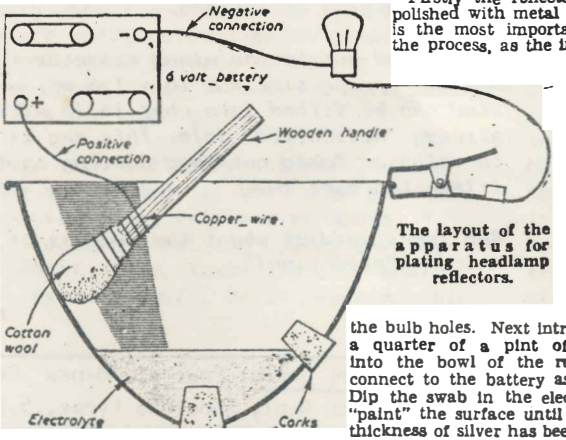
TECH TIPS

RE-SILVER YOUR HEADLAMPS

IN the method described the bowl of the reflector is made the cathode by connecting to the negative terminal of a six-volt battery. The anode is in the form of a cotton-wool swab soaked in the electrolyte and held by a wire connected to the positive terminal of the battery. The swab is used like a paint brush and by dipping in electrolyte a film of pure silver can be painted on the reflector.

SILVER PLATING

Firstly the reflector should be polished with metal polish. This is the most important stage of the process, as the initial degree of polish determines the final result. Obtain a mirror finish and remove any traces of lacquer from the surface. Wash the reflector free from metal polish and cork the bulb holes. Next introduce about a quarter of a pint of electrolyte into the bowl of the reflector and connect to the battery as illustrated. Dip the swab in the electrolyte and "paint" the surface until a sufficient thickness of silver has been deposited.



The layout of the apparatus for plating headlamp reflectors.

Do not allow the wire connection of the swab to touch the reflector. Wash the reflector and polish with metal polish until a desired finish has been obtained. Finally finish with a coat of transparent lacquer which has been thinned to about a third of the usual consistency.

THE ELECTROLYTE

For silver plating the electrolyte is made as follows. Obtain from the chemist a quarter of an ounce each of silver nitrate and sodium cyanide. Sodium cyanide is, of course, poisonous, and utmost care should be exercised in disposing of spent solutions. The materials should be kept under lock and key and preferably disposed of after the reflectors have been plated. Dissolve each of the chemicals in a half pint of water and mix. This quantity is sufficient for about four average reflectors.

By using different electrolytes this method is also successful for cadmium and nickel plating. The procedure is similar and almost any shape of object can be electroplated using a small volume of solution. In all cases, however, the importance of obtaining a clean and highly polished surface at the beginning must be emphasised. On this point the success of all electroplating depends.