



# THE WOLSELEY

TOOL AND MOTOR CAR CO. LTD

— Proprietors —

VICKERS SONS AND MAXIM LTD

SOUVENIR OF THE VISIT OF THE AMERICAN  
SOCIETY OF MECHANICAL ENGINEERS & THE INSTITUTION  
OF MECHANICAL ENGINEERS TO THE WOLSELEY WORKS  
ADDERLEY PARK-BIRMINGHAM-JULY 28<sup>TH</sup> 1910-ON THE  
OCCASION OF THEIR JOINT SUMMER MEETING

1896  
35-0

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SHOWROOM AT YORK STREET, WESTMINSTER.

# THE WOLSELEY TOOL AND MOTOR CAR CO. LTD.

THE Wolseley Tool and Motor Car Company, Ltd., which is a subsidiary Company of Messrs. Vickers, Sons & Maxim, Ltd., was registered in February, 1901, and was formed for the purpose of acquiring and developing the manufacture of the Wolseley horizontal motor car.

The first motor of this type, constructed in 1895-6 by the Wolseley Sheep Shearing Machine Company, was a light three-wheeled vehicle, built on cycle lines as shown in the illustration on page 24. It carried one passenger besides the driver, and was fitted with a 2 h.p. horizontal motor.

In 1897 the same Company built another three-wheeled car with the single wheel in front, the car being steered by a tiller working in a ball head, similar to that employed on a bicycle. The engine, which gave about 3 h.p., was also of the horizontal type.

The next development was in 1899, when the first four-wheeled vehicle was made. This embodied many of the principles of construction which afterwards distinguished the Wolseley cars, and it is interesting to note that the framework was built up of channel steel, a practice which three years later was employed by nearly all the leading makers.

Similar cars, greatly improved in detail, were built in 1900, and one of these was the first Wolseley to make a public appearance in competitions and trials, gaining the highest award for voitures in the 1,000 miles road trial organised by the Royal Automobile Club.

About this date Messrs. Vickers, Sons & Maxim, Ltd., entered into negotiations with the Wolseley Sheep Shearing Machine Company, and acquired the motor car section of the business. In 1901 the Wolseley Tool and Motor Car Company, Ltd., was formed, with works at Adderley Park, Birmingham, where they are at present situated.

From this time the motor car business was vigorously developed, and no opportunity was lost of entering for competitive trials and races, in which the Wolseley car gained considerable prominence by its numerous successes.

Having established their name for reliability in trials and competitions, the Company discontinued the policy of entering cars for such events, having come to the conclusion that racing as a means of developing the motor car is unsatisfactory under existing conditions. The Company have therefore devoted their energies to the perfecting of pleasure cars, particularly in the essential points of reliability and silence.

Six different models are at present constructed, viz., 12/16 h.p., 16/20 h.p., 20/28 h.p., 24/30 h.p., 30/34 h.p. (which can also be fitted with 40 h.p. engine if desired), and 50 h.p. The 24/30 h.p. and the 50 h.p. are six-cylinder cars, and the remainder are fitted with four-cylinder engines. Every style of modern carriage body is manufactured in the Company's carriage department, and a large illustrated catalogue, giving full details of chassis and carriage work, is issued annually.

In addition to the manufacture of motor cars and chassis the Company manufacture marine engines. The production of these was



commenced in 1904, and one of the earliest made was a 60 h.p. engine for the Duke of Westminster.

In July, 1907, the Company opened a Branch at East Cowes, Isle of Wight, from which a number of notable motor boats have been turned out, the most successful of these being the "Ursula," the present holder of the motor-boat record for distances over one mile.

The Company also manufacture aero engines, and have recently completed the engines for the naval dirigible balloon now under construction by Messrs. Vickers, Sons & Maxim, Ltd., at Barrow; while perhaps the most novel feature of their manufacture is the fleet of Motor Sleighs—one of which is illustrated on page 28—for Captain Scott's Antarctic Expedition.

## THE WORKS.

Having dealt with the early inception of the Wolseley car, it may be of interest to briefly describe the works as they exist at present.

Their extent may be judged from the fact that the total area amounts to about 23 acres, of which about 17 acres are covered by buildings. The works are divided by a public road into two sections, the East and West Works, the latter containing along the main frontage the offices for the management, clerical, and drawing office staff, while at the rear are the foundry, engine erecting shop, and machine shop. Some recent additions which adjoin these premises are the assembling shop, stores, repair shop, engine erecting shop, engine test shops, and a private test shop for the purpose of experimental work.

In the following pages views are given of many of the more important departments, and the following brief sketch of the methods employed will probably be of interest to the motorist, both present and prospective.

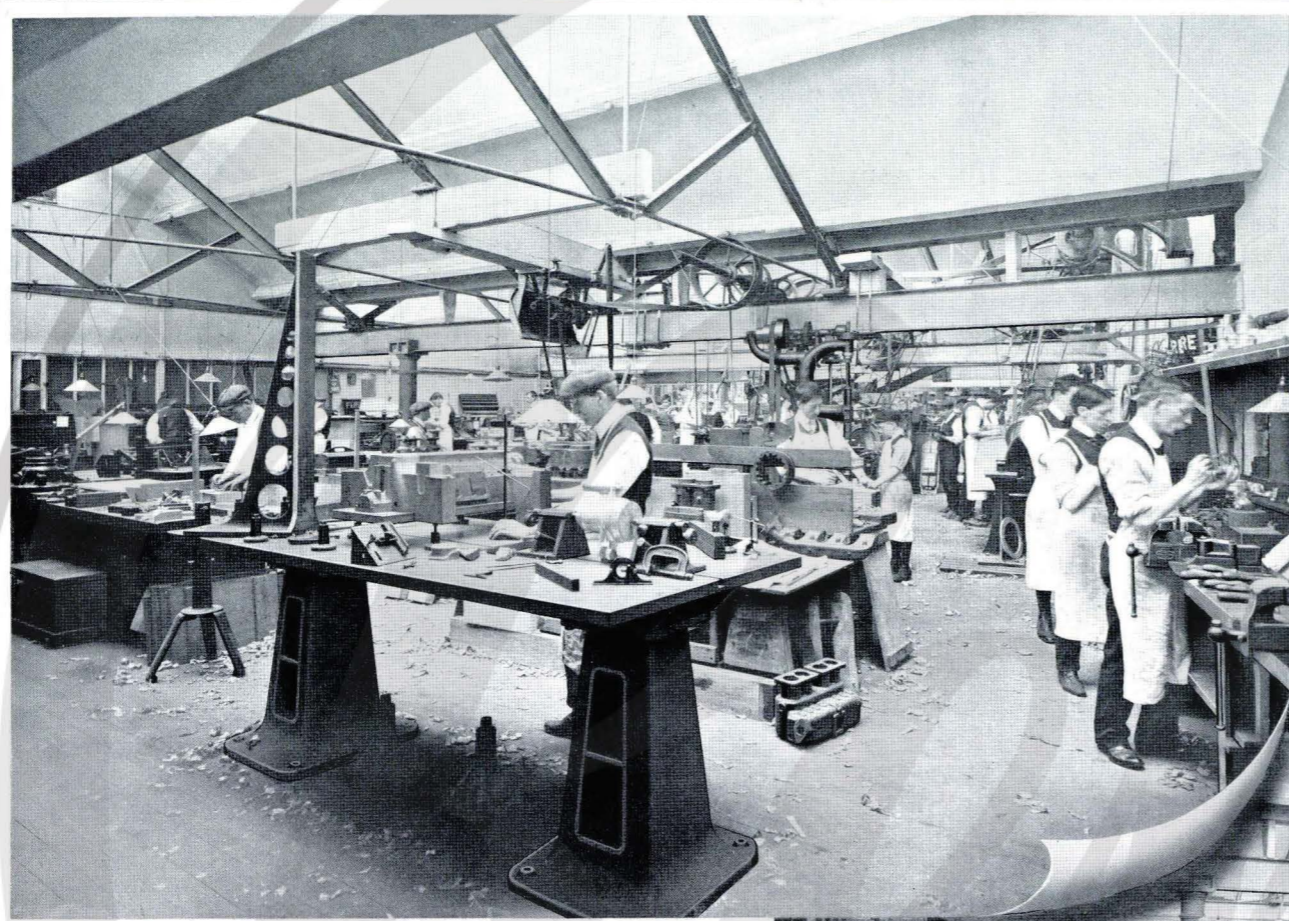
**MATERIALS.**—As a branch of the firm of Vickers, Sons & Maxim, Ltd., the Company has always been in a position to profit by the great experience of the parent firm in the production of high-grade materials. Vickers' steels are almost exclusively employed, and the Wolseley Co. is probably the only motor car firm which can claim that all the component parts of its vehicles, with the exception of the tyres, magnetos, and accumulators, are made in the workshops of a single firm, mainly from raw material of its own production.

**PATTERN MAKING.**—The designs of the car having been completed and the drawings made, the real construction is commenced in the pattern-making departments, shown on facing page. Here the patterns are fashioned in wood, aluminium, or other suitable material by highly-skilled workmen. When finished they pass to one of the foundries.

**CASTING.**—In the foundries, shown on page 7, are carried out the various operations that result in the finished castings, such as gear-boxes, cylinders, engine cases, &c., which when machined go to make up the completed car.

**MACHINING.**—The machine department, a part of which is shown on page 9, is one of the most important in the works, measuring 300 ft. by 200 ft. It is equipped with machinery of the latest type, to which additions are continually being made. In addition to the castings from the foundries, the forgings also are received from the smiths' shop and the stamping department; in fact, the whole of the parts which go to the making of the complete chassis may be said to come together for the first time. Here can be seen lathes and milling machines, drilling and boring machines in every variety, all turning out finished parts in rapid succession. Naturally, all the latest labour-saving methods are employed in connection with the detail management, to ensure economy as well as the high degree of accuracy required in motor car work. In this connection it may be mentioned that every week more than 120,000 parts are turned out by this machine department.





PATTERN-MAKING DEPARTMENT

PATTERN-MAKING DEPARTMENT



PATTERN MAKING.



INSPECTION OF PARTS.—Between each process every part is examined by specially trained men in the inspection room, shown on page 10, and the accuracy required may be judged from the fact that all working parts are gauged to limits in some cases finer than one-thousandth part of an inch. The precise workmanship entailed by this system of rigid inspection, together with the high quality of the materials employed, has much to do with the reliability so characteristic of the Wolseley productions.

ERECTING AND TESTING ENGINES.—This system of inspection is in evidence not only in the machine department, but also in those departments to which the components are subsequently passed for assembling, of which the first is the engine erecting shop. The engines, on completion, are transferred to one of the engine testing departments (see page 11), and here they undergo a thorough and exhaustive trial, specially arranged to prove that all working parts are perfect in their relation to each other.

ASSEMBLING GEARS AND COMPONENTS.—In another department, illustrated on page 10, the gear boxes and axles are assembled, special precautions being taken to ensure that both gears and axles shall be as nearly noiseless as possible; whilst a separate branch is devoted to the assembling of the smaller parts, such as change speed gear, steering gear, &c.

CHASSIS ERECTING.—It now remains to bring all the parts together into a complete chassis, and for this purpose they are transferred to the chassis erecting department, illustrated on page 12, where the frames, to which springs have already been fitted, are waiting to receive them. After being erected, the finished chassis are carefully inspected, and are then turned over to be tested on the road.

CHASSIS TESTING.—In the road test department shown on page 13, every chassis is subjected to a thorough and most exacting trial. After being carefully "tuned up," a temporary body is fitted, and the completed car undergoes a series of trial runs, not only on the track and

test hills (see page 17) connected with the works, but also on the open road. Every detail receives a most careful and strenuous test, and no chassis is permitted to leave this part of the establishment until it has been proved to be perfect throughout. It is then ready to be painted, and fitted with the body.

CARRIAGE SECTION.—The advantages accruing when the body-work is fitted by the makers of the chassis have long been patent to the experienced motorist, and by far the larger proportion of the chassis turned out are now fitted with carriage work in the shops of the Company. When the chassis is received from the road test department it is sent to the mounting department, where the carriage body which has previously been built by a picked staff of coachbuilders in the body construction department (see page 14) is fitted to it.

PAINTING AND TRIMMING.—After fitting, the car is taken apart, the chassis being sent to the chassis painting department (see page 14) whilst the body goes through the processes of painting, trimming, and varnishing, &c. Nearly every modern style of car body may be seen in these departments, from the limousine and cabriolet to the sporting racerised two-seater, and in this connection it is interesting to note the decided fashion which has set in this season in favour of high driver's doors, and bodies of the torpedo type.

