

TELEGRAMS:

"VAPOROUS," NOTTINGHAM.

TELEPHONE No. 1177.

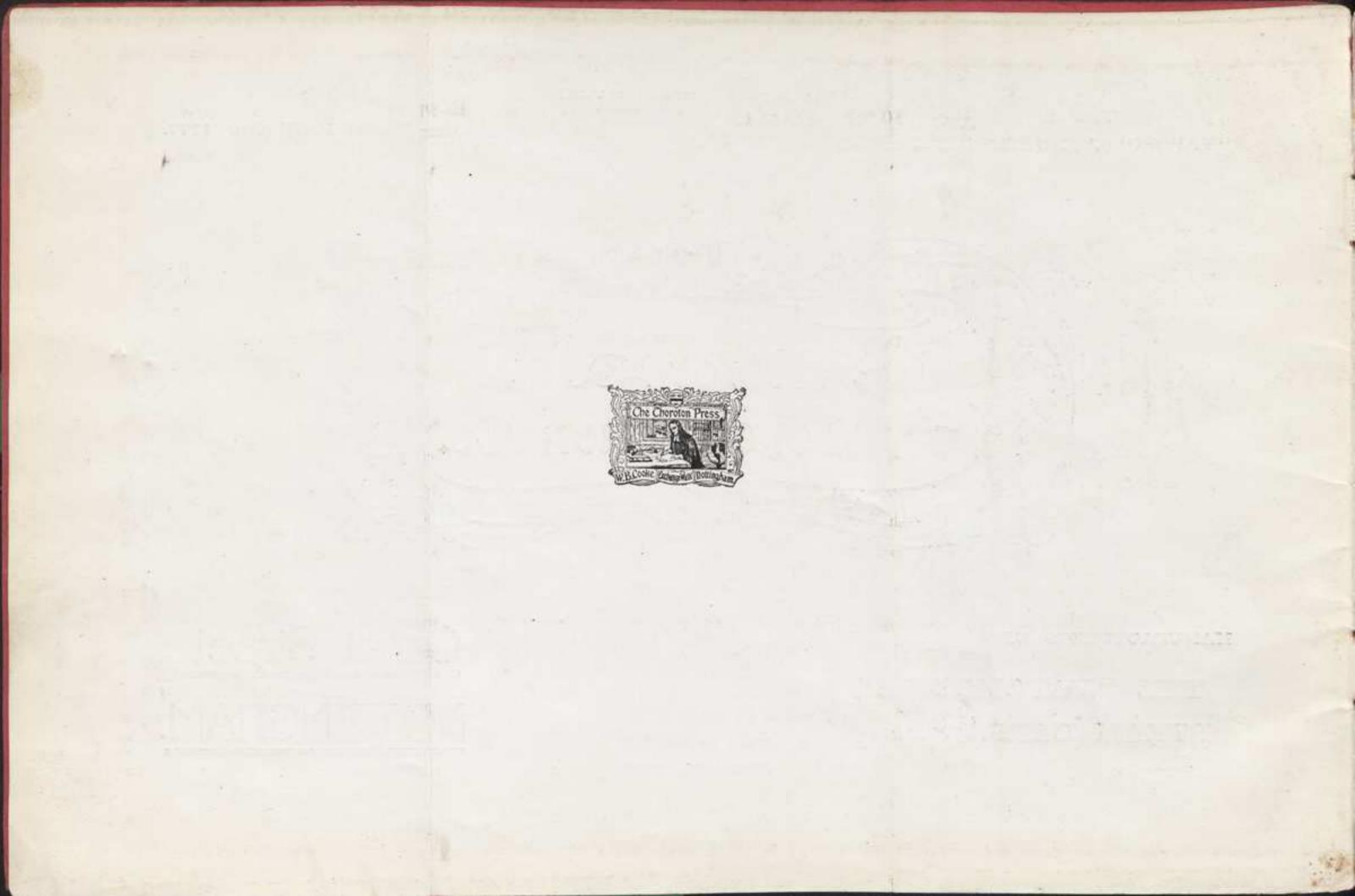


MANUFACTURERS OF

THE "VAPOMOBILE"
STEAM CARS. ** ** **

Canal Street
NOTTINGHAM.

