cuts Figs. 5 and 6, were always used on board the Challenger for the deeper soundings, the latter being exclusively employed during the last two years of the cruise. In these the iron

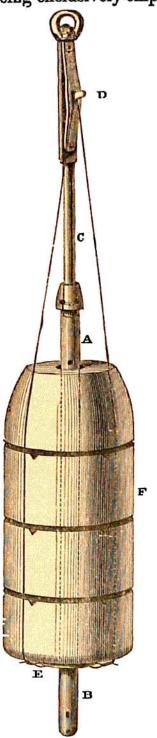


FIG. 5.—Hydra Sounding Machine.

A, brass cylinder with butterfly valve B at the bottom and a sliding iron rod C at the top; D, stud over which the wire attached to the washer E, and thus supporting the

weights or sinkers F, is passed.

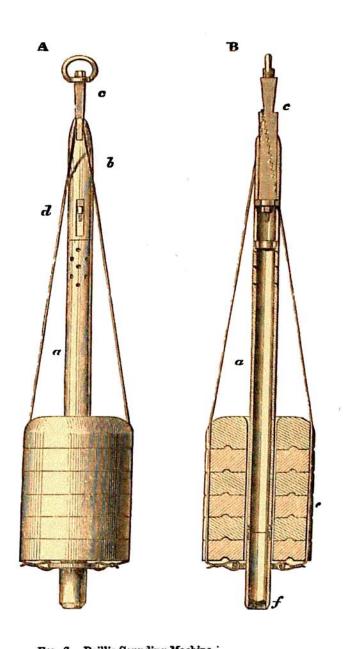


Fig. 6.—Baillie Sounding Machine.

a, iron cylinder with butterfly valve f at the bottom and brass tube b at the top; c, cylindrical iron weight sliding backwards and forwards in b, regulated by the slit d; c, iron weights.

weights or sinkers (F) which surround the iron cylinder serve to carry the line down and to force the tube into the deposit, but being detached on striking the bottom, these sinkers