MOUNTING AND FINISHING.—The body and chassis are then brought together again in the mounting and finishing department shown on page 15. Here they are combined into a complete car, hoods, screens, horns, &c., are fitted, and the final finishing touches are put to the whole. A short running trial is then given, to see that all is in order, and the finished car is ready for the purchaser.

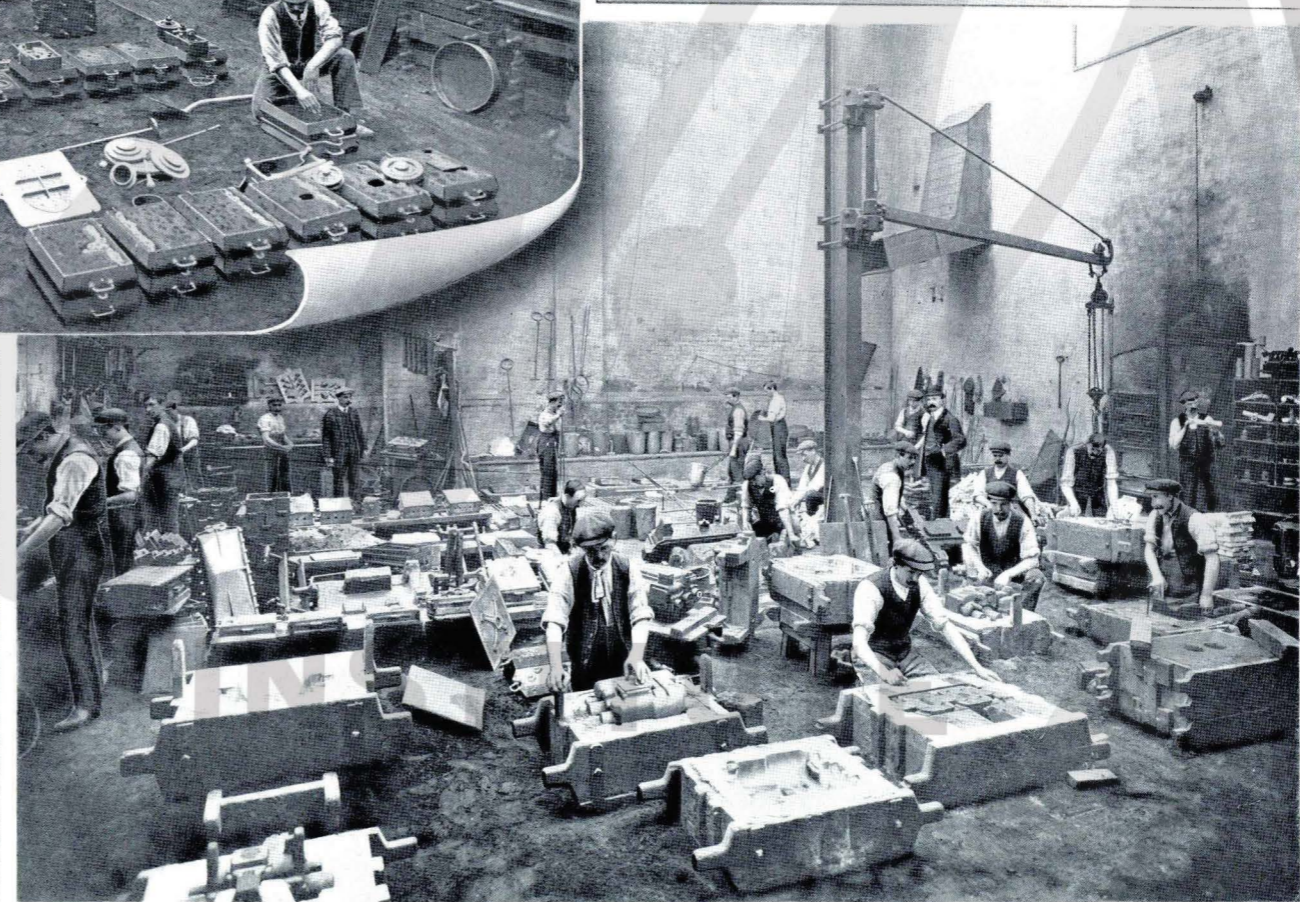
DESPATCHING.—From the despatch department, shown on page 16, a continuous stream of finished cars and chassis are forwarded to nearly every part of the world. Some are sent by road, some are despatched from the sidings adjacent to the works, whilst others are loaded on



IRON FOUNDRY



ALUMINIUM FOUNDRY



THE FOUNDRIES.



specialty-built motor lorries and transported to one or other of the Birmingham railway stations. In the case of cars for export, they are packed complete in crates for shipment.

**MESS-ROOMS.**—The latest extension is the new mess-rooms for the use of the men employed in the works, numbering somewhat more than 3,500. These mess-rooms, which are intended primarily to be used as dining-rooms for the staff and workmen, are also available as a social centre for the employees, and accommodation is provided for gymnastic contests, &c. A miniature rifle range is also installed.

## LONDON DEPOT.

The Showrooms of the Company are situate at York Street, Westminster, London, S.W., in connection with which there is a large garage and repair shop. Views of this depot are given on pages 19 to 22.

**Garage.**—The garage is always open—day, night, and Sundays. It is one of the finest in London, the floor space covering an area of about 20,000 sq. ft.

**Lock-ups.**—A number of private lock-ups are available, which are shown in the illustrations on pages 20 and 21, and have been very much appreciated by customers.

**Washing Space.**—Large additions have been made which enable 100 cars to be washed every night.

**Control.**—A very efficient system of control is kept upon the movements of all cars. No car can enter or leave the garage without passing the Timekeeper's barrier (see page 21), the time being recorded in a book which is always open to the inspection of the customer.

**Accessories.**—Petrol, tyres, oil, and accessories of various kinds can be obtained at any hour, day or night.

**Accumulators.**—A plant is installed for charging ignition and lighting batteries at moderate prices, a skilled attendant carrying out all repairs that may be necessary.

**Tyre Repairs.**—A vulcanizing plant is available to carry out all repairs to cut or burst tubes.

**Drivers' Room.**—A large room about 37 ft. long, well warmed with hot water, together with anteroom and lavatory, is provided for the use of customers' drivers.

**School of Instruction.**—A School of Instruction is established on the premises, with a Lecture Room supplied with engines and parts in section, while several cars fitted with duplicate control are kept exclusively for the purpose of giving lessons in driving to gentlemen and their servants. A separate illustrated catalogue, with full particulars in regard to the School of Instruction and other matters, is issued by the Company.

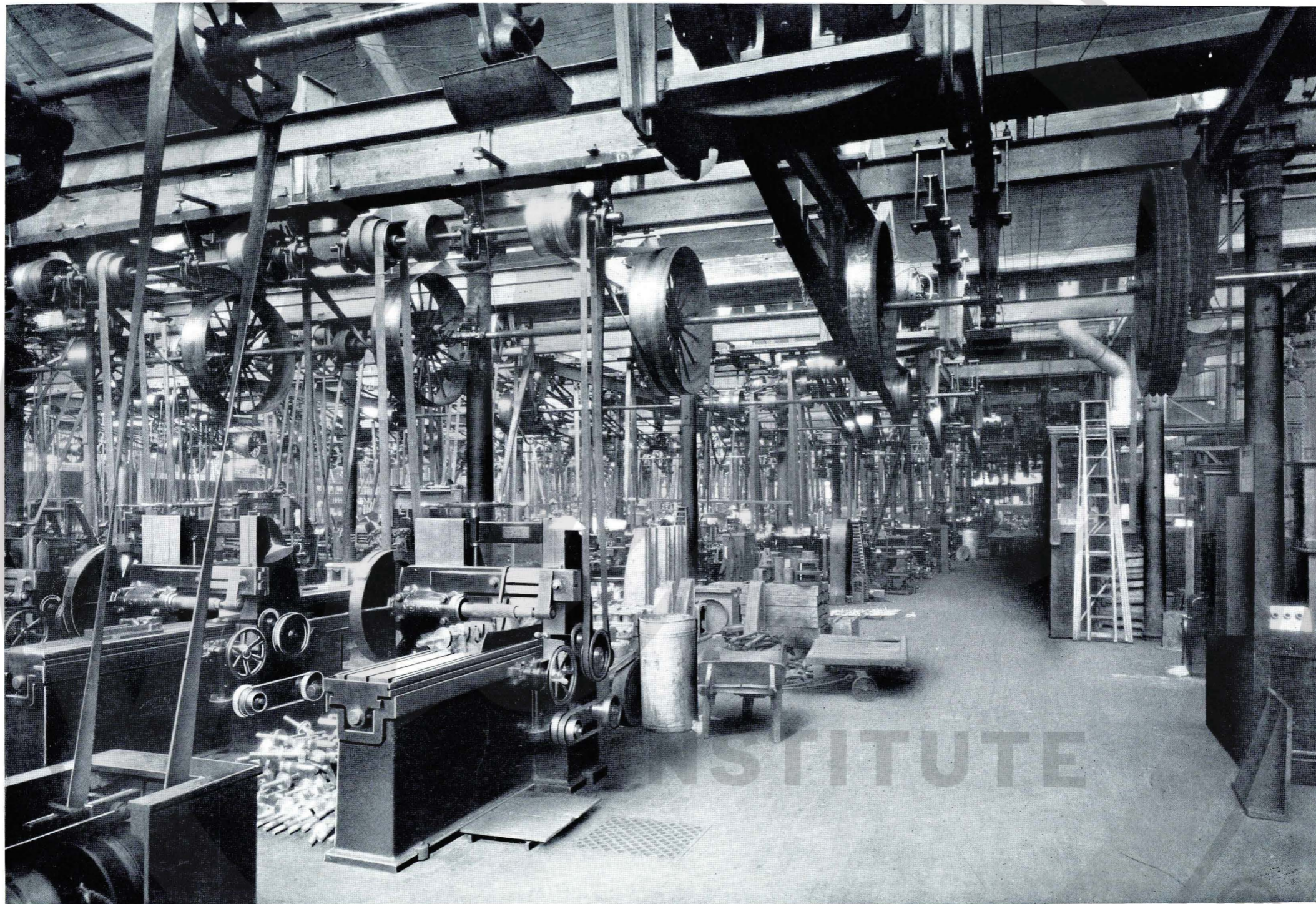
**Hire.**—An extensive hire department has been in operation for some years. Cars are supplied by the year or season, whilst other cars are provided for long distance touring, race meetings, and general country work.

**Sales Department.**—In the showroom, an illustration of which is given on page 2, may be inspected examples of the latest designs of the Company's manufacture.

**Repairs.**—About one mile from the garage are the Repair Works, covering an area of 30,000 sq. ft. Repairs are undertaken to every make of car, the work not being confined to cars of the Company's manufacture. The Grosvenor Canal forms the boundary on one side of the Repair Works, and thus affords facilities for carrying out repairs to motor boats of all kinds.

In addition to the LONDON DEPOT the Company have Showrooms in DEANSgate, MANCHESTER, of which an illustration is given in the accompanying pages.





THE MACHINE DEPARTMENT.





