

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

1<sup>D</sup>

Vol. V. No. 121  
15<sup>th</sup> March, 1915  
*Registered at the G.P.O.  
as a Newspaper*

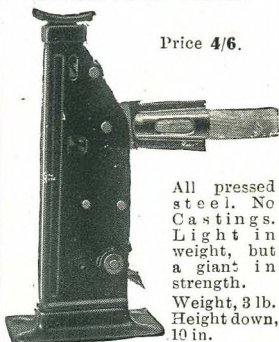


Rakaia Gorge  
New Zealand



### THE "LITTLE GIANT" LIGHT CAR JACK.

Price 4/6.



All pressed steel. No Castings. Light in weight, but a giant in strength. Weight, 3 lb. Height down, 10 in.

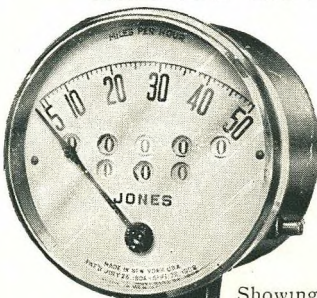
### "BROWN" OIL BOX. The Automatic Lubricator of Leaf Springs.



Feeds oil automatically between the leaves of the springs by capillary attraction, ensuring ease and more comfort. Easily attached. Price 5/6 each.

# The JONES SPEEDOMETER

STEADY AS A ROCK.



### NEW 'FORD' MODEL

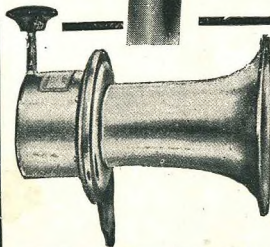
with all fittings,

**£2 : 15 : 0**

A GENUINE JONES  
SPEEDOMETER.

Showing Speed to 50 m.p.h.,  
total and trip mileage.

IN BLACK FINISH.

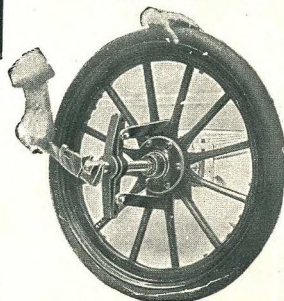


### THE "LONG" MECHANICAL HORN.

Reduced Price for  
1915,  
**25/-**

Hand actuated.

### THE "LITTLE GIANT" WHEEL PULLER.



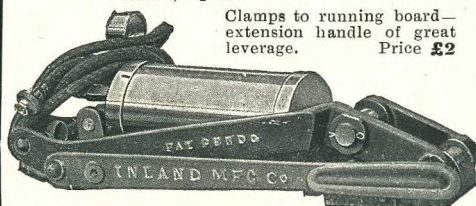
Price,  
per set,  
**28/-**

Complete with long and short arms. Quickly removes the most obstinate wheels without risk of damage. Three adjustments for large or small diameter hubs. **Indispensable.**

### "INLAND" HAND AIR PUMP.

A compact collapsible pump for car or garage. Length over all, with handle folded, 15½ in.

Clamps to running board—extension handle of great leverage. Price **£2**

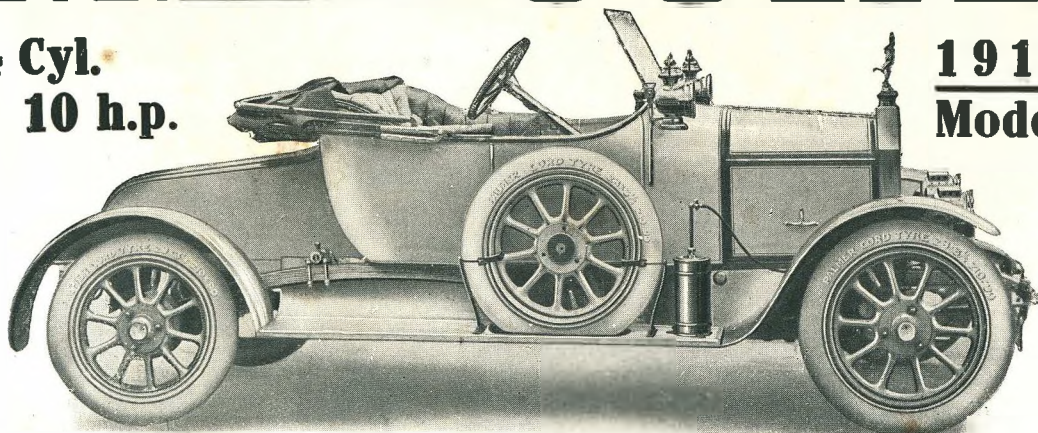


**MARKT & CO. (LONDON), LTD., 98-100, CLERKENWELL ROAD, E.C.**

# MERCURY

**4 Cyl.  
10 h.p.**

**1915  
Model**



2 Seater with Dicky, finished to suit individual taste, upholstered in real leather, fully equipped, including spare wheel and tyre (Palmer Cord Car tyre 710 x 90), hood, screen, lamps, generator, electric horn, dash clock, speedometer and mascot.

**Mercury Works,  
May Road,  
Twickenham, S.W.**

**£200**

**Showrooms and Offices:  
110, HIGH STREET, MARYLEBONE,  
LONDON, W.**

where all communications should be addressed.

Telephone: 8873 Mayfair.

Telegrams: "Obotrit, London."



# The right-of-way—without delay

## SPARTON Warning Signals

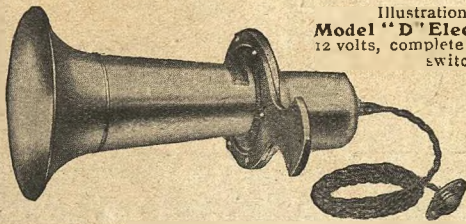


Illustration shows  
Model "D" Electric Sparton  
12 volts, complete with wire and  
switch.

Black finish,  
with metal  
mounts,  
each 60/-

All brass,  
65/-

Sparton Horns are made in various sizes and styles for electric or mechanical operation. The tone of each model can be modulated to suit individual taste.

The tone is commanding and instantly secures a clear way in any traffic. Should conditions demand a long-range signal the Sparton may be heard a long distance ahead. The note can be heard above any noise, and the warning is instantaneous.

The motor of the Sparton Electric Horn is constructed to operate on the lowest possible current consumption, to give the greatest volume of sound.



### CIGAR LIGHTER

This Model has a spring-controlled drum fitted in the circular base on which the flexible cable is coiled up out of sight as the lighter is replaced after use, so that no wires are left hanging about while the lighter is not in use.

Model II. Complete as illustrated. No. B61/80. Nickel plated ... each 32/-

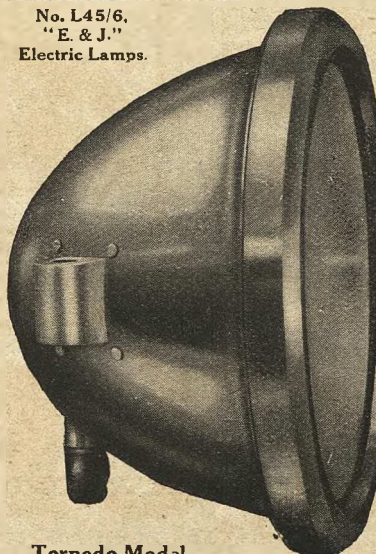
### One-way Switch,



for ...  
Electric Light.  
No. L56/12  
each 1/6

## E & J ELECTRIC LAMPS

No. L45/6,  
"E. & J."  
Electric Lamps.



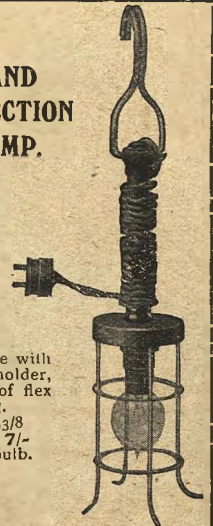
Torpedo Model.

Brass or Black ... 30/- each  
Nickel-plated ... 32/6 "

"E. & J." Lamps are made in the largest and best-equipped lamp factory in the world. Both Gas and Electric models are scientifically constructed to project the maximum amount of light. The construction embodies the latest ideas in the art of lamp making, and the special method of drawing the body of the lamp from one piece of heavy gauge metal makes them handsome in design and substantial in construction. All gas headlights are fitted with lens mirrors. Neat in design and appearance, strongly made, "E. & J." Lamps are suitable for any car regardless of make or price.

"E. & J." Lamps are sold by all Motor Dealers and Garages.

### HAND INSPECTION LAMP.

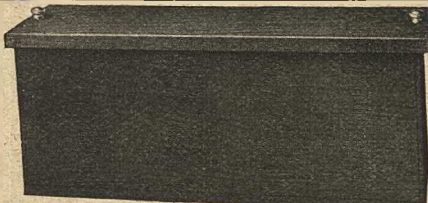


Complete with glass, holder, 12 feet of flex and plug.  
No. L53/8  
each ... 7/-  
Less bulb.

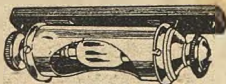
### "Veena" Electrical Adapter



that will fit on the burner of almost every paraffin lamp on the market. A simple and cheap means of converting an oil lamp. Standard bayonet for small filament bulbs. No. L57/1. Each ... 2/-



"B.B.L." Car Lighting Batteries. Guaranteed 1 Year. These batteries are the result of our careful consideration on the question of car lighting by electricity, and we are now able to place these thoroughly reliable lighting sets on the market at a very moderate price.  
Price from £2 10 0 upwards.



THE "AUTOCLIPSE" REVOLVING SHUTTER SCUTTLE DASH LAMP.  
No. L51/6

Brass or nickel-plated (less bulb) each ... 11/6

### "Autoclipse" Metal Filament Bulbs.

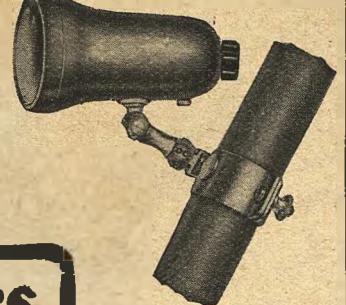


The filaments are of drawn tungsten wire (stronger than steel) wound into the form of a helix, and are situated in the bulb in the position which permits of the maximum range of adjustment for the focusing device attached to the head lamp.

4, 6, 8, and 12 volt.  
Prices from 1/4 to 4/6 each.

All the Goods on this page are obtainable from Motor Dealers, Garages, etc.

### "AUTOCLIPSE" ELECTRIC STEERING COLUMN LAMP.



Fitted with switch and double ball joint. Fittings S.B.C. Less bulb. A high-class well-finished Lamp No. L51/1 Brass or plated. Less bulb ... each 13/6.

# Brown Brothers

Wholesale—GREAT EASTERN ST., LONDON, E.C.  
267-273, Deansgate, Manchester. Showrooms—15, Newman Street, W.  
South African Representative: E. G. HIGGINSON, P.O. Box 1269, Johannesburg.

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.

A1



# STEPNEY TYRES



*For Quality,  
Life & Grip.*

STEPNEY TYRES are all British and embody the finest quality of materials and workmanship obtainable.

*Made in all sizes  
for Cyclecars.*

**THE STEPNEY SPARE MOTOR WHEEL, LTD.,**  
STEPNEY WORKS, LLANELLY. And of All Agents. 168, Great Portland Street, LONDON, W.

The oldest established. With over 20 years specialised experience.

Originators of radial weave for clutches, sheets for repair work, die pressing for heavy service (sole patent rights held by us), etc., etc.

The only linings used in the Tourist Trophy, Grand Prix, and many other races.

Over 600 sizes stocked.

Consult us freely—we know more about brakes and clutches and their troubles than all other firms combined.

List M 13 from

**THE HERBERT FROOD COMPANY, LIMITED,**  
CHAPEL-EN-LE-FRITH.

'Phone—19 and 20.

788 Museum.

And 39, Upper Rathbone Place, LONDON, W.

Wires—"Friction."

"Frodobrake, Ox."



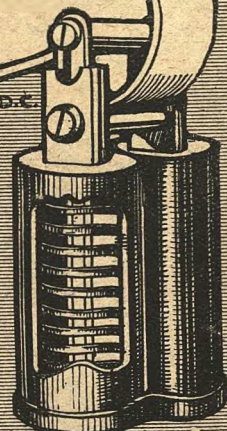
**Why  
endure?  
when  
you  
can  
cure**

all the jars and jolts which shook you about so last year. The J.M. Shock Absorber can and will do it, as at least 100,000 owners found to their satisfaction. Not only are they pounds in pocket on what they save in repair bills, tyre bills and chassis wear, etc., but they also enjoy the infinitely greater comfort obtained by these wonderful aids to luxurious suspension. Their price is low, they are easily fitted, and there is a 10 years' guarantee with each pair. Stocked by all Dealers and Garages.

A Booklet giving all particulars will be sent by return on receipt of postcard.

**J.M. SHOCK ABSORBERS,**  
92, Gloucester Rd., London, S.W.

**J.M.** The Shock Absorber  
with a 10 Years  
Guarantee :

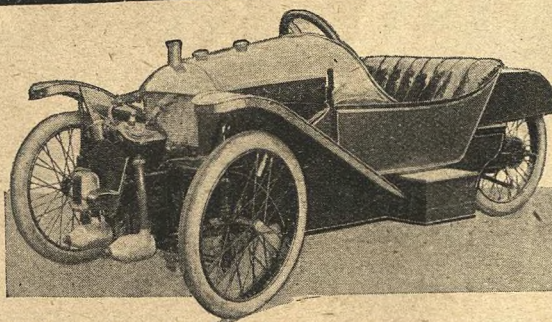


**Why worry about the '£100 car'?**  
when you can purchase a

***Morgan Runabout***

for **£90**

The "Morgan" has proved itself in numberless trials the fastest, most economical and most reliable of all Light Cars and Cyclecars. It won the Grand Prix of France in which no Motorcycle and Sidecar finished.



**MORGAN MOTOR CO., Ltd., Malvern Link.**



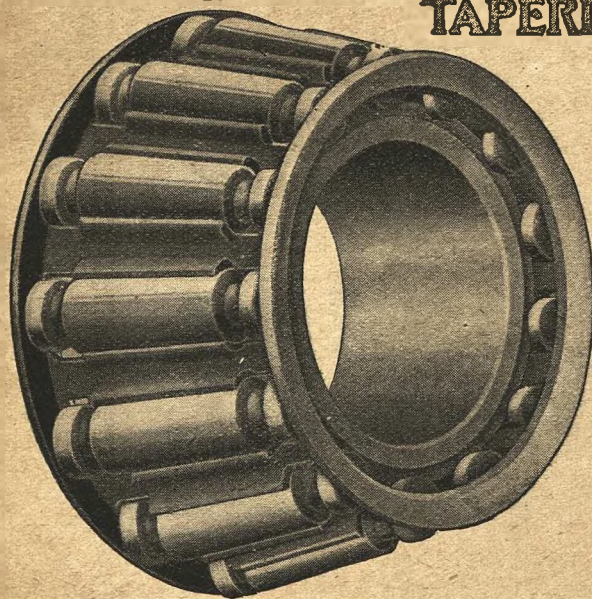
# ORDER from STOCK! Insist on not waiting!!

We carry the largest stock of Light Cars in Wales.  
Singers, Calcotts, Standards, and Calthorpes.  
2-seaters, 4-seaters and Coupes actually in stock.  
Cash, Easy Payments or Exchanges (— CARS OR —  
MOTORCYCLES).

**R. E. JONES (Garages) Ltd., Dillwyn Street, Swansea.**

Also at CARDIFF.

## TIMKEN TAPERED ROLLER BEARINGS



For use in pleasure cars. Scientifically designed. Accurately made. Best quality steel employed. Subjected to most careful heat-treatment. Bearings are adjustable for wear. No loss of efficiency.

THE ELECTRIC  
ACCESSORIES

ASTON,



& ORDNANCE  
CO., LIMITED,

BIRMINGHAM.

Continental Dept.: Vickers House, Broadway, London, S.W.



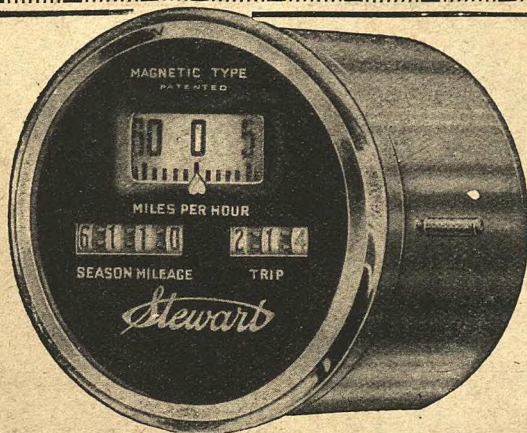
# Stewart

## CYCLECAR SPEEDOMETER

**H**ERE is the ideal Speedometer for Cyclecars. It is a grand instrument—accurate, easy to read, and absolutely reliable. You couldn't wish for anything better. This Stewart Cyclecar model is of the sturdiest construction, and, bar accidents, will give years of satisfactory service. And the price is **£3:3:0**, with the necessary fittings to attach it to any cyclecar on the market. Why not have it on your cyclecar? It costs so little, and gives so much pleasure and help, that you'll be delighted with the purchase.

*From all Traders, or from*

**COOPER-STEWART ENGINEERING Co., Ltd.,**  
11, Broad Street, Bloomsbury, London, W.C.



**£3 - 3 - 0**

Registers from Zero to 65 miles per hour.  
Records up to 10,000 miles, then repeating.  
Trip record to 100 miles and repeating.

### JUST READY! STEWART WARNING SIGNAL

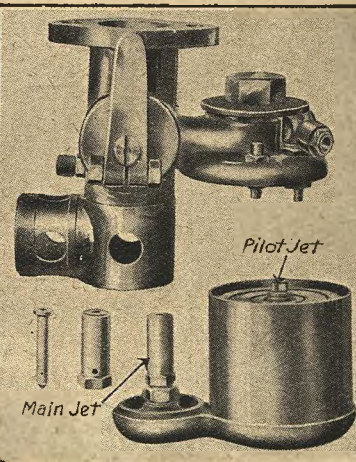
One quick press of the plunger produces a loud, clear and penetrating warning. Substantially made and too simple to get out of order. Buy it on approval. Money refunded if horn returned within 30 days of purchase.

**21/-**

**THE**

# SOLEX

## CARBURETTER



The Solex Carburettor is the most accessible on the market, it being possible to dismount the float, main jet, and pilot jet by merely unscrewing one nut. By fitting the SOLEX your petrol bill is reduced by 40 per cent, and your engine's efficiency increased.

For flexibility, quick acceleration and remarkable economy there is no other carburettor to equal the SOLEX, therefore—

**Specify a SOLEX for your new car.**

Write to-day for our Catalogue, sent post free on request to—

**S. WOLF & CO., Ltd., 115, Southwark St., LONDON, S.E.**

Telephone—5172 Central, 2734 Hop.

Telegrams—"Widerstand, London".



# G.W.K.

## *Light Car*

### Increase in Price from 1st March

**O**WING to the greatly increased cost of raw materials and skilled labour, we have had to increase prices to the following extent:—

STANDARD MODEL	-----	160 GNS.
FOUR-SEATER	-----	180 GNS.
COUPE	-----	240 GNS.
MODEL DE LUXE	-----	200 GNS.

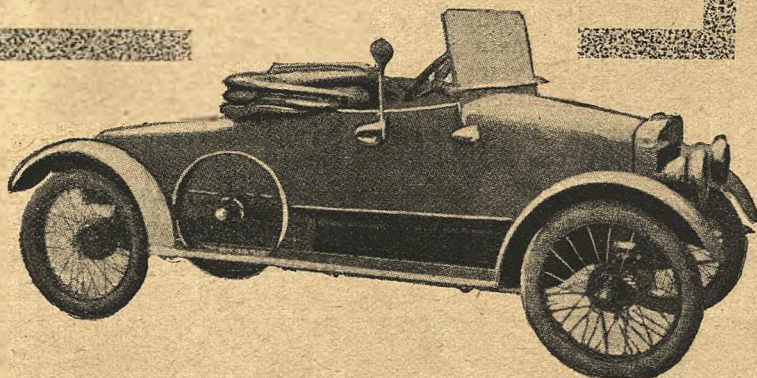
Model de Luxe is fitted with SCOTT Electric Starter, Electric Lighting, Automatic Lubrication, Inside Brake, Speedometer, Nickel Fittings, etc., etc.

N.B.—We reserve the right to further increase the prices without notice. There is also an increase of 10% in the cost of spare parts.

**G.W.K. LIMITED,**  
**Cordwalles Works, Maidenhead**

Telegrams: "Cars, Maidenhead."

Telephone: 562 Maidenhead.





## ADVICE ON THE PURCHASE OF SECOND-HAND LIGHT CARS.

(SEE  
PAGE  
407.)



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

Three weeks to Easter.

Easter Touring Topics will be a special feature of the next few issues.

Good news for motorists! The 20-mile speed limit is not enforced at Brooklands, says the wiseacre of a local Scottish paper in his motor "notes."

Coincidentally with our Editorial remarks upon the need for smaller lighting sets, the makers of the famous C.A.V. have produced a 36-watt set for light cars, with the finish of the larger outfits. An illustrated description will appear next week.

If, with the wide powers now delegated to it, the Government could transfer the manufacture of munitions of war from the harassed motorcar makers to engineering factories, the British motor trade would be saved from the irreparable damage which is threatened by an American attempt to monopolize the British car market.

The poster of THE LIGHT CAR AND CYCLECAR last week, "What is a man to do?" seemed to be answered by that of "The Commercial Motor," placed alongside it, referring to the Campaign Comforts Fund, which read "Give them socks." And we hope when some of our readers reach the Germans that they will with a vengeance.

Something very startling in carburetters is a promise of the next few months. Watch our pages.

The weather, after a sustained effort to improve its position, has suffered another severe reverse.—Wireless, Official.

A new simple belt-driven cyclecar may shortly be expected. Just lately the belt-driven cyclecar is experiencing a re-awakening of interest.

A very large number of second-hand light car and cyclecar advertisements appear in this issue, and some useful advice on the purchase of second-hand machines.

A leading manufacturer expresses the opinion that light cars will be at a premium in a month or two, owing to the difficulties of obtaining raw material and labour, consequent upon the Government's demands on both. This being so, the second-hand market is likely to become even livelier than at present.

If you have second-hand accessories to sell, or wish to buy them, advertise them in THE LIGHT CAR AND CYCLECAR, under the special heading of "Accessories." Several appear this week. We are endeavouring to make a recognized market for the sale and exchange of old accessories. There are hundreds lying by, and yet there is quite a good demand.



## LIGHT ON LIGHTING.

### The Latest Phases of the Regulations and How they are Being Interpreted.

**T**HE inconsistencies of the lighting regulations and their application continue. Magisterial wisdom varies wonderfully, like the fines, while Mr. Mead has actually suggested that the application of the lighting restrictions is wholly illegal.

The Commissioner of Police has drawn attention to the regulation prohibiting powerful lamps, stating that the proscribed area "covers a considerable amount of rural land." The intimation has come much too late to many unfortunate motorists who have fallen a prey to Benches on the boundary districts. We utterly fail to see why headlights are dangerous on one piece of rural road that happens to come within the irregular boundary of the Metropolitan police district, and yet considered safe on another where the mark happens to be very much nearer London.

#### "Do As I Do."

The chairman of the Kingston Bench told a defendant recently that he should have known that headlights are forbidden. The defending solicitor pointed out that this was not so; only "powerful" lights are prohibited. The chairman (Lt.-Col. Cooper-Turner) then told the defendant to do as he had done. "I have removed my headlights altogether, so they can't run me in."

#### "Mistaken Identity?"

Strong representations were made to the Bench by the solicitor for defence in a Bromley case, where by the way, the fines are moderate, urging that it was a case of mistaken identity. The police argued that defendant had said that he had "put an extra piece of reflector on the lamp" (whatever that may mean), the defendant stating that actually he had partially obscured the lens with whitening with a small hole in the centre. Fined 5s. and 10s. costs.

#### Endorsement of Licences Illegal.

Some of the magistrates are endorsing the licences of offenders who are prosecuted for breaches of the lighting regulations. We believe that magistrates have no power to do this, as the offences do not come under the Motor Car Act, and we hope that a test case will be taken to the Appeal Courts shortly. At Kingston recently the magistrates contended that they would be exercising their rights in endorsing licences for the offence of having a powerful headlight, on the ground that it might be regarded as "negligent driving," but, after hearing the arguments of a solicitor, decided not to do so.

#### Costly, Not Dangerous.

Mr. D'Eyncourt, the Clerkenwell magistrate, inquired of an inspector who was applying for a summons against a motorist whose lights were too "powerful" for a definition of that vague term, and the object of the definition. The inspector suggested that it might be because motorcars were used to signal to Zeppelins which the Germans have not got. The magistrate asked how that could apply in towns, to which the somewhat irrelevant reply was: "The penalty is £100 or six months hard labour."

The Magistrate: "It seems very dangerous to go about in a motorcar."

And costly, these times!

A8

#### Are the Lighting Regulations Illegal?

At Marlborough Street, where a motorcyclist was summoned for having a powerful light at Hyde Park Corner, Mr. Mead held that as only the Privy Council had power to make certain regulations under the Defence of the Realm Act, the Secretary of State, or any other body, had no authority to make regulations under its provisions. The solicitor for the police, Mr. Musckett, then attended, and the matter was argued at some length, Mr. Mead pointing out that the restrictions were very stringent, so much so that if the captain of a ship at a pier head did not stop when called upon by a subordinate official he might be secretly arrested, secretly tried and possibly sent for execution. The magistrate reserved his decision.

While some courts are busy in fining motorists for having an excess of lights, Romsey has been active in summoning those who have not sufficient. In five cases, for not having off-side lights or tail lights, the defendants were let off on payment of costs.

#### Increased Penalties.

The penalties for having powerful lights are to be increased by most of the Metropolitan magistrates. Incidentally, we notice quite a good number of motorists still using powerful headlights in parts of London which are well within the area, and for those who offend knowingly there can be no excuse. The maximum penalty is £100.

#### Definition of Lights: A Suggestion.

A sensible way out of the impasse caused by the varying police definitions of "powerful" lights would be to restrict side lights to either oil lamps or electric lights with a front not exceeding 4 ins. in diameter and a bulb plainly marked as of any power not exceeding 4 c.p. Such lights would not be "powerful." The size of large lamps could be reduced to 4 ins. by means of opaque masks.

We have tried driving at night with two taxicab paraffin lamps, which the police state are the standard of "powerful" illumination allowed. We found it possible to see with them better than ordinary obscured electric sidelights.

#### Searchlights—A Punishable Offence.

The A.A. advise us that the Commissioner of Police has drawn their attention to the illegality of lamps mounted on brackets enabling them to be turned in any direction, while the possession of any lamps that can be considered as searchlights, or that have shutters fitted, enabling them to be used for signalling purposes, is a punishable offence. This being so what will happen to guards, porters and other railway officials?

#### The G.P.O.

We have come across so many horsed mail vans bearing neither tail light nor front light at night of late that we are wondering if, for any particular reason, the Post Office is exempt. A mail van can be a very awkward thing to meet in a darkened street.

#### The Fire Brigade.

Also the motor fire engines of the L.C.C. seem to be exempt, for we recently noticed one with powerful headlights entirely unmasked. He would be a bold policeman who attempted to arrest one in full career.





*Burford Bridge on the occasion of the Cyclecar Club run. Part of the Royal Naval Air Service are stationed here, hence the sentry with bayonet. In the foreground are the new Adamson and a racy Bébé Peugeot.*

### The Cyclecar Club Run.

At the Cyclecar Club's run to Burford Bridge on 7th March, no fewer than 52 sat down to lunch. The cyclecars and light cars included a very large number of makes, and the scene outside the hotel was reminiscent of the "rally" in November. We noted the following:—Morris-Oxford, Douglas, Charronette, the sporting model, the three-seater, and the three-wheeler A.-C., G.N., Victor, de P., Lagonda, Bayard, Swift, Singer, G.W.K., Bébé Peugeot, and a new Adamson with totally-enclosed belt drive.

The next run of the Cyclecar Club will be to Beaconsfield, on Saturday next, for tea at the White Hart, meeting at Uxbridge at 3.30 p.m.

