The only Small CarJournal

A SUBMARINE ROADWAY.

There are two traffic tunnels under the Thomes. They both carry a very large volume of traffic and go far to relieve congestion. Similar tunnels under the Mersey, the Severn, the Humber and the Firth of Forth would be appreciated by many thousands of road users.

For the "SPORTS" engine

LODGE SPORTS PLUG

(model HI)

is the finest plug that has ever been made.

sealed blue metal box.

Particulars of suitable plugs for supercharged and other highefficiency engines gladly sent on request.

LODGE PLUGS LTD.-RUGBY.

CLYNO = CARS NEW PROGRAMME & PRICES

(Operative September 14th, 1927)

AN ENTIRELY NEW 9 H.P. MODEL

Will be introduced at OLYMPIA on STAND 64, where full details will be available.

TOURER COMFORTABLY SEATING 4 ADULTS £145:0

FABRIC SALOON COMFORTABLY SEATING £160:0

CONSIDERABLY IMPROVED 11 H.P. MODELS

A new design of radiator giving a much improved shape of bonnet. Option of Fabric or Coachbuilt Saloon Bodies, without extra charge. New coachwork with increased accommodation and all-weather protection. Smith's Shock Absorbers and additional equipment on all models. Smith's instruments grouped on sunk centre panel. 28 x 4'95 Dunlop Tyres on "Royal" models. 12-in. diameter Four-Wheel Brakes.

2-SEATER £152:10 "ROYAL" 2-SEATER £195:0

4-SEATER £170: 0 "ROYAL" 4-SEATER £195:0

4-DOOR SALOON £190: 0 "ROYAL" SALOON £220:0

Dunlop Tyres. Lucas Electrical Equipment. Smith's Instruments. Shock Absorbers and Four-Wheel Brakes on all models.

Rootes Ltd. - - - Devonshire House, Piccadilly, W.1. Lookers Ltd., 5-35, Hardman St., Deansgate, Manchester.

THE CLYNO ENGINEERING COMPANY (1922), LTD., WOLVERHAMPTON.

C.C.45.

ANNOUNCE THE GREATEST

UNEOUALLED VALUES IN THE MOTORING SECTIONS.

MONDAY



MALL"

easy starting in the morning. Will burn for about 36 hours at one filling. Burns parafin. urns paraffin.



SCOPE MIRRORS.

Gamage "Sc Gamage and the car. O popular models of the season. Gives a very large range of vision

range of vision owing to shape reflector. SALE PRICE each Post 6d.



SPECIAL OFFER! Austin 7 TOOL BOX.

Made to fit the offside running board. Will accommodate Jack

MOTORISTS'

ALLSDRTS.

Insulating Tape, Copper Wire, etc., complete with Bag. Post 6d. SALE PRICE 3/6

SIII IN Motorist's Useful Bag of All Sorts. Contains Bolts, Nuts, SplitPins,

Pump and all Tool
Kit. SALE PRICE

EVERYTHING



SAVE ON YOUR COVERS

These are made in a Strong, Striped Cotton Tick, and represent the criterion of value for the money. Post 9d. Supplied in the following

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SIZES.	SALE PRICE.	SIZES.	SALE PRICE
10 ft. x 6 ft.	9/6	18 ft. x 12 ft	24/-
12 ft. x 9 ft.	12/-	18 ft. x 15 ft	30/-
15 ft. x 12 ft.	20/-	21 ft. x 15 ft	32/-

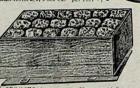
GREAT CLEARANCE CLEANING OF CAR

ORDER NOW AT THESE PRICES



CHAMOIS LEATHERS. Fine quality, soft, yet long wearing. Size about 21 by 22 in.
Sale Price, each 4/Post extra. 3 for 11/6

CLEANING CLOTH. Splendid quality Cleaning Cloth. Nice and soft, and made up into 50-yard rolls. Far superior to waste or mutton cloth. Sale Price, 4/6
Half Rolls 2/6, Post ex. per roll 4/6



SPONGES. Fine quality Honeycomb Sponges 4/3, 3/1 & 2/1. Extra large size 7/-. Special line of Strong Sponges for car washing, 1/3. 3 for 3/6. Post extra. Extra large Honey-Usual Price 8/6. Sale Price 6/3

TRIANGLE MOTOR SPOKE BRUSHES. Best quality bristle. A fine serviceable brush Post 3d. Sale Price 4/3

ORDINARY SPOKE BRUSHES., Good quality fibre mixture, Well made in a handy size and very useful. Usual price 4/6 Sale Price 1/10

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CLEANING BRUSH. Specially suitable for Sale Price 1/10

MARKE BENT SPOKE BRUSH.

Specially shaped for getting at awkward places.
Best quality bristle. Car size. Post 3d. 3/10
Sale Price 3/10

WHEEL BRUSHES. Well made and finished. Post 3d. Sale Price 2/4

Sale also proceeding at our well-known City

SPOT IGHT."

Spot-Light with self-contained swites a zery penetrating beam of light Complete with 6 or 12 volt bulb. Post 6d. SALE PRICE

Best Quality Spring Top Patters SCREEN WIPERS.

Best quality with twin squandle for operating.
Fits either plain edge or metal edge type screens.
Post 4d. SALE PRICE





LIGHTWEIGHT GOGGLES.

sible frame, Chinelle Edse, and selastic, is very comfortable, and possesses qualities that edual goggles selling at 25'.
Post 4d, SALE PRICE

SPECIAL BARGAIN DRIVER'S BACK WEDGE CUSHION

SALE PRICE Post 6d.

A. W. GAMAGE, LTD.,

TO THE READER.—By mentioning "The Light Car and Cyclecar" when replying to . advertisements, the progress of the small car movement will be assisted.

Autumn Salc Record

NEXT at 9 a.m. SHARP.

Complete Satisfaction Guaranteed on All Orders, WHETHER BY PERSON, POST OR TELEPHONE

GENUINE BARGAINS IN LEATHER MOTORING WEAR.

All keen motorists will take full advantage of this Sale to re-equip themselves with garments that ensure comfort combined with practicability for the Autumn and Winter Spins.

These

Outstanding Features of this Sale

GAUNTLETS

need with a warm fleece. Made with 1800 Russetted gauntlet and one dome roller esp fastener. An ideal motorist's or motoriclist's flower.

SALE PRICE

Post 4d.

FUR TRIMMED LEATHER HELMETS

Very warm and cosy Helmets suitable for ladies or gentlemen. Made from soft, pliable SALE PRICE Tan Leathers with Fur Peak and Neck. Each

Post Free.
These represent the best that can buy.
Send your order per return of post.

HIHHHH

RM RUGS

a full nge of fringed ends.
rong, serviceable, hard-wearing, comfy "for motoring.

WARM

Price.

GENTLEMEN'S MOTOR COAT UNRIVALLE
FIRST FLOOR. LADIES' AND GENTLEMEN'S

LEATHER MOTOR COATS

These coats are made rich shade of Tan, carefully selected skins, and lined with a light and warm fleece and tailored LADIES' OR GENT'S to perfection by expert craftsmen.

They embody all rich shade of Tan, carefully selected with a light and warm comfort of the rider against the keen winds of Autumn.

Stocked 1 usual sizes.

LADIES'
MOTOR COAT
SECTION —

SECOND FLOOR

TAN LEATHER WAISTCOATS

for all-weather driving, warm and comfortable. Absolutely windproof, made from soft and pliable skins. These are guaranteed all-leather, including back and sleeves, SALE When ordering by post kindly send size round chest over

LONDON, E.C. 1. Telephone Holb. 8484.

House: 107, CHEAPSIDE, LONDON, E.C.2

those qualities

that are so

essential for the

FACILITATE BUSINESS, and ensure prompt attention to your enquiries, by mentioning

Α3

The direct results of 36 years' constant endeavour, continual research in the laboratory, tests in the works, and on the road, are all embodied in the present C.A.V. Battery, which is universally recognised as the ideal standard of battery construction for any make of car, whether British, French, Italian or American.

We honestly believe that in the latest C.A.V. production, the multi-plate battery with THREADED RUBBER INSULATION, in our ALL-MOULDED CONTAINER we have achieved something definitely better than has ever been offered to the motoring public.

Write for folder 485/L and let us quote for your next replacement.

EXAMPLE SIZE:
Type6TW9 .. £3-5-0 suitable for Austin 7.

Overall dimensions — Length 73%, width 613%, height 93%. If required, cover and fixing rods can be supplied at extra cost.

ACTON. LONDON, W 3

" Vanteria, Act. London."

Telephone:

CHISWICK 3801. (Private Branch Exchange.)

SALES AND SERVICE DEPOTS AT
Belfast, Birmingham, Bristol, Coventry, Dublin, Glasgow, Leeds, Manchester and Newcastle. Sales and Service Agents in all important centres throughout the country.

A LAYSTALL REPAIR IS PERMANENT

Laystall Departments:

CRANKSHAFT GRINDING

CYLINDER GRINDING & DE LUXE LIGHTWEIGHT (CAST IROK of ALUMINIUM) PISTONS.

SCORED CYLINDER REPAIRS.

NEW CRANKSHAFTS

COMPLETE ENGINE OVERHAULS.

HELICAL BEVELS & GEARS

CAMSHAFT GRINDING & **NEW CAMSHAFTS**

WELDING.

WER STREET, SOUTHWARK, LONDON, 8.E.1

7claphose HOP 6140 (9 lines)

Northern Branch Works 55, FONTENDY STREET, LIVERPOOL

THEM WHER The Scientific Sparking Plug Attachment.

World-wide Patents and Provisional Patent:)

Remember the benefits you get from Auto-Clix.

No more troublesome terminals to screw or unscrew. Instant connection or disconnected simply by a push or a pull.

A firm electrical contact, with a greatly improved appearance.

An instant Plug-Tester—no need to stop the engine.

No lost terminals, waste of time or dirt on the hands.

A thicf-proof device. Simply with-drawing the "Auto-Clix" plug prevents thieves starting up the engine.

- each.

Of all Dealers. Complete with

Adapter: (Extra Adapters for space plugs, 4d.) Resilient Non-Vibratory Plug and Insulator, Nickel-Plated.

LECTRO LINX LIMITED,

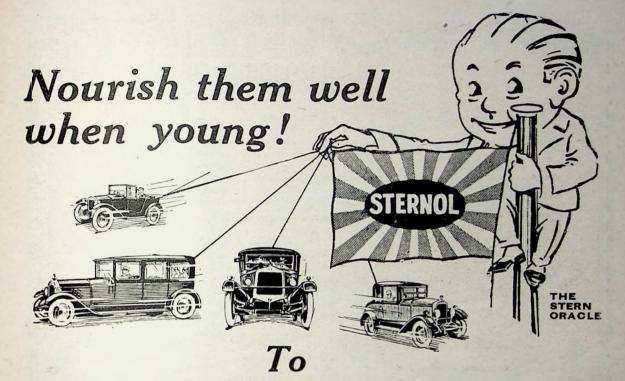
Motor Dept.,

Manufacturers of Clix Radio Fitments,

Manufacturers of Clix Radio Fitments,

See them at all Wireless Shops. 254, YAUXHALL BRIDGERD., S.W.1

WHEN REPLYING to advertisements, mention " The Light Car and Cyclecar." It helps the advertiser and you, and assists the small car movement generally.



AUSTIN OWNERS

The Austin Company start you on the right lines by delivering your car filled up with STERNOL WW—the oil which they themselves have used exclusively for the past nine years. Moreover, they recommend you to keep on using it.

Every Austin starts life on STERNOL WW HEAVY. In the earliest days of its existence, when its engine requires every care bestowed upon it, it is given this soothing lubricant. And its makers recommend you to let it grow up on it!

Through boyhood, in adolescence, and even during old age, it will thrive on STERNOL WW HEAVY as it will thrive on no other oil.

NINE YEARS CONSISTENT EXPERIENCE OF STERNOL WW HEAVY HAS LED THE AUSTIN MOTOR CO. TO USE THIS OIL EXCLUSIVELY AND TO RECOMMEND ALL AUSTIN OWNERS TO DO THE SAME.



Makes Engines Purr Like Pussies

Follow the advice of other Austin owners and particularly of the famous makers of your excellent car.

The Austin Co. not merely approve, but RECOMMEND Sternol WW. They themselves use it exclusively



STERNS, LTD., 46, ROYAL LONDON HOUSE, FINSBURY SQUARE, E.C.2



The warning note emitted by Delco-Remy Horns is clear and musically penetrating. It can be heard high above the drone of heavy city traffic or far down winding country lanes.

Delco-Remy Horns are made in five models, so there is one to suit your particular purpose. From the model 8c at 16/6 to the 73/6 Model 25, each is perfect in its class. In style, in finish, in usefulness, in reliability they cannot be excelled.

Ask your dealer to demonstrate or write us direct stating 6 or 12 volt



Another

Delco-Remy Accessory—

or Winter Drivina YOU NEED A

GYLPHON

With the Sylphon Thermostat the water is up to 150° F, before it reaches the radiator— then it circulates. Result— a warm engine in sixty acconds. Saves time, engine strain, petrol. Automatic. Quickly hited. Recommended only for pump-cooled engine.

Price 24/-

Postage 9d. Ask your dealer to show you one or write us, giving the pipe diameter, for information nd nearest stock.





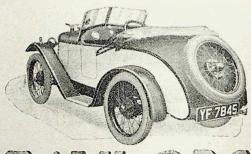
WELLINGTON POLISH METAL

drocerismon! POLISH THAT. with a minimum of labour. GIVES A REAL BURNISH THAT LASTS.

CLEANS and POLISHES ΔΙΙ METALS (includino Silver) and GLASS (Windows. Mirrors) Motor-Screens (Glass or Celluloid). TRY IT and PROVE IT.

In TINS, 3d., 41d., 71d. & 1/3; also in 1, 1 & | Gallon Cans.

JOHN OAKEY & SONS, LTD.. WELLINGTON MILLS, LONDON, S.E.I.



SPECIAL SPORTS AUSTIN 7, £165

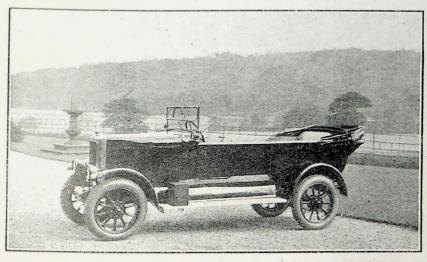
ERE is a real Phoroughbred (coachbuilt—not mass produced) at a price only slightly in excess of the mass production article. This snappy 2-secter is built upon the apecial Austral 7 sports Chassis and it is an exclusive Taylor design. The body allows ample leg room which can be varied to suit your individual requirements. The luggage accommodation is excellent, ample space being available for three suit cases. An extra low centre of gravity makes speed both safe and enjoyable, and the V-shaped windscreen adds to the general attractiveness of the car as a whole. We can give enry delivery of this fine little sports car which can be finished to your own choice of colours.

ALL MAKES SUPPLIED FOR CASH, EXCHANGE, OR UPON OUR LIBERAL "NO DEPOSIT" E.P. TERMS,

The following care give both excellent and economical service:
AUSTINS £135 to £775 CLYNOS £160 to £250
SINGER £148-10 to £350 MORGAN £89 to £140 SINGER £148-10 to £350 Motor Cycles or used Cars taken in part payment for New Cars.

H. TAYLOR & Co., Ltd.,
49, 50, 52 & 53, SUSSEX PLACE, SOUTH KENSINGTON, S.W.7.
Telephone: Kensington 8558/2 and 55/6, Telegrams: "Dynametre, Southkeas."

OBITER DICTA. "£1,500 A YEAR."



JUDGE ———, of the ———— County Court, when he made the much discussed statement that the salary of a County Court Judge (£1,500 a year) is not sufficient to run a car, could not have made the acquaintance of the JOWETT, the car that has "the little engine with the big pull."

YOU can run a JOWETT for a whole year on much less than even 1,500 shillings, as the following simple sum shows:—

		£40	0	0
TYRES and REPAIRS		 8	8	8
INSURANCE (Comprehensive)		 8	10	0
TAX		 7	0	0
OIL-1,500 m.p.g. at 6/6		 2	3	4
PETROL—45 m.p.g. at 1/3 (10,000	miles)	 £13	18	0

LESS THAN A PENNY A MILE!

We do not mention depreciation—with a JOWETT this is negligible. Nor do repairs amount to much—the JOWETT is more trouble-free than any other light car.

Shall we send you our interesting literature?

NEW PRICES:

Short Two, £134. Long Two, £142. Chummy, £142. Full Four, £145. Saloon, £170.

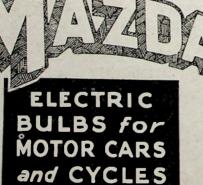
Dunley Balloons and Stewart Speedometers Standard.

JOWETT CARS LTD., IDLE, BRADFORD.

This advert, has been sent us by a Jowett owner who knows!



Good lighting clears the road foryou



2822



The British Thomson-Houston Co., Ltd. Crown House, Aldwych, London, W.C.2

1928 MORGAN

NOW AVAILABLE.

To all Purchasers of new machines from this date we GUARANTEE a refund of the amount of any reductions in price that may be announced at the MOTOR WHY WAIT? SHOW.

DEFERRED TERMS ARRANGED. TRADE SUPPLIED. ALL SPARES.



Send Lists.

243/7, LOWER CLAPTON ROAD. Works: 46, London Road, Clapton, E.5.

PRATTEN'S Three' Garages



ACH of the Garages illustrated is manufactured in our own two workshops of the best quality materials and supplied in sections which can be easily erected without skilled labour—carriage unit.

You are cordially invited to inspect them at our works, which is the most up-to-date in the West of England, where we shall be pleased to show you the process of manufacture. Prices are lowest consistent with first-class workmanship. workmanship.

All Garages supplied by us are insured against fire free. THE "STERLING" ASBESTOS GARAGE.

15'0" x 8'4" x 7' 3" £14 0 0 17'0" x 10'6" x 7'3" £16 0 0

2. THE "POPULAR" CARAGE 12'0" 7'0" x 6'0" £9 0 0 14'0" x 8'0" x 6'0" £11 0 0

3. The "DUPLE" JOINT GARAGE 14'0" x 8'6" x 6'9" £15 5 0

of F. PRATTEN
& CO., LTD.
gra 12, Midsomer Norton,
near Bath.

tions contained in fulder No.37 Other designs illustrated and described in this Catalogue No. 34, post free.



£400 or£1,500?

... unless a man has an annual income of not less than £1,500 it is impossible for him to own a car...

This statement made recently aroused much comment. The Press pointed out the fallacy.... Experts went into details... a private car owner with an income of £400 stated that since he had invested in a Light Car he had actually saved money...

It is a fact that motoring is as popular . . . more popular with £300-£400 men as it is with £1,500 men—why?

Making due allowance for the low prices and excellent quality and reliability of Light Cars nowadays, it is our opinion that the reason lies with the Service Agents.

At the Service Co., Mr. "Man with Modest Means" callslooks over a fine range of the best makes . . . comfortably ... leisurely-tries a model ...it may be an Austin-it may be a Rover . . . perhaps both - discusses upkeep costs with experts . . decides on a make and then talks terms. DEFERRED PAY-MENT TERMS. A small sum down and the balance in comfortable monthly payments.... NO DEPOSIT TERMS, delivery on the payment of the first instalment . . Part Exchange . . .

When Mr. "Man with Modest Means" is out on his first drive he gets that delightful "carefree" feeling—why? because he knows that he has a old-established House looking after his interests. Service-after-sale.

Motoring is an economical pleasure when you start the Service way.

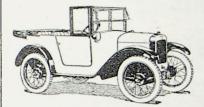
FREE! Write to-day for a copy of our novel catalogue "The Diary of a Car Tester."

Immediate Delivery of the following 1928 models at latest prices

ROVER 10.25 h.p.

2-seater . . £220 4-seater . . £225 Semi-sports . £260 Saloon . . £250





AUSTIN 7 h.p.

Chassis . . . £ 99
Chummy . . £135
Saloon . . £150

JOWETT.

Short 2-seater . £134
Long 2-seater . £142
Chummy. . £142
4-seater . £145
Saloon . £170



We can also guarantee delivery within a few days of 1928 models of:—

CITROEN CLYNO SINGER STANDARD SWIFT

ESTABLISHED 1889. - - - AS LONG AS THE INDUSTRY.

273-274, High Holborn, London, W.C.1. Telephone: Holborn 0666 (3 lines). Telegrams: "Admittally, London."

TO THE READER.—By mentioning "The Light Car and Cyclecar" when replying to advertisements, the progress of the small car movement will be assisted.

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BI

Are you a regular reader



Special Features of Next Week's Issue, Sept. 27th.

MORE NEW 1928 MODELS.

WHY BLAME THE CARBURETTER?

Some Common Faults in the Running of a Car which are Often Erroneously Ascribed to Faulty Carburation.

OUR VARIED ROADS.

A List of the Different Types of Roads Laid in this Country.

AND ALL THE NEWS OF THE WEEK.

The National Motor Journal

If not, buy a trial copy this week. Here are some special features of the Sept. 20th issue:

NEW CARS FOR 1928.

Straight-Eight Wolseley—Straight-Eight Ballot—Six-cylinder Fiat—Chrysler "62" and "72" models—14-40 h.p. Bean—A-C new features—45-150 h.p. Isotta-Fraschini, etc.

1928 CARS JUSTIFY "THE MOTOR" PLEBISCITE
Many Improvements Called for by Readers of
"The Motor" now adopted.

REDUCING MOTOR ACCIDENTS.

