

## XI.—THE NORWEGIAN FISHERIES IN 1883, WITH STATISTICS OF PREVIOUS YEARS.\*

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The cod fisheries near Spitzbergen proved a complete failure. The Tromsø Fishery Association reports as follows: "This fishery seems to be still more unreliable than the capelan fisheries. Many fishermen believe that we have entered a period, which possibly may last several years, when the cod will stay away entirely from Spitzbergen." Tromsø equipped 10 vessels for the cod fisheries. The other vessels engaged in these fisheries came from the following places: 1 from Trondhjem, 2 from Christiansund, 2 from Aalesund, 1 from Arendal, and 2 from Hammerfest.

THE BANK FISHERIES NEAR AALESUND—(Communicated by Consul M. Hansen).—In the winter fisheries there were engaged 90 Norwegian vessels, with a total crew of 747 men, and the number of fish caught by these vessels was 465,200. Of Swedish vessels there were 25, with a total crew of 250 men; the number of fish caught by these was 161,200.

In the summer fisheries at Storeggen there were engaged 22 vessels, 21 Norwegian and 1 Swedish, with a total crew of 270 men. The following quantity of fish was caught by these vessels: 1,272,000 kilograms ling, 157,000 kilograms torsk, 814 hectoliters liver, and 246 hectoliters roe, the total yield representing a value of 155,548 crowns [about \$41,686.86]. The yield of klip-fish of both fisheries would therefore be about 1,100,000 kilograms.

The winter cod fisheries in the Stavanger district are said to have yielded about 200,000 cod.

The Havbro cod fisheries (fisheries on the banks in the Polar Sea) were carried on by a vessel from Tromsø, as an experiment by the fishery association of that town. The yield amounted only to 3,500 cod. This small quantity, it is said, was principally owing to the lack of fresh bait.

THE ICELAND COD FISHERIES.—From information received by the editor of this journal it appears that 23 vessels from various Norwegian ports were engaged in these fisheries. The total yield was 200,000 cod, the greater portion of which was sold in England. The largest

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\* "Norske Fiskerier, 1883." From *Norsk Fiskeritidende*, Vol. III. Bergen, January, 1884. Translated from the Danish by HERMAN JACOBSON.

catch amounted to 34,000. Seven vessels from Aalesund were engaged in these fisheries, with a total crew of 56 men, their tonnage varying from 21 to 103. The individual shares of the crews varied from 135 to 400 crowns [\$36.18 to \$107.20]. Besides cod there were caught haddock, halibut, wolf-fish, sea-perch, torsk, codfish (some unusually large), and ray. Some fishermen had taken herring nets along and caught a sufficient number of herring for bait and for their own food. From the information received it appears that it took about 1,200 cod for a ton of liver. The fishing season lasted from the middle of June till the beginning of September. Both on the east and west coasts of Iceland the fisheries were occasionally hindered by the ice.

**THE FINMARK WHALE FISHERIES.**—In East Finmark the following Norwegian vessels were engaged in these fisheries: From Tonsberg, 8 vessels, with 221 men; from Sandefjord, 5 vessels, with 144 men; Laurvig, 1 vessel, with 30 men; Arendal, 1 vessel; Bergen, 1 vessel, with 28 men; Trondhjem, 1 vessel, with 28 men; and Christiania, 3 vessels, with 75 men. The engines on these vessels were generally 30 horsepower, some 15, and a few 40. The above 20 vessels were stationed as follows: 2 in Vadsoe, where there is a guano factory, 3 in Jarfjord, 1 in Pasvig, 1 in Madvig, 2 in Kobholmfiord, 1 in Kiberg, 3 in Svartnæs, 1 in Smelroren, 2 in Syltefiord, 2 in Engelviken, 1 in Stegeluæs, and 1 in Vardoe.

