FISHERIES RESEARCH BOARD OF CANADA
Translation Series No. 1688

Northern fisheries outside Europe. 1. Newfoundland

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Original title: Nordhavsfangst i uteneuropeiske farvann. 1. Newfoundland

From: Den Moderne Hvalfangst Historie. Opprinnelse of Utvikling. Verdensfangsten, 1883-1924 (The History of Modern Whaling. Origin and development) The World Catch 1883-1924, 2: 106-128 and 545-548, 1967

Translated by the Translation Bureau (AKH)
Foreign Languages Division
Department of the Secretary of State of Canada

Fisheries Research Board of Canada
Arctic Biological Station
Ste. Anne de Bellevue, P. Q.

1971

43 pages typescript

FRB 1688

DEPARTMENT OF THE SECRETARY OF STATE
TRANSLATION BUREAU

FOREIGN LANGUAGES DIVISION

CANADA

SECRÉTARIAT D'ÉTAT
BUREAU DES TRADUCTIONS

DIVISION DES LANGUES ÉTRANGÈRES

TRANSLATED FROM – TRADUCTION DE	INTO – EN
NORWEGIAN	ENGLISH

AUTHOR – AUTEUR

Joh. N. Tønnessen

TITLE IN ENGLISH – TITRE ANGLAIS

Northern fisheries outside Europe

Title in foreign language (transliterate foreign characters)

REFERENCE IN FOREIGN LANGUAGE (NAME OF BOOK OR PUBLICATION) IN FULL. TRANSLITERATE FOREIGN CHARACTERS.
RÉFÉRENCE EN LANGUE ÉTRANGÈRE (NOM DU LIVRE OU PUBLICATION), AU COMPLET. TRANSCRIRE EN CARACTÈRES PHONÉTIQUES.

Den Moderne Hvalfangsts Historie. Opprinnelse of utvikling.
(The History of Modern Whaling. Origin and development.)

(Verdensfangsten, 1883-1924) Vol. 2. (The world catch, 1883-1924)

REFERENCE IN ENGLISH – RÉFÉRENCE EN ANGLAIS

as above

PUBLISHER – ÉDITEUR	DATE OF PUBLICATION / DATE DE PUBLICATION			PAGE NUMBERS IN ORIGINAL / NUMÉROS DES PAGES DANS L'ORIGINAL
Norges Hvalfangstforbund, Sandefjord	YEAR / ANNÉE	VOLUME	ISSUE NO. / NUMÉRO	106-128 + 545-548.
PLACE OF PUBLICATION / LIEU DE PUBLICATION				NUMBER OF TYPED PAGES / NOMBRE DE PAGES DACTYLOGRAPHIÉES
Sandefjord, Norway 1967	1967	2		43

REQUESTING DEPARTMENT / MINISTÈRE-CLIENT: Fisheries & Forestry

TRANSLATION BUREAU NO. / NOTRE DOSSIER N°: 0777

BRANCH OR DIVISION / DIRECTION OU DIVISION: Fisheries Research Board

TRANSLATOR (INITIALS) / TRADUCTEUR (INITIALES): AKH.

PERSON REQUESTING / DEMANDÉ PAR: Dr. E.D. Mitchell, Arctic Biol. Station, Ste.Anne de Bellevue, Que.

DATE COMPLETED / ACHEVÉ LE: MAR 24 1971 March 19, 1971

YOUR NUMBER / VOTRE DOSSIER N°: 769-18-14

DATE OF REQUEST / DATE DE LA DEMANDE: 20.1.71

CREDITED DRAFT TRANSLATION
Copy for information
TRADUCTION NON REVISÉE
Information seulement

FRB 1688

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TRANSLATION BUREAU
FOREIGN LANGUAGES DIVISION

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BUREAU DES TRADUCTIONS
DIVISION DES LANGUES ÉTRANGÈRES

CLIENT'S NO. / Nº DU CLIENT	DEPARTMENT / MINISTÈRE	DIVISION/BRANCH / DIVISION/DIRECTION	CITY / VILLE
769-18-14	Fisheries & Forestry	Biological Station	Ste. Anne de Bellevue, Que.
BUREAU NO. / Nº DU BUREAU	**LANGUAGE / LANGUE**	**TRANSLATOR (INITIALS) / TRADUCTEUR (INITIALES)**	**DATE**
0777	Norwegian	AKH	March 19,1971 MAR 24 1971

106

Northern fisheries outside Europe. 1. Newfoundland.[1)]

When modern whaling spread to Newfoundland in 1898 one might say it had arrived at one of the world's classical fishing grounds with the richest occurrence of fish and whale. The fishermen from Biscay, who were Europe's master teachers in whaling, were the first to find the way. One story tells that this happened already in 1372, over one hundred years before Columbus' first voyage in 1492 and John Cabot's in 1497. Some years before these voyages Englishmen, Brettons and Basques fished extensively off Iceland and it would appear that this fishing extended west towards Greenland and south-westwards toward the banks of Newfoundland. The name Newfoundland, then Terra Nova (Terre Neuve), covered not only that territory which today bears this name, but the whole coast with adjacent islands from the New England colonies in the south to the Hudson's Bay in the north. We have good sources to show that the Basque fishermen crossed the Atlantic every summer from about 1530 on and up to year 1600 to fish on a regular basis for fish and whale. off Newfoundland. The whalers left in June and returned in December. In the last half of the 1500's we also find Dutch, French and English whalers in the same waters. From then on we also know

that whale oil was used by manufacturers of soap.[2]

The species of whale found, the right whale, was the one which later has most commonly been called the Greenland whale (Balaena mysticetus), a very near relative of the one which the Bisquays had caught in their own territorial waters, the North Cape whale (Balaena gracilis or biscayensis). It is highly probable that large finback whales were also found off Newfoundland, but the Greenland whale was the one sought, probably because it had the greatest value because of the whale bones and partly because man was unable to catch the other species. The whale population decreased sharply off Newfoundland around year 1600 and
107 when Svalbard, with its profusion of right whale was discovered in 1596. The interest of the large whaling stations turned this way while the English colonials in America began to catch right whale in their own territorial waters.

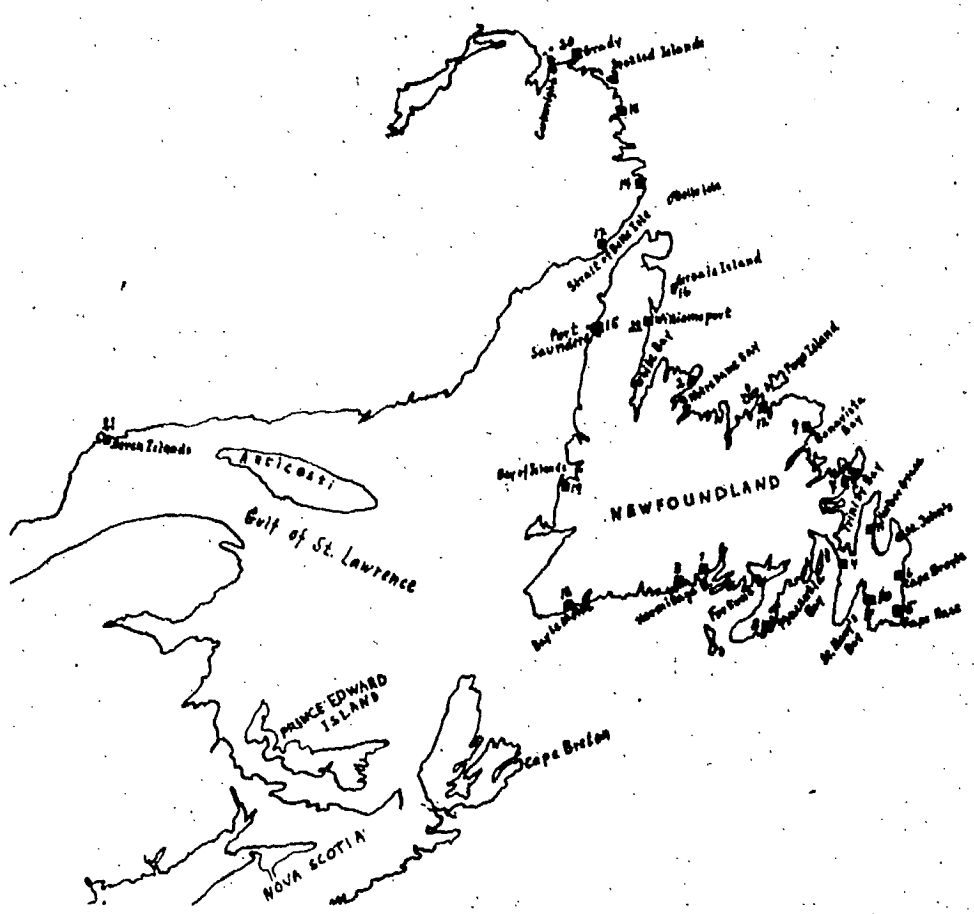
This American coast whaling was once of considerable importance. It began in the 1640's originating from small fishing villages (Amagansett, Promised Land, Sag Harbour, and others) on the south and east coast of Long Island, further south round Nantucket, north to Provincetown at the northern tip of Cape Cod and off Gloucester. According to another reference, the whaling was to have started from Nantucket in 1614. This harvesting of right whale was almost at an end when the "explosive harpoon" was introduced about 1870. This resulted in a small revolution in that it made possible the harvesting of other whale species, probably mainly

the humpback whale. "Of the 100 or so whales which were killed by the whalers of Provincetown in 1880, only three were said to be humpbacks", the rest were finbacks. The few statistics available show that also this method could yield a considerable harvest. Twenty humpbacks were killed in Provincetown harbour with the "explosive harpoon" in one day (May 14, 1881), and a total of 48 whales were killed the year before from which 29,925 gallons of oil were rendered. Sold for 40 cents per gallon, this brought in $ 11,970. Eighteen whales were caught off Gloucester in 1880, 15 in 1881, and ca. 75 in 1882. After the end of the 1880's only occasional whales were shot (more in 1895 and -96), and the old whalers showed that they had not forgotten their trade when they for the last time caught a right whale off Amagansett in 1918. It was rendered at the old oil- and guano-plant in Promised Land, but it gave only 30 barrels. Coast fishing predominated up until 1760, but from then on the famous Gloucester, Salem and New Bedford whalers began departing on their famous distant excursions, first on the east side of the continent to the Davis Strait, Baffin Bay and other arctic oceans, but from the 1770's on also round Cape Horn and up to the Bering Sea.