Further Extracts from Readers' Suggestions.

ARE MOTORISTS VANDALS?

With Some Comments on Glaring and Unsightly Petrol Stations.

AVOIDING CONGESTED ROADS.

Interesting Country Adjoining the Bath Road.

CAR THIEVING.

The Problem of the Anti-theft Device.

FURTHER ANNOUNCEMENT CONCERNING THE NEW VAUXHALL.

EXCELLENT RACING AT BROOKLANDS.

Alvis Sports Racer Wins 50-Mile Race in which a Wheel separates Second and Third.

OUR DANGEROUS ROADS.

Interesting Opinions by Readers.

EVERY TUESDAY 4d.

Offices: 5-15, Rosebery Avenue, London, E.C.1.

1928 brings with it a brilliant new chapter in the History of the Rhode Motor Co. Patented and exclusive features are incorporated in the latest productions, commanding a new degree of exclusive style, superb luxury, and a masterful preformance that enhances the finest Rhode traditions of craftsmanship.

Entirely Redesigned 2/6-SEATER DE-LUXE

Incorporating the famous 10:30 in its latest development with the double exhaust port cylinder head engine. A completely redesigned 2/6-seater body, with full de-luxe equipment and real leather upholstery.

FULL FIVE-SEATER TOURING DE-LUXE

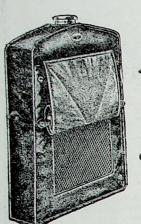
1928 brings the inclusion of a full five-seater Torring model, incorporating the redesigned developments of the famous 10:30, and with the same full de-luxe equipment as the 2/6-seater. Individual front tip-up seats with ample accommodation for 3 passengers in the rear—with armrests, luggage carrier and protection strips.

5-SEATER COACHBUILT SALOON DE-LUXE

An entirely new development in Saloon construction, embodying the principle of the "Fabric" type Saloon combined with the rigidity of the Coachbuilt Saloon. A patented principle which is exclusive to the Rhode only. Full de-luxe equipment and upholstered in \$250 real leather hide or Bedford Cord

Write to-day for all details.

40 HONEST MILES PER GALLON 55 HONEST MILES PER HOUR.



what!

September?

Yes-most decidedly!

The dampness and coldness of September mornings is already apparent in the sluggishness of your Car in starting, and that means strain on your engine and batteries—more effort, more trouble, more petrol.



Radiator Muff

conserves the heat of your engine,

costs a few shillings only, is easy to fit and lasts a lifetime.

There is a type to suit your Car.

Don't merely utilize the "Midland" for preventing "freezing up." Use it on Autumnal mornings and note the easier starting.

A FEW EXAMPLES.

AUSTIN SEVEN 10/- CLYNO.. 11/-SINGER 8 11/- JOWETT 12/6

3-colour folder now

Write for your copy!

MIDLAND GEAR CASE CO., LTD.,
Allcroft Works,
Hall Green - Birmingham.

M.G.P.

Not Experiment

The practical experience of fitting a "B & B" Carburetter to your Car will result in a performance you would never have believed possible.

Well may you ask
"Is it the same Car?"

Fewer Stops at Petrol Stations— Greater Speed and Flexibility— Infinitely Easier Starting—Vastly Improved Running.

Now—we prove all this in a practical way —Try a

BROWN & BARLOW, LTD. Carburet Works, Witton, Birmingham.

London Service Agents Dartford Eng. & Carriage Co., Ltd. 23/24, Hythe Road, Willesden, N.W.10. on your Car for 30 Days. If you are not delighted with the all-round change—return it to us and the matter is ended. Could toe say fairer?

Way

OUR USED CARS ARE GUARANTEED

A.C., 1926, Royal 2-seater, F.W.B. 1885
AUSTIN 7 h.p. Chummy Models, from 685
CITROEN, 1926, 3-seater, from 925
CLYNO, 1927, 2-seater 1925, English 2-seated Coupe 1925
CLYNO, 1927, 2-seater 1925
FIAT, 1924, 10/15 h.p. English Coupe 1825
HANDS, 1924, 2-seater 1825
HANDS, 1924, 2-seater 1825
HANDS, 1924, 11 h.p., All-weather 4-seater 1825
EAS-FRANCIS, 1924, Chummy 825
EAS-FRANCIS, 1924, Chummy 1825
ROVER, brand new 9/20 h.p. dz Luxe 2-seater 1825
SINGER 1927, 10/26 h.p., 4-seater, as new 1825
STANDARD, several 11-4 h.p., All-weather 4-seaters from 1825
TANDARD, several 11-4 h.p., All-weather 4-seaters from 1825

100 OTHER BARGAINS from £50 to £250. Best Exchange and Deferred Terms in London.

You never take a risk when buying a Used Car from

The light (ar 6.

404, 410-414, EUSTON ROAD, LONDON, N.W.1.

'Phones

Museum 3081, 2122 and 0140,



OCT. 7th OCT. 14th OCT. 21st

THREE SPECIAL SHOW NUMBERS

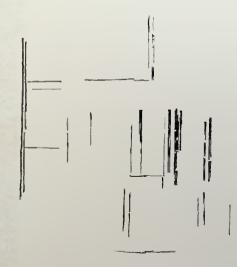
1ST SHOW NUMBER. FRIDAY, OCTOBER 7th. Containing complete details of all the small cars on the British market, this issue will be invaluable in helping intending visitors to the Show to decide what Stands they particularly wish to visit. It will contain all the usual features in addition to many special articles dealing with 1928 developments.

2ND SHOW NUMBER. FRIDAY, OCTOBER 14th. On sale at Olympia on the opening day of the Show, this issue will contain comprehensive descriptions of the small-car exhibits. Not only will it form an invaluable guide to the Show, but it will be of considerable interest to all who are unable to visit Olympia. A report of the small car exhibits at the Paris Salon will be included.

RD SHOW NUMBER. FRIDAY, OCTOBER 21st.

An exceedingly helpful issue to all those who are contemplating the purchase of a 1928 model. It will comprise a review of the exhibits from a technical standpoint, but written in language which all can understand. A report of the 200 Mile Race will also be included.

Offices of "The Light Car and Cyclecar." 5-15, Rosebery Avenue, London, E.C.1.



PRICE

3d.

Order these important

issues well

cdvance l

OLYMPIA MOTOR SHOW October 13th——22nd 1927

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A MONG THE SUBJECTS DEALT WITH ARE:

Too's and Appliances for the Motorist's Workshop-Workshop Operations and the Use of Tools—Soldering and Brazing—Dismantling an Engine—Adjusting Bearings—Reassembling an Engine—Gearbox and Back Axle Repairs—Repairing Universal Joints—Steering Gear Adjustments—Brake Adjustments—Brake Adjustments—Wheel Alignment—Practical Workshop Hints and Notes—How to Build a Motor House, etc., etc.



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costing over £100,
costing over £100,
and this week all
and this week all
singer cars of 1925
or later manufacor later manufacor later manufacor later munique 3
with our unique 3
with our guarante
months' guarante
as approved by the
as approved by the
principal manufacturers.

This week we are making a very special offer of a limited number of "Used" Swift and Singer cars which we have taken in part exchange for new models. These have all passed through our works and are offered with our printed and signed Guarantee. Remarkable value is offered and early application is very strongly udvised.

SINGER, 1927; brand new, shop-soiled, 10 h.p., 4-seater, in
margon finish. Guaranteed unused. Current list price. £195
SINGER, 1926, 10 h.p. 4-seater, in blue finish run only 5,000 miles and strongly recommended
SINGER, 1926, 10 h.p., 4-scater, fully equipped and in
SINCER 1926 10 h n. Asserter in blue finish fitted with
step mats, aluminium number plates and usual equipment \$138 SINGER, 1926, 10 h.p., 4 seater, in maroon finish, repainted
and fitted with new tyres SINGER, 1926, 10 h.p., 4-seater, in maroon finish, F.W.B.
and all usual equipment
has been most carefully used, and is offered with our
SINGER, 1926, 10 h.p., 2-seater and dickey, in very nice order £135
brown leather unhalstery balloon tyres, and all in good
order \$125 SINGER, 1925, 10 h.p., 4-senter, in blue finish, fully
equipped and in excellent condition
SINGER, 1925, 10 h.p., 4-seater, repainted marcon, and all standard fittings
SINGER, 1925, 10 h.p., 4-seater, in blue finish, self-star.er, lighting, luggage grid, and usual makers' fittings.
lighting, luggage grid, and usual makers fittings SINGER, 1925, 10 h.p., 2-seater and dickey, painted blue. Choice of two, both in very excellent condition
run very small mileage and almost equal to new £125
All the SINGER cars described boye are offered with our THREE MONTHS' QUARANTEE as to condition, and each car is fitted with new
cocontinuis poor mais and is ready for immediate service.
CLYNO, 1927, 11 h.p., Royal model saloan, painted dark blue, run very small mileage, and almost equal to new £178 CITROEN, 1923, 7 h.p., coupe, balloon tyres, repainted,
STANDARD, 1925, 11 h.p., "Piccadilly "saloan, repainted,
balloon tyres, good appearance and condition
A-C., 1924/5, 12 h.p., 4-senter, painted violet, good run- nin order £116
AUSTIN, 1927 model, delivered 1926, 7 h.p., 'Gordon England' soloon, in dark red finish, safety glass, taxed to end of year, perfect condition AUSTIN, 1926, 7 h.p., Chummy model, painted blue with
to end of year, perfect condition £135
full makers susrantee, tax paid
full makers susrantee, tax paid £95 CALTHORPE, 1925, 10 h.p., 4-door saloon, pain'ed dark blue, excellent condition throughout £125
ARIEL, 1924, 9 h.D., 4-cylinder, 4-sea er Chummy model, in
IEA-FRANCIS, 1927, 10 h.n., 4-seater de Luxe 4-speed
model, run only 700 miles and as new. Current list 5215 price, £275. Offered at SWIFT, 1927, 10 h.p., 4-seater, in red and black finish,
run very amail mileage
SWIFT, 1927, 10 h.p., 2-seater and dickey, fitted with numerous extras
SWIFT, 1926, 10 h.p., 4-seater, painted maroon, F.W.B.,
automatic acreenwiper, Hartford shock absorbers, very £145
SWIFT, 1926, 10 h.p., 2-seater, repainted grey, Gabriel snubbers, excellent order £138
anubbers, excellent order £138 SWIFT, 1925, 10 h.p., 4-seater, painted dark blue, balloon £110 tyres, self-starter, and usual accessories
RUVER, 1926 (Aug.), 9-20 h.p., Semi-Sports 2-seater, in
strawberry and cream finish, balloon tyres, usual equip- ment, very smart car

Full lists gladly sent on request.



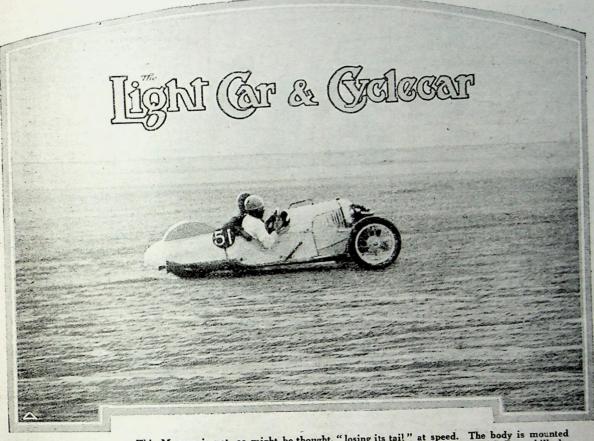
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NOT DIGGING ITSELF IN!

This Morgan is not, as might be thought, "losing its tail" at speed. The body is mounted on a frame specially dropped for sand-racing purposes and, in the hands of S. Brownhill, the car has already obtained several successes. The photo was taken at Southport on Saturday last.

NOTES, NEWS & GOSSID The WEI

The "200."

Thirty entries have been received by the J.C.C. for the seventh 200-Mile Race due to be run off on October 15th.

R.A.C. Grand Prix.

A pamphlet describing the general arrangements for watching the Grand Prix race at Brooklands on October 1st is obtainable from the R.A.C.

This Week.

Good brakes are one of the most important requirements on modern cars, portant requirements on modern cars, but the best designed brakes depend for their success on the "human element." This and other aspects of an all-important question are dealt with in an article entitled, "Factors which govern stopping distances." What is wrong with motor sport? queries "Critique," who argues that motor track racing is not meeting with its proper share of is not meeting with its proper share of support. Amongst other features are the latest details of the Grand Prix and a description of a new sporting Jowett.

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MUMINU-01	tomber 94th
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7 20	Liverpool 7.35
	Brietol 7.33

Tynemouth Parking.

Moon-New, September 25th.

A new car park at Long Sands is being provided by the Tynemouth Corporation at a cost, it is estimated, of

The "Elephant."

The L.C.C. has approached the Ministry of Transport with a scheme, to cost about £377,000, for the reconstruction of the complicated road crossing at the Elephant and Castle, London.

Show Admission Prices.

The Olympia Motor Show opens this year on Thursday, October 13th, the price of admission being 10s. all day. On both Fridays and Saturdays the charge will be 2s. 6d., whilst 5s. will be charged on Monday, Tuesday, Wednesday and Thursday.

Next Week.

It is no exaggeration to say that interest all over the world will centre in the British Grand Prix, due to be run off at Brooklands, on Saturday, October 1st. In next week's issue we shall give a complete guide to the race, all the latest news concerning "form," and a host of details which will be invaluable to every cuthusiast, whether invaluable to every enthusiast, whether he be an intending spectator or not.

Ipswich Road Repairs.

At a cost of £12,750, Sproughton Road. Ipswich, is to be reconstructed and the old wooden bridge modernized.

New Shields Link Road.

Many proposals have been made recently with regard to better means of communication between North and South Shields. An expert has now been engaged by the Tynemouth Corporation to deal with the matter.

Harwich-Felixstowe Ferry.

Although no definite plans have yet been made for the establishment of a car ferry between Harwich and Felixstowe, conferences have recently been beld by the local authorities concerned with a view to arriving at a practical

"No Parking."

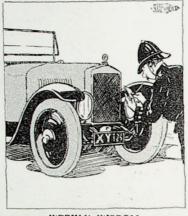
At certain seaside resorts motorists have been summoned for parking their cars at unofficial places on the promenades. In many instances the excuse has been put forward that the "No Parking" signs are not prominently placed, and as a result the local authorities in at least one resort are erecting new signs.

Golden Roads.

A concrete road has been laid in Colorado in which rock containing gold ore worth £4,000 has been mixed. Crushed rock from the local gold mines was the most convenient material from which to construct the road, and the amount of gold in the ore did not warrant the expensive operations necessary to extract it.

Stopping on Corners.

During the past few months a number of accidents have been caused by vehicles stopping on blind corners, thus causing traffic to draw out on wrong side of the road in order to pass. The danger is greatly aggravated when the obstructing vehicle is a char-a-bancs or lorry, the large bulk of which comor lorry, the large bulk of which completely obscures the view ahead and gives drivers of overtaking cars no opportunity of making sure that there is a clear road before pulling out. The R.A.C. is taking up the matter with various associations dealing with these clears of rehigh. classes of vehicle.



WEEKLY WISDOM.

Park not thy car in the busy places lest a guardian of the law he maketh a note of thy number upon his tablets and thou art mulcted in many shekels.

More Tolls to Go?

There is at least a possibility that certain of the Thames tollbridges will be freed in the near future. The Ministry of Transport has been approached with regard to bridges in Oxford, Berks and Buckingham.

The 1928 Coventry-Victor, which will have two adjustable seats. The removable dickey seat pro-vides ample luggage space.

Noisy Exhausts Again!

The Home Secretary has been in communication with the Chief Constables in England and Wales with regard to a campaign against noisy motorcars and motorcycles. It is stated that an official warning issued last year did not have the desired effect.



WHERE NEW MEETS OLD. One of the most primitive forms of transport is still to be found in Wales. The horse-drawn dray tram takes passengers from Pwllheli to Llanbedrog and, as our picture shows, is well patronized!

A New Autostrada.

The new autostrada connecting Milan with Bergamo is expected to be ready at the end of the month, having taken about 18 months to complete. The road will form an important by-pass for British tourists who wish to avoid the many bad stretches of road which have to be covered when en route from Milan to Verona or Venice

"Outboard" Motorboats.
Applications for a British record for a one land mile in the three officially recognized British classes will now be considered by the council of the Marine Motoring Association, which is desirous of giving every encouragement to outber of motor boats. An increasing number of motorists find that motorboating, with simple outboard craft, is a most pleasant complement to motoring.

Our "Safety First" Cover.

The remarkably striking front-cover design which figured on our issue dated September 3th embodied a warning triangle of a very distinctive type. These triangles, we learn, are made by Fairylites, Ltd., who inform us that members of a far-seeing foreign police force attach these luminous gigns. force attach these luminous signs to their uniforms when on point duty.

Ambulance on River Hill.

River Hill, the well-known acclivity near Sevenoaks on the London-Hastings road, has become so notorious for its accidents that the authorities have inaccidents that the authorities have installed a St. John Ambulance Brigade tent half-way up and St. John men patrol the bill throughout its length. Residents in the district appear to find watching the traffic during week-ends on this hill a never-failing source of amusement.

Surbiton "150" Results.

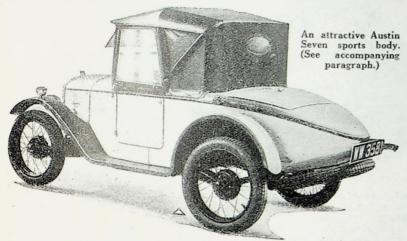
The petrol consumption figures of the light cars which competed in the Surbiton Motor Club's "Speed with Economy" race at Brooklands, on September 3rd, are very interesting and instructive. The winning Austin Seven, driven by J. P. Dingle, averaged 52.11 m.p.h. with a petrol consumption of 37.5 m.p.g., whilst the figures for the other finishers were:—D. M. K. Marendaz (Marendaz Special), speed 56.97 m.p.h., consumption 29.8 m.p.g.; H. Hallam (Alvis), speed 55.1 m.p.h., consumption 27.2 m.p.g.; S. H. Newsome (Lea-Francis), speed 55.54 m.p.h., consumption, 23.5 m.p.g. In comparison with the foregoing, it is interesting to note that the 4½-litre Beutley driven by Capt. Barnato used 17.7 gallons of fuel (8.45 m.p.g.), its average speed being 74.28 m.p.h. The petrol consumption figures of the

Austin Seven Sports Body.

A special two-scater body for Austin gevens is made by Duple Bodies and Motors, Ltd., Edgware Road, The Hyde, Loudon, N.W.9, and will appeal Hyde, London, 18, 19, 3 and will appear to those who require an Austin Seven having a more sporting appearance than the standard ear, but which gives

Wolseley Programme.

Wolseley Motors (1927), Ltd., announce that the specification of the 11-22 h.p. car remains practically unchanged for 1928. The prices are as before: Two-seater £215, two-seater de luxe £245, four-seater de luxe £250 and the saloon de luxe £300.



nt least equal luggage accommodation. The body is fitted to standard Austin chassis, gives ample leg room for the driver and passenger and is provided with an upholstered dickey seat in the tail. The complete car is finished in any standard two-colour scheme and is priced at £155, or £158 if upholstered in real leather hide.

The £1,500 Scare!

The daily papers have been full of estimates of light car running costs recently as a result of a county court judge's dictum that an income of £1,500 a year is the minimum upon which a car can be run. What a lot of reckless spendthrifts there must be!

Austin Seven Bulb Horn.

An attractive bulb horn, which should be particularly useful to Austin Seven owners, and which figured in a group of warning signals reproduced on page 426 of our issue dated September 9th, was inadvertently described as being a Stadium model. We are informed that this horn is made by Gisbornes, Ltd., 320, Witton Road, Birmingham, the price being 12s. Gd. retail.

Riley Nine Prices.

In a recent issue of The Light Car and Cyclecar we dealt at length with the latest type of Riley Niue fabric saloon. Since then, however, the price of this model and others in the 9 h.p. range has been reduced considerably. The two and four-seater open cars now cost £235, the normal type of fabric saloon £265, and the Monaco sports saloon £285.

J. J. Hall Injured.

During an attempt on long-distance records at Brooklands on Tuesday last, J. J. Hall, driving a 750 c.c. Morgan, overturned on the railway straight. The mishap was apparently due to the back tyre bursting at speed. Hall was Hall was thrown out and sustained injuries to his head, while his companion, Derrington, sustained severe cuts and other injuries. Both the injured men were taken to the Weybridge Cottage Hospital and are reported to be making good progress. Before the accident happened several records, of which details are not to hand, had been established.

THIRTY ENTRIES FOR THE 200-MILE RACE.

THE Seventh International J.C.C. 200-Mile Race promises to be the most interesting of the series, as there is a thoroughly representative entry which includes the cream of French and English light cars.

The race takes place at Brooklands on Saturday, October 15th, and there are 30 cars down to start of which no fewer than seven have eight cylinders

and three six cylinders.

The speeds of 1,100 c.c. cars have become so high of recent years that the struggle for first place-hitherto associated only with the 1,500 c.c. entries-will certainly be extended to the 10 cars in the lower-capacity class. Incidentally, the race will, in any case, provide a thrilling duel between the Salmsons and the

It was rather anticipated in some quarters that a rumoured Salmson with an eight-cylinder supercharged engine would make its debut in this race, but, as will be seen from the appended list of entries, all the Salmsons down to start have four-cylinder engines.