The joint Easter tour of the Motor Cycling Club and the Cyclecar Club will be to Newnham, Glos. The meeting-place will be the Bridge House Hotel, Staines, on Good Friday, 2nd April, at 10 a.m., and the route taken will be by Egham, Ascot, Reading, Goring (by the Thames), Wantage, and Faringdon, to Lechlade for lunch (New Inn), continuing by Cirencester, down Birdlip Hill, to Gloucester and Newnham, on the banks of the Severn, the headquarters being the Victoria Hotel. Tours in the Wye Valley and Malvern districts will be arranged.

### Saving Tyre Wear.

Much interest has been aroused by the J.M. Shock Absorbers advertisement in our last issue, wherein they guarantee that unless 1000 more miles per cover are obtained by the use of J.M.s, they will pay in cash the proportionate equivalent of the unobtained extra mileage. It is not generally known that shock absorbers make an enormous difference to tyre mileage. J.M. Shock Absorbers, 92, Gloucester Road, S.W., are also offering £5 for the best "spring song," similar to that in their advertisement last week.

### Power in a Nutshell.

On the occasion of the Cyclecar Club's run to Burford Bridge on 7th March, we noticed there a very smart sporting A.-C. with running boards and domed mudguards. On inquiry, we found that this was a standard sporting model, but fitted with an experimental engine, from which great expectations are entertained. We were invited to try the machine down the road, and nothing loth we took our seat behind the steering wheel. We were very frankly surprised at the power developed by this engine, and in order to get some idea of its possibilities, we attempted the hill across Ranmore Common. This has a maximum gradient of 1 in 6, which occurs on the acute hairpin bend, where the surface is very loose. It is no exaggeration to say that on second speed we took this corner at quite 25 miles an hour, the car running round with only the slightest sign of a skid with the engine developing surprising power in relation to its revolutions.

This engine naturally requires a certain amount of further work upon it, as it is yet in the experimental stage, but judging from results given by the first engine to be fitted to a standard chassis, we have no hesitation in prophesying that Messrs. Auto-Carriers (1911), Ltd., have an extremely good proposition, from which it is probable that 1916 purchasers will reap some benefit. At present this new engine has little of the sweetness associated with the standard 1915 A.-C. engine, but this will no doubt be attained.

### 10,000 Miles for a Back Tyre.

We have a Hutchinson cover which has done just about 10,000 miles and is still in use. The surface of the tread is polished with wear, instead of being cut about as might be expected, and it seems good for indefinite service. It has been used on a driving wheel for nine-tenths of its mileage.



### Good Advice, but Expensive.

A bunch of summonses for exceeding the 20-mile limit, heard at Stratford Police Court, which is East London way, produced an interesting scale of fines, which worked out at 30s. for 23 m.p.h. and £1 for 27 m.p.h. and 30 m.p.h. But one defendant who, when stopped, asked the police, "Why don't you catch a burglar?" was fined £5.

### Gentle Satire.

We sometimes give a lift to a passenger who is simply priceless in traffic. One morning, after saving the life of the inevitable careless pedestrian, the few moments we stopped enabled our passenger to address words of wisdom to the half-awake individual slowly collecting his wits. "I suppose," he said, "you are just one of those people who are necessary in order that the police can make up quarterly statistics upon street accidents? I cannot see any other useful purpose you can serve. Good morning!" Never a word said the pedestrian until the car was well on the way, when he blurted out, "Want all the bloomin' road!"



### Cars Replacing Horses for Council Officials.

The Halifax Town Council has formed a "motorcar department" for the provision of cars for the use of members of the Corporation and officials engaged on Corporation work, and to purchase two two-seater cars at £350 each. It seems a lot of money for cars to be used only for conveying officials when there are so many highly-efficient and economical two-seaters to be had at a little over half the cost, but it is satisfactory to note that the horse-drawn vehicles now in use are to be displaced.

Malvern is one of the latest places to adopt cars for its officials. The special committee received 22 tenders, ranging in price from £110 to £205, and proposed that two Swift light cars should be purchased. After considerable discussion at the urban council meeting, the recommendation of the committee was referred back, however.

### Our Front Cover.

Our front cover picture is a change this week from English scenes, for it is reproduced from a small photograph taken last October by a New Zealand reader, who owns a G.W.K. "Rakaia Gorge," he writes, "is off the Canterbury Plains. Maximum grade is 1 in 4. The mountains in the distance are the Southern Alps."

### Light Car Driver Stops Runaway Horse.

In Dorking recently we witnessed a very self-possessed act on the part of a light car driver. A horse attached to a light van started to run away, and the populace as usual pursued it with loud cries, thereby adding to its excitement. The light car driver was proceeding in the same direction as the horse, and, without any flurry, he accelerated his car until it was practically in front of the animal. He then slowed up gradually in its track until he had stopped the car, when the horse, with no course open to it, and with the characteristic good sense of its species, came to rest, and was secured without any trouble.



1. The U.A.F. motor section seeking cover on Headley Heath. 2. Practising attack near Farnham.

### A Wood Pavement Glide.

We had an enervating experience the other night. We were descending one of the steep, narrow streets leading from Kingsway to the Thames Embankment, and going very slowly. Half-way down we espied a mail van pulled up on the near side and a taxicab coming up. We applied the brakes and the speed was checked to less than an average walking speed, the wheels locked, and slowly but inevitably the car slid down the hill, the surface of which was indescribably greasy. In vain we endeavoured to free the wheels; on we went, crab-wise, non-skids notwithstanding. Fortunately, just before the mail van was reached, a front wheel got some sort of grip and steered us for the pavement, where we fetched up with inches to spare. When the obstruction was cleared, the rest of the hill was descended in the same way, very slowly, and fortunately without mishap. There is no road surface more treacherous than a wood pavement when it has a thin layer of grease after a shower of rain.



## NOTES, NEWS AND GOSSIP (contd.).

**Will the Admiralty Pay?**

For "unthinkingly" using a number to which he was not entitled when under Admiralty orders, for not having a driving licence, and for not appearing in person at the hearing of the summons, a naval officer was charged on a warrant at Southampton and fined £5 and costs for one offence and £9 3s. costs for the other, although he explained that it was impossible to get away from Liverpool, from where he had to be brought on the warrant. We hope the Admiralty will pay.

**He Had Reversed the Back Axle.**

Enter Mr. G. N. Higgs's hospital for disabled cars, one light car and owner, the latter very perturbed. He explained that while he had only one speed forward, the car had three in reverse, and suggested that perhaps the body could be put round the other way to meet this rather novel order of things. Mr. Higgs, very much surprised, made an inspection and discovered that the owner had taken down the back axle himself and put it in again upside down!



3. Twixt Churt and Headley, a sporting De P. leads the way. 4. Moving off from Churt House.

The St. Asaph-Abergele road, recently reported by the A.A. to be in very nearly an unusable condition, is now being restored to its normal condition.

**Nobody Else Wants It!**

Quite pathetic were the efforts of a councillor to induce the Keighley Rural District Council to apply for a speed limit, which, unfortunately for some people, is not granted without proper inquiry. He alleged that certain roads were highly dangerous; instanced that on "several occasions" he had had to "step back" to avoid motors; that motorists never sound their horns, and it takes people all their time to get out of their way. The Council, however, wanted proof of the necessity for a speed limit. The clerk said he had asked the inspector to get evidence, if possible, but he could not. The councillor lamented the deplorable fact that there was nobody who would come forward with a complaint against motorists, and it really does not look as if Keighley will ever get its speed limit.

**What is "Furious Driving."**

It is often suggested that were the speed limit abolished, and the police relied upon the clause of the Motor Car Act governing driving to the common danger, not only would a useless form of persecution be avoided but the public would be quite sufficiently protected by checking the really dangerous driver. It should not be forgotten, however, that what to the driver, who knows his car, seems perfectly safe driving often looks reckless to the police and public, while the smaller the car the higher will be the estimate of its speed. There are about a dozen cases of dangerous driving heard in the courts all over the country every week, and one at Gloucester recently rather points to the difficulty of saying what is a dangerous speed. In this case the motorist was charged with driving at a furious pace, viz., 15 to 20 m.p.h. The policeman shouted to the driver to stop, and said that had he not done so a cyclist who was turning a corner on the wrong side would have been run down. The policeman stated that the defendant pulled up in three or four yards. The cyclist had no complaint to make. Two independent witnesses stated that there was nothing wrong with the speed of the car—one said the speed was 6 to 8 m.p.h. The defendant stated that he sounded his horn twice, and there was no traffic whatever at the corner when he approached. He could not have pulled up as quickly if he had been travelling as fast as was alleged. The passenger stated that the speedometer registered only 8 m.p.h. The magistrates decided to convict, and fined defendant £3 and costs. The defendant gave notice of appeal.

**The Rural Special.**

The zeal of special constables in rural districts is alarming, and a motorist was approaching a little village on a main road one night last week when he saw a huge red light swinging vigorously in the middle of the road. On pulling up he saw an enormous stable lantern which had been painted over red, and behind it the red face of a farmer with an armlet of the special constabulary.





## The Present Average Advertised Prices of Second-hand Machines.

THE following scale of prices is based on those advertised during the last three weeks in THE LIGHT CAR AND CYCLECAR for standard models. There are numerous omissions, some makes not coming in the second-hand market very frequently, and the average is in some cases affected by additional fittings which have caused the owners to ask for a higher price, but the figures will give a fair idea of the second-hand value of most makes of light cars and cyclecars. It will be noticed that, generally speaking, prices have advanced over the average of the first six weeks of the year.

Make.	1913 price. £	1914 price. £
A.-C. Sociable ...	60	—
A.-C. Light Car ...	106	157

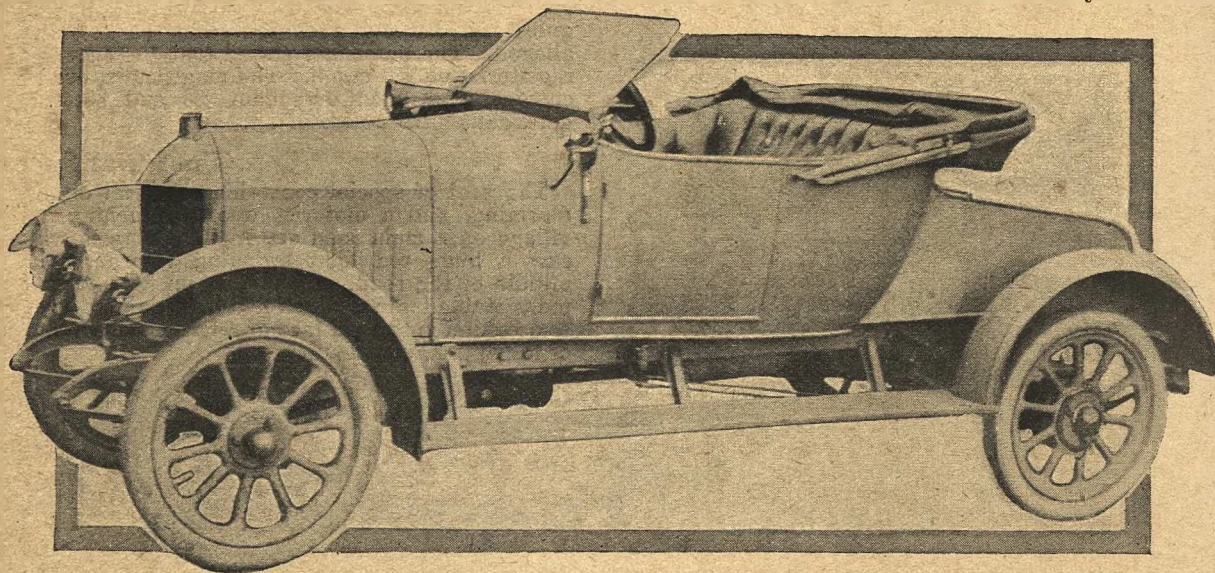
Make.	1913 price. £	1914 price. £
Alldays ...	80	137
Buckingham ...	—	83
Calcott ...	—	157
Calthorpe ...	—	137
G.W.K. ...	84	116
Humberette ...	65	104
Lagonda ...	—	127
Morgan ...	70	82
Morris-Oxford ...	115	156
Perry (two-cylinder) ...	83	111
Singer ...	115	160
Standard ...	—	156
Swift (two-cylinder) ...	87	105
Victor ...	—	82

## AN IMPROVED MORRIS-OXFORD.

A Morris-Oxford was recently seen on the road which appeared somewhat longer than the standard model. Inquiry showed that the wheelbase was indeed 1 ft. longer, being 8 ft. 6 ins., and there were one or two other slight alterations from standard which merit attention. The longer chassis gives a

Another departure from standard was a bevel-driven back axle, which had every appearance of being as sound an engineering job as the usual worm drive and quite capable of taking the extra weight of a third passenger.

This is an alternative, we are told by the Morris-



A long wheelbase Morris-Oxford recently seen on the road. Notice the improved appearance.

much better appearance and allows a roomier design of body to be fitted. Three abreast on this particular car was not at all uncomfortable.

The change-speed lever was mounted inside the body, a point of great convenience. The engine and gearbox unit was unchanged, but a novel lighting dynamo mounting consisted of a bracket bolted to the dashboard, the drive being by Whittle belt. The Lucas lighting set is, of course, an extra, costing 15 guineas.

Oxford people, because the makers of the well-known M.O. back axle, Messrs. Wrigley, are so busy with Government work that sufficient worm-driven axles cannot be delivered to satisfy the requirements of the M.O. works.

An interesting handbook of instructions for the Morris-Oxford has been brought out, and may be had on application to W.R.M. Motors, Ltd., Cowley, Oxford, or the London agents, Messrs. Stewart and Arden, 18, Woodstock Street, Oxford Street, W.

## MEASURING PETROL CONSUMPTION.

As a means of roughly testing petrol consumption, most people measure the depth of the spirit in the tank when putting in two or four gallons, and note the mileage when the same level is reached. This requires to be done on exactly the same spot as when the first measurement was taken, and it is surprising how a slight variation of the position makes all the difference to the apparent level. As an instance of this, we recently made a rough note of the height of the petrol

before putting in a further two gallons. At about the time we expected that quantity to have been used, we took the level again, and found that it was approximately the same. Another 17 or 18 miles was covered in the anticipation that the tank would empty completely. Once more the tank was sounded, and we found the level registered as before. These different readings were caused by the car standing on the level in one instance, and on a slight incline in the other.



# It is just Luxurious

—a little car of extreme usefulness, smart and pleasing in design, extremely economical in running costs, and—will take you anywhere.

Will take you anywhere—do you need proof of that?

Then note these records—

*In 1913 Mr. Harry Long on the*

## SINGER "10"

*covered 25,000 miles in 26 weeks without a single mechanical trouble.*

*In the 1914 R.A.C. Six Days Light Car Trial, the Singer "10" put up the best all-round performance, gained Silver Trophy, 200 Guineas, and Two Gold Medals.*

*In the 1914 Alpine Trial—the audacious little Singer competing with the giants of the road—completed the course, never failed on any gradient, and arrived far ahead of time.*

It will take you anywhere and—is just luxurious.

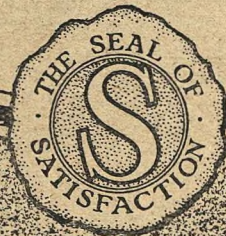
**Prices—Phaeton £205 and £215; Coupe £260 and £270.**

Let us demonstrate its merits on a trial run.

**SINGER & Co., Ltd., COVENTRY, & 17, Holborn Viaduct, E.C.**

*Official Retailers to the Company for Light Cars:*

**BAMFORD & MARTIN, LTD.,  
CALLOW STREET, FULHAM ROAD, LONDON.**







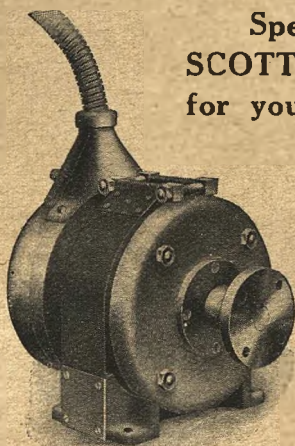
# Economy

**ECONOMY** in First Cost  
— Economy in Running  
Costs — Economy of Space —  
Economy of Energy — these  
are the strong features of

## The SCOTT PATENT STARTER

Being a **Single Unit**, it takes up very little space—Being the most efficient electrical machine in the world for its size it costs very little to run. When not required for starting or lighting you can switch it off—no energy is wasted. You get maximum efficiency at lowest expenditure.

Specify the  
**SCOTT STARTER**  
for your new car.



The Scott Starter, arranged for direct coupled drive.

A beautifully printed booklet gives a history of the Scott Starter together with a detailed and clear description. It is illustrated from drawings by Mr. Harry Furniss, and from fine photographs. It will be sent post free on receipt of visiting card.

**The EFANDEM Co. Ltd.**

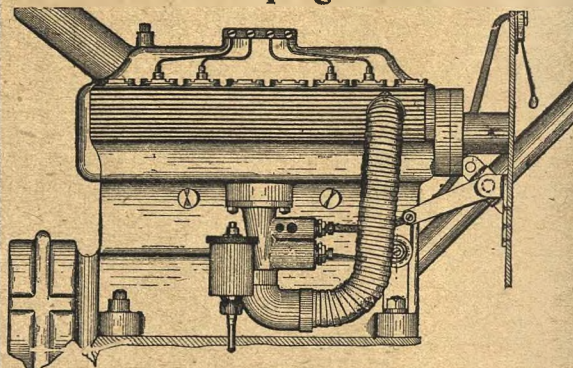
Head Office  
TENNYSON HOUSE  
159-163, Gt. Portland St.  
LONDON

Works  
FALLINGS PARK WORKS  
WOLVERHAMPTON  
ENGLAND

All Correspondence to be addressed to the Head Office

# A REVOLUTION IN CARBURETTORS

THE WONDERFUL "**BINKS**"  
3-Phase Jet-Damping CARBURETTER



The great success of this carburettor on ordinary cars is even more pronounced on the tiny four-cylinder engines of the modern light car, converting them into veritable steam engines as far as dead slow running and flexibility are concerned and giving great economy in petrol consumption. The carburettor has three jets, and each jet is damped out of action when not in use, and in running down hill all jets are damped out and the engine scavenged with cool clean air, preventing fouling of the engine and converting your engine into a good air brake. This instrument gives a most perfect tick over when idle and violent acceleration when opened out, and will pull slower on top gear than any other carburettor in the world, and you can have it on a month's trial and your money returned, less the examination fee, if in any way you are not thoroughly satisfied.

## Easily Fitted

In many cases like the A.-C. Light Car as shown in this illustration or the Stellite, we supply special models that fit right on complete at a slight extra cost.

Price—

**£2.17.6**

Complete with 6 spare jets, key and full instructions.

## Extracts from Letters just received:

"The improvement your carburettor has made to my A.-C. is most gratifying, it is indeed now a perfect little car."

"Since I have fitted your carburettor to my Stellite I have had no further trouble, and the car is far more flexible and runs so slowly that I cannot tell the engine is running."

SEND FOR LIST and  
Treatise on Carburation.

**C. BINKS, Ltd.,**

Phoenix Works,  
ECCLES, Manchester.





## The Choice of a Second-hand Light Car or Cyclecar.

WHEN buying a second-hand light car or cyclecar, a great deal of trouble can be saved if a very definite idea of what is desired is formed. The deciding factor, when it comes to making a selection, will then be one of price, and, having settled the highest limit to which it is proposed to go, a list of cars may be made with a note of their condition and equipment.

The would-be purchaser will gain useful knowledge in making the list of the prevailing prices of second-hand machines, and he will finish his labours with a list something as follows:—

10 h.p. A.-C., 1914, C.A.V. lighting set, speedometer, clock, £165.

10 h.p. A.-C., 1914, standard equipment, £150.

10 h.p. A.-C., 1913, standard equipment, £100.

10 h.p. Alldays, 1914, 300 miles only, spare wheel, £150.

10 h.p. Alldays, 1914, standard equipment, £120.

Calcott, 1914, speedometer, 2000 miles only, £150.

Calthorpe Minor, 1914, standard equipment, £123.

Calthorpe Minor, 1914, C.A.V. lighting set, speedometer, clock, £145.

And so on, right through the light car makers' alphabet. To save trouble, a mark can be placed against the likely advertisements and then a second choice made and listed.

The task of choosing a car does not appear a very great deal simpler as yet, for there is still a good

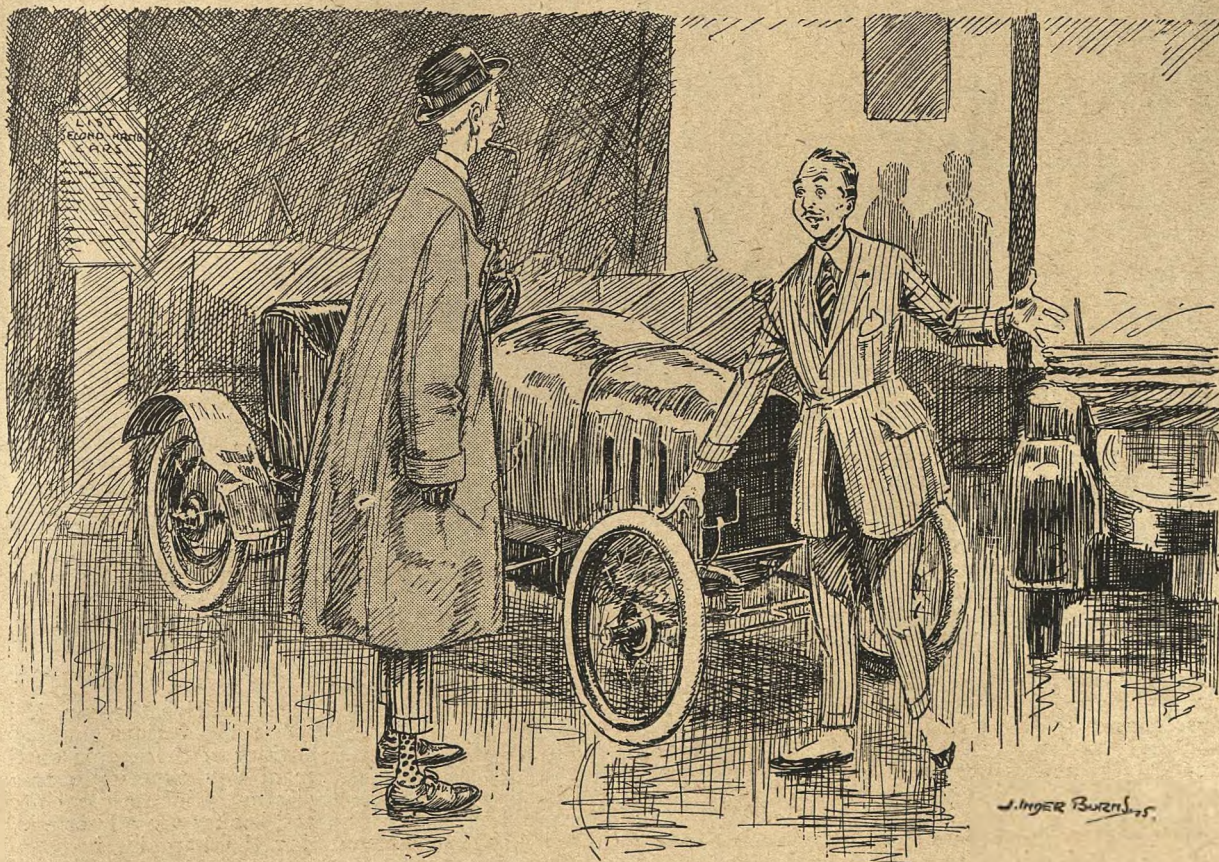
selection of cars all more or less desirable. Now most would-be owners have a preference for some particular make or other, and they will naturally look for a bargain in the section of the list dealing with that particular car.

Let us suppose, for the sake of argument, that the car specially favoured is an A.-C.; then the task is narrowed down to selecting the best A.-C. available at the price, say, £150, which is the second car on our list.

Now the question arises shall the 1913 model at £100 be bought and £50 saved? This can only be solved by inspecting the two cars and comparing their mechanical condition. Obviously, the 1914 model is likely to be in much better trim, and if the £150 can be spared the more expensive 1914 model will probably be chosen.

If it is impossible to inspect both the cars, then it will be safer to give the highest price and obtain the most modern model available. The later the model the fewer repairs are likely to be necessary, and one should be moderately certain of running a 1914 model through the season without any repair or replacement bill. With a 1913 model, new tyres would almost certainly be necessary, unless they have already been fitted.

If no particular make of car attracts the would-be purchaser, he should endeavour to grasp the different points of design and choose what seems to him most



**RECKLESS SALESMAN:** "Well, I admit, the er—bargain—is slightly battered, but, my dear sir, look at the tyres, so firm and hard and smooth! Perfect, sir, simply perfect!"



CHOICE OF A SECOND-HAND CAR (*contd.*).

suitable for his particular district. The four-cylinder engine undoubtedly attracts most people by its sweet vibrationless running, but the two-cylinder engine should not summarily be passed over on this account, for it is reliable and economical, and a good bargain can often be picked up in this type of car owing to the popularity of the four-cylinder engine.

The engine-gearbox unit has an attraction for some people, while others prefer the back axle-gearbox unit. Both have their good points, as has the ordinary separate gearbox arrangement, and where silent running is specially desired the back axle-gearbox unit is to be preferred, as what noise there is does not reach the occupants of the car.

Springing and comfort are most important. As a general rule, true cantilever springing with inverted semi-elliptic springs is the most comfortable type on

a light car, but the question can only really be settled by actual trial.

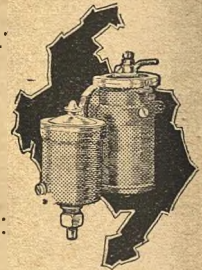
The question of buying a light car or a cyclecar is one that only individual inclinations can determine. The man who is wed to an 8 h.p. sidecar combination will not find anything give him quite the same satisfaction in the way of speed, acceleration and power as a Morgan, G.N. or Buckingham cyclecar. The man who cannot afford much, but wants silent running and comfort, must have a water-cooled engine, and deep, properly padded seats, with windscreen, hood, etc., but unless a second-hand Victor or Adamson cyclecar can be obtained, it will be necessary to fall back upon the cheapest light cars.

It should not be forgotten that by a round of visits to dealers in second-hand cars a much better selection can be viewed quickly than a house-to-house visit to cars advertised privately, where, however the best bargains will usually be found.



## INSPECTING A SECOND-HAND CAR.

## Faults to Look For.



**H**AVING chosen a second-hand car which seems likely to suit one's requirements, so far as can be told from the bare advertisement, the next step is to inspect the car and try it, when, if satisfactory, the bargain may be completed.

The first thing to notice is the general appearance of the car. If the bodywork is free from faults, and the varnish in good condition, the hood neat and not badly stained or worn, and all metal work brightly polished (nickel plating untarnished), it betokens a car that is well cared for by its owner, for a superficial cleaning up at the last minute will not restore a handsome appearance to a neglected car. The hood should be erected and examined for signs of rotting or tears; the hood straps and hood sticks should also be noticed. So many people are in the habit of conveying quite heavy parcels in the hood that cracked sticks and torn hoods are not rare.

The wings and fittings, such as lamps, should be examined. Dented wings or lamps are the result of collisions, and denote a careless or reckless driver, and there may be other more serious, but less apparent, damage. While examining the wings attention should be given to the condition of the springs. If the leaves appear rusty and devoid of lubricant it shows that the owner does not give that attention to detail which is desirable, and uncomfortable riding and much squeaking may be expected.

Tyres and wheels should be in good condition; the tread of the tyres may be worn away, but if no cuts are visible there should still be considerable life in the tyres, while retreading would be possible if it is necessary.

The engine may be examined, and its external appearance will give a shrewd buyer a very good idea of the amount of attention it receives. The water connections and water joints of the inlet and outlet pipes should be free from leaks, also the crankcase should be moderately free from oil. Traces of oil round the valve caps may spell over-oiling and compression leakage, while oil all over the flywheel is an indication of a slack main bearing. The carburetter should not flood, and there should be no slack in the magneto coupling or drive. The valve springs should not appear flabby, and the tappets should present just sufficient clearance.

The owner should be asked to start up, and the ease of starting noted. With the engine running slowly, the regularity and slowness of running will give an indication of the state of the carburetter, magneto, etc. Depressing the accelerator pedal, the response made by the engine will give a further indication of its state of tune, for if it splutters instead of accelerating violently the carburetter is badly in need of attention. While the engine is running at different speeds, the balance should be noticed; a four-cylinder engine should give no undue vibration, although at one certain speed there is almost bound to be a certain amount.