On their way northwards along the east side, the Americans stopped for a few years along Newfoundland where they carried on a rather rich whaling of right whale from 1796 to 1807 along the south coast, in the Hermitage-, Despair- and Fortune-Bay areas until it was stopped by the restless political situation between the U.S.A. and England. The whaling was almost at an end by the

1830's. The local authorities tried to support the whaling by offering a prize of $ 200 to the ship which first brought in their 10 tons of oil or 15 tons of blubber in the period between May 1 and October 10. Cheered by this, attempts were made along the west coast with rather good results. But it ended with this spurt. The last right whale was reportedly caught in 1850.

108



Map of Newfoundland with whaling stations.

However, all whaling off Newfoundland was not at an end. A single firm continued coast whaling to a lesser extent from 1850 to 1890 from a station along the middle of the south coast. Even

though the whaling was old fashioned with open rowboats and hand harpoons, several whales were caught over the years. There are no certain reports about what kinds of whale were caught. It was probably mainly small whales because it was reported once that 50 whales were caught in one day. Less likely is the information that man, with the materials at hand, also should have managed to catch larger finback whales. The most significant aspect of this whaling was that it was established that larger amounts of blue- and finback-whales occurred there and that whaling with modern tools would undoubtedly pay off. Only eight years passed from the time the old whaling finally ended and the new one began.[3]

109 Whaling stations in Newfoundland, Labrador and by the St. Lawrence 1898-1915. and some later years.

Only the names of the companies which started the stations are listed in this table, not the later variable patterns of ownership. The dates indicate the years in which the stations were active (including interruptions), not the years that the respective companies ran them. The time intervals are very uncertain for many stations.[21]

1. Balaena	Cabot Whaling Co.	1899—1914
2. Snook's Arm	—»—	1898—1914
3. Chaleur Bay	Newfl. Steam Whaling Co.	1901—1906
4. Rose-au-Rue	—»—	1902—1946
5. Aquaforte	Anders Ellefsen	1902—1907
6. Cape Broyle	Cape Broyle Whaling & Trading Co...	1903—
7. Trinity Bay	Atlantic Manufacturing Co.	1904—1914
8. Little St. Lawrence	St. Lawrence Whaling Co.	1903—1906
9. Safe Harbour	Colonial Manufacturing Co.	1904—1906
10. Riverhead	M. Cashin	1904—
11. Harbour Grace	Newfld. Whaling & Trading Co.	1905—1906
12. Beaverton	Henry J. Carle	1904—
13. Dublin Bay	Mic Mac Whaling Co.	1904—1914
14. Cape Charles	Cape Broyle Whaling & Trading Co.	1904—1912

15. Hawke's Bay	Newfld. Whaling & Trading Co. ..	1905—1913
16. Groais Island	Colin Campbell	1904
17. Lance-a-Loup	Mic Mac Whaling Co.	1904—1905
18. Hawke's Harbour	Daniel A. Ryan	1905—1951, 56—59
19. York Harbour	Colin Campbell	1905
20. Grady	British—Norwegian Whaling Co. ..	1927—1928
21. Seven Islands	Norwegian—Canadian Whaling Co. ..	1911—1915
22. Williamsport	Olsen Whaling & Sealing Co.	1947—1951
23. Cape Broyle	Newfld. Whaling Co. (Chr. Hannevig)	1918
24. South Dildo	Arctic Fisheries Products Co.	1947—
25. Nova Scotia	Karlsen Shipping C. Ltd.	1964—

The man who pursued the thought of whaling was the Norwegian Adolf Nilsen (in English Adolphe Neilsen). He came from Tønsberg and was hired as fisheries superintendant on Newfoundland since 1898. Nilsen, who reportedly knew much about the fishing and whaling off the Finnmark coast, made the local residents aware of the fact that whaling right outside their livingroom doors could become the same source of wealth for Newfoundland as the catches from Finnmark were for Norway. But, without Norwegian equipment and Norwegian whalers this could not be realized; the Newfoundlanders could take over later on. A native businessman, A.W. Harvey, from an earlier whaling firm, is said to have encouraged Nilsen to proceed. Nilsen travelled to Norway in January of 1897. He was successful in finding Norwegians as shareholders. With Gustav Hansen, Oslo, as manager, The Cabot Steam Whaling Co. was founded with partly Norwegian and partly American capital. A whaling boat called "Cabot", was ordered from Aker's Mechanical Workshop and left for Newfoundland in May 1898 with a Norwegian crew. The station, which was also called Cabot, was located in Snook's Arm on the north coast by Notre Dame Bay. Nilsen, who called himself manager, was apparently also the harpoonist because

in April 1899 he reported that "he caught as many whales with his boat as the company's own station could handle". The starting capital for the company was ca. $ 100,000. Reports about returns vary greatly for the first years. The natural historian J.G. Millais says that the first whale was shot June 25, 1898 near Cabot by captain Hjalmar Bull (1859-1927) who got 47 whales that year; 95 whales were shot in 1899, 111 in 1900 and 258 in 1901. However, according to the Annual Report the returns were:

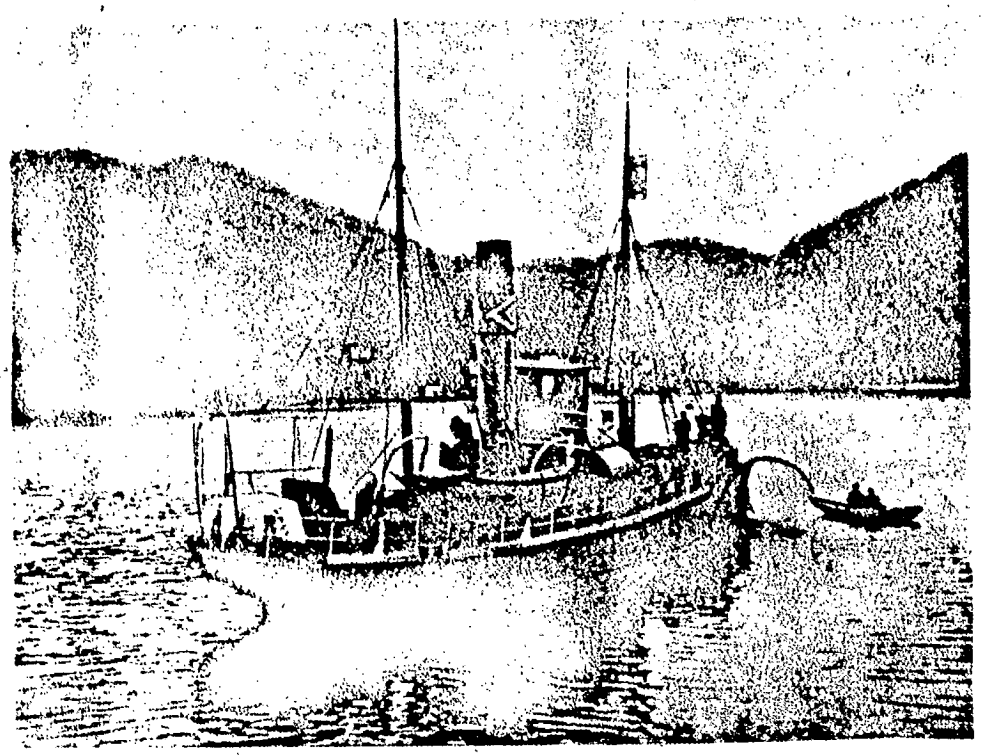
	Number		Value in $		
	Whales	Barrels	Oil	Bone	Total
1898	7	194	1,340	241	1,581
1899	55	1,519	14,439	1,167	15,606
1900	112	3,096	34,604	1,824	36,428

Under any circumstances, the report must be completely wrong for the first two years. At the directors' meeting of the whaling company, held 3/I 1899, it was stated that "Cabot made out well last year by catching 91 whales even though it had a late start. At full capacity Cabot could catch 200 whales." Bull himself reported to the paper that he had landed 20 whales by the middle of September 1898. This refers to humpback- and finback- whales which each gave 4 - 5 tons of oil; nothing certain is said about the others. When one also got started on the south coast in 1899 mostly blue whales were shot there. Year 1903 is the first year with more certain figures; then the catch was 38% finback whales, 32% humpback whales and 25% blue whales and 4.5% sei whales plus 1 sperm whale. The relative values have probably been similar in previous

years though possibly with higher numbers of blue whales.