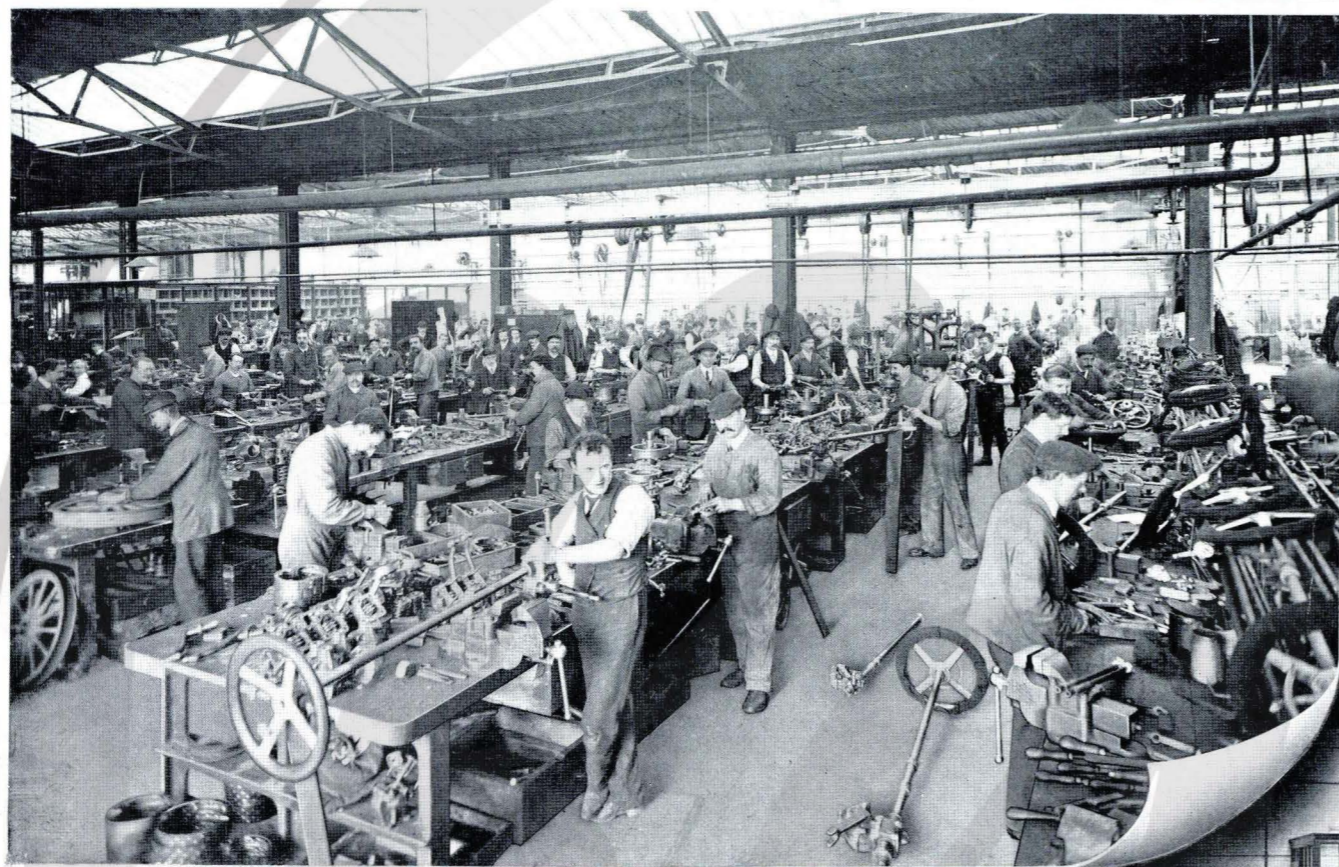
INSPECTION DEPARTMENT

GEAR DEPARTMENT



VIEWING AND ASSEMBLING.

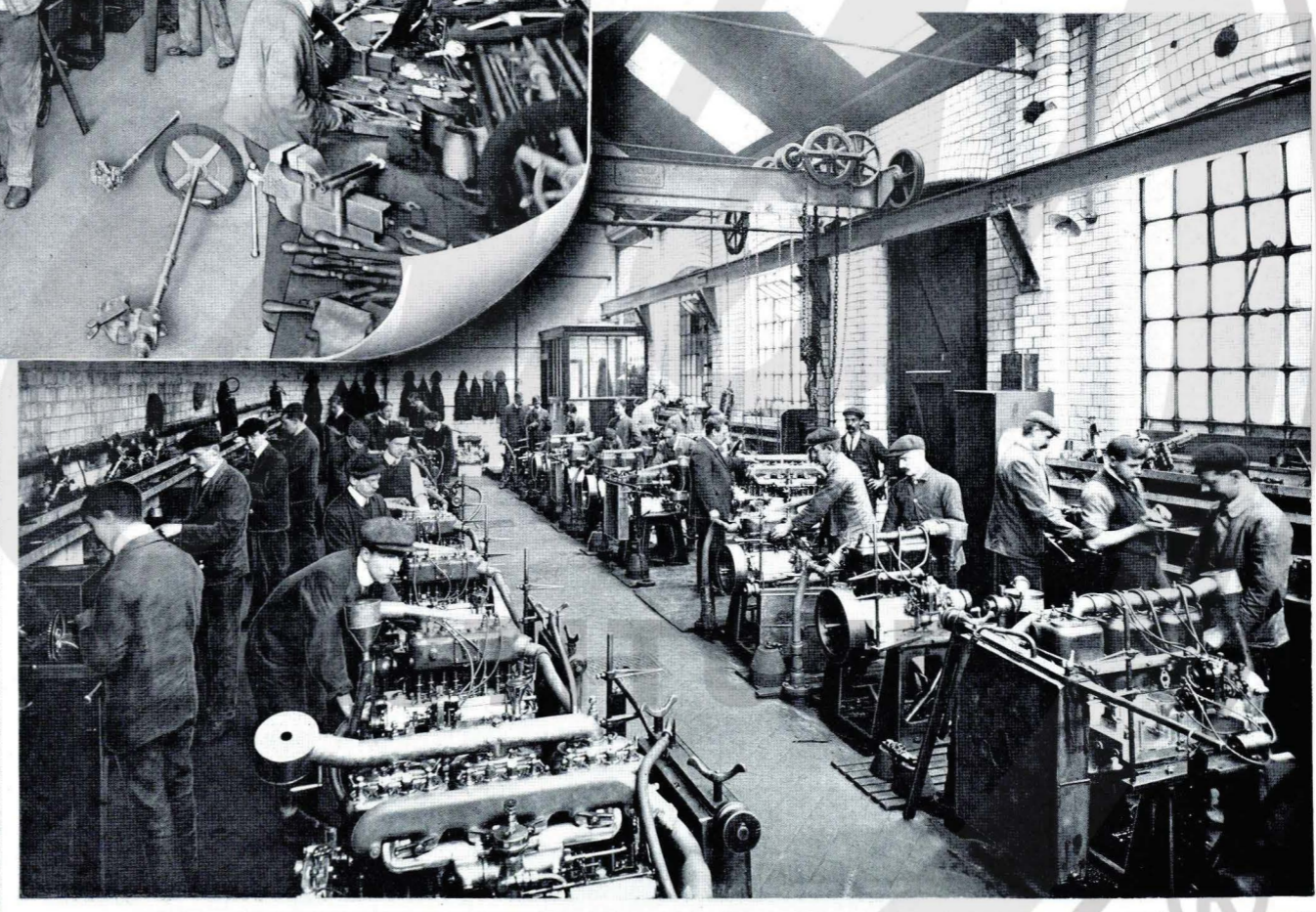




ONE OF THE ASSEMBLING SHOPS



ONE OF THE ENGINE TESTING DEPARTMENTS



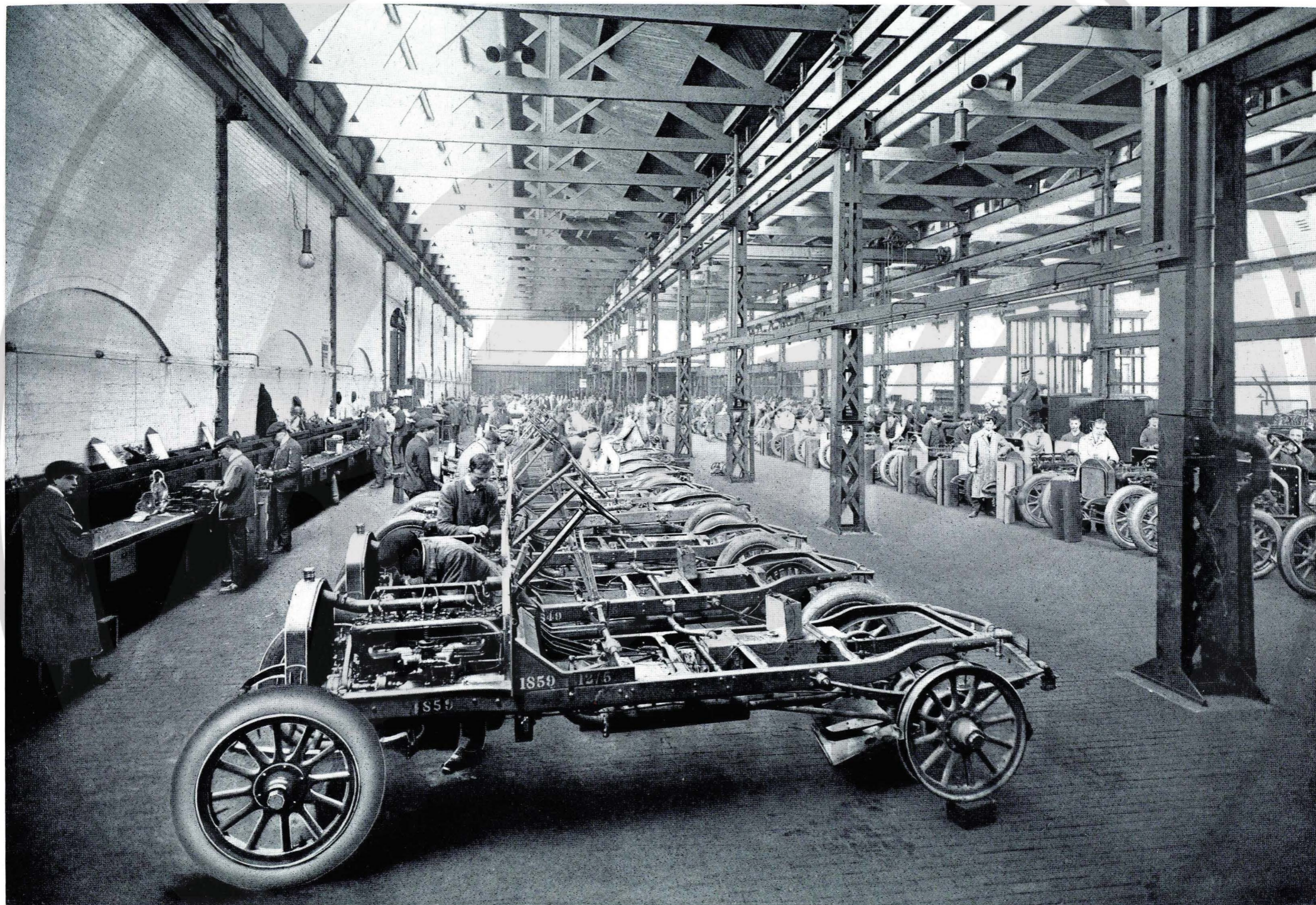
ASSEMBLING AND TESTING.





CHASSIS ERECTING DEPARTMENT.





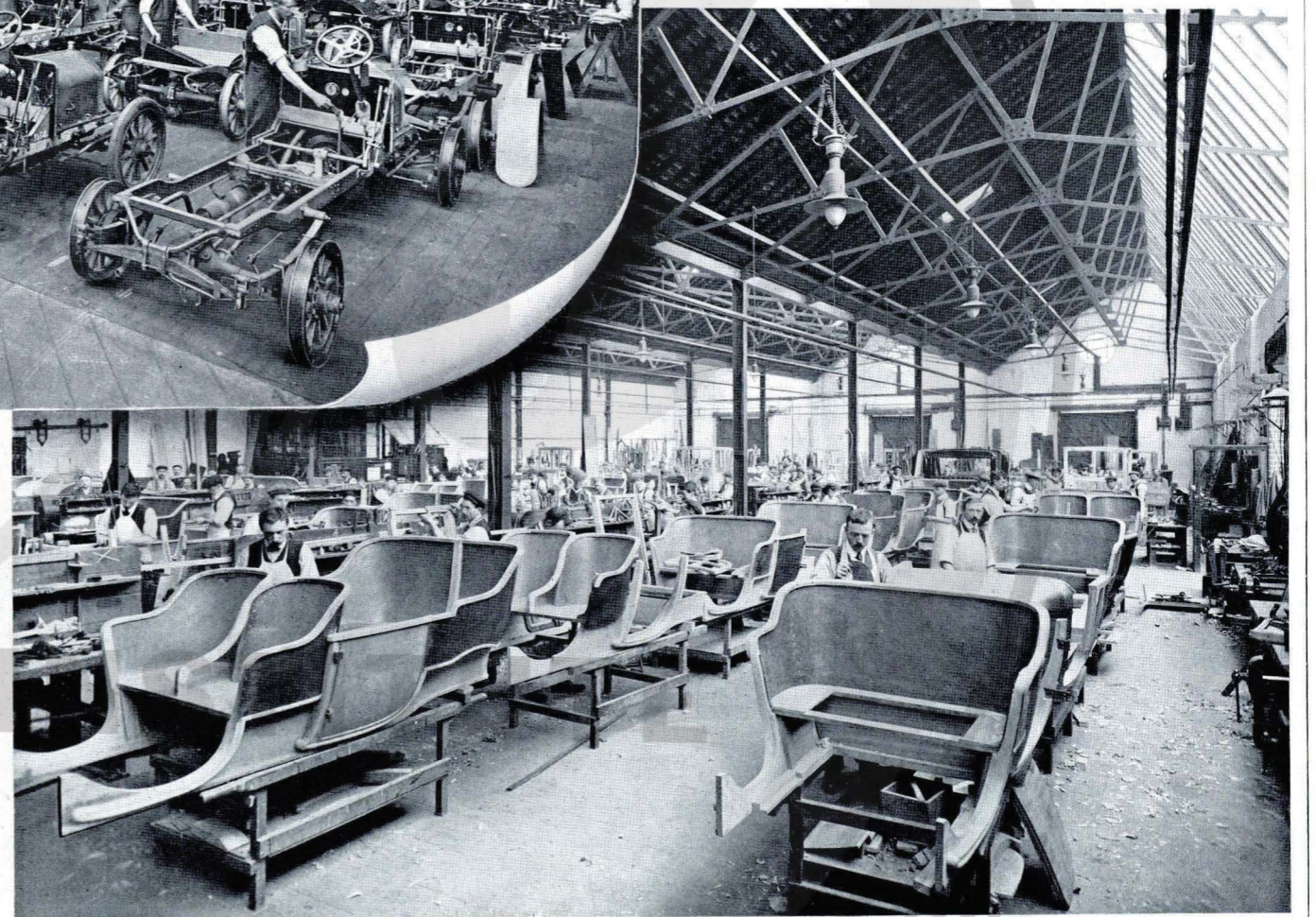
ROAD TEST DEPARTMENT.





