

GRAND DISPLAY OF CHAINLESS MOTOR CARS AT THE NEW ZEALAND INTERNATIONAL EXHIBITION

We are the Sole New Zealand Agents for the following lines, which we are exhibiting at the Exhibition:—

CLEMENT TALBOT, LTD., LONDON, Makers of Talbot cars.—1 10-12 h.p., 2-cylinder Talbot car, side entrance body; seats for four. 1 12-16 h.p., 4-cylinder Talbot car, side entrance body; seats for five. Send for Catalogue.

HUMBERS, LTD., COVENTRY, Makers of Coventry Humber Cars.—1 10-12 h.p., 4-cylinder Coventry Humber Car, for Doctor's use. Two seats. 1 10-12 h.p., 4-cylinder, Coventry Humber, side entrance body. Seats for four. Send for Catalogue.

HUMBERS, LTD., BEESTON, Makers of Beeston Humber Cars.—1 12-20 h.p., 4-cylinder, Beeston-Humber Car, side entrance body. Seats for five. Send for Catalogue.

MINERVAS, LTD., ANTWERP, Makers of Minerva Cars.—1 22 h.p., 4-cylinder Minerva Car, side entrance body. Seats for five. Send for Catalogue.

SWIFT CYCLE CO., COVENTRY, Makers of Swift Cars.—1 7-8 h.p., 2-cylinder, Doctor's Swift Car, two seats. 1 12-14 h.p., 4-cylinder, Swift Car, side entrance body. Seats for five. Send for Catalogue.

The cars exhibited by us in the International Exhibition are chainless, and to prove that chainless cars have superseded the chain drive system, we point to the Tourist Trophy Race, just run in England.

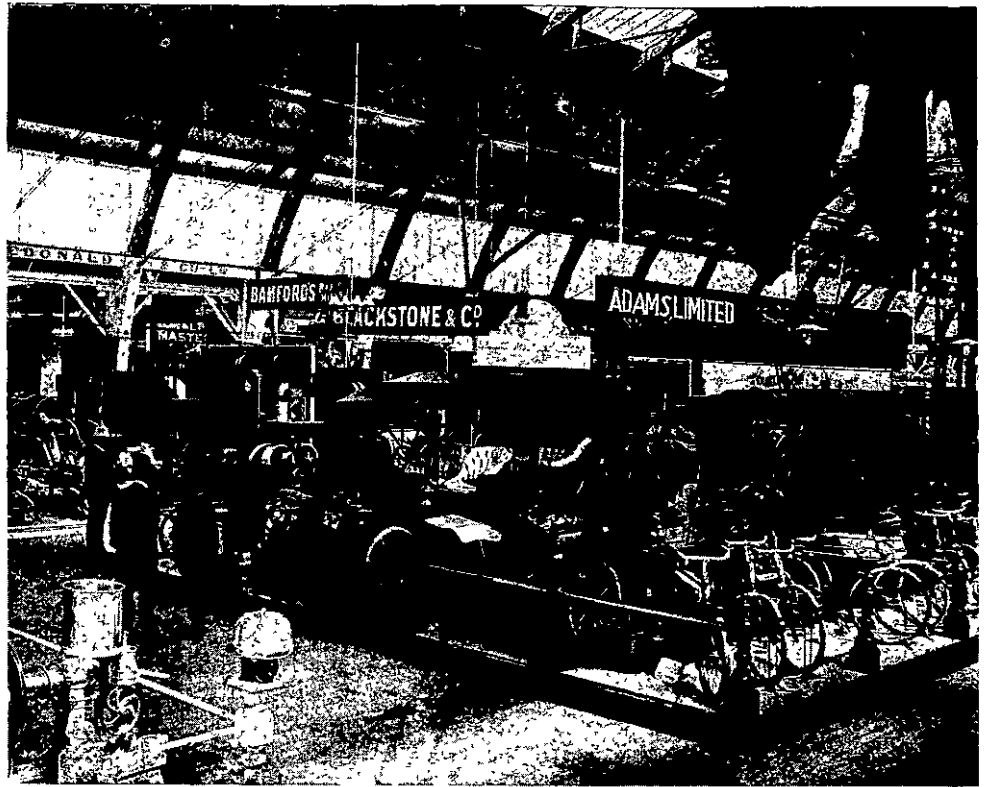
The 49 cars entered for this race can be taken as representing the latest system of construction. The Tourist Trophy Race is organised with a view to improving the design of cars for the use of the general public, and although chain drive cars were the first on the market, we now find that out of the 49 cars entered for the Tourist Trophy Race, 32 of the latest makes were chainless, while only 17 were fitted with side chains. The winning car of the Tourist Trophy Race was chainless.

The well-known firm of Messrs. Charles Jarrott and Letts, agents for the Crossley car, advertise in the "Auto car" under date 15th September, 1906, as follows:—

"Realising that a number of Automobilists have a marked dislike for any car with a chain drive, and realising that for use in town with covered-in carriage bodies, the increased silence in running obtained from a chainless car has many advantages, we are now in a position to meet the wishes of many of our clients, and supply a chainless Crossley car."