JANUARY, 1903.



Introduction.



N presenting to the Public our Catalogue for 1903 we beg to point out that a slight re-adjustment in our prices has been found necessary.

To compete in price with the American Cars we have adopted the course of quoting two prices for each of our Cars—with the exception of the 12-H.P. and higher powered Cars—the lower priced Cars of any type are fitted with American Engines in each case, while the higher priced Cars are fitted with our own English Engines of the highest workmanship and quality of materials, at the same time we should point out that, with the exception of these Engines, all our Cars are, as before, of British manufacture (see also paragraph on Boilers).

We have lessened the bulk of our Catalogue by publishing all the illustrations separately, and those desiring to have the illustration of any particular Car, or part, will oblige by mentioning their requirements by number.

Adopting the plan of our last Catalogue, which found favour with the public, we proceed to describe the different part of our Cars categorically.

Engines.

UR Engines are of the double high pressure type with link motion, and are so designed that the frame of the Engine—which is of aluminium—forms an oiltight crankcase enclosing the cranks and connecting rods. All our double acting Engines are fitted with piston valves and circular crosshead slides. [See plate 6.]

Where American Engines are fitted we have adopted the "Mason" Engine, which has acquired such a high reputation in America. [See plate 7.]

Boilers.

Hitherto all our Boilers, whether of English or American manufacture, have been of the firetube type, and for simplicity this type is hard to beat. But the demand which has arisen for an increased range of action has led us to turn our attention to the water-tube, or semi-flash boiler.

With this type of boiler it is possible to use the feed water over and over again in a way which is not practicable in the fire-tube boiler, as the trace of oil which (after filtration) is always present in the water, which is returned by the condenser sooner or later, causes trouble in the fire-tube boiler, which is absent in the water-tube type. To put the matter briefly we should recommend the public to specify fire-tube boilers where a running distance of 20 to 25 miles with one tank of water is sufficient, but where it is required to run 50 to 100 miles with one filling of the water tank, we recommend the semi-flash boiler, used in conjunction with our patent condenser, which latter returns a very large percentage of the exhaust steam as water. In all our Cars we fit either our own English built boiler or a boiler of American construction, as our clients may prefer, without any difference in price. [See plate 10.]

"VAPOMOBILE"



ho. 1.

rej

sin

ou

in cor

ma wit

we

per

Am

Patent Feed Water Level Regulator.

E have acquired the sole rights for Europe of the above valuable patents. The invention consists briefly of a patent steam trap, low water alarm, and in the special use of a back pressure valve. By adopting this apparatus the use of a "Water glass" becomes quite unnecessary, and the constant "taking on and off" of the pump is done away with. The apparatus maintains the level of the water in the boiler at a practically uniform height, it is quite automatic in action and both simple and certain in construction. Part of the apparatus consists of an "alarm," which, should the engine pump fail from any cause, gives immediate and unmistakable warning to the driver. We fit this apparatus to our own Cars for 10 guineas extra, or to any other make of Steam Car for 12 guineas. [See plate 12.]

Carriage Bodies.

We have endeavoured throughout to fit our cars with bodies of one quality only—the very best,—and Messrs. Starey's, Ltd., of Nottingham, who have built most of our bodies, have, it is generally admitted, been very successful in carrying out our designs in the very best possible manner.

Burners.

