 183-e145

**MORGAN**, 1916, Grand Prix, 10hp M.A.G., disc wheels, only done about 450 miles, delivered January, 1916, price £108, or nearest offer. Can be seen at "Homestead," Hillyfields Cres., Lewisham. 182-d990

**MORGAN**, 1913, standard, screen, lamps, £57 10s.; 1914 de luxe, all on, speedometer, £79 10s., both repainted 1916 style. Collier, Deal St., Halifax. Trade 184-941

**MORGAN**, Grand Prix, new, 1916, No. 1 model, complete equipment, £135. Below.

**MORGAN**, Grand Prix, 1915, No. 1 model, with 1916 improvements, won gold medal in Birmingham Easter trial, painted red, 5 Lucas lamps, speedometer, screen, horn, 700 by 80 tyres all round, £120; 3 months guarantee, 12 months insurance free; tuition free; exchanges; deferred terms 5 per cent. Below.

**MORGAN**, Grand Prix, 1915, No. 1 model, painted blue, screen, disc wheels, 5 lamps, speedometer, mechanical horn, bargain, £112 10s. Cass's Motor Mart, only address, 5 Warren St., Euston Rd., W. Museum 623. Trade 182-30

## LIGHT CARS AND CYCLECARS FOR SALE

(continued).

**MORGAN**, 1916, Grand Prix, in stock, 10hp M.A.G. engine, air-cooled, complete with hood, screen, lamps, mechanical horn, rear light, tools, etc., finished French grey, £117 12s. Below.

**MORGAN** 1916 models. We are official contracting agents, and can give best delivery of any model, spare parts in stock. Elice and Co., 15-16 Bishopsgate Av., Camomile St., E.C. Phone, Avenue 5548. Trade 182-25

**MORGAN**, 1915, Grand Prix model, blue, hood, windscreens, 700 by 80 tyres, disc wheels, acetylene headlights, with D.A. outfit, oil side and tail, all accessories, little used, £110. R. Bamber and Co., Ltd., 33 Liverpool Rd., Southport. Trade 182-975

**MORGAN**, 1914, Grand Prix model, in excellent condition throughout, hood, screen, lamps, horn, etc., £85, bargain. Stour Cycle Depot, Stourbridge. Trade 182-e438

**MORGAN**, sporting, 1916, Panhard red, hood, screen, disc wheels, oversize tyres, only run 200 miles, cost £116, accept £100. Wrigley, Dale House, Thornes, Wakefield. 182-e437

**MORGAN**, Grand Prix, November, 1914, perfect order, tyres good, new Stepney back, large toolbox, hood, screen, spares, bargain, £55. Collin, Burleigh, Harlaxton Rd., Grantham. 182-c433

**MORGAN**, 8hp, standard model, tyres nearly new, hood, screen, speedometer, clock, 3 spare tubes, spare chain, etc., any trial here, £55. Leonard Hook, West End, Honiton, Devon. 182-e429

**MORGAN**, 1915, w.c., G.P., absolutely new condition, hood, screen, 5 lamps, disc wheels, bargain, £115, owner called to Colours. 18 South Bruton Mews, Bond St. 182-c369

**MORGAN**, 1916, new, latest model, Grand Prix, M.A.G. 10hp air-cooled engine, under long taper bonnet, long chassis, wider body, fitted 700 by 80 tyres, hood, screen, lamps, Stewart horn, lighter than w.c. modl, grey body, black circular wings, very smart, most comfortable, swift and very economical, did 73 miles on test one gallon petrol, immediate delivery if not sold. Potter, Morgan Specialist, Leicester Grove, Leeds. Trade 182-c397

**MORGANS**. Potter, Morgan Specialist, Leicester Grove, Leeds, invites your inquiry for any model, spare parts stocked, Stepney Road-Grip tyres, prompt attention and dispatch price right. Trade 182-c398

**MORGAN**, 1914, standard model, complete, extraordinarily good condition, had very careful expert owner, overhauled, £75, really a bargain. Layton's Garage, Bicester, Oxon. Trade 182-949

**MORGAN**, Grand Prix, No. 1 brand, new, actually in stock, water-cooled J.A.P. engine, windscreen, electric side and rear lamps, horn, footboards, disc wheels, finished black and white, complete price £122 18s. plus makers advance 5 per cent. The Walbro Motor Co., Saffron Walden, Essex. Phone, No. 45. Trade 182-c340

**MORGAN**, Grand Prix, overhead-valve engine, 700 by 80 tyres all round, new Rom combination back, lamps, screen, mechanical horn, spares, tools, etc., bargain, £98; consider exchange 1915 Matchless combination with cash adjustment. Lieut. Parkes, 12 De Montfort Chambers, Horsefear St., Leicester. 182-c343

**MORGAN**, sporting, with side door, 1914, adjustable steering rod, inside gear change, £5 car tyre on back, unpunctured, Binks 3-jet carburettor, upholstered back, 3 lamps, hood, screen, tools and spares, fast and reliable, any trial, £68 cash. Motorist, Swinton Park, Masham, Yorkshire. 182-c323

**MORGAN**, 1916, Grand Prix, overhead valves, cost £120 few days ago, used only one journey, £125. Stevens, 184 Pentonville Rd., King's Cross, N. Trade 182-993

**MORGAN**, 1914½, sporting, hood, screen, lamps, etc., original tyre back, perfect, any trial, lowest £65. Burrows, Cudworth, Barnsley, T'de 182-e412

**MORRIS-COWLEY**, 1916, model de luxe, dynamo lighting, speedometer, done small mileage, £225. G. J. Francis and Co., 22 Pantton St., Leicester Sq. Trade 182-962

**MORRIS-COWLEY**, 1916, 11.9hp, electric lighting, speedometer, 5 Sankey interchangeable wheels, new extra tyre, insurance, as new, £225. Hart-ridge, 12 Grey Friars, Leicester. 182-e424

**MORRIS-OXFORD**, 10hp, late 1913, in perfect order, £130. The Light Car Co., 331 Euston Rd., London. Phone, Museum 3143. Trade 182-23

**MORRIS-OXFORD**, quick deliveries, free tuition, etc., wholesale and retail agents for Surrey and parts of Sussex and Hants, The Haslemere Motor Co., Ltd., Haslemere. Phone, 43. Trade zzz-261

**MORRIS-OXFORD** 1914 light car, fully equipped, splendid condition, £145. Main, 36 Parade, Leamington. Trade 182-c169

**MORRIS-OXFORD**, overhauled, repainted, new standard body fitted, also van body to fit, 5 wheels, 5 lamps, bargain, £150. Roper and Wreaks, 112 Arundel St., Sheffield. Trade zzz-923

**MORRIS-OXFORD**, 1915, model de luxe, dickey seat, shock absorbers, dissolved acetylene lighting system, speedometer, air, gas, and magneto controls, valances, etc., only done 6000 miles, £155. Roper and Wreaks, 112 Arundel St., Sheffield. Trade zzz-924