The following was the result of the fisheries: At Vadsoe, 24 whales, or 12 per vessel; in the South Varanger district (Jarfjord, Pasvig, Madvig, and Kobholmfiord), 124 whales, or 18 per vessel; in the Vardoe district (Kiberg, Svartnæs, Smelroren, and Syltefiord), 178 whales, or 26 per vessel; and at the island of Vardoe (Engelviken, Stegenæs, and Vardoe), 72 whales, or 18 per vessel; making a total of 407 whales, or 20 per vessel. Most of the whales are caught 7 or 8 Norwegian miles (about 4.7 English miles each) from the coast. The fisheries commenced in the beginning of April and came to a close about the middle of August. One Russian vessel was engaged in these fisheries, and was stationed in the Mokkafiord. It caught 22 whales. Next year 2 more Russian vessels will be engaged in the whale fisheries.

In West Finmark 3 vessels were engaged in the whale fisheries, all from Tonsberg; 2 of these were stationed at Sorvær and 1 in the Tu fiord. The total catch was 99 whales.

The average value of the train-oil is 500 crowns [\$134] per ton, or \$13.40 per keg of 102 kilograms net, from which should be subtracted for freight 3 or 4 crowns [80 cents to \$1.07].

The Finmark whale fisheries owe their origin to M. Svend Foyn, of Tonsberg, who in 1864 made the first attempts near Vardoe and in the Warangerfiord, and continued them in 1865, 1866, and 1867. In 1866 he caught nothing, and in 1867 only one whale, while in 1868 he caught 30. In the following year he sent out 2 vessels, which, however, caught only

17 whales. Later the yield of these fisheries, not counting those whales which were cast ashore, has been as follows:

	Whales.
1870 .....	36
1871 .....	20
1872 .....	40
1873 .....	36
1874 .....	51
1875 .....	37
1876 .....	42
1877 .....	32
1878 .....	130
1879 .....	123
1880 .....	145
1881 .....	279
1882 .....	386
1883 .....	506

In all, since 1866..... 1,911

In 1877 a new association was formed at Jarfjord, and in 1881 one new establishment was founded in East Finmark, at Vardoe, and two in West Finmark, 2 at Tufjord, and 1 at Sorv ar. In 1882 the whale fisheries were carried on by 8 associations, with 12 vessels, which number in 1883 rose to 14 associations, with 23 vessels. There are at present 11 establishments in East Finmark and 3 in West Finmark.

**THE SEAL FISHERIES IN THE POLAR SEA.**—This fishery yielded 121,072 skins, 48 bottle-noses, 25 bears, 22,140 tons of fat, and 1,800 tons of train-oil, the total value being estimated at 1,900,000 crowns [\$509,200], while the expenses of fitting out were 30,000 crowns [\$8,040] per vessel. The total number of vessels engaged in these fisheries was 16, all of them steamers.

The first Norwegian who engaged in these fisheries, which for a long time had been in the hands of the English, was Svend Foyn, of Tonsberg, who in 1847 fitted out a vessel for the seal fisheries. Till 1852 he sent out only this one vessel, but in that year he sent out 3 vessels; in 1853, 5 (among these 1 from Christiansand); in 1854, 9; and in 1855, 13 (among these one from Sandefjord). During the next five years these fisheries developed gradually, and several others towns sent out vessels. In 1860, 21 Norwegian vessels were engaged in the seal fisheries, viz., 1 from Frederikshald, 1 from Frederikstad, 2 from Drammen (from 1859), 13 from Tonsberg, 1 from Sandefjord, 2 from Laurvig (1857), and 1 from Christiansand. From 1856 to 1858 Holmestrand sent 1 vessel. During the ten years 1861 to 1870 the number of vessels annually engaged in the seal fisheries varied from 15 to 18. In 1866 steamers were employed for the first time, viz., 2 from Tonsberg. It was some time, however, before steamers were more generally employed, for in 1871

their number was only 3. After that year, however, their number increased more rapidly; in 1872 their number was 9 and the number of sailing vessels 14; in 1882 the last sailing vessel was fitted out for these fisheries.

