FOREIGN

Argentine Republic

WHALING FACTORYSHIP PURCHASED BY GOVERNMENT: Purchase of the Juan D. Peron, reportedly the world's largest whaling factoryship, was announced by the Argentine Government, states a May 22 American consular dispatch from Buenos Aires. Apparently the vessel may be leased back to its former owners.

Commissioned last year, the ship was held in port under a Government lien after entering Buenos Aires with a petroleum cargo. Further use as a tanker may be scheduled prior to whaling, since operations for the latter type of service are held up by lack of crew and killer boats.

NOTE: ALSO SEE COMMERCIAL FISHERIES REVIEW, OCTOBER 1951, P. 22.

Canada

REVIEW OF THE FISHERIES, 1951: A substantial improvement took place in the Canadian fishing industry during 1951, according to a February 4 American Embassy dispatch from Ottawa. Both landings and the market value of the catch established a new record. The value of exports also increased over the preceding year. Landings of commercial fish of all types are estimated to have been slightly below 1950, but the market value was about C$196 million, an increase of C$16 million.

The British Columbia salmon fishing was very successful and better prices were obtained than in 1950. Although exports of canned salmon decreased during 1951, domestic consumption continued the upward trend. This consumption expansion increased as much as 50 percent during the past three or four years. The East Coast lobster fishery in 1951 was about equal to the high production of the previous year.

Fresh-water fisheries continued to be important. Nearly 60 million pounds were exported to the United States in 1951. Higher prices resulted in a C$2.3 million increase in value as compared with the previous year.

The United States is the most important export outlet for the Canadian fishing industry, taking about three-quarters of the total exports in 1951. Exports of fresh and frozen fillets (all species) have been steadily increasing in recent years.

In several respects, progress was made that improves the outlook for 1952 and subsequent years. On the Pacific Coast there was a high level of investment in boats and gear. During the 1950-51 construction season an estimated C$2.3 million was spent for 236 boats of superior design and construction. Reduction of the U.S. duty on canned salmon at the Torquay trade negotiations in 1951 should improve the export outlook, although the increase this year was only 3,000 pounds.
Additions to the fish-processing facilities in Nova Scotia and Newfoundland may provide the basis for diversion from the traditional production of salted fish to more remunerative forms, especially fresh and frozen fillets. No price support action was taken for fish fillets in 1951. The Federal Government continued to assist fishermen in acquiring modern small draggers and long-liners.

* * * *

NEWFOUNDLAND FISHERIES PLANS AND PROSPECTS: No revolutionary changes in Newfoundland as a result of the interim report of the Fisheries Development Committee are contemplated, stated the Canadian Federal Minister of Fisheries when he visited St. John's the latter part of May. (It appears that the final report of the Committee may not be made public until fall, reports an American consular dispatch from that city.) The Minister said that recommendations contained in the interim suggestions proposed by the Committee were being considered but that no plans were being made for large-scale activities during the present season.

The Minister suggested that experimental work now going on be continued, and in this connection said plans were now to go ahead with the erection at Bonavista of a pilot plant to test equipment for drying light-salted cod. Bonavista had been chosen since electricity, steam, suitable buildings, and cold-storage facilities were available there. Should the experiments now being carried out prove successful, the Minister believed the solution of a number of local fishery problems would be possible. Experimentation with the use of long-liners, which have been operating successfully off Bonavista for the past two years, will be continued.

The hydrographic survey, presently conducted by the Department of Mines and Resources, would be continued to include an examination of the sea bottom to determine good spots for long-lining, dragging, and other fishing methods. He praised the work of the Committee and stressed that it had collected a very large amount of information and was now engaged in drawing up a final report on which future development plans would be based.

He added that the matter of unemployment insurance for fishermen "was under consideration" and was being discussed with the Department of Labor.

From all reports, including statements by the newly-formed Newfoundland Fishermen's Federation, there is considerable uncertainty as to the number of fishermen who will be ready this summer to undertake fishing activities. As much as a 30-percent drop in the number of fishermen who will go to sea this year, as compared with 1951, is estimated in some quarters, although it is readily admitted that until fish prices are actually established (probably the first part of June) no prophecy can be of particular value.