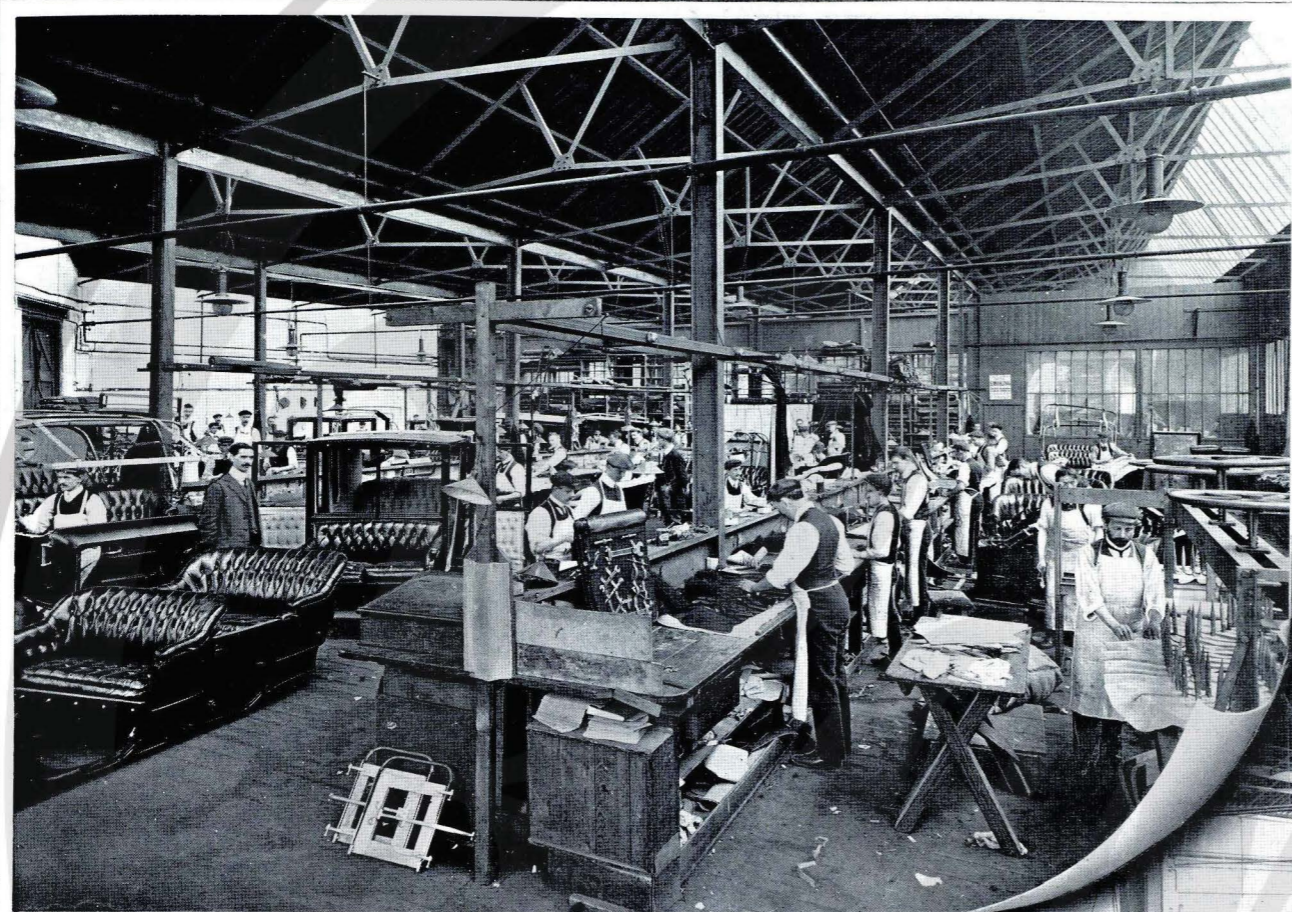
CHASSIS PAINTING DEPARTMENT

BODY CONSTRUCTION DEPARTMENT



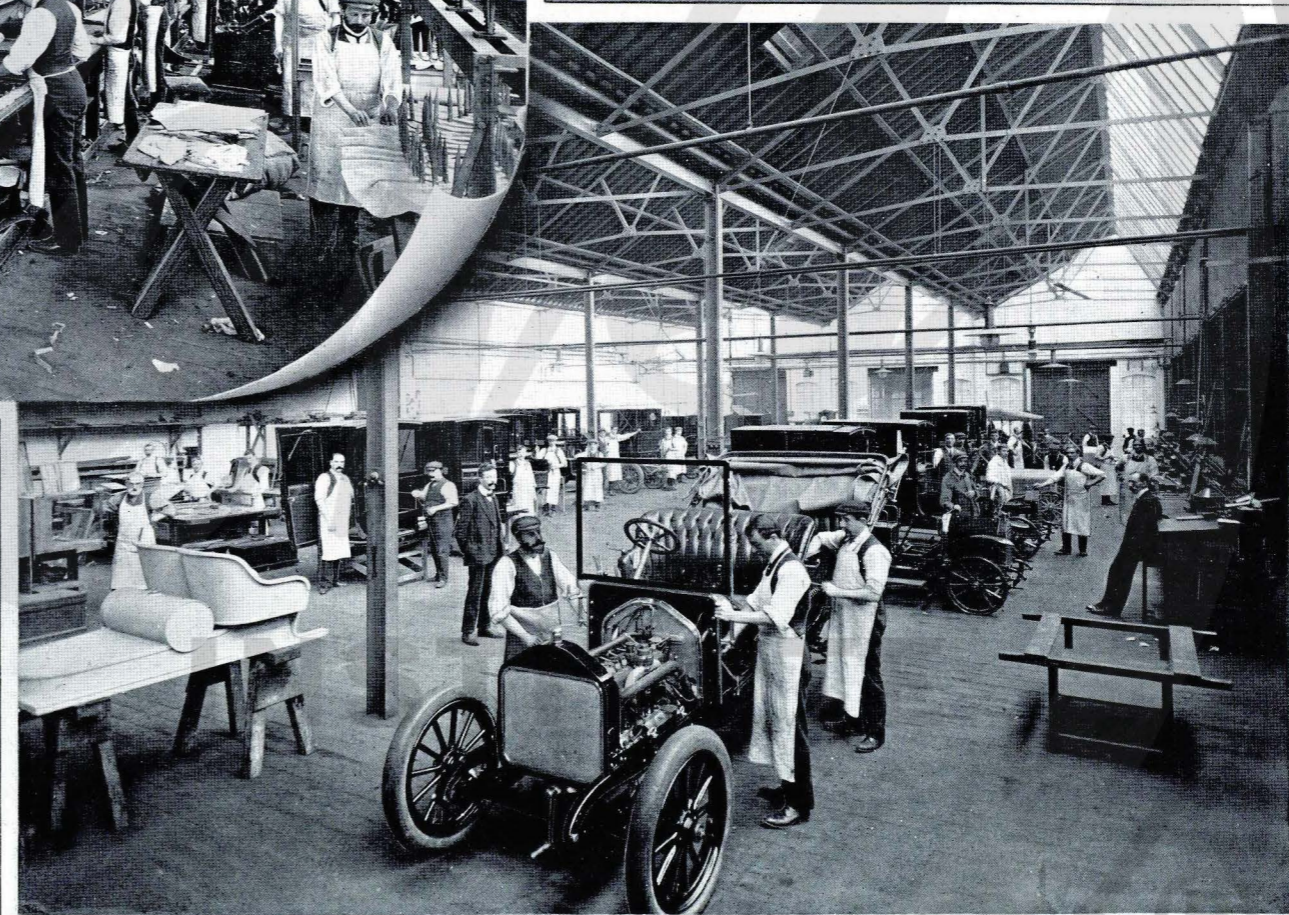
THE CARRIAGE WORKS.





CARRIAGE MOUNTING AND FINISHING  
DEPARTMENT

CARRIAGE TRIMMING DEPARTMENT

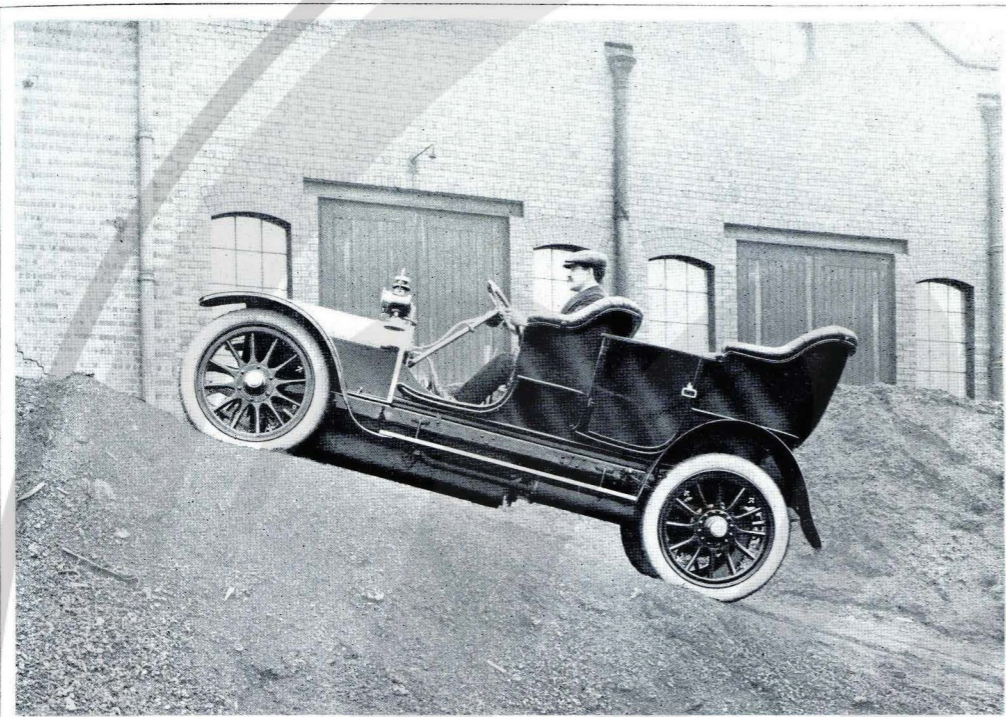


THE CARRIAGE WORKS.

