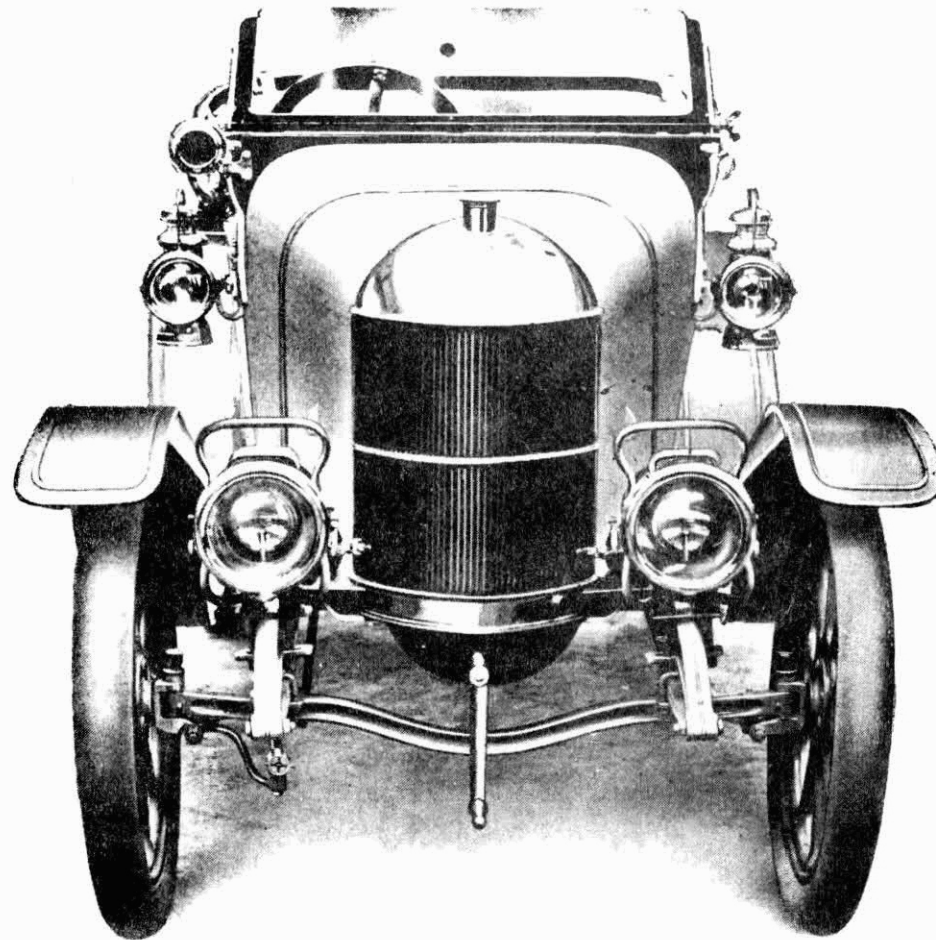




THE MORRIS-OXFORD LIGHT CAR.

