

cates roughly whether the dredge is going down properly. When it reaches the ground and begins to scrape, an experienced hand upon the rope can usually at once detect a tremor given to the dredge by the scraper passing over the irregularities of the bottom. The due amount of rope is then paid out, and the rope hitched to a bench or rollock-pin.

When there is anything of a current, from whatever cause, it is usually convenient to attach a weight varying from fourteen pounds to half a hundred-weight, to the rope three or four fathoms in front of the dredge. This prevents in some degree the lifting of the mouth of the dredge. If the weight be attached nearer the dredge, it is apt to injure delicate objects passing in.

The boat should move very slowly, probably not faster than a mile an hour. In still water, or with a very slight current, the dredge of course anchors the boat, and oars or sails are necessary; but if the boat be moving at all it is all that is required. I like best to dredge with a close-reefed sail before a light wind, with weights, against a very slight tide or current; but these are conditions which cannot always be commanded. The dredge may remain down from a quarter of an hour to twenty minutes, by which time, if things go well, it ought to be fairly filled.

In dredging from a small boat the simplest plan is for two or three men to haul in hand over hand and coil in the bottom of the boat. For a large yawl or yacht, and for depths beyond fifty fathoms, a winch is a great assistance. The rope takes a couple of turns round the winch, which is worked by two