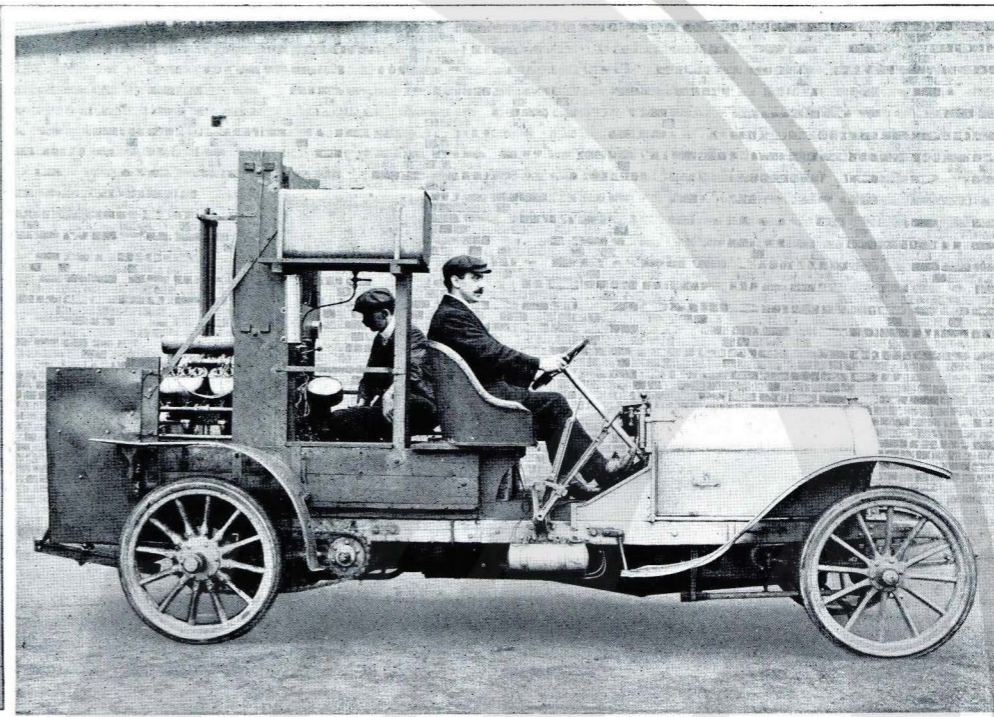


DESPATCH DEPARTMENT.





TESTING THE BRAKES ON A WOLSELEY CAR



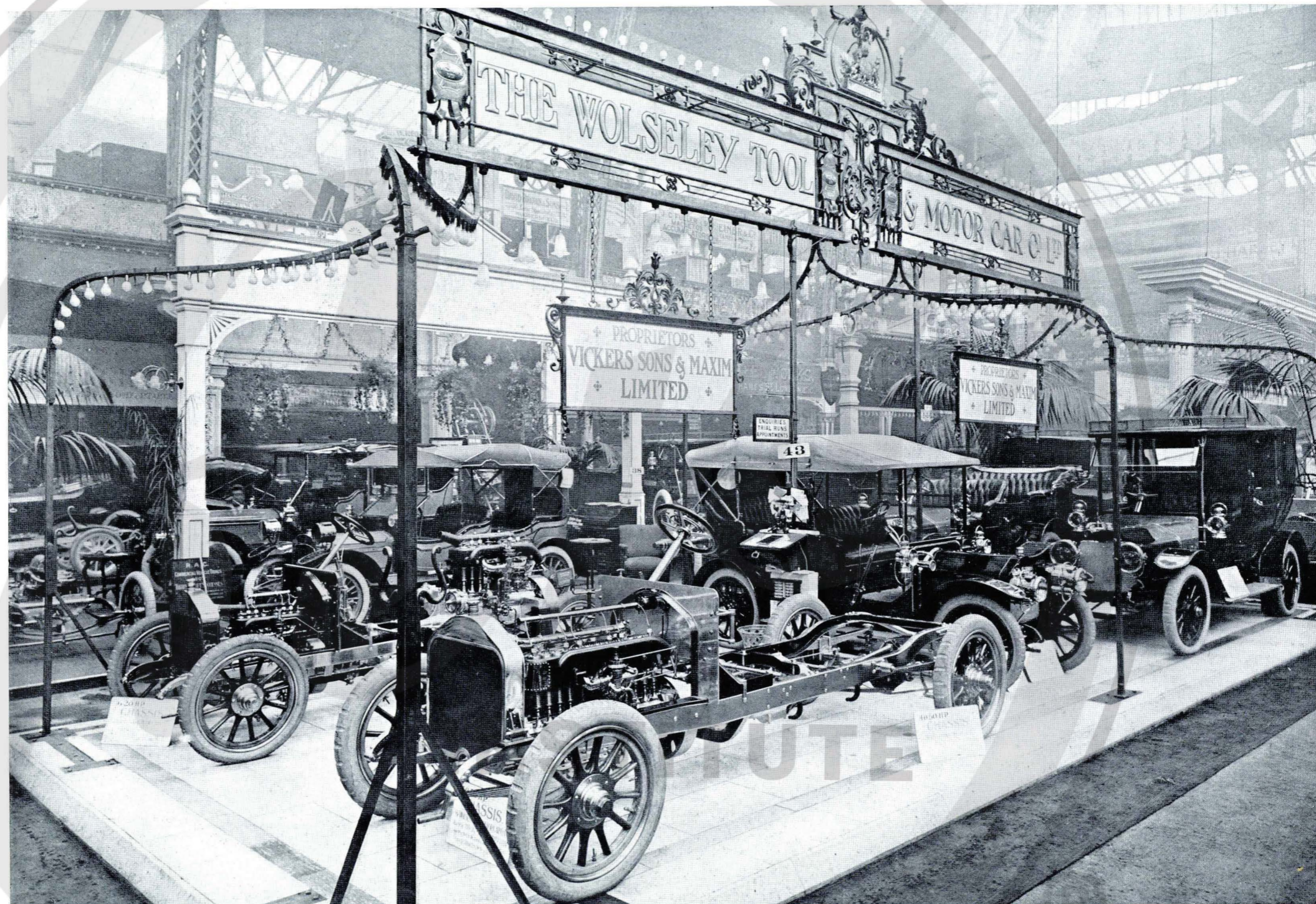
TESTING A WOLSELEY AERO ENGINE.  
COMPLETE WITH COOLING ARRANGEMENT.  
ON THE ROAD



TESTING A WOLSELEY RACING BOAT (35-1 KNOTS)

TESTING FINISHED PRODUCTIONS.





WOLSELEY EXHIBIT AT OLYMPIA, NOV., 1909.



LONDON DEPOT, YORK STREET, WESTMINSTER.

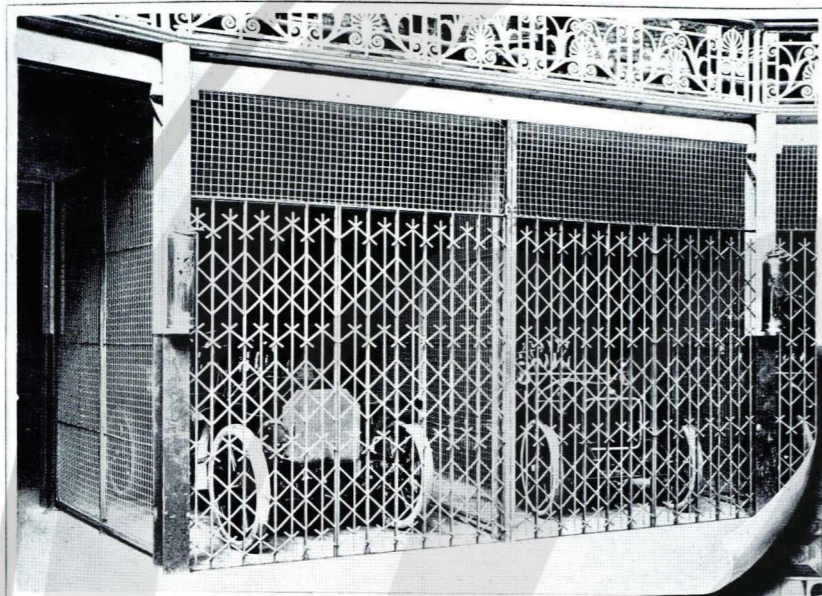


INSTITUTE



PRIVATE LOCK-UPS IN LONDON GARAGE.

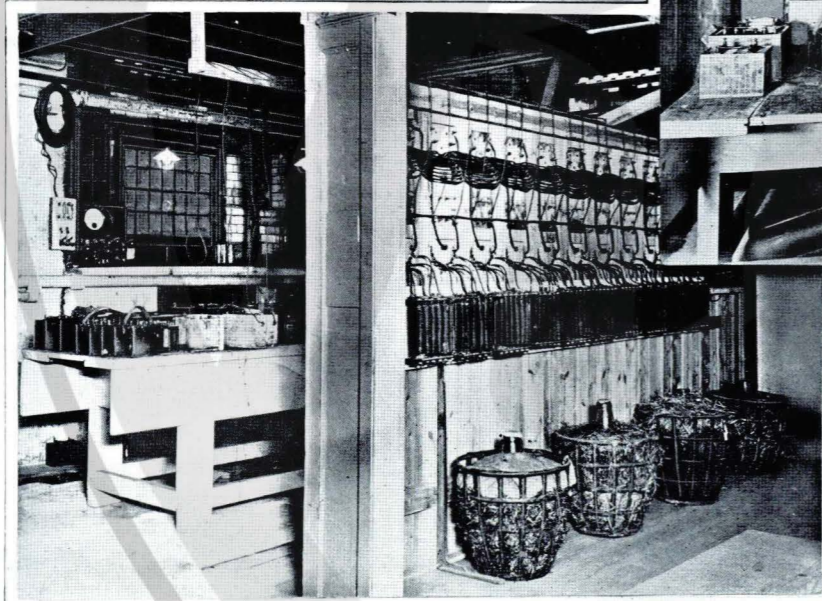




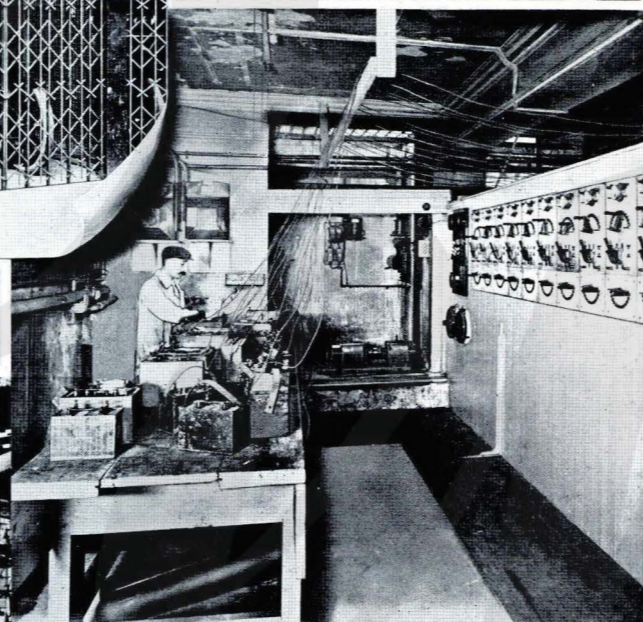
THE LOCK-UP.



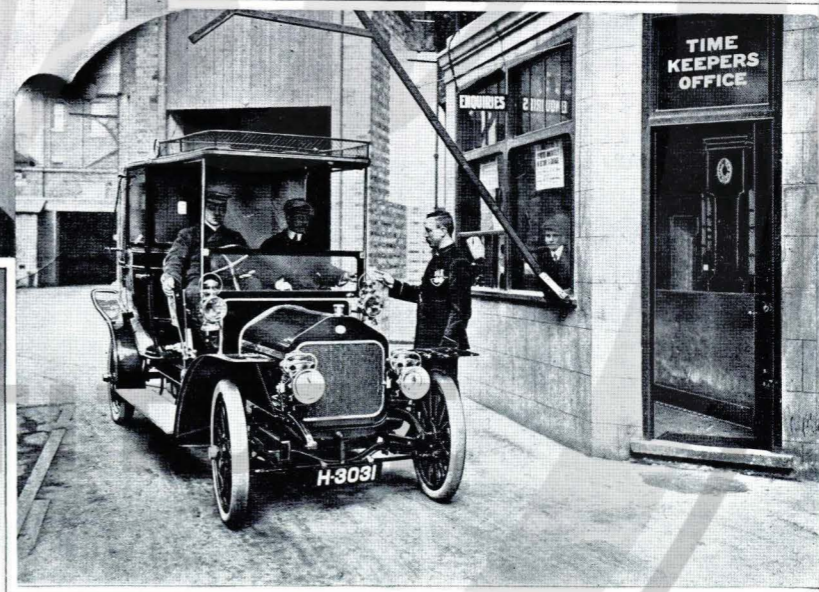
THE WASH.



THE SWITCH-BOARD.



CHARGING BATTERIES.