1913



1913

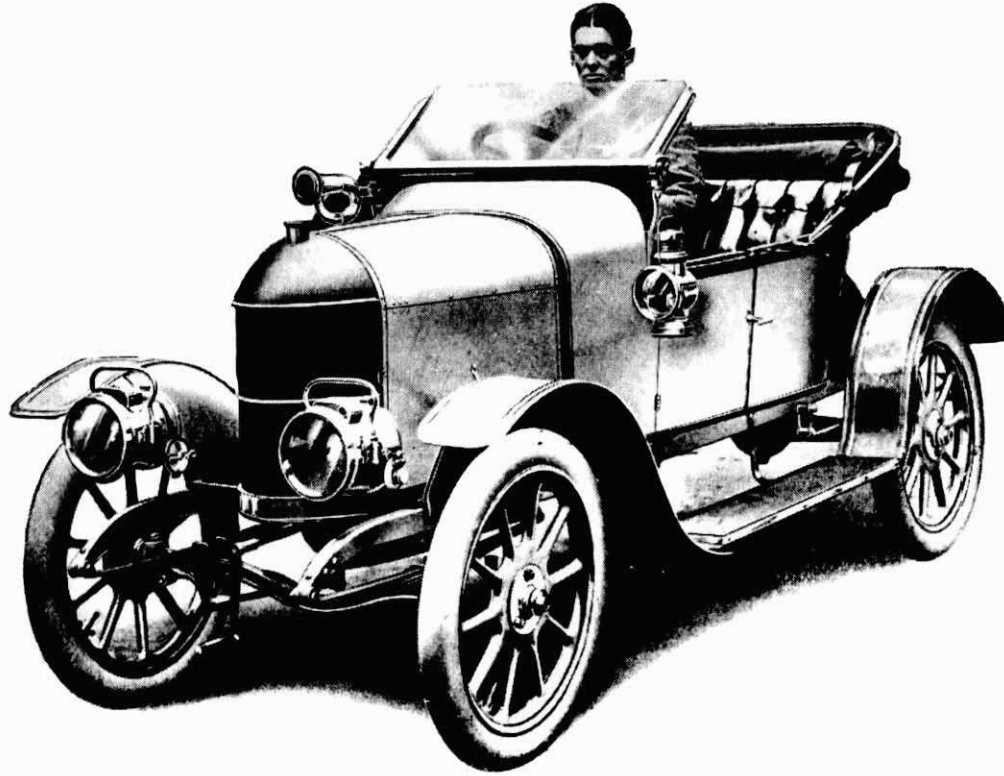
"The High-Grade

Small Car."





10 h.p. 4-cylinder Morris-Oxford Light Car.



50 Miles to the Gallon.

Price £175.

50 Miles per Hour.





DETAILED SPECIFICATION :

- ENGINE.** ... 10 h.p. specially designed **White & Poppe 4 cylinder water cooled Engine** of high efficiency, 60 m/m bore, 90 m/m stroke, cylinders cast en bloc, with inlet and exhaust manifolds cast integral with same. Valves fitted with adjustable tappets and enclosed in aluminium covers. Bottom half of crank case detachable. Government Tax, £3 3s. 0d.
- GEAR BOX.** ... The Gear Box, Clutch and Engine are constructed as a single unit, suspended at three points from the main frame. Three speeds and reverse, direct drive on top. Gate change of the latest design.
- CLUTCH.** ... **Latest pattern multiple Disc type** running in oil.
- LUBRICATION.** ... Forced feed throughout engine. Absolutely automatic. Indicator fixed to dash.
- RADIATOR.** ... **Unique V shaped Radiator** of special design, and very efficient. Thermo Syphon cooling with extremely large water channels.
- IGNITION.** ... **Bosch Magneto.** Latest type.
- CARBURETTOR.** **White & Poppe.** Entirely automatic. Embodying all latest improvements.
- CONTROL.** ... By Accelerator pedal.
- FRAME.** ... **Pressed Steel** of deep section and robust construction.
- CHASSIS.** ... Wheelbase, 7ft. Track, 3ft. 4in. Length over all, 10ft. 5in. Width (over Hub Caps), 3ft. 9in.
- FRONT AXLE.** ... **H Section forged steel** of ample strength.
- REAR AXLE.** ... Worm drive of the very latest design. **Driving shafts and differential removable for inspection without dismantling axle. Propellor shaft and universal joints entirely enclosed in torque tube of large dimensions,** combining with engine and gear box in forming an **entirely dust-proof and water-tight drive** throughout the whole transmission.
- BEARINGS.** ... **Hoffman Ball Bearings** fitted to gear box, road wheels and axles.
- STEERING.** ... **Worm and Worm wheel,** irreversible, **15in.** steering wheel. Steering column raked to a comfortable angle.
- BRAKES.** ... Two sets of the internal expanding metal to metal type, all contained in drums on rear wheels, actuated by side lever and pedal.
- SUSPENSION.** ... **Semi-elliptic springs to front, 32in. long, $\frac{3}{4}$ -elliptic to rear, 40in. long,** giving great smoothness of running under all circumstances.
- WHEELS.** ... **Sankey Steel Detachable, 700 x 80 m/m.**