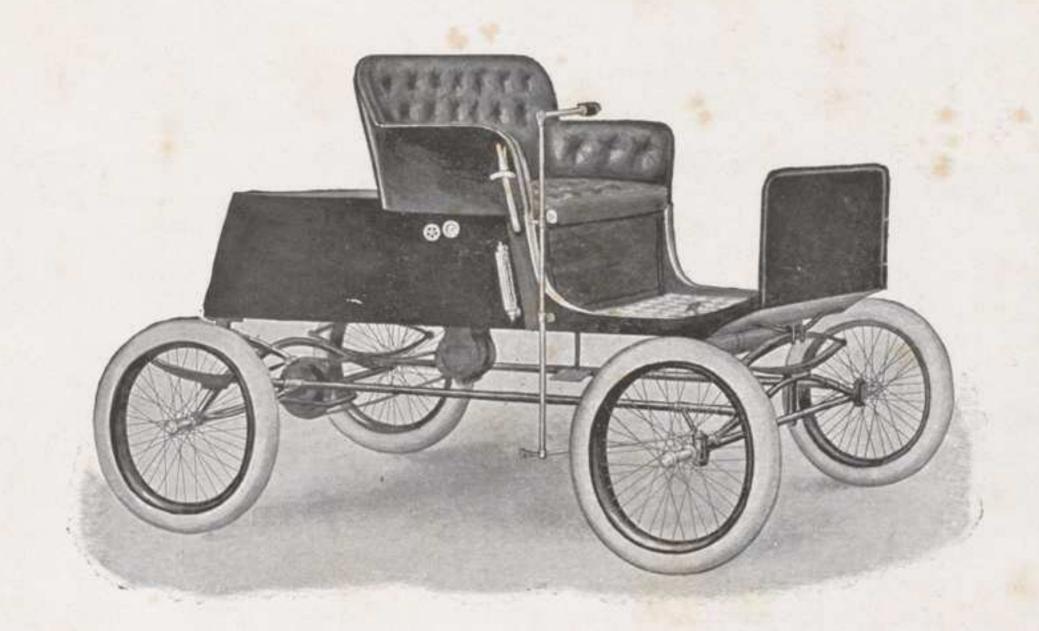
THE Burners which we make for our Cars are constructed to burn either Paraffin or Petrol. If the former is used the burners are of a heavier make, and the vaporizing coils are larger, and in consequence the burners are more costly. At the same time it must be understood that the burners which are made specially for Paraffin will burn Petrol equally well. Our Paraffin fired Cars are usually fitted with our patented arrangement for starting the burner with a specially designed blow lamp supplied with Petrol or Benzoline from a special tank, which is connected with the main air pressure tank.

Wheels.

For the lighter Cars we recommend wheels with steel spokes of specially strong construction, but where artillery wheels are preferred, we are always prepared to fit the latter at an extra cost of £2 per wheel.

Underframes.

Our underframes, which are constructed throughout in our own works, are of English Solid Drawn Steel Tubes of very heavy gauge and large diameter. Very special care is given to brazing the joints of these frames; altogether the frames are of unequalled strength, and specially suitable for use in rough country districts.



ho. 2.



Brakes.

A LL our Cars are fitted with double acting brakes, and the larger Cars with two extra brakes, but any of the Cars can have extra brakes added at prices given below.

Tyres.

On the three lighter types of our cars we fit Goodrich Single Tube Tyres, which we have found to give great satisfaction. If any other make of tyre is required it can be fitted at an extra cost, for which see below.

Chains and Differential Gears.

All our Cars are fitted with chains of extra strength. The differential gears are of the enclosed dust-proof type.

Condensers.

BY our patent Condenser, which differs essentially from any other type on the market, we obtain nearly double the cooling surface for a given weight of metal. We avoid entirely all back-pressure on the engine, while we secure a certain amount of forced draught, which assists the burner. The condenser is placed underneath the carriage except in the case of a covered vehicle, when it may be placed with advantage on the top.

Where the construction of the boiler admits of the water of condensation being used over again, a very great economy of water results from the use of this condenser.

Feed Water Beaters.

Large Feed Water Heaters are fitted to all our Cars.