The factory at Snook's Arm was ready in August 1898 and the operation was led by Adolf Nilsen. It was capable of handling two whales per day, but only the blubber was used. There were 23 tanks; the peculiar statement was given about 11 of these " sun-tanks, which contents were exposed to the sphere's rays which shone through the glass roofs". It appears that one believed that sunshine should contribute to clearing the oil and give it a better quality. Fifty natives worked at the station and there was great joy over the new labour demands for the industry.

111



"Cabot". The first whaling ship in Newfoundland, 1898.

When large amounts of mainly blue whale were reported in the

old area in Hermitage Bay on the south coast - "hundreds of them can be seen from land blowing in the bay" - the company decided to use also this area. Then "Cabot" could whale during the summer season, June- October, on the north coast and during the winter on the south coast. A new station, Balaena, was built in the spring of 1899 by Bonne Bay on an arm of Hermitage Bay. It was finally completed by the summer, but "Cabot" also shot whales during the winter. These whales were marked with buoys and left until the station could handle them. It was also decided that a slightly larger boat be obtained for the rougher northern area. (This boat, "Viking", was delivered from Nyland's Workshop in 1902).[4]

Even though the operating costs were disproportionately high, the company did earn a little from 1900 on after initial expenses were covered. There were enough whales and the view to increased profits. Yet another company was tempted to start, The Newfoundland Steam Whaling Co. It started its whaling in 1901 with its base at Reuben's Harbour by Charleur Bay, both on the south coast, with one boat per station. The company apparently had no Norwegian shareholders, but was supported completely locally. It may therefore be said to have been the first fully foreign company to adopt the modern Norwegian whaling method. But also this was completely dependent on Norwegian materials and Norwegian harpoonists. One of these was Nokard Davidsen (1877-1908) who was active from 1903 on for several years. Whaling was therefore in full growth on Newfoundland when the first Norwegian company settled there in 1902, tempted by tales of the huge quantities of whale. The profits of

1901 could not have been the temptation because the two companies received 4,561 barrels to a value of $ 54,221 from four stations. In addition, there were 41 tons of bones to a value of $ 13,350. A relatively good market still existed for these products in U.S.A. and England.[5]

The authorities had taken steps to regulate and control the catch and production before the Norwegians got started. The demand for this came from two sides, those companies which already were active and wanted to avoid too close a competition and from the fishermen who had the view that the whaling hindered the rich fishing. This view was far weaker than in Norway. "In the true interest of the whaling and with a view to hinder a rapid extermination of the valuable whales, the Department of Fisheries wants to recommend very strongly that limitations be set on the number of permits issued... The population was exhausted in 14 years in Norway because of unlimited taking... The example from Norway ought to frighten". The statement shows how the fate of the whaling in Finnmark and the lack of a timely control and limitations there had consequences far beyond the borders of the country. We have seen it in Iceland and in the British Isles and on Newfoundland. A third argument against the whaling came from complaints from the people regarding offensive smells from the carcasses with blubber removed; the fishermen also complained over the fact that carcasses drifted into the fishing nets and ruined them. They also complained that pursued whales damaged nets.

The law (The Whaling Industry Act) of April 22, 1902 (with certain additions in the following year) established that one

had to pay the very high price of $ 1,500 per year for a permit in order to whale, and the permit was valid for 10 years. A permit could be given to a foreigner, but the crew and the workers at the station had to be British subjects; however, foreign specialists could be used during the three first years to teach the local people. Only one whaling boat (but no towboat) was permitted per station. Whales could not be pursued or killed closer than one mile from a fishing boat and two miles from shore. A carcass with blubber removed, which was not prepared for fertilizer, should be towed at least 50 miles out to sea. An official inspector should travel to all stations every year, keep close control with the law and report to the Department of Fisheries under which whaling belonged. (These yearly reports have been the most important source for this report.)[6]

This Newfoundland whaling law of 1902 is of great historical interest because it is the first one known which made whaling dependent on permit granted for a given period, which established a permit fee, and which limited the number of whaling boats. It has without doubt established presedence for all later similar laws. The same three regulations can thus be found in the British "regulations" for whaling from its colonies in the Antarctic Ocean.

The law concerning priorities for import of workers and the very high permit fee indicate that it was dictated mainly by the fishermen. Regarding the remaining regulations, concerning the limitation on catch, were totally ineffective. The coast of Newfoundland is a couple of thousand kilometers long; it could give

room for 30 - 40 stations with as many boats with an average distance of 50 miles between stations. Secondly, the law did not establish that the catch, as it did off Shetland, be carried out farther from the coast. Thirdly, there was no limit on period of whaling; there was nothing to prevent whaling the year around. As it turned out, the way the law was formulated it made it possible to "empty" the area within a few years. "The example from Norway" had not been frightening enough. In his report of 1903, the inspector made an urgent warning against issuing any more than the eight permits which were already issued. Unfortunately, his warning was not heeded and the inevitable happened.

The thought of a Norwegian undertaking on Newfoundland is said to have come from proprietor Ragnvald Berg, Stokke, who discussed this with Andreas Ellefsen. They contracted a whaling boat called "Thumber" at Nyland's Workshop and turned it over, at time of delivery, for 85,000 crowns in 1902 to the son of Ellefsen, Anders Ellefsen (1875-1953) who formally became single owner of the company (The Atlantic Whale Manufacturing Co.) in that he borrowed the needed starting capital of 205,000 crowns. He had been to Newfoundland the year before and been promised permission by the governor to "establish himself on Newfoundland with the full and equal rights of a British citizen without any permit". The governor had welcomed with joy that a foreigner wanted to start a business there. It is told that Anders Ellefsen had been given orders by his authoritative father to proceed with the undertaking. This son was the only one in the family who was not trained as a whaler. He was trained to be a goldsmith with many years

apprenticeship behind him both from Norway and from abroad. We have met his father in Finnmark, together with his brother Hans on Iceland; a third brother, Ole, was also interested in whaling.

Anders Ellefsen built the station at Aquaforte furthest south on Newfoundland. When "Humber" left Tønsberg at the end of May, 1902, with his brother Henrik as harpoonist, father Andreas came along. He says proudly, and with good reason, that "I was with my son and we caught 84 whales in six weeks". That makes two whales per day on the average, an excellent result. A third son, Arne, came in 1904 as harpoonist and he was only 20 years old when he shot his first whale. A fourth son, Frithjof, was harpoonist and foreman for his uncle on Iceland for nearly 20 years. When the fifth son, Georg, started the station Blomvåg by Bergen in 1912, where the father, then 64 years old, shot the first whale, all five brothers and their father had entered the whaling business. Besides Ellefsen, a new English company called Cape Broyle Whaling & Trading Co. also started in 1903 with Admiral's Cove as its base. That company was formed on the 14th of March with a capital of $ 60,000 (Cape Broyle lies half way between St. John's and Cape Race, the most southerly promontory on the island and dreaded for so many shipwrecks). The company opened another station on the Labrador coast called Cape Charles two years later.[7]

Ellefsen's catch in 1902 was quite good but not as good as the start had indicated. While 84 whales were caught during the six weeks following June 17, only 24 more whales were caught during the rest of the season giving a total of 108 whales or

2,223 barrels. It proved then and later that the summer months were the best whaling time on the southeast coast; fall was the best time off Labrador. The quantity of rendered oil was markedly low in spite of the relatively high proportion of blue whale in the catch. The number of barrels per whale was, for the years 1902-06, 27.7, 22.5, 28 and 24.5 respectively. This was lower than for most other areas of the northern seas. When the oil return per whale was so low off Newfoundland - it did not exceed 28 barrels until 1915, and in the years 1907-11 it was only 20.8 on an average for the year - it may have been because the whales here were said to be leaner than in the other areas and because mainly the blubber was used. However, most of the oil was of # 1 grade. This was also because the catches were made so near the coast that towing time was short and the blubber therefore was of a better quality when boiled. It was generally agreed that a whale could be flensed up to 16 hours after being shot and still give # 1 oil. The total catch for all five stations in 1902 was 331 whales giving 9,184 barrels valued at $ 112,859 and bones valued at $ 12,285.[8]

115

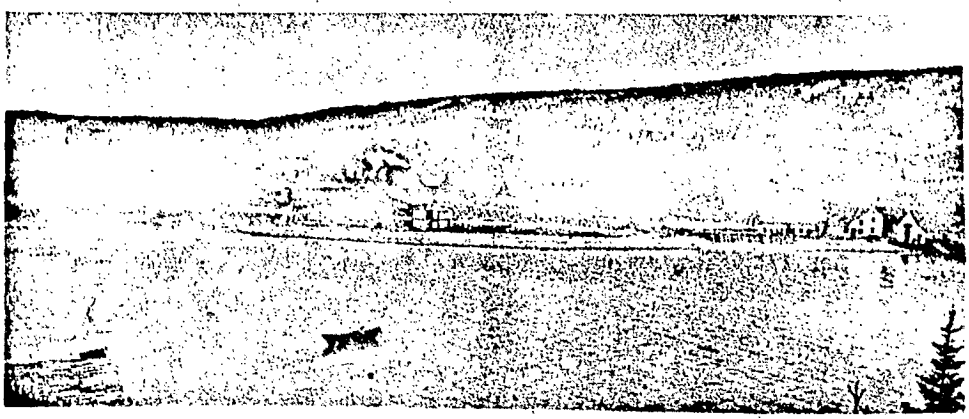
Anders Ellefsen. *Hjalmar Bull.* *Nokard Davidsen.*

