

## SEAL HUNTING ON THE ICE FLOES OF THE NORTH.

BY ALLEN DAY.

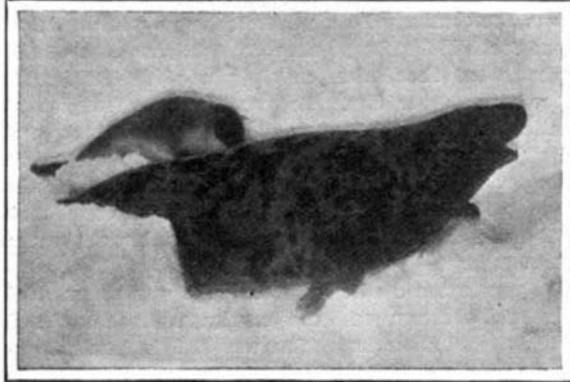
One of the most perilous of the world's vocations, but one in which an army of from five to seven thousand men take part, is the seal hunt, as it is called. The scene of the hunt is the ice fields which drift southward in the spring of each year from the Arctic regions, and a bleaker or more desolate region could scarcely be found than this great icy waste. The prey of the seal hunters, however, is of enough value to tempt them to brave the rigors and dangers, for the hair seal which is their quest is of especial value. Not only is its coat valuable, but the blubber of the young yields an oil much prized for different purposes.

The Arctic current which sweeps southward through the ocean along the coasts of Labrador and Newfoundland carries with it a variety of animal life, being one of the great feeding grounds for deep-sea fish such as cod and mackerel. The low temperature of the waters, and the fact that for such a large portion of the year great masses of ice drift upon them, ranging from the glacial berg to the floe, render the Arctic current a fit habitat not only for many varieties of fish, but for the seal referred to. The ice floes form the cradle of the young, where they are cared for by the mothers during the first few weeks of their existence. The fine pelt which forms the coat of these young seals is especially prized by the seal hunters, for the reason that it can be manufactured into leather which is utilized extensively for making trunks, boots, as well as book bindings. The oil referred to commands a high price, being used for illumination, for lubrication, and for the manufacture of fine toilet soaps.

There are four species of seals in the waters around Newfoundland and Labrador—the bay seal, the harp, the hood, and the square flipper. The bay seal is local in its habits, does not migrate like the others, but frequents the mouths of rivers and the harbors near the coast. It is never found on the ice. Mostly taken in nets, it is commercially of small importance. The harp seal—the seal of commerce—is so called from having a broad curved line of connected dark spots proceeding from each shoulder and meeting on the back above the tail, and forming a figure something like an ancient harp. The hood is much larger than the harp. The male, called by the hunters "the doghood," is distinguished from the female by a singular hood or bag of flesh on his nose. When attacked or enraged, he inflates this hood so as to cover the face and eyes, and it is strong enough to resist seal shot. When thus protected, he can be killed only by shooting him in the neck and the base of the skull. The doghood fights desperately in defense of his mate and young ones, and if they are killed he becomes furious, inflates his hood, while his nostrils dilate into two huge bladders. His appearance is now terrific, and with uncouth floundering leaps he rushes on his foe. Instances have occurred where a fight between an old doghood and five or six men has lasted for an hour; and sometimes a hunter is fearfully torn, and even killed, in the encounter. The square-flipper seal is the fourth kind, and is believed to be identical with the Greenland seal; it is from twelve to sixteen feet in length. It is only occasionally met with in these seas.

The seal industry of Newfoundland is determined by the migratory movements of the seals. These are as regular as the flow of the Arctic current. About the middle of February their young are born on the ice-fields off the northeast coast of Newfoundland. The young are suckled by their mothers for six weeks, and about the 1st of April they take to the water. Early

in May they commence their northerly movement in company with their young, shaping their course for the Greenland seas, where they spend three months. As the early Arctic winter sets in with September, they begin their southern migration, keeping ahead of the ice as it forms, and moving toward the coast of Labrador, feeding in its fiords and bays as they move. Small detachments seem to lead the way. Days are occupied in passing certain points, and the sea as far as the eye can reach seems filled. This great army on its march may well impress the beholder with the



Seals on an Ice Floe.

idea of the vast number of seals, on whose ranks the hunters make their annual onslaughts.

Having reached the Straits of Belle Isle, separating Newfoundland from Labrador, one division enters the Gulf of St. Lawrence, the other moving along the eastern shores of the island, feeding in its bays and inlets, but both divisions steadily going south. Toward the close of the year they have reached the Banks, these being their southern headquarters, as the Greenland seas are their northern. The Banks are ever swarming with fish, and on these the seals feast till the beginning of February. Then they commence their northern migration to meet the Arctic ice, on which their young are to be brought forth and cradled. By the 10th or 15th of February they have reached the ice-fields descending on the Arctic current. These great floes are the birthplaces of their young.