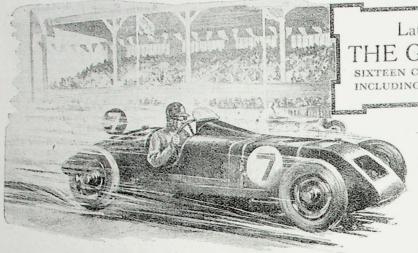
The Amilears entered by Mr. Vernon Balls have six-cylinder supercharged engines, which develop nearly 100 brake acre-power. Mr. Balls tells us that he mas tried one out at the Monthéry track and tried one out at the Monthéry track and was extremely pleased with it, the errformance being exceptionally good, has the general design of the engine impressed him as being very sound and engly to ensure unusual reliability. Morel and Martin, who are driving

the other two Amilears, have had a great deal of experience of road-racing on the Continent and have, of course, both been seen at Brooklands.

It is encouraging to note that the

750 c.c. class is well supported and it will be observed that, this year, a French Ratier will be matched ugainst the Austins. The full list of entries is given in the accompanying table:-

	(All Cars	are "Specials	.")		
	1,500	c.o, Class.		No. of	
Entrant, T. G. John T. G. John L. d'Erlanger A. Frazer Nash H. W. Purdy Malcolm Campbell	Driver. C. M. Harvey G. E. T. Eyston A. Frazer Nash H. W. Purdy Malcolm Campbell	Car. Alvis 1 Alvis 2 Bugatti 1 Frazer-Nash Thomas 1 Bugatti 2	52 × 88	cyla. 8 8 8 4 8	1497 1497 1493 1496 1492 1493
P. L. Densham C. W. Johnstone	P. L. Densham C. W. Johnstone W. Urgubart, Dykes	Bugatti 3 Bugatti 4 Alvis 3 O.M Thomas 2	69 × 100 69 × 100 68 × 103 56 × 76 52 × 88	4 4 8 8	1496 1496 1496 1497.5 1495
	1,100	c.c. Class.			
J. D. Benjafield A. Bovier A. Bovier A. Bovier C. M. O. Turner J. H. Oborn Vernon Balls Vernon Balls	J. D. Benjafield George Newman P. Goutto M. G. Casse C. M. C. Turner J. H. Oborn Vernon Balls A. Morel C. Martin	Salmson 1 Salmson 2 Salmson 3 Salmson 4 Salmson 5 Gwynno Talbot Amilcar 1 Amilcar 2 Amilcar 3	62 × 90 62.2 × 90 62.2 × 90 62.2 × 90 62.2 × 90 60 × 96 58 × 95 55 × 77 55 × 77	4 4 4 4 4 6 6 6	1087 1097 1097 1097 1097 1087 998 1097 1097
	750 c	c. Class.			
Gordon Hendy C. U. M. Walther F. H. B. Samuelson J. S. H. Wilson A. E. S. Walter F. H. Poyd Carpenter C. K. Chase	Gordon Hendy C. U. M. Walther F. H. B. Samuelson J. S. H. Wilson "El Bolivar" F. H. Boyd Carpenter C. K. Chase	Austin 5	56 x 76 56 x 76 60 x 66 56 x 76 56 x 76 56 x 76 56 x 76	4 4 4 4 4 4	747.5 747.5 746 747.5 747.5 747.5 747.5



Latest News of GRAND PRIX INCLUDING THE THREE

> promptly at noon, and no fewer than 16 cars are down to start. is feared, however, that Prince Ghica will withdraw, as it is doubtful whether he will be fit enough to drive after his accidents at Boulogne.

> The complete list of entries, together with drivers named so far and the numbers they will actually carry in

RACTISING for the second Grand Prix of the Royal Automobile Club will probably begin in L carnest on Monday next, and although the experience gained last year by competitors who took part in the race will be valuable they will have to reconsider their tactics because the course has been slightly altered and will call for even more skilful driving methods.

The main alteration is in the position and nature of the second artificial bend situated in the finishing straight. The distance between the two bends will be about 250 yards, but this year the second turn will be made up of one sandbank running straight up the middle of the track, which cars must leave on their right, and a second bank 100 feet beyond running across the track.

It is anticipated that speeds in excess of 80 m.p.h. will be attained by cars negotiating this bend, which is more a test of skilful driving than of brakes, gears and steering, the latter being well catered for by the first S-bend in the straight, which will necessitate a reduction of speed to about 30 m.p.h.

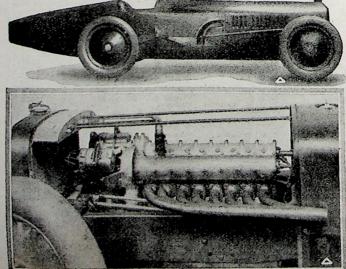
The length of each circuit is roughly 2½ miles, and 125 circuits will have to be made, making a total distance of 325 miles, which is nearly 50 miles longer than last year's race.

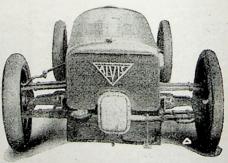
The race itself takes place on Saturday, October 1st,

the race, is as follows: Bugatti, G. E. T. Eyston and S. C. H. Davis.
 Delage, R. Benoist.
 Delage, F. R. Bourlier.

- Delage. A. Divo. Bugatti. Capt. M. Campbell.
- Thomas Special. W. R. Scott.
 Thomas Special. H. W. Purdy.
 Duesenburg. G. Souders.
- Alvis. Major C. M. Harvey. 9.
- 10. Bugatti.
- Drivers not yet nominated. 11. Bugatti.
- 12. Bugatti.
- Bugatti. Prince Ghica. TILL
- Fiat. P. Bordino. Fiat. C. Salaman 15.
- Salamano. 16.
- Fiat. F. Nazarro. 17.

The Delage racers made their debut last year and their drivers were handicapped considerably by faulty exhaust manifold design, as the result of which frequent stops at the pits were necessary to enable the unfortunate men to leap out and plunge their scorched feet into bowls of cold water. The cars have been considerably improved since then and, as their performances in the other races of the Championship of the World series have proved, they are certainly a match for any other high-speed cars in the world.





NEW ALVIS STRAIGHT EIGHT.

Destined to take part in the forthcoming British Grand Prix and 200-Mile Race, this new supercharged straight-eight Alvis, to be driven by C. M. Harvey, will undoubtedly start a strong favourite. A brief description of the car is given on the next on the next page.

Malcolm Campbell's Bugatti will probably be the same one that he drove into second place in last year's R.A.C. event, whilst the Thomas Specials have long since emerged from the experimental stage. British enthusiasts will put their faith in W. B. Scott and H. W. Purdy, but there will be many a heavy heart at Brooklands on October 1st amongst those who recall with sincere respect and admiration the memory of the late J. G. Parry Thomas.

Very high hopes are entertained in America that

George Souders will carry all before him as he did in the Indianapolis "500," and certainly the American element present this year for the first time in Inter-national Grand Prix Championship races will add a

marked degree of interest to the event.

Our Italian correspondent waxes enthusiastic over the performance of the new Fiats, which it should be mentioned are entirely different racing cars from those which appeared at Brooklands in 1922. Salamano is one of the most determined Italian drivers; he takes everything as it comes, and will not be perturbed in the slightest by the unusual conditions presented by

the course. Finally, there is the new 11-litre straight-eight Alvis -which has been evolved by Captain G. Smith-Clark as the result of very hard-won experience in previous years. This car is somewhat similar to its prototypes in that it has front-wheel drive, but in detail it differs very widely from them. It will be observed, for instance, that there is no front axle in the usually accepted meaning of the term, twin transverse superimposed springs taking the place of the axle. Each front wheel is steered independently, the steering gear being placed centrally in the car and connected to the necessary drag links from the ends of a transverse shaft that runs through the gear reduction box. The engine is, of course, supercharged, the Roots blowercontrary to usual practice—being mounted alongside the crankcase on the off side.

Next week's issue of The Light Car and Cyclecar—

published on the eve of the race-will contain lastminute news and a full programme of the day's event.

The Week-End Programme

SHELSLEY: TO-MORROW.

481

EXCELLENT SUPPORT FOR THE MIDLAND A.C.'S SIXTEENTH ANNUAL CLIMB.

STARTING promptly at 1.30 p.m. to-morrow (Saturday) the 16th annual hill-climb of the Midland Automobile Club will be run off at Shelsley Walsh. It should be borne in mind that this is the only open event of its kind sanctioned by the Royal Automobile Club, and, for this reason, it is not only well supported by the best drivers in the country, but enjoys a marked significance in the world

of sport.

Admirable arrangements made for the convenience and comfort of spectators, the hill itself providing natural grandstands from which the most existing the convenience and comfort of spectators, the hill itself providing natural grandstands from which the most existing the convenience and compared to the convenience and comfort of spectators, the hill itself providing natural grands are convenience and comfort of spectators, the hill itself providing natural grands are convenience and comfort of spectators, the hill itself providing natural grands are convenience and comfort of spectators. citing part of the course can be viewed, whilst special parks for spectators' cars are arranged adjacent to the foot of the hill. It is advisable for intending spectators to take up their positions early, as the event creates widespread interest and a big crowd is always present.

The length of the course is 1,000 yds.; it has a sharp lefthand bend, on which some spectacular cornering is usually seen, whilst the gradient of the steepest

part is just over 1 in 6.

The organizers take every precaution to guard against accident, and suitable barriers are erected to keep the public from encroaching on the course. There are venturesome spirits, however, who, intent on a nearer view, may be tempted to climb the railings. Actions of this sort cannot be too strongly deprecated, and it is to be hoped that no such transgressions will occur.

B. H. Davenport holds the record for the fastest ascent, his time last year with his Frazer-Nash being 49 secs., equivalent to a speed of 41.74 m.p.h. This year, however, his record will be very seriously challenged, for some of the fastest makes of sporting car will be taking part, including Sunbeam, Alfa-Romeo, Alvis, Bentley and Mercedes, the last named to be piloted by Raymond Mays. A fully illustrated report of the climb will be a premier feature of next week's issue of The Light Car and Cyclecar.



Fow to get to Shelsley Walsh.

The full list of entries is as follows:—W. D. Phillips (Ballot), A. L. F. Mucklew (Frazer-Nash), A. W. K. Von Becke (Beke Special), J. Heyworth (Lowetz), C. Kay (Bentley), R. Mays (Mercéed eight-leylinder supercharged), Derei Tinker (Vauxball), J. D. Barnes (Austin Tinter), Miss E. V. Watson (Alvis), Miss W. M. Punk (Alvis), V. H. Conke (Senéchal), R. Forestior-Walker (Austin 7), D. G. Bird (Genchal), R. R. Jackson (Frazer-Nash), G. A. Taylor (Salmson), Ronald Hughes (Vauxhall), E. Hillary (Frazer-Nash), T. H. Shorthose (Bugatti), J. Pares (Austin 7), C. F. Small (Diatto), J. R. Felton (Austin 7), F. Clifton (Diatto), J. G. Orford (Austin 7), H. Shorthose (Bugatti), J. G. Orford (Austin 7), F. Clifton (Diatto), J. G. Orford (Austin 7), H. F. Clay (Sunbeam), Raymond Mays (2-litre Mercedel), Frazer Nash (Frazer-Nash), S. H. Newsome (Lex-Francis), C. W. Perkins (Sulbeam 2-litre racing), Major Harvey (Alvis), Capl. Frazer Nash (Salmson), E. H. Hall (Vauxhall), P. R. Hill (Amilear), A. R. Simmins (Simmins Special), H. T. Guest (Salmson), E. H. Hall (Vauxhall), P. R. Hill (Amilear), A. R. Simmins (Simmins Special), H. T. Guest (Salmson), J. L. Pearson (Amilear), D. W. Parkes (Lex-Francis), G. Hont (Vauxhall), G. L. Jackson (Frazer-Nash), Miss May Cunlife (Bontley), M. G. Cantacuzino (Invicta), C. M. C. Turner (Gryacr-Nash), Miss May Cunlife (Bontley), M. Marcher (Bontle

Night Trial Abandoned.

Owing to insufficient entries the Junior Car Club (South-Western Centre) has been obliged to cancel the night trial arranged for this week-end. This is regrettable, as it was the first time the centre had endeavoured to organize an event of this nature, and high hopes were entertained that it would be an entire success. B13



FACTORS WHICH GOVERN STOPPING DISTANCE.





T is quite a common matter to see included in the test report of a new car a braking curve giving the stopping distance in feet plotted against the speed in miles per hour, and it is equally common to hear an enthusiastic owner-driver make ridiculous claims in regard to the pulling-up powers of his newly acquired car.

Deceleration or retardation is the exact opposite of acceleration, the former denoting a decrease in speed, the latter an increase. If we consider either accelera-tion or deceleration to take place at a uniform rate, that is, an equal increase or decrease in speed in each consecutive second, we find that the distance covered in each case in any interval of time is governed by definite laws. In dealing with these laws of mechanics it is usual to denote the initial velocity as u feet per second, the final velocity as v feet per second, whilst f denotes the acceleration or deceleration occurring over a distance of s feet.

We then have an equation connecting these quanti-

the stopping distance depends upon the square of the initial speed. In other words, if we have a car travelling at, say, 30 m.p.h., and we pull up in 45 ft., then at 60 m.p.h. the same car with constant braking action will take 45×4 , or 180 ft. to come to rest, because doubling the speed quadruples the stopping

In addition to this, we must realize that there is always a time lag between the brain message and the actual application of the brakes. Psychologists are able to measure this time reaction with accuracy; it will be of fixed duration for any given movement. It is obvious that the faster the car is travelling the greater will be the distance moved before the brakes are applied. This is shown graphically in the accompanying illustration, but some figures may help.

For instance, if we take a quarter of a second as the interval, then at 60 m.p.h. this will mean 22 ft. of travel, which makes our pulling-up distance 180 + 22,



ties, namely $v^2=u^2+2$ f s for acceleration and $v^2=u^2-2$ f s for deceleration. If we consider stopping distance due to a uniform application of the brakes, the latter equation is the one which will apply.

Furthermore, if we consider bringing the car to rest

then v = 0, so that $u^2 = 2 f s$, or $s = \frac{1}{2}$. Now the first

thing that strikes one in considering this result is that B14

or 202 ft., only 8 ft. short of 70 yards. At the speed attained by Major Segrave during his world's record run, a similar time reaction would have meant nearly 75 ft.

before the brakes could be applied.

It is interesting to consider the question of what happens to the energy absorbed when a car is brought

When we have a car at rest and we put it in motion we have overcome its "inertia" or tendency to remain at rest; during acceleration up to a steady speed we can measure the force to be exerted; it is equal to

f; where w is the weight of the car and g is the

acceleration due to gravity (32.2), f is, of course, the

acceleration, which is equal to the increase of speed divided by the time in seconds. Now when the point of application of a force is moved along the line of its action, work is done and it can be measured by the product of the force and the distance its point of application moves. For instance, if we raise a weight of 330 lb. to a height of 100 ft. from the ground we do 33,000 ft.-lb. of work on it. The quicker this action is accomplished the greater must be the power exerted.

If one minute were taken to raise the weight we should be working at the rate of one horse-power. Now in raising the weight we have invested it with a certain amount of energy or capacity for doing work which it will give out when falling to the ground. The energy with which we have invested the weight is known as "potential" energy, and in falling to the ground this energy is converted into "kinetic" energy, or energy which the body possesses by virtue of its Wv².

motion. The kinetic energy equals --

A similar principle holds good in respect of the car

quicker will we be able to decelerate. The maximum retarding force which can be exerted at any wheel without causing slip is equal to the weight on the wheel multiplied by the co-efficient of adhesion, which is actually the co-efficient of friction between the tyre and the road, and is usually denoted by the Greek letter μ .

Now, if we have four-wheel brakes the maximum braking force we can apply to the car is equal to κ W, where W is the total weight of the car. Also we

know that the decelerating force is equal to $\stackrel{W}{\longrightarrow}$ f, where

f is the deceleration in feet per second per second. We W
then have that μ W = - f, which gives a value for f

as equal to "g, where g is the acceleration of a freely falling body, and equals 32.2 ft. per second per second. From this result it will be noticed that the retarda-

This sketch shows the normal stopping distances of cars travelling at 20 m.p.h., 60 m.p.h. and 204 m.p.h. (Major Segrave's record speed). Added to each figure is the "time lag" distance explained in the text.

have accelerated; the work
we do on it is stored
as kinetic energy possessed by the moving car. In braking the car and bringing it to rest
we must exert a force in a direction opposing its motion; and the
amount of work done by this force will equal the

kinetic energy. Expressing this result in symbols we have $P\times s=Wv^2$

 $\frac{1}{2g}$, where P = braking force in pounds, s = stopping

distance in feet; from this equation we have $s = \frac{Wv}{2}$

and if we neglect wind resistance and assume that the brakes give a consistent performance at all speeds, then we see again that stopping distance depends upon the square of the speed. By the principle of conservation of energy we cannot create or destroy energy, but only convert it into a different form.

The energy due to motion, or kinetic energy, is converted into heat energy at the brakes, whence it is conducted to the frame or radiated to the atmosphere. The radiation is assisted in some cars by the use of ribbed drums, and in this connection it should be noted that screening of the brake drums is to be deprecated, as it tends to create a pocket of dead air which is inimical to the radiation of the generated heat.

The maximum retarding effort which can be applied

The maximum retarding effort which can be applied to the car depends, of course, upon the grlp of the wheels on the road. This is technically known as "adhesion," and obviously the greater the adhesion the

tion is entirely independent of the weight of the car. This fact is not always clearly realized, and many people think that a heavy car is more difficult to stop.

This is not actually the case, because although a heavy car has more kinetic energy, it has also a greater force of adhesion due to its greater weight. If \(\theta \) were equal to unity then the retardation possible would equal gravity and the retarding force that we could apply would equal the weight of the car. The condition of the road surface, of course, will greatly affect the co-efficient of adhesion, which may range from anywhere about 0.4 or less up to unity; a general average value may be taken as 0.6.

It is a fairly simple matter to find the greatest rate of retardation which it is possible to attain, assuming a co-efficient of adhesion of 0.6. With four-wheel brakes it is equal to $21.95 \times 0.6 = 13.2$ m.p.h. per second. Considering a four-seater or saloon it is usual to assume two-thirds of the weight on the back axle and one-third on the front. This gives the maximum rate of retardation with rear-wheel brakes only as $21.95 \times 0.6 \times \frac{1}{2} = 8.8$ m.p.h. per second, and with front-wheel brakes only $21.95 \times 0.6 \times \frac{1}{2} = 4.4$. m.p.h. per second. If we consider a two-seater body it is probably more accurate to consider half the weight on each axle.

The stopping distance can be found from the formula V^2

 $0.7333 \frac{V^2}{f}$, where V is the speed in miles per hour and

f is the deceleration in miles per hour per second.

These results neglect the other factors which assist braking; wind resistance, although negligible at low speeds, has a definite retarding effect at high speeds, because it varies as the square of the speed.

GUILDFORD'S LANDMARK.

THE STORY OF A FAMOUS HIGH STREET AND OF A STILL MORE FAMOUS CLOCK.

BY reason alone of its great age the history of the old clock which has hung over Guildford High Street for nigh on two hundred and fifty years is not without interest, and there is at least one episode in its lifetime of faithful timekeeping which deserves to

be retold.

In the early part of the seventeenth century a certain John Aylward arrived at Guildford intent on setting up in business as a clockmaker and with much knowledge in his head but with little money in his

The all-powerful Guild Merchants of the town were not long in pointing out to the young Aylward that competition was not welcomed among master craftsmen and that to trade in prosperous and wealthy Guildford was a privilege only to be bought for a large sum. The sum, as the Guild intended, was far more than the poor clockmaker could afford to pay, and although he had arranged to take over a shop in the busiest centre of the town he was compelled to pack his traps and open up premises in a locality not controlled by the Guild.

Having a keen eye for business, he moved no farther

than was necessary, and his sign shortly appeared over a small shop in what is now Mount Street, just out of the Guild's jurisdiction. His connection grew, and with his success came the desire again to trade in the centre of the town.

Having a clear conception of the modern slogan "it pays to advertise," he took advantage of the fact that the Guildhall was being rebuilt to offer the merchants a clock for the new edifice. The offer proved irresistible, so John Aylward's masterpiece was hung in the very heart of Guildford's trading centre: there it has watched over the highway from 1681 to the present day.

The clock, being an excellent specimen of the maker's skill, the Guild Merchants doubtless had good reason to regret their acceptance of the wily John's offer. In due course the townspeople conferred the Freedom of the town upon him, as substantial thanks for his generosity and the Guild had to turn an unsceing eye when Aylward opened up a shop in the High Street opposite his prominent advertisement; here his prosperity was assured.

As is only to be expected, the old clock has seen many changes in Guildford. At the present time the corporation is considering a suitable celebration of the diamond jubilee of the improved road over which the clock has kept watch for 60 years. The final setts for the roadway were laid on November 28th, 1867, and the oldest roadmaker in Guildford clearly remembers seeing the aldermen and councillors in their top hats watching the ceremony. The blocks were originally laid on the steepest part of the hill to give horses a foothold, but despite the enormous increase in traffic only once in the sixty years has repair work been necessary.

THE ART OF TOURING.

THE art of successful dining is bound up with the subtle blending of foods which are delectable to certain palates and provide the maximum digestive benefits from the minimum consumption, but many a tourist who is an epicurean success is a dismal failure in fulfilling his heart's desire at the wheel of his light car. His tour is not a delicately blended balance of country-side selected to charm the eye because of its divergent beauties, nor is it varied with the expert touch and unerring certainty with which his dinner is selected.

unerring certainty with which his dinner is selected.