There is so far little to indicate that the 1952 production will be large, and in all probability a greater number of Newfoundland fishermen will seek land employment this summer than at any time in the past.
Chile

MARINE OIL PRODUCTION, 1951: Chile's production of whale and sperm oil in 1951 is estimated at about 5,800 short tons, or slightly above the 5,640-ton output of 1950, reports the American Embassy at Santiago. The output of the large company's land station at Quintay, near Valparaiso, declined by about 5 percent from 1950, but this is believed to have been more than offset by the production of a smaller station operating near Talcahuano.

Approximately 3,800 tons or 65 percent of the total 1951 output consisted of sperm oil. In 1950 sperm oil made up almost three-fourths of the total production. Chile utilizes practically its entire production of both whale and sperm oil in the manufacture of soaps, washing powders, and margarine. Exports of whale oil in 1951, all to the United States, were reported at slightly more than one ton. No imports of whale or sperm oil were registered in 1951.

Chile also produces some 650 short tons of fish oils annually, of which about 100 tons are of medicinal quality. There is a good demand for industrial fish oils and the industry could well be enlarged beyond its present size. This probably will come about partly as the result of the rapidly growing interest in fish meal for poultry feed. Chilean fish oil, as of the last of April, was sold at 18 to 20 pesos per kilogram (7.8 to 8.6 US cents per pound).

Denmark

BROOK TROUT EXPORTS, 1951: Total exports of brook trout by Denmark during 1951 amounted to 5,434,000 pounds, valued at US$1,695,274. Of this amount 22.6 percent or 1,228,400 pounds (valued at US$475,840) were exported to the United States, according to Danish statistics.

Practically all brook trout produced in Denmark are for export. All are hatchery fish raised in dirt ponds, and the principal food used, as far as is known, is small scrap fish from the commercial fishing fleet. The cost of the scrap fish is currently reported to be about 1.3 US cents per pound.

Ecuador

TERRITORIAL WATERS DEFINED: An Executive Decree issued on January 29 prohibits fishing by foreign flag vessels in Ecuadoran territorial waters, defined as the region within a 12-nautical-mile line drawn between the westernmost points of the Ecuadorian coast and adjacent islands, states an American consular dispatch from Quito.

Fishing is permitted in Galapagos Islands territorial waters if written license is obtained. Licenses will not be granted by radio except for extensions. All Ecuadoran boats are authorized to report violations and receive 50 percent of the fines imposed.
India

PEARL FISHING TO BE REVIVED BY MADRAS: The Madras Fisheries Department is proposing to start pearl fishing anew off the Tuticorin Coast early next year, after a lapse of over 20 years. During the course of its periodical survey and inspection of fishing grounds on the east coast, the State Fisheries Department found that pearl oysters located ten miles off the Tuticorin coast three years ago have now spread over a wide range from Tuticorin to Rameswaram. The oysters are reported to be progressing satisfactorily, reports an American consular dispatch from Madras dated June 12.

In order not to disturb the growth of the pearl oysters, the Department has cautioned all ships and powerboats moving about the area not to throw coal or stones over these belts. Fishing in this area will also be restricted.

Japan

MOTHERSHIP-TYPE TUNA EXPEDITIONS TO OPERATE IN EQUATORIAL WATERS: The Japanese Ministry of Agriculture and Forestry has authorized two mothership-type tuna fleets to operate in equatorial waters in the vicinity of the Celebes Sea and eastward of the Solomon Islands, reports a June 4 American Embassy dispatch from Tokyo. The permits were granted on May 22 to two fishing companies.

One fleet will consist of one mothership, the Tenyo Maru (11,224 gross tons), and 29 catcher boats. Fishing will be in the offshore waters east and southeast of the Solomons. This fleet was scheduled to leave Japan on June 12.

The other fleet will consist of one mothership, Kaiko Maru (2,940 gross tons) and 10 catcher boats. Fishing will be in the Celebes Sea and adjacent waters. This fleet was scheduled to leave Japan on June 5.

The Japanese Fisheries Agency will require daily reports on positions and record of catches by species and weight. A research vessel will accompany each fleet.

Catcher boats will not operate within territorial limits (3 nautical miles) of any land masses and the motherships will be stationed not less than 12 miles from the shore of any islands in the region of operation.