**THE SHARK FISHERIES AND THE SPITZBERGEN FISHERIES.**—The total number of vessels sent out from Tromsøe was 40, with an average crew of 8 men and an average tonnage of 44. Of these vessels 1 belonged to Christiania, 1 to Arendal, 2 to Stavanger, 1 to Bergen, 1 to Trondhjem, 1 to Helgeland, and 34 to Tromsøe. Four of these vessels did not catch anything. The vessels from Christiania and Arendal took home with them all they caught. The yield of the 34 vessels which brought their catch to Tromsøe was the following:

	Crowns.
211 walrus, at 130 crowns.....	27, 430
5,426 seal, at 16 crowns.....	86, 816
226 whitefish, at 100 crowns.....	22, 600
80 polar bears, at 60 crowns.....	4, 800
265 reindeer, at 10 crowns.....	2, 650
907 kilograms eider-down, at 2.25 crowns.....	2, 041
1,015 hectoliters shark liver, at 21.50 crowns.....	21, 822
<b>Total</b> .....	<b>168, 159</b>

Of the 40 vessels 23 were stationed near Spitzbergen, 6 near Nova Zembla and in the White Sea, and 11 near Havbroen. Besides these vessels, 2 from Sandefjord and 2 from Aalesund were engaged in the Spitzbergen fisheries, and caught 166 whiting, 190 seals, 3 walrus, 2 polar bears, and besides secured a small quantity of eider-down.

Regarding this year's fisheries (1883), the Tromsøe Fishery Association reports as follows: "In the Murman Sea, or near the entrance to the White Sea, where seal fisheries are going on in May and June, the fisheries were very successful. Near the Kolguev Island an unusually large number of seals were caught. Owing to the favorable condition of the ice near Spitzbergen, which allowed the fishermen to go farther north and east than usual, a larger number of walrus was caught than during any previous year. The violent persecutions to which these animals have been exposed for many years have driven them farther north and east, where they can be caught only in years when there is not too much ice.\* The shark fisheries which were carried on along the Tromsøe coast were less successful than usual, while a good many of these fish were caught in the Waranger fiord and near Spitzbergen."

The fisheries near Spitzbergen, principally for walrus, seals, and polar bears, which in former times had been in the hands of the Dutch and later in those of the Russians, were not shared by the Norwegians till the year 1820. Till 1860 Hammerfest was the principal Norwegian port

\*The average annual number of walrus caught from 1830 to 1834 was 1,807; in 1876 the number caught was 1,286; in 1878, 621; in 1881, 444; and in 1882, 148.

which equipped vessels for these fisheries, sending out 10 to 15 a year. Later some other Norwegian towns followed the example of Hammerfest, especially Tromsøe. The number of Norwegian vessels engaged in these fisheries during the period from 1866 to 1877 was 45, viz.: 1 from Vardoe, 22 from Hammerfest, and 22 from Tromsøe. During this period the first attempt at fisheries was made near Nova Zembla (in 1867).

Regarding the fisheries in the Polar Sea the following data have been furnished by the Tromsøe Fishery Association:

Fisheries.	Time of sailing.	Time of return.
Seal fisheries in the White Sea .....	Middle of April...	In the most fortunate case in the beginning of June, but generally in the beginning of August.
Walrus and seal fisheries near Spitzbergen and Nova Zembla.	1st of May.....	In September, sometimes not till October.
Whiting fisheries .....	15th of May.....	Beginning of September.
Spitzbergen cod fisheries .....	Middle of June....	Beginning of September.
Shark fisheries.....	1st of April.....	End of September.

During that time 3 or 4 trips are made.