Touring, after all, is an art. It is not the linking-up of town with town, historical site with historical site, nor is it the fastest transit between two points. It has several important functions, the chief being to stimulate the mind, eye and body. It needs freshness of outlook, variety of mountain, downs, moors, lochs, rivers and sea. It must be a combination of many things, but it must not demand that the tourist should be at the wheel of his car, treading hard on the gas all day.

A tour should be something more than just a circular route planned to embrace a specified mileage within a prescribed period. That is a common conception and it reveals lack of imagination and a failure to utilize properly a countryside which is the richest in the world in variety, colour, charm and antiquity. The too prevalent practice is to decide upon a tour in, say, the English Lakes. The ultimate destination chosen, the tourist rapidly and neatly links up the intervening towns in an out-and-home route.

This may be successful in so far as the period in the Lake District is concerned; but the tourist is invariably bored with the journey out and is not greatly impressed with his trip home. The former is merely so much ground to be covered between his home and the centre of his desires.

Now, I do not reside in England, but I never fail to bring a car across once or twice a year for a few thousand miles, and I have been astonished by the number of car tourists who confess that lengthy portions of their tours are "dull beyond description" and, what is even more surprising, that only comparatively few tours are carried out to schedule. A common error apparently lies in selecting too lengthy a route over a countryside of similar characteristics.

In my own ideal of a touring holiday I seek always a mileage that will provide similarities to the quietude of Dorset villages, the black-and-white timbered work of the England-Wales border countries, the rugged picturesqueness of Westmorland's mountains and lakes, the rolling downs of Yorkshire and the spacious charm of Dartmoor. I seek the opportunity to idle for a day with a rod and a line in the Wye, or at Dovedale beneath Tissington spires. I find a particular charm in going afloat with a small boat on England's lakes or Scotland's lochs. I have toured for a week by car amid Lincoln's fens and Norfolk's lowlying country, and spent the second week in a 15-ft, motorboat, complete with a small cabin and cook-

THE light Car AND Cyclecar

house (this really is great fun) upon the Norfolk . but I could go on enlarging upon the

charms of Britain's highways indefinitely.

I have been bringing a car across regularly for years and years, and I think I know the countryside, its villages and the splendid stability of its people even more intimately than the casual resident within its boundaries, but, even so, I am afraid that life is too short for me to cover all the areas I would have liked

Tours fail to come quite up to expectations because so many tourists cannot enter into the romance of the thing. A highway or byway is just a road, whether it be of modern construction or whether it be steeped in

I cannot view it like that. antiquity.

Canterbury always quickens my pulse; amid those narrow and quaint little streets near the cathedral I can always see the Canterbury Pilgrims. Helston and those ancient little towns and hamlets in the toe of Cornwall re-create the romantic history of Phonicians. Away up in Northumbria that giant wall of Roman construction gives birth to the picture of bearded men, many oxen, coats of mail, even slavery, but always the indomitable will behind it and the incessant building up of the Wall. Lincoln's fens whisper with the breezes that stir them of Hereward the Wake; sometimes the mind's eye pictures that dire moment when the mighty man of arms had perforce to kill Mare Swallow in the marshes-poignant thought!

Coming over the Cheviots from Scotland into England, at that point where the semicircular stone seat is erected as a memorial to the immemorial battle of Otterburn, one can read the inscription:—

On these fields on August 19th, 1388, the battle of Otterburn was fought and deeds were done which in the noblest of English ballads were immortally recorded.

Un in those same Cheviot passes, too, and removed but a few hundred yards from the stone memorial of antiquity is the little cross, a war memorial of the village of Horsley, Rochester and the adjacent hamlets, recording humbly of the passing of great men in a great war with deeds, unhappily unknown and unsung in the "noblest of English ballads."

Do not the centuries-old stone bridge at Post Bridge (Dartmoor) and the massive stones at Stonehenge stir something deep within you? Scenes such as these belong to a faraway antiquity, but they are not so far divorced from the present era that one can lightly pass them over as something too remote to be given

undivided attention.

It is not necessary to meander on. The romance that will be found in touring can be achieved only when the motorist realizes that to derive the maximum benefit from it all he must make an art of his hobby; and is there a more pleasurable task to carry out during the long days of winter? But it is not wise to remain steeped only in the lore of antiquity. There is always the pulsating present. The seaside resorts and inland spas of Britain offer sport, entertainment, gardens and novelty. A day or two of bathing, golf, tennis and walking form other ingredients in the potpourri of successful touring.

Britain is the most delightfully diversified touring ground in the world. Be grateful for it!

A. STANLEY BLICQ, F.R.G.S.

TIDY TOOL KITS.

OF recent years manufacturers have given much more attention to providing adequate and convenient accommodation for tools, just as they have improved the actual tool kits supplied, but there are still some makers who deem an odd space under one of the seats or a locker on the running board satisfactory.

Where this is the case, the job of stowing away the tools and spares neatly and conveniently is often somewhat difficult, with the result that many owners shirk it. Their method of putting away the many and varied articles which are to help them out of trouble and enable them to maintain their cars in good trim is to throw them higgledy-piggledy into the space provided and then to shuffle them until the lid or seat, as the case may be, will fit down into its place.

This treatment is fatal to the life of tools and spares-particularly the latter-and, moreover, it does not save time in the long run. "A place for everything and everything in its place" is an excellent motto, and it applies with particular aptness to the subject under consideration. To find the "place for everything" may take a little time, but half an hour or so spent on the job may save many hours in the course of a year or two.

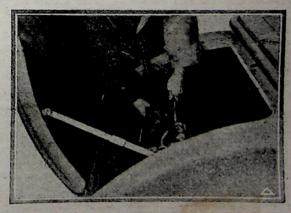
It must be remembered, however, that important as neatness is it is not everything, for convenience must be studied also, and those tools which are likely to be needed on the road should be placed where they can easily be reached. It is not a bad plan to place all the items to be carried in the car on a bench or table and to arrange them in three or four groups according to the frequency with which they are likely to be used. Thus the jack and wheel brace, together with an adjustable spanner and a screwdriver, could be placed into one group, whilst such things as tappet and magneto spanners and other tools designed for special purposes would form another.

Then, again, items which are not often wanted on the road but which are needed for regular maintenance jobs—the oilcan, pump and grease-gun being examples—could be placed in another category, spares making up the fourth class.

Having reached this stage, the owner can examine his car with a view to finding suitable positions for the various groups. The front of the dashboard, for instance, forms an excellent position for such things as the grease-gun, oilean, jack handle and so forth, these being secured by means of clips, as in the case of many up-to-date cars.

Spares—which should be very carefully packed and tools which are not often required could probably he stowed away under one of the seats, whilst if a locker is provided it can be used for the tools which are most likely to be required during a journey.

An owner who stores his tools in this manner can always find any item he requires in a few moments and has the comforting knowledge that, if well packed, they will not rattle or be damaged. A most important point, however, is to get into the habit of putting everything back in its proper place; otherwise the time spent on arrangement will be wasted.



The space under the dickey seat is excellent for tools or spares, but careful packing is necessary to prevent rattle and damage.

TWO NEW JOWETT MODELS FOR 1928. A SPORTS TWO-SEATER CAPABLE OF NEARLY 60 M.P.H., AND A VERY ATTRACTIVE COUPE TO SELL AT £168. A CONTRAST IN TYPES. (Above) Th: sports model, which, at £145, is one of the cheapest on the light car market. (Right) The coupe—a very striking little all-weather car, which will certainly create an excellent impression.

A saddition has been made to the range of Jowett cars by the inclusion of a sports two-seater, which is to be marketed in addition to the other models now produced by this go-ahead concern. The all-out speed of the car is nearly 60 m.p.h. and it is very economical on petrol and oil. The price complete is £145.

Although the external appearance is entirely different from previous Jowett models, practically all the components in the make-up of the sports car are exactly similar to the standard product; a few essential modifications have been made to the engine, of course, and its position in the chassis has been altered.

The wheelbase and track are the same as on the "long" models, but the introduction of lighter springs and shock absorbers has been made possible by the general reduction in weight of the bodywork. The power unit and radiator are 9 ins. farther back in the chassis than on the standard touring model, an arrangement which enables a shorter propeller shaft to be used.

Without increasing the capacity of the engine, a greatly improved performance has been obtained by "tuning-up." The carburetter is set for speed, of course, the compression has been raised and slightly stronger valve springs are used. No alteration in the gear ratios has been made.

As will be seen from the illustrations, the bonnet has been carried well back towards the scuttle. This gives greater accessibility to the engine, clutch and gearbox parts.

Performances Compared.

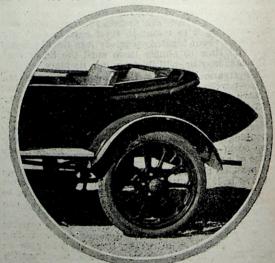
Only a very short acquaintance with the car on the road showed that it possessed good acceleration and hill-climbing properties. This was emphasized by comparing the new sports model with another new Jowett—a coupé—en a run among the Yorkshire hills. With the coupé running "flat out," the sports model was able quickly to overtake it either on the level or on hills in top gear; in fact, above 10 m.p.h. or 12 m.p.h. the top-gear performance of the little sporting car was one of its most striking features. On several occasions, even on comparatively winding roads, 50 m.p.h. was exceeded without any feeling of forcing the pace.

A few turns of the starting handle sufficed to set

the engine going, even from dead cold, and, thanks largely to the efficient means of warming the inlet gases, the engine soon warmed up to its work, enabling perfectly even firing to be obtained in a very short distance. At 40 m.j.h. to 50 m.p.h. the car holds the road in a quite convincing manner, and as the steering is light and positive one feels a sense of security straight away.

Up Poole Bank.

Leaving Idle, near Bradford, where the Jowett factory is situated, we turned in the direction of Harrogate, and a few miles out came upon Poole Bank. This hill seemed to be an excellent gradient for a top-

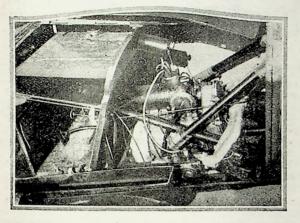


Showing the staggered seats and general lightness of construction of the sports two-seater.

gear test. Although we had already formed the opinion that the new sports model was an excellent top-gear performer, the results of the climb strengthened our view. The hill is fairly long and has a maximum gradient of 1 in 10.

We began the climb at about 25 m.p.h. and accelerated to 38 m.p.h. on the early reaches, where the gradient is easy. Thereafter, however, the speed gradually fell off as the gradient stiffened, until the speedometer registered a steady 15 m.p.h., which was maintained throughout the whole of the 1 in 10 section of the hill.

Apart from hill-climbing, however, the car was capable of putting up a very good cross-country average, for at 40 m.p.h. the engine seemed to settle down to its work, and at any speed over 12 m.p.h. would



Only minor modifications from standard have been made to the sports engine, nevertheless it gives an excellent road performance. Note the five-gallon petrol tank.

accelerate in top in a quite convincing manner. We made several tests of the acceleration powers: thus, on top gear from 10 m.p.h., 6.5 sees. sufficed to raise the speed to 20 m.p.h., 13 secs. were required to reach 30 m.p.h. and 20.5 secs. to reach 40 m.p.h. From a standing start, in first, 40 m.p.h. could be attained in 15 secs., finishing up in top, of course.

So far as all-out speed was concerned, we recorded 55 m.p.h. on a fairly straight stretch against a slight head-wind; it would be possible, we think, slightly to better this speed under more favourable conditions. On first and second gears 22 m.p.h. and 40 m.p.h.

respectively were attained.

Springing was inclined to be rather harsh at slow speeds, but the Broadbent shock absorbers were tightened sufficiently to make the car steady at high speeds. It is, of course, very difficult to strike an ideal suspension for both high and low speeds in a very light car, and this Jowett model weighs only 8 cwt. I qr. unladen.

The long, sloping front wings with which the car is equipped scemed to be quite effective and, although several patches of wet road were encountered, the body kept clean. The wing fixings appeared to be substantial and prevented any annoying rattles when traversing bumpy surfaces. With the hood up a six-footer could be accommodated with plenty of headroom and creditable protection from the elements was obtained: a side wind, combined with rain, however, might reveal the necessity for side screens.

Reverting for a moment to the chassis details, it may be mentioned that a rectangular five-gallon petrol tank is fitted forward of the dash, the filler orifice being in a convenient position under the bonnet. An illustration on this page shows the arrangement quite clearly. The engine exhaust system has been modified slightly by fitting a larger diameter tail pipe, designed to minimize back pressure.

We formed the opinion that the new sports Jowett proved a roadworthy, fast and economical little car, which should require the minimum of attention in order to maintain it in good running order. At £145 complete it should make a distinct appeal to the motorist who has just graduated from a motorcycle.

The New Coupe.

As already mentioned, the 1928 Jowett range also includes a new coupé model. The lines of the body are quite pleasing and plenty of room is provided for the passengers. The car is panelled in aluminium, except for the crown of the head, which is covered with leatherette to avoid drumming. All the seats and squabs are upholstered in grained leather and are sufficiently capacious to give adequate support to the passengers' thighs and shoulders. A two-colour scheme is standardized.

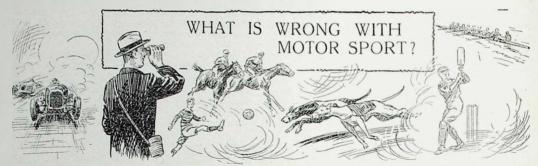
There is a single door wide enough to allow easy entry and exit from the car; sliding windows are fitted. With standard equipment the car is priced at £168.

The prices of the remaining Jowett models are:—Short two-seater, £134; long two-seater and chummy models, £142; full four-seater, £145; saloon, £170.

These two photographs reveal the neat "head," the ease of entering the front compartment and the commodious dickey seat of the coupe.



The Unconventional Viewpoint.



WHY DOES MOTOR RACING FAIL TO CATCH THE FANCY OF THE PUBLIC? THE WRITER OF THIS "IMPASSIONED PLEA" WANTS TO KNOW.

HERE is, at the moment, about one greyhound to every 200,000, one horse to every 20,000 and one car to every 200 of the present population of these islands; yet in a few months the sport of greyhound racing has caught the imagination of literally millions of folk, horse-racing continues to be a national sport, and motor racing lies buried in comparative obscurity. Why should this be so?

Are we to be for ever satisfied in our favourite "daily" with two lines of small type—the smallest on the page—devoted to a Grand Prix whilst a "stick-and-a-half" is taken up by bowls, angling or billiards? And if not, what are we going to do about it?

Personally, I am quite satisfied with the reports of motor events given by the technical Press, and no matter how much space the lay folk might give, my allegiance would never waver; but what thoroughly annoys me is that motor sport simply does not "get there" with the millions who own motors whilst greyhound and horse-racing appeal to countless men and women who know no more about greyhounds and horses than that they have two eyes and four legs; as to billiards, angling, and so on, I say in all seriousness that I refuse to credit the presumably "obvious" fact that they are of sufficient interest to warrant the attention that is devoted to them by the lay Press.

This brings me back to my starting-point, the Daily This and Evening That, and the influence which they exert on the fickle fancy of the public towards sport. I verily believe that if one of those widely read journals started to boom tortoise racing the public would follow their lead. No journal would, of course, do anything so foolish, and why should it when, if it wants something fresh, vigorous and practically unknown to the multitude at large, it might take up motor sport?

For Those Who Worship . . .

All this, apparently, does not say much for those who have the sport at heart—folk like myself who would like to see a national holiday proclaimed for the first British Grand Prix run on the Salisbury Circuit; but the technical Press does not set out to educate the public on general matters: it is a sort of prayer book for those who worship at the shrine of motoring, and it looks after its disciples regardless—and quite rightly so—of those who are not converted; or, at least, that is how I look at it.

"Oh!" I hear certain champions exclaim, "What

about the thousands who flock to Hepolite, the Crystal Palace, and so on?" Well, I reckon you could put them all into the Stadium half-way through a Cup final and nobody would notice they had been pushed in. I am looking for something far bigger than the support that even Southport races receive. I, want the lay Press to get hysterieal-posters flying-chief subs yelling down two telephones at once-tape machines ticking out a chorus of results and the great B.P. (people, not petrol) waiting with dry tongues and bulging eves to find out whether the Alvises maintained their reputation, and what happened to good old George Newman and all the rest. It makes your blood tingle when you think of it all happening.

There is an old saying "Monkeys would talk only they're afraid of being sent on errands." Some folk may think, perhaps, that not profiting by the wisdom of our alleged ancestral tribe. I am asking for it. I do not care a rap, let all the population

come, I am eager for the fray: and here is the first doughty opponent who says "What about track racing? How can you expect the middle-class world

and his wife to take any interest in it when Brooklands is the only place in this country where they can see it—even if they can afford the time and money to go?"

Until quite recently the White City was about

"... We might say, like the man who saw all there was to see at the Air Pageant: 'Business is looking up.'"

the only place down south where you could see greyhound racing; the Derby is run off at Epsom in the middle of the week when only those courageous enough to kill aunts and uncles can get anywhere near it, and you cannot pack so much as

the adult population of Peckham into a billiards hall, can you? So it really does not matter about the public getting there more than once or twice a year. What I want them to do is to recognize motor sport, to "jump to it" when there is a Grand Prix about and to write and tell the editor of their pet daily that they are starving for motor sport news.

Then the greatest coup of all. Alive to the stupendous reaction that had taken place in the hearts of the people would any Parliamentary party in power at the moment having an eye on the possibilities of a future election dare to disregard a national plea for road racing?

That is a long way off, perhaps, but it will come: it must come if the public want it for, after all, parliamentarians are only the mouthpieces of the community and if the community really sets its heart on something then it is jolly well going to have it.

As for the present state of affairs, it leaves me The news value of motor racing, so far

as the lay Press is concerned, boils down to accidents or narrow escapes therefrom, and if no one succeeds in "turning a double somersault whilst taking a hair-pin bend at 120 miles an hour.' papers do not consider it necessary to give so much as the bare announcement of the results.

In a few days' time one of the greatest track races in British history will be run off at Brooklands, namely, the Second Grand Prix of the R.A.C. The pick of the world's best drivers and cars will take part, and the event will cause world-

Here is a chance for the public to show whether or not it cares the price of a return ticket to Weybridge about motor racing. If I am not mistaken and may I be cast out as a false prophet if I am -Brooklands will be obscured by such a crowd as never was. The presence of His Majesty the King would put the seal of success on the meeting.

Then, I think we might say, like the man who saw everything there was to see at the Pageant: "Business is looking up." CRITIQU CRITIQUE.

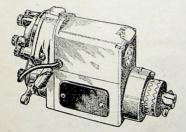
AUTOMATIC IGNITION CONTROL.

Satisfactory Results Obtained with a B.T.-H. Unit.

IN our issue of February 11th, 1927, we described a new B.T.-H. automatic ignition control; since then one of these units has been fitted to a staff Alvis car upon which it has given very satisfactory service. It has done all that is claimed for it and has given no trouble whatsoever.

For the benefit of those who are not quite au fait with the functioning and advantages of automatic spark advance and retard we should point out that the significance of correct spark control on the good performances of modern engines is a well-known fact. A hand-controlled advance and retard can be made to give satisfactory results when used by an experienced driver, but an instrument which performs this action automatically has much to recommend it.

One of the particular features of the B.T.-H. system is that, in addition to the advantages of automatic control, the spark is as strong when fully retarded as



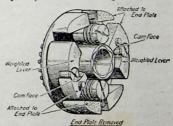
A good idea of the compactness of the B.T.-H. unit can be gained from this drawing, showing the instrument fitted between the magneto and the Vernier coupling.

when it is fully advanced, the explanation being that the relationship between the magneto and the engine, and not that between the contact breaker and the armature, is altered.

The device is marketed in two forms, one being intended for attachment to existing magnetos and the other for incorporation as a unit with the magneto itself. The unit, incidentally, is contained within a cylindrical casing only a little larger than the ordinary Vernier coupling.

The principle employed is similar to that of the governor used on steam engines. Two pawls are mounted on a plate attached to the Vernier coupling; fitted to the magneto shaft is a driving plate on which are mounted two cams on which the pawls bear. When the unit is stationary stops on the driving and driven

The internal mechanism exposed by the removal of the end plate on the driving side. The weighted levers or pawls, the rollers and the cams are clearly shown.



plates are held a certain distance apart by helical springs, whilst the pawls, with their rollers in contact with the cams, are pressed against the centre boss of the magneto plate. At a predetermined speed centrifugal force moves the rollers along the cams and results in a "lead" being given to the magneto plate. As the speed increases the pawls move farther outwards until finally a solid drive is provided through the medium of stops.

The maximum range of advance and retard which the instrument provides is 30 degrees, but, if desired, this can be increased by using the ordinary hand-con-trolled advance and retard attachment; thus a unique range of spark control is obtained. The makers are the British Thomson-Houston Co., Ltd., Alma Street, Coventry, and Crown House, Aldwych, London,

W.C.2.

NEXT WEEK

All about the Greatest International Track Race to be run in this Country - The Second R.A.C. Grand Prix. -- Make sure of your copy.

FRIDAY, AS USUAL.

(Published on the Eve of the Race.)





HE Dragon was standing patiently at the foot of the steps. Everything was ready, all luggage was I neatly stowed away in the back scats and the cover was clipped on. "No dusty boxes on the grid for me!" Smith Minor had declared. "Besides," he added, "it spoils the lines."

The mater was fussing about as she always does at such times. Joan was a being a bit peevish, deat such times. Joan was a being a bit peevish, demanding the reason why she could not accompany her father and brother. "It's just the day for a long run," she wailed; "and I got up specially early to help, too."