Both Japanese companies have had previous experience in mothership-tuna operations, having operated expeditions to the region of the U. S. Trust Territory of the Pacific Islands in 1950 and 1951. The Japanese Government now permits only individual Japanese tuna boats to operate in these waters and thus prevents competition in the Trust Territory region between the mothership expeditions and individual boat operations.

Production from these expeditions will continue to contribute to domestic requirements and products for export.

* * * * *

GOVERNMENT RESTRICTIONS ON TUNA FISHING IN THE PACIFIC OCEAN: Owners of Japanese tuna and skipjack fishing boats were sent a notice dated April 14, 1952, outlining a Japanese Government authorized area for tuna fishing in the Pacific Ocean. Reports a May 7 American Embassy dispatch from Tokyo.
A prohibited region has been established in the eastern Pacific waters. No fisheries must be operated by Japanese fishermen in the following waters: In waters east of the date line in the Pacific Ocean, waters outside of the area bounded by the lines made connecting the crossing point of Lat. 40° N. and the date line, the crossing point of Lat. 20° N. and Long. 140° W., the crossing point of Lat. 30° S. and Long. 140° W. and the crossing point of Lat. 30° S. and the date line.

The restriction became effective on April 28 and is to continue until such date as decided by the Japanese Minister of Agriculture and Forestry. The Japanese Government hopes that this temporary restriction on Japanese tuna fishing will contribute toward international good will as well as aid in negotiating fisheries treaties between Japan and countries having an interest in the high-seas fisheries and in the area where tuna fishing is conducted in the Pacific Ocean.

CANNED TUNA CHECK PRICES REVISED: Revisions in the check prices of Japanese canned tuna and bonito were announced in the Japanese press (Suisan Tsushin) on May 22 and were confirmed by an official of the Ministry of International Trade and Industry, states an American Embassy dispatch from Tokyo. Check prices are in effect floor prices. The Government may disapprove applications for export of these products if the prices are below the check prices. Check prices are intended to prevent dumping of cheaply-priced items in foreign markets and to stabilize export prices. The revised prices for the month of June were decided by the Canned Tuna Department of the Export Control Ordinance Executive Committee. This committee consists of two sections: one dealing with canned products, and the other with frozen products. The committee, composed of members of the Ministry of Agriculture and Forestry and the Ministry of International Trade and Industry, meets monthly.

The revised check prices, f.o.b. Japan, for June are as follows:

<table>
<thead>
<tr>
<th>Size Can</th>
<th>Case Quantity</th>
<th>Tuna in Brine</th>
<th>Skipjack in Brine</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>New Price</td>
<td>Old Price</td>
</tr>
<tr>
<td></td>
<td></td>
<td>US$</td>
<td>US$</td>
</tr>
<tr>
<td>3.5 oz.</td>
<td>4 doz.</td>
<td>5.50</td>
<td>5.10</td>
</tr>
<tr>
<td>7 oz.</td>
<td>4 doz.</td>
<td>9.10</td>
<td>8.50</td>
</tr>
<tr>
<td>13 oz.</td>
<td>4 doz.</td>
<td>16.15</td>
<td>15.00</td>
</tr>
<tr>
<td>2 kilo. (4.4 lbs.)</td>
<td>1 doz.</td>
<td>18.30</td>
<td>17.00</td>
</tr>
</tbody>
</table>

IMPORT RESTRICTIONS TO AFFECT NORWEGIAN CANNED FISH EXPORTS: There is at present a buyers' market for Norwegian canned fishery products, according to the May issue of Tidskrift for Hermetikkindustri (a Norwegian canning industry publication). In addition, several of the most important markets have introduced import restrictions on canned fish, states an American consular dispatch from Bergen. Great Britain has reduced the total global import-quota of canned fish goods from £500,000 (US$1,390,000) for the first half-year to £400,000 (US$1,112,000) for the second half-year of 1952. This quota for the second half-year is even less favorable for Norway since soft herring roes, which were on the British free list for the first half-year, are now included in the total import-quota for the second half-year.
Several of the British Colonies have adopted similar import restrictions. Australia reduced imports of canned fish to 20 percent of the quantity imported during the budget year 1950/1951. France introduced import-licensing for all goods previously on the free list, including canned shellfish.

