

suitable for scientific purposes. The oyster dredge has a scraper only on one side. In the skilled hands of the fishermen this is no disadvantage, for it is always sent down in such a way that it falls face foremost, but philosophers using it in deep water



FIG. 45.—'Ball's Dredge.'

very generally found that whether from clumsiness or from want of sufficient practice, they had got the dredge down on its back, and of course it came up empty. Again, oyster dredgers are only allowed to take oysters of a certain size, and the meshing of the commercial dredge is so contrived as to allow all bodies under a certain considerable size to pass through. This defeats the object of the naturalist; for some of the prizes to which he attaches the highest value are mites of things scarcely visible to the unaided eye.

The remedy for these defects is to have a scraper on each side, with the arms attached in such a way that one or other of the scrapers must reach the ground in whatever position the dredge may fall; and to have the bag deeper in proportion to the size of the frame, and of a material which is only sufficiently