18.—THE WHALE FISHERY OF NORWAY.

By NIELS JUEL.

The whale fishery began in 1864 and was carried on till 1868 by one steamer, and then till 1877 by two steamers belonging to the same company. In 1877 the number of establishments (companies) rose to 2; in 1881 to 5; in 1882 to 8, which used 12 steamers, and in 1883 to 14, with 23 steamers. Of these, 11 are in East Finmark—east of Cape North—and three in West Finmark, between Cape North and the town of Hammerfest. The catch was:

Year.	Whales.	Year.	Whales.
1866	0	1877	32
1867	1	1878	130
1868	30	1879	123
1869	17	1880	145
1870	36	1881	279
1871	20	1882	386
1872	40	1883	506
1873	36	1884	416
1874	51		
1875	37	Total	2,327
1876	42		

In 1872, 1877, and 1878, whaling was tried in the Strait of Davis by one vessel* but without success. Last year, Mr. Svend Foyn, who is the creator of the Norwegian whale fishery in Finmark, put up an establishment in Iceland. This year he got 22 whales there. Besides, whales are occasionally taken by fishermen, who shoot them with arrows. In the waters of Spitzbergen there are taken every year by vessels fitted out from Tromsoe about 150 to 250 so-called white whales (*Delphinapterus leucas* Pallas), by means of nets, 1,100 to 1,200 meters long with meshes of 0.16 m.

The whales taken in Finmark belong to the two species: *Blaahvalen* (*Balænoptera sibbaldii* Gray)† and *Finhvalen* (*Balænoptera musculus* Comp).‡

The steamers used are built of iron, have a burden of 32 registered tons net, and an engine of 25 to 35 nominal horse-power. The length is 22.5 to 26.7 meters, the breadth 4.0 to 4.3 meters, and the draught 2.5 to 2.8 meters. They are rigged as fore-and-aft schooners. Below deck are only the engine, the cabins, and a place for the cordage, as the whales are always towed ashore either by the steamers or by a tug-boat. The crew consists of 9 men; viz., the captain, 1 gunner, 3 engineers, 1 steward and 3 sailors. The speed is 9 knots.

* One of those engaged in the Jean-Mayn seal hunting.

† 1 Blaahval yields 90 and 1 Finhval 40 hectoliters of oil.

‡ *Knolhval-Megaptera boops* (Fabricius) is also 10 m. times taken.

The guns used are muzzle-loaders of steel with steel-coils and mounted on swivels. The length 1.2 meters and caliber 0.078. The charge 0.34 kilograms. They are fired at a distance of 20 to 40 meters. The gunner tries to hit the whale between the ribs as near the spinal column as possible.

The gun-harpoon used was invented by Mr. Svend Foyn about 1860, and patented in 1882, when the patent went out in Norway. It consists of:

Shell, diameter	meter..	0.104
Shell, length	do....	0.319
Charge	kilogram..	0.5
Barb-holster, length	meter..	0.319
Pole, length	do....	1.307

The shell is screwed to the barb-holster, which contains a glass filled with sulphuric acid. To the pole is attached the rope, 0.143 meter in circumference and 733 meters long, with a ring running on the pole. The weight of the rope, which is of hemp, is about 1,450 kilograms.

When the harpoon is to be used, the barbs that are pivoting are secured to the pole by rope-yarn and the shell screwed on the holster. As the number of barbs are four, the shell and the holster that turn in the ring at the end of the pole when they are free, now form with the pole a solid mass. When the harpoon penetrates the whale the rope-yarn slips off, the barbs turn so as to make an angle with the holster crushing the glass tube, and the sulphuric acid that communicates with the powder in the shell through a channel in the screw makes it explode.

Most whales sink. When they do not sink, several whalers are of the opinion that the respiratory organ is filled with coagulated blood impeding the inhaled air in getting out again. The reason for this theory is, that very little blood comes through the nostril of a whale that does not sink. No hand-harpoons are used.

The manner in which the fisherman kill the whale by means of arrows and cross-bow is as follows: When a whale enters a bay the passage is barred with a strong net, and the whale is shot. They let him go for two or three days inside. The arrows contain no poison, but later investigations have led to the discovery of a peculiar bacilla, that lives on arrows already used, and which poisons the blood. Only old arrows of iron are esteemed, and now we know the reason why. After some days the whale appears to be dying and is dispatched with knives and harpoons. The flesh is eaten with the exception of the parts around the wounds, where is formed a tumor. The whale ordinarily taken in this manner is the *Balænoptera rostrata* Fabricius. The number may amount to 15 or 20 a year.

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