All these restrictions will in time inevitably influence Norway's exports, although they are not as yet reflected in the present export statistics. This is mainly due to the fact that the greater part of the British quota for the first half-year was imported at the beginning of the year, and due also to the fact that British imports of soft herring roe took place, as usual, during the first months of the year while this commodity was still on the free list. Restrictions in Australia did not go into effect until March 8.

** * * * * *

CANNED FISHERY PRODUCTS EXPORTS, 1951: Norwegian exports of canned fishery products during 1951 amounted to 34,527 metric tons, valued at US$20,447,049 (see table), according to a May 16 American consular dispatch from Bergen. Of this amount, 9,481 tons (US$5,744,101) were exported to the United States; 7,799 tons (US$4,067,415) to Australia; 6,494 tons (US$4,305,197) to Great Britain; 1,860 tons (US$1,177,949) to New Zealand; 1,193 tons (US$977,528) to Canada; 1,104 tons (US$543,680) to Eastern Germany; 494 tons (US$270,787) to Western Germany; and the balance to various other countries.

Norwegian Exports of Canned Fishery Products, 1951

<table>
<thead>
<tr>
<th>Product</th>
<th>Quantity</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sild (small), smoked:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In oil</td>
<td>12,340</td>
<td>6,971,488</td>
</tr>
<tr>
<td>In tomato sauce</td>
<td>496</td>
<td>188,202</td>
</tr>
<tr>
<td>Sild (small), not smoked:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In oil</td>
<td>748</td>
<td>380,618</td>
</tr>
<tr>
<td>In tomato sauce</td>
<td>54</td>
<td>25,562</td>
</tr>
<tr>
<td>Brisling, smoked:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In oil</td>
<td>5,987</td>
<td>5,135,393</td>
</tr>
<tr>
<td>In tomato sauce</td>
<td>485</td>
<td>373,876</td>
</tr>
<tr>
<td>Brisling, not smoked:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In oil</td>
<td>64</td>
<td>28,652</td>
</tr>
<tr>
<td>Herring:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kippered</td>
<td>6,844</td>
<td>2,656,320</td>
</tr>
<tr>
<td>Herring (contd):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Winter or spring, not smoked</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mackerel</td>
<td>438</td>
<td>248,315</td>
</tr>
<tr>
<td>Other fish</td>
<td>972</td>
<td>647,753</td>
</tr>
<tr>
<td>Roe</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soft herring</td>
<td>1,470</td>
<td>547,753</td>
</tr>
<tr>
<td>Other</td>
<td>1,434</td>
<td>427,528</td>
</tr>
<tr>
<td>Fish balls, etc.</td>
<td>1,427</td>
<td>133,146</td>
</tr>
<tr>
<td>Crayfish and shellfish</td>
<td>2,240</td>
<td>2,442,696</td>
</tr>
<tr>
<td>Total</td>
<td>34,527</td>
<td>$20,447,049</td>
</tr>
</tbody>
</table>

** * * * * *

KLIPFISH INDUSTRY: Norwegian exports of klipfish ("klippfish") will reach an estimated total of 51,000 metric tons during the 1952-53 season as compared with nearly 53,000 tons in the 1951-52 season, according to reports from the port of Aalesund, announces a June 19 news release from the Norwegian Information Service. (Klipfish is cod that has been salted and sun-dried on the smooth rocks of the Norwegian shore.) Assuming that the price remains stable on the world market, the season's production will earn an income of about 170 million kroner (US$23,800,000).

Traditionally, klipfish produces between 10 and 20 percent of the Norwegian fishing industry's foreign-exchange earnings, rising from a mere 119 million kroner (US$16,660,000) in 1947 to 173 million (US$24,220,000) last year. Nearly 28,000 tons of the 1951-52 production were sold to Brazil. Other major buyers are Spain, Portugal, Cuba, and the republics of South America.

A characteristic feature of Norwegian klipfish production is that 90 percent of the output is dried by being exposed to sun and wind. But first the cod is thoroughly saturated with salt. The greater part of the output is processed in
The western Møre districts, near Aalesund. Here flat rocks that provide an ideal drying ground. Other processing centers are located in North Trøndelag province and in the Saltendistrict, further north.