The following data have been furnished relative to the expense of fitting out the vessels and the income from these fisheries:

The outfit of a vessel for the walrus and seal fisheries, with a crew of 10 men, will generally cost about 3,000 crowns [\$804]. To this sum should be added 700 crowns [\$187.60] advanced to the crew, making a total of 3,700 crowns [\$991.60]. The crew generally receives one-third of the gross yield of the fisheries, and this third part is generally subdivided into 4 more parts than there are men. If the crew, for instance, numbers 10, each man receives one-fourteenth of one-third of the entire yield, except the mate, who receives two-fourteenths. The remainder, three-fourteenths, goes to the company. The company provides the entire outfit, including food, and pays the mate 100 crowns [\$26.80] per month, and each harpooner from 60 to 100 crowns [\$16.08 to 26.80]. Each vessel has generally two harpooners.

The outfit of a whiting vessel costs about 1,000 crowns [\$268] more, which increase is principally caused by the seine, which costs about 5,000 crowns [\$1,340], and which, as a general rule, will not last longer than 5 years. The company also pays for the entire outfit, food, &c. As regards the monthly pay and the division of the yield, different rules prevail from those in the walrus and sea fisheries. Each fisherman receives from 20 to 24 crowns [\$5.36 to \$6.43] per month, and the mate about 100 crowns [\$26.80]. If a harpooner accompanies the expedition to catch walrus and seals, he receives from 60 to 100 crowns [\$16.08 to \$26.80] per month. The entire yield of the fisheries (including seals and walrus) is divided into 6 parts, one of which goes to the crew and is divided on the following principle: If, for example, the crew, including the mate, is composed of 10 men, 9 receive one-twelfth of one-sixth of the yield, the mate two-twelfths, and one-twelfth goes to the company.

To equip a vessel for the cod fisheries, if some provision also is made to catch seal, &c., costs about 2,000 crowns [\$536], including salt and ready money advanced to the crew. The yield is divided equally between the crew and the company. The crew pay for their food and their share (one-half) of the salt and provide their own fishing apparatus. Occasionally, however, crews stipulate for having free salt.

In the shark fisheries the equipment for the summer, including the wear and tear of the apparatus, food, and money advanced to the crew, is generally estimated at 2,000 crowns [\$536]. If the company provides food, the crew receives one-third of the yield; while if the crew provide their own food, they receive one-half of the yield.

Both in the cod fisheries and the shark fisheries the mate receives 2 men's shares of the yield, and besides this generally a monthly sum from the company. In all these fisheries the company has the first chance to buy the shares of the crew, at the wholesale market prices. In giving the cost of fitting out vessels for the various fisheries, the insurance premium has not been counted in. The insurance on the Spitzbergen vessels has during the last years amounted to from 5 to 9 per cent of their value.

Whiting fisheries are said to have been carried on with seines at Spitzbergen by the Russians during the period from 1820 to 1830. The Norwegians first commenced to engage in these fisheries in 1867, with 2 vessels, which caught in all 15 fish. In 1868 eight vessels were engaged in these fisheries, and their number increased from year to year till 1872, when it seemed to have reached its greatest height. From that year these fisheries began to decline, and in 1876 only 2 vessels were engaged in them, 1 from Trondhjem and 1 from Tromsøe, the former of which, however, was engaged principally in the cod fisheries. Since then the number of vessels engaged in the whiting fisheries has again risen to 8.

Nova Zembla, owing to the territorial boundary, has much less importance as a fishing station for Norwegian vessels than Spitzbergen. The whiting fisheries near Nova Zembla are for this reason almost exclusively in the hands of the Russians, who during the last year have caught a great many fish. Since 1867 a few Norwegian vessels from Tromsøe and Hammerfest have, as a rule, annually visited Nova Zembla and engaged in the walrus and seal fisheries, and generally with favorable results.