**MORRIS-OXFORD** de luxe, 10hp, late 1914, painted green, black wings, 5 lamps, 5 Sankey detachable wheels, speedometer, petrol can carrier, dickey seat, good tyres, mechanically perfect, fully equipped, bargain, £185. Mebes, Light Car Specialists, 156 Gt. Portland St., W. Telephone, 3426 Mayfair. Trade 182-999

**MORRIS-OXFORD**, 10hp, late 1913, fitted special de luxe body, hood, screen, 5 Sankey detachable wheels, 5 lamps, fully equipped and ready for immediate use, splendid condition, offers. Mebes, Light Car Specialists, 156 Gt. Portland St., W. Telephone, 3426 Mayfair. Trade 182-1

**MORRIS-OXFORD**, 1913, 5 detachable wheels, 5 lamps, speedometer, excellent condition, £130. Auto Mart, 133 Hammersmith Rd., W. T'de 182-e405

**MORRIS-OXFORD** de luxe, 1914, 5 lamps, speedometer, spare wheel, Palmer cord tyres, car just repainted and overhauled, many extras, £170. Stretton and Smith, 23 Woodstock St., Bond St., W. Trade 182-970

**PERRY** cars. Sole London and District Agents. Cars and Motor Sundries, Ltd., 175-177 Shaftesbury Ave., London, W.C. Phone, 1432 Regent. Trade zzz-745

**PERRYS**, 1916, 11.9hp and 8hp models, 2-4-seaters and coupes, earliest deliveries; exchanges entertained. R. Bamber and Co., Ltd., 33 Liverpool Rd., Southport. Trade 182-462

**PERRY**, 1916, 2-cylinder, actually in stock, 140 guineas, complete. Julian's, Broad St., Reading. Biggest motorcycle and light car dealers in the south. Phone, 1024. Trade zzz-658



## LIGHT CARS AND CYCLECARS FOR SALE

(continued).

**PERRY**, 2-cylinder, not done 4000, also shed, 18 by 9, £140, any examination. 17 Spotland Rd., Rochdale. Trade 183-63

**PERRYS** in stock, latest 1916 8hp models, 3 speeds, complete, hood, screen, lamps, horn, 5 detachable wheels and tyres, £22 2s. tax and 40 m.p.g. P. J. Evans, John Bright St., Birmingham. Trade 182-939

**PERRY**, 7-9hp, 1914 model, hood, screen, spare wheel and tyre, £105. The Light Car Co., 331 Euston Rd., London. Phone, Museum 3143. Trade 182-22

**PERRY**, late 1914, 2-seated torpedo, painted green, black domed wings, hood, screen, 5 Powell and Hammer lamps, generator, speedometer, 5 Sankey detachable wheels, just overhauled, perfect condition, bargain, £125. Mebes, Light Car Specialists, 156 Gt. Portland St., W. Telephone, 3426 Mayfair. Trade 182-5

**PERRY**, 1913, in nice condition, £100.

**PERRY**, 1914, in really nice condition, £115. Percy and Co., 337 Euston Rd., London. Trade 182-988

**PERRY**, 2-cylinder, 2-seater, latest model, complete with hood, screen, 3 lamps, 5 detachable wheels and tyres, remarkably fine condition, practically new, £100. Lowe and Wood, 280 Broad St., Birmingham. Trade 182-609

**PREMIER**, 7-9, 2-seater light car, hood, screen, lamps and horn, good climber, £67 10s., or exchange. Motor Exchange, 68 Horton St., Halifax. Trade 184-944

**RITZ**, 10hp, 4-cylinder, 2-seater, £145, all on; best value obtainable, liberal exchanges. Motories, 68 Horton St., Halifax. Trade 184-945

**ROBERTSON** 7-9 cyclecar, new 1915, maker's certificate, 2-seater, cost 100 guineas, take 50, mileage 900, scarcely soiled. 10 Norwood Crescent, Southport. Trade 183-610

**ROLLO**, 8hp J.A.P. engine, variable gear, chain-cum-belt drive, seats 2 (side by side), tyre good, all accessories, £29 10s. Collier, Deal St., Halifax. Trade 184-942

**SAXON**, prompt delivery, 1916 models. Obtainable from the Pioneer Agents, Western Motor Works, Chislehurst, Kent. Phone, Sidcup 160. Trade 182-689

**SAXON**, 11-9, brand new 1916 model, slightly shop-soiled, overstocked, accept £140. Roper and Wrecks, 112 Arundel Street, Sheffield. Trade 182-925

**SAXON** cars. Although the tax is doubled, the Saxon tax is now only £6 6s. Petrol 40 m.p.g. Plenty of latest 1916 models for instant delivery. All spare parts stocked. We usually have demonstration Saxons of latest type at bargain prices. Lowe and Wood, Ltd., 280 Broad St., Birmingham. Trade 191-0197

**SAXON** new 1916 model in stock, painted cream and black, complete with magneto, £150. Tuke and Bell, Ltd., Motor Department, Carlton Engineering Works, High Rd., Tottenham, N. Trade 182-28

**SAXON**, 1916, only done few miles, disc wheels, best Saxon on the road, £145. Rey, 378 Euston Rd., N.W. Telephone, Regent 4219. Trade 182-985

**SAXON**, 1915, 2-seater, electrically equipped, self-starter and lighting set, excellent condition, Dunlop tyres, £95 net. Lowe and Wood, 280 Broad St., Birmingham. Trade 182-608

**SAXON**, 1916, special English finish, grey and black, complete, 145 guineas, latest model, brand new. Bradshaw's, The Motor House, Preston. Tel., 988. Trade 182-602

**SINGER**, 1916, 10hp, 2-seater, dynamo lighting, in stock. Palmer, 202 Great Portland St., W. Phone, Mayfair 4942. Trade 182-296

**SINGER**, phaeton or coupe, 1916 models, dynamo lighting, prompt delivery. London Depot, 17 Holborn Viaduct, London, E.C. Trade 182-339

**SINGER**, 1915, dynamo lighting set, in new condition, £240. R. E. Jones (Garages), Ltd., Swansea. Trade zzz-634

**SINGER**, 1916, standard model, lighting set, fully complete, practically as new, very little used, owner buying coupe, first nearest cheque to £245 secures. Castle Motor Co., Kidderminster. Tel., 226. Trade zzz-390

**SINGER**, 1916, 10hp., brand new. We have 2 cars in stock, both with dynamo lighting, one with dickey seat, immediate delivery, reasonable prices. Layton's Garage, Bicester, near Oxford. Phone 35. Trade 189-782

**SINGER**, 1914, dynamo, clock, speedometer, side curtains, etc., not done 6500, £165. Sykes, Arkenley, Almondsbury, Huddersfield. Trade 184-61

