

placed, and as many weights are put on as are deemed necessary (generally speaking, one for every thousand fathoms). At the bottom of the last weight a small iron ring is rove on the rod, to which is attached a piece of iron wire about 12 feet in length. The bight of the wire is passed over the projection, and the rod being lifted, the weights rest on the ring, which is supported by the wire sling. The strain of the weights falls on the stud, thus pushing back the spring; and as long as the pressure of the weights continues on the ring at the bottom, the wire remains in its place. When the weight of the sinkers is relaxed, by their reaching and resting on the bottom, the spring pushes the wire off, and the rod, being hauled up by the line, unreeves itself from the weights, leaving them at the bottom.

The second sounding-rod (Fig. 3), which was principally used, is the invention of Staff Commander Baillie, R.N., and consists, as in the "Hydra," of a cylindrical rod, of 3 inches in diameter and some 48 inches in length. The iron sinkers are rove on the rod in a similar manner to the former, but the means of disengaging and the safety in lowering are more to be depended on. The bight of the wire supporting the weights is placed over a sliding "ketch." On the rod reach-

Fig. 3.