An umbrella, or walking stick, rested on the engine will act as a stethoscope, and by placing an ear to the other end of it any knocks may be plainly heard above the other noises. By moving the position of the stick a very good idea of the whereabouts of the knock will be gained.

A trial run may now be asked for, and the smoothness of the clutch should be carefully noted; the ease of changing gear and the quietness of the gearbox also. On top gear the gearbox should be practically inaudible, and the back axle should be silent. The springing should be tested over a rough road, and the comfort of the bodywork, leg-room, etc., given attention. The action of both brakes should be noticed, and the engine power tested on some hill.

At the top of the hill the car should be stopped, and the would-be purchaser should quickly dismount and feel the radiator, gearbox and differential casing. The radiator should be hot at the top and practically cold at the bottom, but there should be no sign of boiling. The gearbox and back axle may be slightly warm, but if they are hot they are in need of lubricant, or are under some undue stress.

The purchaser should ask to drive the car, if he can drive, and should notice the various points as detailed above. The behaviour of the engine on the road will afford a driver of any experience at all a very good idea as to its condition, while clutch, gear changing, steering and brakes are all tested.

Finally, when completing the bargain, it is only natural for the vendor to require more security than is afforded by a cheque, and opportunity should be given to refer to the bank.



# The Light Car and Cyclecar

**Largest Circulation.**

**Mondays—1d.**

Conducted by EDMUND DANGERFIELD.

TEMPLE PRESS LIMITED

(Proprietors of "THE MOTOR,"  
"MOTOR CYCLING," &c.)

7, 9, 11, 13, 15, Rosebery Avenue,  
LONDON, E.C.

Telephone—5292 Holborn (four lines).  
Telegrams—"Pressimus, Holb., London."

## MIDLAND OFFICES:

Birmingham—9-10, Burlington  
Chambers, New Street.  
Telephone—2498 Midland.  
Telegrams—"Presswork, Birmingham."  
Coventry—6, Warwick Row,  
Hertford Street.  
Telephone—983 Coventry.  
Telegrams—"Presswork, Coventry."

## NORTHERN OFFICES:

196, Deansgate, Manchester.  
Telephone—Central 2467.  
Telegrams—"Presswork, Manchester."

## NOTICES.

Readers should ask for

**"MONDAY'S 'LIGHT CAR  
— AND CYCLECAR '"**

from their newsagents.

If there is any difficulty in obtaining a copy can be sent by post and will arrive at the breakfast table every Monday morning for a subscription of 6s. 6d. per annum.

## 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.

## Press Times.

IMPORTANT LATE NEWS and Photographs can be accepted for insertion in the following Monday's issue by special arrangement previously.

## 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.

## Subscriptions.

"The Light Car and Cyclecar" will be mailed regularly at the following rates:—

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

REMITTANCES. — Postal Orders, Cheques, etc., should be crossed and made payable to "Temple Press Ltd." All letters regarding subscriptions must be addressed to "The Manager."

**LIGHT UP**  
Next Saturday, 7.10 p.m.

## Topics of the Day

**Is There a Call for a Smaller Lighting Set?**

ONE of the most notable features of the development of the light car is the popularity of the electric dynamo lighting set. In the future this will be more largely supplemented with an electric self-starter than has been the practice in the past, giving of course an ideal, though naturally an expensive, equipment. On the other hand there are many thousands of people who will be buying light cars who cannot run to the additional cost of electric lighting. We see no reason why their requirements should not be met by the introduction of smaller sets by the leading manufacturers. The capacity of the average lighting set as fitted to modern light cars is 90 watts: some are as large as 120 watts. From a 90-watt set, two 16 c.p. head lights, two 8 c.p. side lights, an 8 c.p. tail light, and a 4 c.p. dashlight are usually supplied. Thus with 90 watts available only 60 watts are used, and there is no advantage in the surplus unless an electric starting set is fitted, when of course it is required. The average user would obtain all the light required from a 40-watt set, which would give two 12 c.p. head lights, two 6 c.p. side lights, and a 4 c.p. tail light. An alternative arrangement would be two 16 c.p. head lights, leaving 8 watts available for tail and dash lamp. Side lamps could be included in the set with the proviso that they are not to be used in conjunction with the headlights, the switchboard being arranged to cut out one or the other. Personally, we think it better to drive with headlights only, and not to use the sidelights at the same time. We find that the nearer illumination of the side lights causes the pupils of the eye to contract, and reduces the value of the beam of the head lamps. The smaller set would be very much less in weight than the larger, probably less than half. It would take about half as much power to drive. Most important, however, the cost of production would also be halved, and thus a very cheap lighting set, costing very little more than the alternative of acetylene, would be provided.

## Over the Dividing Line.

SOME little time ago an advertisement appeared in our pages of the new Bianchi small car; a very remarkable production from Italy, with the sweet-running, vibrationless engine which is characteristic of the best Italian work. No model was over here at the time, and it was not possible to say definitely whether such a car came within the scope of this journal. Its price of £285 complete seemed to rule it out. We have now had an opportunity of examining the car closely, and, splendid example as it is of most luxurious car design, it hardly falls within the present scope of the new motoring movement, but comes within the sphere of the Motor Press proper. We are not, therefore, in a position to accept the advertisement contract which Messrs. Bianchi Motors, Ltd., have tendered us. Readers desiring particulars of this car are referred to the issue of "The Motor" of 10th November, 1914, in which it was very fully described and illustrated.

The object of THE LIGHT CAR AND CYCLECAR is to foster and follow the development of quite a different type of car, which, although it may, in some very few instances, overlap the big-car field, is in general quite distinctive. Just as the cyclecar is a very different vehicle from the passenger motorcycle, and is getting farther and farther away from motorcycle practice, while appealing chiefly to those who would never give a moment's thought to the purchase of a motor-bicycle, so the modern light car, with its diminutive high efficiency engine, economical running, light weight and small size, is very distinct from the motorcar. One has only to place two types of small cars side by side to see the difference between the modern and the older class of two-seater.

It is because THE LIGHT CAR AND CYCLECAR makes the distinction, and is sacrificing mere advertisement revenue in its practice of confining the journal to vehicles that come within its scope only, that it has the sympathy of the public, which of course means circulation.



## THE 1915 ADAMSON.

Three Speeds and Reverse—Enclosed Belt Drive—Divided Back Axle.

**T**HE novelty of the 1915 model of the Adamson cyclecar lies in the transmission, which has been redesigned and greatly improved, the final belt drive being retained but totally enclosed. The illustration on the opposite page will give a better idea of this than any detailed description.

The underslung channel steel frame is still a feature of this very handsome cyclecar with semi-elliptic springs both front and rear, but despite the low-built appearance the ground clearance is  $8\frac{1}{2}$  ins., which compares favourably with other machines. The front axle has been redesigned, and the wire and bobbin steering is now arranged behind the axle with the tie-rod in front. Plain steering heads are now used in place of the ball bearing type, and gun-metal thrust washers are provided. A bigger lock is now allowed, which is a great improvement when manœuvring in traffic.

Either a two or four-cylinder water-cooled Alpha engine is fitted. Starting is by a lever and ratchet device worked from the driver's seat. This is simple and cannot get out of order; it is now fitted in front of the engine on the main shaft, and has been improved in its action by the substitution of a coil return spring for the spiral spring of previous models.

The clutch has been improved, and is a leather-to-metal cone held in engagement by an internal-coiled spring. Leather ring universal joints are employed,

and being of ample size and accurately made their satisfactory action is assured.

From the clutch the drive is transmitted to a three-speed-and-reverse gearbox, which gives ratios of 3.6, 6.6 and 11.6 to 1. This is controlled by a gate mounted directly over it, thus being in the centre of the body. A locking device makes it impossible for two gears to engage at the same time. The accessibility of the gearbox leaves nothing to be desired.

Directly behind the gearbox is the bevel drive, which has been increased in size and holds a large quantity of grease. The drive is taken from large pulleys on either side of the bevel casing to the back axle, which is divided, and carries similar pulleys. The tension of the belts is taken by four radius rods, which run from the axle to a ball joint at the rear of the bevel casing.

The two internal-expanding brakes operate in drums formed in the rear wheel hubs.

The wheelbase of the Adamson is 8 ft. 6 ins., and with a 4 ft. track and its low centre of gravity it ranks as one of the most stable cars on the road. It can be tilted up on its side to an angle which must be well over 60 degrees without overturning.

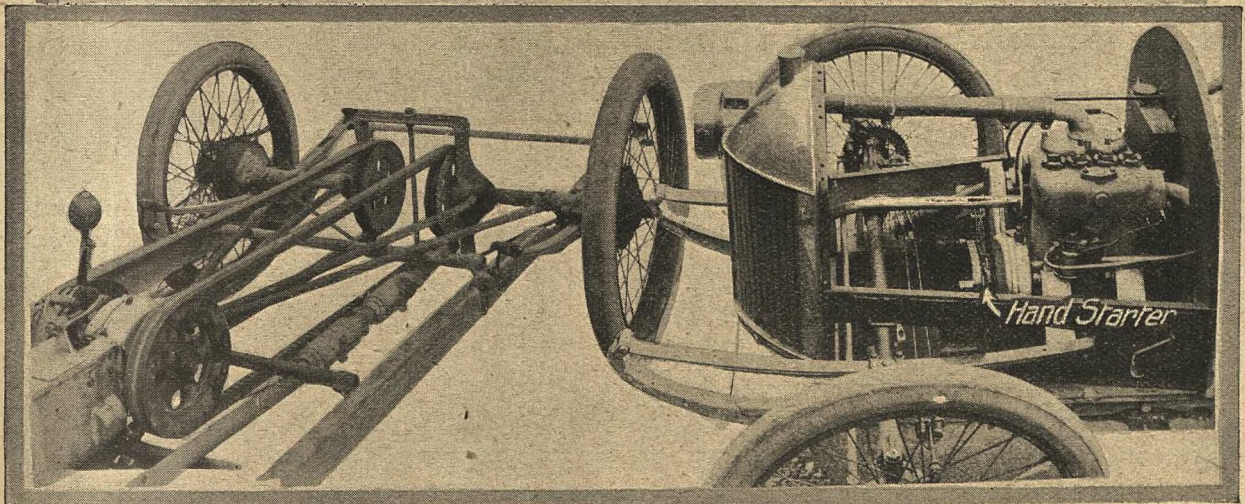
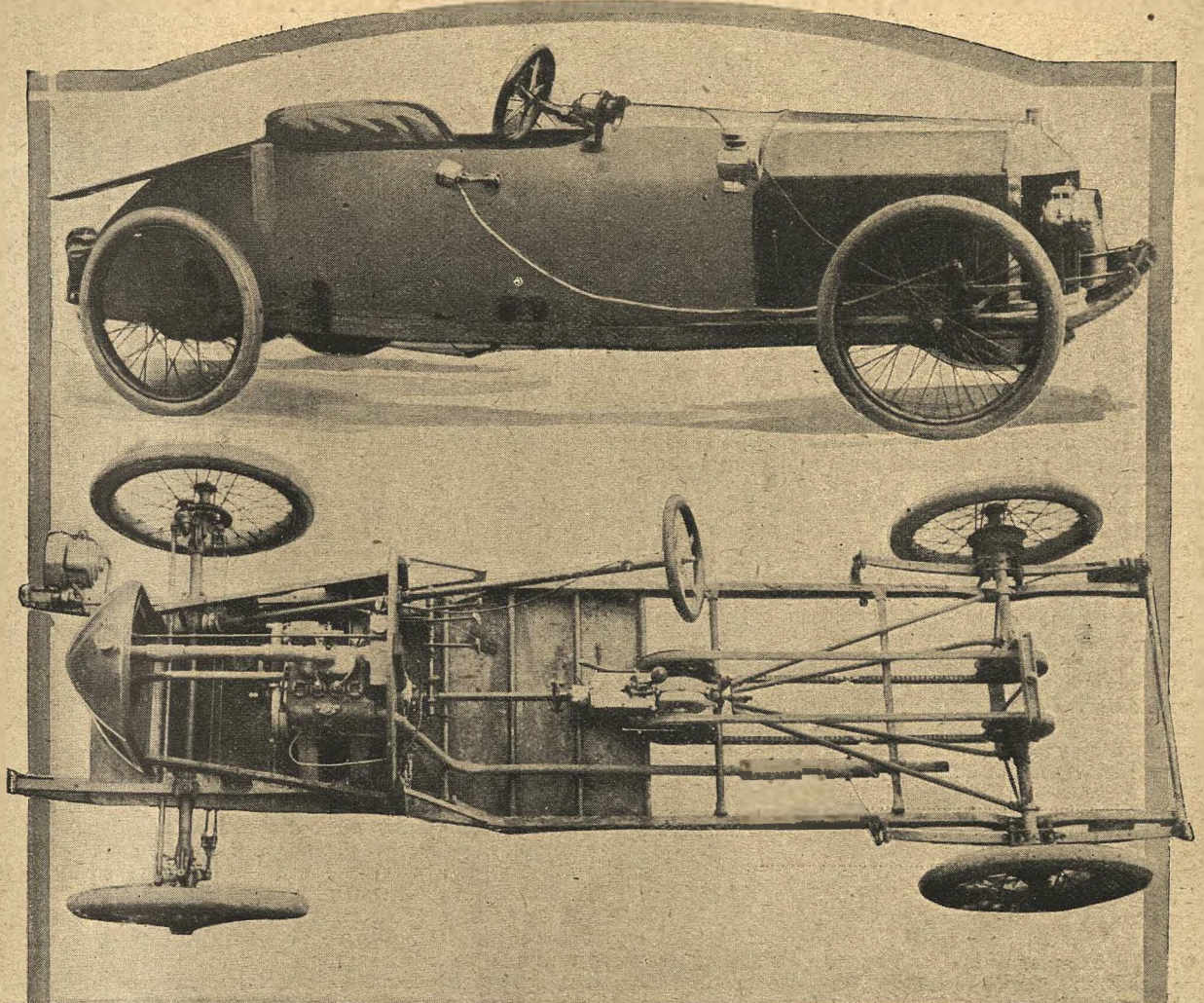
The price of the two-cylinder model is 125 guineas, the four-cylinder being priced at 141 guineas. The makers are Messrs. R. Barton Adamson and Co., Enfield Highway, Middlesex.



The ford, in a depression between two hills, across the road at Bone's Gate Inn, Chessington, near Hook, off the Kingston-Leatherhead road. There is a good deal of motor traffic over this road from Hook to Ewell. In the summer the watersplash, which is caused by a tributary of the Hogsmill river, frequently dries up completely, but in the winter assumes a very considerable depth. In one place there is a hole where the water is sometimes six feet deep, but out of the track of cars. The Automobile Association has now placed a post indicating the depth of the water.



## THE 1915 ADAMSON WITH CONCEALED BELT DRIVE.



The new Adamson cyclecar with divided back axle and concealed belt drive. The top illustration will give a good idea of the low build and general appearance of this charming little car, but the body shown is only a rough test one. The arrangement of the belt drive (from a three-speed-and-reverse gearbox) is shown in the other illustrations. A hand starter operated from the driving seat is one of the features of this cyclecar.



## A MUCH-CRITICISED FUEL.

### How Benzole Should Be Used—Notes On Carburetter Setting.

**N**O engine fuel has been so much discussed, indiscriminately praised and condemned, as benzole. Each time somebody gets hold of a bad sample—really at very rare intervals—or uses good benzole with a bad carburetter setting, which happens much more frequently, the critics rise in their wrath and deprecate its use.

As a matter of fact, good benzole is the finest motor spirit yet produced for the internal-combustion engine of present design. Its virtues are, firstly, its economy. It costs less than petrol, and a gallon will give 20 per cent. increased mileage compared with No. 1 petrol. The engine will run cooler on benzole. There is less pitting of valves, less carbon deposit, and pre-ignition only occurs when the engine is in a deplorable state. In some engines the plug points become sufficiently hot to continue igniting a charge of petrol when the magneto is cut out, but they will not ignite benzole. But, above all, benzole gives unmistakably greater power. All that is demanded is, in the first place, good benzole, and, secondly, a carburetter set for its proper use.

Bad benzole is obtained about as frequently as bad petrol—that is, very rarely. Some of us have obtained a can of petrol containing either water or paraffin, which leads one to suspect that it has been tampered with locally. So with benzole, only the cause is usually laid at the door of some local distiller, which may be the neighbouring gas-works. The well-known brands of benzole give no trouble.

#### Standardizing the Quality.

To standardize the supply, "The Motor" has been carrying out gratuitously a number of tests. Manufacturers, agents, dealers and the public alike have submitted samples which have been tested. Bad benzole has been found, the source of supply traced, and such representations made that the faults have been promptly eliminated. It is thus, thanks to the co-operation of the public, that cases of bad benzole being sold have become so rare. Those who propose to use benzole should apply to "The Motor" (7-15, Rosebery Avenue, London, E.C.) for a test tube, and submit a sample of the supply that they can obtain regularly, a report upon which will be given free of charge. Unfortunately, it is not so easy to obtain the spirit now as before the war, but there is still a large quantity being sold, possibly 10,000,000 gallons per year. It speaks well for its reliability that bad reports, in spite of its extensive use, are very rare.

Then the carburetter should be set to consume the fuel properly. Everyone should experiment with carburetter settings, whatever the fuel, for it will be found as a rule that improved results can be obtained. The carburetter people will advise on the settings that can be tried, and spare jets, choke tubes, etc., can be obtained, the cost being trifling.

The general principles governing the use of benzole are, firstly, the necessity for bringing the level up to the same height as when using petrol, by weighting the float (in some carburetters the float is simply reversed to get the same effect); secondly, cutting down the supply drawn into the engine (in most carburetters by decreasing the size of the jet); thirdly, giving more air; and, fourthly, in advancing the spark. It should not actually be necessary to give more air; if an extra air valve is fitted with good results, it points to the inefficiency of the carburetter in this respect.

In fitting an extra air valve great care should be taken that no air leaks are occasioned. An air leak is always an uncertain factor, and good carburation demands exactitude in everything: Air leaks at any point should be carefully eliminated by making gas-tight joints at all unions, inlet valve stems, etc. Rather more advance to the spark is required with benzole to give the maximum efficiency, owing to its slower burning; but the usual range of the magneto will probably accommodate this without retiming.

Having ascertained the correct level for petrol—if not apparent, the information can be elicited from the manufacturers of the carburetter—which is usually so that the petrol just comes to the top of the jet, without spilling over, the tank should be filled with benzole and the level brought up to the same height by means of a washer on the float. Incidentally, better carburation is obtained by high level and small jet than vice versa. Then a smaller jet should be fitted and a test made for power and consumption.

#### An Easy Testing Method.

There ought to be a hill in the test on which the car's highest speed on petrol is known. It should also be known what its consumption is for a given stretch of road. An easy means of testing consumption is to take a route that is exactly 20 or 25 miles in length, finishing at the starting point. Before starting, the tank should be filled to the brim (or to a mark on a gauge), seeing that the car is absolutely level, and marking the exact place where the wheels rest. Upon returning, the quantity consumed is measured by filling the tank to the same level as formerly, with the wheels resting on the same spot as before. The quantity consumed should be noted by filling up from a graduated pint measure, which can be obtained from the stores or chemists. Special auxiliary tanks for attaching to a lamp bracket can be obtained, and thus the consumption can be accurately measured over short distances. Repeated tests with different jets, more or less air (if it can be varied), will soon determine the best setting for power and consumption, a happy mean having to be struck. In all probability, a light car that has hitherto been giving an approximate consumption of 30 m.p.g. can be tuned to do 45 m.p.g. or even 60 m.p.g. on benzole. It is well to assume, by the way, that carburation, even for petrol, is not good, and try every possible combination. A day—or even an afternoon—making tests like this is most instructive, and the results mean much greater enjoyment for future runs. Careful note should be taken of the setting for each experiment, so that it will be known exactly what alteration is necessary when going back to petrol—usually removing the weight on the float and substituting a larger jet. For each test the engine should be warm.

Economical consumption, with efficiency, greatly enhances the life of an engine. Carbon deposit is chiefly caused by a rich mixture.

Our own experiments with benzole on an air-cooled engine—which is the worst possible for the purpose—are not without interest. With one simple, cheap carburetter, of the motorcycle type, we found it impossible to get good results; it was most wasteful of petrol, caused carbon deposit to form very rapidly, overheating and other troubles. We replaced it with a Senspray carburetter, which immediately gave good results, and, with a little tuning, produced a



### A MUCH-CRITICISED FUEL (contd.).

consumption so low as 67 m.p.g., as compared with about 50 m.p.g. for petrol, together with much more power. The engine was just under 1000 c.c.

On another larger engine, also air cooled, which was just under 1100 c.c., we obtained even better results, using an automatic carburetter—a Solex. The consumption was 69 m.p.g., while, instead of requiring to be decarbonized every 1000 miles, it ran at least 3000 miles without it being necessary to clean it out, and the deposit was then found to be comparatively slight. Benzole deposit, by the way, is much softer than petrol, and is therefore easier to scrape away. At the present moment we are experimenting with specially cut cams, and it is hoped, in a fair test, without faking, to produce a result of 90 m.p.g. So far, a short test has given 77 m.p.g. on petrol. As the total weight of the load was 10 cwt., this gives a ton-mileage of  $38\frac{1}{2}$  t.m.p.g., which is distinctly high, though not the best yet attained.

We had one unfortunate experience with benzole, the engine carboning up in 50 miles so that it would

not run. Analysis of the benzole showed that it was very bad indeed, owing to an excess of toluol. Toluol was put in to lower the freezing point. Benzole, theoretically, freezes at 34 degrees Fahr., or 2 degrees less than water. Actually, the freezing point is very much lower. The toluol was added by the manufacturers, quite unnecessarily, to reduce the freezing point to 22 degrees. It is no longer added by the distillers of the particular sample we got hold of, and, in fact, owing to its use in "T.N.T." the well-known explosive, is practically unobtainable.

With regard to the damage to paintwork often alleged against benzole, we believe that it does have some slight effect, if slopped over it. Our tank orifice is in the centre of the scuttle dash, yet our paintwork is absolutely undamaged after a year's continuous use.

The object of "The Motor" in encouraging the use of benzole—and by its influence alone has it come into popularity—is to bring about a home-produced fuel and make us entirely independent of foreign sources of supply. In doing this many thousands of motorists have been able greatly to cut down their running costs and increase the pleasure of driving.

## MAINTAINING APPEARANCE.—The Care of Upholstery, Paintwork and Hoods.

THE appearance of a light car is as large a factor as its good running, both in the pleasure one gets from driving it and in the price it fetches in the second-hand market. Besides, if it looks neglected outside, it has probably not been cared for inside.

Most cars get their regular—or irregular—attention in the matters of washing down and dusting out the body, but if they are to look well-cared-for after a season or two of use they want just a little more than this, and the little more can be given at any convenient time, such as a wet afternoon.

### Upholstery.

The upholstery probably looks just a trifle shabby. To make it look newer the cushions should be taken out and all corners and round the buttons thoroughly dusted out with a soft brush. There will be many little corners and crevices that never get cleaned out in the ordinary way. It will be noticed, too, that the cushion has chafed the sides and back where it touches them. The next process is dressing all the leather with sweet oil. A little should be taken on a soft pad of cotton wool or old rag, and well rubbed into every part of the leather. No attempt should be made to shine the upholstery at this stage: the object is to get a small quantity of sweet oil evenly distributed over the leather. At the chafed parts it will dry in quickly, and a second dressing may be applied there. The colour of the leather will come up better, due partly to the oil reviving the surface, and partly to the slight film of dirt that the cleaning pad has removed. The sweet oil should be left to dry into the leather all night, or two nights if possible, and then the whole of it may be rubbed lightly with a perfectly clean soft rag to remove any oil that has been left on the surface. After this, a very little furniture cream, or one of the leather polishes sold for the purpose, should be gently applied and the shine brought up with quick, light rubbing. By this treatment good upholstery may be kept in condition indefinitely.

The paintwork of a car is exposed to all sorts of weather: water, dust, sun and wind—all of them detrimental to the varnish or enamel with which its surface is coated. Under the action of such external influences varnishes and enamels must dry and crack. It is their nature to do so, but the drying and cracking may be delayed by feeding them from time to time with linseed oil. As with the upholstery, all

dirt and dust must first be removed, for a particle of grit on the rubber will make scratches. Also, it is desirable when the paintwork is in bad order, to clean it down with paraffin applied with a soft rag. Very little paraffin should be used, the rag should be frequently changed, and the paraffin must not be allowed to dry on. Its purpose is to clean the surface, and each panel should be cleaned and dried off before the next is begun.

The linseed oil should be applied a little more liberally than was the case of the sweet oil on the upholstery, a very thin film being left rather than a heavy smear, and the surplus must be polished off the next day as lightly as possible. If desired, a final gloss may be put on with furniture cream or a special polish, but this must be looked upon merely as a polish, whereas the linseed oil actually fed the varnish and added that oily body which was being gradually dried out by the sun and wind.

### Paintwork.

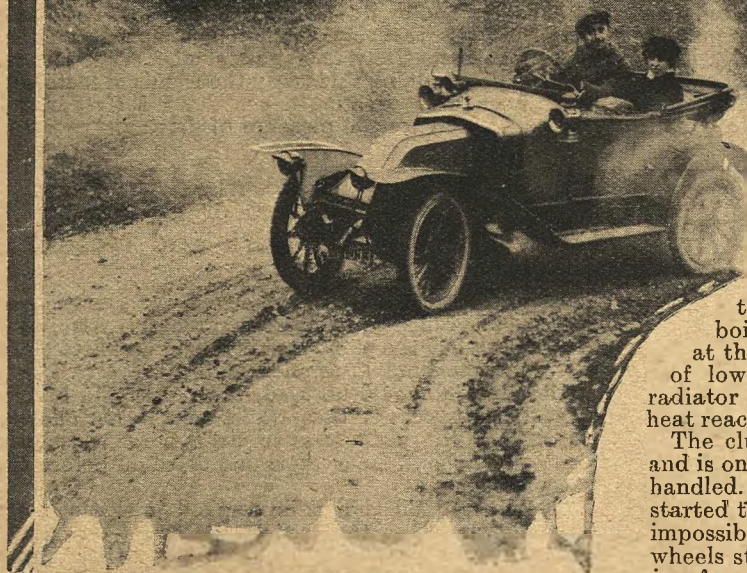
One is often asked the best way to touch up chipped places on the paintwork. There is no best way, and it is a very difficult thing to do. There is the colour to be matched exactly, and a slight depression to be filled up as well. Anyone who has the time and patience should first match the colour. For this purpose the little penny tins of enamel are extremely useful. When the colour is matched as nearly as possible the depression should be filled with colour. It will be necessary to give several coats, each coat being allowed to dry before the next is put on, and the depression should be filled up to the edges and no more; that is to say, the patching must not overflow the chipped place. The brush used should be a sable or camel-hair pencil, as used by artists. Even with the greatest care the results are so poor that professional coach painters will rarely undertake the job if the chipped places are in a conspicuous position—in the centre of a body panel, for instance.

With hoods, less perhaps can be done than with any other part of the car, in the way of renovation and the removal of mud and water stains. The most thorough way is to take the hood off the car, brush it well with a stiff brush, and then wash it with soap and water. While still damp it must be erected on the car and left to dry in position. It can then be treated with hood paint.

M.G.



# The Charm of the Charronette



the cooling. During our test, the water never boiled yet the engine was always maintained at the correct temperature, even after long spells of low-gear work. An air channel between the radiator and the dashboard proper prevents undue heat reaching the passengers and also assists radiation.

The clutch fitted is of the leather-lined cone type, and is one of the best of this construction that we have handled. Even on a slight up-grade we habitually started the car on second speed, and even then it was impossible to tell the exact moment at which the wheels started to revolve. When fully engaged, there is, of course, no sign of slip.