As regards the fishing expeditions sent out from Hammerfest, we have received the following report from Messrs. Feddersen and Nissen, with the remark that, as they possess only very incomplete data, there may possibly be some errors in the figures:

Hammerfest has sent out on the seal and walrus fisheries near Nova Zembla 5 vessels, with a total tonnage of 159 tons and about 50 men, *i. e.*, 10 or 11 for each vessel, *viz.*, the mate, first harpooner, second harpooner, and 7 fishermen. Each vessel has 2 fishing boats with complete

fishing apparatus, and besides these 1 boat for general use. Sometimes the mate also acts as first harpooner. One man is hired to take the mate's place while he is out with the fishing boats. Each fishing boat has a crew of 4 men. While they are out 2 men remain on board, and sometimes 2 men and 1 boy. These 5 vessels have brought back from the coast of Nova Zembla (occasionally they were also engaged in the seal fisheries on the ice, as the seal about that time of the year come from the White Sea), 160 walrus, 2,678 seals of different sizes,\* and 3 polar bears, valued at 51,684 crowns [\$13,851.31]. Some of these vessels were very successful in the seal fisheries, but these expeditions to the coast of Nova Zembla have, as a general rule, not been very profitable, especially if—as has been the case during two successive years—they could not enter the Sea of Kara. Last year seal-skins brought a good price, so that the fisheries paid; the oil, however, was offered at too high a figure.

For the Spitzbergen fisheries Hammerfest equipped 7 vessels, with a total tonnage of 209 and a total crew of 70 men, viz., 6 vessels with a crew of 10 or 11 men, and 1 with 7 men, having only one fishing boat. These 7 vessels caught and brought home 230 walrus, 1,108 seals (mostly large), 17 polar bears, 45 reindeer, and 130 kilograms of eider-down, valued at 59,458 crowns [\$16,034.74].

The fishing area is not very large. If many more vessels were to engage in these fisheries, the animals would go farther north into the icy regions, and the entire fisheries would be ruined in a few years.

At the banks in the Polar Sea, principally near the Bear Islands and the south coast of Spitzbergen, shark fisheries were carried on exclusively. Fifteen vessels were engaged in these fisheries, with a total tonnage of 415; 13 had a crew of 6 or 7 men each; and 2, only 5 men. They brought home 2,067 tons of shark-liver, with an estimated value of 51,675 crowns [\$13,848.90]. Two small vessels, with a total tonnage of 35, were engaged in the cod fisheries near the coast of Spitzbergen,† but only caught a few hundred cod.

Whiting fisheries were attempted from Hammerfest, we believe, in 1869 or 1870, by John Berger and a firm in Bergen (probably Mohr & Son), who fitted out a large steamer, with an extraordinarily large and expensive seine; but the enterprise proved an entire failure. In 1872 an expedition for catching whiting was attempted with a sailing vessel, but the results were exceedingly small, and as other attempts made during the following years were equally unsuccessful, no further expeditions were sent out. The expeditions sent out from Tromsøe have been more successful in catching whiting near Spitzbergen; but experience has shown that these expeditions do not pay, as good whiting fisheries are purely accidental and very rare.

\* As a general rule, 1 large seal is supposed to yield 1½ tons of fat or 1 ton of oil, and 7 to 10 small seals about 1 ton of fat.

† In all about 700 men from Norway have participated in the various fisheries in the Polar Sea beyond the limits of Norwegian waters.

**THE MACKEREL FISHERIES.**—(Communicated by Inspector Buch.)—  
The following table gives the result from those places which made a report:

Districts.	Fishermen.			Yield.				Gross share per fisherman.	Foreign buyers.
	Vessels.	Boats.	Men.	Number.	Value.	Salted and used.	Exported.		
The Jarlsberg and Lauvig districts.	116	....	445	435,000	<i>Crowns.</i> 87,000	.....	.....	<i>Crowns.</i> 105	(*)
Lister and Mandal districts. †	329	2	1,195	2,497,400	329,300	1,556,000	941,300	274	.....
The Stavanger district. ‡	200	70	934	1,612,000	217,800	618,000	994,000	220	55
Total .....	717		2,574	4,544,400	634,100	.....	.....	248	.....