**SINGER**, 1914, 10hp light car, dynamo lighting, full equipment, very good condition, £180. Main, 36 Parade, Leamington. Trade 182-666

**SINGER**, 10hp, late 1913, with 1914 and later improvements, dickey, hood, screen, five lamps, speedometer, clock, overhauled, fast, £130. Simmonds, 46 Clavelly Rd., Hornsey, N. Trade 182-594

**SINGER**, 1914, dynamo, good condition, £160. Bennett, Darley Cottage, Hoole Rd., Chester. Trade 182-646

**SINGER**, 1916, 10hp, dynamo lighting, painted buff, as new, £235. The Light Car Co., 331 Euston Rd., London. Museum 3143. Trade 182-18

**SINGER**, 10hp, late 1914, 2-seated torpedo, painted buff, black wings, dynamo lighting set, 5 Sankey detachable wheels, speedometer, fully equipped, perfect condition, bargain, £127 10s. Mebes, Light Car Specialists, 156 Gt. Portland St., W. Telephone, 3426 Mayfair. Trade 182-8

**SINGER**, 1916, 10hp, brand new, actually in stock, immediate delivery.

**SINGER**, 1915, 10hp, indistinguishable from new, £220.

**SINGER**, 1914, as new, exceptionally attractive, £135

**SINGER**, 1913, in real nice order, £125. Percy and Co., 337 Euston Road, London. Trade 182-988

**SINGER**, 1914, dynamo lighting, just overhauled and repainted, bargain, £170. Rey, 378 Euston Rd., N.W. Telephone, Regent 4219. Trade 182-984

**SINGER**, 1916, 2-seater, as new, dynamo lighting. Storey's, 118 Gt. Portland St., W. Trade 182-13

**SINGER**, 1916, 10hp, just delivered from works, £250. Below.

**SINGER**, 1915, 10hp, dynamo lighting, speedometer, many extras, splendid condition, £220. G. L. Francis and Co., 22 Pantons St., Leicester Sq. Trade 182-961

**SINGER**, 1916, 2-seater, dynamo lighting, clock, luggage carrier, only run 1000 miles, indistinguishable from new, £240. Below.

**SINGER**, 1914, 2-seater, dynamo lighting, speedometer, painted brown, £180. Smith and Hunter, 15 Little Portland St., Oxford Circus. Trade 182-950

**SINGER**, 1916, 10 p cars, largely used by the Government, list with prices on application, many orders particularly solicited, special precedence in delivery. English Light Car Specialists, Robinson's Garage, Green St., Cambridge. Telephone, 388. Telegrams, "Cars." Trade 182-968

## LIGHT CARS AND CYCLECARS FOR SALE

(continued).

**SINGER**, 1915½, green, plated fittings, dynamo lighting, speedometer, Bowden extra air, petrol carrier, toolbox on running board, dickey seat, inspection lamp, spares, practically as new, done 1000 miles, nearest to £220 secures. Robson, 88 Hastings St., Sunderland. Trade 182-6436

**SINGER**, 1914, 10hp, Rotax dynamo lighting set, buff colour, repainted November last, tool equipment, hood and side curtains, 5 detachable wheels, tyres good, 1 spare cover and tube (unused), splendid condition, owner gone abroad, £180. Glead, Hauraki, Old Charlton, S.E. Trade 182-6434

**SINGERS**, new season's dynamo lighting, fully equipped, delivery from stock, £250; unequalled allowance for your car. Below.

**SINGER**, 1915, 10hp, dynamo lighting, spare wheel, speedometer, unscratched, fine condition, £220. Stretton and Smith, 23 Woodstock St., Bond St., W. Trade 182-969

**STANDARD** 1914 light car, £185. R. E. Jones (Garages), Ltd., Swansea. Cash or easy terms. Trade zzz-103

**STANDARD**, 1914, 9-5hp, 2-seater, hood, windscreen, dickey seat, 5 detachable wheels, speedometer, all lamps and accessories, first-class condition throughout, price £185, offers invited. R. Bamber and Co., Ltd., 33 Liverpool Rd., Southport. Trade 182-753

**STANDARD** 1914 light car, dynamo lighting, dickey, speedometer, etc., very good condition, £200. Main, 36 Parade, Leamington. Trade 182-616

**STANDARD**, 1914, perfect order, 2-seater, dickey seat, 5 lamps, detachable wheels, price £180. City Car Agency, 34a Queen St., City. Trade 182-947

**STANDARD**, 9.5hp, late 1914, wide 2-seated body, painted grey, chocolate line, 5 lamps, generator, 5 Sankey detachable wheels, good tyres, speedometer, dickey seat, special dash and screen, tools, etc., splendid condition throughout, bargain, £185. Mebes, Light Car Specialists, 156 Gt. Portland St., W. Telephone, 3426 Mayfair. Trade 182-3

**STANDARD** 2-seater, dynamo lighting, speedometer, clock, dickey, just repainted, £195. Smith, 15 Little Portland St., Oxford Circus. Trade 182-954

**STANDARD**, 1914 model, dickey seat, speedometer and full equipment, guaranteed £180. Service Co., 292 High Holborn, London. Trade zzz-977

**STANDARD**, 9.5hp, only run 3700 miles, complete with dickey seat, speedometer, etc., original tyres, practically new, guaranteed, £185. Bradshaw's, The Motor House, Preston. Tel., 988. Trade 182-600

**STELLITE** 9.5 light car, with dickey, spare wheel, speedometer, lamps, horn, etc., in good condition, £155. Main, 36 Parade, Leamington. Trade 182-6164

**STELLITE**, 9.5hp, 1915 model, extra wheel, dickey seat, 4 lamps, one a headlamp, good, good tyres, fully equipped, splendid condition, 37 m.p.h., over 40 m.p.h., fully insured till May, 1917, say £150 inclusive. Smart, West Knoll, Burton Rd., Derby. Trade 182-621

## NOTICE.

Owing to postal delays and irregularities, it is advisable to post advertisements EARLY ON TUESDAYS so as to ensure, as far as possible, that they reach us by the FIRST POST on Wednesdays. Lately several advertisements have been received too late for inclusion, although despatched on Tuesdays.