The following extras can be fitted to any of our Cars:—

| Automatic Steam Driven Air | Pumps, | fitted c | omple | te for | *** | *** | | *** | *** | GUINEAS. |
|--------------------------------|--------------|----------|-------|--------|------|-----|-----|-----|-----|----------------|
| ,, ,, ,, Auxi | liary Wat | er Pun | np, | 22 | *** | *** | *** | *** | *** | 8 |
| (Either of the above can be su | pplied (with | hout fit | ting) | | | *** | | *** | | 6 |
| Mud-guards, (the set) | | *** | *** | 79 87 | 1944 | 644 | 444 | *** | *** | $3\frac{1}{2}$ |
| ,, if of patent leath | er | 100 | | (88.8) | | *** | 200 | *** | | 8 |
| Extra Brakes, per pair | | 244 | | *** | *** | *** | | | | 4 |
| "Klinger" Water Gauge | 64 151 | *** | | | *** | | | *** | | $2\frac{1}{2}$ |

Mo. 1. Light Two=Seater.

N this Car we have combined the lightest possible construction with adequate strength.

The Car is not designed to carry heavy weights on rough roads.

It is of the very best finish throughout, and upholstered in real leather.

| | PRICE. | | | | | GUINEAS. |
|--|----------------|----------|---------|--------|----|----------|
| If fitted with American Engine (see page 3) | *** | | | *** | | 150 |
| Or, if fitted with our own Engine of English | design and con | nstructi | ion thr | oughou | it | 170 |

This Car carries water for 20 to 25 miles, and oil or spirit for 30 to 36 miles.

See Plate 1.

Mo. 2. Two=Seater, with Solid Panel Back.

THIS Car is designed to carry two passengers, but, if required, a seat for a third passenger may be added behind, the frame being amply strong enough for this.

Water for from 20 to 30 miles is carried, and oil or spirit for 40 miles. The Car is fitted with a 16in. boiler.

PRICE.

| With American Engine (see page 3) | GUINEAS, 180 |
|--|-----------------|
| Or, if fitted with our own Engines of English design and construction throughout | 205 |
| Back Seat, to carry one passenger, extra | 8 |
| *If fitted with water-tube boiler, condenser and apparatus for returning condensed water to the tank | 005 |
| | 235 |
| *See paragraph on Boilers, page 4. | |

See Plate 2.