"I know," said her brother. "But it's quite Impossible to take one's womenfolk to school. I should reason hear the last of it. It simply isn't done."

never hear the last of it. It simply isn't done."
"You're a pig!" retorted Joan; but Smith Minor was far too busy to hear.

"Good-bye, mater," he was saying. "See you on speech day, and don't forget to wear that stunning pink dress of yours."

"Don't worry, Jim. I'll try not to disgrace you."

"Good-bye, Joan-you silly kid."

Smith Minor climbed into the car, followed by his father. A touch of the starter, a gentle sigh and the car was off. A final wave as they passed through the gates, and the long run back to school had begun.

Once outside the town Smith Minor opened out and the car sped along with just that fascinating whir of the tyres and the steady, subdued hiss of the car-buretter which tells that the speedometer is well over the "forty" mark.

Memories of the Holidays.

It was a wonderful day for a run, and the road over Dartmoor lay like a ribbon of sand against the darker background of turf and swamp. The tors stood sharply outlined against the clear blue and white of the cloud-flecked sky.

The Dragon ran perfectly, and it was quite a wrench to have to slow down for the narrow streets of Exeter; but soon they were out on the wide road again, and father and son chatted together with that freedom from restraint and with those long periods

"Well, pater," said the boy, "the last few weeks have been simply great. It has been topping of you to let me use the Dragon so much. We've had some great times. Do you remember the day at Bluehills? It was fine. Then that scrap we had with the fellow in the three-wheeler over the Goss Moors. I think that must have been the fastest four miles we have ever done. I should like to meet him again. He was

a great sport. Hello! I wonder what's the trouble?"

Some way ahead a car was drawn up at the side of the road and a man was peering disconsolately at the engine beneath the raised bonnet. Smith Minor stopped and asked whether he could be of any assistance.

"I'm afraid not, thanks," said the man. "Big-end

has gone."

"Bad job, that. But why not heave it out?"

"Rather a task, isn't it? Besides, there's all the oil in the sump to be drained out and the sump itself to be cleaned.

"We can make a spare tray out of a petrol tin if you have one."

"That's an idea, anyhow. Here is a tin, which I will empty into the tank, and I can get the sump off in under ten minutes."

'Rightho!" said Smith Minor, and when the tin was empty he set to work to cut out one of the sides. Meanwhile the man got on with the preparations for removing the sump.

The two worked hard, and soon the sump was off and the big-end removed. Then the sump itself was cleaned of all the churned up metal and put back, after which the oil in the temporary tray was carefully filtered through a piece of butter muslin.

"Now we shall be able to see whether the old bus will pull on three cylinders," said Smith Minor. She



started up quite well and managed to move up and

down the road reasonably.
"Lunch is indicated," said Smith Minor's father, who had thoughtfully occupied his time in laying out the contents of a generously packed basket. So the three set to work and made light of a much-needed meal before each party prepared to go its way. The owner of the Guelph swore eternal gratitude to "Young Segrave," as he called Smith Minor, who flushed to the roots of his hair at the compliment.

The last stage of the journey proved an exciting time for Smith Minor, who quite forgot that he was returning to what he termed the "lunatic asylum." They were speeding along and were just about to overtake a large and luxurious limousine when they had to drop back as a car was approaching.

A Scrap with the "Sinai Twins."

Suddenly at the broad back window of the limousine two faces appeared, stared a little and then deliberately and without further ado proceeded to "pull noses" at the Dragon.
"Great Scott!" exclaimed Smith Minor. "Moses and Aaron!"

'What on earth are you talking about?" demanded his father.

"Moses and Aaron, or the 'Sinai Twins'-or, more officially, Griffstein Major and Griffstein Minor. Two kids in old Ikey's House. They simply ooze oof and are always swanking about their fleet of cars. I suppose this is the eighth car, driven by the third chauffeur. They are awful ticks. Their pater is always coming up during term, and takes the twins out to enormous grubs at the 'White Elephant.' Look! They are telling that big stiff of a chauffeur to get a move on. Game for a scrap, pater?"

"Of course," said the pater, who, to do him justice,

was always ready for a scrap. "Carry on, but don't forget that I have to drive the car home to-morrow."

"You needn't worry. I won't let the old Dragon come to any harm. Too fond of her for that—and of

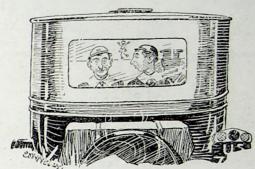
you, too!" said the boy with a grin,
The big car shot ahead, and the affluent twins jibbered and jeered to their hearts' content. Smith Minor writhed, but continued to concentrate all his energies on getting in front of it. It was a much bigger job than it seemed, for the road which winds along the Severn's banks is not constructed for road racing. Again and again they had to fall back for a bend or approaching traffic just as they were about to overtake, and once they lost quite a number of minutes at a level-crossing, over which the other car had just

managed to slip. It seemed pretty hopeless, but Smith Minor said that if they could make good time until they got on to the main road they might even yet pick them up and get a chance of passing on one of the long, straight

It was as he had hoped. Just where the massed telegraph wires came into view, where the second-class road joins the arterial road, they saw the top of the

limousine as it slowed for the cross-roads.
"Now we've got 'em!" chortled Smith Minor, and as soon as he rounded the corner he set after the car and started a ding-dong battle somewhere in the "middle fifties."

He could see his rivals egging on the chauffeur to greater efforts. The big car swayed and seemed to roll on the slightest bends, but the driver was a sportsman, for he kept well to his side and did not attempt to baulk the other car.



"The affluent twins jibbered and jeered to their hearts' content.'

A great chance came and Smith Minor took it. He had been nursing the Dragon with the utmost care, and now there appeared a long stretch of road, with no sign of approaching traffic.

Steadily he pressed down the accelerator still farther, the needle swung a few more miles towards the "sixty" mark, and the Dragon crept up first to the back wheels, then slowly to the level of the driver's seat. The twins were silent then; the chauffeur was leaning forward, driving grimly. The big car was making a thundering noise as it rushed through the air. Neck and neck they raced along the straight, level stretch. Then the road began to rise, and Smith Minor called for one last effort. Down he went to third. The Dragon responded gamely and shot ahead with what sounded like a whine of triumph.

The race was won. Both cars had then to slow down, for in front of them loomed the outskirts of a large country town, and away on a hill could be seen the school chapel and some of the boarding houses.

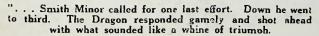
"Well done, my lad," said the pater. "But I think I have had enough for to-day. I should think you could do with a feed, couldn't you? What time is lock-up?

"Oh, I haven't to be in till nine, so there is plenty of time, thanks, pater."

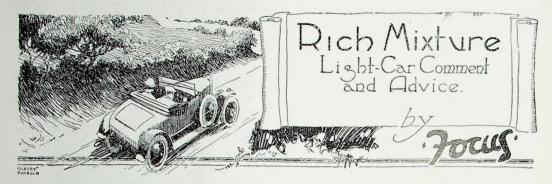
They drove up to an old inn and through a cobbled

"If you will go and see about the doings, I'll have the old bus filled up and washed for you for to-morrow—and, dad, what price 'Young Segrave'?"

"The toast of the evening, my boy."







Out of Late.

Is it not time that the red triangle, painted or mounted on the back of cars, was allowed to lapse? There are few cars now without f.w.b. and one expects quick stopping power as a matter of course. Doubtless, the new owner likes to see the decoration on the rear of his bus, but nowadays one might as well hang out an indication that the car has an engine.

The sign served its purpose when f.w.b.s were a novelty, but, like the word "motor" in motorbus, it has become superfluous. Its adoption on motorcycles beats me altogether, for motorcycles have been fitted with brakes on both wheels since the year dot.

On the Move.

To the keen motorist the atmosphere at present is electrical. There never was a time when the industry was so full of interest. On every side, look where you will, something new is to be seen, and those "prophets" who, a year or two ago, croaked of finality must feel extremely foolish.

Developments are, perhaps, most striking among vehicles which cannot be classed as light cars, but even the owner of a tug can admire an Atlantic leviathan, and although a man cannot buy a large car he may extract much enjoyment by following the trend of design among the more luxurious and powerful models. Moreover, he may hope that ultimately some of the new features will gravitate to the smaller vehicles and so come within the capacity of his purse.

The Small Six.

THE evolution of the six-cylinder and the straight-eight are certainly sufficient to awaken interest. Shall we ever see them supplied to us at a price that the average man can afford? Who knows? Competition is so keen nowadays that some manufacturer is bound to make a bid for the market by offering a model of one or the other type at a popular figure; and once the lead is established others will follow.

In this connection it is fervently to be hoped that English manufacturers will not again allow foreign competition to get in ahead of them as they did with the 1,000 c.c. car. Continental firms are trained to the last hair for jumping off the mark where potential custom is discerned and their activities at present need to be closely watched. Their vast experience in road racing gives them a formidable advantage, and among the leading firms

anything analogous to the English manufacturers' attitude of lofty disdain to the little car finds no place whatever.

French manufacturers, like all people of that nationality, are intensely practical, and if they can see a return for their large expenditure on racing models by cashing their experience on a wide market, they will not hesitate to do so. IWe confidently expect to see a small six of French manufacture at the Show.—ED.]

A New Magneto Trouble--

 $E_{
m of\ my}^{
m N}$ route to town a month or so ago the engine $E_{
m of\ my}^{
m N}$ Singer Junior after a few preliminary splutters, which seemed to indicate a shortage of petrol, ceased work. I examined the carburetter, and finding everything in perfect order turned my attention to the magneto. Here the trouble was at once apparent in the shape of a broken contactbreaker spring. Not having a spare and being nowhere near a garage, I adopted the old scheme of using a piece of rubber tubing from my windscreen wiper squeezed between the rocker arm and the fixed contact boss. By this means I completed my journey in a perfectly satisfactory manner; in fact, I could detect no difference whatever in the performance of the engine. Naturally, however, I took immediate steps to get a new spring and, when doing so, learned something which I certainly did not know before.

Ionization.

I WAS told that broken contact-breaker springs are becoming a fairly frequent source of trouble to magneto makers nowadays, and that the cause of the breakages has been traced to the ionization of the air within the contact-breaker casing. Ionization is an electrical phenomenon which, in the case of a magneto, is brought about by the very high speed at which the instrument works on a modern engine.

It has the effect of causing the steel spring of the contact breaker to rust, with the result that it weakens and ultimately breaks. Two methods have been discovered by which the trouble can be overcome; one is to electro-plate the springs and the other to coat the ordinary blued steel spring

with grease.

A Wiper Blade de Luxe.

A FEW weeks ago I promised to give my opinion, after a suitable test, of a patent windscreen wiper squeegee which I ran to earth at a big accessory store. It has proved to be an out-

standing success during weather which has given me every opportunity to appreciate or to decry it. In heavy rain, a Scotch mist or an autumn fog it keeps the glass absolutely clear, after several weeks' use it shows no sign of perishing and the glass is not scratched or impaired in any way.

This squeegee is called Christin's safety windshield wiper blade, it hails from Detroit, is marketed in this country by Wilcot (Parent) Co., Ltd., Morley House, Regent Street, London, W.1, and can be had from most accessory houses for 2s. 6d. So much do I treasure the one I have fitted that I would cheerfully pay a guinea for a duplicate if it gets lost or stolen and the price goes up in the meantine.

The Brighton Road.

THE overcrowded state of the Brighton road during certain hours has been responsible for a good deal of talk and quite a lot of ink-spilling of



THE NEW CHIVALRY OF THE ROAD.

The Owner-drivers (in unison): "Entirely my fault,

I'm ofraid!"

late but, judging by a test run which I made not long ago, the conditions—like those of the Southend road, concerning which I had a word to say recently—are not so bad as some folk would have us believe.

I purposely avoided the rush hours, leaving London about 11.30 a.m. on Saturday and returning immediately after tea on Sunday—quite long enough at Brighton, for me at any rate—and, apart from the 15 miles or so of narrow and twisty roads south of Handcross, I had no difficulty, and saw only one example of flagrantly bad cutting-in. The outward journey from Hyde Park Corner took two hours, and the return journey half an hour longer.

The route I chose was Brixton, Croydon by-pass, Redhill, Crawley and Handcross, and, on the whole, I had no cause for complaint; but, let me mention once again, I dodged the rush hours.

Truly Rural.

RURAL England remains, but rustic England is dead. On a road near a quiet little Thamesside village I came across a company of cinema artistes enacting a portion of a story. The particular episode represented a motor pursuit, a four-seater and a very modern Morgan being the vehicles used. The company were attired to represent the "natives"—the women in old-fashioned sun-bonnets and simple garb and the men in smocks. They made an idyllic picture, but, unfortunately, the illusion was marred by a small crowd

of girls and women with sleeveless, barely kneelength frocks, flesh-coloured stockings and smart shoes who were being exhorted not to spoil the effect by getting in range of the camera. Who were these who regarded the show in the light of a comic opera? Townspeople who had come in cars? Not a bit! They were the ordinary inhabitants of the neighbouring village in their Sunday best!

The truth is that, nowadays, if a London actress wishes to dress as a country maiden she needs merely to wear her usual clothes—or, perhaps, to take a few of them off!

Our Village Maidens.

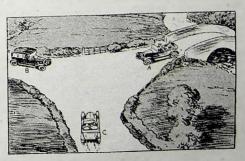
I AVE you noticed, by the way, what an attractive young person the village maiden is becoming? Her healthy complexion, rounded limbs and muscular physique do justice to present-day fashions and produce an ensemble which often is most appealing. And, by way of contrast, what a pathetic spectacle is her counterpart in the industrial districts of the country.

Perhaps it is wrong in one whose bachelor days are long past, but I must admit that if there is one common sight along our highways and by-ways that appeals above all others to me as being worthy of admiration it is the village maiden of

In Scotland I give pride of place to the village kiddies. If you keep your eyes open in the Highlands you can see, during the course of a day's run, a hundred little children who, with their flaxen hair, blue eyes and bonny little bodies, surely have no counterpart in any other quarter of the globe.

A Peculiarly Dangerous Spot.

PEADERS who care to exercise their brains on solving traffic problems might study the subjoined sketch showing a comparatively simple



An uncommon road intersection, whic's "Focus" describes as peculiarly dangerous.

road intersection which yet is one of the most dangerous that I know. It exists in the Eastern Counties, and I have seen smashes occur despite drivers being in full view of each other. There are no houses and the hedges are low.

It will be seen that cars emerging from the bridge and proceeding towards B are directly in the path of cars coming from C and turning towards the bridge. A car coming from the bridge towards C masks cars coming from the bridge towards B, and this has produced triple collisions.

Another danger arises through cars coming from B to C. The "inevitability" of smashes here is uncanny, and even a man on point duty cannot prevent them. There are no white lines, as these would only make confusion worse confounded. It would be interesting to have the views of readers concerning the right of way at this peculiarly dangerous spot.

When Building.

A CCOMPANYING a friend on an inspection of some new villas being erected in a London suburb. I was interested in the manner in which garages had been included in the scheme. Mostly, they stood detached beside the house, but in a number of cases they were part of the main building, yet with these latter there was only one instance of a door giving direct access to the house.

This is a little point, but it means much on a winter's night, when it is a real boon to be able to pop into the garage without leaving cover. Builders are not prone to think of these things until too late, and car owners contemplating the erection of a house would be well advised to insist on such a facility in the design.

No Reprisais.

OBSERVATION this year confirms me in the belief that there is a type of driver now on the road who deliberately exploits people's fear of a smash in order to cut-in and maintain a high average. Out of a thousand car owners, 999 will brake hard when seeing an approaching fool cut-in rather than maintain their right of way and perhaps be involved in a smash.

Unfortunately, there is a type of mentality that is quick to perceive and take advantage of this instinct for safety in others, and so the road hog

goes merrily on his way avoiding the punishment that he richly deserves. It would be no exaggeration to say that if every driver on his right side of the road continued his course unwaveringly in the face of cutting-in the roads would be strewn with the débris of wrecked cars.

Troublesome Symptoms.

CARBURATION is a fickle business: witness the experience of a friend of mine who covered roughly 10,000 miles in a 1927 model of a certain make without having once to touch the carbureter; in fact, he confessed to me that he was not at all sure where the filter lived.

About six weeks ago he took delivery of a later model of the same make, and he has now had to dismantle his carburetter no fewer than seven times—not merely to clean the gauze filter or clear the jets, mark you, but to remove everything removable and clean every part thoroughly in the forlorn hope of curing symptoms all the while suggestive of a choked jet. At first the cause of the trouble was water; now tiny particles of dirt mysteriously find their way into the main jet chamber. He asks: how can they possibly get past the gauze? And echo answers: how?

Brighter Cars.

BRIGHTER cars" is rapidly becoming a popular slogan with motorists—witness the increase of striking body colour schemes. It is no secret that one model of a particular make—of sterling worth in itself, be it said—obtained a firm hold on the public largely because of its pleasing effect on the eye. The firm in question is determined to make the best of the "brighter cars" movement, and some very attractive colour schemes are now on the tapis.



A CORNER
OF SUSSEX.

Sussex, perhaps the most popular of all counties amongst motoring pleasure-seekers, provides a very wide variety of interest. A little-known spot, Bosham, near Chichester, is shown.



Running Costs.

VERY healthy sign in A connection with the various new and improved models with which we have been dealing during the past few weeks is that they show no signs of the "cheap-at-all-costs" policy which a year or two ago threatened to flood the market with jerry-built light cars. The new models may rightly be described as having been designed to fill a definite and clearly defined gap without regard

for competition either from larger or smaller cars. Their makers have set out to market models which will carry the load of a medium weight at light-car cost and the appearance, performance and individuality of which will allow buyers to feel genuine pride in owning them. Above all, the new models, like many other genuine light cars, are honestly built to give honest service. Buyers of them will find that after a season's use costly repairs and renovations will not be needed. These form the almost inevitable sequel to buying a car which is built down to a price, and the bills to be met after a year on the road may amount, with licence and insurance renewals, to £40 or more. This is a fact which everyone should bear in mind and which those who buy by deferred payments should never allow to escape them. The first cost of any car is not the last cost, nor is it the most important. It is a much better plan to pay more in the first instance and less for running costs; the former is fixed, but the latter are cumulative.

Motor Sport.

A CONTRIBUTOR in this issue asks what is wrong with motor sport. In our opinion almost everything is wrong with it, whilst there is little or no chance of any of the wrongs being righted. First, Brooklands must be considered. Its shortcomings are well known and not all of them could be overcome, however much money, enthusiasm and zeal were applied to popularizing track events. Brooklands suffers from its geographical position both from the point of view of access and the attitude of local residents, whilst the design of the track itself is a pronounced hindrance to the holding of events of a truly "popular" character.

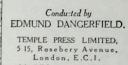
Sand-racing has its adherents, but does not make the appeal that it might. If trade-entered



"THE LIGHT CAR AND CYCLECAR" WAS FOUNDED IN 1912 TO CATER FOR THE NEEDS OF USERS AND POTENTIAL PURCHASERS OF LIGHT CARS AND CYCLECARS, AND IT HAS CONSISTENTLY ENCOUR AGED THE DEVELOPMENT OF THE ECONOMICAL MOTORING MOVEMENT FOR OVER FOURTEEN YEARS,

NO CAR WITH AN ENGINE CAPACITY EXCEEDING 1,500 C.C. (1) LITRES) COMES WITHIN THE SCOPE OF THIS JOURNAL, THAT CAPACITY BEING GENERALLY RECOGNISED AND ACCEPTED AS THE LIMIT FOR A LIGHT CAR ENGINE.

Topics of the Day



London, E.C.I.
Inland Telegrams - Pressimus,
Holb, London."
Cables - "Pressimus, London."
Telephone - Clerkenwell 6000
(7 libes).

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were permitted cars participate we believe that sand meetings would become much more popular. The banning of trade entries, except for a very limited number of events, has deterred manufacturers from building racing cars, which accounts, of course, for Saltburn and Shelsley Walsh receiving so little trade support. Continental road races lack British entries for the same renson, whilst events like the British Grand Prix and

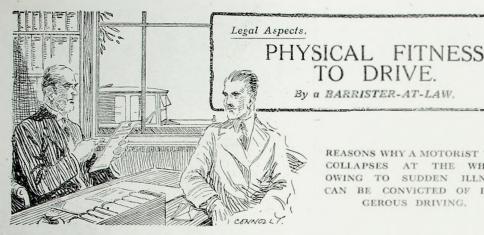
the 200-Mile Race would have much more representative entry lists if the speed trials and hill-climbs of a few years ago were not now taboo.

The whole outlook for motor sport is, in our view, far from promising. It would be given a new lease of life only by the building of special racing tracks in different parts of the country and by the lifting of the trade ban. Neither eventuality is at all likely.

Autumn Dangers.

of autumn marks also the beginning of a period when special care is necessary on the roads. In the early part of the year many thousands of new motorists made their appearance on our highways, and these same drivers will shortly be gaining their first experience of winter conditions. True, our so-called summer has given them ample opportunity to get accustomed to wet-weather driving, whilst the disgracefully slippery nature of some of the new "wonder" roads has taught them how treacherous a greasy surface can be, but at the same time they have come to regard the average tarred road as reasonably safe when wet, and herein lies the danger.

Fallen leaves, unless absolutely dry, can turn the safest of roads into veritable skating rinks, and to take a corner fast or to brake hard—particularly if no front-wheel brakes are fitted—is to court disaster if the road is covered with them. Then, again, it will not be long before frosty mornings and misty nights become common, and both call for more than ordinary care. Forewarned is forearmed, and we therefore draw attention to these dangers first, so that new motorists, being aware of them, can exercise particular caution and, secondly, as a reminder to old hands who, in forgetful moments, might be caught off their guard.