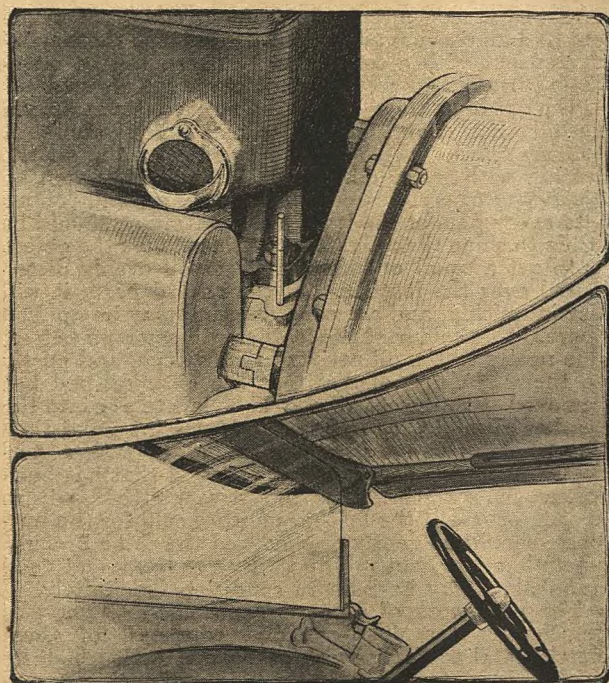
**A** FIRST-RATE touring car is the title which best befits the Charronette. It affords a degree of comfort such as is rarely met with on so small a car, and it possesses such a reserve of power and is, withal, so speedy, that touring can be undertaken with comfort and confidence, whatever the district selected or the condition of the roads.

As a town carriage, the Charronette is also exceptionally good. The flexible engine, the smooth-acting clutch, and the easy gear change, all combine to make traffic driving more of a pleasure than an infliction. The engine responds instantly to the accelerator pedal, a fact which contributes materially to the confidence experienced when driving.

This little car is constructed on standard lines. The engine has four cylinders, which are neatly cast together, the bore and stroke being 58 mm. by 100 mm. All the valves are on the near side, one large diameter valve cap covering a pair of valves. The mixture is drawn from a Claudel-Hobson carburetter, controlled by pedal, hot air being taken through a muff on the exhaust pipe. Ignition is by high-tension magneto, with fixed firing point, an Oldham coupling in the drive permitting of instant detachment.

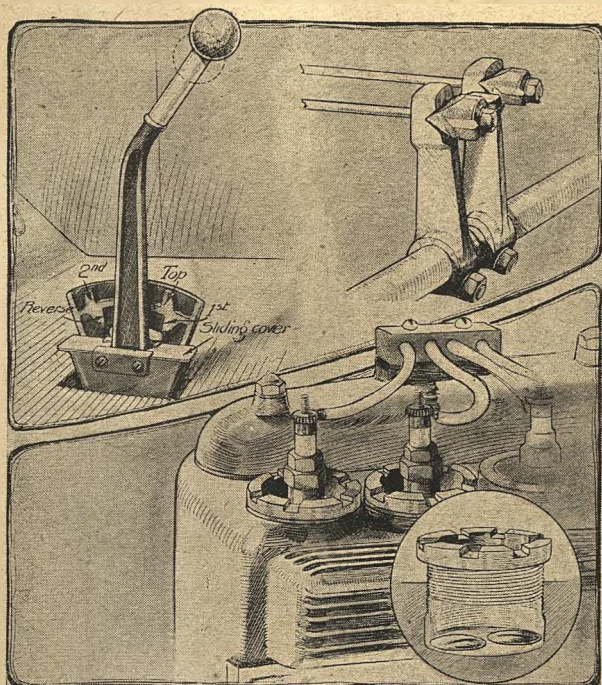
The lubrication is carried out on distinctly novel, yet practical, lines. The silent chain driving the camshaft and magneto is made use of as the oil circulator, the lubricant being picked up from the sump by the travelling chain, and thence delivered to oilways leading to the different bearings. It is remarkably efficient in practice, no attention besides occasional replenishment being necessary.

Engine cooling is on the thermo-syphon system, the radiator occupying the familiar Charron position on the dashboard. No fault whatever can be found with



Above, the combined oil filler and breather, showing also the level indicator. Below, the neat flap on the hood, which prevents rain and wind entering.





Details of the Charronette. The gear lever, which works in a vertical gate. The self-locking brake adjustments. The valve cap covering a pair of valves.

The Charronette is one of the now numerous cars on which the gear lever is placed centrally. The gearbox is on standard lines, and provides three speeds and a reverse. The control is, however, distinctive, as a vertical gate is employed. To obtain first and reverse, the knob on the gear lever is depressed and the lever pulled backwards and pushed forwards respectively. For second and top, the knob is raised, and the lever operated in exactly the same way. This gate is wonderfully easy to operate, and, in particular, the change from second to first, so difficult on an ordinary gate, is robbed of its terrors. Simply press on the knob when in second and pull the lever straight back.

The gear ratios are exceptionally well chosen, and they permit of a good speed on all hills, without necessitating frequent changes. For instance, the first stretch of Reigate Hill from the level-crossing to the

steep pitch was easily climbed on top, and the remainder of the hill was covered at 20 m.p.h. on second speed. Other hills well within the capabilities of top gear were Kingston Hill, both from the town and from Robin Hood Vale. Up the latter hill the little Charronette successfully kept pace with a 20-30 h.p. car.

On second gear, the car is a magnificent hill-climber; such well-known test hills as Newlands Corner, Charterhouse, and Ranmore Common were all climbed very near the legal limit, and even on Combe Bottom a portion of the 1-in-6 stretch was climbed on second before first was required. This was the only time first gear was employed on any hill, a fact which marks out the Charronette as a really excellent hill-climber.

The engine is remarkably flexible and vibrationless, the acceleration is distinctly good, and the brakes are well up to their work. The body is extremely comfortable, and in wet weather, as we, unfortunately, experienced, the protection afforded by the hood and screen is extremely good. The suspension of the car leaves little to be desired, and even at speeds as high as 42 m.p.h., the car held the road and did not jump about, in spite of its comparatively short wheelbase.

In town traffic, the most noticeable feature is the large steering lock provided. It is possible to turn round in an average street without reversing, and traffic can be negotiated with ease and certainty.

Every Charronette sold is guaranteed to do 40 m.p.h. and 35 m.p.g., figures which can be considerably exceeded in practice. The price is 185 guineas, with full equipment of five lamps, hood, screen, and spare wheel. With a dynamo lighting set, the price is 200 guineas. The makers are represented in England by Charron, Ltd., 65-66, Piccadilly, London, W., and deliveries can be made at very short notice.

Up Ranmore Common Hill on second.





## THE LIGHT CAR MACHINE GUN BATTERY IN A



The sketch is drawn from suggestions made by a naval officer, recently returned from Belgium, who thinks



## ION. A MOBILE FORCE FOR RECONNAISSANCE.



There is tremendous scope for such a force. The guns, of course, are only used when dismounted from the cars.



# NORTH WALES



The Cromlech  
GREAT ORME

THE war goes on, but so does business, and those who are left behind, from various reasons, to carry on the indispensable business must have their relaxations just as the men in the trenches have theirs and hurry home on four days leave.

This being so, it is safe to assume that touring will go on this year just as other years, and it may even be increased, as there will be many people unable to take their annual long holiday, and who will instead take the needful rest a week at a time. What better manner of spending a week than on a tour with continually-changing scenery and everything to interest the mind and take it off business worries?

One of the finest touring districts is North Wales, with its combination of sea and mountain scenery. It is easy of access from most parts of England, and is particularly in favour with Midland motorists, who are but just over 100 miles away. London, too, is within a good day's run if one is willing to make an early start and lose no time on the way.

Starting from Birmingham, with the coast line from the mouth of the Dee to Llandudno as objective, the tourist finds a choice of routes open to him. He can go by the direct road through Wolverhampton, Newport and Whitchurch to Chester, and thence along the left bank of the River Dee until the open sea is really reached at Prestatyn, or pretty Prestatyn, as the railway posters rightly term it.

## Another Route.

Another route farther westward is via Shrewsbury, Llangollen and Bettws-y-Coed to Llandudno, or an alternative to either route is to branch off at Whitchurch on the former route or just before Llangollen on the second route, and proceed via Wrexham, Mold, Denbigh and St. Asaph to Rhyl. A moment's reference to a map will make this clear, and each route has its advantages and disadvantages.

The first route through Whitchurch and Chester is fast, and a good route for the driver who wishes to reach the sea in the shortest possible time. Its weak points are the first portion from Birmingham to Wolverhampton and the run from Chester onwards.

The Birmingham to Wolverhampton stretch was once infamous as the worst few miles of tramlines in the Midlands, but although it has been improved of late months, it is a journey which can well be avoided, and a detour through Erdington and Brownhills, along the old Roman road, will save time, although it is a mile or two longer. The run from Chester onwards is an unending succession of small towns, but can be avoided by a cross-country route to Mold, continuing by St. Asaph and Rhuddlan in order to avoid the bad stretch from St. Asaph to Abergele.

The way by Shrewsbury and Llangollen must be given the palm for scenery, for the run down into Llangollen is a wonderful succession of rapidly-changing views. An ideal tour would be to leave Birmingham



## DAILY

### OUTWARD.

Birmingham,  
Chester,  
St. Asaph, Rhyl,  
Prestatyn,  
Colwyn Bay,  
Llandudno,  
Conway,  
Penmaenmawr,  
Llanfairfechan,  
Bangor, Menai,  
Carnarvon.

ham after an early breakfast and go straight through to Chester, for there is nothing of absorbing interest on the way. After a late lunch there one could spend a brief hour looking round the ancient city, for the cathedral, city walls and ancient buildings are full of interest and beauty. If desired, the afternoon could be spent in sight-seeing, for there is much to be seen, and a stay made there for the night. The quaint old place well deserves its reputation:—

“There's a widow in sleepy Chester,  
Who weeps for her only son.”

But, unfortunately, there must be many to whom the quotation applies at present.

If Chester is left the same day, a short halt for tea could be made and the run continued, but St. Asaph should claim an hour for the sake of inspecting its ancient cathedral and the many interesting relics it contains. Even with these delays Rhyl should be reached the same evening in time for dinner.

On the second day the first part of the morning will doubtless be given up to exploring the town, but the tourists will probably be quite willing to run on as far as Prestatyn, which is only a pretty little village nestling at the foot of the hills. Lunch might well be taken here, and in the afternoon the first mile or two retraced on the run to Colwyn Bay and Llandudno.

These two seaside resorts are only separated by the promontory of the Little Orme, and a night should certainly be spent at one or other of them. The fine



# for EASTER.



## ITINERARY.

### RETURN.

Llanberis,  
Llanberis Pass,  
Capel Curig,  
Bettws-y-Coed,  
Trefriw,  
Llanrwst,  
Bettws-y-Coed,  
Llangollen,  
Shrewsbury,  
Brownhills,  
Birmingham.

promenade at Colwyn Bay extends for three miles in the arc of a circle, and has been used for speed trials ere now. The woods at the back of the town rejoice in the awful name of Pwllcrochan, and it is well worth while to forsake the car temporarily and wander through them. A run up the Nant-y-Glyn Valley will repay the tourists with some splendid views, for from the hills at the back of the town the Conway estuary can be plainly seen, with Anglesey swathed in mist in the background.

The famous Marine Drive at Llandudno, round the Great Orme's Head (toll 1s.), and Conway with its magnificent old castle and modern bridges in striking contrast, will all demand attention. Conway can, indeed, be done on continuing the tour, and half a day in the old castle and the Plas Mawr, where Queen Elizabeth once stayed, will not be grudged. The Plas Mawr is a magnificent example of an ancient Welsh dwelling, and the fireplaces and old oak appointments are blazoned with the insignia of Elizabeth Regina.

Passing on down the coast on the third day, unless the attractions of this little corner of Wales have called a longer halt, the little towns of Penmaenmawr and Llanfairfechan will quickly be reached, shut right in by towering mountains. If time presses these will have but a fleeting glimpse, and Bangor will be made for at the entrance of the Menai Straits. The famous Menai bridges will soon be in sight, as the road permits, and if Anglesey is to be included in the tour the famous suspension bridge will be crossed over, the equally well-known Britannia tubular bridge,

through which the railway runs to Holyhead, being in full view.

If time does not allow Anglesey to be included, the run will be continued into Carnarvon, and this historical old city, with its famous castle, will certainly occupy the rest of the day. On the morrow, the fourth day of the tour, it will probably be necessary to reach home again, so an early start must be made for Llanberis and the famous pass of that name. This little village nestles at the foot of Snowdon, and on the left will be seen a huge slate quarry, which is worked by electric power derived from a mountain stream. The beauty of the mountains of Snowdonia rising majestically on either hand will cause many a halt, and at Easter-time their peaks will most likely still be clad with snow, which will gleam dazzlingly if the sun be kind. If time permits and the weather is fair, Snowdon may be climbed from Llanberis very easily.

## Wonderful Scenery.

Tearing themselves away with difficulty, the tourists continue amidst wonderful scenery to Capel Curig, where the famous Holyhead road is joined. On the run down into Bettws-y-Coed a stop should be made at the Swallow Falls, but these are grander in the summer, when the overarching trees form a perfect frame for the foaming cascade. Bettws itself is a picturesque little place, and if the calls of business are not so urgent that another day cannot be taken, it is an ideal spot to break the journey home. There will probably be time before lunch to inspect the Miner's bridge and the lovely ravine leading to the foot of the Swallow Falls.

After lunch the Fairy Glen will demand a visit, and the car may again be requisitioned for a short run along the banks of the Conway river to Trefriw. A visit will surely be made to the Wells here, and the waters tasted at the small pump room, although not exactly palatable the waters have not such a bitter taste as medicinal waters usually have. Running over a toll bridge across the river Llanrwst is reached, and after tea the other river bank followed back to Bettws, which is entered over the Waterloo bridge.

If the extra day cannot be spared the tourists will have left so much of interest behind already that a return to this ideal touring ground will have been decided on long ago, and they will be content to have a superficial look round, and then push on to reach Llangollen, which will make an ideal luncheon stop.

In the afternoon no time must be wasted, so a glance round Llangollen and then the climb up the pass is begun with regret, for the lovely scenery is being left behind, although the journey still holds interest. Shrewsbury reached, the journey is best ended by running along the old Roman road to Brownhills, and then the Midland metropolis is soon reached and a four or five days tour brought to a happy ending. The weather and roads are generally good.



# LIGHT CARS AT THE FRONT.

## How They Stand Up on Truly Terrible Roads.

AT the very commencement of these notes it is necessary to point out that the roads in Northern and Eastern France especially have suffered grievously of late—not that they were ever comparable with ours so far as road surface is concerned—yet they certainly possess advantages of their own in the long, open, straight stretches which delight the hearts of the speed-loving Frenchmen, but which no doubt seem dreary enough to the English lorry driver.

Now, there is a certain stretch of road which I have traversed many times, and which I have seen in every period of its decay. I remember well the first time I passed over at speed on a rather lightly-sprung car, and I remember thinking then what an extraordinarily good piece of road it was, though perhaps on the soft side.

And then convoy after convoy of cars, motor lorries, and even steam tractors used it—not to mention innumerable cars and postal service box-cars; that is, touring cars with large covered boxes mounted on the chassis in place of the back passenger seats. Furrows and then ruts soon appeared, and these were followed by waves or wrinkles, hardly noticeable at first but afterwards decidedly pronounced.

Then deeper and deeper became the ruts; the road surface gave way in one or two places, and the gutter was ploughed up by drivers taking to the grass at the roadside, and the road was wrecked. It was realized that urgent repairs were needed, and then when I passed one morning three or four men were found making a start, and several four-horsed wagons had deposited their loads of flint and earth.

The ruts and holes were, in the course of a few days, filled up, and earth thrown on the top of the stones; then for the next few weeks the road was in an appalling condition, and there was no track free from the stones, even for a motorcycle.

### Gruelling Tests.

In the meantime the convoys of cars and lorries continued to pass, and comparatively soon the stones were ground into the road surface, and to-day the road has recovered to a large extent. But it is when the roads are in a decaying condition that gruelling tests of chassis, tyres and wheels take place.

As a follower—and a very keen one at that—of the cyclecar, and, later, the light car movement from the very beginning, I feel it would be of interest to owners of light cars who contemplate making use of this form of vehicle, either for military or any other purposes, to obtain some idea of the requirements of a car that should prove successful.

In nearly six months, since the commencement of hostilities, I have seen in all only some six or so makes of light car or cyclecar. At the Front I once met a driver of a very well-known make of friction-driven light car, which had a large mileage in Belgium to its credit. The chassis and bodywork, I was informed, had stood up excellently to the heavy work which was, however, too much for the small-sized tyres and wheels fitted. "A strip of rough pavé with a couple of feet of slush on either side" aptly describes the majority of the roads in that part of Belgium occupied by the British Forces.

Other vehicles seen include the three-wheeled Morgan and the ubiquitous Bébé Peugeot, which is, apparently, as immune from trouble as any other tour-

ing car. I have asked French drivers and mechanics what effect the roads have upon such small tyres and wheels, and the reply is that the results are satisfactory enough, and certainly this little car, if one can judge by appearances, holds the road.

Often in this journal one has seen diagrams showing how a small wheel dips into a pot-hole more deeply than a wheel with a larger circumference, but it is equally obvious that the weight of the vehicle and load, and the kind of springing employed, play an important part in the effect produced.

This introduces the question of springing, but this, however, must be settled by actual experience. At any rate many of the drivers of the light cars which I have seen out here complain of lightness of springing. Eminently successful seems to be the cantilever type, such as is employed by the makers of the Siddeley-Deasy cars.

It is, indeed, instructive to see an English touring car traversing rough stretches of road—and infinitely more instructive actually to handle various well-known makes of British touring cars. Were one able to watch closely a back axle out here, one would feel disposed to make an assertion that 75 per cent. of the time one of the two back wheels was in mid-air.

### The "Speed-roll."

One can note, too, the "speed-roll" of most English landaulets, and how they "wander" across the road when travelling fast. Fitted with a transverse rear spring a car is difficult to hold on these roads, even at a fair speed, and especially on corners when the "tail" swings round to either side. Some cars, too, seem to go forward in leaps and bounds on rough roads, the back of the seat periodically hitting one in the back—a highly unpleasant motion.

The design of French touring cars apparently tends to the employment of short and stiff springs—three-quarter elliptical fore and aft. Of the cars which seem to hold the road extraordinarily well, a few are the Panhard-Levassor, Peugeot, Renault and Mors.

The Singer light cars, a number of which make have been taken over by the Government to join the Expeditionary Forces, seem to be running very well, though one hears complaints about lightness of springing. Otherwise, drivers of these cars seem perfectly satisfied.

During several thousands of miles covered in all weathers or on all sorts and conditions of road surface, it has always been my ambition to replace my motorcycle by a simple form of cyclecar, built on the lines of the G.N., Buckingham, de P. or Carden; that is, to obtain as far as possible maximum efficiency for simplicity. I am inclined to think that two speeds would be sufficient, provided one were an emergency gear and the top gear moderately low. Final belt drive would, no doubt, prove advantageous, and supply a positive yet not harsh means of transmission; it should also reduce the cost of upkeep. Personally, I would prefer a water-cooled multi-cylinder engine, though probably an air-cooled V-twin cylinder would give satisfactory results. Certainly I would emphasize the point that I would prefer a four-wheeled vehicle to a three-wheeler, owing to the ruts. I would regard sturdy springing and the fitting of large tyres and wheels as essential features.

L. STUART-VAILE,  
Lce.-corpl. A.S.C., M.T., France.





*To one who has been long in city pent,  
'Tis very sweet to look into the fair  
And open face of heaven, to breathe a prayer  
Full in the smile of the blue firmament.*

Keats.

The first drive under Spring conditions should be one of the finest of the season. But, however blue the heavens, it may be marred by petty worries, such as tyre troubles. Guard against this by fitting

# DUNLOP

tyres, which give practical immunity from puncture and a feeling of security all the time.

The Dunlop Rubber Co., Ltd., Founders throughout the World of the Pneumatic Tyre Industry, Aston Cross, Birmingham; 14, Regent Street, London, S.W.  
Paris: 4, Rue du Colonel Moll.

DUNLOP SOLID TYRES FOR HEAVY COMMERCIAL VEHICLES

**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.

A29



# Calcott Cars 1915 Models

10.5 H.P., 4-CYLINDER.

PRICE  
ALL ON **£195**

IMMEDIATE DELIVERY.

Fitted with Dynamo Lighting Set, £15 extra.  
Fitted with Electric Self Starter, £15 extra.  
Fitted with Dicky Seat, - - £4 10s. extra.

CABRIOLET MODEL, £255

**PROMPT DELIVERIES**—— If you require your car for Easter, make sure of it now.

*Trial Runs Free.*

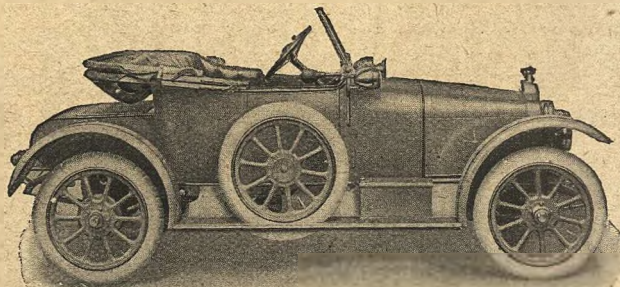
Best prices allowed for Motorcycles, Light Cars or Cyclecars in Part Payment.

Also—

Singer £205, and with lighting set £215

Swift, 10 h.p., £210. G.W.K., £168.

*Prompt delivery of any 1915  
LIGHT CAR or CYCLECAR.*



Write us, we shall be pleased to answer any inquiries.

**Wilkins, Simpson & Co.,**  
11, Hammersmith Rd. (Opposite Olympia), London, W.  
—— LIGHT CAR SPECIALISTS. ——

**Better Springing**

**More Comfort**

**No Skidding.**

**Protection from  
the Elements.**

**No need to wear  
Overalls.**

**Room for plenty  
of Luggage.**

A LETTER FROM  
ONE OF OUR  
CUSTOMERS:

Thank you so much for the prompt way in which you sent the spring; it is an absolute blessing to deal with you after some of these anything but obliging motorcycle firms.

I find that now the engine is in good tune there is absolutely no need for a two-speed gear, the clutch being as sweet as a car clutch on bottom gear.

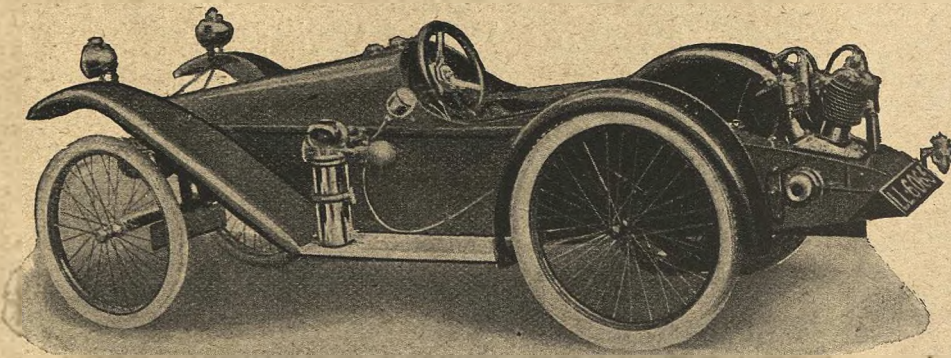
Thanking you again,  
Yours truly,

The **CARDEN**  
**Engineering**  
Co., Ltd.  
Somerset Road  
TEDDINGTON.

## A MOTORCYCLE ON FOUR WHEELS

WHY ENDURE THE DISCOMFORTS OF A  
MOTORCYCLE WHEN YOU CAN HAVE A

# CARDEN MONOCAR?



PRICE £70. TWO-SPEED £80.

**HELP THE  
MOVEMENT**

by letting advertisers know that their advertisements  
in "The Light Car and Cyclecar" interest you.





*"The suggestions of to-day may be the realities of to-morrow."*

## DR. LOW'S TECHNICAL CORPS.

Attaching the Technical Corps to an Existing Volunteer Corps.

### Further Details of the Scheme.

I have read with interest the letter from Mr. Milns concerning the Birmingham Technical Corps, but my suggested scheme was really to be limited to technical experts in every branch, although it is very nice to hear that others also believe in the scheme.

In London there is nothing of the kind, and as I see you say in the Editorial columns the need exists for some outlet by which people can give their best services without throwing other people out of employment and making the total net gain to the country nil! If this scheme were to be taken up and proper forms published, I am sure from the response I have received that many would be glad to help. Such a corps could be attached to an existing Volunteer corps, and I have already found that without any liability upon its members other than a subscription of 25s. per annum we could provide those interested with a good rifle range, interesting lectures and other valuable instruction.

The point which requires bringing out is that this is not a corps in which time would be spent in drills, etc. A really technical man knows his job it has taken him his life time to learn, and a technical corps would be composed of the people who are simply willing to say "if there is the need I will give the benefit of my knowledge as far as I am able to help my country."

A. M. Low, A.C.G.I., D.Sc.

\* \* Letters on this subject *must be addressed to the Editor.*

\* In suitable cases the writers will be put in communication with Dr. Low.—Ed.

### Transferring from a Volunteer Corps.

I was pleased to see the letter from Dr. Low in your issue of 1st March, as he put clearly what has been in my mind for some time.

I would very much like to have fuller details as to his ideas on the subject, as his letter, naturally, only deals with the matter in a general way.

In particular, I would like to have his ideas as to the case of men such as myself, and other engineers, who for months past have been members of one or other of the various recognized volunteer training corps, either in town or in the suburbs of London.

In very many cases, if not in most, we have already made ourselves efficient in drill, musketry, and, in some cases, signalling.

All of these items are, of course, necessary in the case of any technical corps formed, in addition to the discipline

learned, and, in working out any scheme, I venture to suggest that the question of such men should be taken into consideration, as very many men will think twice before taking the step of transferring from the corps they are at present enrolled in, to a new one, unless they are certain that their services, by so doing, will be of more use to their country.

I am of the opinion that there must be many engineers and others whose special technical knowledge would never be required or called upon in connection with the work of the ordinary V.T.C.

Apologizing for the length of my letter,

R. ADDIE.

Suffolk House, Laurence Pountney Hill, E.C.

### Technical Training and Practical Experience.

I have read Dr. Low's letter with reference to the formation of a Volunteer Technical Corps with much interest. The idea seems to me an excellent one, and if the approval of the authorities can be obtained, it should form a very useful body of men, from which they could be drawn to fulfil any special service for which they would be fully qualified without the necessity of further training.

There are, no doubt, a great number of men, like myself, who, through business and other responsibilities, have not been able to join the Regular forces, but who are only too willing and anxious to be of some real use, and who consider that this technical training and practical experience could be better and more usefully utilized than by joining any of the volunteer corps.

If my services will be of any value, I shall be pleased to devote a great deal of my time to this movement.

VERNON A. TRIER, A.C.G.I.,

(Managing Director, Messrs. Trier and Martin, Ltd.).

Uplands, Champion Hill, S.E.

### Providing the Corps is Recognized.

I have read the interesting letter from Dr. Low, and agree with his general remarks. I understand that his idea is to form a corps of engineering and allied members whose civil responsibilities prevent them from wholly offering their services to the Government. This being the case, providing that a member's spare time could be put to real and practical utility, and the corps be recognized by the Government, then I should be pleased to register as a member.

C. F. HALSALL (Director Wilton Cars, Ltd.).

7a, St. John's Hill, Clapham Junction, S.W.



## THOUGHTS AND OPINIONS (contd.).

**Why a Morris-Oxford Does Not Carbon Up.**

I see that a correspondent of yours has run his Morris-Oxford 7500 miles without removing the carbon deposit, and may explain that there are three reasons for this. Firstly, five piston rings are fitted and the pistons are a close fit; secondly, the valves being on opposite sides, there is a never-ceasing ebb and flow of gases across the piston, preventing deposit settling; thirdly, the cylinders are all completely water-jacketed, with the result that distortion through unequal heating is absent and the pistons maintain their original fit. I have run my Morris-Oxford about 8000 miles with one clean, effected by taking out the plugs in the tops of the cylinders after removing the water jacket casting on top of the cylinder bloc. It is, of course, far quicker than lifting the cylinders, but care is required.

I still have the original four grooved Dunlops, and they have only suffered three punctures. Of other stops I have had in all only two—both for choked jet. Repairs, renewals, etc., are: four plugs, 15s.; one selector spring, 6d.; leaf springs, 5s.