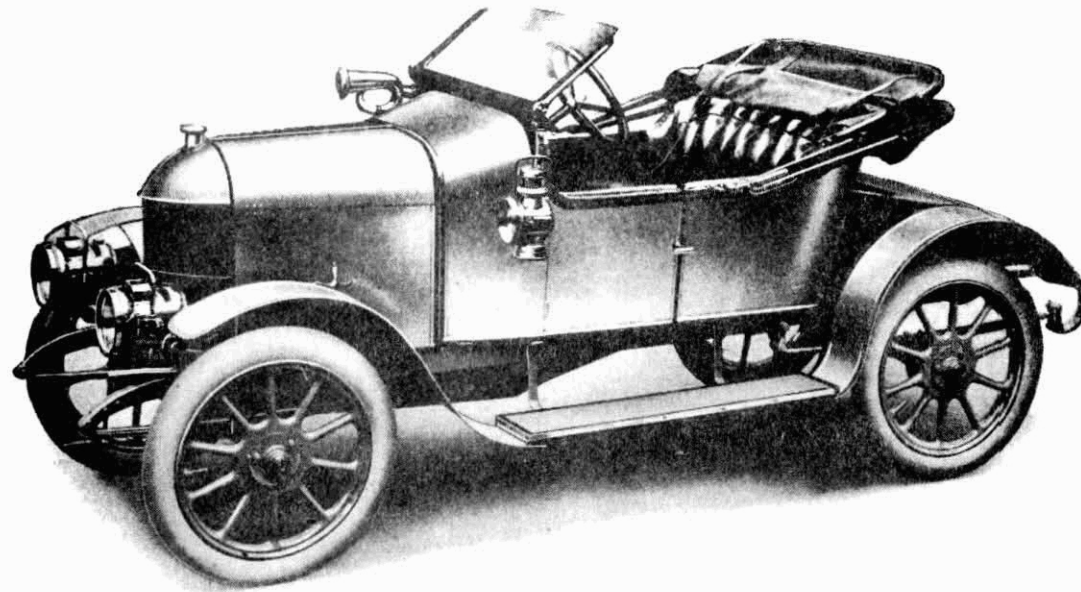




DETAILED SPECIFICATION —continued.

- TYRES.** **Dunlop Car Tyres, 700 x 80 m/m, fitted with bolt valves**
- BODY.** **Smart 2-seated flush side Torpedo Body of the latest design. Painted pearl grey, upholstered green leather. Brass mounts Wide spring cushion. Tool box fitted at rear**
- EQUIPMENT.** ... **High-class Cape Hood, and Adjustable Wind Screen, with best brass fittings, full set of Powell & Hanmer Lamps, comprising — two Acetylene Headlights, fitted with genuine Mangin Lens Mirrors, Oil Side and Tail Lamps with detachable Aluminium Reflectors, Horn, Pump, Jack, Tools, and Spare Sankey Wheel.**

Price (complete) **£175.** Absolutely ready for the road.



❖
Price £175.

❖
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❖
THE MORRIS-OXFORD LIGHT CAR.
❖



DISTINCTIVE FEATURES.