**STELLITE**, delivered June, 1915, this car is indistinguishable from new, has speedometer, clock, dickey seat, host of other extras, and is absolutely unsoiled, £160. Stretton and Smith, 23 Woodstock St., Bond St., W. Trade 182-971

**SWIFT**, 7-9hp, 1914, 2-seater, complete, mechanism and coachwork as new, £120. Peall, 14 Leicester St., Leicester Sq. Tel. No., Gerrard 1901. Trade zzz-54

**SWIFT**, 1914, 3-9 model, lamps, Stepney, horn, screen and usual fittings, very good order, £120. Smith, 15 Little Portland St., Oxford Cir. Trade 181-902

**SWIFT**, late 1914, perfect condition, mileage under 5000, does 45 miles per gallon, full equipment, shock absorbers, two new Dunlops, sacrifice, £100. Lucas, Polesworth, Tamworth. Trade 182-639

**SWIFT**, 1915, September, 7-9hp, 2-cylinder, hood, screen, side curtains, all accessories, Parsons non-skid chains, tyres (original) in splendid condition, mileage 1200, coachwork, etc., as new, mechanically perfect, any trial this car is a bargain at £130, cost £155 10s. Butler, 100 High St., Harlesden. Trade 182-24

**SWIFT**, 10hp, 2-seater, dynamo lighting, done 1000 miles only. Storey, 118 Gt. Portland St., W. Trade 182-15

**SWIFT** light cars, all models in stock, all prices, £65 to £225. Percy and Co., 337 Euston Rd., London. Trade 182-990

**SWIFT**, 1914, 7-9 model, lamps, Stepney, horn, screen, usual fittings, very good order, £120. Smith, 15 Little Portland St., Oxford Circus. Trade 182-952

**VICTOR** cyclecar, 8hp twin Precision engine, w.c., 2 speeds and reverse, very smart body, blue, handsomely upholstered, complete with all lamps, speedometer, hood, screen, etc., specially finished and fitted for officer, new, price £120; full particulars on application. Tylor Apparatus Co., Ltd., 11 Charing Cross Rd., W.C. Trade 182-663

**VICTOR** cyclecar, 8hp, water-cooled, hood, screen, lamps, speedometer, all on, done about 3000, climb anywhere, perfect condition, bargain, £55. Roberts, New St., Neath. Trade 182-614

**WARNE**, 8hp, 1913 (late), a new car, only used for demonstration purposes, hood and screen, three speeds and reverse, Stepney, 5 lamps, dashboard clock, speedometer, £85, a bargain. Maudes, 100 Gt. Portland St., London, W. Trade 182-933

**WHITING-GRANTS** in stock, cash or easy terms. R. E. Jones (Garages), Ltd., Swansea, London, Cardiff. Trade zzz-919

**WILLIAMSON**, the Rolls-Royce of 3-wheelers, 8hp water-cooled Douglas engine and gearbox, £126; or exchange. Motories, 68 Horton St., Halifax. Trade 184-946

## PARCEL CARS.

**A.C.** box carrier, hood, screen, lamps, etc., £50, for immediate service. Alfred Wastnage, 65 Gt. Portland St., W. Trade 185-752

**A.C.** carrier, large box-van body, nearly new, £90; ditto Gilling, new, £80. Stevens, 184 Pentonville Rd., London, N. Trade 182-994

PRIVATE OWNER  
AND TRADER

alike recognise the value of these pages for the disposal of their goods.



**MISCELLANEOUS LIGHT CARS AND CYCLECARS.**

**LONDON'S** light car and cyclecar experts. If you are considering purchase of a light car or cyclecar, call and see us; we guarantee satisfaction; exchanges arranged. Percy and Co., 37 Euston Rd., London. Trade zzz-453

**BRIGHTON.** Perry, Morgan, and other small cars. Turpin's, 22 and 29 Preston Rd. Trade 204-m843

**LIGHT CARS.** No man can be too careful in the choice of his friends; the same applies to cars. Let me choose you one. Light cars. At the time of going to press I have the following light cars in stock:—Morgan de luxe, late 1914, absolutely tip-top car, £82 10s.; Saxon, 1915, in fine running order, worth considering at £105; Crescent, friction drive, newly painted, a really useful little bus, in sound condition, £60; G.W.K.s, 1913; I have two of these, newly-painted, and in very good running order, £85 and £89; Lagonda coupe, 1915, absolutely fine condition in all parts, a great bargain at £145; Whiting-Grant coupe, electric light, electric starter, in good condition and running order, £180; Swift, 7.9, 1915, tip-top condition, full of extras, £135; Calthorpe, 1914, condition as new, full of extras, £160. New cars this week: can guarantee delivery of a brand new Singer, Crouch, Horstmann, and several other new cars. I sell cars on cash, exchange or deferred payment terms, and shall be pleased to show my stock in garage (two minutes from office). Write, wire, 'phone or call, Marian G. Paige, the only Lady Motor Dealer (12 years practical experience), 199 Piccadilly (office opposite the Piccadilly Hotel). Tel., "Womanish, London." 'Phone, Gerrard 4417. Trade 182-935

IT will always pay you to consult a specialist. We specialize in light cars and cyclecars exclusively, and if we should not have in stock just what you are looking for we can obtain it for you promptly. We charge you for this, of course, but only a nominal amount of 5 per cent. on the price paid, and you are sure of getting what you require at the lowest trade price plus our commission. This is far cheaper than paying what you may be asked to pay elsewhere. Give us a trial. We please ourselves by pleasing you, and your recommendation is worth something to us. The Light Car Co., 331 Euston Rd., London. 'Phone, Museum 3143. Trade 182-19

**CASS'S MOTOR MART**, at the time of going to press, have the following light cars actually in stock:—Enfield, 1915, £170; A.C., 1914, 10hp, £165; Morgan, G.P., new 1916, £135; Morgan, 1915-16 improvements, £120; Morgan, G.P., 1914, £112 10s.; G.W.K., 1913-14, £105; G.W.K., 1913, £105; G.W.K., 1914, £80; G.W.K., 1912, £87 10s. All above cars overhauled, repainted, guaranteed 3 months, 12 months insurance free, tuition free, exchanges, no combinations, deferred terms 5 per cent., trials free. For full particulars of above cars see small ads. If you do not see what you require, call, 'phone, wire or write, same may have arrived after going to press, as you observe our stock is always changing. If you are in want of a light car, it will pay you to inspect our stock of guaranteed light cars before going elsewhere. You will not regret doing so. Remember, we are always willing to purchase or exchange first-class light cars as per our "Want'd" advertisement, for cash. We will personally call and inspect your car within 150 miles. Above cars can be seen and tried at our only address, 5 Warren St., Euston Rd., W. Museum 623. Trade 182-35

**CYCLECAR**, J.A.P., 8-10, fast, racy, splendid machine, almost new. £50; piano part exchange. Watson, 72 Station Rd., Redhill. 182-c324

IF you are in want of a good light car, you cannot do better than pay a visit to the showrooms of F. Mebes and Sons (Est. 1893), who hold one of the largest stocks in London; cars from £50 to £250. 156 Gt. Portland St., W. Telephone, 3426 Mayfair. Trade 182-997

**J.A.P.**, 8hp, sporting 2-seater, hood, screen, wire wheels, excellent hill-climber, new condition throughout, £65. Beardshaw, Auctioneer, Wood Green. Trade 182-418

