

The Trawl (see fig. 20) was of the ordinary pattern, consisting of a beam of wood with an iron at each end, to which a large V-shaped net was attached, so that its mouth was kept spread open by the trawl irons and beam. The size of the net depended on the length of the trawl-beams, which were 17, 13, and 10 feet in length; the smallest being used for very deep water and the others for lesser depths. On the trawl-irons and bag of the net were hung 28 lb. leads, so as to keep the net down to the bottom when trailing along. At first, beams made of fir were used for trawling in deep water, but were replaced by oak or teak beams, as the fir spars came up broken, and so much compressed from the pressure of the water that the knots in the wood stood out three quarters of an inch above the surface of the spar. The bottom of the netting was, as in the case of the dredge, usually lined with bread-bag stuff, to prevent the smaller animals being washed out whilst being hove up through the water. It is, however, preferable in place of this bread-bag stuff, to use a small strip of fine linen or cotton for the netting of both the trawl and dredge, and to change it at each haul. Improvements, both in the form and the method of using the dredge and trawl, have recently been suggested by Captain Sigsbee,¹ by the naturalists of the Norwegian North Atlantic Expedition,² and others.

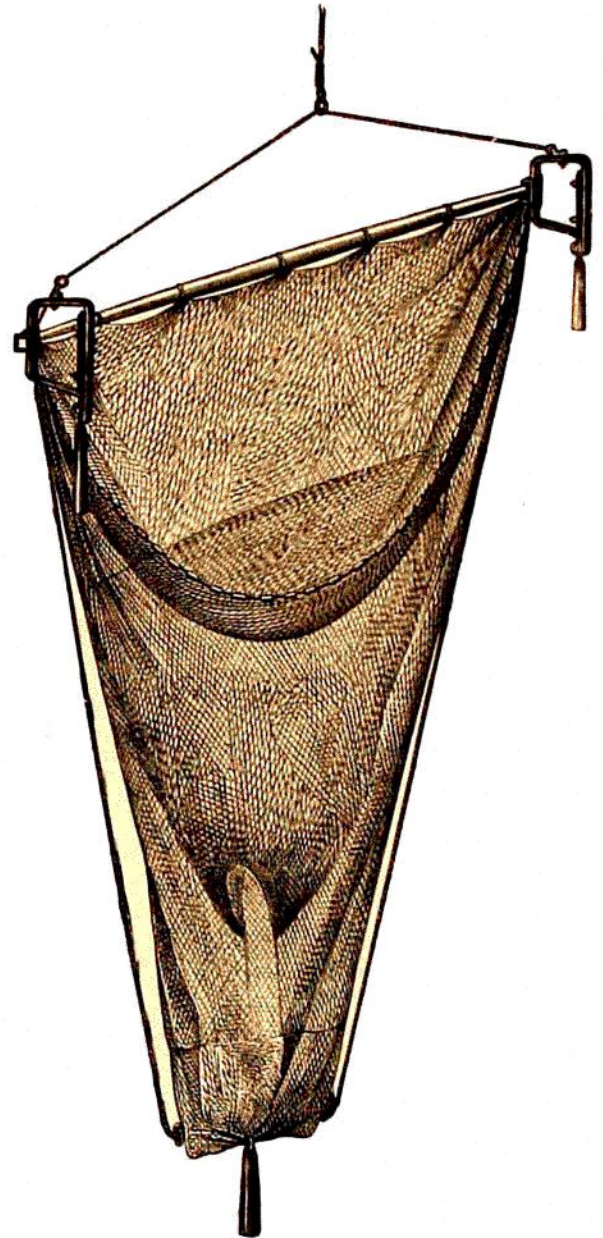


FIG. 20.—The Beam Trawl used in deep-sea work.

The Sieves.—Close to the place where the dredge was emptied there were always one or two tubs, about two or three feet in diameter and twenty inches deep, each of which was provided with a set of sieves, so arranged that the lowest sieve fitted loosely within the bottom of the tub, and the three succeeding sieves within one another (see fig. 21). Each sieve was provided with a pair of iron handles, through which the hand could pass easily, and those of the largest sieve were made long, so that the whole nest could be lifted without stooping and putting the arms into the water. The upper smallest sieve was usually deeper than the others; it was made of a strong open net of

¹ Sigsbee, *Deep-Sea Sounding and Dredging*, Washington, 1880.

² C. Wille, *Norwegian North Atlantic Expedition, 1876-1878, part iv., The Apparatus and How Used.*