THE TIMEKEEPER'S BARRIER

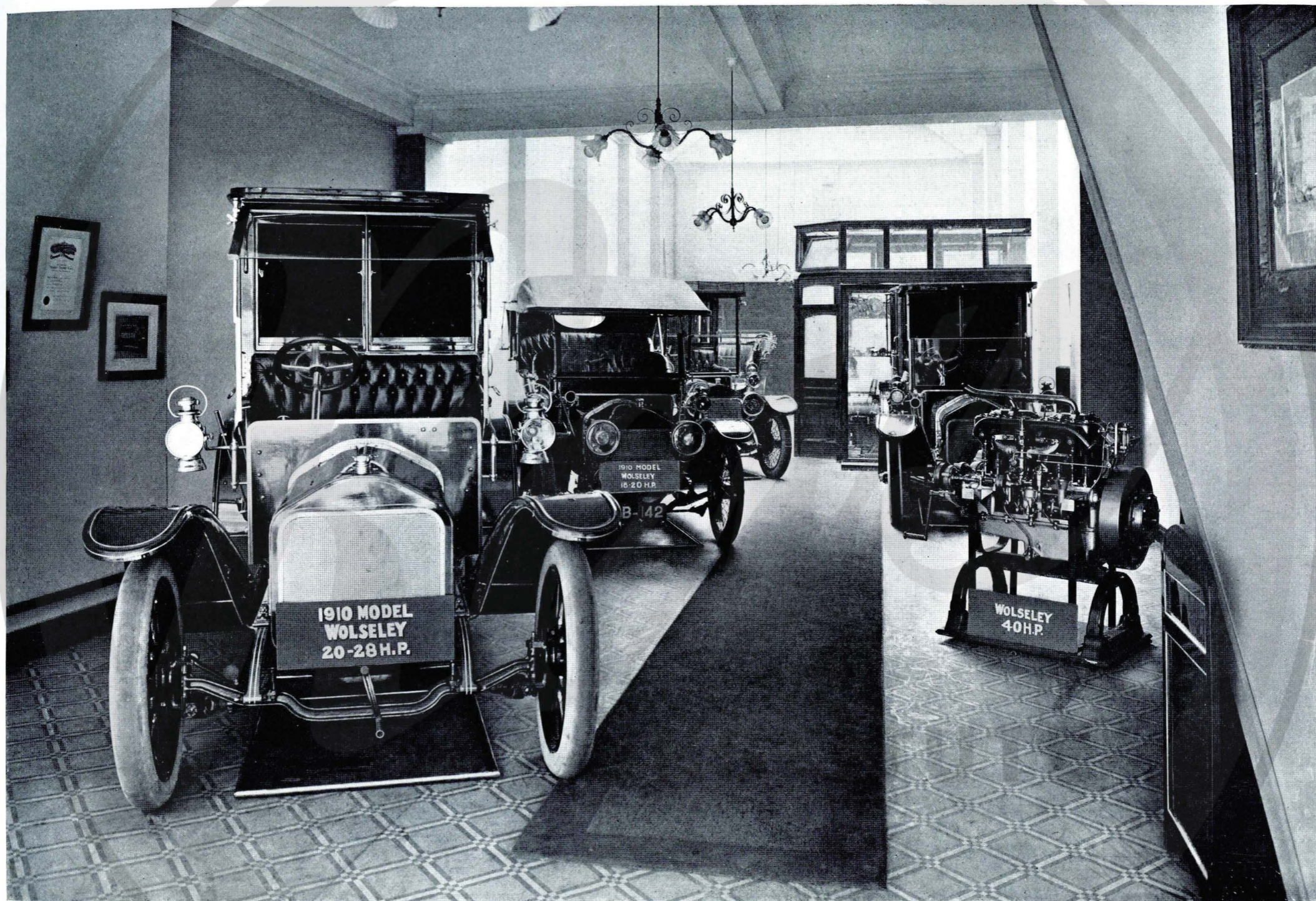


VIEWS OF LONDON GARAGE.

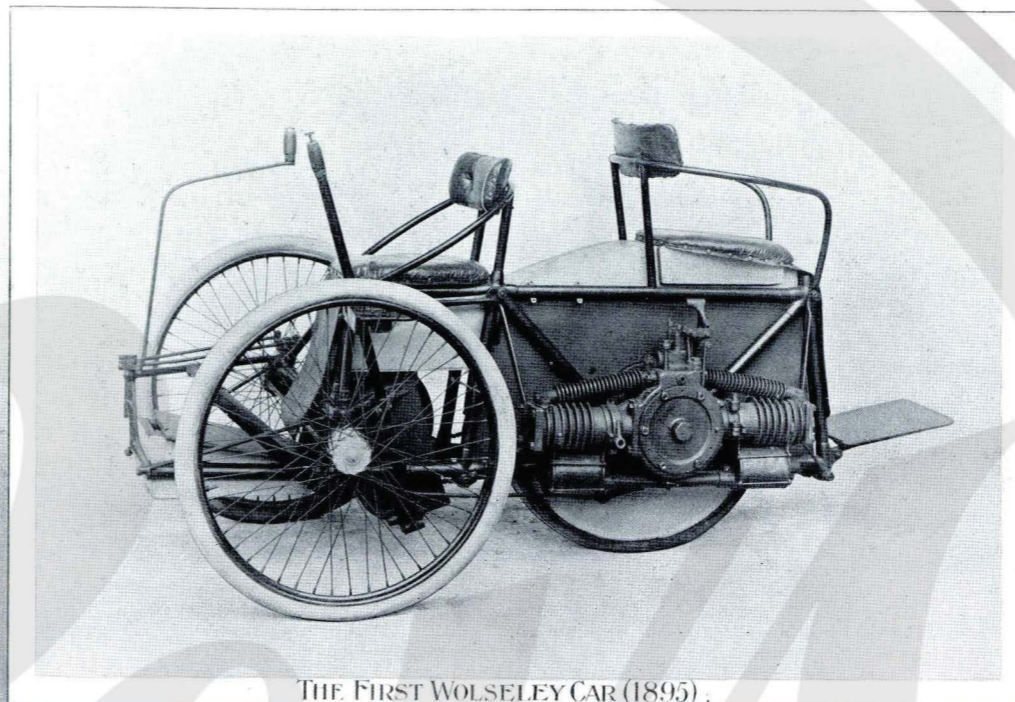


THE REPAIR WORKS AT CHELSEA.

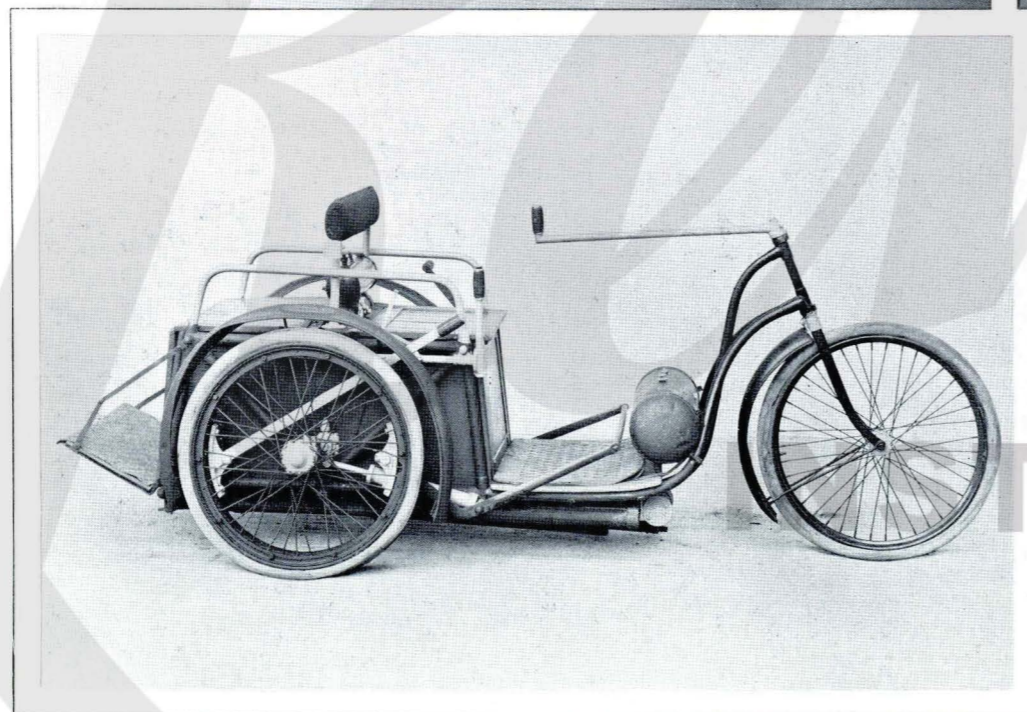




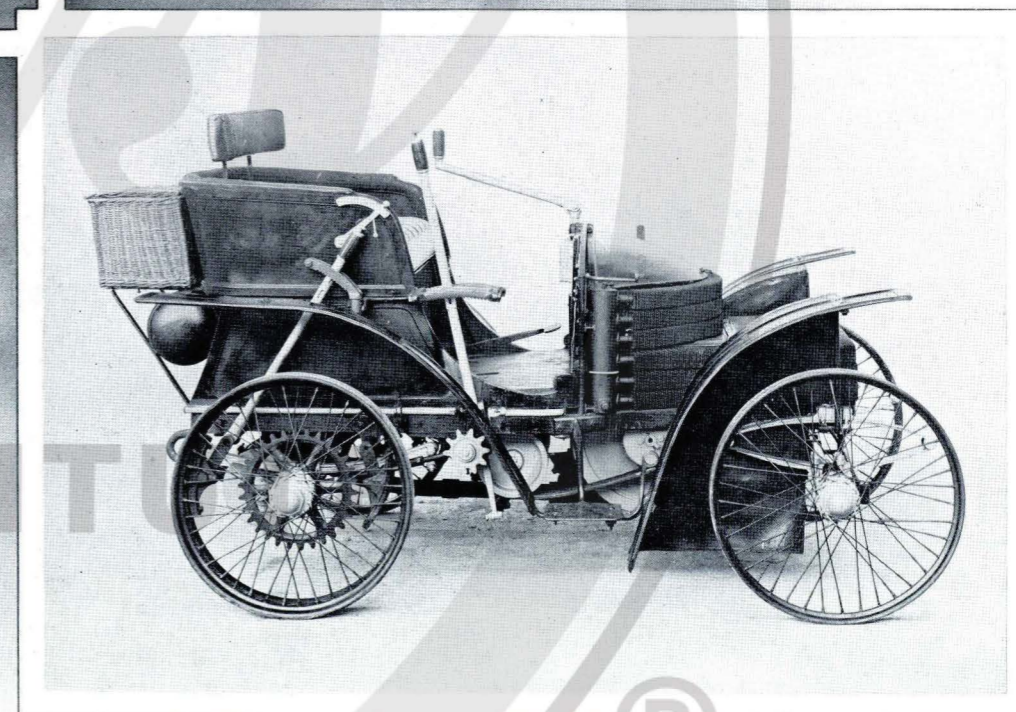
SHOWROOM, DEANS GATE, MANCHESTER.



THE FIRST WOLSELEY CAR (1895).



WOLSELEY CAR MADE IN 1897.

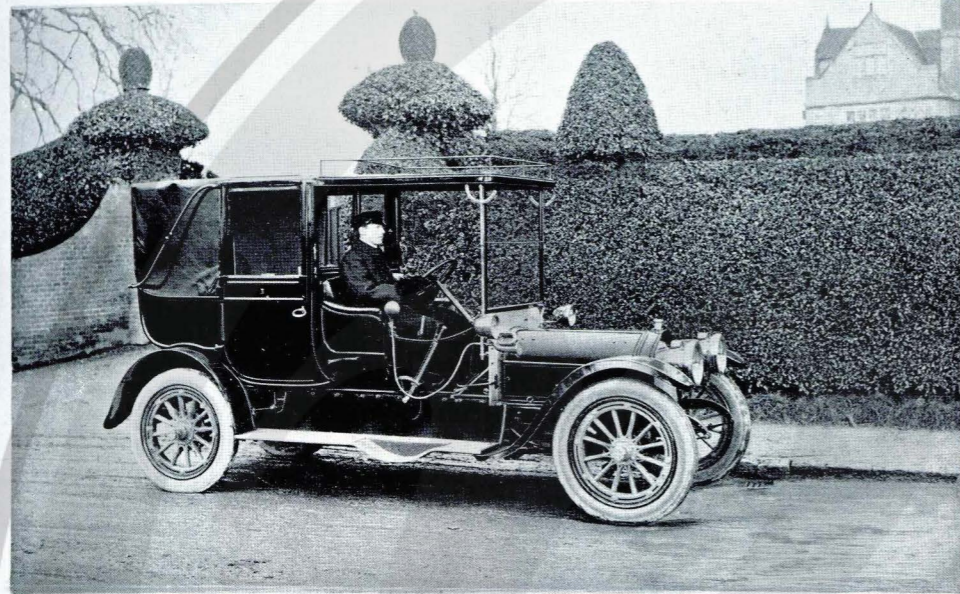


WINNER IN VOITURETTE CLASS R.A.C. 1000 MILES TRIAL 1900.