IN stock, 1 new Grand Prix Morgan, painted blue; 1 de luxe model Morgan, complete, run about 3000 miles, M.A.G. engine, rock bottom price, £90; 1913 de luxe Morgan, £65; Saxon car, only been on the road three times, lamps not been lit, fitted with 1-guinea Watford speedometer, new stepney wheel, tyre and tube extra, large toolbox fitted on step, Bosch magneto, cost £182 10s., take £140 quick sale. Messrs. James and Co., 263 Ecclesall Rd., Sheffield. Tel., 2460. Trade 182-976

**MISCELLANEOUS.**

**ACCUMULATORS.** Over 100 sizes always in stock. The cheapest and best house in the trade for reliable accumulators for car lighting, ignition, etc.; stock of slightly shop-soiled accumulators at greatly-reduced prices. The Essex Accumulator Co., 497-499 Grove Green Rd., Leytonstone, London, N.E. Trade zzz-505

**LIGHT-CAR** manufacturers and dealers requiring cheap but well-made and reliable sets of torpedo electric-lamps of British manufacture should communicate with the Essex Accumulator Co., 497, 499 Grove Green Rd., Leytonstone, London. Trade zzz-183

**ALUMINIUM** number plates, best quality, any number, raised letters, very handsome, 9s. 6d. per pair. Freeman, Oakes, Devonshire St., Sheffield. Trade zzz-805

**CYCLECAR** components: Channel steel reinforced wood frames, with quarter-elliptic springs, £4 5s. 3d.; countershafts, friction sets, axles, wheels. Denby and Co., Ltd., Ilkley. Trade zzz-836

**BARGAINS.** 22 mm. Zenith carburettor, 55s.; 18 mm. Claudel-Hobson, 50s.; 23 mm. Solex, 45s.; powerful hand mechanical horns, 17s. 6d. (each where 35s.); several 1, 4 and 6-cylinder Bosch magnetos; quantity of new and second-hand acetylene, electric and oil side and rear lamps; also small headlights, generators, horns (all sorts), whistles, accumulators, vulcanizers, speedometers, tyres, Stepneys, mirrors, mascots, clocks, etc.; all goods on approval. H. Smyth, Ltd., 53 Museum St., W.C. Trade 182-c391

**J.A.P.**, 8hp, air-cooled, 2-cylinder, fitted Bosch waterproof magneto, carburettor, starting handle, etc. nearly new, £15. Elephant Motor Mart, 10-18 Elephant Rd., London, S.E. Trade 182-928

**TYPEWRITERS**, Remington 7, £4; Empire visible writer, £3 15s.; both excellent condition; particulars and specimen. 22 Rock St., Finsbury Park, N. 182-1648

**LIGHT** car chassis, 650 by 65 wire wheels, nearly new tyres, countershaft and variable, belt drive, ready for engine, £12. Elephant

**LIGHT** car pressed-steel frames, 7 ft. 6 in. wheelbase, 29 ins. wide, in-swept front, 25 ins. wide, fitted engine frame and spring brackets, new, £23; set quarter-elliptic springs for same, 27s. 6d.; 650 by 65 ball-bearing wire wheels, fitted spindles, 27s. 6d. pair; 1 5/8 in. steering wheels, aluminium centre, black finish, 12s. 6d. Elephant.

**RADIATORS**, latest type, pointed front, 18 ins. wide, 18 ins. high, polished brass with copper tubes, £4; large stock tanks at low prices. Elephant Motor Mart, 10-18 Elephant Rd., London, S.E. Trade 182-926

**MISCELLANEOUS (continued).**

**TWIN** Fafnir water-cooled engine, vertical, 6-8hp, complete with magneto, silencer, clutch, £10; also two-speed and reverse gearbox, with sprockets for chain drive, £4; chains, 15s.; also underslung light tubular chassis with springs, steering, chain drive, differential wheels, tyres, etc., £25; radiator, 25s.; consider offers, lot or exchange Douglas. Dickinson, Gt. Nelson St., Liverpool. 182-c347

**STRONG**, nearly-new, 650 by 65 back wheel for 3-wheeler, complete with belt rim and Palmer cord tyre, 50s.; set quarter-elliptic 6-leaf springs and shackles, 12s.; rack-and-pinion steering column, 10s.; pair high-powered field glasses in leather case, 30s. G.L.S., Oak Lodge, Brook Lane, Sarisbury Green, Hants. 182-c344

**FOLDING** screen and hood, both practically new condition, suit light car or cyclecar, offers; 2 trembler coils and Sthenos carburettor; Rudge motor-cycle, fine order, £24 or near offer. Motor, 5 Westfield, Park Road, Farnborough, Hants. 182-c316

**8hp ENGINE**, 80 mm. bore, 2-cylinder, m.i.v., Simms-Bosch magneto, £28 10s.; 4 wire wheels, 700 by 80, tyres and axles, £24 10s. Mitchell, 8 Ditchling Rise, Brighton. 182-c432

**ACCESSORIES.**

**STEWART-PRECISION** carburettor, 1 in., fitted hot-air jacket, used on 1915 9 h.p. Hillman, offers wanted. Squire, 38a King William St., E.C. 182-c330

**SHOCK** absorbers, J.M. twin, sell or exchange 700 by 80 tyres. Watson, 76 Lewin Rd., Streatham. Telephone, 580. Trade 182-c426

750 by 90 **COVER**, head, side and tail lamps, horn, accumulator, carburettor, new sparking plugs, mirror, jack. Beardshaw, Auctioneer, Wood Green. Trade 182-c419

**BODIES.**

**SMALL** torpedo 2-seater, fitted hood, screen, and petrol tank, £5. Elephant Motor Mart, 10-18 Elephant Rd., London, S.E. Trade 182-927

**TWO-SEATED** Saxon bodies, latest Improved type, complete with hood and screen, brand new, painted dark blue, £10 10s. each. Lowe and Wood, 280 Broad St., Birmingham. Trade 182-c407

**EXCHANGES.**

**EXCHANGE.** Motor-bicycles and light cars taken in part exchange for light cars, balance in cash or extended payments as preferred. Service Co., 232 High Holborn, London. Trade zzz-689

IF you wish to effect an exchange of any description, consult the specialists. We please ourselves by pleasing you. The Light Car Co., 331 Euston Rd., London. 'Phone, Museum 3143. Trade 182-21

**LIGHT** car, suitable for lady, wanted in exchange for 4hp water-cooled Humber combination, Bramble sidcar, hood, screen, and every possible refinement, all accessories and spares, guaranteed perfect, new June, 1915, appearance as new, owner called up. Britain, 27 Waterloo Bridge, London. 182-c333

8-10 w.c. **LIGHT** 2-seater, 2-cylinder, 3 and reverse, torpedo body, 700 by 80 wire wheels, hood and screen, lamps, fast and reliable, £60, or exchange with £50 for light 4-seater; approval and trial Sundays only. 59 Central Park Rd., East Ham. 182-c320