Anyway, profits were promising enough that they tempted many others to come, many too many. A senseless speculation and over taxation of the area ensued with a resultant crash so severe that no other area in the history of whaling can match it. Fortyfive applications for permits were received between December 1902 and November 1903. Of these, 19 were granted (including the stations which already had permits); a total of 14 stations were already finished by the start of the 1904 season, and four more were established the following year. A total of $ 45,000 was paid in permit fees during the three years 1903-05, and one estimated that the investment capital exceeded one million dollars in the latter year. The catch reached its peak with 1,275 whales in 1904 (264 blue, 690 finback, 281 humpback, and 40 uncerta in) from which were produced 35,766 barrels of oil worth $ 297,415, 2,603 tons of bones worth $ 39,557 and 3,511 tons of fertilizer worth $ 38,981, together $ 375,953.[9]

The inspector gave vivid figures of the hectic beginning years in his reports. Of special interest to us is the report from Ellefsen's station where he found the conditions unsatisfactory in 1903. The flensing deck was too small to prepare the whales rapidly enough; much waste lay about smelling. Complaints were made that whale carcasses had drifted into the adjacent Placentia Bay and damaged fishing nets. Ellefsen said that a large fertilizer factory would be established the next year to utilize the waste. At the time of the inspector's visit on July 30, 1904, 160 whales had been shot. The fertilizer factory was then ready but even though it operated at full capacity it could not keep up with the cooking

plant even though some carcasses had been towed to the neighbouring station and some out to sea. When the inspector found that not enough was done to remove the carcasses, Ellefsen was fined $ 100.

116

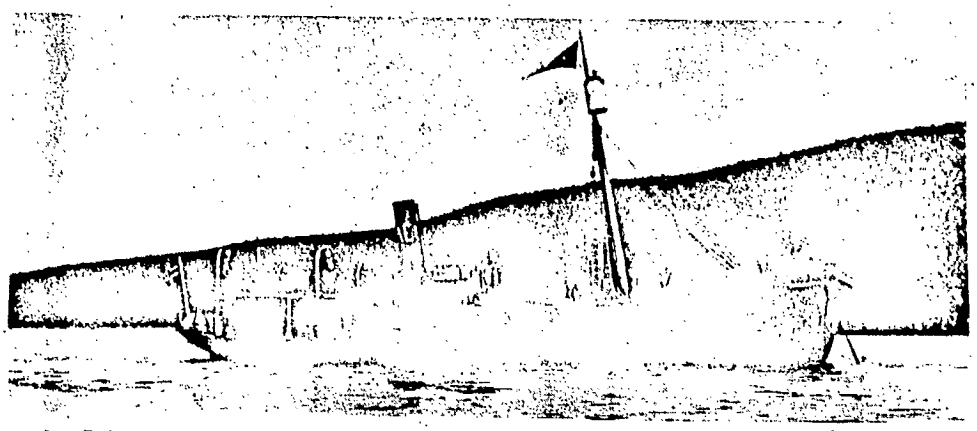


The station at Aquaforte, Newfoundland, 1902-07. The station is in the centre, the store on the right and the house of director Ellefsen on the hill to the left.

A German-American engineer, Dr. L. Rismüller, is mentioned often in the reports regarding the great importance of his method for making fertilizer and feed concentrate. These products were excellent and in great demand. He had some of his own stations with cooking factory and fertilizer plant as well as plants located at other whaling stations where he bought whale carcasses. " His station is the headquarter or teaching institution for fertilizer production and at the time of my visit two men were studying there to be able to take over plants which were to be opened ", wrote the inspector. (It was not possible to find out more about his process). Before the fertilizer production got started, oil was of course also extracted from the carcasses, and it was of an excellent grade according to the inspector: "The Norwegians had for many years extracted oil from the meat and bones, but it was almost worthless

because the dark colour prevented profitable sales. Dr. Rismüller was the man who perfected the process so that only # 1 oil is made, and when this oil is treated chemically it can not be separated from the natural product in any way." Sewen stations had a combined production of 5,000 barrels meat-oil in 1904. It is said that large sums were used for experimentation with methods of cooking in Newfoundland. - Millais also mentions many times the importance of Dr. Rismüller's discoveries and that: " He has done more for whaling and for the use of whale products than any other living man. We owe him for the full utilization of every part of the whale, including the meat, blood and liver, and parts of the hide which were considered as waste only a few years ago."[10]

Dr. Rismüller and his patents are mentioned so often and so
117 forcefully that one cannot overlook the fact that he played a certain



The whaling boat "Humber" at Aquaforte ca. 1904.

role in the building of the whaling industry. This is expressed even more clearly at the start of the modern whaling in 1905 on the west coast of Canada where Rismüller was called on to install cooking equipment in the first stations and based on his experiences gained in Newfoundland. It was stated simply that the first company's production could not have started on the west coast

without his assistance and his "patented machinery"."His patented drying is the great mystery in the whaling industry." The patents seemed particularly aimed at utilization of the carcasses without blubber for the production of fertilizer, but it was also said that he experimented with an improved refining technique of the oil for use in finer soaps etc.. According to a newspaper article, he was also already an expert on making fertilizer from fish waste in Germany before he came to Newfoundland. The whaling industry was "not in a healthy situation when he came to Newfoundland. It was carried out in a non systematic manner and did not pay. But, things soon changed when Dr. Rismüller came into the business." There were finally 21 stations"operating with the system which was controlled by him. Everyone uses the method which he developed." It is said that it was only when the great benefit with his process had been proven that one succeeded in obtaining capital to invest in the whaling off Newfoundland.

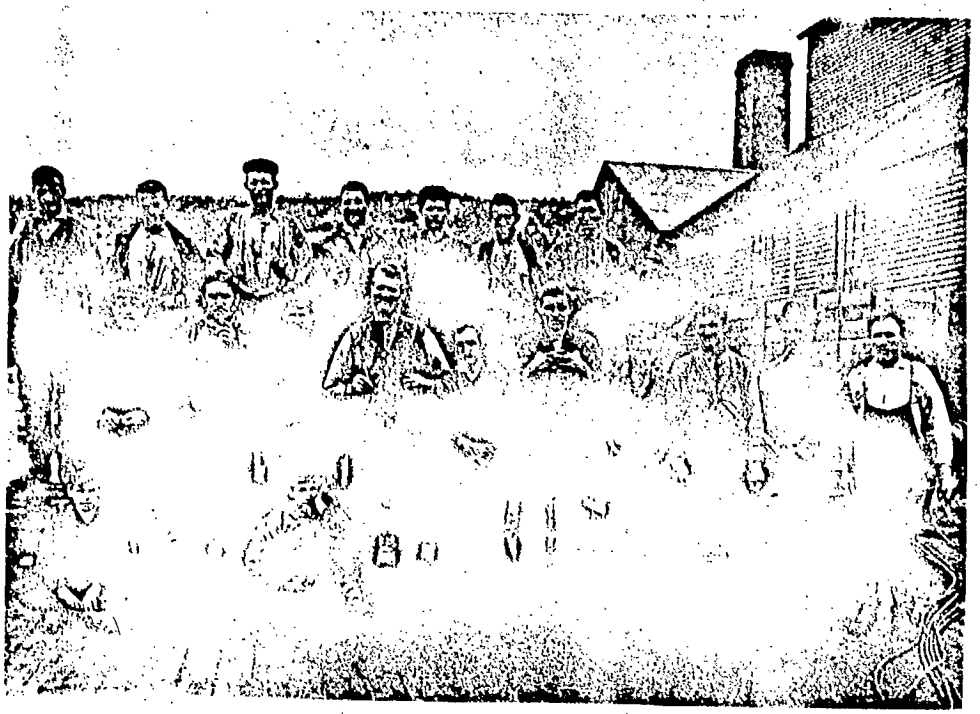
Rismüller established his own company, Colonial Manufacturing Co.,here in 1900 with a factory at Cape Broyle which was not used as a whaling base by him but for the purchase of carcasses with
118 blubber removed. According to Anders Ellefsen's papers, we see that he signed a contract in 1903 with Rismüller about sale of whale carcasses at a price of $ 24 for blue whale, $ 14 for finback whale, and $ 10 for humpback whale. This was a high price in comparison to the one pound sterling paid per carcass for all kinds of whales 7 - 8 years later in Antarctica. Rismüller's enterprises, called The Fish Industries Co., had a similar contract with Cabot