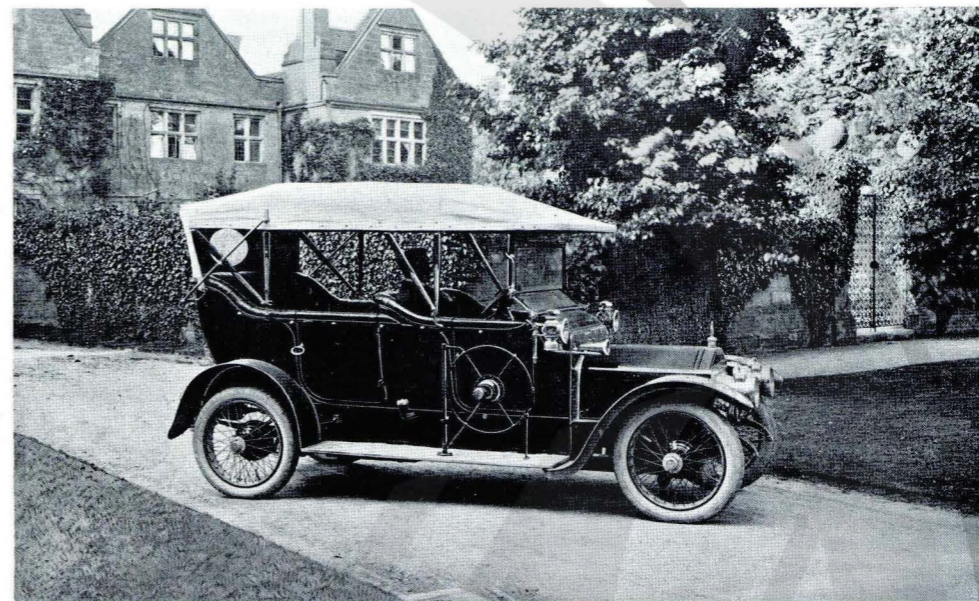


THE ORIGINAL WOLSELEY CARS.

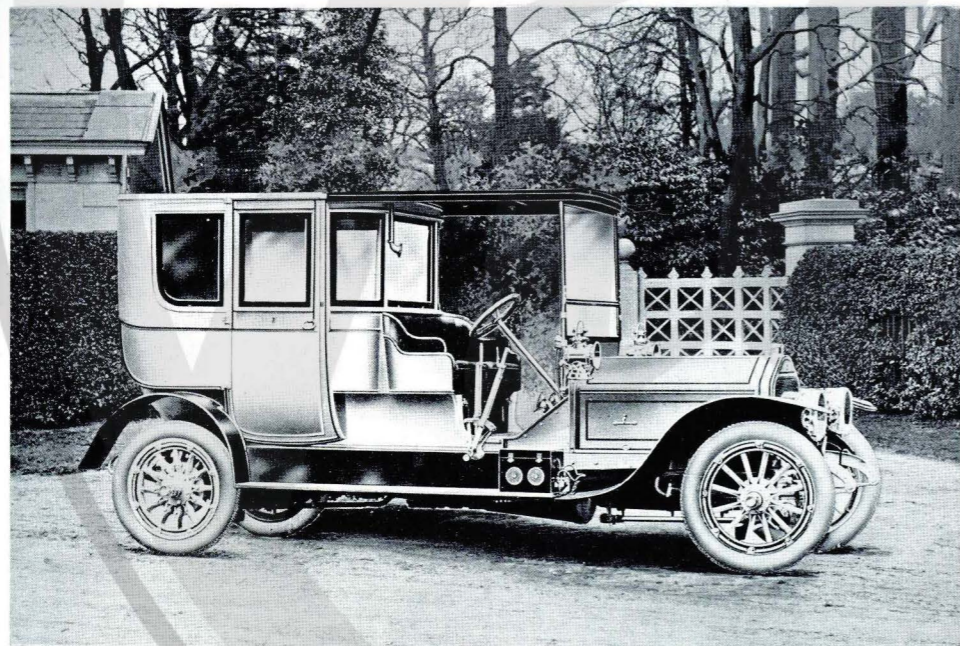




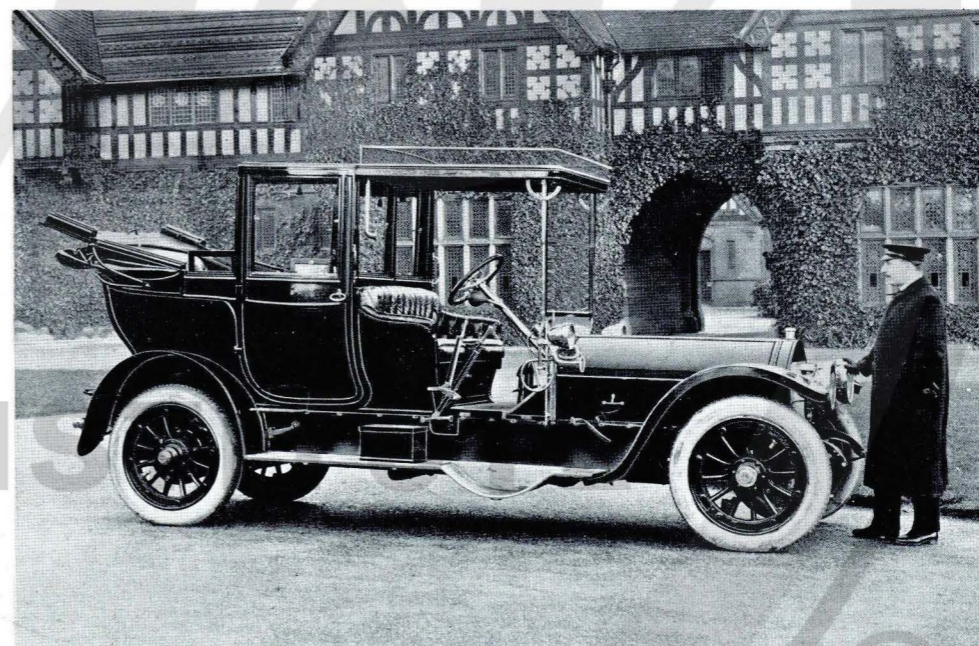
20.H.P. LANDAULETTE



16.H.P. TORPEDO PHAETON.

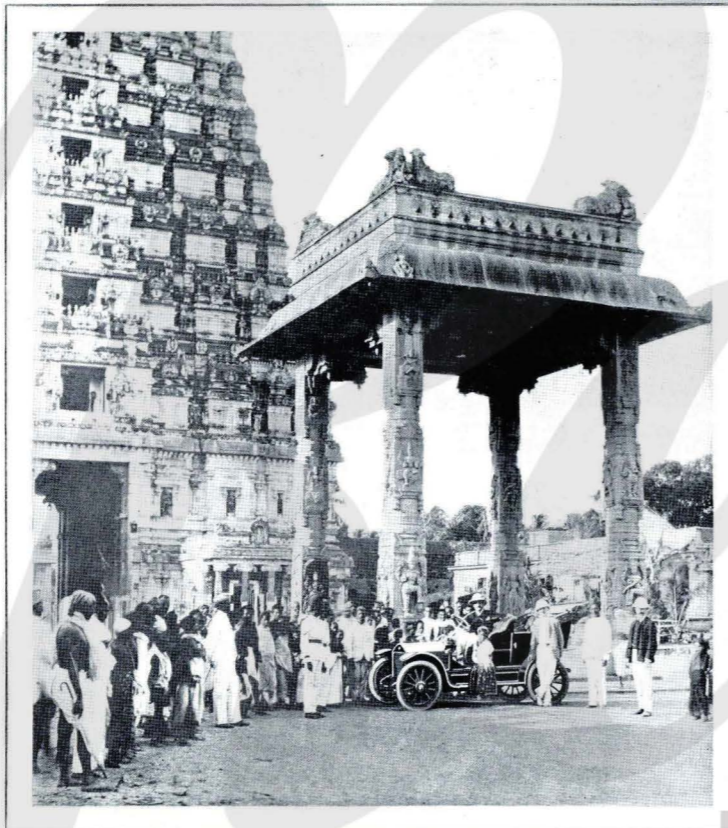


QUEEN ALEXANDRA'S CAR.



60.H.P. IMPERIAL LIMOUSINE-LANDAULETTE.

MODERN WOLSELEY CARS.



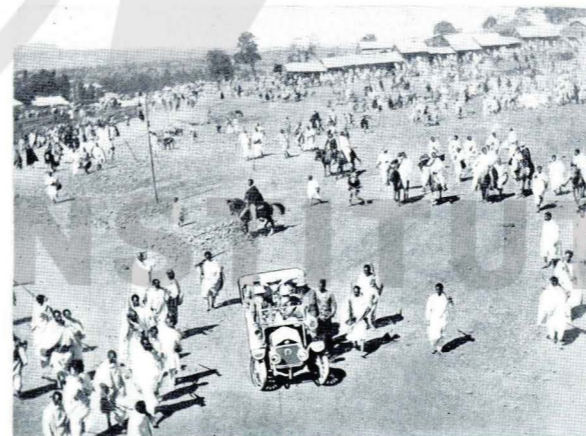
INDIA



SINGAPORE



CEYLON



ABYSSINIA



MALAYA

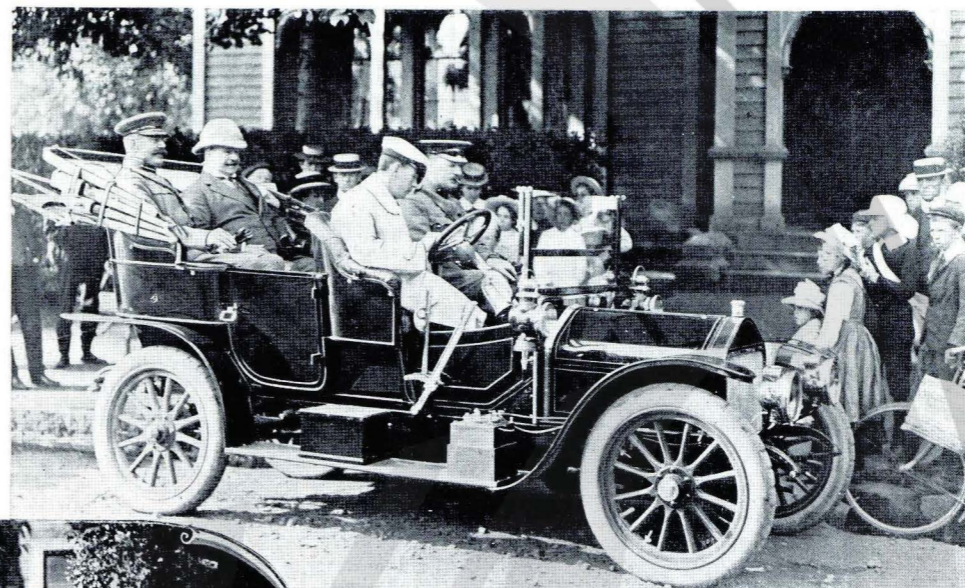


WOLSELEY CARS ABROAD.