REASONS WHY A MOTORIST WHO COLLAPSES AT THE WHEEL, SUDDEN OWING TO ILLNESS. CAN BE CONVICTED OF GEROUS DRIVING.

N a recent case tried at Manchester an interesting Aquestion arose as to whether a driver who was suddenly incapacitated by illness could be convicted of driving to the danger of the public. The learned magistrate decided that he ought to be convicted, and, while this decision at first sight may seem unreasonable or unfair or contrary to the spirit of the law, it does appear after careful consideration that the magistrate was right in law and that his decision was not so unreasonable as it appears.

Section 1 of the Motor Car Act, 1903, makes it an offence "if any person drives a motorcar on the public highway recklessly or negligently or at a speed or in a manner which is dangerous to the public having regard to all the circumstances of the case." It is noteworthy that with regard to the last two offencesnamely, driving at a speed dangerous to the public or in a manner dangerous to the public-no word implying intention or knowledge appears in the section.

On the other hand, in the section of the same Act which makes it an offence not to stop after an accident the words are "if any person knowingly acts in contravention of this section" Again, under the Roads Act, 1920, the section which makes it an offence to have an obscured number-plate contains an express saving clause, excusing anyone who can prove that he has taken all reasonable steps to prevent the plate being obscured.

"Wilful Acts."

Under the Offences Against the Person Act, 1861, the section, which makes it an offence, in certain circumstances, for a driver to cause bodily harm to any person, contains the words, "by wanton or furious driving or other wilful misconduct or wilful neglect."

In fact, a consideration of the various statutes dealing with criminal offences shows that in nearly all of them the act forbidden must be done "unlawfully," "maliciously," "wantonly," "wilfully," "with intent to defraud" or "knowingly" in order to constitute an offence, and in the few cases where these words do not occur it is usually not necessary for the prosecution

to prove such knowledge or intent.

To take another example, the regulations as to lights on motorcars are contained in the Locomotives on Highways Act, 1896, and the Motor Car Order, 1904. No words are contained in these provisions making knowledge necessary to complete the offence if the regulations are infringed, and, in fact, it is no defence to a charge of this sort to prove absence of knowledge-e.g., that a rear lamp was out.

In these circumstances, while a motorist who injures or kills anyone as a result of momentary illness could not be convicted of the serious offences of manslaughter, for which gross negligence or recklessness is required, or for causing bodily harm, because the words of the statute mentioned above expressly refer to wilful or

wanton driving, there is no legal reason why he should not be convicted of dangerous driving. The Motor Car Act forbids "driving in a manner dangerous to the public," whether knowingly or intentionally or not, and in these circumstances anyone who drives in that manner, for whatever reason, is liable to conviction.

If this is considered unfair, it must be remembered that the court has a discretion as to what penalty it imposes and may, in proper circumstances, dispense with it altogether. Doubtless in a case where a de-fendant satisfied the magistrate that the offence was caused solely by an attack of giddiness or the like he would not suffer very serious, if any, consequences.

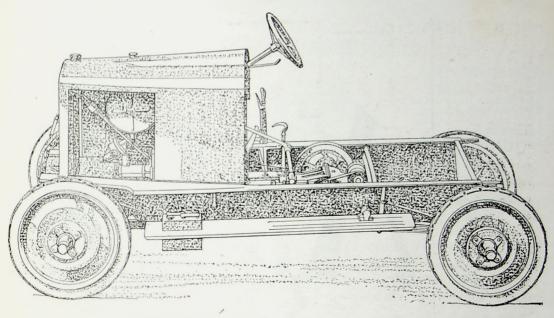
On the other hand, if every motorist, who had an accident, could successfully plead as an excuse that he became momentarily ill, it might often be very difficult to disprove such a plea, and the general public would suffer in consequence.

Dangerous Driving.

The curious feature of the case is this: In the ordinary way it is harder to establish criminal than civil liability, but in this instance the reverse is the case. A driver, who knocks a man down in the circumstances already described could properly be convicted of the criminal offence of dangerous driving, but he would not be liable to a civil action for damages for the reason that merely to injure someone or something on the road does not give a cause of action to the in-jured party or the owner of the injured property of He must prove either that the injury was initself. flicted wilfully or as the result of negligence, and unless he can do this he must bear his own loss.

After all, this does not seem unfair, for there is no logical or moral reason why, in the case of an inevitable accident, one party should suffer any more than another, and while it is hard on the party who does suffer this is no reason why the other innocent party should reimburse him. To decide otherwise would be to make every owner of a motorcar absolutely liable for any accident that occurred merely through the presence of his car on the road, which would be absurd on the face of it.

In the case under consideration, then, it is quite clear that the accident arose neither through wilful misconduct nor through negligence, and as a result no civil liability can attach to the driver. It might be different if a man knew that he was very likely to lose control of the car because he was continually subject to fainting fits, and a judge or jury might hold that it was negligent to drive a car at all with that knowledge. In default, however, of such circumstances a driver who injures someone purely as the result of momentary illness of one kind or another will not be liable to him in law for the resulting damage, although he may technically be guilty of the criminal offence of dangerous driving.



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CYCLECAR COMMENTS.

By SHACKLEPIN.

CYCLECARS IN GER-MANY-A DESCRIP-TION OF THE HANO-MAG, WHICH SELLS FOR £100-WHAT IS THE IDEAL TYPE OF CYCLECAR?

To British eyes the Hanomag must seem very unusual in appearance. The singlecylinder power unit is shown on the left.

WHAT is claimed to be the cheapest and most popular cyclecar in Germany is the Hanomag, a little two-seater of unique appearance which, despite its smallness, has taken part in practically all the reliability trials held in Germany during the past few years. In these it has been so consistently successful that its popularity in that country, where it takes the place of our three-wheelers, appears to be well merited, and the following details of the machine, which have been sent to me by a correspondent in Germany, will be found very interesting.

The general layout of this miniature car is wholly unconventional. In outward appearance front and back are of identical shape, the seats being on the centre-line between rear and front axles. The engine unit is mounted behind the seats and just in front of the rear axle, which has no differential; it is driven by an enclosed chain and both wheels are keyed to it.

The single-cylinder engine is water-cooled and works on the four-stroke principle. It has a piston displacement of only 502 c.c., the bore being 80 mm. and the stroke 100 mm., whilst the compression ratio is 6 to 1. The valves, which are in the head, are operated by means of push rods and levers from a short camshaft in the timing case, the cover of which carries the Bosch force-feed lubricator and the fan pulley shaft.

Transverse mounting, as in motorcycle practice, is adopted for the power unit, of which the vertical cylinder and crankcase proper are on the left. The timing-case cover forms the left-hand side of the unit, the crankcase being elongated towards the right and arranged with an interior division in which are housed the flywheel and dryplate clutch. A conical casing containing the three-speed gear of normal design is bolted direct to the crankcase and the driving sprocket is fitted on the extreme right-hand side of the unit.

The crankshaft of the engine runs in ball bearings and the lubrication, as already stated, is effected by a Bosch plunger pump which draws fresh oil from a reservoir beneath the crankcase. Magneto ignition is used at present, but the new models will probably be equipped with battery and coil ignition. In the existing models a dynamo is incorporated with the magneto.

The engine, which develops about 10 h.p. at 2,600 r.p.m., is started by means of a lever and chain, the former projecting into the driving compartment beneath and between the two seats, whilst the chain is partially rolled up on a small shaft projecting from the timing case, where a ratchet arrangement engages with a gear on the crankshaft.

The rear axle is supported by two radius rods pivoted on the longitudinal members of the frame and having their rear ends held by helical springs. Lateral stresses are taken up by special sliding blocks mounted on the rear extremities of the frame, the ends of the radius rods rubbing against them; in this way also a certain amount of shock-damping is obtained. There is no front axle, the wheels being held by two sets of transverse springs.

The controls of the Hanomag are similar to those of other cars, whilst the seating accommodation, for so small a car, is said to be surprisingly commodious and riding comfort quite good, even over rough roads, because the seats, as already mentioned, are on the centre-line of the

chassis, where movement is always smallest. The car is, apparently, not very speedy, the standard model being claimed to do 40 m.p.h., but the average German owner, I understand, is quite content with that.

What is the ideal type of cyclecar? This is a question I was asked the other day by a designer friend of mine, who has had many years' experience in cyclecar building and who has produced some very popuiar and successful machines. Recently, however, he has been "marking time" and trying to find out what kind of cyclecar the public really wants. Should it have three wheels or four? Should the engine be in the front or at the rear? What is the most suitable form of transmission?

He asked my opinion, and I suggested that it was a "toss-up" between two distinctly separate layouts. One, which I am sure would prove popular, would be what may be described broadly as a four-wheeled Morgan. That is, adhere to the Aero Morgan design as closely as Mr. Morgan's ideas will allow, but use two rear wheels. No doubt a good deal of general modification would be necessary, but I am sure that the resulting vehicle, if really well built, would prove very popular.

Another cyclecar layout well worthy of very serious consideration, would be an engine-at-the-rear type, using, say, an American X motorcycle combined engine and gearbox unit, with just a single short chain driving the rear axle, which, with a fairly narrow track, could quite well be of the "diff-less" type. There is a great deal to be said in favour of a layout of this kind; it is simple and compact, there are no trausmission difficulties to overcome and the weight is in the right place.

It would be interesting to learn

It would be interesting to learn the views of other cyclecar enthusiasts upon this matter.

THE B.A.R.C. MEETING.

"THE finest scrap I have ever seen at the track" was the way one Brooklands habitue summed up a ducl which will long be remembered by those who were present at the postponed August Bank Holiday meeting of the B.A.R.C., run off on Saturday last. He referred to a thrilling 50-mile struggle between H. W. Purdy, driving a 1,495 c.c. supercharged Thomas Special, and J. R. Cobb at the wheel of a Vauxhall of over twice the cubic capacity.

It was the last race of the day—a 50-mile handicap—and 13 cars started, but the rest of the field received but scant attention from the spectators after the first few laps, all eyes being centred on Purdy and Cobb. So much were the spectators taken up by the neck-andneck efforts of these two drivers that F. Hallam, who won the race by a com-fortable margin in a 1,496 c.c. Alvis, after a magnificent run, was almost forgotten when he pulled in to the finishing straight at the end of the race. The congratulations of the enthusiastic crowd were showered on Purdy, who, after coming round the Byfleet banking level with Cobb, crossed the finishing line a bonnet's length ahead.

Light Cars Do Well.

This result naturally delighted smallcar cuthusiasts and proved a fitting close to an afternoon's sport in which light cars figured with conspicuous success

Of the eight races run off, light cars took part in seven and gained six first places, whilst in three races first, second and third places fell to small cars-a truly excellent performance.

The weather was as good as the rac-



H. W. Purdy, who came second in the 50-mile Handicap at Brooklands, averaging 113.19 m.p.h.

then took the lead and crossed the finishing line hotly pursued by Duller and E. K. Rayson (2-litre Bugatti), a matter of only three lengths or so separating the cars. Eyston's average speed was 101.33 m.p.h.

In the second race, the Twenty-ninth 90 m.p.h. Short Handicap (6½ miles) the field, with the exception of J. Crickmay (Morris-Cowley) was composed entirely of light ears. Crickmay was the limit man with 1 min. 5 secs., whilst P. L. Densham (Bugatti) was scratch. R. A. Railton (1,074 c.c. Riley), who had received a handicap of 48 secs., was well ahead at the end of the first lap, Crickmay and F. H. Boyd-Carpenter (Austin Seven) following in close com-pany, with V. Gillow (Riley) leading the rest of the field.

In the second lap Railton increased

The World of Sport.

RACING

A SUCCESSFUL DAY FOR LIGHT CL 93.21 M.P.H. AND BEAT-

his lead considerably, whilst Boyd-Carpenter and Gillow got into second and third places respectively. Railton mainthird places respectively. Railton maintained his lead and crossed the finishing line a mile and a half ahead, Boyd-Carpenter finishing four fifths of a second in front of Gillow. This race, incidentally, was for its class the fastest ever run at Brooklands. Railton's average was 91.37 m.p.h., and he was lapping at 99 m.p.h.—a remarkable performance. The next race produced no light cars. The next race produced no light cars and was won by J. R. Cobb.

> Incidents at Brooklands: (Above) H. W. f (Vauxhall) travelling at well over 110 m.p. (Left) Lining up for the same race. (Red-Carpenter (Austin) in the sixth race. Carpenter (Austin), S. E. McGowan (G.N.), F. Marsh-G. N.) getting off the mark.

ing, for, despite the heavy rain in the morning, the track was dry and the sun was shining when the programme was about to start.

In the first race of the day, the Fiftyfourth 100 m.p.h. Short Handicap (61/2 miles) there were eight starters, of which two were light cars. George Duller (Bentley) was the limit man with 27 sees, whilst the two light cars hopes, Malcolm Campbell and G. E. T. Eyston, both driving supercharged Bugattis, received 24 sees. and 8 sees. respectively

Campbell soon caught Duller, but on the last lap had to retire with slight mechanical trouble. Eyston, who in the meantime had slid into second place,

CK AND SAND.

T BROOKLANDS.—MORGAN ACHIEVES ECARS AT SOUTHPORT.

A very exciting finish was witnessed in the Twenty-ninth 90 m.p.h. Long Handicap, the length of which was 9½ miles. F. H. Boyd-Carpenter (Austin Seven) was the limit man, and he made fine use of his 1 min, 30 sees, start, for on completing the first lap he was well over a mile ahead of the second man, J. D. Benjafield, in a supercharged Salmson. P. L. Densham (Bugatti) lay in third place with R. G. Watney (4,393 c.c. Stutz) following. In the next lap Densham passed Benjafield, and these



F. Hallam, who drove a 1,496 c.c. Alvis to victory in the 50-mile Handicap at Brooklands.

positions were maintained until the finish, Densham making an excellent effort to catch Boyd-Carpenter, but failing to do so by two-fifths of a second. Boyd-Carpenter's average speed was 78.38 m.p.h.

The fifth race, the Fifty-Third 100 m.p.h. Long Handicap (9½ miles) produced nine starters. Passing the Members' Bridge after completing one lap the limit man, R. Watney (Stutz), was still well ahead, with George Duller (Bentley) and J. Dunfee (Ballot) lying second and third. Watney maintained his lead for another lap, but Dunfee got into second place closely followed by G. E. T. Eyston in a ½ litre supercharged Bugatti. Watney, however, could not retain his position and fell considerably behind the leaders, then Eyston, Ray-

mond Mays (Mercédès) and Dunfes, who crossed the line in the order named. Eyston's average speed was 111.24 m.p.h.

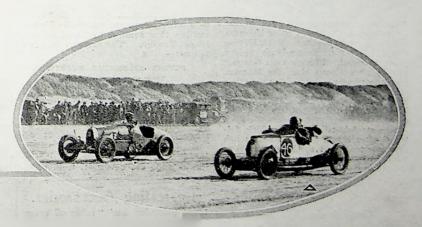
Considerable interest in the next race—for the Brooklands President's Gold Plate (9½ miles)—was taken in the 746 c.c. two-cylinder Avon-Jap, handled by Kaye Don. Don was the limit man with 1 min. 29 secs., whilst Boyd-Carbandicapped, was given 1 min. 7 secs. The rest of the field, with the exception of R. F. Oats (2-litre O.M.), was composed entirely of light cars. Kaye Don maintained his lead for nearly two laps and was then overhauled by V. Gillow (Riley), Boyd-Carpenter and F. Hallam (Alvis) being third and fourth. Gillow maintained his lead to the end, but by a fine effort Malcolm Campbell (Talbot) had made his way into second place. H. N. Thompson (1,372 c.c. H.N.T.) picked up two places and came in third. The winner's average speed was \$9.43 m.p.h.

Carburetter Trouble.

There were only six entries for the Thirty-niuth Lightning Long Handicap (9½ miles) and of these H. W. Purdy (supercharged Thomas-Special) was the only light car driver. Purdy started a hot favourite, but it was noticed that his engine was missing on his first lap, and his chances were spoilt by carburctter trouble. The race was eventually won by Malcolm Campbell (2-litre Bugatti), Cobb (Leyland-Thomas) and G. Duller (Bentley) taking second and third places.

In the last race of the day, the Fifty-Mile Handicap, there were 13 starters, J. S. H. Wilson (Austin Seven) re-

the Thomas Special (No. 3) and J. R. Cobb their wonderful duel in the 50-mile handicap. D. Benjafield (Salmson) passing F. H. Eoyduthport beach: (Below right) P. Stephenson shall Special) and E. L. F. Mucklow (Frazer-F. Mucklow (Frazer-Nash-G.N.) and G. Lane att speed.



ceiving 14 mins. 34 secs., whilst at the other end of the scale was Purdy, who fortunately had been able to rectify his carburetter trouble, and J. R. Cobb (3-litre Vauxhall), both with 1 min, 57 secs. start, the scratch man being Kaye Don driving a 2-litre supercharged Sunbeam.

driving a 2-litre supercharged Sunbeam.
The Austin was completing its first lap as F. Hallam (1,496 c.c. 4-seater Alvis) and A. V. Wilkinson (1,087 c.c. Salmson) started. A. Whale (Calthorpe) was the next man off, but he retired after completing the first three laps. Then came a batch of four cars, composed of two supercharged Salmsons, driven by George Newman and J. D. Benjafield, the supercharged Felix "Nanette" in the hands of F. Scriven

and R. F. Oats's 2-litre O.M. Of these Denjafield made the best get-away. Rayson (2-litre Bugatti) and George Duller (3-litre Bentley) followed at intervals.

Pardy and Cobb then got away together, the Vauxhall taking a short lead which was quickly lost. Then began the epic struggle mentioned at the beginning of this report, the slug-like (in appearance only!) Thomas-Special forming a striking contrast to the Vauxhall. Finally, as the first man thad completed six laps Kaye Don was started.

In his seventh lap Hallam passed

Wilson and took the lead. George Duller pulled into the finishing straight and retired after four laps. The Alvis was holding its lead well at the end of ten circuits, the ear lapping at some-thing like 85 m.p.h., whilst next in order came Wilson, Wilkinson and Newman, Wilkinson taking second place a

lap later.

By the twelfth lap Purdy and Cobb had drawn up behind the three leaders and were continuing their struggle in a magnificent fashion, first one car, then the other, gaining a slight temporary advantage.

On the fifteenth lap Coob ran into

second place, a few feet separating him from Purdy, Newman and Kaye Don lying next in order. The Alvis, however, had too great a lead to be caught and came home a comfortable winner. Purdy and Cobb maintained a wonderful fight for second place and came off the Byficet hanking dead level on their last lap, but Purdy, making a supreme effort, crossed the finishing line a bonnet's length in front of Cobb, both drivers being loudly cheered. Hallam averaged 84.99 m.p.h., whilst Purdy and Cobb averaged 113.19 m.p.h. Fourth and fifth places were taken by Kaye Don and Wilkinson.

Morgan's Remarkable Speed at Southport.

COMPETITORS, officials and the enormous number of spectators who were present were all agreed on one thing after the seventh Southport sand meeting-that it had been in every way a record one.

A new course was employed some distance farther away from Southport town than that usually used, and it proved almost perfect; the organization, too, was excellent throughout.

The morning started with flying kilo-metre events, in which each driver had two runs, the fastest of which counted for all classes. R. T. Horton's amazing Morgan again distinguished itself, clocking 24 sees, which equals a speed of 93.21 m.p.h.—a figure good enough to beat the fastest sidecar by over 5 m.p.h.

Frazer-Nash Successes

E. L. F. Mucklow (Frazer-Nash) put up the best time in the 1,100 c.c. car classes, although he was 4 secs. slower than Horton's Morgan, whilst M. B. Joynson (Amilear) and P. Stephenson (Austin) had great struggles in the novice classes, the former using his extra 350 c.c. to good advantage, B. H. Davenport's 1,496 c.c. Frazer-Nash Spider shone as usual, although even this car was 13 secs. slower than the Morgan. Davenport had not entered for the other class, but if he had done so he might have been second, as only H. F. Clay's 2,996 c.c. Vauxhall put up a better speed.

The straight-mile events, which fol-lowed after lunch, produced very much the same results as the kilometre; they were, bowever, run off as a race with the whole class starting together, which

was certainly more interesting for the spectators. Mucklow did very well, but Davenport did not figure in the results.

R. T. Horton, S. A. Keay and S. Brownbill joined their Morgans in battle with the sidecars in the 10-mile sidecar race. Horton was leading at the first corner, but lost ground owing to being unable to negotiate this as quickly as C. Edwards (Brough Superior), who was leading the side-cars; on the straights, however, his enormous speed gave him back the lead until the third lap, when he slowed considerably, his engine not sounding nearly so happy as it had done at first. On the fifth lap S. A. Keny (Morgan) jumped into second place, only to drop right back on the next and concluding lap. Horton finally finished fourth in general order, but as one was a 600 c.c. machine he was placed third in the 1,000 c.c. class.

The two big cars, H. Mason's Austro-Daimler and G. J. Jackson's Sunbeam, having collided at the first corner in the 10-mile race, R. Mellor (Frazer-Nash), the only other runner, was flagged off after one lap, thus winning the Dunlop Challenge Trophy. The results are as follow :-

FLYING KILOMETRE EVENTS.

Three-wheeled cyclecars.

Up to 1,100 e.c.—1, R. T. Horton (Morgan), 24 secs. 93.21 m.p.h.; 2, T. A. Rhodes (Morgan), 28 2-5 secs.; 3, C. N. Taylor (Morgan) 30 2-5 secs.