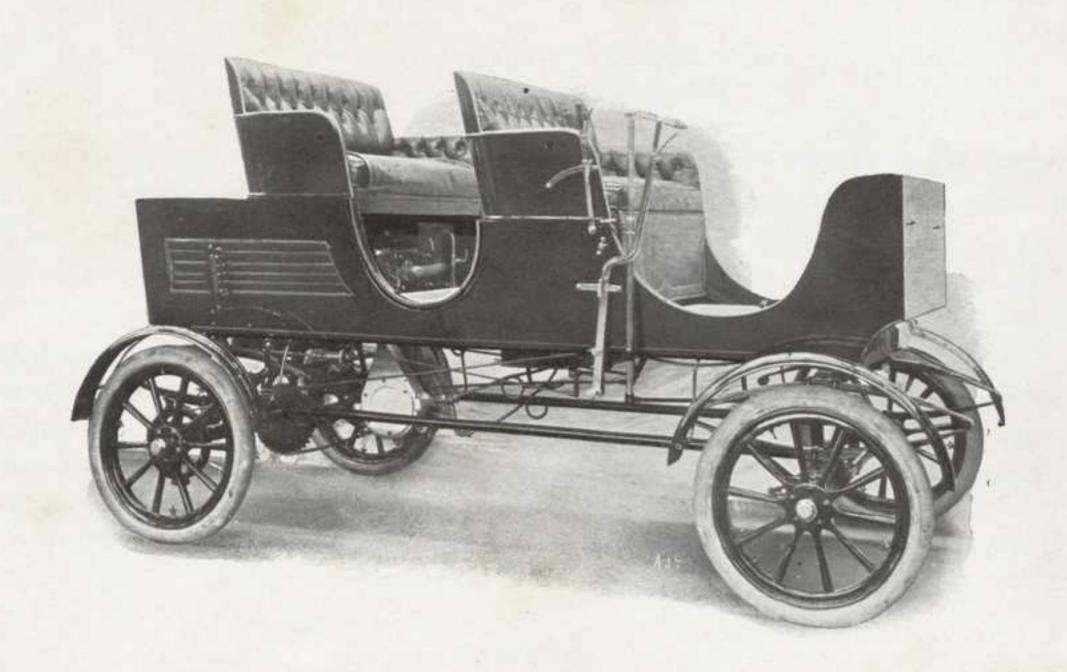
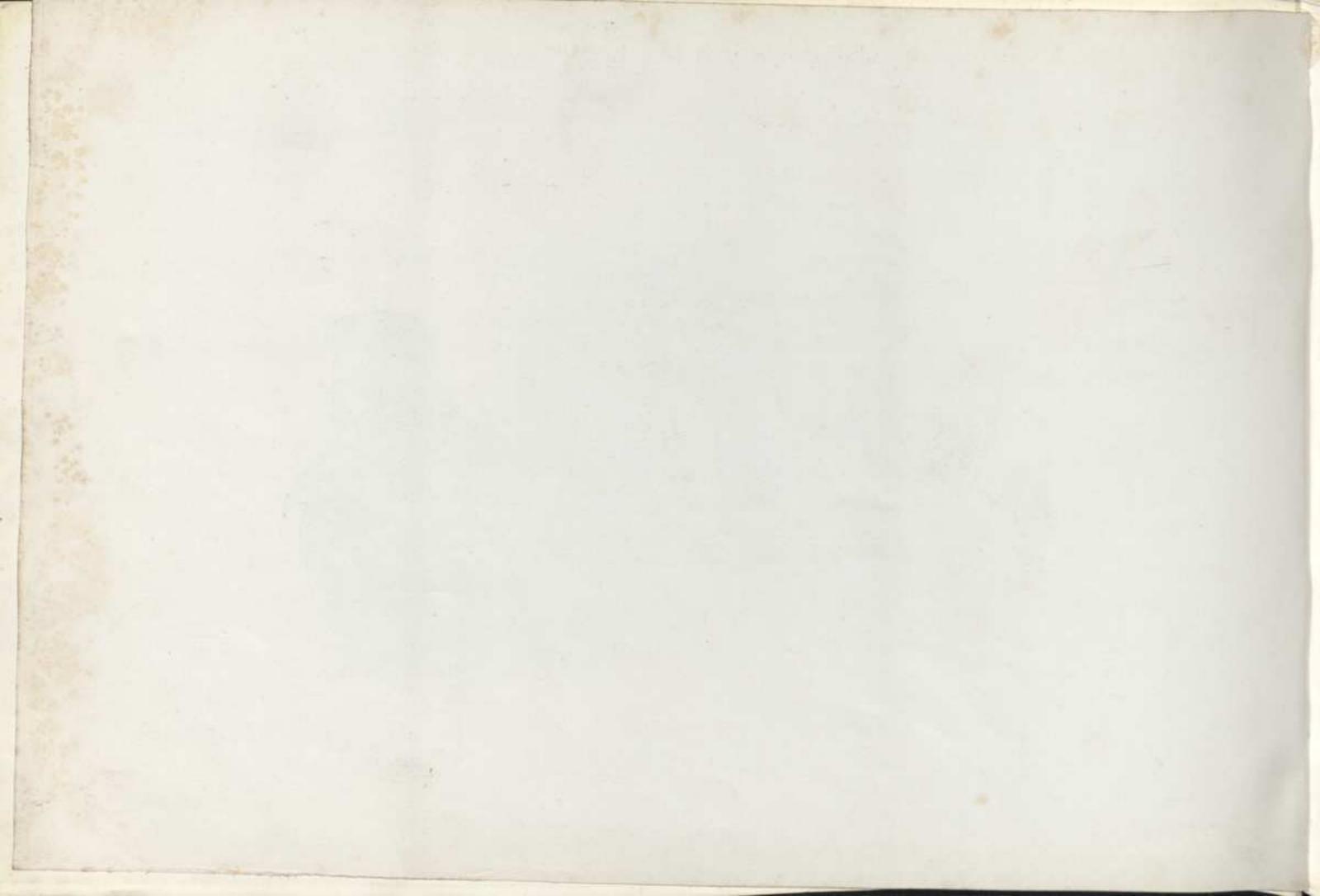


PLATE 4.