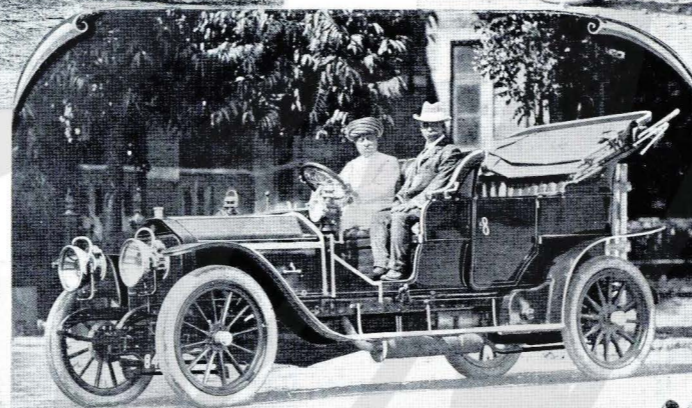




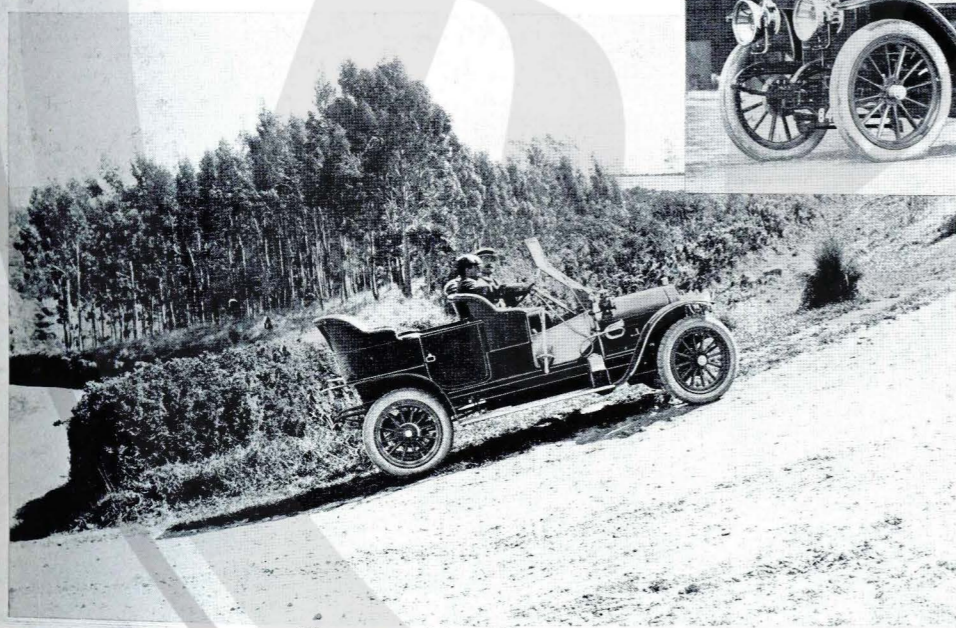
STRAITS SETTLEMENTS.



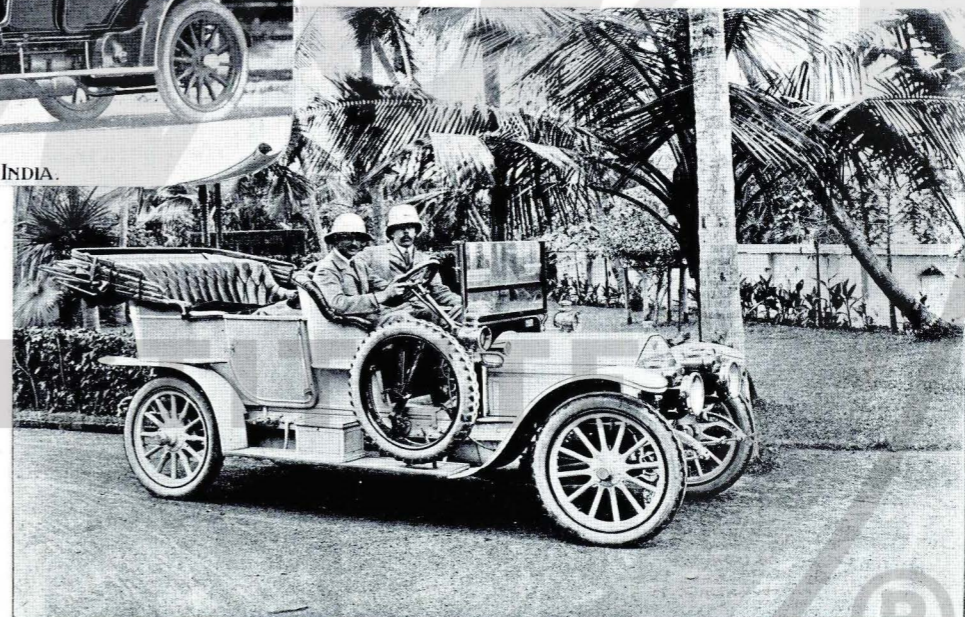
CHRISTCHURCH, NEW ZEALAND.



BOMBAY, INDIA.

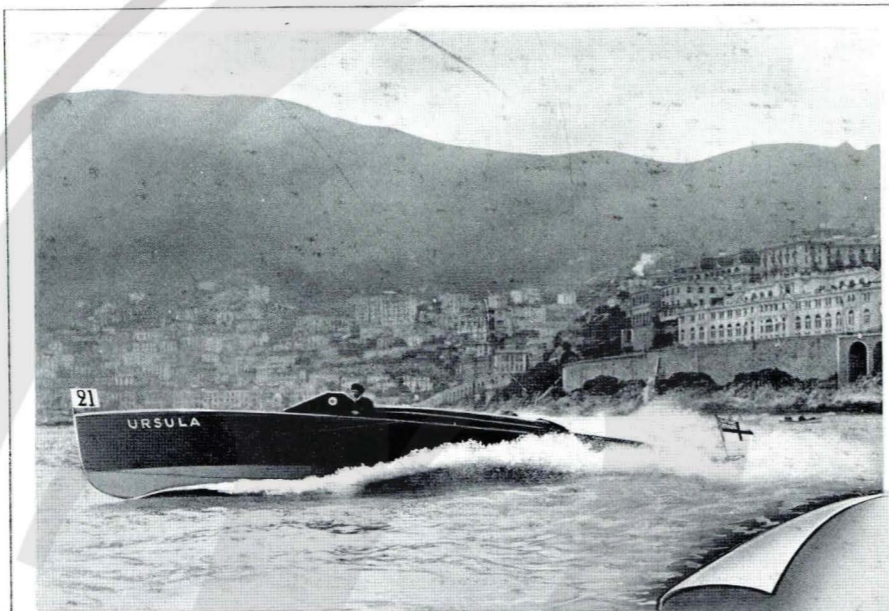


TIMARU NEW ZEALAND.

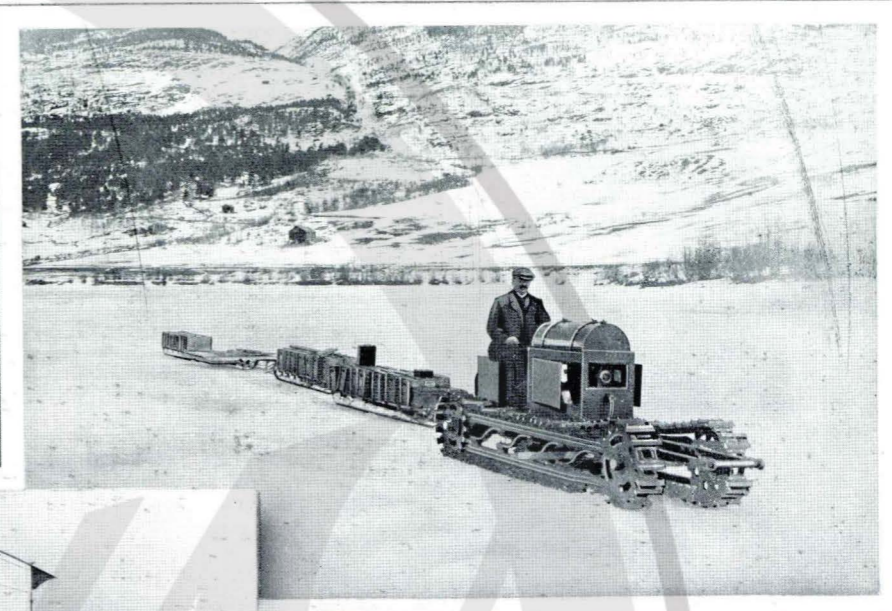


BANDARWELA CEYLON.

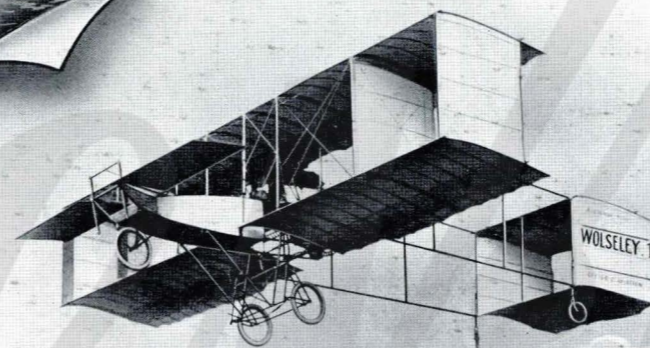
WOLSELEY CARS ABROAD.



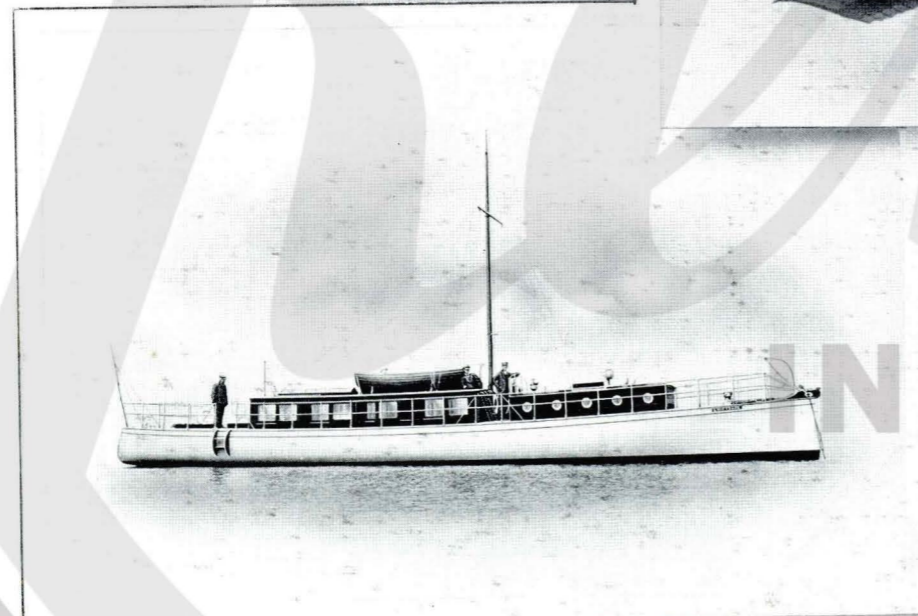
WOLSELEY BOAT BREAKING  
THE RECORD AT MONACO



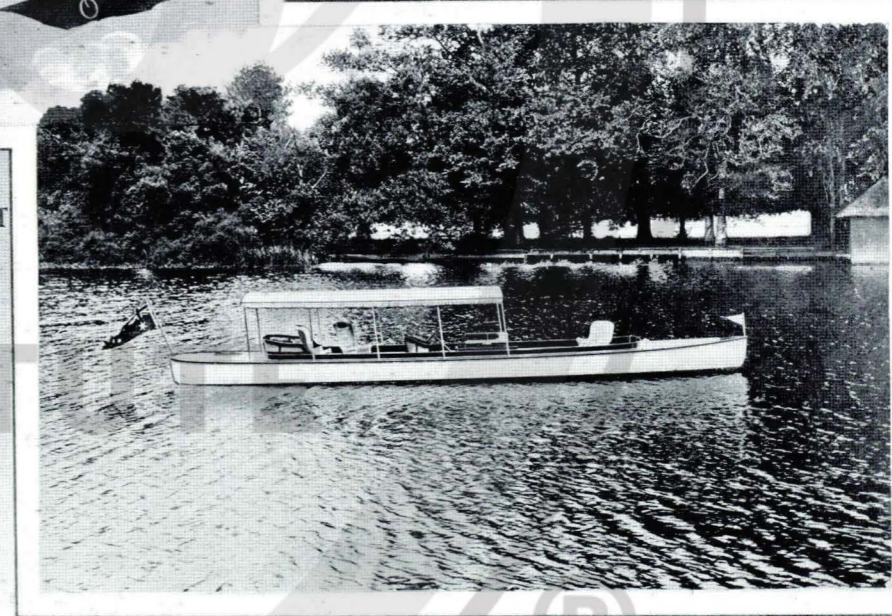
MOTOR SLEDGE BUILT FOR BRITISH ANTARCTIC  
EXPEDITION UNDER TRIAL IN NORWAY



WOLSELEY Nº1  
AEROPLANE IN FLIGHT



A WOLSELEY 70 FT MOTOR YACHT



A WOLSELEY RIVER LAUNCH ON THE THAMES



OTHER WOLSELEY PRODUCTIONS.



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INSTITUTE