Steam Whaling Co.. A fertilizer plant was built close by the whaling station in Bonne Bay on the south coast. He has probably also done some whaling because a whaling boat had been contracted by him at a Norwegian workshop. The boat was called "St Lawrence". After the collapse of whaling off Newfoundland it was transferred to the company Rismüller helped start on the west coast. Because of him, America was a third place, after Germany and Norway, where experimentation was done to improve the cooking technique and the complete utilization of the whale. However, none of Rismüller's patents appear to have been used outside of North America. Regarding the collective technical development within the whaling industry, they can therefore probably not have been of any great consequence.[11]

As we shall see later, a Norwegian captain by the name of T.T. Gjertsen, had sold the right to his patent on a side-port on a floating cookery to an American firm because he was unable to form his own company. Instead, he now got American capital (the main shareholder was apparently the railroad magnate S.W.D. Reed) of 450,000 crowns. The company was evidently called The Atlantic Whaling & Manufacturing Co. Ltd. and it began operations from two stations in 1905, Harbour Grace on the southeast coast and Hawke's Bay on the west coast (by Strait of Belle Isle). Two whaling boats, "Fin" and "Hump", were delivered from Aker's Mechanical Workshop. They had Norwegian crews, 10 on each, hired for a couple of years from Tønsberg and environs. The result was a great disappointment for almost all companies, 49 whales in 1905 and 57 in 1906. Even though this company could show limited progress, the result for

Newfoundland as a whole was a catastrophic recession, from 892 whales and 25,182 barrels in 1905 to 439 whales and 10,740 barrels in 1906. This meant total ruination for many companies. Stations were deserted and the whaling boats were sold, many to Japan. In spite of the permit fee being reduced to $ 750 in 1906 and removed altogether the year after, the number of stations shrank and the fleet decreased to five in 1910. It was estimated that two million dollars had been lost by then.[12]

When one of the whaling boats sold to Japan left St. John's at New Year's time 1907 with 10 men aboard, it was probably start-
119 ing one of the longest voyages ever made by a whaling boat. "Fin"



A group of native workers at the station at Aquaforte, 1905.

was only 96 feet long. The trip over the Atlantic, through the Mediterranean and the Suez Canal, across the Red Sea, the Indian Ocean and up to Japan was more than half way around the world. The

captain was Marius Amundsen. They left Port Said on February 7, but they went aground two days later in the middle of the Red Sea. The boat could not move and the people remained on board until the 13th; then the captain, together with three sailors (a Dane, a German and a Greek), took a life boat to try to reach land. When the other six did not hear anything from them in six days, they left the wreck in the other boat. They rowed for three days in the boiling heat before they reached land where some beduins led them on camels to Jidda (the port town for Mecca). Here Lloyd's agent took care of them and sent them on to Aden. They had been very lucky, said the agent, "because it is exceedingly rare that Europeans, who beach on the coast of Arabia, escape with their lives". The four others probably did not escape because an expedition found no trace of them.[13]

There were several reasons for the crash of the Newfoundland whaling. Operating costs were relatively high; even in the record
120 year of 1904 only three companies showed a profit and then not more than 6%. The main reason for this was the strong decrease in oil prices, from ca. 21 pounds sterling for # 1 in 1901 to 16 pounds in 1904. One year later it fell to between 15 and 14 pounds and some had to sell for as low as 13 pounds 10 shillings. It helped little that the price rose to 19 pounds in 1906 and even to 23 pounds in 1907 when the whale population declined. It was said in the annual reports that the reason for this was not so much to be blamed on the intense whaling as on the near disappearance of plankton off the coast, and that the whale therefore went further out to sea.

The conditions improved somewhat in 1909 because of more plentiful plankton, and the year might have been a good one if the oil prices again had not dropped all the way to 17 pounds. The two next years, 1910 and 1911, were without doubt the most profitable for the five remaining companies. The return was ca. 8,200 barrels each year and the price was relatively good, 22 pounds sterling. This renewed prospect of profits led to 10 stations starting operation in 1912. However, when their collective returns were only about 8,000 barrels, and the price of oil dropped, most of them closed again. "All operations experienced losses", wrote the vice council once more from St. John's, "and it is doubtful if the whalers will return next season. No company can pay dividends." There were only three stations left in 1915, Hawke's Harbour on Labrador and Beaverton (northeast) and Rose- au-Rue (southeast) on Newfoundland. The collective catch was 141 whales (115 finbacks, 19 sperms and 7 humpbacks), of which half came from Labrador. Complaints were made that the whales were small and thin; the number of barrels per whale was 21.6, only half of this year's catch in St. Lawrence Bay.[14]

The station there was run by a Norwegian company, The Norwegian-Canadian Whaling Co., which was constituted in Oslo on May 20, 1911 with a share capital of 450,000 crowns and on the initiative of shipowner Willy Görrisen. Among the shareholders were shipowner Joh. Ludv. Mowinkel, Bergen, consul Finn Bugge, Tønsberg, and the director for Kaldnaes Mechanical Workshop, Harald Henriksen (1872-1934), a younger brother of Henrik N. Henriksen, who became directors. A very large and expensive but delapidated plant at Seven Islands

(Sept Isles) on the north coast of St. Lawrence Bay was bought from an earlier Canadian company. It was renovated with modern equipment from Henriksen's Workship for the cooking of both blubber and meat and for manufacture of fertilizer. Hans Sørensen, Kjøle, became administrator and two whaling boats, "Hauken" and "Grib", were bought from Ørnen Co. These had proven ineffective in the whaling in the Antarctic. (Grib was shipwrecked in 1914.) Profits were relatively good; because they started late only 55 whales and 2,000 barrels were processed, but in the following four
121 years, 1912-15, the annual average was an even 84 whales, 3,450 barrels of oil and a similarly large number of bags of fertilizer. With the reasonable prices paid for both products, the operation probably broke even, but it probably yielded no profit. Only blue- and finback- whales were caught during the five years, anout 1/3 of the largest and 2/3 of the latter. The relatively large number of blue whales made the barrels per whale value the highest of any area in northern seas until then yielding 40 barrels on the average for the five years (in 1914, 43.5). Seal hunting was also attempted in the last year of 1915. This is probably because the company changed hands; it was taken over by consul August Fosse, Trondhjem, where two large sealhunting steamships, "Samson" and "Njørd" (originally from Arendal) were bought. Their catch was to be prepared at the station at Seven Islands. The idea was thus to extend the season by hunting seal from March and to May and then go over to whaling. The attempt was unfortunate; the catch was only ca. 5,000 seals because of exceedingly difficult iceconditions. When the war then also caused complications, the venture was given up and the

company liquidated. Chr. Salvesen & Co., which started the whaling again from Newfoundland and Labrador after the war, also inspected the station at Seven Islands. It is stated in this report that it was closed in 1916 because it traded with the enemy and that it was sold in 1921 for $ 1,400.[15]

Chr. Christensen, manager for Kosmos Co., also tried to run a whale- and seal- operation with "Lloydsen", one of the three boats the company had had built at Aker's Mechanical Workshop in 1911 and used it as a combined whaling boat and cookery. "Lloydsen" weighed 545 brutto tons, considerably more than usual whaling boats, and it had cooking facilities. It made two trips to the Arctic Ocean in 1911 under captain J. Hansen. Seals were caught between March and May on Bear Island and 1,392 seals were caught. It left Sandefjord again on June 23 and 17 blue whales and 7 humpback whales were shot during a five-week period (12/7 - 19/8) off Diskoe Island on the west side of Greenland. Together this yielded 1,595 barrels of oil, an exceptionally good result for such a small "cookery" over such a short time. About half was rendered on board. If one had not run out of coal, the result might have been even better. They had a violent battle with one blue whale. The journal says: "Hit whale at seven in the afternoon. The line was stretched out completely. Tried twice to haul it in but both times it was stretched out. In spite of the engine working at half speed in reverse, the boat was towed ahead at about two miles per hour until 12 midnight when the ship managed to stop. The voyage went in and out among huge icebergs. Tried to deflate the whale at one o'clock, continuing with brief intermissions until 7 o'clock but without

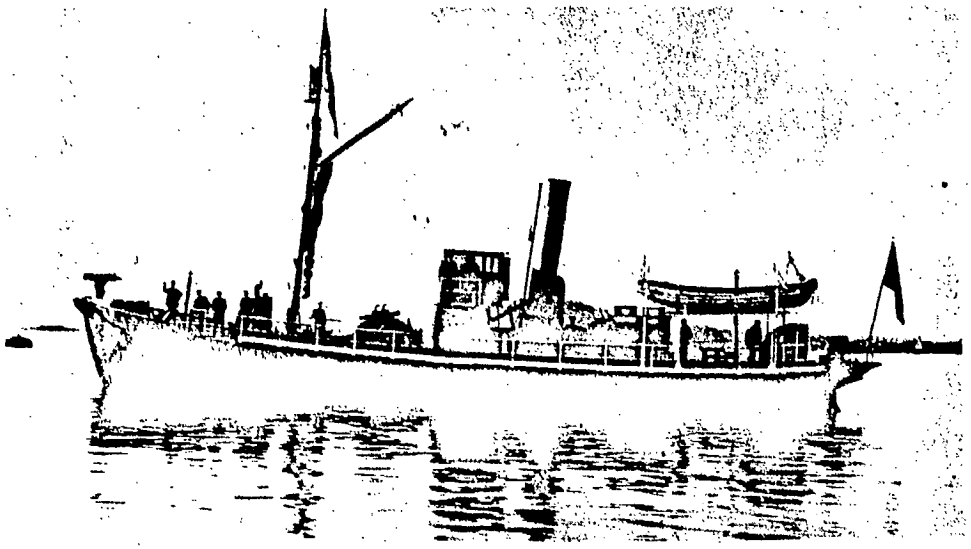
122 killing it. Only at 10:30 were we successful. It was the largest whale we had caught, 83 feet long and a huge width. It had about 1½ times the amount of blubber of a usual blue whale. The harpoon had been too short and had to be extended by two feet". The average yield from the 17 blue whales was 79 barrels (only blubber was used), and 36 barrels from the humpback whales. These must have been exceptionally fat animals.

