## 16 BULLETIN OF THE UNITED STATES FISH COMMISSION.

of the fishery by the Scotch vessels, the owners of which not many years ago realized  $\pounds 50$  or  $\pounds 60$  per ton for the same oil.

Some of the vessels brought home very miscellaneous cargoes—1,033 white whales, 320 walruses, and many narwhals and bears—the scarcity of big game, I presume, rendering the pursuit of such small deer the more keen.

During his voyage to the Greenland fishery, when in latitude  $70^{\circ}$  N., longitude  $16^{\circ}$  W., or about half way between Jan-Mayen and Greenland, Captain Fairweather, of the Aurora, reports a singular phenomenon. On August 16, about midday, his vessel received a sudden shock, caused by what he considers must have been an earthquake (or seaquake). "The sensations," he says, "felt by those on board were as if the ship was moving over a rocky bottom with great velocity." The officers and crew immediately rushed on deck, thinking a boiler had burst, or that the ship had gone aground, but the boilers were all right, and the lead failed to find bottom at 100 fathoms. The weather was foggy, with slight rain and wind from ESE.; no upheaval of the water was noticed, the sea being unusually calm. About two hours later, a second but much lighter shock was experienced, which, however, only caused the vessel to tremble.

NORWICH, ENGLAND, May, 1887.

## 4.--RESULTS OF PLANTING SHAD IN THE KENNEBEC RIVER.

## By EVERETT SMITH.

## [From a letter to Prof. S. F. Baird.]

In 1880 I accompanied and personally directed the disposition of the shad fry planted in the Kennebec River at Waterville, the first plant, I believe. My interest officially as State Commissioner of Fisheries at that time did not exceed my interest as a naturalist in the experiment, which interest has been continuous. This month there have been caught at Cape Small Point, at the mouth of the Kennebec River, a considerable number of shad of such large size, and of such general proportions and appearance as to show a marked contrast with the native Kennebec shad. As distinctive as the 3 to 5 pound shad of the Kennebec from the 2 to 4 pound shad of the Nonesuch River, of Cumberland County, Maine, are these large shad of 5 to 7 pounds weight lately caught, which I believe to be Chesapeake Bay shad, hatched in 1880. I have examined a number of 6 and 64 pounds in weight and one of 7 pounds. They were caught together, evidently from one school, with none of the usual sized Kennebec shad of less weight and appear. ance.

PORTLAND, ME., May 26, 1887,