Three reasons why the Chainless Cars are up to date:—

1. The Tourist Trophy Race, run on Thursday, 27th September, 1906, in the Isle of Man, over a distance of 161½ miles, with a fuel limit of one



Our Exhibit at the Exhibition—8 Motor Cars, 5 Motor Cycles and 40 Cycles, valued at £7,000.

gallon of petrol per 25 miles, was won on a chainless motor car. 49 entries, 32 cars chainless.

2. Manufacturers of high-class cars are now advertising the new models chainless, viz., the new Crossley and the new Napier.

3. The following cars we represent are chainless—Swift, Humber, Talbot, Minerva and the Chainless Napier. Illustrated Catalogues on Application.

Sole New Zealand Agents: **ADAMS, Ltd.**

Late ADAMS STAR CYCLE CO.,

CHRISTCHURCH, 148 High-st. & 198 Colombo-st.; WELLINGTON, Mercer-st.; WANGANUI, The Avenue; PALMERSTON N., The Square.

IMPORTERS OF MOTOR CARS AND CYCLES,

main lamp holder, and the lamp is inserted in the new holder. It only remains to find out which are the positive and negative ends of the wire, and connect up to the accumulator as before described. The lamp used would be either an 8, 16, 32, or 50 c.p., according to the size of the accumulator and the voltage of the lighting circuit.

Charging from a dynamo—A good deal of misunderstanding sometimes arises as to the proper way to connect up an accumulator to the wires from a dynamo machine. The correct way is to connect the lamps across the wires, the accumulator being placed in the circuit between one of the brushes and one side of the wiring. According to the number of lamps in circuit will depend the amount of current in amperes that will pass through the cells. The current that each lamp will pass depends on its candle power and voltage.

Bichromate battery—A perfectly satisfactory method of charging ignition accumulators at home is to rig up a two-fluid bichromate battery. One type is known as the "Fuller" battery. It consists of four glass or earthenware jars, and in each of these is placed a circular porous pot. Then placed in each outer jar are two carbon battery plates, and in the porous pot a thick zinc rod or plate, that has been previously amalgamated with some mercury. The outer jar is filled with a strong solution of 4 oz. chromic acid, water 16 oz., and 10 oz. sulphuric acid added. The porous pot is filled with dilute sulphuric acid, one part to eight of water. The plates must be connected carbon to zinc, with insulated wire and joined up to the accumulators. An ammeter should if possible be placed in the circuit to see that no excess of charging current is passing; if so, it will be necessary to place about 20 in. of No. 20s German-silver wire in the circuit, and adjust it to the right length to give the correct charging current. The battery will charge up a twelve-ampere-hour accumulator three times without the solutions being renewed, but it is important to see that the zincs are removed from the acid when not in use. The capacity of the outer jar should not be less than three pints. The supplies can be obtained from any dealer in electrical fittings, or the battery complete can be purchased from one of the large motor accessories depots.

LEARN AUTOMOBILE OPERATION and ENGINEERING.

THE only School that provides training by mail for the growing numbers of people who require practical and theoretical information concerning the operation, repair, construction and design of modern Automobiles and Motor Boats.

If you are in the least interested in the motoring industry, it certainly will pay you to avail yourself of the thorough and well-planned resources and facilities we possess for imparting the sort of knowledge that no motor-car user or expert can do without.

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Owners, Drivers, Chauffeurs, Salesmen, Agents, Bicycle Men, Engineers and Inventors will find our course of inestimable value. Send for a free prospectus. Fill in the coupon below and post it to-day, and you will receive a copy by return mail.

THE CORRESPONDENCE SCHOOL OF AUTOMOBILE ENGINEERING, NEW YORK.

N.Z. Agent: **JAS. RODGER,**
131 Cashel Street - Christchurch.

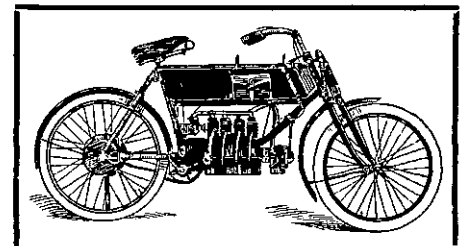
Name

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Keep your Eye

On the Three Distinguishing Features of the....

F.N. 4-CYLINDER F.N. 4-H.P. MOTOR CYCLE F.N.



- 1.—F.N. 4-Cylinder Engine of 4-H.P.
- 2.—F.N. Bevel Gear Transmission.
- 3.—F.N. Spring Compensating Forks.

A single glance at the F.N. 4-Cylinder Motor Cycle suffices to realise the very practical arrangement of the machine which makes it less complicated than any other motor cycle.

SOLE NEW ZEALAND AGENTS:

E. REYNOLDS & CO., LTD.,
WELLINGTON,
CHRISTCHURCH and INVERCARGILL.