\* 120 boats with 2 men each.

† 2 lives lost.

‡ 3 lives lost.

The average share per fisherman in these three districts was in 1882 198 crowns; and for the whole country in 1881, 200 crowns; in 1880, 187 crowns; in 1879, 202 crowns; and in 1878, 218 crowns.

The Fosen cod fisheries are reported to have yielded in all 1,000,000 cod.

**SEINE FISHERIES FOR HERRING.**—Besides the fisheries carried on by the regular company, some herring were caught by a vessel of 60 tons and a crew of 4 men, fitted out by Messrs. Lehmkul, of Bergen. This vessel was engaged in the fishery from 10 to 20 miles west of Espevær for three weeks, commencing about the middle of May. In the beginning 1½ to 3 tons of herring were caught per set of seines (18), and towards the end of the month once 7 and another time 8 tons. The herring were of medium size, with little fat, but full of small red crustaceans. In one of these herring, which was examined by the editor of this journal, and which measured 274 millimeters [about 11 inches] in length, the roe measured 92 millimeters [about 3½ inches] in length and 9 in breadth, and weighed 4 grams [about ¼ ounce.]

Mr. Jorgensen, of Hisken, at about the same time made an attempt at herring fisheries between Skudesnæs and the Søbjoerns fiord. The greatest distance from the shore at which these fisheries were carried on was 3 Norwegian miles [= 14 English miles] from Udsire. The catches varied from 100 fish to about half a ton. On account of the clear nights the fisheries came to a close in June, and were not continued later during the season. About 10 to 12 boats engaged in the herring fisheries from Smorstak out toward the Skudesnæs fiord as far as 3 to 5 miles from Hvidnigsoe, but, on the whole, it cannot be said that these fisheries were particularly successful.

During the spring herring fisheries three Dutch cutters made some attempts to catch herring, twice near Lister and twice near Haugesund. The entire yield of each vessel was 5 or 6 tons. These attempts must, therefore, be termed failures; but the cause must probably be sought



rather in the unfavorable condition of the weather and in the selection of unsuitable times and places than in lack of skill and enterprise. About 100 Norwegian boats were engaged in the herring fisheries between Udsire, Rover, and Bommelbaad. The yield varied greatly and cannot be termed very successful.

The attempt made by the Dutch will not be repeated. A Norwegian vessel caught spring herring 14 miles from Egersund as early as December 7. At Hvidnigsoe and Skudesnæs spring herring were for the first time caught on December 24.

The herring fisheries near the Hval Islands came to a close in March, and yielded an estimated quantity of 60,000 tons of salt herring, some of which, however, had been caught by Swedish fishermen. Of this quantity 24,000 tons were salted on board vessels from Haugesund, 3,000 tons on vessels from Stavanger, and 12,000 tons on vessels from Bergen.

On the Norwegian side of the Hval Islands herring were last year caught for the first time on December 14. About the middle of December large schools of herring appeared outside the Laugesund fiord and the Laurvig fiord, and a large number were caught near Nevlunghavn and in the Vig fiord. At the close of the year large masses of herring were observed outside the Flekke fiord. Some specimens, which were sent to the editor of this journal, measured from 317 to 336 millimeters [14 inches] in length and were full of milt and roe, weighing from 40 to 50 grams [nearly 2 ounces].

**THE ICELAND HERRING FISHERIES.**—Total number of Norwegian vessels engaged, 157; seines, 383; crews, 1,807; yield, in tons, 103,886. Calculating the ton of fresh herring at 8 crowns [\$2.14], and of salt herring at 19 crowns [\$5.09], the total yield of these fisheries would represent the sum of 554,400 crowns [\$148,579.20] and 1,973,834 crowns [\$528,987.51], respectively. At the end of the year 1883, the Norwegians had in all 56 fishing stations in Iceland, each station being composed of a dwelling-house and a warehouse.