When it says somewhare else thact "Lloydsen" (under captain J. Antonisen) caught 23 blue whales off Aquaforte in 1912, "an unusually large catch of this whale in this area, this must be an error. According to the catch journal it says that it was 15 blue-, 5 humpback-, and 3 finback- whales and that they were caught, as in the year before, off Diskoe Island. Six of the blue whales which were shot at were lost because the line broke or the grip in the tail slipped. Poor animals! "Lloydsen" was used again in the hunt for seal in the next two years when 6,540 and 4,650 seals respectively were caught. This venture probably was no great success and the boat was sold to Sweden in November 1914.[16]

The Newfoundland Steam Whaling Co. tried to coordinate whaling in the north and south by using one floating cookery and using the equipment the year around. The steamship "Sobraon" was outfitted by Framnaes Mech. Workshop as a floating cookery for the summer of 1907 under direction of Nokard Davidsen. With him as whaling administrator, captain I. Egenes as leader and a 57-man Norwegian crew, the cookery left with its two whaling boats in October to whale off South Shetland. Four expeditions, of which two were Norwegian, were to whale there that

season. Davidsen was only 30 years old when he got this responsible position and he took a great risk when he, as the first whaling administrator, entered the difficult and yet quite unknown waters of the Gerlache Straits (Belgica Straits) between Palm Islands and Graham Island. He saw many whales but the conditions were so difficult that he went north to Brandfield Strait. Here the catch had just started when a deeply tragic thing happened. Davidsen fell overboard in high seas from the Whaling ship "Lynx" and drowned on January 22 off Greenwich Island (in South Shetland). To commemorate this good representative for Norwegian whalers, a 22-foot concrete pillar was erected on Deception Island on February 9, 1908. It was unveiled in the presence of 250 Norwegians. During May "Sobraon" was off Newfoundland and continued whaling during the summer along the Labrador coast up to Spotted Island. Fortyseven whales were caught. The profits from the whole voyage to the south and north was 141 whales and 4,000 barrels (of which 94 whales and 2,500 barrels were from the south). The experiment probably did not meet the expectations of the company. The "Sobraon" was sold
123 in 1910 and we shall from then on meet it again as a floating cookery off South Shetland between 1910 and 1913 in the service of The Odd Company, Sandefjord and under the name of "Orion" under Amandus Andersen, the pioneer of the South-American whaling. He was owner and whaling administrator 1914-15 along the coast of Chile.[17]

The inspector of Newfoundland said in his report of 1904: "All whaling is now done with steamships which are all built in Norway and manned mainly by experienced men from there; They are completely conversant with the use of the "harpoon canon" loaded with the deadly modern explosive projectile which a whale rarely escapes.



The whaling boat "St. Lawrence", 111 brutto tons, built at Nyland's Workshop, Oslo, 1903. It left St. John's Newfoundland for Cape Horn and Vancouver Island, 1906-07.

But the far greater number of men are employed in the factories and are without exception British subjects." The Newfoundland whaling has had an indirect significance for Norwegian trade and for the world catch in general. The companies did not bring home net profits. If Ellefsen made a good profit in the first four years, his losses have surely outweighed the gains esp. in the last year (1906, 18 whales and 310 barrels). He sold the plant to some of the shareholders who could not believe that this was the end. But that was it because their profit was subsequently only three whales. Ellefsen then went home, took over the family farm, Skjaernes, and started a plant in 1909 for the production of ignition bolts and time fuses for whaling. It is still in operation in the same place to date. The production was based on the patents he himself had experimented on and which his father also had worked on. During his years on Newfoundland,

124 Anders Ellefsen continued the experiments and found in time such a safe and effective form that his ignition bolts and fuses today are almost unique all over the world where whaling is practiced. The Newfoundland whaling was quite beneficial for Norwegian shipbuilding; 15 new whaling boats were supplied from only two workshops in a few years. All equipment and much of the machinery for many of the stations were delivered from Norway; all harpoonists, most of the whaling directors and crews on the whaling boats were Norwegian. Considerable sums were earnt over the years in wages and shares by these couple of hundred men.[18]

The whaling off Newfoundland and Labrador stopped almost completely toward the end of the first world war. The high prices for oil in the latter war years stimulated it again and again the Norwegians took the initiative. The rumour of this caused a paper in St. John's to launch a sharp attack on Norwegian whaling. "They have all the means to carry on whaling to the extreme off the Newfoundland and Labrador coasts, and have they first begun the business, there is every chance that they will not stop as long as one whale blows... If our authorities want the whaling along our coasts spoiled for a hundred years or so, then they ought to let the Norwegians start... They have already depleted their own coasts, the coast of America along the Pacific and many other places where the whale occurred in large quantities earlier." This was rebutted by the Norwegian Whaling Times (Norsk Hvalfangst-Tidende) which pointed out that the catch had decreased greatly in later years because the whale population had decreased so strongly. During the attempts to keep

the whaling going "there was probably no whaling area in the world where so much money was wasted as exactly on Newfoundland." The Norwegians whaled to make money and their catch would be regulated by the prices for oil. When no more money could be earnt in this area they had withdrawn early. And besides, the whale was not exterminated at all; blue- and humpback- whales had decreased in numbers but a fair amount of finback whales were caught in the years 1912-15, i.e. 202, 185, 142, and 115 respectively (in addition 84 blue-, 48 humpback-, and 35 sperm whales were caught). - The Whaling Times could also have added that if the whale was "exterminated" off Newfoundland's coasts there was no one more responsible for this than the native population itself. The Norwegians had grantedly started the whaling, but the Norwegian capital investment had been very modest in comparison to the British-American. To accuse the Norwegians of having exterminated the whale was to punish the wrong party.[19]

125 Christoffer Hannevig began the whaling in 1918. One of his American shipyards was the Newfoundland Shipbuilding Co. Ltd. at Harbour Grace. Captain Marius Michelsen from Sandefjord bought, on Hannevig's account, the old whaling stations at Cape Broyle and Beaverton plus two older whaling boats. Only the former station was renovated, using the old name of Newfoundland Whaling Co. The whaling was continued only that one year with a return of 1,840 barrels of oil (there was no equipment for any other kind of production). The result was so depressing that the boats were sold to Chr. Hannevig's brother, Edv. Hannevig, who had started a company in San Francisco called California Sea Products Co.

(see page 166). Michelsen went there with the boats and remained there a couple of years. - One of the older companies, Labrador Whaling Co., which had not been active for many years, tried again in 1919 but with an even worse result, 1,464 barrels. Even if the desire to whale off Newfoundland had been impressively tough in spite of repeated losses, the unsuccessful attempts of these two years seem to have removed the people's courage. There are no reports of whaling during the next three years, 1920-22; it was probably completely stopped. The collapse of the whale oil market in the fall of 1920 probably also had a frightening effect.[20]

When the prices had stabilized themselves after a few years people dared try once more and in 1923-30 we find the Newfoundland Whaling Co. operating for a third time from the two old stations at Hawke's Harbour on Labrador and Rose-au-Rue on the south coast of Newfoundland.[21] It was finally possible to maintain an evenly paying production for a time. From 1,600 barrels in 1923 the production rose to 5,500 in 1924, 8,400 in 1925 and between 1926 and 1930 it averaged 13,272 barrels. The promising prospects brought to light a new company called The British-Norwegian Whaling Co.. It was a daughter company of Compania Ballenera Espanola, a company with mainly Norwegian and British shareholders and some Spanish ones. Both companies, which were managed by Bruun & von der Lippe, Tønsberg, were dissolved in 1930. In 1927 and 1928, whaling was carried out from a new station called Grady (by the town of Cartwright, ca. 100 km. north of Spotted Islands) on Labrador. It proved less suitable and returns these two years