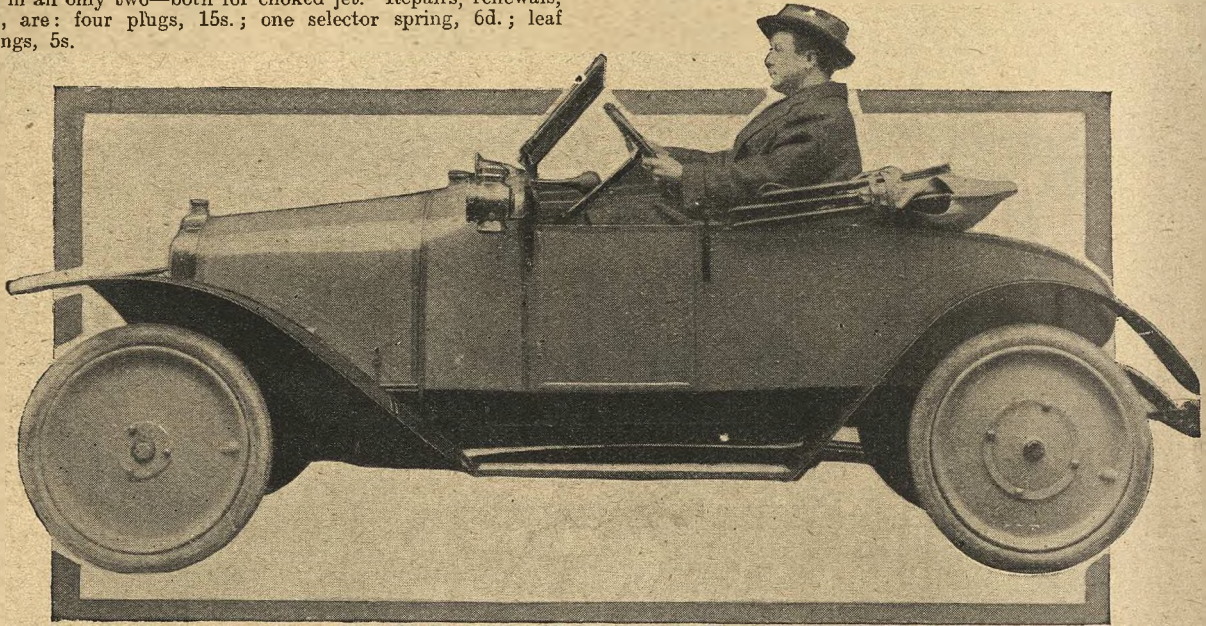
roads make one realize to the full the terrible toll of human life that the war has exacted. The roads, contrary to our expectations, were everywhere in excellent condition, and if we had not been bound by convoy rules, our speed would have been great. Our journey was more or less a triumphal procession. In many towns where we stopped, souvenirs, in the shape of bottles of champagne, "Union Jacks," etc., were showered on us, and in many cases meals which we had were given gratis.

Now that we have arrived at our base, we have started on our work proper. We have much more exciting duties than are usually assigned to Red Cross contingents, as we go up at night-time, with lights extinguished, right up to the trenches, and take the men, even before they are dressed, in the field hospitals.

The machines, which include all makes, are standing up to the work well.

I am very fit and well, and am having the experience of my life.

A. P. BRADLEY (Croix Rouge Française).  
Somewhere in France.



A very taking little Bayard light car, its appearance being greatly enhanced by the Lynton disc wheels which the owner has had fitted to it specially. It was seen at the last Cyclecar Club run. A spare rim with tyre complete is carried in the tool locker. To change a tyre, one half the wheel is unbolted, when the new rim and tyre can be slipped into the place of the other, a very simple operation.

The plugs supplied with the car were unsuitable for the work and were scrapped after 1000 miles. The special Sphinx now in use have therefore done 7000 miles, with but two adjustments of the gaps.

The breakages of leaf springs were excusable, and no fault of the material or design.

J. W. G. BROOKER.  
8, Chisholm Road, Croydon.

**Singer Carburation.**

The trouble your correspondent, Rev. A. Rowand, is having seems very similar to that I have experienced, and is caused by the thread of the slow-running adjustment screw wearing, thus allowing the screw to slip and the throttle to shut.

Newport, Salop.

E. G. M. C.

**Exciting Work with the Red Cross.**

Just a line to let you know that THE LIGHT CAR AND CYCLECAR, "The Motor," and "Motor Cycling" are arriving week by week, and the members of the convoy read them eagerly. We have now arrived at our base, and are very comfortably quartered in nice billets. Our headquarters are fitted up cosily, and we get excellent food.

We took a long time getting across France, as we had to go in a convoy, which means that if any car breaks down, all the others have to stop until it is ready to proceed. There were over 30 cars, about 10 of which are brand new. Every day one of the new cars would give trouble. Everybody in the convoy is absolutely "fed up" with them.

Our journey was very interesting, as we traversed the country near Paris which had been demolished by the Germans and the Allies. The destruction is something appalling and the graves scattered over the fields alongside the

**Petrol Drying Up.**

With reference to the letter from the Rev. A. Rowand, the trouble seems to be quite similar to what I used to encounter. As each time it suggested something wrong with the carburettor, I several times had to take it down, together with the petrol pipe, but never found any blockage, although when it was put back again in place the engine would run on again for, say, another 10 miles, when the trouble would again arise. After a good deal of experimenting, I at last discovered it was due to keeping insufficient petrol in the tank, and although I could never quite understand why the small quantity of petrol should be the cause of stopping the engine and yet be sufficient to run perhaps 30-40 miles farther, yet the fact remains that whenever I carried a liberal quantity of petrol in the tank the trouble would not arise, but as soon as the petrol got rather low the engine would pull up, until I had taken the carburettor down again.

109, Mayow Road, Sydenham.

W. E. GROVES.



## THOUGHTS AND OPINIONS (contd.).

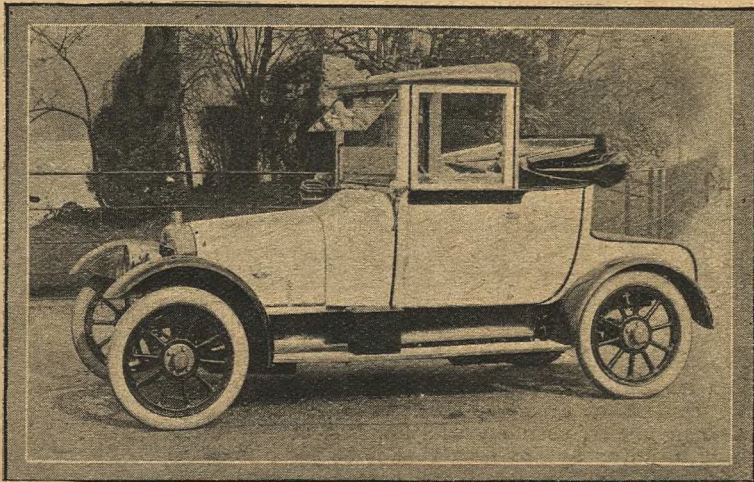
**"The Boiler's All Right."****A Strange Tale from India.**

Here is a story from India. I got out, my first motor conveyance of any kind from England last April. It was a Calthorpe Minor. My ideas as to machinery were of the haziest, but it was not difficult to learn to drive it. The appearance of the car captivated the inhabitants of our small station, and one lady asked me to drive her up to a hill station for a week-end. With some misgivings I agreed, and exactly a month after the arrival of the car we started off.

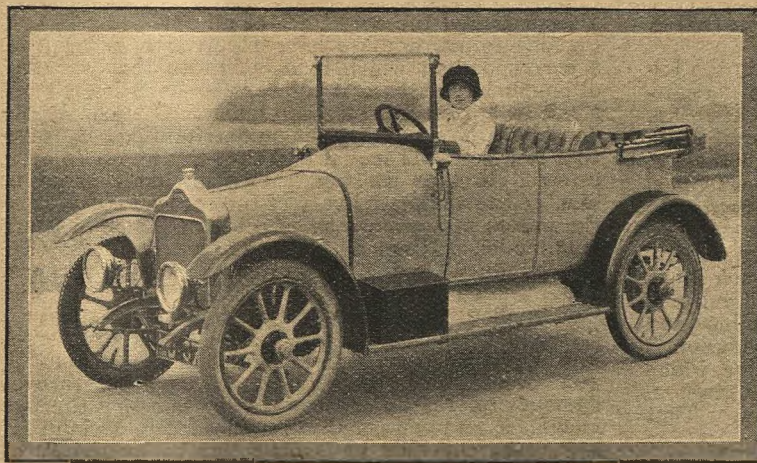
The end of May is the hottest time of the year, so we settled to start about 5 a.m., drive about 100 miles to the base of the hills, and then undertake the 22-mile climb in a horse tonga. This enabled us to get breakfast at Kathgodam, the town at the base of the hills, which we hoped to reach by 10 a.m. The car went well, but the luggage kept slipping off; and when 10 o'clock came it was very hot, and we were still 18 miles from Kathgodam. At that moment a herd of wild buffaloes charged right across the road in front of the car, and, without warning, we were into them and, in fact, ran over one. The car for some reason did not upset, but dived for the edge of the road, which is built on an embankment; a desperate twist of the steering wheel saved us from plunging down, but we were on a perilous slant, with both wheels on one side over the edge. In such circumstances even a light car is heavy, and it took us much toil to get it up on the road again. Then it was seen that the two front wheels had turned to look at one another. But this could not be helped; the steering was strange, but we could get on slowly.

Thus we went on for another two miles; all the time I was trying to get into top gear and failing, and at last one failure stopped the engine. Try as I would, I could not start it again. I used up all my limited store of know-

doubted it when he pounced on the speedometer pinion, which, after the accident, had got out of adjustment and was grazing the spokes of the front wheel, and pronounced that this was the cause of the failure to start. However, I let him put that right, and he also straightened out the bent steering rod and restored the parallelism of the wheels, which he did really well and quickly. Then he confidently tried to start the engine. No luck at all. He looked at the plugs, etc., again, and I tried to explain their function in bad Urdu, but evidently I failed, for at last he unscrewed the radiator cap, looked at the steaming water, shook his head dismally, and remarked, "It's your turn now; I have done my part. The boiler's all right!" After that I was content to have the car loaded on to a truck, feeling that nothing more could be done.



One of the latest cabriolets produced by the Enfield Autocar Co., Ltd., Birmingham. It sells complete with dynamo lighting set for £225, which is remarkable value, and, as may be gathered from the illustration, is beautifully finished.



Miss Neary Fielder of London, in a special three-seater Calcott, supplied to her by the Central Garage, 330, Kennington Road, London, S.E.

ledge in looking at plugs and valves and altering the throttle opening, and I turned the handle till my hands were blistered and bleeding and I was almost on the point of collapse from hunger and weariness and heat; but there was no result.

At last we learned from a passer-by that there was a railway station only a mile away, and we got men to push us there. There we at least found a waiting-room and a punkah (swinging fan), but there was no refreshment-room, and no prospect of any drink save the dubious water of the village well, and as our sandwiches were too dry to eat without drink, we had to fast. No train was due till 4 p.m., and I spent the time trying to put the car right with the help of an engine driver, who said that he knew all about motors. I

To end the story, we found that we could not get to our destination that night (trains are not very frequent on that line), so when a train came the other way we got into it and went back home, getting back at 1 a.m. We got our breakfast at an intermediate station at 7.30 p.m.! That was a day which I do not want to repeat. But I never got a word of reproach from the lady, and all through the rest of the day I murmured to myself at intervals "The boiler's all right!" and felt much comforted thereby!

R. MILNER-WHITE, I.C.S.

Budaon, United Provinces, India.

**Water Decarbonizing.**

"When one wants to clean out the engine" (I am quoting from Mr. Burn-Murdoch in *THE LIGHT CAR AND CYCLECAR* of 11th January); "all that is necessary is to get it running and hot, then open the tap and slowly trickle in water or paraffin, and in a very short time the engine is clean."

"To stand by an engine" (and again I am quoting from Mr. Burn-Murdoch in *THE LIGHT CAR AND CYCLECAR* of 8th March) "and squirt water into it" [Mr. Burn-Murdoch's expression; actually it was allowed to trickle in through the main air] "why you might just as well heave lumps of coal at the radiator for all the good you might do."

"I have not made any test yet as to decarbonizing either with water or paraffin." Again, a quotation from this estimable correspondent's latest effusion, and very much to the point. When he has actually tried the process—as I have done—he might be less certain which of us is best fitted for the retirement of a "padded cell."

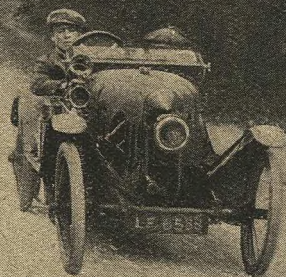
He admits that this theory is based on hearsay, and jeers at one who has put his flight of fancy to the test!

Tufnell Park.

ARTHUR DOUGLAS.



# Notes & Queries



## Simplicity, Comfort and Economy.

**B**Y far and away the largest class of potential purchasers of cyclecars—and we mean those who want simplicity, economy, and low first cost—are entirely unsuited by anything that is as yet offered to them. We are in continual correspondence with people whose needs are thus set out, and the letters that frequently appear in our pages are also very good evidence indeed of the market that exists for the ideal type of vehicle. At one time it looked as if America might meet this demand, and there is no doubt that if the right idea had been discovered, and that means the popular conception of an inexpensive two-seater, a very ready sale would have been found.

We are daily replying to letters couched in the following terms: "I want a cyclecar, comfortable, smart-looking, one that would not bear the stamp of cheap, makeshift production, silent running, preferably with a four-cylinder engine, with three gears and reverse, geared low enough to take any hill, very economical to run, guaranteed by a first-class manufacturer, to cost £90 to £100 complete." There is no answer to that. Many correspondents specifically mention that the various cyclecars now sold do not meet their ideal, because they are noisy or not sufficiently well finished, apart from the question of four-cylinder engines and a three-speed-and-reverse gearbox. Transmission is not a vital point, and the objectors to belt drive, which cuts down the cost of production and really gives an ideal transmission, are comparatively few. That such a vehicle will be produced is possible.

## Satisfactory Belt Fasteners.

The one complaint that we ever receive with regard to belt drive is the occasional breakage of the fasteners, the pins usually snapping off. Hitherto we have recommended a fastener made in France, and known as the "Star," but it is somewhat difficult to obtain. Its advantage is a positive instead of a link coupling. Recently, however, we have tried Forward fasteners, with detachable central links of various sizes for adjusting the length of the belts. By wrapping insulating tape, secured by copper wire, round the detachable link, so that it cannot come adrift (as when rounding a corner, when one belt becomes slack), the disadvantage of the motorcycle belt fastener is quite overcome. The Forward fasteners are exceedingly strong.

A34

## Misrepresentation of Facts.

We have pointed out the need for clearness in drawing up advertisements and the avoidance of all ambiguous terms, and we have received a letter from a correspondent which lends point to this warning, although in this case it appears to have been more a mis-statement than an ambiguity. Our correspondent bought a car on the understanding, he says, that it was a 1914 model and that the numbers on it referred to that car and should be transferred to him. After taking delivery of the car and completing the purchase, our correspondent found that it was a 1913 model, and not a 1914 as represented, also that the numbers had no connection with that car. We referred this case to our legal expert, who has replied to our correspondent as follows:—"Provided that you can prove that the seller knowingly sold you a 1913 model as a 1914 model, you would succeed in an action to recover damages for the difference in value between the two machines, and you should also succeed in a claim for any extra cost you have been put to by reason of the wilful mis-statement made by him regarding the registration numbers." It is quite conceivable that an ambiguous statement in an advertisement might create a disagreeable atmosphere between a buyer and a seller, and it thus behoves readers who are contemplating selling their machines to draw up a clear and concise announcement, giving all the necessary information a buyer would want to know. It is foolish to sell as a 1914 car a 1913 one.

## RULES FOR CORRESPONDENCE.

We are always pleased to give advice on choice of a light car or cyclecar, on technical matters, legal queries, touring queries, etc. All letters should be written on one side of the paper only, queries of different categories on separate slips, and addressed to the Editor, "The Light Car and Cyclecar," 7-15, Rosebery Avenue, London, W.C., accompanied by a stamped addressed envelope.



# AT YOUR FINGER TIPS

A Complete  
**Dynamo  
Lighting  
Set,**

**£18:10**

In response to the demand for a reliable high-grade Lighting and Starting Set for Light Cars—we are placing on the market a set which for value cannot be equalled throughout the world—Ready for immediate fitting. All sundries and everything complete.

The Lighting Set ... £18-10-0  
The Starting Set ... £15-15-0

*Please write for  
Descriptive Booklet*

**C. A. VANDERVELL & Co**  
— ELECTRICAL ENGINEERS, —  
**ACTON, LONDON, W**

Manchester: 12, Victoria Build-  
ings, St. Mary's Gate.  
Birmingham: Stanhope Street

**C.A.V.**

**LIGHTING & STARTING**

THE  
**Pytchley**  
AUTOCAR CO LTD

**216, Great Portland St.,  
London, W.**  
**Sole London Agents.**

"A very comfortable body with ample leg room, and will take three abreast if necessary."

**Dickey Seat - £4 . 0 extra**  
**Coupe Model £15 . 0 ,,**  
**Lighting Set £15.15 ,,**  
**Lighting and  
Self-starter £31 . 10 ,,**

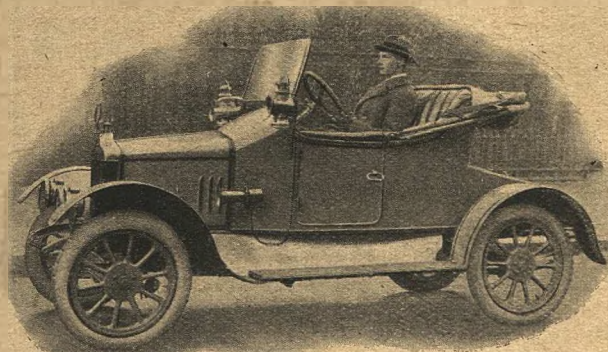
*Added to instalments if desired.*

The above Accessories are subject to 5 per cent. increase.

... 1915 ...  
**STANDARD**  
**LIGHT CAR**

Complete with five lamps, **£205** five detachable wheels, etc.

or £50 down and £160 in 12 monthly instalments.





# WHITELEY'S LIGHT CARS

ANY Light Car or Cycle-car advertised in this paper can be purchased through us on our Deferred Payment Plan. :: :: ::

The extra charge is - - - - **2<sup>0</sup>/<sub>10</sub>** only.

Motorcycles taken in Part Payment.  
Balance may be paid by Instalments.

**WM. WHITELEY, LTD.,**  
QUEEN'S ROAD, LONDON, W.  
Telegrams: "Whiteley, London." Telephone: Park ONE.

# HORSTMANN ... CARS ...

1915 MODELS.

The car without a starting handle **ALL BRITISH** Starts from driver's seat.

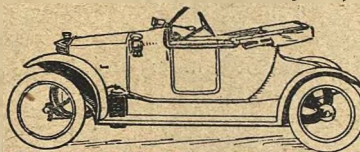
*The best light car on the market, irrespective of price,*  
**SPECIAL AND UNIQUE FEATURES.**

Standard Model	...	£155
De Luxe...	...	...175 gns.
Light Van	...	£145

Every car specially tuned and tested by our Brooklands racing expert. No Extra Cost.

*Earliest Deliveries.*

*Write for Specification*



SPECIAL LONDON AGENTS

**EDWARDS & PARRY**  
69 Great Queen St. KINGSWAY, W.C.  
tel - Edwards, Regent 5086

# PANTASOTE

(Registered Trade Mark)

For Light Car  
**UPHOLSTERY &  
HOOD MATERIAL**

Equal in appearance and durability to the best leather.

**Waterproof—Stainless  
Durable.**

*Write for Patterns Book—*

**WM. E. PECK & CO.,**  
31, Bartholomew Close,  
LONDON, E.C.

## New 1915 Light Car Models.

You will find the Best Selection awaiting your inspection at my up-to-date and perfectly-equipped Depot—including the

**Perry, Standard, Calthorpe**  
(Sole Wholesale and Retail B'ham Agent)

SWIFT, CALCOTT, SINGER, Etc.  
Whether you contemplate immediate purchase or not, you are cordially invited to walk through my extensive Showrooms. Exchanges, Special Payments, and Free Trial Trips any time.

Several specially good Bargains in Second-hand Cars now being offered. Here are three examples:—

Alldays, 1914, 10 h.p., 4-cylinder, list £175	...	£145
Calthorpe Minor, 10 h.p., all accessories	...	£125
Perry Deliv'y Van, new, shop-s'l'd, list 140 gns	Gas 120	

Write for details of the others.

**P. J. Evans**

The Birmingham house for small Cars

87, 89, & 91,  
John Bright St., Birmingham.  
Phone—Mid. 662. Wire—LYTCAR, Birmingham.



# Vestalin

(Regd.)

## Japan Motor Enamel

**P**ROVIDES the cyclecar owner with a suitable material for touching up the worn or damaged paint work. Vestalin is an air-drying super-finish Japan Enamel supplied in ten different tints, black and white or special colours to order.

**Sold by Agents and Stockists. Ready for use in Tins. Price 1/9, Postage 4d.**

*The Broadmead Booklet 4 gives full directions, also Hints on Renovating. Ask for copy.*

**JOHN HALL & SONS (Bristol and London) Ltd., Autopaint Department**

— 175, Pancras Road, LONDON, N.W. —  
'Phone—North 669 (2 lines). Telegrams—"John Hall, London."



**WE BUY—**

**Singers,  
Calthorpes,  
Morris-Oxfords,  
Standards,  
Calcotts,  
Morgans,  
Swifts,  
G.W.K.'s,**

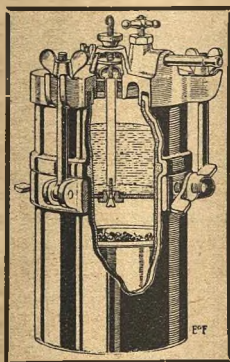
*For spot cash.*

**GOOD PRICES FOR GOOD CARS.**

**Maudes' Motor Mart,**

**136, Great Portland St., LONDON, W.**

'Phone—552 Mayfair. 'Grams—"Abdicat, Wesdo, London."



# The LOW

**ACETYLENE GAS GENERATOR**

**Makes "Home-made  
Dissolved Acetylene"**

**WITHOUT TROUBLE, DIRT,  
SMELL, or WASTE of CARBIDE**

**Q** Provides light at *any* moment and stores gas under pressure until required.

Instantly  
fitted  
to any  
Car.

**LIGHT CAR  
SIZE—**

**55/-**

**Capacity—  
1 lb. of Carbide.**

Light can  
be turned  
up or down  
just like  
Coal Gas.

**John Gilpin, Jr.,** says—"I never want to go back to any other form of Acetylene Lighting."

**OF ALL DEALERS, or Wholesale of—**

**WARD & CUNINGHAM, Craven House, Kingsway, London, W.C.**

**LIGHT CAR  
COMPREHENSIVE  
POLICY 1915**



**PROSPECTUS ON APPLICATION**

**HAROLD TOWNEND LTD**

MANAGING DIRECTOR HAROLD TOWNEND

**13 & 14 Abchurch Lane King William St  
LONDON EC**

**TELEPHONE CENTRAL 156  
2 LINES**

**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.



# MANCHESTER

**THE FIRM WITH A REPUTATION**

is the firm YOU should deal with, whether you want a new light car or merely a pair of driving gloves. No matter what your order—you get the same attention. We are the

## PIONEERS OF THE LIGHT CAR.

We were the first firm to take it up. Our catalogue is yours for the asking. Will you write for your copy? Particulars of our Easy Payment System free.

Light Car Depot—29 & 31, Oxford Street.  
Telephone—2242 Central.

Accessories—18, Oxford Street.  
Telephone—4764 Central.

**MANCHESTER.**  
Telegrams—"Motoring, Manchester."

# MOTOR SUPPLY CO.

**SINGER,  
HILLMAN,  
STANDARD,  
HORSTMANN,  
MORRIS-  
OXFORD,  
PERRY,  
SWIFT,  
G.W.K.**

## "BRITISH BUILT."

### The HORSTMANN Car

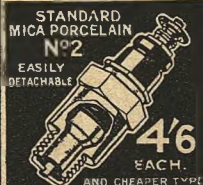
The London Agents and Sole Agents for Kent can give IMMEDIATE DELIVERY of

## 1915 MODELS

Horstmann Car complete - £155  
" " de Luxe - 175 Gns.  
" " Light Van (not including Lamps, etc.) - £145

WALTER ENGALL & Co., 21, Mercer St., Long Acre.  
Telephone: Gerrard 1918 (2 lines).

## HOBSON



The Best, Most Reliable & Durable of all. Used by the various Allied Governments. Owing to their insulation being made of several parts, allowing for expansion and contraction, they are specially recommended for engines subject to abnormal strain and much vibration.  
H. W. Hobson Ltd., 29, Vauxhall Bridge Road, London, S.W.



## PLUGS

## LAYSTALL

FOR

**CYLINDER GRINDING  
WELDING  
CRANKSHAFT GRINDING  
REPLACEMENTS**

**Laystall Repair Works,  
34, Queen Street, London, E.C.**

Telephone: 12501 Central.  
8148 City.

Estd. 1902.

# It grips!

**RAYBESTOS,**  
the Original Asbestos  
and Brass Wire

**BRAKE LINING,**  
is Safe, Silent, and  
well-nigh Wear-proof.

Each Cord in "RAYBESTOS" is composed of two fine strands of hardened brass wire with three strands of asbestos, so interwoven that each cord forms a unit in the structure. This method of manufacture provides a flexibility that is not possessed by any other brake lining. Result, more uniform wearing surface and longer life. The smooth action which is the feature of "RAYBESTOS" is due to this.

Write for sample and full particulars—  
**BROWN BROTHERS, LTD.,**  
Wholesale: Gt. Eastern St., E.C.,  
and Deansgate, Manchester.  
Showrooms: 15, Newman Street,  
Oxford Street.

*Raybestos*

# Raybestos

**BRAKE LINING**

## ROBERT W. COAN

Best Quality ALUMINIUM CASTINGS  
FOR ALL TRADES AND FOR  
MOTORS FROM 2 TO 240 H.P.

Aluminium DIE Castings a Speciality.  
Original Maker of Aluminium Number Plates and Aluminium Repairs.  
Contractor to WAR OFFICE & ADMIRALTY.  
TELEGRAMS—"KANKASES" ISLING LONDON  
TELEPHONE NOS—CENTRAL 4879 CITY 3846

219, Goswell Road, LONDON, E.C.

## STOP RADIATORS BOILING.

**BOILERINE RADIATOR TABLETS** remove and prevent Corrosion, Fur and Rust, increasing Engine efficiency and M.P.G.

Two Tablets per gallon average main waters.

One Tablet per gallon for rain water.

100 Tablets quarter size tin 5s. 9d. } Postage free.

460 Tablets full size tin . . . 28s. 0d. }

Size of QUIDS and SAVE YOU QUIDS.

Call and see a demonstration of what the Tablets actually do to hot water; you will marvel at the results. Users' testimonials from

Boilerine Ltd. facing Old Kent Rd. Stn., London, S.E.

## 50 MILES ROUND LONDON.

Price, paper, 1/- net; mounted, 1/6 net.  
Postage extra. Strongly bound in Cloth Cover.

Offices: 7-15, Rosebery Avenue, London, E.C.  
Wholesale: E. J. Larby, 1, Paternoster Av., E.C.

## WHITE CARAGE

Strong, Durable, Damp-proof guaranteed weather-proof Completely made in sections. Bolted together in a few minutes, treated preservative. All sizes made. Delivery from stock 10 x 8ft. £4/8/0, 12 x 8ft. £5/1/0, 14 x 8ft. £5/18/6 on rail Staines.

P. WHITE, G, Kingston Rd., Staines



L  
I  
S  
T  
S  
F  
R  
E  
E

**The Motor** Britain's Pre-eminent  
Motor Journal. . . .

Every phase of Motoring. Practical  
articles well illustrated. All the news  
of the automobile world.

TUESDAYS . . . 1d.

Offices: 7-15, Rosebery Avenue, E.C.