**THE FAT-HERRING FISHERIES IN THE NORDLAND DISTRICT.**—From January 1 till the middle of December tax was paid on 430,300 tons of herring. Some of these belong to 1882 and some were caught in the spring of 1883. These latter were estimated at 40,000 tons. On the other hand, a large quantity of herring had not yet reached the custom-houses, and many are still in the hands of Nordland merchants. The principal fisheries were carried on in October and November, and chiefly in the districts of Bejeru, Skjærstad, and Bodo. From places outside the districts of Nordland and Tromsøe 50,000 tons of herring were imported into Bergen alone.

**OTHER FISHERIES.**—The whale fisheries near Iceland were carried on (besides by the vessels mentioned on page 267 of our last volume) by 1 vessel from Haugesund. Three companies in Haugesund also had shares in Mr. Foy'n's establishment in the Isa fiord.

The shark fisheries near Iceland were carried on by 2 vessels from Haugesund and yielded 175 tons of liver. On the shore of the Isa fiord the merchants of Haugesund have established a steam oil-refinery, where last year 300 tons of oil were manufactured, mostly of the light kind, but no medicinal oil.

As to the whale fisheries near Bergen, at Skagshavn (Sartoroe) 7 whales were caught, and at Florvaag (Askoe) 2.

The coal-fish fisheries in Finmark were very successful, as during the previous year a great quantity were made into klip-fish, probably 2,000,000 kilograms. As a general rule the price of klip-fish made from coal-fish was half that of the klip-fish made from cod.

The salmon fisheries were unusually successful; but the prices were low, as there were also very rich salmon fisheries in Scotland. In Canada, likewise, the salmon fisheries were extraordinarily productive.

The lobster fisheries on the west coast were very successful.

The exports of Norwegian fishery products were as follows, at the end of November, 1883: 10,568,000 kilograms dried fish; 29,616,000 kilograms klip-fish; 6,522,000 kilograms guano; 594,500,000 hectoliters herring; 36,600,000 hectoliters roe; 106,900,000 hectoliters oil.

STATISTICS OF THE NORWEGIAN FISHERIES.

Average annual value of the principal products exported from Norway during the period 1866-1882.

Years.	Products of the forest and wood industries.	Fishery products.	Other Norwegian articles.	Foreign articles again exported from Norway.	In all.	Fishery products.
	<i>Crowns.*</i>	<i>Crowns.</i>	<i>Crowns.</i>	<i>Crowns.</i>	<i>Crowns.</i>	<i>Per cent.</i>
1866-'70 .....	31,000,000	33,300,000	8,200,000	800,000	73,300,000	46.5
1871-'75 .....	44,900,000	41,800,000	16,900,000	2,000,000	106,200,000	39.3
1876-'80 .....	33,800,000	43,100,000	19,100,000	2,300,000	103,400,000	41.7
1881 .....	44,900,000	50,200,000	24,000,000	1,800,000	120,900,000	41.5
1882 .....	45,900,000	47,100,000	26,900,000	3,100,000	123,000,000	38.3

\* The crown = 26.8 cents. 1 million crowns = \$268,000.

Exports of guano, 1883.

Custom-houses.	August.	September.	October.
	<i>Kilograms.</i>	<i>Kilograms.</i>	<i>Kilograms.</i>
Aalesund .....	185,200	21,300	.....
Christiansund .....	192,800	206,400	85,700
Tromsø .....	171,400	.....	2,000
Mosjøen .....	17,500	.....	.....
Bodo .....	550,700	50,000	400,000
Hammerfest .....	.....	20,000	.....
Vardø .....	10,000	.....	260,000
Vadsø .....	150,000	147,700	.....
Total .....	1,277,600	535,400	747,700
Since January 1 .....	*4,700,000	5,200,000	5,900,000

\* One million kilograms = 2,204,860 pounds.