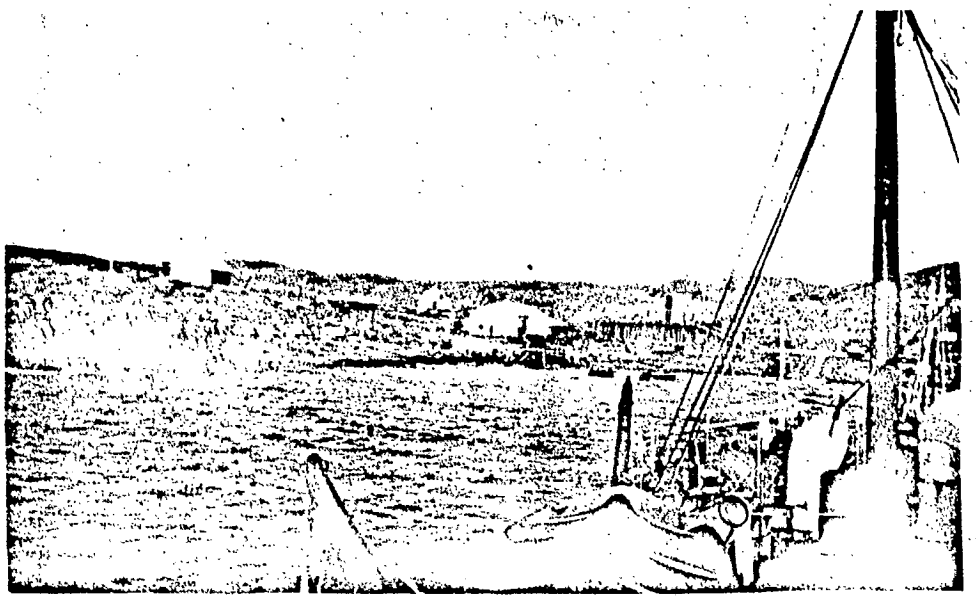
were 3,314 and 5,980 barrels and a lesser number of fertilizer sacks. Combined, the two companies in 1928 had 508 whales and 20,580 barrels or only 5,000 barrels less than 16 companies had managed from 18 stations in 1905.[22]

The blossoming of the whaling occasioned a new law valid from January 1, 1928. The most important resolutions were: 1.
126 Whaling was to be allowed only under permit for a period of not more than 10 years, from established land stations i.e. no floating cookeries, and for two whaling boats per station. The yearly fee was $ 1,000 per station. 2. Only six stations were to be allowed on Newfoundland and two on Labrador. They had to have a mutual distance of at least 75 miles and be placed in such a way that they not bother settled areas. 3. The total whale had to be converted into saleable products. 4. It was prohibited to chase whales nearer than one nautical mile from fishing boats. 5. Only British subjects were to be used in the factories. Norwegians therefore had access as harpoonists and sailors on board the whaling boats. The law placed no limits on time of whaling or the number of whales caught. It was still possible to whale with 16 boats from eight stations in this relatively limited area for as long a time and to as great an intensity as possible. These regulations must be termed very liberal because they paid little attention to the fear expressed in 1905 and in 1918 that whales would be exterminated if the Norwegians were given access; according to the law there was nothing to prevent them from starting all eight stations.

However, the catch of 1920 showed that the fear was completely ill founded. Grantedly, the blue whale catch was still low, ca. 20 per year, but the population of finbacks had not only been maintained but had even shown a great and gratifying increase. Of the total catch of 2,597 whales in the period 1923-30, 2,026 or 80% were finback whales. The good catch in the period 1926-30 is significant. The total catch for 1930 was 321 whales (of which 282 were finbacks) which gave 13,100 barrels and it was made in the period April 10 - November 27. The number of barrels per whale also rose sharply both in relation to the previous period of 1898-1915 and during the 1920's, from 23 barrels in 1923 to 41 in 1929 and -30. This undoubtedly was due to the more effective method of cooking which was being developed just in this period. That the relatively heavy taxing of the finback whale had not been too heavy in the 1920's was shown by the catch. When the whaling was resumed in the 1930's after a couple of years without whaling. For example, in 1937 90% of the 483 whales were finbacks. The same was the case in the latter part of the 40's when the oil production (not the number of whales) reached its greatest peak thus far.[23] This whaling was also conducted by Chr. Salvesen & Co. as we shall see later.

The collective result from the catches off Newfoundland from 1898 to 1915 was ca. 7,200 whales which gave 178,000 barrels; in addition came 13,040 tons of fertilizer (and feed concentrate). The returns were somewhat greater than off the Faeroes 1894-1916. Regarding the number of barrels per whale, Newfoundland was as low (24.6) as Finnmark. It proved once more that Iceland

127 was on top both with regard to barrels per whale, 36, and with



The station at Hawke's Harbour, Labrador, 1928.

regard to a yearly average of 19,339 barrels. This figure was nearly half, or 10,243 barrels, for Newfoundland. In relation to the large mustering of investment, as many as 16 companies and 18 stations in one year, this whaling ground was the least profitable of all in the modern history of whaling, probably the only one which gave an overall loss.[24]

One of the most exciting of the many tales told about how a wounded whale can tow a whaling boat came from Newfoundland. First mate Hans Johansen on "Puma" tells that in 1903 they shot a blue whale six miles from Placentia at nine in the morning. It immediately went wild and it became impossible to get near enough to fire another harpoon into it. All day long it towed the boat which ran at half speed in reverse, at six knots. Towards evening another line was secured aft and tied to the first. The speed was changed to full speed ahead. The whale still pulled so hard

it nearly pulled the back of the boat under. The rope aft was then cut with an axe. The whale continued to pull the boat, the heavy line and all through the night. The animal's strength decreased by 10 next morning and at 11:30 the harpoonist was finally able to puncture it. Then the battle had lasted 28 hours. It was said in American and English papers that the whale had pulled the boat from Newfoundland to Labrador.[25]

128 A report by the Newfoundland Fisheries Research Station, St. John's, 1953, exists on whale movements. The blue whale moves mostly along the south- and west- coast up the St. Lawrence Bay, through the Strait of Belle Isle as far north as Hawke's Harbour on the east coast of Labrador. This occurs from June to July. It rarely comes to the east coast of Newfoundland. The sei whale has always been rare occurring only towards the end of the season in the south and east. The humpback whale, which was very common until 1906, was the first one to become scarse after heavy hunting. It is now very rare off Newfoundland. It is of interest that this whale, which otherwise moves close to land, has been observed far out at sea on the fishing banks. The catch of sperm whales has been, as in other northern areas (Iceland, North-Norway) shown a definite tendency to increase. The finback whale attracts the greatest interest because mainly it made commercial whaling off Newfoundland possible after 1905. Unfortunately, we know least about the movements of this whale. It can be found almost all the year around on the large fishing bank in the southeast but especially in June and July when it feeds on small spawning fish.

It moves north after the middle of July and spreads over the whole whaling area in fall. The return occurs off the east coast in October-November, but it has been observed as late as in January.[26]

In order to maintain chronological order in the presentation this part of the publication will deal with only those areas where modern whaling was started before man moved to the Antarctic. Geographically, it might have seemed natural to go from Newfoundland to the adjacent waters of Davis Strait. This newest Arctic whaling of the 1920's and -30's was mainly pelagic. It would constitute a break in the chronology and in the year to year description to treat it here. The modern form of whaling between 1868 and 1904 occurred only in northern waters and from land stations close to the whaling grounds where the catch could be landed quickly. We will continue to follow the further spread of this whaling.

545

III. Northern fisheries outside Europe

1. Newfoundland.

1. Most important source: Annual Report of the Newfoundland Department of Fisheries, St. John's, 1903. - History from Norwegian Whaling Times 1917/21, 40 (incl. 1915) and 1953/439 (re. the value of this note see p. 26). P.W. Browne: Where the Fishers go. The story of Labrador. Toronto, 1909. Deals with Newfoundland also, chapter XXI, 165-74 and the whaling catch from there. - F. Lucas: The Newfoundland Whale Fisheries In: Science, N.S. XXI, No. 540, p.718, N.Y., 1905. - Glover. M. Allen: Some Observations on Rorquals of Southern Newfoundland In: The American Naturalist XXXVIII, No. 453, pp.613-23. Boston, 1904. - J.G. Millais: Newfoundland and its untrodden Ways. London, 1907. - Verbal report by harpoonist Marius Amundsen, who 1908-16 whaled from Newfoundland, Seven Islands and Labrador. He was also on "Sobraon".

2. Jenkins: Whale Fisheries,59 and following pages. Aagaard: The old whaling, 23 and following pages incl. bibliography.

3. Everet J. Edwards and Jeanette Edwards Rattray: "Whale off!" The story of American Shore Whaling, N.Y., 1932. - Glover. M. Allen: Whales and Whaling in New England, In: The Scientific Monthly XXVI, p. 340, N.Y., 1928. Ibid. The Whalebone Whales of New England. Memoirs of the Boston Society of Natural History, vol. 8, No. 2, Boston, 1916. Browne: Where

the Fishers go, 167 and following pages. The Evening Herald (St. John's) 1899 19/6. On the explosive harpoon, compare B.I. 63 and following pages.

546 4. Mainly from the Evening Herald 1898 19/7, 20/7, 20/8, 19/9, 23/12, 1899 4/1, 24/4, 19/6.

5. Annual Report 1903, p. 6. Whaling Times 1917/21, 1953/441, Norway's Fishing Times 1897/205, 1903/518, 1904/422, 1907/535, 1908/333-50. Risting 268. The Morning Paper 1899 25/4. Norwegian Seafaring Times, 1906 19/9. The Tønsberger, 1907, 31/8 (about N. Davidsen). Note by A.O. Johnsen. Millais: Newfoundland and its untrodden Ways 163. The author got much of his material from Norwegian harpoonists: Hans Johansen, Christian Johannessen, Hans Andersen, Stokken, Christophersen and others. There are many mistakes as for example that Svend Foyn began in 1880, that the Norwegian Parliament forbade him to catch in 1907, and that one filled the whale " with steam from the boiler" to keep it floating!" This is illustrated with a picture (facing p. 238). Ford Fairford: Whale Hunting in the North Atlantic (In: The Empire Review and Journal of British Trade, XXX, p. 222., London, 1917). It says that sperm whales off Newfoundland "which gave 98½ barrels of oil from the head alone each barrel containing 46 gallons."