**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."

**LIGHT CARS AND CYCLECARS FOR SALE.**

A.-C. Sociable, 1914 model, hood, screen, front brakes, fans, four lamps, luggage carrier, Rom back, tools, spares, French grey, black lines, very smart, any expert examination, £60. Gibb, White House, near Scarborough. 121-o828

A.-C. Sociable, 1911, just thoroughly overhauled, complete with hood, windscreen, tail lamp, acetylene headlights, in exceptionally good condition throughout, £30. W. J. Coe, Crown Street, Ipswich. Trade 121-895

A.-C. Sociable, August, 1911, hood, screen, two acetylene headlamps, good tyres, spares, £28. Auto Mart, 133 Hammersmith Road, W. Trade 121-a959

A.-C. Sociable, 1913 (December), hood, side curtains, screen, screen extension, special side doors, reverse, front brakes, luggage grid, lamps, generator, tools, spares, jack, tyres all new, Panhard red (unscratched), exceptionally smart, only run 800, trial or dismantle for examination, cost £112, sell £56, or exchange combination. Box No. 5390, care of "The Light Car and Cyclecar." 121-a985

A.-C. Sociables, unexcelled for reliability and comfort, immediate delivery from the sole Liverpool agents. Colmore Depot, 31 Renshaw Street, Liverpool. Trade 121-865

A.-C. Sociable, 1913, in excellent condition, hood, screen, fans, front brakes, carrier, reupholstered, tyres good, £50. Warder, Blakebrook, Kidderminster. 121-o875

A.-C. Sociable, three-seater, hood, screen, four lamps, front brakes, good tyres, spares and tools, splendid condition, any trial, £40. Langan, 292 Kingsland Road, London. 121-o774

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

A.-C. Sociable, late 1912, good condition, well fitted out, been 3000 miles, £39, or exchange and cash for cyclecar of good make. Boatman, 39 Alexandra Street, Southend-on-Sea. 121-o861

A.-C. Sociable, late 1912, with 1913 engine, perfect running order, hood and side wings, screen, side doors, fans, speedometer, luggage carrier, extra strong tyres, studded rear, front brakes, three lamps, spares, etc., bargain, £45; seen by appointment. A., 7 Slaithwaite Road, Lewisham. 121-o778

A.-C. Sociable de luxe, 1913, reverse gear, hood, screen, side curtains, luggage carrier, front brakes, four electric, one acetylene lamps, tyres nearly new, unpunctured, many spares, cost £106, mileage 4000, £60 cash. Scott, Upsomborne, Kingsomborne, Hants. 121-o792

A.-C. Sociable, 1913, hood, screen, £4 4s. headlight, three oil lamps, extra fans, luggage carrier, new back tyre, car thoroughly overhauled and painted grey, any trial, £55. Haytor House, Ashburton, Devon. 123-o794

A.-C.s from stock, on deferred terms; write for Buyers' Guide. Harrods, Ltd., Brompton Road, S.W. Trade zzz-616

A.-C. light cars, second-hand 10 h.p. models for immediate disposal, excellent condition, real bargains, prices from £135. Write or call, Auto-Carriers, Ltd., 181 Hercules Road, Westminster Bridge Road, S.E. Trade zzz-819

A.-C., latest model, 10 h.p., £185, deposit £37 secures, balance 12 monthly payments £12 12s. 8d. Other terms considered. Exchanges entertained. Service Co., 292 High Holborn. Trade zzz-338

A.C. light car, 10 h.p., complete equipment, ready for the road, £185. Immediate delivery from stock. Any make of light car taken in part exchange. Bristol and district agents, F. G. Cox and Co., Ltd., Perry Road, Bristol. Trade 121-o831

A.-C. light car, 10 h.p. model 1914, second-hand, complete, hood, screen, 8-volt C.A.V. lighting set, with five lamps, horn, five detachable Sankey wheels and tyres, speedometer, clock, excellent condition, fast car, cost well over £200, accept £165; exchange entertained. F. G. Cox and Co., Ltd., Perry Road, Bristol. Trade 121-o832

A.-C., Model 12, 1914, dickey, C.A.V. dynamo, five lamps, five Sankey detachable wheels, new, 710 by 90 tyres, electric horn, fawn colour, fast car, £185, cost £228, trial. Fowell, 69 High Street, Dartford. 121-o830

A.-C., 1914, four-wheel, two-seater, 6 h.p. cyclecar, with hood, screen, three lamps, Stepney wheel and accessories, little run. Brownless Bros., Hartington Road, Middlesbrough. 121-o805

A.-C., trade, magneto, 1912, box body, detachable hood, good tyres and accessories, perfect, accept £40. Richens, Reigate. 121-o880

A.-C., 10 h.p., late 1914, almost new, dickey, hood, screen, electric lamps, headlight, speedometer, five detachable wheels, new tyres, £150. Auto Mart, 133 Hammersmith Road, W. Trade 121-a960

ALLDAYS Midget, four-cylinder, 1914, nearly new, complete, £135. Freeman Oakes, Devonshire Street, Sheffield. Trade zzz-387

ALLDAYS Midget, 1914, two-seater, five detachable wheels, good condition, £80. Jarratt, 116 Abbeydale Road, Sheffield. 121-o847

ALLDAYS Midget, late 1913, two-seater, fully equipped and in perfect condition, £80. Smith and Francis, 22 Pantons Street, Haymarket, S.W. Trade 121-892

ALLDAYS Midget, late 1913, fitted extra screen and glass windows to form coupe body, spare wheel, all accessories in splendid condition, seller wants larger car, cost £147, sell £90. F. J. Franklin, Roseleigh, Meole Brace, Shrewsbury. 121-o791

*One of many  
similar  
letters:—*

"Am very pleased to say the car was sold within two days of the advertisement appearing.  
Well over 30 replies were received, which we think was very good.

Yours truly,  
For JAMES KEILLER & SON, Ltd.,  
J. A. Mickerson."

London, 9th March, 1915.



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

ARDEN, late 1913, French grey, roomy two-seater and dickey, J.A.P. 8 h.p., three speeds and reverse, magneto (Bosch advance and retard), electric horn, headlight, hood and screen, little used, tyres good, 40 m.p.g., buying four-seater, bargain £80. (Bristol.) Box No. 5376, care of "The Light Car and Cyclecar." Trade 121-0773

AUTOCRAT. Sole concessionaires for Midland counties. Catalogues on request; trial runs by appointment. Vincent Motor Co., Alrewas, Staffs. Trade 144-n784

AVERIES, 1914, nearly new, beautifully finished and fitted up complete, head, side and tail lamps, speedometer, spare wheel, cost £240, nearest offer to £170; war sole cause of sale. Mr. Neal, St. Mark's Road, Notting Hill. Trade 122-0800

BABY cyclecar, 8 h.p. Fafnir engine, speeds and reverse, torpedo body, all grey, lovely condition throughout, fully equipped, sacrifice £37. Robertson, 101 Upperton Road, Leicester. Trade 121-0867

BABY cyclecar, 1913 model, 8 h.p., magneto, water-cooled, hood, screen, lamps, new condition, £55; exchange motorcycle. 1 Ebner Street, Wandsworth. Trade 121-0654

BUCKINGHAM, 10-12, new August, 1914, 5000 miles, just overhauled, perfect condition, very fast, reliable, three electric lamps, accumulator, powerful headlamp, large generator, tyres nearly new, special Vi-spring cushion, hood, screen, speedometer, clock, all accessories, £80; good solo motorcycle part exchange. Wilkinson, 2 Paragon, Richmond, S.W. Trade 121-0841

BUCKINGHAM, 12 h.p. cyclecar, 1914 model, very little used, cost over £130, accept £90. Trueman Motor Co., Ltd., 14 Tempest Hey, Liverpool. Trade 124-890

BUCKINGHAM, 1914 10-12 twin, painted red, with black wings, hood, screen, two P. and H. acetylene headlights and large generator, two acetylene side lamps and small generator, tail lamp, Rom over-size combinations on back, speedometer, two spare large pulleys, giving a speed of 62 m.p.h., two spare belts, two spare tyres, spare chain and valve, tools, etc., insured until May, 1915, £85 cash. G. N. Higgs, 31 Vauxhall Bridge Road, Victoria, S.W. Trade 121-880

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

CALCOTTs from stock on deferred terms; write for Buyers' Guide. Harrods, Ltd., Brompton Road, S.W. Trade zzz-617

CALCOTT Cars. T. Smirhwaite, Automobile Engineer, Northallerton, authorized Agent in North Yorkshire for these splendid cars. District including Hawes, Reeth, Richmond, Leyburn, Masham, Bedale, Thrisk, Helmsley, Stokesley and Yarm. Trials by appointment. Trade 135-k587

CALCOTT cars. H. H. Timberlake, Wigan, makes a speciality of these celebrated cars. All models in stock; trials any time. Trade 127-307

CALCOTT, 1914, two-seater, five lamps, spare wheel, speedometer, and two non-skids, only run 2000 miles, £150. Alfred Wastnage, Portland Court Garage, Great Portland Street, W. Trade 121-667

CALCOTT, 1915, quick deliveries and best quotations. R. D. Storey, 118 Great Portland Street, W. Trade 123-815

CALCOTT, 1915 with dynamo lighting set, immediate delivery, £210. Seemann and Stones, Ltd., 39 St. James's Street, Piccadilly, W. Phone, Regent 212. zzz-837

CALCOTT, 1915, de luxe, complete with dynamo lighting set, dickey seat, just delivered, sacrifice £200 or close offer, owner buying larger car. A. Bradshaw, 21 Lakedale Road, Plumstead, Kent. Trade 121-0863

CALCOTT, 1915 models. immediate delivery, £195, dynamo lighting set £15 extra, dickey seat £4 10s. extra, all models in stock, best prices allowed for exchanges, free trials; we are Calcott experts and special authorized agents. Wilkins, Simpson and Co., 11 Hammersmith Road (opposite Olympia), London. Trade 122-869

CALCOTT, Calcott, Calcott. 1915 models from £195, 2 per cent. extra deferred payments; tuition free. Cass's, The Light Car Specialists, 5 Warren Street, Euston Road. Museum 623. Trade 121-911

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

CALCOTT, 1915, complete with five lamps, horn, spare wheel, hood and screen, £195; lighting set, £210; motor-bicycles in exchange; early delivery. Telegrams, "Bicycles." Telephone, 388. Robinson's, Green Street, Cambridge. Trade 121-873

CALTHORPE Minors, two-seaters and coupe, delivery from stock, easy terms, exchange. R. E. Jones (Garages), Ltd., Swansea, also at Cardiff. Trade zzz-661

CALTHORPE, latest model Brooklands, in stock, easy terms, exchange. R. E. Jones (Garages), Ltd., Swansea, also at Cardiff. Trade zzz-662

CALTHORPE, 1914, in nearly new condition, £125, Triumph combination taken in part payment, any trial. Parker's Garage, Derby. Trade 121-a506

CALTHORPE Minors, 1915 models in stock; exchanges or terms. Freeman, Oakes and Co., Ltd., Sheffield. Trade zzz-833

CALTHORPE Minor, new May, 1914, splendid condition, overhauled January, carefully driven, roomy body, tyres excellent condition, mileage 3500, speedometer, clock, many spares, all tools, £135, buying four-seater. Butterfield, Draper, Attercliffe, Sheffield. Trade 121-0843

CALTHORPE Minor, 1914, champagne colour, condition as new, headlights and generator, clock, speedometer, electric horn, special ventilation louvres, luggage grid, Bowden extra air, etc., tyres 700 by 80, good condition, all tools and numerous spares, in excellent running order, price £125, owner buying four-seater. Southam, Trafalgar House, Alcester Lanes End, King's Heath, Birmingham. Trade 121-0825

CALTHORPE Minor, 1915, 10 h.p., special body, almost a coupe, three-seater, C.A.V. dynamo, an exceptional attractive little car, £165. 337 Euston Road, London, N.W. Trade 121-0818

CALTHORPE Minor, 1915, Grand Duke Michael, unscratched, only used 400 miles, Watford £5 5s. speedometer fitted, must realise, £165, cost £196 last month. Harvey, 58 Poole Road, Bournemouth. Trade 121-0812

CALTHORPE Minors. All 1915 models in stock. More powerful engine, longer wheelbase, larger radiator and tyres, much smarter in appearance, having gained 1st and 2nd prizes at the Cyclecar 1915 Rally for appearance. Standard, two seater, 180 guineas; G.D.M., three-seater, 190 guineas; four-seater, 200 guineas; coupe, 210 guineas, with dickey, 215 guineas; my own sporting model, 190 guineas; with third seat 195 guineas; my own special design of three-seater, 200 guineas. Send for catalogue. Sole Selling Agent for London, Kent and Surrey. R. D. Storey, 118 Great Portland Street, W. Trade zzz-963

CALTHORPE, 15.9, long stroke, 80-150, two-seater, double collapsible dickey, 1912, thoroughly overhauled, perfect throughout, smart colour, very fast and silent, five Rudge-Whitworth wheels, uncut Palmer cord, 815-105, hydraulic shock absorbers, large Rushmore lamps, electric horn, light, etc., cost over £400, Zenith dual ignition, etc., real bargain, £155, or might consider modern light cyclecar part. Seen and tried at Tucker's Garage, High Street, Watford. Trade 121-a973

CALTHORPE Minor, 1914, five lamps, five detachable wheels, hood, screen, speedometer, excellent condition, £128; another with standard equipment, £123. Auto Mart, 133 Hammer-smith Road, W. Trade 121-a961

CALTHORPE Minor, 1914, excellent condition, only used week-ends, hand and foot accelerator, clock, speedometer, extra large tyres, in fine condition, spare wheel, three electric and two acetylene lamps, buying larger car, price £130. W., Lynton, Powys Lane, Palmer's Green, London, W. Trade 121-a974

CALTHORPE Minor light cars. Prompt delivery of all models from the sole Liverpool agents. Colmore Depot, Renshaw Street. Trade 121-866

CARDEN Monocar, 5 h.p., J.A.P., two speeds, fully equipped, £85 or £17 deposit and 12 monthly instalments of £5 19s., less bonus; motorcycles part payment. Service Co., 292 High Holborn, W.C. Trade zzz-655

CARDEN, de luxe model, two-speed, new June last, condition as new, owner bought car, £50, tools and spares. Atkinson, 87 Cleveland Road, Sunderland. Trade 121-a968

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



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

CARDEN, Carden, Carden, de luxe model, 1914, 5-6 h.p., three acetylene lamps and generator, horn, tools, etc., painted grey, run about 1500 miles, £52 10s., tuition free. Cass's, The Light Car and Cyclecar Specialists, 5 Warren Street, Euston Road, W. Museum 623. Trade 121-918

CROUCH, brand new, 1914 model, cost £132 15s., accept £107 15s., fully equipped and guaranteed. 337 Euston Road, London, N.W. Trade 121-0822

CUMBRIA, 1914, monocoque, 8 h.p. J.A.P. engine, five spare tyres and tubes, complete and in splendid condition, done 900 miles, £55. Norman Mitchell, Cokermouth. 121-0845

DEEMSTER, 10 h.p., 1914, two seater, dark green, five detachable wheels and tyres, Solex carburettor, Stewart trip speedometer, under 1000 miles, three lamps, hood, screen, horn, and sundries, excellent order and condition, £110 or near offer. Squire, 38a King William Street, E.C. Tel., 8793 Central; 1326 Western. 121-0804

DUO, 1913, 8-10 J.A.P., hood, screen, tools, three lamps, six tyres (two new Palmer cord), run 3000 miles, engine overhauled and rebushed this month, £45. H. F. W., 84 Green Lanes, Stoke Newington. 121-0293

DUO, 1913, fully equipped and re-tyred, in perfect condition, £50. Duo, 2 Ashbourne Avenue, Golder's Green. 121-0292

DUO racer, Grand Prix, actual machine, sacrifice £75. Percival, 8 Carysfort Road, Crouch End, London. 121-a965

ENFIELD, 1915, 10 h.p., four-cylinder, fully equipped, spare wheel and tyre, dynamo set, just delivered; £185 cash, exchange, or £37 deposit, and 12 monthly payments of £12 12s. 8d., less rebate. Service Co., 292 High Holborn, London. Trade zzz-642

ENFIELD autolette, late 1913, mileage 7000, excellent condition, overhauled last August, tyres perfect, speedometer, Bowden, air control, cut-out, five lamps, generator, tools, cost £150, take £75; buying cyclecar. Box No. 5374, care of "The Light Car and Cyclecar." 122-0771

G.N., 1914, 8-10 h.p., two-seater, two-speed, hood, screen, D.A. lighting set, Lucas lamps, spare wheel, Dunlop grooved and studded tyres, speedometer, perfect condition, mileage 2500, 95 guineas. E. A. Downs, Eastholme, Holderness Road, Hull. 121-0787

GORDON was the only machine of any type to make a non-stop run in the recent Harrogate Colonial trial; send for catalogue of this excellent car to Gordon Armstrong, Beverley. Trade zzz-458

G.W.K.s from stock on deferred terms; write for Buyers' Guide. Harrods, Ltd., Brompton Road, S.W. Trade zzz-614

G.W.K., last year's, newly painted, perfect condition, Lucas lamps, speedometer, spares, heavy tyres, £105, bargain. Motor Supply Co., Oxford Street, Manchester. Trade zzz-953

G.W.K., new 1914 model de luxe, fitted with coupe body, painted dark blue, complete with detachable wheels and all lamps, £180. Samson and Veal, 12 Woodstock Street, Oxford Street. Mayfair 6826. Trade zzz-518

G.W.K., 1914, in first-class condition, 105 guineas, very big bargain. Julian, Broad Street, Reading. Biggest light car dealer in the South; 44 years reputation. Trade zzz-800

G.W.K., 1915, latest model, 150 guineas; deposit 30 guineas, balance payable 12 monthly instalments of £10 15s. 3d., less bonus, motorcycle part payment. Service Co., 292 High Holborn, London. Trade zzz-643

G.W.K. de luxe, 1915, fitted with electric lights and electric starter, a magnificent light car, smart in appearance, fitted with spare wheel, hood, screen, complete, £199 10s., take motorcycle or light car in part payment, delivery free, expert tuition. Wauchope's, 9 Shoe Lane, Fleet Street, London. Trade 121-902

G.W.K., late 1914 de luxe, C.A.V. dynamo light set, speedometer, dash lamp, toolbox, five detachable wheels and oversize tyres, G.R. petrol economizer, Klaxon horn, mileage 3600 perfect order throughout and runs better than new, £150, cost over £210. Auto Mart, 133 Hammersmith Road, W. Trade 121-a958

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

G.W.K., 1914, mileage 5000, coachwork, engine and tyres in splendid condition, Fallot incandescent acetylene headlamps, D.A. cylinder, cost £171, price £110. Glendower Motor Co., Ltd., Glendower Place, South Kensington. Ken. 558. Trade 121-887

G.W.K., 1914, fitted with five lamps, oversize tyres, Stepney, etc., very sweet running car, perfect throughout, £120. Below.

G.W.K., 1913, fitted with Stepney, speedometer, five lamps, in beautiful condition, £90. Smith and Francis, 22 Pantons Street, Haymarket, S.W. Trade 121-891

G.W.K., 1913 (September), speedometer, Rushmore lamps, very good condition, light grey with black wings, recently overhauled, any trial, £85. Mrs. Macaskie, Laleham, Middlesex. 121-a971

G.W.K., 1914, Lucas 10-guinea headlights, side and rear, Brooks' toolbox, speedometer, spare disc, spare tyre, for quick sale £86. 34 Greenside Road, Shepherd's Bush. 121-0860

G.W.K. 1913, five lamps (three oil and two acetylene), many spares, a bargain, £79 15s. Wilkins, Simpson and Co., 11 Hammersmith Road, London. Trade 122-870

G.W.K., 1913, repainted, five lamps (three electric and two acetylene), new hood and side curtains, screen, horn, jack, mat, many spares, speedometer, a bargain, £87 10s. Wilkins, Simpson and Co., 11 Hammersmith Road, London. Trade 122-869

G.W.K., latest 1915 model, £168, in stock, immediate delivery, tuition and delivery free, free trials, best prices allowed for exchanges, easy payments only 2 per cent. extra, trade supplied. Wilkins, Simpson and Co., 11 Hammersmith Road, London. Trade 122-870

G.W.K., G.W.K., G.W.K., late 1913, 8 h.p., two-cylinder, four speeds and reverse, hood, side curtains, screen, five lamps and generator, will be repainted free to suit purchaser, tuition free, bargain £85. Cass's, The Light Car Specialists, 5 Warren Street, Euston Road, W. Museum 623. Trade 121-912

G.W.K. car, late 1913 pattern, hood and cover, Stepney wheel, pair of acetylene headlights, horn, screen and speedometer, five heavy tyres (new February), just been thoroughly overhauled and re-enamelled, price £90. Apply T.B., 30 Claremont Road, Surbiton. 121-0784

G.W.K., 1914, standard model, mileage 3000, carefully driven by lady owner, never had breakdown, usual accessories, price £110. Stewart, 9 Radnor Place, Hyde Park. 121-0776

G.W.K., 1912, November, fully equipped, just newly painted, perfect condition, £75. Paget, Wood Street, Leamington. 122-0781

HILLMAN, 1915, with Lucas dynamo lighting set, the luxurious light car and most reliable, exchanged for Standard, Singer, Calthorpe, Morris-Oxford, Calcott Perry, G.W.K., good allowances. Motor Supply Co., Oxford Street, Manchester. Trade 138-187

HILLMAN, 1914, done under 1000 miles, everything complete, condition as new, £150 for early sale. Norman Mitchell, Cokermouth. 121-0844

HILLMAN, 9 h.p., two-seater, complete equipment for the road, £200; immediate delivery from stock; any make of light car taken in part exchange. Bristol and district agents, F. G. Cox and Co., Ltd., Perry Road, Bristol. Trade 121-0833

HILLMAN light car, 1915 model, fitted with dickey seat, hood, screen, electric side lamps and tail light, acetylene headlights and generator, horn, five Sankey detachable wheels, £205, immediate delivery, motorcycle or light car taken in exchange, easy payments arranged. Wauchope's, 9 Shoe Lane, Fleet Street, London. Trade 121-904

HILLMAN, 9 h.p., 1914, hood, screen, five lamps, spare wheel with tyre, recently overhauled, £145 or close offer. G. N. Higgs, 31 Vauxhall Bridge Road, Victoria, S.W. Trade 121-881

HILLMAN, Hillman, Hillman. 1915 models from £210, 2 per cent. extra deferred payments; tuition free. Cass's, Light Car Specialists, 5 Warren Street, Euston Road. Museum 623. Trade 121-909



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

**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 guaranteed, no extra cost, trial runs by appointment. Write for illustrated catalogues, or call at 69 Great Queen Street, Kingsway. Regent 5086. Trade zzz-871

**HORSTMANN** light cars, specially suitable for ladies, fitted with self-starter, very economical running, immediate delivery of 1915 models, £155; nearly new demonstration car for sale, smart body, at a bargain price. The Purley Motor Garage, Ltd., Purley, Surrey. Telephone, 103 Purley. Trade 122-o217

**HUMBERETTE**, 1915, newly repainted, overhauled, splendid condition, speedometer, complete, hood, screen, large lamps, £275. Motor Supply Co., Oxford Street, Manchester. Trade zzz-954

**HUMBERETTES** from stock on deferred terms: write for Buyers' Guide. Harrods, Ltd., Brompton Road, S.W. Trade zzz-611

**HUMBERETTE**, 1914, water-cooled, complete with Stepney, lamps, etc., bargain, £80. Harris, Garage, Slough. Trade 122-o231

**HUMBERETTE**, 1914, air-cooled model, fully equipped, carefully driven, exceptionally good condition throughout, any trial given, sacrifice 82 guineas. Nevill, Crudgington, Wellington, Salop. 121-o840

**HUMBERETTE**, 1913, excellent condition, used week-ends only, reliable and powerful, £63, or take modern motor-bicycle part. 19 Mirfield Drive, Manton, Manchester. 121-o829

**HUMBERETTE**, 1913, just been overhauled and repainted by makers, perfect condition, any trial, electric light, price £70. V. C. Badois, Egham, Surrey. 124-o826

**HUMBERETTE** cyclecar, fully equipped, equal new, guaranteed in perfect order and condition, 60 guineas. 337 Euston Road, London, N.W. Trade 121-o823

**HUMBERETTE**, 1914½, water-cooled, hood, screen, electric side and rear lamps, acetylene headlamp, Stewart speedometer, clock, Stepney wheel, well equipped, tools and spares, just overhauled, done 2000, splendid condition, £95, owner buying larger car. Drake and Mount's Garage, Bracknell, Berks. Trade 121-a967

**HUMBERETTE**, 1913, hood, screen, lamps, horn, Stepney wheel and spare tyre, appearance excellent, mechanically perfect, £65. Eastern Garage, 418 Romford Road, Forest Gate, E. Trade 123-860

**HUMBERETTE**, 1915, water-cooled, new and guaranteed, list price £135, cash offers wanted, exchanges entertained. Lankester, 39 Eden Street, Kingston, Surrey. Trade 122-884

**HUMBERETTE**, 1913, air-cooled, chocolate, Stepney (with tyre), new lamps and horn, speedometer, dickey seat, good condition, £75. Dr. Hill, Wolstanton, Staffs. 121-o852

**HUMBERETTE**, 1914½, nearly new, speedometer, heavy Dunlops, new Stepney wheel, cost £146, sell £125. Hill, Bon Marche, Hednesford. Trade 121-o849

**HUMBERETTE**, Humberette, Humberette. 1915 models from £120, 2 per cent. extra deferred payments: tuition free. Cass's, Light Car Specialists, 5 Warren Street, Euston Road, Museum 623. Trade 121-910

**IMP**, 1915, light car, 10-12 h.p., water-cooled, Mea magneto, two seats side by side, hood, screen, electric lamps, cost £120 three months ago, owner will accept £55 cash. G. N. Higgs, 31 Vauxhall Bridge Road, Victoria, S.W. Trade 121-882

**KENDALL** Carrette, 1913, 8 h.p. J.A.P., Bosch, Amac, hood, screen, lamps, horn, good tyres, perfect, £60. South Eastern Garage, Herne Hill. Trade 122-o252

**LAGONDA** coupe, 11 h.p., complete equipment, ready for the road, £150; four-seater model, complete, 150 guineas; delivery from stock; exchange entertained. Bristol and district agents, F. G. Cox and Co., Ltd., Perry Road, Bristol. Trade 121-o834

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

**LAGONDA** coupe, 11 h.p., latest model, fully equipped, £150; also 1914, many extras, £120. Taylor's, Ltd., 21a Store Street, W.C. Trade zzz-624

**LAGONDA** coupe from stock, £150; exchange or £30 deposit and 12 monthly payments of £10 5s., subject rebate. Service Co., 292 High Holborn, London. Trade zzz-900

**LAGONDA**, coupe, bought July; 1914, carefully driven and in perfect condition, used as tender to big car and only done 3500 miles, all spares and extra-size unscreatched tyres, clock and speedometer, property of a doctor, £110, no offers, trial by appointment. Dr. Coplestone, Speen, Newbury. 121-o857

**LAGONDA**, coupe, late 1914, five detachable wheels, five lamps, speedometer, clock, electric horn, excellent condition, £122. Auto Mart, 133 Hammersmith Road, W. Trade 121-a962

**LAGONDA**, coupe, late 1914, with 1915 valve gear, C.A.V. lighting, five lamps, interior light, speedometer, electric horn, mirror, Hunt mahogany toolbox on step, spare wheel and tyre, oversize covers all round, Rom non-skids on back, in very good condition throughout, cost £188, will accept £136 cash. G. N. Higgs, 3 Vauxhall Bridge Road, Victoria, S.W. Trade 121-883

**LAGONDA**, Lagonda, Lagonda. 1914 coupe, 11 h.p., four-cylinder, three-speed and reverse, five lamps, generator, speedometer, electric horn and bulb horn, two new 700 by 80 Dunlop grooved back, new hood, and just repainted; tuition free; bargain, £115. Cass's, The Light Car Specialists, 5 Warren Street, Euston Road, W. Museum 623. Trade 121-917

**MARSHALL-ARTER**, 8-10 h.p., water-cooled twin J.A.P., Solex twin jet, U.H. magneto, patent spring transmission, two speeds and reverse, guaranteed mechanically perfect throughout, hood, screen, paintwork, upholstery and tyres splendid condition, car bought June, 1914, been carefully driven, cost £142, will sell for £110, trial, approval, photo. Farrell, Cinema, Kelso, N.B. 121-a969

**MATHIS**, 10 h.p., 1914, Grand Prix model, painted blue, complete with head, side and tail lamps, horn, five Sankey detachable disc wheels and tyres, excellent condition, very fast, bargain, £125. F. G. Cox and Co., Ltd., Perry Road, Bristol. Trade 121-o835