Mo. 3. Four=Seater.

A FOUR-SEATED Car, built on the "Dos-a-dos" principle, the body being of our own special design. This is a very strongly built Car, with plenty of seating accommodation, and unusually large luggage space. It can be had with or without canopy, fitted with 19in, boiler, carries water for 20 to 25 miles.*

PRICE.

| | | | GUINEAS. |
|--|----------|---------|----------|
| With large American Engine, 31in. by 4in | ••• | | 250 |
| Or, if fitted with our own Engine, No. 2 size, 23in, by 41in | *** | | 270 |
| Canopy (extra) | *** | | 12½ |
| Basket, painted to match Car (extra) | **** | | £2/7/6 |
| *If this Car is fitted with water-tube boiler, condenser and apparatus for r | eturning | condens | ed |
| water to tank | | | 310 |
| | | | |

2 20 2

*See paragraph on Boilers, page 4.

See plate 1.3.

Mo. 4. Double Phæton.

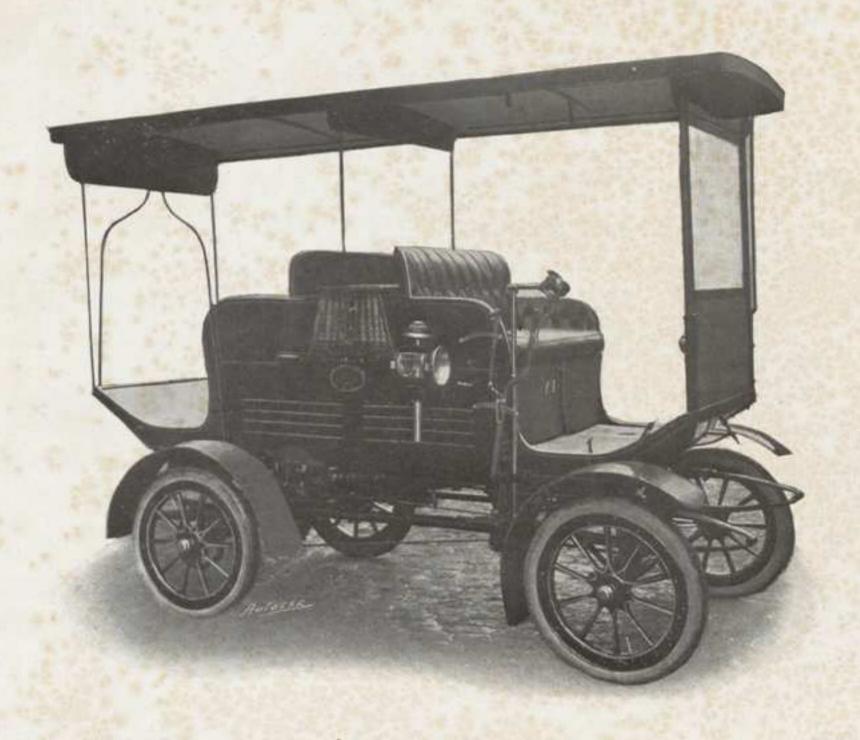
THIS is our most popular type of Four-seater. This car is now only made in one type, namely, that lately known as the "B Type." It is fitted with 8 H.P. Engines, 19in. boiler, artillery wheels, and Grappler Tyres, water for 25 to* 30 miles, and spirit or oil for 50 miles.