**EXTENDED PAYMENTS.**

**EXTENDED** payments; all makes supplied; lowest terms. Service Co., 292 High Holborn, London. Trade zzz-688

**ALBERT LAW** (late motorcar manager for Wm. Whiteley, Ltd.). Deferred payment specialist, is now the managing director of the Purley Motor Garage, Ltd., Purley, Surrey. All makes of cars supplied by deferred payments, and he will be glad to advise on these matters free. Ring up 103 Purley (not a trunk call from London), or write, when you can be assured of his personal attention. Trade 189-433

**INSURANCE** policies. Annual premium payable monthly without extra cost; lowest rates and full insurance for light cars and cyclecars. For prospectus of Lloyd's motor policies write Manager, General Insurance Co., 199 Piccadilly, London, W. zzz-992

**FOR HIRE.**

IF you want to hire a Standard, Calcott, Singer or any other make light car, for a day, week-end, week, or month, call at Warren's, 386 Euston Rd. 'Phone, 3081 Museum. Trade zzz-509

**HOODS AND SCREENS**

**HOODS** for light cars, 55s.; hoods re-covered in black waterproof leatherette, 45s.; in khaki, 25s. Stockport Garage Co., 37 Wellington Rd. N., Stockport. Trade zzz-189

**BUNYAN SHIELD** and **HOOD CO.**, removed to 4 Worcester St., Wolverhampton. Old-established manufacturers, hoods and screens; light car hoods speciality; hoods re-covered and repaired; expedition and experience. Trade 182-d553

**TODD** and **CO.**, Duncan St., Islington. Shop-soiled hood and screens, suitable Morgans, etc., cheap; hoods recovered. 'Phone, 249 North. Trade 185-c387

**LIGHT** car hoods, 50s.; windscreens, 35s.; hoods re-covered. Lang and Webb, Jackson Rd., Holloway, London. Trade 182-j641

**INSURANCE.**

**WHY** pay your insurance premium a year in advance when you can pay monthly without extra cost? Lowest rates and full insurance for light cars and cyclecars. Annual premium payable monthly. For prospectus of Lloyd's Motor Policies, write Manager, General Insurance Co., 199 Piccadilly, London, W. zzz-970

**PATENT AGENTS.**

**PATENTS.** Inventors advised free. Write for booklet. King's Patent Agency, Ltd., 165 Queen Victoria St., London, E.C. 182-920

**REPAIRERS.**

**THE AZ-NU** Works, 21 Risinghall St., Pentonville, N., radiator, lamp and welding specialists, American radiators a speciality. Trade zzz-817

**OVERHAULS** to any make of light car. Morgan expert, official repairer to the Morgan Co., all parts in stock; fully-equipped workshop; experienced mechanics; best work only, moderate charges. S. Hall, Stevenage, Herts., 30 miles from London on the Great North Rd. 186-127

**"THE LIGHT CAR AND CYCLECAR"** is the best medium and has the largest circulation.



**REPAIRERS (continued).**

**RADIATOR** and lamp repairs by skilled workmen, lowest prices, quickest delivery, no cure, no pay. Lloyd Motor Radiator Co., 377 Monument Rd., Birmingham. 187-1488

**LAMP**, radiator and magneto repairs by practical men; also plating; highest class work only, at lowest prices; prompt attention; large stock of lamps and magnetos. Smyth, Ltd., 53 Museum St., W.C. 182-c392

**SITUATIONS VACANT.****Defence of the Realm Act**

REGULATION 8 (b).

*Under the above regulation, advertisements offering situations with firms whose works are situated within 30 miles of London and whose business consists wholly or mainly in engineering, ship-building, or the production of munitions of war, or of substances required for the production thereof, must contain the words:—“NO PERSON ENGAGED ON GOVERNMENT WORK OR RESIDENT MORE THAN 10 MILES DISTANT NEED APPLY.”*

*When the advertiser's works are situated more than 30 miles from London all applications must be made through a Labour Exchange, by means of a box number allocated by the Board of Trade. Forms of application may be obtained from any Labour Exchange, or from the offices of this paper. Each advertisement must clearly state that no person already engaged on Government work need apply.*

**TUITION.**

**THE** Motor Training Institute Ltd., appointed by the Royal Automobile Club since 1907. Write for free illustrated prospectus, or call and inspect our institute, 10 Heddon St., Regent St., W., or the works: 21a London Rd., St. John's Wood, N.W. zzz-221

**BRIGHTON.** Turberville Motor School for ladies and gentlemen and their servants. Driving instruction cars, new 1915 model. Technical rooms filled with complete working chassis. Lady instructor for ladies. Prospectus free. Bath St., Seven Dials. 'Phone, 371 Brighton. 220-512

**BRIGHTON.** Learn to drive in comfort and safety at the Turberville Motor School, Bath St., on an up-to-date new 1915 model car. Prospectus free. 'Phone, 371 Brighton. 220-513

**TYRES AND TUBES.**

**ST. MARTIN'S.** The cheapest house for all kinds of accessories, new and second-hand. Write for our giant list.

**ST. MARTIN'S.** Tyres and tubes for light cars, hundreds of bargains, new and second-hand; our prices are the lowest; write, mentioning requirements, or call.

**ST. MARTIN'S.** Stepney wheels from 25s.; also liners, gaiters, etc.

**ST. MARTIN'S.** Retreading and repairs of all descriptions.

**ST. MARTIN'S.** We supply all your requirements. We can buy or sell your car on commission. We can quote you for tyres, lamps, lighting sets, magnetos, carburettors, etc. Call or write, St. Martin's Motor Works, 12 Upper St. Martin's Lane, London, W.C. (one minute from Leicester Sq. Tube). Telephone, Regent 5070. Trade zzz-196

**COVERS,** 1 pair Goodrich Safety Tread, cost £4 14s., used 400 miles, almost new, 32s. 6d. each; also pair new Harrod's Shell covers for disposal at 15 per cent. discount from list price. Layton's Garage, Bicester, Oxon. Trade 182-943

**ECONOMIC.** Continental 650 by 75 and 700 by 80, very heavy rubber-studded covers, 31s. 6d.; Palmer cord heavy 3-ribbed cyclecar covers, fully guaranteed, latest pattern, 700 by 80 50s., 710 by 85 57s. 6d.

**ECONOMIC.** Kempshall special oversize non-skid, 700 by 85 and 26 by 3, for 650 by 65, in stock; special allowance for old covers.

**ECONOMIC** for 30 by 3 and 30 by 3½ Ford covers and tubes, in stock. Special terms to commercial users.

**ECONOMIC** for all requirements. Lamps, speedometers, etc.; quickest despatch, keenest prices; retreading and repairs; a tread for every casing.

