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.