

ART. XVII.—*Description of an apparatus for collecting and washing precipitates in test tubes*; by M. McDONALD, Prof. Chem. Va. Military Institute.

THE apparatus is shown in the figure in side elevation. A is a bracket of hard wood or other suitable material, and serves as a support to the test tubes. It is firmly attached to the upright D which carries the inverted syphon tube G, G', G''. It has a shoulder at I which abuts against the fixed support C and prevents oscillation.

Upon the bracket A rests the disk E of porous biscuit ware, and upon this, several thicknesses of filtering paper. The test tube T is adjusted as shown in the figure, and held firmly in place by a clamp (which is not shown). There is an orifice through the center of A and E through which passes the shorter branch of the inverted syphon tube G, G', G''. This is drawn to a capillary bore at G'', and serves to introduce distilled water into the interior of the test tube for the purpose of washing the precipitate. The apparatus is supported upon the stand BC, and has a motion of rotation around the axis P.

The disks of filtering paper have a diameter slightly less than the diameter of the disk E; their centers are perforated with holes a little less in diameter than the syphon tube at the point F.

To use the instrument, several thicknesses of filtering paper are slipped over G'' and pressed evenly down upon E. The apparatus is then inverted in its frame, the test tube containing the precipitate adjusted and secured in position by the clamps and then restored to the position shown in the figure.

The syphon tube is then connected with the delivery tube of a wash bottle and a jet of distilled water thrown into the interior of the test tube.

Usually this jet may be projected against the bottom of the tube with sufficient force to wash all the precipitate down upon the filter. The test tube should fit very closely upon the support, or the pressure will force liquid and precipitate through together.

Modifications of the apparatus for special purposes will readily suggest themselves, and any one of ordinary ingenuity may construct one for himself.