**ECONOMIC TYRE CO.,** 137 Lewisham High Rd., New Cross. 'Phone, New Cross 1393. Open till 9; early closing Thursday. Trade 182-1639

**COVER,** heavy Michelin, 750 by 65, unused, offers, or exchange inner tubes, 815 by 105. 65 Crayford Rd., Erith, Kent. 182-e403

**WANTED.****Cars.**

**WANTED,** for cash, immediately, any makes, second-hand light cars. Rey, 378 Euston Rd. Tel., Regent 4219. Trade 211-c420

**WANTED.** Good second-hand or new light cars purchased for cash or taken in exchange for new cars or motorcycles. Service Co., 292 High Holborn, London. Trade zzz-253

**IF** you want to dispose of your light car, we will give you good market value, spot cash down, no delay; no models previous to 1913 wanted. Ring up Holborn 5777, or write Wauchops's, 9 Shoe Lane, London. Trade 183-324

**THE** Car and Tyre Mart will purchase your car for cash; distance no object; expert advice gratis. Write, 'phone or wire, 113 and 114 Long Acre, W.C. Trade zzz-732

**WANTED,** light cars, cyclecars, spot cash paid, bring or send. Wandsworth Motor Exchange, Ebner Street, Wandsworth (Town Station). Trade 186-b514

**WANTED,** Morgan runabouts, fair prices given for clear purchase, or taken in part payment car or motorcycle. James Fryer, Ltd., Commercial Road, Hereford. Trade zzz-303

**WANTED,** a large number of modern cars for spot cash. We pay the absolute tip-top market prices. No sale on commission business done. Cars purchased on sight for cash only. Distance no object. Write, wire, or 'phone us. The Motor Car Supply, 330 Euston Rd., N.W. 'Phone, Regent 4955. Trade zzz-673

**HUMBERETTE,** Singer, Calcott, Standard, or any good make for cash. J. Phillips, 164 Elm Park Mansions, Park Walk, S.W. zzz-758

**WANTED—Cars (continued).**

**WANTED,** light car, 1913-1914, Lagonda, Horstmann, Le Gui, or similar, cheap, good order, £25 down, balance instalments, Midlands. Box N. 1122, c/o "The Light Car and Cyclecar." 184-d9.1

**WE** specialize exclusively in light cars and cyclecars and are always open to buy any make. Offer us what you have for sale. We please ourselves by pleasing you. The Light Car Co., 331 Euston Rd., London. 'Phone, Museum 3143. Trade 182-17

**CASS'S MOTOR MART** require to purchase A.C., Calcott, G.W.K., Hillman, Humberette, Morgan, Morris-Oxford, Perry, Singer, Standard and Swift light cars. Mr. Cass will personally call and inspect your car free of charge, within 150 miles. 5 Warren St., Euston Rd., W. Museum 623. Trade 182-31

**F. MEBES and SONS** (Est. 1893), the original light car specialists, pay best market prices for high-class light cars. Write fullest particulars, or call with car; prompt cash. 156 Gt. Portland St., W. Telephone, 3426 Mayfair. Trade 182-996

**PERHAPS** you are disposing of your cars, if so, give us a chance; cash paid on sight. Percy and Co., 337 Euston Rd., London. 'Phone, Museum 1337. Trade 182-987

**LAMBORN MOTORS, LD.,** require at once a large number of light cars of the following makes, very best prices given:—Singer, Standard, Calcott, Hillman, Morris-Oxford. 3 Elizabeth St., Victoria, S.W. 'Phone, 6111 Victoria. Trade 182-c388

**LIGHT** car, lady is prepared to pay fair price for modern light car. Miss, 81 Wilberforce Rd., Finsbury Park, N. 182-c382

**WANTED,** Calcotts, Singers, Morris-Oxfords, Standards, Hillmans, Humberettes, G.W.K.s for spot cash, new or second-hand, good prices. Maundes', 100 Gt. Portland St., London, W. Trade 182-334

**CALCOTT** open 2-seater or coupe, detachable wheels essential, 1914 or later. A.B., 68 Sinclair Rd., Kensington. 182-1645

**WANTED,** light car, 1914-15, well-known make, perfect, for cash. Fullest particulars. Write, A. Neville, 17 High St., Kingston, S.W. 182-c391

**WANTED,** a 1915 10hp a-c. light car, would consider a 1914 provided in good condition. Box No. 8172, c/o "The Light Car and Cyclecar." 182-c335

**WANTED** for cash, small cyclecar, in good condition, 1914 or 1915. Particulars, 273 Caledonian Rd., N. 182-c328

**WANTED,** G.W.K., good condition, London district, state equipment, date, and price. Atkinson, 107 Highbury New Park, N. 183-c327

**WANTED,** light car or cyclecar in exchange for 1913 Centaur-Humber coach-built combination and cash to balance, 34hp, 3 speeds, kick-starter, Powell lamps, horn, and accessories, or sell, £36. 28 Dallin Rd., Bexley Heath. 182-c319

**PRIVATE** motorist wants 4-seated light car, not earlier 1914; state what fittings, accessories, condition of tyres, and lowest cash price, privately-owned preferred. Address, Economy, 1 Carlisle Villas, Hastings. 182-c351

*These advertisements are now set in smaller type to meet the Government demand for economy in paper. At the same time the distinctive style of the setting makes it as easy as before to find the advertisement of any particular make of car.*

**IMMEDIATE** cash for good privately-owned light car, Calthorpe, Singer Calcott, or any good make. Box No. 8176, c/o "The Light Car and Cyclecar." 182-364

**G. L. FRANCIS and CO.** want several good light cars, not earlier than 1914; good prices given. 22 Pantton St., Leicester Sq. Trade 182-963

**SMITH and HUNTER,** 15 Little Portland St., Oxford Circus, will buy Calcotts, Standards, Singers, and Morris-Oxfords for cash, or sell on commission; cars collected any distance; definite offers made by return of post. Trade 182-955

**WANTED,** water-cooled Grand Prix Morgan de Luxe, with screen and hood. M. W. Green, Butcher, Alconbury. 182-c425

**STRETTON and SMITH** will pay top prices for Stellites, Calcotts, Singers, Morris-Oxfords, Perrys, or any other modern cars of reputed make. 23 Woodstock St., Bond St., W. Trade 182-974

**Wanted—Miscellaneous.**

**THE** Editor of "The Commercial Motor" will be pleased to be advised of any stocks of old type or obsolete commercial-vehicle spare parts, as well as of spares for those touring-car models which are commonly used for conversion to delivery vans, etc. Particulars should state types and principal parts available, and these will be included in the Spare Parts Bureau list published regularly in the editorial columns of "The Commercial Motor." Letters should be marked "Spare Part," and addressed to The Editor, "Commercial Motor," 7 Rosebery Av., E.C. zzz-75