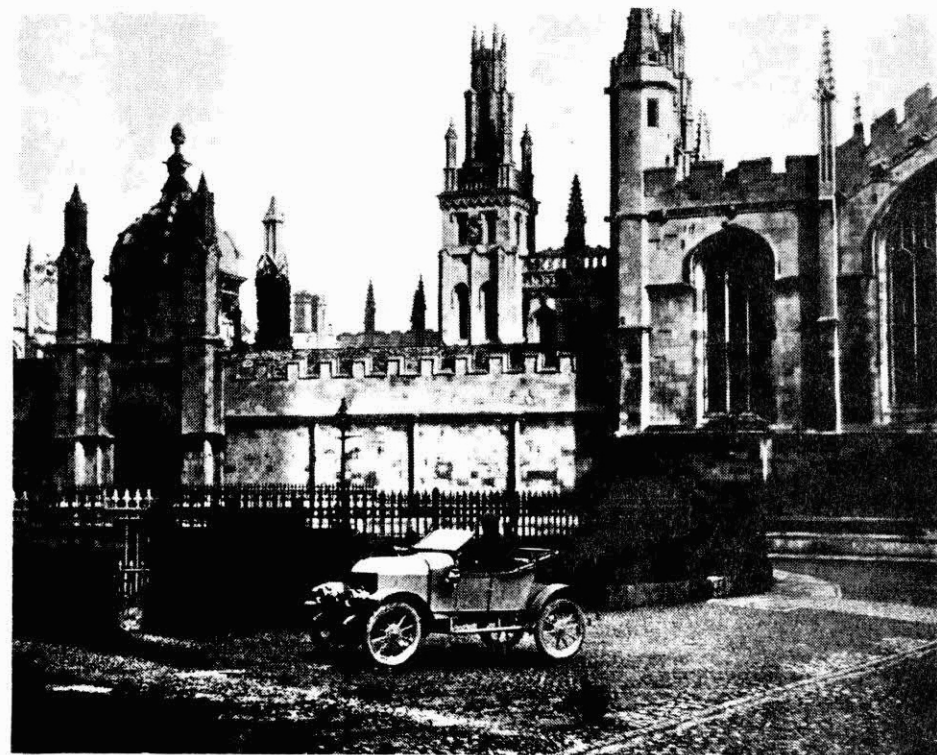
To the purchaser of a small Car, who is most frequently his own driver, the ability to start at any time at a moment's notice, simplicity of control when driving, and absolute freedom from trouble are of the first importance. In order to satisfy these requirements it is necessary that the car and its control mechanism shall be as simple as possible so that a minimum amount of attention is required from the owner both when driving and when in the garage. The more simple the control, the less the amount of adjustment required and the fewer parts there are to go wrong, the better.

In the control of the new "Morris-Oxford" Light Car we have the acme of simplicity. The ignition is fixed, the throttle is operated by pedal only, and can be set at a minimum running position. For easy starting the throttle can be opened by means of the adjustable accelerator pedal.

The consumption of petrol is from 50 to 55 miles to the gallon, and tyres and lubricating oil are upon an equally economical basis. Speeds range from 5 to 55 miles per hour on top gear on average roads. The Government Tax is £3 3s 0d, being the lowest rate for a Car with 4-cylinder engine.

The whole of the Transmission from starting handle to rear Wheels is enclosed in absolutely dust and water-proof, Oil-retaining housings, protecting it from undue wear, thus increasing its efficiency, providing greatly prolonged life and freedom from trouble.

The Engine, which is the very latest production of the celebrated firm of White & Poppe, Ltd., Coventry, has been specially designed and constructed for this Car. The Valves are of extremely large dimensions, as also



A "Morris-Oxford" Car outside All Soul's College, Oxford.



DISTINCTIVE FEATURES.—continued.

are the Inlet and Exhaust ports. Adjustable Tappets fitted with fibre insets are provided, enclosed in Aluminium covers, rendering the Engine extremely silent under all conditions, and reducing wear to minimum. The Crankshaft is carried in **three bearings** of liberal proportions, lined with white metal, and the bottom-half of the Crankcase being detachable, gives easy access to the main bearings and big ends. Being produced with the very latest and most accurate automatic machinery it is possible to procure, irrespective of cost, ensures maximum efficiency with the greatest economy.

The Gear Box and Clutch casing forming with the Engine a single unit ensures absolute alignment of the driving mechanism, resulting in increased efficiency and reducing wear and noise. The multiple disc clutch has thirty-six plates running in oil, and is of the latest improved type, giving the very sweet engagement which is so essential on a small Car, thus reducing the strains on the driving mechanism and tyres.

The Lubrication is of the latest practice, oil being forced through all bearings of Engine and Gear Box, thus ensuring a perfect and uniform lubrication directly in proportion to the work done.

An extremely handsome V type Radiator of novel design, and of the greatest possible efficiency, is provided. It is of the straight tube type, with an exceptionally large head of water. The water is taken to the bottom of the Cylinders through two large tubes, one on either side of the Cylinders, and from the top of Cylinders back to the Radiator by a single pipe of very large diameter. Special attention has been given to the cooling of the Valve Pockets, and providing very large water channels round Cylinders, thus obviating all possibility of overheating.

The Ignition is by a "Bosch" Magneto of the very latest enclosed type, which is universally recognised to be the most reliable form of ignition. It is driven off the timing gear through an adjustable coupling which allows of a wide range of adjustment.

