



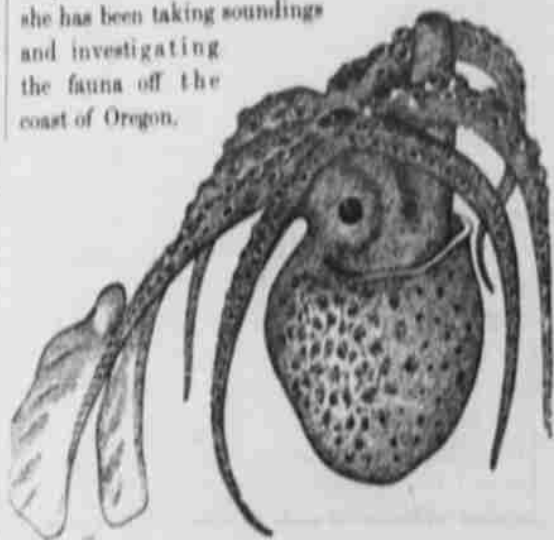
THE TANGLE

ists take the matter in charge. The contents of the mud bag, which hangs at the bottom of the trawl, are emptied into tubs for examination and analysis. From the receiving tray the specimens are taken to the laboratories, where a minute examination of them is made and the results noted. New and strange specimens are preserved in alcohol and sent to the fish commissioner at Washington. The ordinary trawl load from the bottom of the sea presents a curious sight, and one that is very repulsive to persons not accustomed to it. It is likely to contain any marine life that can get within the jaws of the net. An endless variety of fishes, crustaceans, mollusks, radiates and protozoans, is met with in these collections. Generally those specimens brought up from a great depth are dead. The pressure of the water in the lower strata is necessary to their existence, and when that is removed by their being brought to the surface they lose firmness and become flabby. Many of these are very palatable, however, if cooked immediately upon being se-

cured. Of course, there is no lack of the choicest products of salt water for table use on board the ship. Often fine food fish are taken that have to be thrown overboard after being dissected because of the inability to consume them. Specimens previously unknown to naturalists are frequently obtained, and a very minute examination and detailed report is made of these discoveries. When the bottom is rough and rocky the tangle is used. It consists of an iron frame, on which pieces of untwisted rope are fastened, and some of the most beautiful and fragile specimens are secured by it. The illustration shows it just taken from the water with sea lilies clinging to it, the sea lilies in this instance being the rare crinoid (*Pentacrinus decora*), which inhabits depths of 200 fathoms.

The prime purpose of the *Albatross* is to locate fishing banks and to study those already known. To discover the homes and habits of food fishes is the central object in view. The discovery of cod and halibut fishing grounds in the North Pacific has a direct bearing on commerce and gives to the operations of the ship a popular interest. But an interview with the officers in charge of the matter is not so fruitful of definite results as people unacquainted with the details of the investigation would expect. It requires years to work up the reports of the explorations from a scientific standpoint. While the study is in progress and developments but half made, nothing definite can be obtained, because the very next turn may put an entirely different phase on the subject. A good deal has been reported concerning the *Albatross* that its officers do not corroborate.

The *Albatross* was employed in the Atlantic until about two years ago, when she was ordered to do duty in the North Pacific. She came to this coast in May, 1888, since which time she has been taking soundings and investigating the fauna off the coast of Oregon.



ARBOREAUTA ARBO.