**WANTED,** a-c. Humberette cylinder. M. Bartlett, Ye Firs, Plympton, Devon. 183-c330

**WANTED,** set Harcourt radiators for 1613 Humberette. Engineer, Electricity Works, Bray, Co. Wicklow. 182-c229

**BOOKS AND PUBLICATIONS.**

**"MOTORISTS' HANDBOOK,"** containing 200 questions and answers; a most useful and instructive book; the novice should always keep a copy on his car, price 1s., by post 1s. 3d. The Motor Training Institute, Ltd. (Dept. D), 10 Heddon St., Regent St., W. zzz-887

**"THE LIGHT CAR MANUAL."** Written throughout with a scrupulous choice of the simplest wording. Makes every detail of the light car clear as it goes along. Economical running and upkeep specially considered, and all driving problems dealt with. Contains a most instructive section on the control systems of most light cars now on the market. Price, bound in cloth 1s. 6d. net, in paper 1s. net, postage 1s. 9d. and 1s. 3d. respectively from "The Light Car and Cyclecar" Offices, 7-15 Rosebery Av., London, E.C. zzz-694

**"THE MOTORIST'S WORKSHOP."** The ideal book for every owner of a light car or cyclecar who wishes to undertake his own repairs. Clearly and entertainingly written. Illustrated, 1s. net, post free 1s. 2d., from "The Light Car and Cyclecar" Offices, 7-15 Rosebery Av., London, E.C.



## BOOKS AND PUBLICATIONS (continued).

**"SECRETS OF TUNE."** How to get the best results out of a motorcycle. Written by the foremost riders on track and road. Exclusive information on getting more power and speed from a machine. Price 6d. net, post free. "The Light Car and Cyclecar" Offices, 7-15 Rosebery Av., London, E.C.

**MAP OF FIFTY MILES ROUND LONDON.** A clearly-drawn map on the scale of four miles to the inch. Roads coloured brown, no detail of importance omitted. Includes such widely-separated towns as Harwich and Portsmouth and Dover and Oxford, and covers the whole of Middlesex, Surrey, Sussex and Kent, and large parts of Essex, Hants., Herts., and Bucks. On paper 1s. net, mounted on linen 1s. 6d. net, postage 1d. extra. "The Light Car and Cyclecar" Offices, 7-15 Rosebery Av., London, E.C.

**"HOW TO BUILD A CYCLECAR."** The very book for the amateur craftsman who is considering the possibility of building his own machine. Copiously illustrated with 94 scale drawings. 1s. net, post free 1s. 2d., from "The Light Car and Cyclecar" Offices, 7-15 Rosebery Av., London, E.C.

**"OBTAINING INCREASED POWER,"** by A. W. Judge, A.R.C.Sc., Wh.Sc. This book is designed for the assistance of the cyclist and light car owner. It is copiously illustrated with diagrams. It deals most thoroughly with the question of efficiency, and sets out in clear language the means by which the utmost power may be got out of the machine. 6d. net, post free 7½d., from "The Light Car and Cyclecar" Offices, 7-15 Rosebery Av., London, E.C.

**"THE PROFILE ROAD BOOK OF ENGLAND AND WALES."** The best road book extant. All the main roads and many cross routes are dealt with. A profile plan is given of every road, by which its ups and downs and distances can be seen at a glance. Road surfaces described. Bound in cloth 1s. net, post free 1s. 1½d., from "The Light Car and Cyclecar" Offices, 7-15 Rosebery Av., London, E.C.

**"THE MOTOR BOAT MANUAL,"** 6th edition, revised. The standard guide to the motor boat for pleasure purposes. How launches and yachts are built. Various types of motor boats. The working of the marine internal-combustion engine. Useful scale plans of motor boats. Bound in waterproof cloth; 180 pages, over 150 illustrations. 1s. 6d. net, post free 1s. 9d., from "The Light Car and Cyclecar" Offices, 7-15 Rosebery Av., London, E.C.

**"HOW AND WHERE TO TOUR BY MOTORCYCLE AND CYCLECAR."** A book on touring written from an entirely new standpoint—that of the motorcyclist and cyclist. Forms a guide to guidebooks, tells of best methods of preparing for tours. Specially planned routes suitable for light cars and cyclecars. 1s. net, post free 1s. 2½d., from "The Light Car and Cyclecar" Offices, 7-15 Rosebery Av., London, E.C.

**PROFILE ROAD BOOK.** The best road book extant. Covers the whole of the country, giving profile plans showing "ups and downs" of the roads. 1s. net, post free 1s. 1½d., from "The Light Car and Cyclecar" Offices, 7-15 Rosebery Av., London, E.C.

**"LIGHT CAR AND CYCLECAR" TWIN MODEL.** Many users of V-type twin engines are doubtful as to the exact positions of the pistons in the cylinders owing to the slight overlap. The working model makes this plain, showing at the same time the positions of valves and magneto contact breaker. 6d. net, post free 7d., from "The Light Car and Cyclecar" Offices, 7-15 Rosebery Av., London, E.C.

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All advertisement orders are subject to confirmation in writing from the Head Offices.

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Whilst every precaution is taken to ensure accurate printing, the Publishers will not be responsible for printer's errors, nor will they be responsible for advt. blocks that are left in their possession for more than one year.

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	12 ms.	6 ms.	3 ms.
United Kingdom .. .. .	6s. 6d.	3s. 3d.	1s. 8d.
Canada .. .. .	8s. 6d.	4s. 4d.	2s. 2d.
Elsewhere .. .. .	10s. 0d.	5s. 0d.	2s. 6d.

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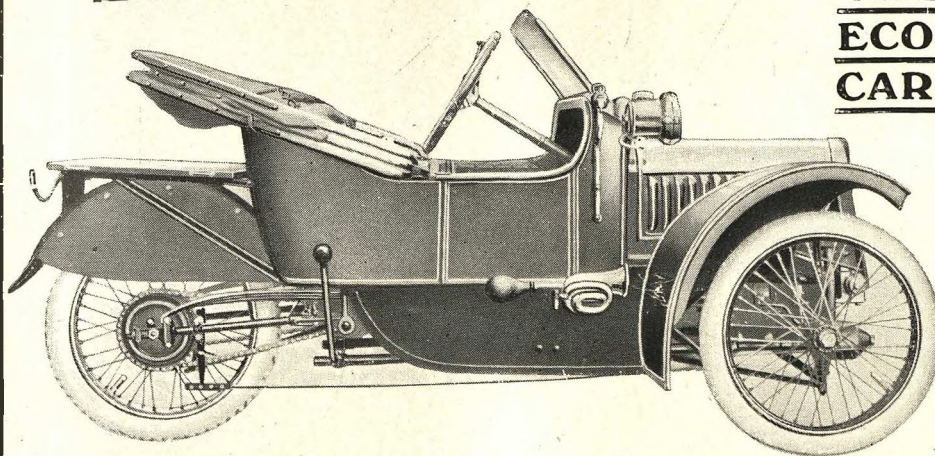
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