Cars. Cars.

Up to 1,100 c.c., General.—1. E. L. F. Mucklow (Frazor-Nash), 28 accs., 79 89 m.p.h.; 22, F. Marshall (Marshall Special), 31 3-5. secs.; 3, M. B. Joynson (Amilcar), Up to 1,100 c.s., Novice—1. M. B. Joynson (Amilcar), 32 3-5 secs., 68.62 m.p.h.; 2, P. Stephenson (Author), 35 accs.

Up to 1,500 c.s., General.—1, B. H. Davenport (Frazer-Nash), 25 25 secs., 88.07 m.n.h.;

L. L. L. Muchow Drazer-Nash), 28 secs.;

3. R. Mellor (Frazer-Nash), 29 35 secs.

Up to 1,500 c.c. Novice Same placings as in 1,100 c.c. Novice race.

Up to 2,000 c.c., General, Same placings as in 1,500 c.c. General class.

Up to 2,000 c.c., Novice, Same placings as in 1,100 c.c. Novice class.

Up to 3,000 c.c. General, -1, 11. F. Clay (Vauxhall), 25 1.5 secs., 2, M. L. Joynton (Vauxhall), 25 1.5 secs., 2, M. B. Joynton (Amilcar), 32 3.5 secs., 2, M. B. Joynton (Amilcar), 32 3.5 secs., 2, M. B. Joynton (Sunbeant), 25 secs., 2, M. B. Joynton (Sunbeant), 25 secs., 2, M. J. Jockson (Sunbeant), 25 secs., 2, M. J. Jockson (Sunbeant), 25 secs., 2, M. J. Jorkson (Sunbeant), 25 secs., 2, M. J. Jorkson (Sunbeant), 25 secs., 3, R. Vankhall, 25 1.5 secs., 2, M. J. Jockson (Sunbeant), 25 secs., 3, G. Pemberton (Vauxhall), 25 secs., 3, G. Pemberton (Vauxhall), 25 secs., 3, R. Vauxhall, 3,

unlimited c.c., Novice.—1, 11. 1. Clay (Vaux-all;, 23 1-5 secs.

Unimited c.c. Novice.—1, II. F. Clay (Vaux-hall), 23 1-5 secs.

MILE EVENTS.

Cars.

Up to 1,100 c.c., General.—1. E. L. F. Mucklow (Frazer Nash), 55 secs., 67.92 m.p.h.; 2, S. E. McGowan (G.N.), 5, F. Marshall (Marshall Speend).

Un to 1,100 c.c. Novice.—1, M. B. Joynson (Antilcar), 61 secs., 55.02 m.p.h.; 2, P. Stephenson (Austin).

Up to 1,500 c.c., General.—1, E. L. F. Mucklow (Frazer-Nash), 51 5-5 secs., 69.77 m.p.h.; 2, R. Mellor (Frazer-Nash); 5, G. L. Jones (Bugatti).

Up to 1,500 c.c. Novice.—1, P. Stephenson (Austin), 62 1-5 secs., 57.88 m.p.h.; 2, M. D. Joynson (Austin), 62 1-5 secs., 57.88 m.p.h.; 2, M. D. Joynson (Austin), 62 1-5 secs., 57.88 m.p.h.; 2, M. D. Joynson (Austin), 62 1-5 secs., 77.25 m.p.h.; 2, G. J. Jackson (Sunbeam); 5, R. Mellor (Frazer-Nash).

Up to 3,000 c.c., Novice.—1, H. F. Clay (Yauxhall), 46 3-5 secs., 77.25 m.p.h.; 2, G. J. Jackson (Sunbeam); 5, R. Mellor (Frazer-Nash).

Up to 3,000 c.c., Novice.—1, H. F. Clay (Yauxhall), 49 sec., 75.47 m.p.h.; 2, U. Kemith (Austro-Daimler); 3, M. B. Joynson (Amilcar).

Unimited c.c., General.—1, H. F. Clay (Yauxhall), 45 2-5 secs., 79.50 m.p.h.; 2, U. Kemith (Austro-Daimler); 3, M. B. Joynson (Namhall), 45 2-5 secs., 79.50 m.p.h.; 2, U. (Yauxhall), 45 2-5 secs., 79.50 m.p.h

(Amiltar).

(Amiltar).

(Vauxhall), 45 2.5 secs., 79.30 m.p.h.; 2, G. J. Jackson (Sunbsam); 3, 11. Masson Unimited c.c., Novice.—1, 11. F. Clay (Vauthall), 49 1.5 secs., 73.17 m.p.h.; 2, D. Kemish (Austro-Daimler); 3, P. Stephenson (Austin).

Three-wheeled Cyclecars.
General.—1, R. T. Horton (Morgan), 48 secs.,
5 m.p.h.
Novice.—1, T. A. Rhodes (Morgan), 52 4-5
ces., 68.18 m.p.h.

Gre-Solvent De Luxe.

THE Gre-Solvent Co., Junction Works, Leeds, are now marketing a new Gre-Solvent de Luxe which, although having a much finer abrasive than the standard product, is, if anything, more efficient. Gre-Solvent de Luxe is made up in handy flat tins, costing Sd. each, which can be carried quite conveniently in the door pocket of a car, and as only cold water is required for use with the compound it can be used quite conveniently. We have tested the claims made for it and find that they are fully justified; not only is the dirt removed but the skin is left soft and fresh after cleaning. It is claimed that its use benefits the skin, cleanses wounds, prevents sores and

Interesting Accessories.

blood poisoning, and "takes off every-thing but the skin." It is also recommended as an excellent cleanser for aluminium, and when used on golf clubs prevents rusting. The same markets Powder Gre-Solvent. The same concern



The Despatch Rider wrist watch, which is specially designed for motorists.

Watches for Motorists.

A N accompanying illustration shows one of a wide range of wrist watches marketed by The Services Watch Co., Ltd., Leicester. The watch illustrated is known as the Despatch Rider and is possible desired. specially designed for motorists' use, being constructed to withstand the most severe vibrations. It is claimed to be non-magnetic, whilst the case is made proof against damp and dust. It will be noticed that the watch shown has a 24-hour dial, but the conventional 12hour markings can be obtained if desired, either model selling for the very low figure of 15s. Gd. A luminous model, which, however, is available only with the 12-hour dial, can be obtained at 17s. 6d.



"Hullo, Fabric body! Looks a good job slaughters the weight, they tell me . . . silent, too tried one yet?" Certainly, Fabric Bodies are very much to the fore.

At Olympia—we may expect a motor-car body covered with some form of fabric to occupy the place of honour on every coachbuilder's stand in the hall. They will all be described as samples of the newest lightweight fabric coachwork. Certainly they will all be fabric covered. And there the resemblance will end! For covering a body with fabric can never make it a lightweight body, it can never make it a silent body.

It is not the covering but the construction that matters.

To-day there are two well developed systems of lightweight fabric bodywork, and two only. One is the Weymann; the other is the Gordon England. Briefly the Weymann is a flexible body, rigidly mounted; while the Gordon England is a rigid body flexibly mounted. Both these systems are entirely different in principle; both offer very definite advantages; both are fully protected by patents.

That the firm of Gordon England Ltd. should believe in a Gordon England system is only natural, but we would take this opportunity to place on record our admiration for our worthy competitors, Messrs. The Weymann Motor Body Co. Ltd., of 135, Lower Richmond Road, Putney, S.W.15.

We wish only for the opportunity to prove to you that the England Body is the body you should select; but should you decide against us, we do

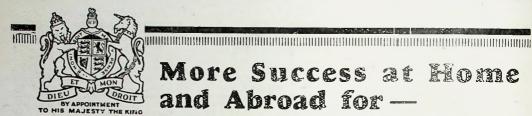
sincerely trust that you will choose a Weymann, the only satisfactory alternative. Every genuine Weymann, like every England Body carries a distinctive licence plate

DANGER! Fabric Bodies at the Motor Show

*A little book describin: Bodywork comes to you free England Ltd., 28, South



England Light Weight if you write to Gordon Molton St. London, W.1



IMPERIAL AIRWAYS LTD.,

"We have pleasure in

confirming that we are

using exclusively your CASTROL 'R' lubricating oil on all of our Napier 'Lion,' Bristol 'Juniter,' and Armstrong Siddeley 'Jaguar'

During the many years we have used this oil it has given consistent

satisfaction in all engines and under all climatic conditions."

Absolute reliability is essential to successful

air transport. Consequently, the use of Wakefield CASTROL by

Messrs. Imperial Airways is significant!

The grade of Wakefield CASTROL recommen-

ded for your needs is shown on the Wakefield

shown on the Wakefield Chart at any leading Garage or Service Station. For your home garage order a drum from your local agent, and on the road buy from the Wakefield Branded Cabinets at 1/6

per quart for CASTROL
"CW" or "AA", 1/8 for
CASTROL "C," and
1/10 for CASTROL'XL"

write:-

engines.

More Success at Home and Abroad for -

Car Grand Light

Boulogne, September 10th, 1927

st Capt. M. Campbell 2nd M. Sabipa 2rd Mr. G.E.T. Eyston BUGATTI

-all used Wakefield CASTROL!

Boillot Cup

Boulogne, September 11th, 1927

M. Lalv 1 st ARIES

Mr. George Newman SALMSON

-both used Wakefield CASTROL!

Surbiton M.C. 150 Miles Race

Brooklands, September 3rd, 1927

1st Mr. J. P. Dingle AUSTIN SEVEN

2nd Capt. Malcolm Campbell 2-litre BUGATTI

-both on CASTROLI

International Class Records

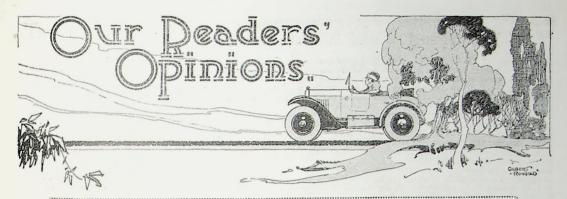
On August 25th, Mr. F. H. Boyd-Carpenter and Mr. K. Chase, driving an Austin Seven and using CASTROL, set up the following records in Class H, subject to confirmation.

500 Kms. 62'60 m.p.h. 3 Hrs. 63 50 m.p.h. 6 Hrs. ... 62.97 m.p.h. 12 Hrs. ... 62.53 m.p.h. 500 Miles 62 69 m.p.h. 1000 Kms. 62 97 m.p.h.

No wonder 239 Leading Motor Manufacturers recommend-

C. C. WAKEFIELD & CO., LTD., All-British Firm, Specialists in Motor Lubrication,

Wakefield House, Cheapside, London, E.C.2 WAKEFIELL Regd



We welcome letiers for publication in these columns, but take no responsibility for the opinions expressed. No anonymous communications will be accepted, but writers may use a nom de plume. To ensure publication in the next issue letters should be addressed to the Editor, "The Light Car and Cyclecar," 5-13. Rosebery Avenue, London, E.C.I, and should reach us on Monday. We reserve the right to make any alterations or deletions which we doem necessary. Please write only on one side of the paper and leave a wide margin.

NEARLY OVER A CLIFF AT 50 M.P.H.! Uncommon Emergencies-Laughable and Otherwise.

The Amusing Side.

I was very amused at the tales of unusual happenings which "Focus" related last week, for although they may seem hair-raising enough at the time, one is nearly always

All Fours.

ready to laugh over such incidents afterwards. I have had a number of close shaves in my time, but most of them

were, unfortunately, common emergen-cies which occur almost every day. But one of the pre-dicaments I have found to be most exasperating is to be helpind a car in a traffic block and to have it back into my irreversible Morgan.

A friend of mine tells an amusing tale of one of the prewar car T.T. races held in the Isle of Man. He was driving a Benz and was engaged in a terrific duel with, I believe, a Rolls-Royce, when the steering gear of the Benz broke. The car crashed through a narrow stone garden gateway, shooting my friend and his passenger over the bounct on to the garden path. They landed on their lands and knees and had to crawl rapidly forward into the sunctumy of the cottage doorway to beat the slowly but relentlessly pursuing Benz sans front axle!

A Sudden End-to the Road!

The "Uncommon Emergencies" mentioned by "Focus" last week reminded me of a rather hair-raising incident in which I took part in the early days of the war. I was

Skidding to

driving two naval dignitaries in a large and very fast car "O.H.M.S." to a cer-

Safety.

tain coastguard station on the top of a cliff. We had never been there before and our business was most urgent; hence, as the road up the cliff was very good, I opened out and ascended at something over 50 m.p.h. As the brow of the hill came in sight

thing over 50 m.p.h. As the brow of the hill came in sight we noticed a sentry making wild and agitated signals to us. I slowed down a trifle, but was at once ordered to "get on with it." I did so and a second or so later regretted having obeyed orders. The road ended on the extreme edge of the cliff, with not so much as a railing to prevent a fall on to the rocks about 200 ft. below. On the right of the road, however, just before it ended, was a stone bridge which, presumably, led to the constguard station, and I saw that I must get on to the bridge or go over the cliff.

To this day I have no idea how I did it. If the car had

To this day I have no idea how I did it. If the car had not been a perfect gem to control I should never have been able to skid it round and then pull it straight just in time to clear the buttess of the bridge. We shot over and pulled up safely, but it had been tonch and go. The sentry, to whom I spoke later, thought I had done it on purpose and analogical for trains to stem to I have still trempose and analogical for trains to stem to I was still trempose and analogical for trains to stem to I was still trempose and analogical for trains to stem to I was still trempose and analogical for trains to stem to I was still trempose and analogical for trains to stem the I was still trempose and analogical for trains to stem to I was still trempose and analogical for trains to stem to I was still trempose and analogical for trains to stem to I was still trempose and analogical for trains to stem to I was still trempose and the state of the state pose and apologized for trying to stop me. I was still trembling as I listened to his praises about a "grand bit of driving."

Awkward for the Cow!

In the early days of the railway George Stephenson was asked what would happen if a cow got in the way of a train. He replied laconically, "It would be awkward for the cow," and I am reminded of this by

But It Wasn't!

an incident which took place a coupla of years ago on Exmoor; but on that occasion the cow came off best! I was

following a little four-seater which was making its way cautiously past a herd of cows when some extraordinary cautionsly past a herd of cows when some extraordinary instinct prompted the last animal of the procession to swing across the road at right angles. It appeared merely to brush the front of the four-seater, which, however, immediately pulled up. When I drew level with the ear I found that the radiator had been literally crushed in and the water was pouring out; meantime, the cow sauntered away entirely unperturbed. Incidents like this go to show that there are many "sudden emergencies" similar to that which "Focus" recounted for which motorists must be prepared.

Take to the Grass.

The first of the two "very narrow escapes" mentioned recently by "Focus" were of rather more than usual interest to me, as it is one which, as a type. I have found by no means uncommon. By this I do not mean to say that every time I venture

a Crash.

forth I come across unfortunate cyclists who have no more road sense than to

swerve to the right when hooted at by overtaking cars. But, through one cause or another, I have on several occasions had to take to the grass to avoid dangerous situations raised mostly by other motorists and very occasionally by myself in fits of carelessness.

My whole point is that, in my opinion, most motorists are far too chary of leaving the road and taking to the pavement in order to avoid an accident. Many accidents, I believe, would be avoidable if drivers would see fit to leave the "straight and narrow way," thus giving several feet more clear space in the road for another driver who happens to be making a fool of himself.

Many of the new arterial roads have been constructed with ample grass space on both sides, as witness the muchtalked-of Southend road, and although at certain sections the kerbs are rather steep, I do not think a car would be damaged if it took to the grass at only a moderate speed. Moreover, I seem to remember a plea being made to the road authorities some time ago with regard to forming shallow kerbs on new roads, the point being that motorists would then have extra latitude on the grass sidewalks in the ease of an extreme emergency arising. PETER BARTON.

B37

OUR READERS' OPINIONS (contd.).

Petrol Wasted in Warming-up Cold Engines.

In the issue of The Light Car and Cyclecar for September 9th "Focus" suggests the simple experiment of transferring

the cooling water of an engine to a bucket and ascertaining how much petrol must be burnt in a suitable stove to heat this water to a temperature of 180 degrees F., starting An Alarming Thought. robably decide that they have discovered a better use for

petrol than this, but the results of such an experiment are so illuminating that they may be of general interest.

My cooling system carries three gallons of water, weighing 30 lb. I estimate that the water jackets and radiator consist of an amount of metal equivalent to another 15 lb. of water. To raise 45 lb. of water (or its equivalent) from, say, 40 degrees F. to 180 degrees F. requires $45\times140=6,300$ British Thermal Units of heat.

The calorific value of petrol is 19,0000 B.Th.U.s per lb., or about 133,000 B.Th.U.s per gallon. Hence if all the heat of the burning petrol entered the bucket of water the amount

6,300 of petrol required would be gallons, or 0.38 pint. 133,000

We must, however, consider the question of efficiency. have endeavoured to arrive at an estimate of this by determining the efficiency of a common kettle on a gas-ring. Under good conditions it worked out at 55 per cent., which means that nearly half the heat generated by the gas failed to make the water hot. We shall be acting on the generous side to allow the same efficiency for a bucket on a petrol stove, but even so the amount of petrol burnt would be

0.55

Now, transferring our consideration to the conditions prevailing in a cold engine, it is easy to see that the radiation from a stationary bucket is small compared with that produced by a modern radiator under running conditions, and it is safe to assume that from two to three times as much petrol would be required to heat the water under such adverse conditions.

It is surely an alarming thought to contemplate that every time we start an engine from cold we have to burn a pint and a half of petrol for no other purpose than warming up the water, quite apart from that used in supplying the waste heat in the exhaust. The latter, of course, cannot at present be helped, but the former can, and such data supply an overwhelming case for thermostatic control or some other means of preventing this appalling waste of H.S. petrol.

Thank You, "Nippy Nine."

Many thanks to "Nippy Nine" for his kind and encouraging letter published in last week's issue of The Light Car and Cyclecar. It is extremely gratifying to find that notice is taken of a letter from such an unimportant correspondent. FOURTEEN-YEAR-OLD.

Are Fabric Bodies Worth While?

I think it would be interesting to many light car owners if some readers of The Light Car and Cyclecar would give their views and experiences on the advantages and disadvantages of the new fabric saloon Readers' Experibodies for cars. Are they really lighter ences Invited. Will they withstand damp so well as the conventional type of bod, and how does the cost of repairs compare with repainting?

J. F. Taylor.

"Concealed Drive."

I write to ask the reason for the erection of the numerous signs reading "Concealed Drive," or similarly; and also inquire what attention, if any, should be given thereto by

The Cuestion materists. It seems to me that the onus of the care necessary when a children of the care necessary when a chi of conus of the care necessary when a vehicle turns from a drive into the highway obviously falls entirely upon the driver of the emerging vehicle, and, further, that the notices, bring customarily placed right adjacent to the sides of the drives, are entirely useless for the purpose of warning drivers travelling on the highway.

At present to me these notices constitute so many annoyances along the roads of the country.

" One, Two, Three . . . "

In last week's issue of The Light Car and Cyclecar "Focus" asks, "Why do we always count the strokes when namping up our tyres?" Well, I always do so to save using iny pressure gauge about six times every time I blow up a tyre. I have found that six strokes of

Pumping Up

Tyres.

Tyres.

tyre. I have found that six strokes of my pump gives an increase of exactly one pound pressure, so if my tyres (27-in. by 4.4-in. balloons) happen to be down, say, 3 lb., I give exactly 18 strokes of the pump. I have never known the system to fail, and I require to use my tester only twice during the process.

• The plan suggested by our correspondent is quite sound ond was recommended on our "Ideas for Owners" page some time ago. Mr. Shaw has rather misread "Focus's" paragraph, however, for our contributor stressed the fact that he always finds himself counting "even when blowing up strange tyres with a strange pump."—Ep.

The Motor and Lairy Shows.

As a London hotel keeper, may I point out how unfortunate it is that two great attractions of the Metropolis should, this year, happen at the same time, viz., the Motor Show and the Dairy Show? If these

two events had been arranged in dif-Dates.

ferent weeks there would have been ample accommodation for everybody, but the holding of two shows in the same week creates a

very undesirable congestion in hotels.

Might I suggest that the holders of these exhibitious should confer with one another in order to avoid such clashing?

WM. FRAME,

clashing?

Director and Secretary, Bonnington Hotels, Ltd.

Single-wire Electrical System.

I do not remember reading any recent comments on what used to be a very controversial question. I allude to the matter of double wire versus frame-return electrical systems.

My wife and I each run a model of a

The Possibility very popular light car with a single-wire system and the bodywork is constructed almost entirely of sheet metal. The same thing has actually happened on both cars—the positive lead has frayed through its insulation against the metal bedye. ork. A miniature fire—admittedly of little dauger—has occurred in each case.

has occured in each case.

Every section of additional wiring on the car is an added danger, as an accidentally strained or severed positive wire may start a fire at any moment.

B. C. DE W. SIFFKEN.

The Price of Car Mats.