**MATHIS**, 1914, 58 by 100, special light, low cigar-shaped body, two bucket seats, slightly staggered, deep scuttle dash, long streamline tail enclosing petrol tank, large steering wheel, bound whipcord, five Sankey detachable wheels, three 700 by 80 grooved Dunlops, two 700 by 80 combination Avons, all wheels disced, tyres good, Smith speedometer, lamps, generator, Reliance mechanical horn, and all accessories; mileage 4300, finished blue-grey, floorboards covered aluminium, toolbox on step, deep hefty exhaust note, fast and exceptionally lively, good condition throughout, absolutely the smartest ultra-sporting two-seater on the road; photo. (returnable) sent; cost nearly £215, would accept £145, close cash offer considered. A. W. Brittain, Orient Lodge, Buxton. 121-a970

**METEORITE** light car, 9 h.p., August, 1914, four cylinders, Mulliner's patent three seats all under hood, speedometer, spare wheel, tyres, tubes, etc., 40 miles per gallon, unpunctured, not done 2000 miles, as good as new, owner serving in H.M. Fleet, £150, fully insured. Dr. Browne, Ponders End, Tel., 560 Enfield. 121-o869

**METEORITE**, 1914, special three-seater, mileage 4300, in perfect order, speedometer, electric horn, clock, etc., owner serving in Public Schools Brigade and has no time to drive, price £143. Miller, 40 Station Road, Epsom. 121-o879

**MORGANS**. All models for early delivery. Grand Prix in stock. Trade supplied. Rey, 378 Euston Road, N.W. Trade 125-161

**MORGANS**, 1915, new and second-hand, trial runs, delivered free and taught driving. Burrows, Cudworth, Barnsley. Trade 121-169

**MORGAN**, immediate delivery of 1915 sporting model, complete with lamps, hood, screen, headlights, etc.; also delivery of Grand Prix model in two weeks; send for list. Julian, Morgan Specialist, Broad Street, Reading; 43 years reputation. Biggest light car dealer in the South. Trade zzz-802



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

MORGAN, 1914, special coachbuilt, high body with door, painted aluminium, with umbrella hood, Auster screen, petrol in dash, electric and acetylene lamps, large tyres, suit someone who prefers comfort to speed, photos. sent to probable purchaser, guaranteed mechanically perfect, complete with numerous accessories, £100 or near offer. Apply J. Blewitt, 29 Montpellier Parade, Harrogate. 122-o203

MORGAN Runabout, 1914, Grand Prix Model, side-valve 8 h.p. J.A.P. water-cooled engine, hood, screen, Lucas horn, Miller acetylene headlamps and generator, paraffin tail lamp, 700 by 80 tyres all round (Dunlop), Jones speedometer, run 4000 miles only, and in excellent condition, cost £130, accept £105. Bristol and district agents, F. G. Cox and Co., Ltd., Perry Road, Bristol. Trade 121-o836

MORGAN Runabout. Immediate delivery from stock, 1915 No. 1 Grand Prix model, screen, disc wheels, just delivered from makers, £110 15s. Bristol and district agents, F. G. Cox and Co., Ltd., Perry Road, Bristol. Trade 121-o837

MORGANS for comfort, safety and economy, no complications or gearbox and back axle trouble, delivery from stock, free trials and driving lessons. Boddington, Morgan Agent, Worcester. Trade 124-o817

MORGAN, de luxe model, 1913, air cooled, mileage under 7000, carefully driven, new back tyre, extra strong front tyres, chain mudguards, and other improvements, cost with accessories, £126, sell for £70, complete with tools. Harding, Daneswood, Hampton Park, Hereford. 121-o816

MORGAN, 1912, perfect order, complete with hood, screen, speedometer, quantity spares, cash £46, exchange later model. Rev. Collins, St. Luke's College, Exeter. 121-o806

MORGAN, two Grand Prix models, No. 1, particulars and prices on application. Wauchope's, 9 Shoe Lane, Fleet Street, London. Trade 121-901

MORGAN runabouts from £90, immediate delivery, sole Devon agents. The Exeter Motor Cycle and Light Car Co., Ltd., 7 Bath Road, Exeter; and 28 Tavistock Road, Plymouth. Trade 121-897

MORGAN, Morgan, Morgan, 1915 models, early delivery, 2 per cent. extra, deferred payments, tuition free. Cass's, 5 Warren Street, Euston Road, W. Museum 623. Trade 121-916

MORGAN runabout, 1912, very little used, engine, gears, tyres, in perfect order, very fast, good climber, £58; wanted Phelon and Moore combination. Crowther, Wellgate, Rotherham. 121-o801

MORGAN, late 1914, Grand Prix, 8 h.p. J.A.P., w.-c., royal blue, all accessories, large P. and H. headlight, mats, etc., tyres not soiled, 90 guineas 35 Rostrevor Road, Fulham, London, S.W. 121-o777

MORGANS get over the difficulty of reduced train services. You can go anywhere at small expense, and in your own time. Business men are finding them indispensable. Potter has new and second-hand models in stock. Leicester Grove, Leeds. Telephone, 4046. Trade 121-o868

MORGAN, 1912, J.A.P., hood, screen, latest 1914 improvements, beautiful condition, little used, £50, take 1914 clutch Triumph, Rover, Douglas part exchange. Bomford, Exhall, Alcester. 121-o871

MORGAN, special body, side doors, hood, screen, Smith's speedometer, Binks two-jet lamps, spares, mileage under 2000, £60 or near offer. Spurgeon, Conevalli, 49 Langley Drive, Wanstead. 121-o874

MORGAN, Grand Prix, 1913, overhead water-cooled engine with special de luxe body, new hood, screen, large Fallot headlight and generator, side and tail lamps, 700 by 80 tyres all round, run 5000 miles, in good condition. £82 10s. G. N. Higgs, 31 Vauxhall Bridge Road, Victoria, S.W. 121-879

MORGANS. The sporting runabouts. Speedy, reliable. Delivery from stock. Sole Liverpool Agents, The Colmore Depot, 31 Renshaw Street. Trade 121-867

MORGANS. All models stocked, cash or terms, exchanges, arrangements. Sole Leicestershire Agents, Colmore Depot, 62 High Street, Leicester. Trade 121-855

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

MORGAN, 1914, Grand Prix racer, single-seater, streamline body, 8 h.p. water-cooled J.A.P. engine, overhead valves, 90 by 77½, finished Indian red, splendid order, guaranteed sound, trial, £75. Elce and Co., 15 Bishopsgate Avenue, Camomile Street, London, E.C. Trade 121-864

MORGAN, five months old, sporting model, hood, screen, lamps, horn, speedometer, etc., condition excellent, cost £106, bargain £77. Colmore Depot, 62 High Street, Leicester. Trade 121-854

MORGAN de luxe, 1914, painted white, hood and screen, three lamps, generator, 700 by 80, tyres almost new, drip and force feed, splendid horn, speedometer, spare jets, jack, spare chain and tyre, in good condition, cost £130, accept £75. W. Shears, Pipers Row, Wolverhampton. 121-o850

MORGAN de luxe, 1914, smart dark green, mileage 2400, carefully driven, engine recently overhauled, hood, screen acetylene lamps, speedometer, extra tool-box, several spares, cost £119, accept £90. Stacey, Windsor Road, Doncaster. 121-a977

MORGAN, Grand Prix, June, 1914, overhead valves, water cooled, mileage 850, head lamps, tail, generator, Watford speedometer, horn, screen, hood with windows and side curtains, 700 by 80 tyres all round, only one puncture, tools, pump, French grey, condition as new, carefully driven, splendid goer and hill-climber, any examination and trial, seen any time, cost £135, take £110, most reliable. Harold Jones, Dyfryn, Ammanford, Carmarthenshire. 121-a975

MORRIS-OXFORD, sole agents for Surrey and parts of Sussex and Hampshire, the quality light car, best delivery dates, free tuition, etc. The Haslemere Motor Co., Ltd., Haslemere. Phone, 43. Trade 122-261

MORRIS-OXFORD. For quick deliveries write to H. W. Cranham, Wholesale and Retail Agent, 221 Deansgate, Manchester. Trade 138-144

MORRIS-OXFORD. W. Watson and Co., Liverpool, Wholesale and Retail Agents. Early deliveries. Easy payments if desired. Trade 128-371

MORRIS-OXFORD, 1914, with dickey seat, speedometer, clock, etc., been in use 2½ months, only 150 guineas, very big bargain. Julian, Broad Street, Reading. Biggest light car dealer in the South; 44 years reputation. Trade zzz-801

MORRIS-OXFORD, 10 h.p., model de luxe, complete with hood, screen, detachable wheels, one spare, Lucas lighting set, in stock. William Rootes, Garage, 22 High Street, Maidstone. Trade 121-o814

MORRIS-OXFORD light car, 1915, de luxe model, new, delivery from stock, fully equipped; this excellent little car is fitted with hood, screen, spare wheel, five lamps, horn, £199 10s., motorcycle or light car taken in part payment, easy terms arranged, free delivery included, expert tuition free. Wauchope's, the largest light car dealers, 9 Shoe Lane, Fleet Street, London. Trade 121-903

MORRIS-OXFORD, popular model, 165 guineas, delivery from stock. The Exeter Motor Cycle and Light Car Co., Ltd., 7 Bath Road, Exeter. Trade 121-898

MORRIS-OXFORD de luxe, 1914 model, new June, run approximately 5000 miles, price £140, any trial and examination. Trueman Motor Co., Ltd., 14 Tempest Hev, Liverpool. Trade 124-889

MORRIS-OXFORD. Stewart and Ardern, the largest contractors in the world for Morris-Oxford cars. Immediate delivery of all latest models, complete with hoods, screens, five detached wheels and tyres, five lamps and full equipment. Popular model 165 guineas, De Luxe model 190 guineas. One brand-new 1914 standard model, with special de luxe body, £155, only slightly shop soiled, usual price £195; one slightly shop-soiled brand-new de luxe model, £185, usual price £199 10s.; one cabriolet coupe, complete with all fittings, brand new, £235, usual price £255. Every car fully guaranteed for 12 months. One second-hand 1914 de luxe model, in perfect mechanical condition, with full equipment, speedometer, clock, petrol can carrier, interior mat, etc., £150. Stewart and Ardern, 18 Woodstock Street, Bond Street, London, W. Trade 121-a980



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

MORRIS-OXFORD, 1914 model de luxe, mileage 1200, coach-work and tyres in practically new condition, Lucas lighting outfit, cost £220, price £170. Glendower Motor Co., Ltd., Glendower Place, South Kensington. Ken. 558. Trade 121-888

MORRIS-OXFORD, 1913, 10 h.p., standard model, recently overhauled, hood, screen, spare wheel and tyre, five lamps, horn, speedometer, tools, £115. Apply, Dr. Johnston, The Orchard, Chester-le-Street, Co. Durham. 121-0286

MOTORETTE, 1913, hood, screen, lamps, little used, good order, £45. George Heathcote, Bartley, Southampton. 122-a984

PERRY light cars, trial runs arranged; also Humberette Morgan, and Marlborough. Turpins, 22 and 29 Preston Road, Brighton. Trade 125-1356

PERRY light car, trial run arranged. Julian, Perry Specialist, Broad Street, Reading. Biggest light car dealer in the South; 43 years' reputation. Trade zzz-394

PERRY, 8 h.p., complete, in excellent condition, £85. Freeman Oakes and Co., Ltd., Sheffield. Trade zzz-831

PERRY light cars, 8 h.p. models, complete, ready for road, five wheels and tyres, £147. Bristol and district agents, F. G. Cox and Co., Ltd., Perry Road, Bristol. Trade 121-0838

PERRY, Perry, Perry. 1915 models, from £147 10s., 2 per cent. extra deferred payments, tuition free. Cass's, Light Car Specialists, 5 Warren Street, Euston Road. Museum 623. Trade 121-908

PREMIER cyclecar, twin-cylinder, 7-9 h.p., done 2000 miles, perfect condition, £75, or exchange for motorcycle and cash. H. White, South View, Haywards' Heath. 121-0877

RANGER, for sale, only run 2000 miles, in perfect order, electric lights and accessories. Howarth, Woodville, Cragg Vale, Yorks. 121-n806

ROLLO, 8 J.A.P., good condition, new tyres, hood, screen, bargain, £30. Rigden, 8 High Street, Redhill. 121-a978

SABELLA cyclecar (latest), 8-10 J.A.P., water-cooled, magnet, hood, screen, lamps, any trial, £45; exchange motorcycle. 1 Ebner Street, Wandsworth. Trade 121-0655

SAXON, Saxon, Saxon. The super-excellent light car, 10 h.p., four-cylinder, two-seater, complete, 100 guineas. Communicate with the pioneer agents, Western Motor Works, Chislehurst, Kent. Trade 129-g766

SINGER light car, 1915 model actually in stock. This wonderful car is fitted with dynamo electric lighting set, hood, screen, horn, painted suede grey, upholstered brown leather, with new type body, and is a most luxurious car. Price complete with dickey seat, £221. Motorcycle or light car taken in part payment. Easy terms arranged. Free delivery included. We give expert tuition in driving, and overhauling, and do everything possible to assist purchasers. Julian, Singer Specialist, Broad Street, Reading. Biggest light car dealer in the South; 43 years reputation. Trade zzz-392

SINGERS, from stock, on deferred terms; write for Buyers' Guide. Harrods, Ltd., Brompton Road, S.W. Trade zzz-612

SINGER light cars, 10 h.p., 1915, immediate delivery, trade supplied. Rey, 378 Euston Road, N.W. Trade 125-162

SINGER, 1915, special radiator, actually in stock, will exchange for 1913, also 1914, good allowances. Singer specialists, Motor Supply Co., Oxford Street, Manchester. Trade 138-186

SINGER, 1915 models in stock, immediate deliveries, trade only. Palmer, 54 Stamford Brook Road, Hammersmith. Phone, 81. Trade 142-n246

SINGERS, 10 h.p., delivery from stock; easy terms, exchange. R. E. Jones (Garages), Ltd., Swansea; also at Cardiff. Trade zzz-659

SINGERS, 1915, quick deliveries and best quotations. R. D. Storey, 118 Gt. Portland Street, W. Trade 123-814

SINGER, 1915, with lighting set complete, for immediate sale, at the old price, £204 15s.; this is the last car that we have at this figure, first deposit secures. Apply Wedge and Co., Willenhall. Trade 122-o220

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

SINGER, 1915 models in stock, immediate delivery, best quotations, delivery, etc., free. William Rootes, Garage, 22 High Street, Maidstone. Trade 133-o815

SINGER, 1914, 10 h.p., with electro dynamo lighting, Klaxon horn, bulb horn, hood and screen, Watford speedometer, clock, etc., painted light blue, black mudguards, in first-class order, demonstration car, £155. William Rootes, Garage, 22 High Street, Maidstone. Trade 121-o815

SINGER, 1914, dynamo lighting, speedometer, recently repaired and varnished, engine overhauled by the official repairs, everything in good condition, trial run with pleasure, price £155. McNeille, Showrooms, 47 Staines Road, Hounslow. Trade 123-o808

SINGER light car, 1915, delivery from stock; this reliable and much improved light car, fitted with dynamo electric lighting set and fully equipped, standard finish, fitted with their very latest type body and radiator, a luxurious light car, price, including everything, £215, motorcycle or light car taken in exchange. Wauchope, 9 Shoe Lane, London. Trade 121-905

SINGER light car, 10 h.p., with dynamo lighting set, £204 15s., early delivery. The Exeter Motor Cycle and Light Car Co., Ltd., 7 Bath Road, Exeter, and 28 Tavistock Road, Plymouth. Trade 121-899

SINGER light cars, 1915 models, with dynamo lighting, in stock, immediate delivery. Colmore Depot, 31 Renshaw Street, Liverpool. Trade 121-868

SINGER light car, 10 h.p., with hood, screen, spare wheel and dynamo lighting set, £204 15s. Jarvis, Ltd., 205 Edgware Road, London, W. Trade 121-o855

SINGER light car, dynamo, 1915 model, circumstances prevent taking delivery. Johnson, 8 St. Albans Road, Arnold, near Nottingham. 121-o866

SINGER 1915 light car, fresh from works, plated fittings, dynamo lighting, £215, in stock, immediate delivery, free trials; we teach you to drive and deliver to your door free; exchanges; easy payments only 2 per cent. extra; trade supplied. Wilkins, Simpson and Co., 11 Hammersmith Road, London. Trade 122-871

SINGER, 1915, dynamo model, stone grey, all latest improvements, actually in stock, liberal allowance for your old Singer; we are experts in this make, therefore purchase from us. Bamford and Martin, Ltd., Calow Street, Fulham Road, S.W. Kensington 3920. Trade 121-859

SINGER, 10 h.p., 1914, with dynamo lighting, five wheels and tyres, speedometer and full equipment, £160. Alfred Wastnag, Portland Court Garage, Great Portland Street, London. Trade 122-857

SINGER, Singer, Singer, in stock, 1915, 10 h.p., with dynamo lighting outfit, £215, 2 per cent. extra deferred payments, tuition free. Cass's, Light Car Specialists, 5 Warren Street, Euston Road. Museum 623. Trade 121-907

SINGER, Singer, Singer, 1913 model, fitted with 1914 engine and back axle, 10 h.p., three-speed and reverse, hood and screen, two acetylene headlamps and generator, three electric lamps, speedometer, horn, mirror, five quick detachable wheels, painted green, run about 4000 miles, £120. Cass's, The Light Car Specialists, 5 Warren Street, Euston Road, W. Museum 623. Trade 121-913

SINGER, 10 h.p., September, 1913, complete, done about 3000, condition as new, 1914 pattern, shock absorbers, new tyres back wheels, £125 or near offer. Land, Highfield Villas, Woodford Road, Bramhall. 121-o803

SINGER light car, new June, 1914, electric lighting set, dickey seat, speedometer, clock, Bowden air inlet, toolbox on running board, extra petrol tin, painted suede grey, tyres good, all in perfect condition, run 4500 miles, been carefully driven by owner, bought four-seater. 3 Pittencrieff Street, Dunfermline, Fife. 121-o780

STANDARD, 9.5 h.p., with Rhyl and coupe bodies in stock, delivery and driving lessons free. A. R. Atkey and Co., Ltd., Shakespeare Street, Nottingham. Phone, 1339. Trade 125-804

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



## LIGHT CARS AND CYCLECARS FOR SALE

(continued).

STANDARD, 1915 model, complete with dickey seat, electric lighting set, self-starter, grooved tyres on back wheels, price £231 10s. Send for full particulars of this magnificent car. Motorcycle or light car taken in part payment. Easy terms arranged. We include free delivery and expert tuition in driving and overhauling, and generally do everything possible to assist customers. Julian, Standard Specialist, Broad Street, Reading. Biggest light car dealer in the South; 43 years reputation. Trade zzz-393

STANDARDS, 9.5 h.p., delivery from stock; easy terms, exchange. R. E. Jones (Garages), Ltd., Swansea; also at Cardiff. Trade zzz 660

STANDARD, 1914, dickey seat, speedometer, four Dunlop heavy tyres, spare steel-studded, run under 1000 miles, condition as new, expert examination, fully equipped and tools, £160, no offers. Thomas Yates, Syston, Leicester. 121-0858

STANDARD, 9.5 h.p., 1914, with five wheels and tyres, speedometer, clock and full equipment, £155. Alfred Wastnage, Portland Court Garage, Great Portland Street, London. Trade 122-858

STANDARDS, 1915 models, immediate delivery from stock, £205, or £40 down and deferred payments at 2 per cent. interest. Sole London agents, The Pytchley Autocar Co., Ltd., 216 Great Portland Street, W. Trade 133-856

STANDARD, 1914, complete with dickey seat, Broit dynamo lighting set, speedometer, mats, fast car, new June, only used week-ends, as new, guaranteed perfect, mileage 2200, cost £225, price £185, seen any time by appointment. 191 Rosendale Road, West Dulwich. 121-a966

STANDARD light car, dynamo lighting set, dickey seat, speedometer, clock, excellent condition, £130. Lucas, Polesworth, Tamworth. 121-0876

SWIFT, 10 h.p., 1915, four-cylinder, complete electric equipment, £200, early delivery. Taylor's, Ltd., 21a Store Street, London, W.C. Trade zzz-803

SWIFT, 1915, 10 h.p., with dynamo lighting set, for early delivery. Seemann and Stones, Ltd., 39 St. James's Street, Piccadilly, W. Phone, Regent 212. Trade zzz-839

SWIFT, 10 h.p., light car, with dickey seat; 1915 models, delivery from stock. Wrexham Motor Co., Ltd., Wrexham. Trade 129-460

SWIFT cyclecar, 1914, nearly new, £100. Freeman, Oakes and Co., Ltd., Sheffield. Trade zzz-834

SWIFT cyclecar, 1914, complete, speedometer, clock and Stepney wheel, only run 550 miles, dark-blue, £110. Freeman, Oakes and Co., Ltd., Sheffield. Trade zzz-832

SWIFT, 1915, quick deliveries and best quotations. R. D. Storey, 118 Gt. Portland Street, W. Trade 123-815

SWIFT cyclecar, 1914, slightly shop-soiled, otherwise brand-new, bargain, £120. Harris, Garage, Slough. Trade 122-0229

SWIFT, 1915, 10 h.p. light car with dynamo set, £210 for immediate delivery. Harris, Garage, Slough. Trade 122-0230

SWIFT cyclecar, 1914 model, 7 h.p., dynamo lighting, perfect condition, guaranteed practically new, £110. 337 Euston Road, London, N.W. Trade 121-0819

SWIFT, 10 h.p., four-cylinder, three-seated abreast, with dickey practically new, run 2000 miles only, an exceptional attractive light car, £150 or offer, fully equipped. 337 Euston Road, London, N.W. Trade 121-0821

SWIFT, 1915, 10 h.p., four-cylinder, dynamo lighting, complete with hood, screen, etc., £200. Jarvis, Ltd., 205 Edgware Road, London, W. Trade 121-0856

SWIFT cyclecar, late 1913, done very little work, in perfect condition, £80. J. Poate, Midhurst, Sussex. 121-874

SWIFT 10 h.p. light car, latest 1915 model, £210. Wilkins, Simpson and Co., 11 Hammersmith Road, London. Trade 122-872

SWIFT light car, 1914 model, new August, many spares, £95. Matthews, Pawnbroker, Croydon. Trade 121-863

SWIFT 1914, 7 h.p. light car, hood, screen, lamps, horn, speedometer, etc., as new throughout, £105. Eastern Garage, 418 Romford Road, Forest Gate, E. Trade 123-861

## LIGHT CARS AND CYCLECARS FOR SALE

(continued).

SWIFT, late 1914, 7 h.p., 2000 miles, carefully driven, engine overhauled by makers last month, saxe blue, very smart, tyres unpunctured, all lamps, hood, screen, horn, new Stepney with complete tyres, speedometer, all mats, complete set tools, and some spare parts, cost £155, owner buying four-cylinder, price 110 guineas or near offer; can be seen Oxford or town week-ends. Box No. 5392, care of "The Light Car and Cyclecar." 121-a986

SWIFT, 1914, 7 h.p., good condition, tyres unpunctured, five lamps, speedometer, side valances, shock absorbers, Stepney, £95. Gibbins, Chesterton, Upland Road, Selly Park, Birmingham. 121-a981

SWIFT, Swift, Swift, 1915 models, from £147, 2 per cent. extra deferred payments, tuition free. Cass's, Light Car Specialists, 5 Warren Street, Euston Road. Museum 623. Trade 121-905

SWIFT, 1914 cyclecar, 7 h.p., speedometer, Stepney and tyre, two studded tyres, two grooved, hood, screen, lamps, tools, been carefully used, run 6800 miles, splendid condition, will take any hill, £110 or near offer. W. Thacker, 457 Hinckley Road, Leicester. 121-0797

VICTOR cyclecar, belt drive, two-speed and reverse, hood and screen, complete with lamps, £100. Sole Devon Agents, The Exeter Motor Cycle and Light Car Co., Ltd., 7 Bath Road, Exeter, and 28 Tavistock Road, Plymouth. Trade 121-896

WARNE, 8 h.p., two speeds, hood, screen, speedometer, clock, acetylene lamp, excellent condition, £48. Auto Mart, 133 Hammersmith Road, W. Trade 121-a963

WARNE, 1914, 9 h.p., w.-c. two-cylinder Blumfield engine, three-seater, shaft drive, done 3000 miles, electric headlamps, Watford speedometer, colour light fawn, in excellent condition, £120 with spare tyre; owner buying four-seater. Trant, 20 Winchester Road, Higham's Park, Chingford. 121-0802

WARREN-LAMBERT light car, 10 h.p., new September, 1914, mileage 2000, painted blood red, black mudguards and valances, hood, screen, horn, lamps, jack, tools, perfect condition, £105. Dove, 154b Cheltenham Road, Bristol. Trade 122-0811

WARREN-LAMBERT, 1914, complete, hood, screen, lamps, headlamp, spare tyre, run under 1000 miles, trial willingly, price £105. Harris, 7 Willow Avenue, Barnes. 121-0775

## MISCELLANEOUS LIGHT CARS AND CYCLECARS

BARGAINS in Morgans, G.W.K.s and other cyclecars and light cars at Spencer's Garage, Uxbridge. Trade 132-36

BRIGHTON. Perry, Humberette, Morgan, Marlborough. Trials runs given. Easy terms arranged. Turpin, 22 and 29 Preston Road. Trade 167-m843

THREE-WHEELED cyclecar, two-seater, J.A.P., magneto, hood, lamps, excellent condition; £25, photo. 7 High Street, Leighton Buzzard. 121-0842

CYCLECAR, belt driven, twin two-stroke, Chater Lea gearbox, clutch and fittings, everything brand new, all complete, done 50 miles, wants upholstering and painting, £30, materials cost £55. Goudhurst, Westborough Road, Southend. 121-0807

1914 SOCIABLE, 6.7 h.p., two tyres on back wheel, hood, screen, lamps, complete, good condition, exchange for motorcycle. G.P., Yew Tree House, High Street, Walsall Wood. 121-0827

NEW Lagonda, £145; new Victor, £100; 1914 8 h.p. three-speed J.A.P., £59 10s.; 1914 8 h.p. Crouch, £97 10s.; 8-10 Bedelia, £39 10s.; 8 h.p. J.A.P.-Sabella, £46 10s. Motories, 68 Horton Street, Halifax. Trade 122-876

CASS'S Motor Mart. The original light car and cyclecar specialists, can give immediate delivery of 1915 A.C., 10 h.p. Calcott, G.W.K., Hillman, Horstmann, Humberette, Lagonda, Morgan, Morris-Oxford, Singer, Standard, Stellite, Victor, Whiting-Grant, Wilton; and seven days—Perry, Saxon, Swift and any other make, tuition free, 2 per cent. extra for deferred payments, exchanges entertained. Several new and second-hand 1914 light cars and cyclecars at bargain prices. Send for lists. The Original Light Car and Cyclecar Specialists, 5 Warren Street, Euston Road, W. Museum 623. Trade 121-914



### MISCELLANEOUS LIGHT CARS AND CYCLECARS (continued).

HUMBER-J.A.P. two-seater car, 9-11, in first-class condition, £60, or exchange four-cylinder four-seater or 8 h.p. motorcycle. Sneath, Dominie Cross, Retford. 121-0862

SALE, cyclecar, 1913, 8 h.p. J.A.P. engine, two-seater, sporting body, electric lights, hood, horn, tools, etc., £55 or offer. P. Thompson, Westville, Loftus, Yorkshire. 121-0779

### MISCELLANEOUS.

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 Road, Leytonstone, London.

Trade zzz-183

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 Road, Leytonstone, London. N.E.

Trade zzz-505

NEW, guaranteed worm-driven back axles, suitable for cars up to 12 cwt., 4 ft. track, complete with hubs, price £24 cash; also radiators at clearance prices. Turners, Lever Street, Wolverhampton.

Trade zzz-43

ALUMINIUM number plates, best quality, any number, raised letters, very handsome, 8s. 6d. per pair. Freeman, Oakes, Devonshire Street, Sheffield.

Trade zzz-805

CYCLECAR components: Channelled steel reinforced wood frames, with quarter-elliptic springs, £3 17s. 6d.; counter-shafts, friction sets, axles, wheels. Denby and Co., Ltd., Ilkley.

Trade zzz-936

GEAR-CUTTING. Spur, sprocket and bevel wheels cut, case-hardening; steels stocked. R. H. Morse, 27 Elder Place, Brighton.