The drying of klipfish, a task that requires the most careful attention, starts in the spring and continues into the summer. On sunny and windy days, the fish is laid out to dry on the bare rocks early in the morning. After 6-8 hours of exposure, it is gathered up and stacked for the night. A few days later the process is repeated, and in this fashion the drying continues for a period of 6-8 weeks or more, until the product has attained the right appearance and the desired degree of dryness. The fish is then taken to warehouses equipped with special drying rooms and cold storage.

There are four main qualities of klipfish, with subsidiary grades chiefly based on the thickness and size of the fish. Moreover, a clear distinction is made between no fewer than six different degrees of dryness, each designed to meet the requirements of various markets. Norwegian klipfish is today sold in about 50 countries in all parts of the world, and every market has its special preferences.

All Norwegian klipfish exports are subject to rigid control by Government inspectors who check every shipment to make sure that it conforms with the stipulated requirements as to quality, dryness, and size. The Government inspector affixes an official seal to every package, box, or bundle shipped abroad to certify that the product has been checked and approved. A grader's certificate also accompanies each shipment. Moreover, every parcel is provided with the mark of the Klipfish Association as additional guarantee that the shipment conforms with the terms of the contract.

Most of the raw material for Norway's klipfish production is provided by the famous Lofoten cod fisheries. Other sources are the fisheries along the coast of Finnmark, the northernmost province in Norway. The importance of the klipfish industry to the coastal population is indicated by the fact that this year, for instance, an estimated 50 percent of the total fish catch, not including herring, will be processed into klipfish.

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INCREASE IN OFFICIAL WHALE OIL PRICE: The Price Directorate in Oslo has agreed to raise the maximum price for whale oil from £70 (US$195) to £90 (US$250) a long ton, according to The South African Shipping News and Fishing Industry Review of May 1952. Norwegian whaling companies will receive this price for the 40,000 tons of whale oil sold in Norway to meet domestic requirements.

An official of the Price Directorate explains that the higher price has been approved owing to the considerable increase in operating costs. He also points out that whale oil this year is bringing a poor price on the export market. Because
of the fall in the price of whale oil abroad, Norwegian whaling companies have
sold only about 75,000 of the 175,000 tons of last season's production, and are
storing the rest.

* * * * *

CONVERSION OF WHALING FACTORYSHIPS TO TANKERS: The present high rates being
paid on tanker tonnage and the poor prospects for whale products is tempting Nor­
genian whaling companies to abandon whaling and convert their floating factories
into tankers. The construction of the whaling factories lends itself to conver­
sion which is practical both from a financial and engineering point of view, point
out an American Embassy dispatch from Oslo.

The exorbitant cost of fitting out and operating a fully modern whaling expedi­
tion (estimated at between US$9,000,000 and US$10,000,000 for one unit of a
factory and fleet of catchers) is causing the operators to seriously consider with­
drawling for a season or two, some even permanently.

One Norwegian company has already decided to dispose of its fleet of whale
catchers and to convert its factoryship into a tanker. The prices available for
catchers is good and sales possibilities numerous.

At the rates presently being obtained on whale oil
the operators insist that they can make no profit. Fur­
thermore, the Antarctic whale-hunting season is being con­
tinuously reduced (see table).

In 1947 there were 17 factoryship and 162 catchers,
while in 1951 there were 19 factoryships and 265 catchers
participating in the Antarctic season's hunt. The increase
in the number of catchers and use of modern techniques, such
as helicopters for spotting, makes the kill far more rapid
and with a fixed limit of 16,000 blue-whale units per sea­
son the hunting time is being reduced.

* * * * *

WHALE HYPOPHYSINS CONVERTED INTO ACTH: On their recent return from the Ant­
artic, Norwegian and British whaling expeditions delivered about 8,000 whale hy­
ophysins to Nyegaard & Co., Oslo, to be converted into arthritis-relieving ACTH
states the Norwegian Information Service in a June 19 news release. The supply is
sufficient for a year's production.

The company's scientists have developed a new, slow-acting preparation which
requires fewer injections. Formerly, arthritic cases needed four ACTH injections
a day. Now, one injection every second or third day will suffice. Last fall the
company donated 625,000 international units of ACTH (worth about US$55,900) to be
used for medical research in Norwegian hospitals.
Mexico

RETAIL FISH PRICES CONTROLLED: Maximum retail prices for fresh fish were established in the Federal District and published by the Mexican Ministry of Economy in the Diario Oficial of April 30, 1952.

