with the liquid, water being added when necessary to compensate for evaporation, and they should be charged about once a fortnight, even if never used during that period.

It will thus be seen that accumulators require considerable attention, but if this is devoted to them they form a very useful source of supply, and are very much cheaper in the long run than primary cells.

Resistances.—A resistance is an appliance used for regulating the current passing through an electrical circuit. It may be composed of various conducting materials, the essential being that the material used should impose a moderately great degree of obstruction to the passage of the current. A coil of German silver wire is commonly used, and the ordinary low candle-power electric lamp also makes an excellent resistance. A receptacle containing water into which two electrodes dip makes a good resistance, the current being increased by bringing the electrodes closer together, or immersing more of their surfaces in the water.

The variable resistance is commonly called a rheostat, whatever form it may take.

If a coil of German silver wire be employed, one terminal is fixed to one end of the coil, while the other is connected to a contact sliding on the coil, which enables the number of turns of the wire which are included in the circuit to be varied at will.

It will be worth while to consider in more detail the use of the lamp resistance. The electric lamp consists of a filament of carbon or metal, the ends of which pass through an insulating base to be brought into contact with the terminals leading from the source of supply. The filament is surrounded by a glass bulb, sealed to the base, and the bulb is exhausted of air. (This is necessary to prevent combustion of the filament.) The filament is very