Trade 160-k427

SPECIAL line for light cars. An exceptionally well-made set of torpedo pattern electric lamps, guaranteed British make throughout, consisting of two side and tail lamps, with metallic filament bulbs, 27s., or with 4-volt 25 ampere-hour accumulator in metal case, 44s. The Essex Accumulator Co., 497 and 499 Grove Green Road, Leytonstone, London.

Trade zzz182

NEW pattern dome wings, front valances, for Ford cars, 55s. per set; for light cars, 45s. set, carriage paid. Crossley, Castle Street, Stockport.

Trade 121-i446

NEW Bosch twin magnetos, type DAV, set 42, 45, 50, and 60 degs., £3 10s.; Zenith carburettors, type 22 £2 15s.; type 26, £3 10s.; type 30, £4; new Longuemare-Hardy, type FB22, £1 15s.; new 6 h.p. Rex twin engine, £11 10s.; new Collier square-tread covers, 650 by 65, 20s.; Henley oversize covers, 700 by 80 to fit 650 by 65, 25s. Bastone's, 228 Pentonville Road, King's Cross, London, N.

Trade 121-573

LANGLEY, Sheet Metal Specialists; radiators, any pattern, made and repaired; bonnets, tanks, wings, panels, etc., maker of the famous all-metal bodies. Unity Works, Malvern Link.

Trade 132-0242

A FEW D.L. light-car chassis for sale, 8 h.p., 1914 models, four-cylinder, three-speed, to clear at £95, particulars on application. D.L. Motor Mfg. Co., Motherwell.

Trade 122-707

TWO-SEATER body, finished, £3; steering wheel, 4s.; chassis springs, 2s.; three-speed and reverse gear set, with box, £3. Norman Mitchell, Cockermouth.

121-0846

10-12 h.p. FOUR-CYLINDER Fafnir, with T. and M. carburettor and pipes, £12; front axle, artillery wheels, 30s.; back do., new crown and bevel wheels, rebushed throughout, £4 10s.; channel steel frame, £2; new radiator, round type, never used, £2; new two-seater hood, £2 10s.; new windscreen, £2; two-seater body, dash and tank, £2 10s.; quadrant and levers, 15s.; steering gear and wheel, 30s.; new square tread Avon tyre, 710 by 90, 35s.; 710 by 90 tube, new, 10s. Box No. 5593, care of "The Light Car and Cyclecar."

121-0885

5 h.p. WATER-COOLED engine, radiator, frame (ash) with springs, front and back axles with wheels, 650 by 65 rims, front mudguards, body, lot £10, or would separate, particulars. Motor, 20 Merivale Road, Putney.

121-0872

### MISCELLANEOUS (continued).

£5 5s., FOR sale, gent's overcoat (Navy), lined Kolinski fur, broad sable collar, chest 52, worth 12 guineas, approval, deposit system. 77 Margate Road, Southsea. 121-0851

LATEST Service Colt revolver, 4.55, leather holster, new, unfired, £5, reason selling. Harley, Dene Court, Taunton. 121-0865

CHASSIS, complete, running order, N.S.U., 6 h.p. twin, magneto, B. and B., live axle, two-speed, four wheels, £22. Glover Bros., Coventry.

Trade 121-0870

LIVE axle, central chain drive, 3 ft. 6 in. track, 26 by 2½ Dunlop tyres, £4; two-speed gearbox and clutch for chain drive, £2; steering wheel and column, 12s. 6d.; pair cyclecar hubs, 2s. 6d.; clutch, 5s.; Premier 6 h.p. engine and magneto, £9. Holland, Clarendon Street, Coventry.

Trade 121-a972

FOR quick sale, cyclecar front axle, complete with springs, dumb-irons, 10G wire wheels, 26 by 2½ Bates's No. 1 tyres, unpunctured, £4; back axle, ditto, complete with band brakes, £4; one pair back cyclecar mudguards, 8s.; 12 ft. ¾ by ¾ Renold chain nearly new 20s.; nickel-steel counter-shaft, with ball bearings, sprockets and band brake, 35s.; brand-new Fuller twin trembler coil, 15s.; tank, 5s.; black plated car generator, 15s.; cyclecar brake and gear levers with quadrants, also pedal gear, 15s. Rhodes, Queen Street, Romford.

121-0786

CYCLECAR parts, engine, clutch, frame, steering, springs, scuttle dash, bonnet, petrol tank, bucket seats, rear axle, gearbox, clutch, wire wheels, new tyres and tubes, clutch and brake pedals, headlamps; what offer? Barnsley Motor Co., Ltd., Barnsley.

Trade 121-0795

### ACCESSORIES.

LIGHTING set, 6-volt 100 watt machine, 6-volt accumulator in lead-lined mahogany case, wants overhauling, ammeter to 20 amps., voltmeter to 12 volts, mounted on block with terminals, £4 or close offer. E.B., 33 Thornhill Crescent, N.

121-0888

FALLOT headlight, with bracket for Morgan, Fallot generator, nickel, cost £7, accept £3; A.-L. Popular generator, brass 10s.; two Radmore 8 in. headlamps, brass, 7s. 6d. each. Box 5394, care of "The Light Car and Cyclecar."

121-0884

SMITH'S combined speedometer and clock, cost £14 14s., also one 40-hour 4-volt accumulator and C.A.V. electric horn, 12-volt. What offers? Morgan, 24 Glyn Mansions, Addison Bridge, Kensington.

121-0886

THREE solid brass self-contained headlamps and brackets, practically new, 15s. each or exchange largest motorcycle set, cash adjustment. Walmer, 39 Disraeli Road, Putney. 121-0887

PAIR black headlamps, bracket and Alpha generator, 35s.; P and H, brass self-contained headlamp, 25s. Tandy, 134 Moor, Sheffield.

121-0889

### BODIES.

CYCLECAR bodies, latest design, well made, fully upholstered, quick deliveries single or quantity, big output from £10, quotations by post return free on receipt of rough drawings. Hurlin Motor Works, 13a Ellingfort Road, Mare Street, Hackney.

Trade zzz-687

### CONSULTING ENGINEERS.

R. G. NYE, 17 Holborn, London (opposite Gamage's), reports on light cars, engines, etc. Easy payments arranged privately.

122-285

### DYNAMO EQUIPMENT.

PHONOPORE 12-volt lighting set, including lamps, dynamo, switchboard and accumulator. Sole agents, Samson and Veal, 12 Woodstock Street, Oxford Street. Mayfair 6826.

Trade zzz-302

### ENGINES.

8-10 h.p. J.A.P. water-cooled engine, 50 degree V-type; 8-10 h.p. Precision ditto, both perfectly new, what offers? Farrar's Motories, Halifax.

Trade 125-m157



**EXCHANGE.**

**EXCHANGE.** Motor-bicycles of all makes can be taken in part exchange for light cars, balance in cash or extended payments as preferred. Service Co., 292 High Holborn, London. Trade zzz-689

**EXCHANGE A.J.S.** and sidecar for A.-C. or Morgan. F.J.P., 60 Hindpool Road, Barrow. 121-n772

**TRICAR,** Riley, two-seater, twin, coach body, photo.; exchange also quantity motor accessories. Kingsholme Studio, Gloucester. 121-o848

1915 G.W.K., Calthorpe and Jowett cars; motorcycles, sidecars and light cars taken in exchange. Colliers Motories, Deal Street, Halifax. Trade 122-875

**WANTED,** good second-hand light car or cyclecar, offers in part exchange with cash, exceptionally smart Thames-built motor launch, cost £120, is 18 ft. long, 4 h.p. motor, Eise-mann magneto, Gaines reversing propeller, all perfect condition, fullest particulars. Box No. 5388, care of "The Light car and Cyclecar." 121-a983

**WANTED,** good second-hand cyclecar in exchange for brand-new 4 h.p. twin-cylinder Hobart motorcycle, Armstrong three-speed, free engine, listed £58 16s. J. Jones and Son, Garage, Machynlleth. Trade 121-669

A.-C. Sociable, 1913, hood, screen, luggage carrier, brass headlamps, large generator, side lamps, tail lamps and horn, tyres almost new, Avon combination on back, reliable machine, exchange A.J.S., or other high-power combination, or sell £50. Rowe, Westbury, Wilts. 121-o796

**EXCHANGE,** 1913 Rudge-Multi and coach-built sidecar, speedometer, lamps, etc., for Morgan sporting preferred, cash adjustment. Particulars to Rudge, 43 Hawarden Crescent, Sunderland. 121-o782

1913 (August), 3½ **PREMIER** and sidecar, Sturmev-Archer, overhauled and redecorated as new, climbing and speed cannot be beaten, exchange good cyclecar and cash adjustment. Shaw, Zylpha, South Cliff, Scarborough. 121-o798

**EXTENDED PAYMENTS.**

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

**FINANCIAL, Etc.**

**THE Service Co.** has accommodation for a number of cars for sale on commission; substantial advance pending sale if desired. Featherstone Buildings, High Holborn. Trade zzz-630

**MONEY** advanced on good recent light cars; garage and interest charges low. 269-275 Rye Lane, Peckham, London. 126-o878

**HOODS AND SCREENS.**

**SLIDING** extension hoods, £2 8s.; folding windscreens, 28s.; made from measurements. Lang and Webb, 1 Jackson Road, Holloway, London, N. Trade 121-o854

**TWO-SEATED** motor hood, sliding extension, brass fittings throughout, cheap. Tye, 310 St. James Road, Old Kent Road, London. Trade 121-885

**TODD** and Ellis, Duncan Street, Islington. Hood and screen makers. Light car work a speciality. Hoods recovered and fitted at short notice—a few second-hand hoods and screens in stock. New hoods from 35s., suitable for A.-C. and Morgan. General repairs undertaken. Bring your car to us and have the paintwork and upholstery revived for the spring. Trade 124-o785

**MAGNETOS.**

**MANCHESTER.** Magneto repairs of every description, any make; rewinding, remagnetizing, coil and accumulator repairs; several good second-hand magnetos in stock. J. H. Runbaken, Magneto Specialist, 7 Peter Street, Manchester. Telephone: 6111 City. Sole Northern Agent for the Eisemann Magneto Co. Trade 122-382

**PATENT AGENTS.**

**MOTOR** manufacturers, inventors, prepare now for trade revival by protecting new ideas. Particulars and advice free. King's Patent Agency, Ltd., 165, Queen Victoria Street, London. zzz-656

**FLETCHER WILSON,** of Coventry, Chartered Patent Agent. Telephone, 136k. Nineteen years experience in motor patent matters. 133-o799

**REPAIRERS.**

**YOU** cannot be certain of the results if you put your car in the hands of an unknown repairer. Having specialized in the repairs to light cars and cyclecars since 1909, when Mr. Higgs first introduced the A.-C. to the public, we know our job thoroughly and can guarantee satisfaction. Our terms are as low as consistent with first-class workmanship. G. N. Higgs, 31 Vauxhall Bridge Road (one minute from Victoria). 'Phone for estimates, 1215 Victoria. zzz-543

**COACH** painting, retrimming, general body repairs, etc.; shall be pleased to submit estimates. Abbott's Carriage Works, Colchester Road, Walthamstow, E. 130-a553

**ALL** repairs. We make anything to pattern or sketch, from an obsolete contact breaker to a set of friction discs. Slack and Parr, Kegworth. 125-o248

**MORGAN** repairs, complete overhauls and repainting, satisfaction guaranteed, delivery from stock of spare and replacement parts. Boddington, Morgan Specialist, Worcester. 124-o817

**REPAIRS.** Now is the time to have your light car or cyclecar overhauled; any kind of repairs. Wilkins, Simpson and Co., 11 Hammersmith Road (opposite Olympia), London. Trade 122-872

**SITUATIONS VACANT.**

**DRIVER,** for light G.W.K. delivery van, luxurious car with self-starter, previous driving experience in London traffic essential, 21s. to commence. Efandem Co., 198 Great Portland Street, W. 121-o882

**TYRES.**

**ELITE.** We have the following special clearance lines, and are willing to send goods on seven days approval against cash. Elite Rubber Co., 264 Vauxhall Bridge Road, Victoria (one minute from Victoria Station), and 260 Coldharbour Lane, Brixton, S.W. All post orders to Victoria Depot. 'Phone, Victoria 6553 and Brixton 2042.

**ELITE.** Dunlop 650 by 65 covers, 18s., list price 50s., 1913 pattern; Clincher 700 by 80 ribbed, 21s. 6d.; Henley oversize covers, 700 by 80 to fit 650 by 65 rims, 27s.; Kempshall heavy non-skid, 650 by 65, 42s. 6d., list price 67s. 6d.; Clincher 700 by 80 tubes, 6s. 6d. each.

**ELITE.** Cyclecar covers retreaded, 650 mm., heavy tread, plain, 10s., grooved 12s. 7d., steel-studded 20s.; 700 mm., 11s. 2d. plain, 14s. 2d. grooved, 28s. steel-studded; relining 4s. 6d.

**ELITE Rubber Co.,** 264 Vauxhall Bridge Road, Victoria. 'Phone, Victoria 6553. Trade zzz-749

**TYRES.** tyres, our telegraphic address is "Tyres," our speciality is tyres. Reduced prices of all makes now ready. Graham, Vine Street, Birmingham. Trade 141-843

**NEW** retreaded tyre, 650 by 65, also unused tube. Jessop, 7 Coleridge Road, Crouch End. 121-a964

**TUITION.**

**BRITISH** School of Motoring, being the practical training institution for the motor industry, gives special courses for car owners. Unlimited tuition until the pupil signs that he or she is satisfied. We teach you how to motor economically. Apply for "C.C. Booklet," The British School of Motoring, Ltd., 5 and 6 Coventry Street, Piccadilly Circus, London, W. 121-893

**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 Street, Seven Dials, Brighton. 'Phone, 371 Brighton. 168-554

**MOTOR** Schools, Ltd., 10 Heddon Street, Regent Street, W., and 21a Loudon Road, St. John's Wood, N.W., invite intending pupils to inspect their lecture-rooms, works, and garage, and advise them not to pay fees to any school until they have assured themselves that the school is genuine. Appointed by the Royal Automobile Club since 1907. We are also recommended by the large manufacturers. Illustrated prospectus and 200 test questions post free. zzz-602

**LEARN** to drive in comfort and safety at the Turberville Motor School, Bath Street, Brighton, on an up-to-date new 1915 model car. Prospectus free. 'Phone, 371 Brighton. 170-683



**WANTED.**

WANTED, several good second-hand light cars, cash waiting, or would take in exchange for any new make of car. Seemann and Stones, Ltd., 39 St. James's Street, W. 'Phone, Regent 212. Trade zzz-838

WANTED, 1914 10 h.p. Singer light car for cash. Rey, 378 Euston Road, London. Trade 121-401

SINGER or other light car, 1914 Indian combination, 2000 miles only, in part payment. Parker's Garage, Derby. Trade 121-a507

1913 or 1914 SINGER, Swift, Morgan, A.C., or Humberette, spot cash or in exchange for 1915 models. Mandes' 136 Great Portland Street, London, W. Trade 132-0257

WANTED, 1914 Stellite, state lowest price, condition. Green, Carlton, New Street, Horsham. 121-0839

WANTED, sociable, wheel steering, exchange lightweight, little cash, photo., full particulars. Advertiser, Rosedale, Walton, Felixstowe. 121-0809

WANTED, Calcott, Singer, Calthorpe, Morris-Oxford or any other good make 1914 light car, must be in good condition; send full details, lowest price. 8 Clifton Terrace, Prescott Road, St. Helens. 121-0810

WANTED at once for cash a light car or cyclecar, 1914 model. 26 Hallselle Road, Golder's Green, London. 121-0820

WANTED, 1914 Carden monocar, good condition, deferred payment. Bull, St. Andrew's, Southborough, Kent. 121-0824

WANTED, cyclecar or light car, offer brand new Player-Piano with cash adjustment. Apply, Box No. 5372, care of "The Light Car and Cyclecar." 121-894

WANTED, a syren, driven off shafting, suitable for Singer 10 in. Alix, St. Hilda, Bradburne Road, Bournemouth. 121-0853

WANTED, good 1914 Grand Prix Morgan for immediate cash. Particulars and price to C. Ranken, "Coanwood," Roker, Sunderland. 121-0859

WANTED tail lamp, Lucas preferred, large generator, electric horn, motor clock. K., 40 Adelaide Road, N.W. 121-0864

WANTED, cyclecar hood, width 36 ins., lamps, tubes, covers, 700 by 65, cheap, cash. 14 Woodcote Road, Wanstead. 121-0873

DOUGLAS 1914 motorcycle wanted in part exchange for light cars and cyclecars. See below.

SECOND-HAND light cars in part exchange for new or second-hand ones. G. N. Higgs, 31 Vauxhall Bridge Road, Victoria, S.W. Trade 121-878

WANTED, 1913-14 light car or Morgan at low price, cash waiting. Send particulars, Box No. 5391, care of "The Light Car and Cyclecar." Trade 122-877

WANTED, modern light car, any good make, A.C., Singer, Morris-Oxford, etc., for cash. Box No. 5389, care of "The Light Car and Cyclecar." Trade 121-a982

WANTED, Baby Peugeot or Morgan (water-cooled), good going order and bargain for cash. B., 43 Perrynead Street, Fulham. (Letters only.) 121-a979

WANTED, Morgan, 1914 (water-cooled), with accessories, must be cheap and in good condition for cash. John Pointing, 6 Crescent Gardens, Bath. 121-a976

RADIATOR, V-shaped preferred, suitable for 8-10 h.p. J.A.P. engine. Lowe, 20 Gerard Street, Derby. 121-0881

WANTED, 1915 Calthorpe Minor or Enfield coupe car. Box No. 5395, care of "The Light Car and Cyclecar." 121-0883

WANTED, 1914 Singer or Standard light car, must be in perfect condition, about £130. W. Beard, Cadley Hill, Burton-on-Trent. 121-886

CASS'S, The Light Car and Cyclecar Specialists, require to purchase, exchange or sell on commission, A.C., Calcott, G.W.K., Hillman, Humberette, Lagonda, Morgan, Morgan-Adler, Morris-Oxford, Perry, Saxon, Singer, Standard, and Swift light cars. Cass's Motor Mart, 5 Warren Street, Euston Road, W. Museum 623. Trade 121-915

WANTED, first-class light car, must be cheap, well-known make. Charles Taylor, 17 Taviton Street, W.C. 124-0793

WANTED, Singer, Morgan, Swift, G.W.K. Bring or send. Highest cash paid. Wandsworth Motor Exchange, Ebner Street, Wandsworth. (Town Station.) Trade 121-0656

WANTED immediately, Morgan runabout, must be in perfect condition. Full particulars, stating lowest cash price to Box No. 5373, care of "The Light Car and Cyclecar." 121-0770

**WANTED (continued).**

WANTED, reliable cyclecar, Singer, Stellite, Calthorpe or Swift preferred, must be cheap for cash. Particulars to Box No. 5375, care of "The Light Car and Cyclecar." 121-0772

WANTED, Stepney spare wheel, 650 mm. by 65 mm., without tyre, to fit wire wheels. Ellis, 157 South Parade, Cleckheaton. 121-0783

BACK axle, complete with bearings and 700 by 80 wire wheels, either solid or belt drive. Steam Laundry, New North Road, Exmouth, Devon. 121-0789

WANTED, chassis, engine about 10 h.p., gearbox, etc., suitable for building cyclecar, 4 ft. track. Haynes, 53 Swindon Road, Swindon. 121-0790

**BOOKS AND PUBLICATIONS.**

A TEXT book for every motorist, just published, fourth edition, 200 practical points in questions and answers dealing with every part of the motorcar, by post 1s. 1d. Motor Schools, Ltd., Heddon Street, Regent Street, W. zzz-887

"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 Avenue, London, E.C.

STRIP ROUTE MAPS. Made in the form of long strips. A profile plan of the road included. These maps are most convenient for use. They open like a book and can be consulted with ease in the highest wind. London to Birmingham, Liverpool and Manchester; London to Bath and Bristol; London to Exeter and Teignmouth; London to Southampton, New Forest, Bournemouth; London to Brighton and London to Portsmouth (in one). 1s. net each, post free 1s. 1d. each, from "The Light Car and Cyclecar" Offices, 7-15 Rosebery Avenue, London, E.C.

EASY EXITS FROM LONDON AVOIDING TRAFFIC. Illustrated with 21 maps of the greatest use to the cyclecarist, showing how to reach open country without passing through crowded thoroughfares. 6d. net, post free 7d., from the offices of "The Light Car and Cyclecar," 7-15 Rosebery Avenue, London, E.C.

**NOTICES.****REGULATIONS WITH REGARD TO ADVERTISEMENTS.**

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

All advertisements and contracts are accepted and made upon the express condition that the Publishers have the absolute right to refuse to insert copy to which they may object for legal, public, or trade reasons, and such refusal of copy shall not be a good ground for advertisers to stop a current contract or to refuse to pay for the same or for taking action for breach of contract.

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 advert. blocks that are left in their possession for more than one year.

**SUBSCRIPTIONS.**

"THE LIGHT CAR AND CYCLECAR" will be mailed regularly at the following rates:

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

REMITTANCES.—Postal Orders, Cheques, etc., should be crossed and made payable to "Temple Press Ltd." All letters regarding subscriptions must be addressed to "The Manager."

**DEPOSIT SYSTEM.**

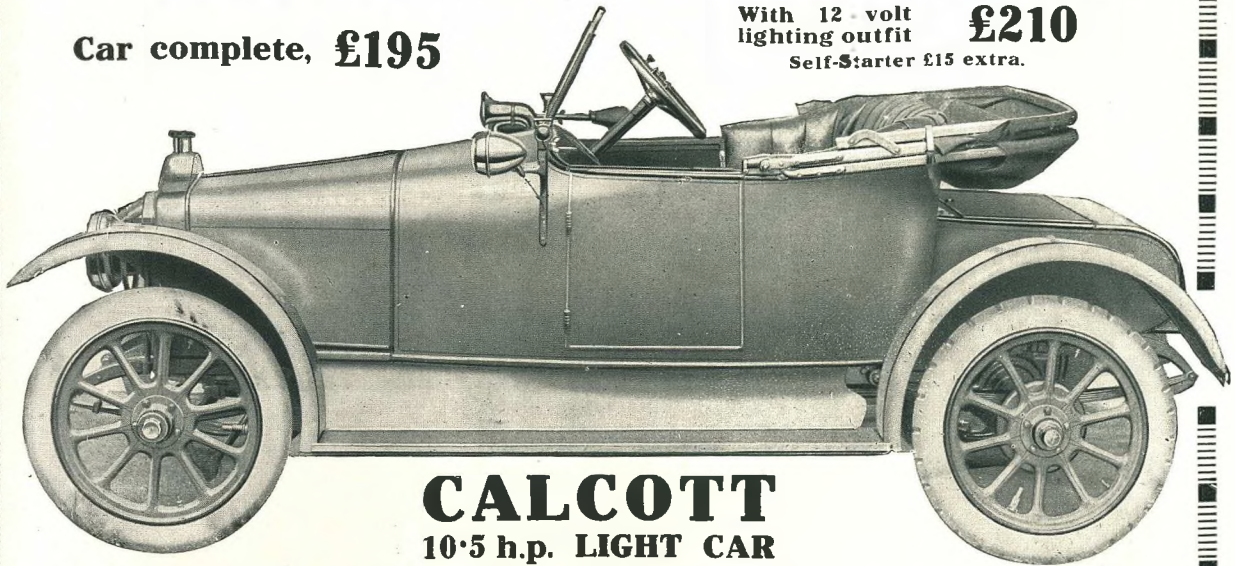
For the convenience and security of our readers we have an approval-deposit system. The intending buyer forwards to our office the amount of the purchase money, which will be acknowledged to both parties. Notes or money order save time. Cheques must be made payable Temple Press Ltd., and are acknowledged to seller when "cleared." If a sale is concluded, we forward to the seller the amount agreed upon. If no sale is made, we return the amount deposited. In either case we deduct a commission of 1 per cent. (3d. in the £, 1/- minimum), on amounts deposited up to £50, 1 per cent. on amounts from £50 to £100, and 1 per cent. on amounts exceeding £100, to cover our expenses of booking, postages, etc. Carriage is to be paid by the buyer. If the article is returned, each party pays one way. The risk of damage in transit is the seller's. Articles on approval are not to be retained more than three days, unless by arrangement between the parties. All disputes to be settled by the arbitration of the Editor of "THE LIGHT CAR AND CYCLECAR."

WARNING.—Acknowledgments of deposits or instructions to forward goods advertised are only written on our special h. aded paper, which bears a facsimile of the title of this journal. To prevent fraud, the advertiser should ACKNOWLEDGE IMMEDIATELY any such letter apparently coming from us, and delay forwarding the goods for a day or so. Should we, on receiving such an acknowledgment, find that no letter has been sent by us, we will wire the advertiser not to act with the goods advertised.



Car complete, £195

With 12-volt  
lighting outfit £210  
Self-Starter £15 extra.



**CALCOTT**  
10.5 h.p. LIGHT CAR

*Sole London and Home Counties Agents:*

**Watkins & Doncaster, Ltd.**  
—95a, Great Portland Street, W.—

Radiators,  
Bonnets,  
Tanks,  
Ball Control  
Joints,  
Fans,  
Filters,  
Steering  
Wheels,  
Petrol Level  
Indicators,  
etc.

The Finest  
LIGHT CARS AND CYCLECARS  
are Water-cooled. The Finest  
Water-cooled LIGHT CARS and  
CYCLECARS are Fitted with

**C.M.F.**

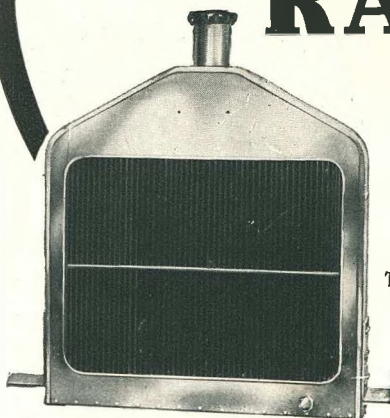
RELIABLE

**RADIATORS**

They are equally  
suitable for CARS  
and DELIVERY  
VANS.

The COVENTRY MOTOR FITTINGS Co.  
Far Gosford Street,  
COVENTRY.

As fitted to—  
Standard,  
Singer,  
Morris-  
Oxford,  
Day-Leeds,  
Salmon,  
Armstrong  
etc.

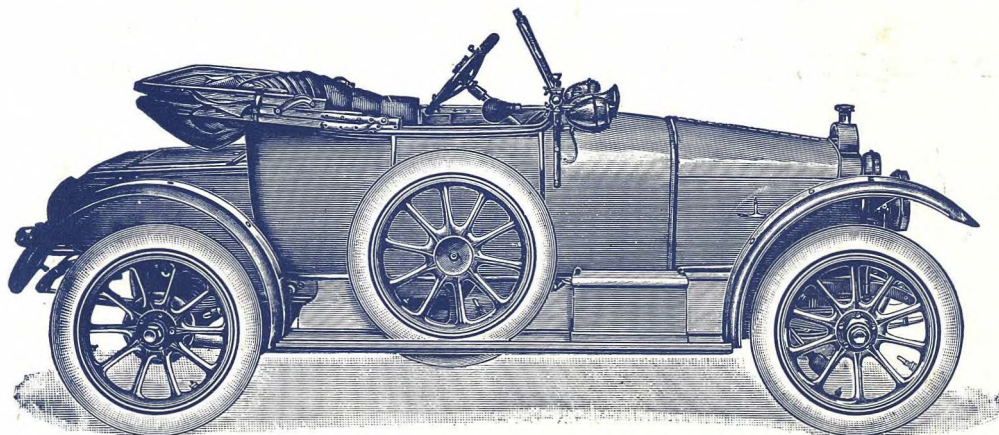


KINDLY MENTION "THE LIGHT CAR AND CYCLECAR" WHEN CORRESPONDING WITH ADVERTISERS.



15TH MARCH, 1915.

The Light Car and Cyclecar



*The*  
**CLASSIC**  
*Calcott*



The Calcott is aptly described as "The Classic Light Car," which means that if you wish to become an owner of the finest light car extant, the Classic Calcott is your only choice.

**10.5 h.p., £195.**

Including Hood, Side Curtains, Screen, Acetylene Head Lamps with Separate Generator, Electric Side and Tail Lamps, Accumulator, Horn, Pump, Jack, Kit of Tools, Spare Wheel and Tyre, and Undersield fitted.

**CALCOTT BROS., LTD., COVENTRY.**

Telephone—No. 91.

Telegrams—"Calcotts, Coventry."