<table>
<thead>
<tr>
<th>Species</th>
<th>Pesos per kilogram</th>
<th>US Cents per pound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red snapper, Gulf</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Whole</td>
<td>8.00</td>
<td>.42</td>
</tr>
<tr>
<td>Sliced</td>
<td>11.00</td>
<td>.58</td>
</tr>
<tr>
<td>Fillet</td>
<td>14.00</td>
<td>.74</td>
</tr>
<tr>
<td>Pacific, whole</td>
<td>4.00</td>
<td>.21</td>
</tr>
<tr>
<td>Trout, large, whole</td>
<td>4.00</td>
<td>.21</td>
</tr>
<tr>
<td>Small, whole</td>
<td>3.30</td>
<td>.17</td>
</tr>
<tr>
<td>Pike, Light and Dark,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gulf</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Whole</td>
<td>5.50</td>
<td>.29</td>
</tr>
<tr>
<td>Sliced</td>
<td>8.50</td>
<td>.45</td>
</tr>
<tr>
<td>Fillet</td>
<td>10.60</td>
<td>.56</td>
</tr>
<tr>
<td>Pompano, whole</td>
<td>6.00</td>
<td>.32</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Species</th>
<th>Pesos per kilogram</th>
<th>US Cents per pound</th>
</tr>
</thead>
<tbody>
<tr>
<td>White fish, whole</td>
<td>8.00</td>
<td>.42</td>
</tr>
<tr>
<td>Mojarras, Gulf</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large, whole</td>
<td>5.00</td>
<td>.26</td>
</tr>
<tr>
<td>Medium, whole</td>
<td>4.00</td>
<td>.21</td>
</tr>
<tr>
<td>Small, whole</td>
<td>2.50</td>
<td>.13</td>
</tr>
<tr>
<td>Pacific, whole</td>
<td>4.50</td>
<td>.24</td>
</tr>
<tr>
<td>Smal Fish, whole</td>
<td>3.50</td>
<td>.18</td>
</tr>
<tr>
<td>Perch, whole</td>
<td>4.50</td>
<td>.24</td>
</tr>
<tr>
<td>&quot; without head</td>
<td>5.00</td>
<td>.26</td>
</tr>
<tr>
<td>&quot; fillet</td>
<td>9.00</td>
<td>.47</td>
</tr>
<tr>
<td>Lisa, whole</td>
<td>3.00</td>
<td>.16</td>
</tr>
<tr>
<td>Dogfish, whole</td>
<td>4.00</td>
<td>.21</td>
</tr>
<tr>
<td>Forcy, whole</td>
<td>4.00</td>
<td>.21</td>
</tr>
</tbody>
</table>

Panama

MARINE LIFE ABUNDANT IN PANAMA GULF: The Danish Navy frigate Galathea recently completed a one-day fishing trip in the Panama Gulf, reports a May 22 American consular dispatch from Panama City. This trip yielded the richest hauls of deep-sea life in its entire 60,000-mile voyage. The frigate stopped at Panama on the home run of a two-year scientific expedition during which it visited 66 foreign ports in all parts of the world in search for rare specimens of marine life.

One haul was made at a depth of 3,800 meters (13,000 feet) some 200 miles from the coast. The other, made closer to the coast, was from a depth of 1,000 meters (3,300 feet). In one of the hauls the scientists aboard the Galathea caught over 5,000 specimens of deep-sea life.

According to Dr. Anton Bruun, of Copenhagen University and one of the scientists aboard the vessel, the trade winds blowing toward the west cause an upwelling of water from a depth as great as 1,000 feet. In the sea off Panama, this mass of water, which rises to the surface, is rich in minerals; hence, rich in plant life. Because of the abundant plant life, crustaceans thrive in these waters; because of the abundance of crustaceans, fish, such as mackerel, are plentiful and, in turn, large fish are found in great numbers in Isthmian waters because of the abundance of smaller fish. The Panama Star and Herald of May 21 reported that Dr. Bruun, in explaining the value of marine scientific research, pointed out: "There may be a practical application of deep-sea research in connection with the thriving shrimp-fishing industry. If the waters of the Gulf of Panama are overfished for shrimp, research might prove that at greater depths there is an abundance of crustaceans."