Exports of fishery products from 1815-1829.\*

Periods of five years.	Klip-fish.	Dried and smoked fish.	Total.	Salt fish in tons, mostly herring.	Roe.	Train-oil.	Lobsters.
	<i>Kilograms.</i>	<i>Kilograms.</i>	<i>Kilograms.</i>	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>	
1815-'10 .....	1,500,000	7,800,000	9,300,000	155,900	8,500	19,200	605,000
1820-'24 .....	3,000,000	10,300,000	13,300,000	307,700	2,100	27,300	827,000
1825-'20 .....	6,000,000	15,600,000	21,600,000	341,000	22,100	40,500	1,280,000

\* For the following years, see "Norsk Fiskeritidende," 1883, p. 174.

Norwegian exports of fishery products in August, September, and October, 1883.

[Communicated by the Central Statistical Bureau.]

Custom-houses.	Dried fish. (1,000 kilograms.)			Klip-fish. (1,000 kilograms.)			Herring. (1,000 kilo-grams.)			Roe. (1,000 hec- toliters.)*			Train-oil. (1,000 hec- toliters.)		
	August.	September.	October.	August.	September.	October.	August.	September.	October.	August.	September.	October.	August.	September.	October.
	Frederiksbald .....							0.1	0.6	0.4					
Fredrikstad .....							0.0	1.1	0.1						
Christiana .....		16	170				1.6	5.5	5.6				0.3	0.5	0.4
Tonsberg .....							0.1	0.1					5.1	6.0	
Arendal .....							0.4	0.4	0.2						
Christiansand .....				2	1										
Flekkefjord .....							0.1	1.8							
Egersund .....								1.3							
Sandness .....								0.4	0.9						
Stavanger .....	1	5	3	1	1	3	7.2	23.8	16.3						0.1
Skudenesbavn .....								3.1							
Haugesund .....							5.6	21.9	10.1						
Bergen .....	1,995	1,478	1,300	692	590	409	24.0	42.2	41.1	9.0	2.6	0.1	2.6	3.3	3.9
Alesund .....				505	768	237	4.6	3.0	8.4	1.8			0.1	0.2	0.1
Molde .....							0.7	1.3	1.9						
Christiansund .....	55	10	6	2,339	1,714	2,131	16.7	20.7	16.2	0.1				0.4	0.2
Tromsø .....	23	20	10				0.4	0.4	0.2				0.1	0.1	0.1
Bodo .....								2.2					0.1		0.6
Tromsø .....	398	300	153			3	1.0						0.2	0.0	0.5
Hammerfest .....	261	361	245				0.2	0.1					0.3	4.5	0.6
Vardø .....	38	105	106				0.6	0.6	0.1				3.1	13.4	17.5
Vadsø .....	94	178	631				0.2						1.0	3.0	0.5
Other places .....								0.2	1.0				0.1	0.2	
<b>Total .....</b>	<b>2,585</b>	<b>2,659</b>	<b>2,699</b>	<b>3,599</b>	<b>3,074</b>	<b>2,873</b>	<b>64.1</b>	<b>128.5</b>	<b>99.7</b>	<b>10.0</b>	<b>2.6</b>	<b>0.1</b>	<b>13.0</b>	<b>32.2</b>	<b>24.5</b>
Since January 1, 1883.	14.6	17.3	110.0	120.5	123.6	126.5	278	406	506	34	36	37	42	74	98
1882	10.7	110.0	113.3	124.7	127.7	132.7	491	575	650	52	65	66	60	72	87
1881.	16.5	111.0	114.6	127.7	131.3	134.3	591	735	884	44	40	52	62	81	104
1880.	18.3	113.9	116.7	135.7	140.0	145.9	251	342	449	68	71	76	107	128	152
1879.	10.9	114.9	118.1	128.4	132.7	137.3	382	504	636	51	53	56	94	111	127

\* One hectoliter = about 22 gallons = about 2½ bushels.

† Millions of kilograms.