PRICE.

| | | | | | | | | G | UINEAS. | |
|--|---------|-----|--------|-----|--------|---------|------|------|---------|--|
| If fitted with large American Engine | *** | *** | *** | *** | *** | *** | 7.57 | | 295 | |
| If fitted with our own No. 2 Engine | Y.1.0 | | | | | | *** | *** | 320 | |
| *If this Car is fitted with water-tube | | | denser | and | appara | tus for | retu | ning | | |
| condensed water to tank | *** | | | | *** | *** | 657 | | 350 | |
| If fitted with 20in, boiler in place of 19in | . (extr | a) | | | | | | *** | 10 | |

*See paragraph on Boilers, page 4.

See plate 4.



ho. 3.



Mo. 5. Special Four=Seater.

THE body of this Car is almost entirely of Aluminium, upholstered in real leather. It is fitted with artillery wheels, with 32in. by 3½in. pneumatic tyres. Chains and Chain-wheel are of extra strength.

The Car is built on a steel frame of Channel section. Engines 12 H.P., boiler 14 H.P.

Fifty gallons of water and 15 gallons of fuel are carried.

A 12 H.P. condenser is included in the price of the Car. This is carried under the frame.

| P | RICE. | | GUINEAS. | | | | | |
|--|-------|-----|----------|------|------|------|------|----------|
| Of Car complete, without brougham top | 172 | 4.4 | *** | 49.0 | 177 | | 141 | 430 |
| Brougham top, extra, according to finish | | 200 | 207 | 3555 | 7.57 | 22.5 | 4.02 | 20 to 40 |
| Price of "Châssis" alone | | *** | 222 | *** | 111 | *** | 244 | 350 |

This Car may be fitted with water-tube boiler and apparatus for returning condensed water to tank for (extra) 10 guineas.

See paragraph on Boilers, page 4.

See plate 5.

List of Accessories and Parts.

| 6 H.P. | Engines, | our | own ma | ake, wit | th alun | ninium | crank | cases, | &c. | *** | *** | | | *** | *** | *** | £ 38 | s. 0 | d. 0 |
|-----------|-----------|-------|---------------------------------|----------|----------|--------|---------|--------|---------|----------|---------|-------|-------|-------|-------|--------|---------|---------|---------|
| 8 H.P. | | | | | | tto | | | | plate 6) | | 155 | 1888 | 2.2.2 | *** | *** | 45 | 0 | 0 |
| 12 H.P | . ditto | | | | d | itto | | | | - 111 | | 14.00 | 414 | 242 | | 444 | 75 | 0 | 0 |
| 51 H.P | . America | an E | Engines, | 2½in. by | y 3åin. | *** | *** | 7 6400 | 1111 | 444 | 4.44 | | 0.666 | *** | 110 | *** | 17 | 0 | 0 |
| 10 H.P | | litto | The second second second second | 31in. b | | | late 7) | | 2.22 | *** | 2490 | 200 | 10000 | *** | 277 | *** | 32 | 0 | 0 |
| If fitted | with Br | amp | oton chai | n whee | ls, exti | ra. | 122 | | 55.7 | *** | 474 | *** | *** | | | + 4.4 | 0 | 15 | 0 |
| | . Engine | | | | | | Vans | 1111 | 224 | 4.4 | *** | 757 | *** | 125 | 0.00 | 144 | 52 | 10 | 0 |
| | n or Pet | | | | | | - | - | | | | | | | | | | | |
| | 14- | inch | Burners | | 444 | 1444 | 144 | 242 | 4.60 | | 1000 | | *** | * * * | 333 | *** | 4 | 0 | 0 |
| | 16 | ,, | 37 | *** | | *** | | 12.7 | *** | **** | (655.5) | 3886 | 55.5 | *** | | 0.00 | 5 | 5 | 0 |
| | 19 | 99 | ** | *** | 212 | | 17.75 | | 57.1 | | *** | *** | *** | | 244 | | 6 | 10 | 0 |
| | 20 | " | ** | *** | *** | *** | 14.4 | | | | | 7666 | *** | *** | 9.54 | 1000 | 7 | 10 | 0 |
| | 24 | ** | " | *** | 414 | 444 | 444 | 2500 | *** | *** | 5000 | (4.4) | *** | 49.5 | 3.55 | 4.14 | 9 | 9 | 0 |
| | | | | | | | Pate | ent c | Cond | ensers | 5. | | | | | | | | |
| | | | | | | | | [See | plate 1 | [1.] | | | | 500 | 0 000 | (4/10) | | | |
| | Accordi | ng t | o size | *** | 27.77 | 355 | *** | *** | | | *** | *** | | 10 | to 18 | Guinea | S. | | |
| | | | | | 1 | datei | it TO | ater | Lev | vel Re | gulat | or. | | | | | | | |
| | If fitted | l to | one of o | our own | Cars | *** | 3.55 | | -7. | | | | *** | *** | 10 | Guinea | S. | | |
| | | | the r mak | | | Car | *** | | | | *** | | 9440 | 200 | 12 | 22 | | | |