In Denmark, he recalled it was found that shrimp were plentiful at a depth of 500 meters (1,640 feet).

NOTE: ALSO SEE COMMERCIAL FISHERIES REVIEW, JUNE 1951, PP. 64-5.
Sweden

ANOTHER FISHING VESSEL TO FISH FOR BRAZIL: Another Swedish fishing vessel has contracted to fish in Brazilian waters, according to an article in the March issue of Göteborgs Handels- och Sjöfartstidningen and as reported by an American consular dispatch. The fishing vessel (Neptun I), whose captain has signed a one-year contract to fish for a Brazilian canning factory, will be stationed at Rio Grande Do Sul at the mouth of the Rio Grande in southern Brazil near the boundary of Uruguay.

Two other Swedish fishing vessels had previously left for Brazil. According to reports, the fishing grounds which the vessel will exploit are about two or three hours out from the home port and at a depth of 60 fathoms. Trawling will be the type of gear used.

Built at Landskrona, Sweden, in 1948, the Neptun I measures 70 feet in length with a 200 hp. engine, echo-sounding equipment, and wireless telephone. The vessel also is equipped with refrigerated storage space.

Union of South Africa

VITAMIN OIL PRODUCTION DROPPED IN 1951: Production of vitamin (fish-liver) oils in the Union of South Africa continued to decline in 1951, when a total of 7,826 mm (million million) international units were produced as compared with 8,903 mm in 1950 and 16.12 mm units in 1949. Production in 1952 is expected to approximate that of the preceding year.

Virtually all the vitamin oils now produced are a byproduct of trawling operations and are purchased by two companies in Capetown. About 80 percent of the production was concentrated by one of these companies in 1951.

Sources of the oil in 1951 were as follows: shark (31 percent), snoek (11 percent), stockfish and hake (56 percent), and other fish (2 percent).

Of the total production, one of the companies estimates that 0.1 mm units required by the local market, the remainder being available for export. The local price for crude vitamin oil is 7d. (8 US cents) per million units; refined oil 1 1/2d. (12.7 US cents); and concentrated oil from 11d. to 18d. (12.7 to 20.7 US cents) per million units, depending on degree of concentration.

The principal export outlet for crude and concentrated fish-liver oils is the United Kingdom, which in 1951 took 133,094 gallons of the 269,150 gallons of crude oil exported. Other important outlets are Germany, Australia, the United States, Belgium, Netherlands, and Italy.

United Kingdom

SCOTLAND TO BUILD NEW-TYPE FISH FACTORYSHIP: Work on a floating fish factory of new design will begin shortly at an Aberdeen shipyard, according to an April 22 American consular report from Edinburgh, Scotland. The ship is to be built for a firm in Leith, Scotland. Plans are based upon the experimental wor
carried out on the factoryship Fairfree (a British Admiralty corvette which was converted to a factory trawler).

The vessel has a stern chute, similar to that of a whale factoryship, and the trawl nets will be operated through this aperture. The trawl winch is driven by a 300 hp. electric motor, but two motors are installed side by side so that either of them can be coupled to the winch drive in a matter of seconds. The nets are emptied direct into the fish pens in the factory space through hinged flush hatches in the upper deck. The factory space is equipped with machinery for washing, heading, filleting, and skinning. The fish are then weighed, wrapped, and passed through quick-freezers, then sent to storage holds on conveyor belts. The refrigerating machinery has a capacity of about 30 metric tons of fish per day. A temperature of -5°F. in the storage holds is contemplated.

The fish offal is fed by conveyors to a fish-meal plant. A plant for extracting oil from the fish livers will also be installed.

NEW TYPE FISH FACTORYSHIP BEING BUILT IN GREAT BRITAIN. AN INTERESTING FEATURE IS A STERN CHUTE THROUGH WHICH THE TRAWL NETS WILL BE OPERATED.

The new ship is 245 feet long by 44 feet broad by 24 feet molded depth to the main deck and 32 feet molded depth to the bridge deck. Sufficient fuel is carried for a voyage of 80 days and the main power source is a 4 cylinder, 1900 B.H.P. opposed-piston marine oil engine. Two vertical boilers provide steam for operation of fresh-water evaporators, and fish-meal and liver-oil plants, as well as for hot water and central heating. Auxiliary motors are driven electrically with power provided by Diesel-driven generators.

