

## APPARATUS.

The following list includes the apparatus required for performing the experiments described in this work. The principal articles of steady consumption are glass-tubing flasks, test-tubes, corks, and india rubber tubing. Many of the other articles once obtained, last a long time. Other apparatus may be added with great advantage, but it is better not to begin with too much as the beginner is almost sure to order many thing which he will not really require.

6 bottles for gas receivers, 4 of 1 pint, and 2 of 1 quart.  
A set of 5 beakers.

A Bunsen burner, if gas is used.

3 dozen corks assorted.

Set of 3 cork borers, with iron rod.

12 feet copper wire, medium size.

2 strips of copper foil, 4 inches by  $\frac{1}{2}$  inch.

A Deflagrating spoon.

6 flasks from 1 litre to  $\frac{1}{4}$  litre ; 2 strong, flat bottom.

2 Funnels, 2 inches and 3 inches diameter.

2 funnel-tubes.

2 strips of zinc 4 inches by  $\frac{1}{2}$  in.

Triangular file, with handle.

Round file, 5 inches long, with handle.

Filter paper.

1 lb. glass tubing assorted.

Graduated glass measure, 50 cu. cent.

6 assorted ground glass plates.

Galvanic battery, 2 cells, bichromate of potash.

4 feet india rubber tubing,  $\frac{3}{16}$  inch and  $\frac{1}{4}$  inch.

Small mortar and pestle.

6 inch platinum wire.