The White and Poppe Carburettor is so widely known and highly appreciated that it needs no comment, but we would mention that amongst its advantages are easy starting, slow running, silence, rapid acceleration, great flexibility, power and economy.

The Frame is of the pressed steel type, and follows the usual practice in up-to-date Motor Car construction.

The front axle is of forged steel of girder section, the steering heads being formed integral with same, the stub axles carrying Hubs mounted on "Hoffmann" ball bearings. The rear "live" axle is worm driven by propellor shaft, which is entirely enclosed in a torque tube of large dimensions, and which at its front ball shaped end encloses the Universal Joint





DISTINCTIVE FEATURES.—continued.

and unites with the gear box in forming an entirely dust, water-proof, and oil retaining drive. This feature is undoubtedly unique in small car construction, and although expensive to produce, its advantages are so great that we have not allowed the question of increased cost to prevent its adoption. The design of this axle gives the highest efficiency and absolute silence. It has been so arranged that the driving shafts and the whole of the differential and gearing can be taken out for inspection, or adjustment, without in any way dismantling the axle casing from the springs, etc.

The Ball Bearings being one of the most vital points in motor car construction, we have decided to fit the highest class of bearings it is possible to obtain, irrespective of price, namely, "Hoffmann." These Bearings are too well known to Motor Car users to need further comment.

Two independent sets of Brakes are fitted, both contained in dust and mud-proof drums on rear wheels. One set is actuated by brake pedal and the other by side lever. This system has been adopted to obviate the great strains and wear put upon the driving mechanism and bearings which must result when the brake is fitted to the Driving shaft and the braking power transmitted through all the axle gearing and differential to the road wheels, the parts of which have already ample work to do. It can be affirmed without hesitation that more back axle wear, and troubles, are caused by braking through the transmission, than from any other reason. Moreover, this system of braking on the back wheels is infinitely smoother in its application, thereby considerably increasing the life of the Tyres, and it must not be forgotten, that with the counter-shaft type of brake, failure in any portion of the Drive puts this out of action. Special lips have been formed in the axle casing to prevent any possibility of oil reaching the brakes, which has been source of trouble in most other types of back wheel brakes.

The Steering is of the most advanced design, being of the worm and worm-wheel type. One of the great advantages of this system is in the fact that the worm wheel can be moved into several new positions, thus providing much longer life to this important mechanism, by bringing new wearing surfaces into position.

Hitherto the bugbear of small Cars has been inefficient springing, therefore this most important feature has received exceptionally careful consideration in the construction of the "MORRIS-OXFORD" CAR, neither trouble nor expense being spared in obtaining luxurious comfort in road travel.

Nearly the whole of the small Cars at present on the market are fitted with fixed wheels, with all their attendant disadvantages. The many advantages of detachable wheels are now so universally recognised that any Car not fitted with them is very much out of date. At great expense we have adopted the well-known "Sankey" detachable steel (artillery





DISTINCTIVE FEATURES —continued

pattern) wheel, which, in addition to its detachability, is practically indestructible, very light, extremely easy to clean, unaffected by climate, and its graceful appearance adds considerably to the high-class outlines of the Car

It will be seen from the Specification that the Tyres fitted are of ample size, and of the best known and most reliable make

A high-class flush-sided Torpedo Body, with high side doors, is fitted, painted Pearl Grey, and upholstered in Green Leather, which is fluted and buttoned in the latest approved style. Deep springs are fitted to the seat cushion and back squabs, rendering them extremely comfortable. A high-class adjustable Wind-screen and Cape Cart Hood are fitted, also a sloping Tool Box is provided at the rear, this being made detachable to allow additional space for carrying luggage when required

The very full equipment of accessories and fittings included in the price of this Car, constitutes a record of completeness and quality on any small Car sold at so reasonable a figure. Every requirement to make the Car absolutely complete and ready for the road has been included in the Specification, and the purchaser therefore knows exactly the amount he has to expend, and will not find, when he has decided upon this Car, that there are endless other additional fittings to be acquired, thus greatly increasing his outlay

Although the price of this Car is only **£175 0s. 0d.** yet if the price were doubled it would not be possible to improve upon the foregoing Specification, either in design, materials, or workmanship, or economy in running costs



A "Morris-Oxford" Car outside the University Parks, Oxford.