WHITE FISH AUTHORITY ARRANGES LOANS FOR NEW FISHING VESSELS: Arrangements have been made for the making of loans to assist in the building of new or the re-conditioning or improvement of existing British white-fish fishing vessels, according to an announcement by the British White Fish Authority published in the May 17 issue of The Fishing News, a British fishery periodical.

It is the policy of the Authority to encourage the rebuilding of the near- and middle-water fleets by making loans for vessels (not exceeding 140 ft. in length) only in cases where the vessel to be built is to replace an old vessel which is to be scrapped. It is hoped by this means to secure the gradual rebuilding of the country's trawler fleet. A memorandum has been issued by the Authority setting out the terms upon which loans will be given.

Loans will not normally exceed 60 percent of the cost. Interest rates will range from 3 to 4½ percent.
INTERNATIONAL WHALING COMMISSION

FOURTH ANNUAL MEETING: The Fourth Annual Meeting of the International Whaling Commission convened at London, England, on June 3, 1952, the U. S. Department of State announced. The United States Delegation to the Meeting was:

United States Commissioner:
Dr. Arthur Remington Kellogg, Director, United States National Museum.

Deputy United States Commissioner:
Dr. John Laurence Kask, Assistant Director, Fish and Wildlife Service, Department of the Interior.

Adviser:
William Kling, Second Secretary, American Embassy, London.

The Fourth Annual Meeting was to be concerned with such matters as possible amendments to the Schedule of the Convention, action taken by contracting governments to promulgate certain laws and regulations concerning whaling in conformity with the provisions of the Convention, invitations extended to the Governments of Honduras and Portugal to adhere to the International Whaling Convention, and the budget for the Commission for the fiscal year beginning June 1, 1952.

The last (Third) Annual Meeting of the International Whaling Commission was held at Capetown, Union of South Africa, July 23-27, 1951.

The International Whaling Commission was established pursuant to the International Convention for the Regulation of Whaling, which was signed at Washington D. C. on December 2, 1946 and entered into force on November 10, 1948. The United States is one of 17 contracting governments comprising the membership of this Commission. The Commission is charged with responsibility within the framework of the Convention for safeguarding the whale stocks of the world. Within strictly defined limits, the Commission may amend the Schedule, an integral part of the Convention, by adopting regulations designating protected species, fixing closed seasons and waters, limiting total catches and the sizes of whales taken, defining standards for measurement of whales, and establishing requirements for statistical and other records.

WHALING

WHALE OIL SALES LAG: Latest indications are that some 78,000 short tons of whale oil from the 1951-52 Antarctic production still remain unsold. According to trade information available to the U. S. Department of Agriculture's Office of Foreign Agricultural Relations, Norway recently sold 44,800 tons of whale oil to Germany, the Netherlands, and France at £72-10-0 per long ton (US$181.25 per ton). In addition, 33,600 short tons of Norwegian whale oil are under option...
sale to domestic hardeners with no price yet determined. Quantities of whale oil remaining entirely uncommitted are approximately as follows: Norwegian—22,000 tons; Japanese—33,000; Panamanian—15,000; and Argentine—8,000 tons.

A later report (June 26) from the Norwegian Information Service indicates that all of Norway's 1952 whale oil production has now been sold. The last 10,000 long tons was purchased at 1,450 kroner (US$203) a long ton by a British firm. The average price for Norway's 1952 total production of 170,000 tons was 1,650 kroner (US$231) a long ton.

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FISH SALAD

- 2 CUPS FLAKED CANNED TUNA
- 1/4 CUP CELERY; DICED
- 1 CUP PEAS
- 1/2 CUP MAYONNAISE OR SALAD DRESSING
- LETTUCE
- 2 TABLESPOONS ONION; CHOPPED
- 3 HARD-COOKED EGGS; DICED
- 2 TABLESPOONS SWEET PICKLE, CHOPPED

Combine all ingredients except the lettuce, being careful not to break the fish into too small pieces. Serve on lettuce cups, and garnish with sliced eggs. Serves 6.

A Fish and Wildlife Service tested recipe. This is one in the series of recipes using fishery products tested and developed in the Service's test kitchens.