| | | | | | 1 | list o | of Acc | essor | ies i | and p | arts | -conti | nued | | | | | £ | S. | d. |
|---|-------|------------|--------|--------|---------|---------|---------|----------|--------|---------|------|---------|------|------|-------|-----|---------|---------|----|---------|
| Un | derfi | rames, p | inned | and br | azed, b | out un- | painted | (see pla | ate 9) | | 243 | | *** | 9440 | 249.0 | | *** | | 10 | |
| | | ntial Gea | | | | | | *** | *** | | | *** | *** | *** | *** | *** | *** | 8 | 10 | 0 |
| | | , built up | | | | | | el spok | es, wi | th hubs | comp | lete | | | | *** | *** | 2 | 10 | 0 |
| | | y Whee | | | | | | | | *** | | *** | 944 | | *** | *** | | 2 | 0 | 0 |
| Boilers. See plate 10. | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | (Steel | Shells | - 4 | Copper | Fire | -Tubes. | | | | | | Mills | | |
| 14 | nch | Boilers | (4.44) | | 100 | | | | | *** | | | | | *** | | *** | £ 18 | | d. 0 |
| 16 | ** | - 11 | | | | | | | *** | | | *** | | | *** | | *** | 21 | 5 | 0 |
| 19 | ,, | ** | | 1770 | | 124 | *** | 2440 | | 3.44 | | | | *** | 110 | | 444 | 33 | 0 | 0 |
| 20 | 11 | | | | *** | | *** | | 2.65 | | *** | 2.65 | *** | | *** | | | 37 | 0 | 0 |
| 24 | " | " | | | | | *** | | *** | | | | | | | | *** | 60 | 0 | 0 |
| 100000000000000000000000000000000000000 | | Shell B | | | 16in. | at, ex | tra per | boiler | | | | *** | | *** | | *** | *** | 6 | 0 | 0 |
| | | ich Copp | | | | | | *** | | | | *** | *** | *** | | | per doz | en 0 | 7 | 6 |
| | | tube Bo | | | | | | | | | *** | | *** | *** | | | | 15 | 0 | 0 |

Tyres.

Any make of Tyres which our clients may desire can be substituted for the stock tyres at an extra cost, depending on the tyre.

Repairs.

Repairs to Steam Cars are a special feature of our business. We are at all times prepared to send an expert to any part of the kingdom to effect any Repairs, or to report and advise on the state of any Car.

We charge for his services at the rate of from 10/6 to 15/- per day. Railway fare and allowance for accommodation and food extra.

Eldvantages of Steam Cars over Petrol=driven Cars.

Freedom from noise. Absence of unpleasant vibration.

No "whirring" of machinery when car is standing. No starting handles to turn.

Great flexibility of speed. Splendid hill-climbing powers.

Less cost in tyres. Less difficulty to localize the trouble if anything should go wrong.

And (by the use of heavy oils) less risk of fire, and greater suitability for use in those parts of the world where petrol is impossible to obtain or dangerous to use owing to the heat of the climate.

Finally, if crude oil is used in the burner, less cost of running.