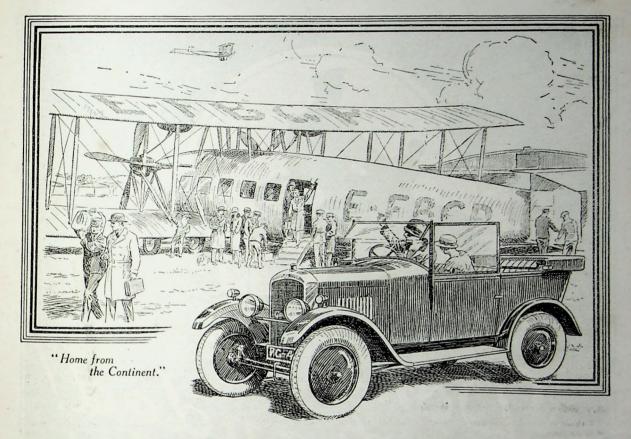
In your issue of September 2nd there is a note by

In your issue of September 2nd there is a note by "Focus" on the cost of accessories and dealing with the price of mats for cars. He states that his friend passed by the mat at 10s. Gd. and bought one for 3s. 9d. There are plenty of cheap mats. as well as cheap hats, to be bought, but the difference is in the material of which they are made and the work put into them. Good car mats are made of good coconut yarn and will withstand very hard wear, besides giving to a car the furnished appearance which most car lovers wish for and andmire. The cheap mat is made from cheap yarn, cheaply made up, will not stand hard wear and always looks what made up, will not stand hard wear and always looks what it is-cheap.

The price asked by the accessory dealer was not because the price asked by the accessory dealer was not because he thought the car owner was necessarily a rich man, but because he offered a really good article. The purchaser of the cheap mat will presently wish he had given the extra money and bought one worthy of his car.

Per pro William Goodacre and Sons, Ltd.,

A. E. Harrison, Director.



Always a part of the Picture

Those who seek the best and easiest means of travel must sometimes choose the air; but when on land they choose a Peugeot!

Speedy, comfortable, reliable, the Peugeot embodies at a moderate cost all those qualities that the critical traveller expects of a really good car.



These models will be exhibited at the forthcoming Motor Show

OLYMPIA Oct. 13th-22nd

Write to-day for Catalogues and particulars.

PEUGEOT (ENGLAND) LTD. SHOWROOMS:

80, Brompton Road, London, S.W.3. Opposite Harrods 'Phone: Kensington 9601.
WORKS AND SERVICE STATION:
Filmer Road, Fulham, S.W.6.
'Phone: Putney 4621

Seven Pounds Tax. Seven Horse-power. Fifty Miles per hour. Fifty Miles per gall.

> "The ideal light car for all occasions."

7-12 h.p. Cabriolet with dickey seat £155 " It must be seen to be

appreciated.

LIGHT CAR SERIES.

All-weather Four-seater £155

7-12 h.p. Saloon Type,



OUR READERS' OPINIONS (contd.)

Chester's Traffic Problems.

As Chester is almost the sole northern gateway to Wales, its acute traffic problem must have affected many of your readers. Here is a possible solution which the local authori-

Cone-way Streets

Suggested.

Suggested.

One-way could move in a steady stream, uninterrupted by cars entering or leaving other streets.

Whilst the narrowness of the streets would prevent the perfeet working of such a scheme it would be a great improvement on present methods, which often cause a line of traffic almost a mile long to remain stationary. Relief is badly needed only on Sundays when the through traffic is heaviest, and when this system would neither be hindered by nor itself interfere with local traffic. The absence of cheeks would amply compensate for the slight detour.

CONDENSED CORRESPONDENCE.

"Looker-on" writes to congratulate the owner of a twoseater Morris Oxford who, in Penge Road, Penge, on Sentember 11th prevented what would have been a nasty accident had it not been for his presence of mind.

Mr. Douglas Row, whose letter regarding shock absorbers was given in condensed form in our last issue, writes to point out that he did not wish to call for readers' experiences regarding the desirability of these fittings on small cars, but wished to have information on their durability. We welcome letters from readers on this subject.

J.G.W. (Woodford, E.18) recommends the Capital Motor Co., Ltd., Remington Street, City Road, London, N., for hood re-covering. He took his car to this concern recently, and a hood with inside wind flaps was fitted in less than 24 hours, the charge being 15s, less than the next lowest of four estimates which he had previously obtained. He states that the workmanship is excellent, whilst the way the concern attends to details is exemplified by the fact that even his hood stays were repainted.

Mr. Tristan Pinches (Camberwell) pays a tribute to the prompt methods of Jowett Cars, Ltd. On Tuesday, September Gth, he took his Jowett to the Westminster Bridge Garage, Lambeth Palace Road, as the engine had developed an clusive knock. The trouble was found to be due to a fractured crankcase, and he wrote to the makers the same evening. On the following Friday he received a letter from the Jowett concern stating that a new crankcase had been forwarded. and a second letter from the Westminster Bridge Garage to say that the new crankcase had been received and that the car would be ready the next morning (Saturday).

INFORMATION WANTED.

ROVER NINE.—The chance to buy or borrow an instruction book for the 1924 model would be welcome .-Gurr. 1. W.O. Ors., Brookhill Road, Woolwich, S.E.18.

ARREL.—The opportunity to buy or borrow an instruction book for the 1924 light four-senter model would be highly appreciated.—T. Johnson, S. Peel Street, Fenton, Stokeon-Trent.

D.F.P .- Any reader who has an instruction book for the 1925, 9.5 h.p. de luxe model, which he is willing to lend or sell is asked to get in touch with—A. Harvey, 86, Blowers Green Road, Dudley.

RILEY NINE.—Readers' experiences of this car with RTLEY NINE.—Readers' experiences of this car with particular regard to reliability, durability, petrol consumption, maximum speed and ease of gear changing would be appreciated.—W. M. Shaw The Garth, Lymm, Cheshire.

FOUND.—Two golf clubs on the road between Maidstone and Harrietsham on Saturday last. The owner should get in touch with—W. N. Noakes, Sandpits, Buxted, Sussex.

EVENTS. CLUB ITEMS AND SPORTING

R.A.C. PERMITS

The R.A.C. has issued the following closed permits:—September 24th, Wgo Valley A.C., rehability trial; October 1st, Sitton Coldfield and North Birmingham A.C., autumn reliability trial; October 8th, A.C.U. Western Centre reliability trial; November 5th and 6th, Sunbeam M.C.C., reliability trial.

DISABLED DRIVERS M.C.

DISABLED DRIVERS M.C.

The following are the results of the slow hill-climb held on September 4th:-1, Mr. N. Frolden (Do Dion-Bouton), 5 mins. 58 secs. 2.

After R. Pope (Decemstor), 2 mins. 57 secs. Mr. Frieden won a special prize presented by the president of the club, Prof. A. M. Low. The ladies' event was won by Miss Fielden (Do Dion), 5 mins. 55 secs. and Mrs. Brough (Singer) was ascond, taking 2 mins. 17 secs. It is missed that the profile of the control of the control of the controls.

SUTTON COLDFIELD AND NORTH BIRMINGHAM M.C.

The autumn reliability trial for the Sutton-Cup, the 1927 "Sunbae" Autumn Goblet, the Sult Cup and the prize will be true of the Autumn Goblet, the Sult Cup and the prize will be true of the Goblet of the Cup and the Cup a

GOZELUM M.C.

The club is endeavouring to make its annual Poynton-Stewart cup trial the ovent of the year. It is claimed to be "run for sportsmen by spertamen," and is will include four new hills in the Porlock-Lyumouth district. These are described as "not freakish but really sweet." There will be no secret checks. The trial is open to members of Archery Sporting M.C.C. Brighton and Hove M.C., Brixton and D. M.C. Garshalton M.C.C. London Ladies M.C. Garshalton M.C.C. London Ladies M.C. Oczelum M.C. Sunbeam M.O.C. Sydenham and D. M.C. Whitigit M.C. and Woking and U. M.C. and C.C., and motorcycles, three-wheelers and cars may compete The start will be from Craulord Bridge at midnight on October 2nd and the finish at Dunster approximately 12 hours later. Entries, which should be sent to the hon, ac. of the meeting, Mr. I. J. Higgs. "Porlock," Wickham Road, Shirley, Surrey, close by the first post on September 26th:

J.C.C. YORKSHIRE CENTRE

J.C.C. YORKSHIRE CENTRE.

A very successful and ingeniously arranged treasure-hunt was organized by the J.C.C. Yorkshire Centre, and held on Saturday, September 10th. The clues were cleverly thought out and cunningly hidden, so that those who managed to finish at the "Square and Compasses Ion" at Righon to claim the treasure felt that they bad earned it. Capt. Trubis Moore, who organized the event and presented the treasure, announced the results, which were:—1, C. D. Wilson (2 mins. error); 2, J. Barker (16 mins. error); 3, G. C. Carlisle (18 mins. error);

FORTHCOMING EVENTS. Saturday, September 24th. Midland A.C. Shelsley Walsh Open Hill-climb.

Hill-climb.

Brighton and Hove M.C. Speed Trials at Lewes.
Lewes. M.C. Hall-day Trial.
Woking and D. M.C. and C.C. 24-bour Trial.
West of England M.C. Reliability Trial.
J.C.G. South-Western Centre. 24-bour Trial.

Sunday, September 25th.
Leeds M.C. Post Hill-climb
Portsmouth and D. Jowett C. Mitchell
Bowl Trial.
Couthern Jowett L.C.C. Annual Trial.

Saturday, October 1st.
British Grand Prix.
M.C.C. One-day Sporting Trial.
Oozelum M.C. Poynton Stewart Cup
Trial.
Stalchpita.

Stalybridge and D. M.C. Speed Trials.

Sunday, October 2nd.

Sunday, October 2nd.

Brighton and Ilove. M.C. Bishop Trophy
Trial.
Leeds M.C. Sporting Trial.
W Ealing M. and M.C.C. Premier Cup
Trial.

CARSHALTON M.C.C.

The motor sports gala organized by the Carshalton M.C.C. was held on Saturday. September 10th, and attracted a crowd of over 2,000 spectators. One of the most popular events of the many which wore held was the reverse car race, the winner of which was G. Recco (Amilcar), with Roy Kent (Austin) as runnerup. A ladies section of the clab has recently inaugurated and inquired Mrs. R. A. Martin. Doreg, Addiscombe Court Road, East Croydon. The hon, secretary of the club is Mr. F. L. Dodridge, Thelma, Grosvenor Avenue, Wallington. Mr. F. I.. Wallington

BARNOLDSWICK M.C.

The annual reliability trial for the club cup was held recently. The route, covering a total distance of 115 miles, was through Chiteroe, Settle, Grassington, Burnsall, Blubberhouses, Otley and Bolton Bridge, J. Horner (Citroen) gained a second prize.

NORTHERN CENTRE A.C.U.

The championship reliability trial will be held in the Lake District on September 25th, starting from Grasuere at 10.50 a.m. The course, which includes some of the most difficult sections used in the International Six Days Trial course a total distance of 85 miles. The test distance of 185 miles are total distance of 185 miles. The test distance of 185 miles are total distance of 185 miles. The test distance of 185 miles are total distance of 185 miles. The test distance of 185 miles are total distance of 185 miles. The test distance of 185 miles are total distance of

KENT AND SUSSEX L.C.C.

KENT AND SUSSEX L.C.C.

Speed trials will be held on the Race Hill.
Lewes, on Saturday, October 8th, and the event
will be open to car members of the Brighton and
love M.C., the Essex Club and the Bexhilt
and D. M.C. Eight classes have been
arranged for standard, sporting, super-sporting
and racing cars, and if it is desired classes
for touring cars will be included. Two runs
will be allowed in each class, the length of the
course being 700 yds. Entries should be sent
to Mr. Lewis Humphries, 12, Malling Street,
Lewes, so as to reach him not later than Wednesday, October 5th. The entrance fee for
members of the promoting club is 104, per
class, members of invited clubs 13s, per class.

M.C.C. HIGH-SPEED TRIAL.

M.C.C. HIGH-SPEED TRIAL.

We have received the prospectus of the third high-speed reliability trial. It will be held at Brooklands on October 22nd, and it is open of course, to members of the M.C.C. only and motorecellist, three-wheeler and car drivers will be required to do 20 laps, cars up to 1.100 c.c. 19 laps, cars up to 1.600 c.c. 21 laps and cars of unlimited capacity 22 laps. These laps must, of course, be completed in one hour's running, but there is be limit to the maximum number of laps which may be covered in the time. There will be four individual runs of one hour, starting at 10.30 a.m., 12 noon. 2 p.m. and 3.30 p.m. Entries must be completed and sent to the trials accretary, Mr. F. T. Billake, 84, North End Road, Golders Green, N.W.11, so as to reach him not later than October 12th.

Acid Level Indicator.

A device which shows the level of the acid in a battery, obviating the necessity for removing the vent plugs for inspection of the electrolyte, is a convenience. The desirability for such an indicator, working externally, is increased if the battery is situated in a position difficult of access.

This may be done in some of the older types of ear battery by removing a vent plug, passing a very thin wooden rod through the small hole in the plug a piece of bamboo rod about 4 ins. long and 1-16 in, diameter will serve very well—and forcing a light cork float on the end of the rod. It is advisable to paint the cork with a brush dipped in amyl-acetate. A mark should be made on the rod, outside the battery, so that when the vent plug is replaced, the floating cork will show the level of the electrolyte.

For proper working the acid level should be just above the tops of the plates. If the indicator is found not to be floating, distilled water should be added. Each cell should, of course, be provided with an indicator and float, but care must be taken to see that the rods are not too close a fit in the vent holes, as, otherwise, the gas evolved during charging will not be able to escape

wer to your

L.F. (Diss).—A heel rest may be found helpfut in preventing driving fatigue. Many accessory manufacturers supply suitable adjustable rests.

(Dartford) .- We cannot give S.K. any definite setting for the shock-absorber adjustment; you must experiment until the best results are obtained.

T.H. (Exeter).—Have you checked the alignment of the rear axle? The wear which you say has taken place on

the rear tyres appears to be excessive. W.E. (Slough) .- Any eccentricity in the brake drums will cause "snatching" when the shoes are applied. will not be an expensive job to have the drums trued up, and we feel sure that this operation will cure your trouble.

P.P. (Andover) .- It is not advisable to keep the air strangler closed any longer than is absolutely necessary. If the carburetter is properly adjusted it should not be necessary to use the strangler for more than a few seconds.

J.L. (Lowestoft) .- If, as you suspect. the flywheel is not rigidly fixed to the shaft, you should immediately place the car in the hands of a competent reif the engine is run in its present con-

(Teddington) .- We suggest that piston rings which are stuck in their grooves are causing the loss of power you describe. Cylinder compression should offer considerable resistance to the starting handle, and if the compression is found to be weak your best course will be to dismantle the engine and fit new rings.

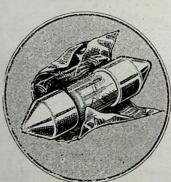
We invite readers to send us hints gained from their own experience for inclusion in this feature. Five shillings will be paid to the sender of any hint published.

Protecting the Paintwork.

Scratched paintwork on the scuttle, in most cases caused when the bonnet is opened or closed carelessly and the metal sides come into contact with the scuttle, spoils the appearance of every A buffer, such as a small piece of rubber, attached at the corner to the lower edge of the bonnet side will generally prevent this. A piece of rubber cut from an old inner tube can be used advantageously and a small bolt passing through the rubber and the bonnet will keep it in position.

A Temporary Fuse Repair.

Many electrical systems fitted to small cars are provided with fuses of the type consisting of a short length of wire enclosed in a glass tube with metal end caps. Although spare fuses should always be carried, it may so happen that no replacement is available when, through one cause or another, a fuse blows. When the cause of the



A piece of tin-foil can sometimes be used as a temporary fuse.

"blow" has been ascertained and the trouble rectified-unless the fuse has blown of its own accord, as may happen if it has been in circuit for a considerable length of time—it is necessary to provide a substitute. The fuse gap may, of course, be bridged with a piece of thick wire as a temporary measure, but this is not to be recommended, as no safety device will be present should another fault subsequently develop.

A satisfactory repair may be effected by wrapping a piece of "silver" paper (tin-foil) around the easing of the blown fuse, ensuring that the foil makes contact with the metal ends of the fuse container.

Adjusting Brake Wing-nuts.

Wing-nuts at the extremities of brake rods are rather awkwardly placed on some cars, and hand adjustment is in consequence rather a messy undertaking. A good plan is to improvise a spanner which will reach the nuts without the necessity to reach under the body and chassis members to the brakeadjusting point.

A length of stout tube, of a suitable diameter, should have a transverse slot cut at one end to fit over the wings of the nuts, and a hole should be drilled at the other end to take a light tommy bar. This device permits adjustment to be made to the lengths of the brake rods at a distance of a foot or more

from the actual wing-nuts.

Queries o general interest will be answered under this heading whenever possible, but a stamped addressed envelope must be enclosed for reply. Telephonic enquiries cannot be answered.

I.T. (South Shields) .- It seems hardly probable that excessive wear in the gearbox main bearings can have developed so early in the life of your car. Are you sure that the loss of oil is not due to filling the box above the level recommended by the makers?

O.P. (Dover) .- Yes, there are several makes of radiator thermometer on the market which operate a recording dial on the facia-board. A very satisfactory degree of accuracy is to be obtained from instruments of this type; far greater accuracy, in fact, than is necessary for ordinary driving conditions.

E.G. (Leytonstone) .- We are afraid that it is beyond the scope of the average owner to alter the layout of the body framework, which operation will undoubtedly be necessary to cure the "drumming" of which you complain. A competent coachbuilder should be entrusted with the work.

D.C.S. (Higham's Park) .- When fitting a luggage grid do not overlook the fact that an extra number-plate may be required. The numbers must be clearly visible from the rear, and you would be wise to fit an additional plate if the original is in any way obscured by the luggage grid.



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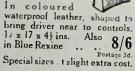
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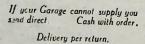


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AROUND THE TRA

We are informed that Messrs. Hughes and Co., manufacturers of radiator muffs, have recently moved to Waverley Road, Small Heath, Birmingham, where they have taken over larger premises.

Mr. Victor L. Blay, late general manager of the County Chemical Co., Ltd., has joined Romae Motor Accessories, Ltd., as general manager for the Midland area. He will be controlling sales from Birmingham.

Clear Hooters, Ltd., call our attention to the fact that the attractive model of their electric horn which was illus-trated in our "Safety First" Number is known as the M XI Model. It costs 30s, with push-button and cable.

We should like to call our readers' attention to the fact that a very large number of the attractive Safety-first devices, motor horns and other accessories reviewed in our Special Safety First "Number are obtainable from A. W. Gamage, Ltd. Helberg, Lynder, 1861. Ltd., Holborn, London, E.C.

We have received from Brown Bros., Ltd., Great Eastern Street, London, E.C.2, a copy of the supplementary illustrated catalogue of motor accessories which they have just published. It contains a large number of new lines introduced since the publication of their general catalogue. It is, of course, published for the treals. course, published for the trade.

We are advised that the Austin Seven, with which Mr. C. K. Chase established six new records in Class H at Brooklands on August 25th, was fitted with two Solex corburetters. Petrol consumption for 12 hours' running averaged 42.4 m ng. and no schemes in the section of the cort. aged 42.4 m.p.g., and no change in the setting of the carburetter was necessary throughout the run.

Delco-Remy and Hyatt, Ltd., 111, Grosvenor Road, London, S.W.1. point out that it is perhaps not fully appreciated that they have sole control throughout Europe of the sales and service of the Pint throughout Europe of the State of the Pint throughout Europe of the State of the State of throughout Europe of throughout Europe of the State of throughout Europe and service of the Binks paint spraying equipment. We understand that the concern is in a position to supply complete plant, and the service of their specialist is available at any time to give advice and assistance.

Readers frequently write and ask where they can obtain spare parts for obsolete cars. Elephant Motors, Ltd., 97-101, spare parts for obsolete cars. Elephant Motors, Ltd., 97-101, Newington Causeway, London, S.E., stock spares for a number of makes which have been out of production for some time. Antocrat, Castle Three, Deemster, Stellite Duplex, Belsize-Bradshaw and Little Greg are some of the makes dealt with by this concern, who are the actual manufacturers of the spares they market.

The Harley-Davidson Motor Co., Ltd., Harleyson House, 74, Newman Street, London, W.I., advise us that they have sole selling rights throughout the United Kingdom and Ireland of the All Rite electric tube vulcanizer. It can be attached to any ordinary electric light scaled, and occupies attached to any ordinary electric light socket, and occupies a space of only 5 ins. by 8 ins. It appears to be very serviceable for garage use, and the price of the vulcanizer, with buffing brush and three outsize hardwood pressure blocks, is fd 4.

We learn from A.C. (Acedes) Cars, Ltd., Thames Ditton, Surrey, that Mrs. Victor Bruce was the first woman to arrive at Le Touquet for the Boulogne motor rally. She started with the Hon. Victor Bruce from John o' Groats on September 1st and west further to the general transfer of the started with the Hon. with the Hon. Victor Bruce from John o' Gronts on September 1st, and was fourth out of 50 competitors in the general classification, for which she gained 5,000 francs and also a plaque and diamond brooch. She was first in the elegance competition with a blue A.C. Aceca. The Hon. Victor Bruce gained sixth place in the rally, 2,000 francs, and was third in the elegance competition with an A.C. saloon.

Beg to announce that they have opened NEW SHOWROOMS at 12, ALBEMARLE ST., PICCADILLY, W.1

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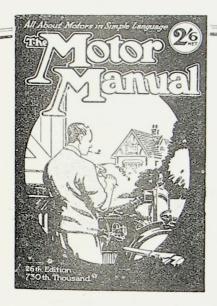
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How does the differential work?

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How does a twostroke engine work?

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U.S.A.—THE INTERNATIONAL NEWS CO., 181, Variek Street, New York, N.Y. AGENTS FOR FIGURE AND BELGIUM—W. H. SMITH & SON, 248, Rue de Rivoli, Paris, and 78, Marche aux Herbes, Brussels.