6. Annual Report 1903, p. 9, and Appendix p.3. Norway's Fishing Times 1904/422. Consular report 1903/381, 1904/502: Quebec. Andrews: Whale Hunting 146.

7. Risting 268. Sørensen 61, Norway's Whaling Times 1914/115. The Tønsberger 1902, 15/5. As a company evidently called Ellefsen & Berg. Annual Report 1903, p. 4. Letter 1901 11/10 from Colonial Secretary, Newfoundland to Andreas E. (among documents with factory owner Edgar Ellefsen, Skjaersnes. Also other informations from various documents and catch journals, same source).

8. Norwegian Whaling Times 1953/444. For statistics see note 9. Ellefsen's catch inventories (Edgar Ellefsen, Skjaersnes.)

9. See especially 1906, p. 15 for the values from the Annual Report. Compared with 1905 there must obviously be a mistake. For the two years they are as follows (values in $):

		Barrels		Bones		Fertilizer		Value
Year	Whale	Number	Value	Tons	Value	Tons	Value	Totals
1904	1,275	35,766	297,415	2,603	39,557	3,511	38,981	366,826
1905	892	25,182	384,062	1,661	34,835	2,802	115,955	535,101

Because the oil prices in 1905 were even lower than in 1904 it is unthinkable that ca. 9,000 fewer barrels give almost $ 90,000 more in value. The two numbers are probably interchanged. The disparity is even worse for the value of fertilizer. Also the weight of bones seems much too high, about two tons per whale. The oil quantity is given in gallons in 1903 as well as in tons. Because 1 gallon = 7.5 pounds this is 3.38 kilos giving exactly 50 gallons per barrel. I have used this conversion factor for all years. It is also used

in I. Wh. St. (1931 II 33, 1942 XVI 89). See Brandt re. the relation between gallons and barrels: Whale Oil p.XII. Six different measures of conversion have been found in the whaling literature: 31½, 42, 49, 50, 53 and 60 gallons = 1 barrel. Where a conversion has been used, the values can not be used in comparisons without knowing which factor was applied.

International Whaling Statistics used the following methods of calculation:

1 USA gal. = 3.785332 liters

1 liter whale oil at 15°C = 0.9221 kilos

1 liter sperm oil at 15°C = 0.8770 kilos

3.785332 (liter) x 50 (gallons) = 189.2666 liters

189.2666 liters whale oil x 0.9221 kg. = 174.522 kilos = 1 barrel

189.2666 liters sperm oil x 0.8770 kg. = 165.986 kilos = 1 barrel

1 average barrel = 170.254 kg. = 1 barrel.

547

10. Norwegian Fishing Times 1903/623, 1904/319, Sandefjord Paper and the Tønsberger 11/8, The Morning Paper 6/9. Millais: Newfoundland and its untrodden Ways 140, 184, 193.

11. Andreas Ellefsen's papers (see note 7). Browne: Where the Fishers go 173. The Evening Herald 1899 9/6. Victoria Times (B.C.) 1905 29/12, 1906 20/7, 10/8, 11/12. Annual Report many places.

12. Norwegian Fishing Times 1903/623, 1904/319. Sandefjord Paper and the Tønsberger 11/8. The Morning Paper 6/9. Annual Report

1906. Appendix XLII - XLVIII.

13. The Morning Paper 1907 16/3,25/2.

14. (Scientific Journal) Canadian Fisherman, St. Anne de Bellevue (B.C.) 1912- ., contains little about whaling in older editions. See 1915/230, 303, 373, 1916/109, 287.

15. Sørensen 50, 116, Risting 274. Bogen: Ørnen Co. 40, Norwegian Whaling Times 1912/25, 1913/142, 1914/2, 171, 231, 1915/29, 148, 1916/52, 217, 1917/244. The Tønsberger 1911 14/3, Sandefjord Paper 7/6. Chr. Salvesen & Co. File 27: Report by captain Begg 1923 20/5.

16. Bogen: Lars Christensen I 127. Annual Report 1912 p.32, 1913 Appendix 91. Dandefj. History II 222."Diary for S/S Lloydsen of Sandefjord." The whaling museum, Sandefj. Diary for same 1914 8/2 - 23/4 (whaling off Jan Mayen) in Univ. Library, Manuscript Collection, Oslo.

17. Sørensen 87. Risting 340, 565. Norwegian Fishing Times 1902/24, 1911/27, 1912/10. Norwegian Whaling Times 1913/46, 1914/159, 1953/442. The Tønsberger 1907 31/8, 20/9. Sandefj. Paper 1908 26/2, 25/3, 1910 14/5, 30/6, 11/8, 7/9. Norwegian Seafaring Times 1907 30/7. Falkland Island's Magazine XIX 1908 12/4. The yield from "Sobraon" was taken from Browne:Where the Fishers go. p. 173, 141 whales and 4,ooo barrels.

18. Risting 275. Sørensen 62 and Appendix IX. Norwegian Trades: The Whaling Catch 93. Norwegian Pat. No. 167, 399. Norwegian Whaling Times 1914/115. Norwegian Seafaring Times 1906 19/9.

19. Norwegian Whaling Times 1918/201, compare 1917/21, 40.

20. Mainly told by captain Markus B. Simonsen, Harstad, Fisheries inspector on Newfoundland, to Northern Times, excerpted in Sandefjord Paper 1919 20/11. Not all that he says can be completely correct. c.f. Annual Report 1918 p.19. Norwegian Whaling Times 1920/205, 1953/443. Supplemented with verbal statements by captain Marius Michelsen, Sandefjord.

21. Norwegian Whaling Times 1924/26 "Norwegian undertakings". 1953/443 "Norwegian interests". Which?

22. Norwegian Whaling Times 1920/205, 1929/112 and reports from the years in between. I. Wh. St. 1931 II, 33, 43 - 44, 1942 XVI 89, 102- 03. There is a slight disagreement here in that the figures for 1927-28 are entered partly as applying for only Newfoundland, partly for Newfoundland and Labrador together. The correct ones are:

(Table below has been rearranged for reasons of space)

1927	363 whales,	11,200 barrels	Newfoundland alone
1927	75 whales,	3,314 barrels	Labrador alone
	438 whales,	14,514 barrels	Newfoundland and Labrador
1928	387 whales,	14,600 barrels	Newfoundland alone
1928	121 whales,	5,980 barrels	Labrador alone
	508 whales,	20,580 barrels	Newfoundland and Labrador

23. The Law, Norwegian Whaling Times 1927/185. Catch 1930, -40's see I. Wh. St. 1954 XXXI 21 and 1957 XXXVII 21, c.f. Norwegian Whaling Times, 1943/41.

24. The Newfoundland catch 1898 - 1939:

548

Year	Stations	Whales	Barrels	Year	Stations	Whales	Barrels
1898	1	91	2 500	1916		61	1 082
1899	2	95	2 600	1918	1	101	2 500
1900	2	112	3 096	1919	1		1 464
1901	4	174	4 561	1920	1	71	1 600
1902	6	331	9 184	1924	3	181	5 500
1903	7	858	19 259	1925	3	331	8 400
1904	14	1 275	35 766	1926	2	360	11 600
1905	18	892	25 182	1927	3	438	14 514
1906	14	439	10 740	1928	3	508	20 580
1907	11	481	9 937	1929	2	382	15 810
1908	9	396	8 417	1930	3	321	13 100
1909	8	518	10 375	1935	2	198	7 165
1910	5	384	8 337	1936	2	192	7 168
1911	4	335	8 113	1937	2	483	19 075
1912	10	289	8 011	1939	1	144	5 980
1913	8	222	5 471				
1914	7	161	3 003				
1915	3	139	3 000				
1898-1915		7 068	174 165				

together

The table is composed of reports from the Annual Report. I.Wh. St., The Canadian Fisherman, Norwegian Whaling Times.

25. Millais: Newfoundland and its untrodden Ways 168. Also in Cosmopolitan. vol. 37, pp. 49 and following pages, N.Y. May, 1904. P.T. McGrath; The Wonderful Whale-Hunting by Steam (with 10 fine illustrations).

26. Mainly after the report in Norwegian Whaling Times, 1953/444. This, written by a biologist, is incomplete for the history of the catch. The graphical exposition seems to betray that the author did not know of I. Wh. St. in that it does not show the most important things: the catch of finback whales 1916-41, and (p. 443) says that "it is impossible to find catch statistics for this period" (1930's) which are reported in I. Wh. St. 1942 XVI 89. The author seems also to indicate that the finback whale does not travel

further north than 55° (about halfway between Newfoundland and Greenland) but there can probably be no doubt that it migrates (travels) into Davis Strait. It may also explain why this whale seems to disappear from the Newfoundland area from the end of August to the beginning of October, and that after this time rich catches may be made when it returns. - Risting 526, under the space " Name of Company" these are lacking with the names of the places where the stations lay inserted instead.