The seal hunt is conducted by picked men from the island of Newfoundland, usually fishermen who are accustomed to long voyages on this portion of the Atlantic. Only strong and hearty men are allowed to secure a berth on the sealing steamers. The vessels are strongly constructed, so as to withstand not only the winter gales in the North Atlantic, but also the pressure of the ice masses in which they are frequently imprisoned. The hulls are usually composed of wood, but the bow is generally filled with timber for several feet, in order that the ship may ram the ice in working a passage through it without being injured. The bow and hull below the water line are also further protected with iron plates. All the vessels carry sails, and are provided with steam power as well. Some of them are noted in Arctic exploration, having gone far north in the quest of the pole.

The voyage of the seal hunters may last for two weeks or six weeks. It all depends on how soon the lookout sights the seals coming down on the ice fields. If the "seal pans" are reached at night, the presence of the animals is frequently recognized by the whimpering of the young, which can be heard a long distance. As soon as the ship reaches the habitat of the animals, it may be moored to the edge of the ice-field or may remain in the open water near by. Every man who can be spared is landed, and immediately the work of

killing begins. A blow on the nose from a gaff, heavily shod with iron at one end, fractures the thin skull of the young seal, and in the vast majority of cases it feels pain no more. Death is instantaneous. In a moment the knife is at work. The skin with the adhering fat is detached rapidly from the carcass, which is left on the ice, still quivering with life, though there is no sensation, the movements of the muscles being merely mechanical, and caused by contact with the icy surface. In fact, death comes to the young "white-coats" far quicker and with less pain than to animals slaughtered by the butchers. The pelts, as the skins and adhering fat are called, are then bound up in bundles and dragged over the hummocky ice to the side of the steamer.

As already stated, the old seals frequently attempt to defend their young, and are killed as well. The skull and the hide of the dog seal are frequently so thick that he cannot be killed with the gaff used on the younger ones. He is then shot with a rifle. Each squad of seal hunters carries at least one gun intended for this purpose. The men do not cease in their work until there are no more victims or night closes in. Sometimes they get several miles away from the vessel, and are obliged to remain on the ice cake until morning. This is a very perilous situation, for the reason that at times gales come up which break the fields into small pieces, or blizzards come in which many a hunter has been frozen to death.

When the vessel reaches port with her cargo, the skippers go to work and separate the skins and the fat. The former are salted and stored for export. By means of steam-driven machinery, the fat is cut up by revolving knives into minute pieces, then ground finer by a sort of gigantic sausage machine, afterward steamed to extract the oil, and then exposed for a time in glass-covered tanks to the action of the sun's rays, and finally barreled for exportation. The annual catch of seals ranges usually from 200,000 to 300,000. Nearly all of the skins go to the United States.

The cargoes of seal pelts are, of course, large or small, according to the number of animals found on the ice. Sometimes a steamer may fill her hold in two weeks. Another may be out for six weeks, and return only with a few thousand skins. Much depends upon the skill of the captains in locating the seal patches, and as the ice-fields may be over a hundred miles in breadth and of unknown length, the sealer may be weeks running along the edge of the field before he sees any dark spots which show the presence of the prey. Occasionally, however, the vessel comes into St. Johns harbor with the broom aloft which shows that she has been unusually successful. One of the largest cargoes ever brought to this port was that of the steamer "Neptune," whose crew secured 42,000 seals in eighteen days, the pelts filling not only the hold, but being piled upon the decks as well.

A paper recently read by Prof. O. P. Hood before the American Society of Mechanical Engineers gave the results of a test of a high-duty engine used in connection with an air compressor. The engine is quadruple-expansion, uses steam at 250 pounds pressure, and is provided with a feed-water heating system which obtains a large credit of heat from the engine to return to the boiler. The duty of the engine per million heat units, based on the indicated work, is 194,930,000 foot-pounds. The heat used per hour per indicated horse-power is 10,157 B.T.U., establishing a new record for a steam engine 9 per cent below the best previous record. The thermal efficiency of the engine exceeds 25 per cent.



"Unlacing" Men Disengaging the Seals from the Towing Ropes.



The Dog Seal Was Shot and the Mother and Cub Clubbed with the Gaff.

HOW SEALS ARE KILLED OFF THE COAST OF LABRADOR.

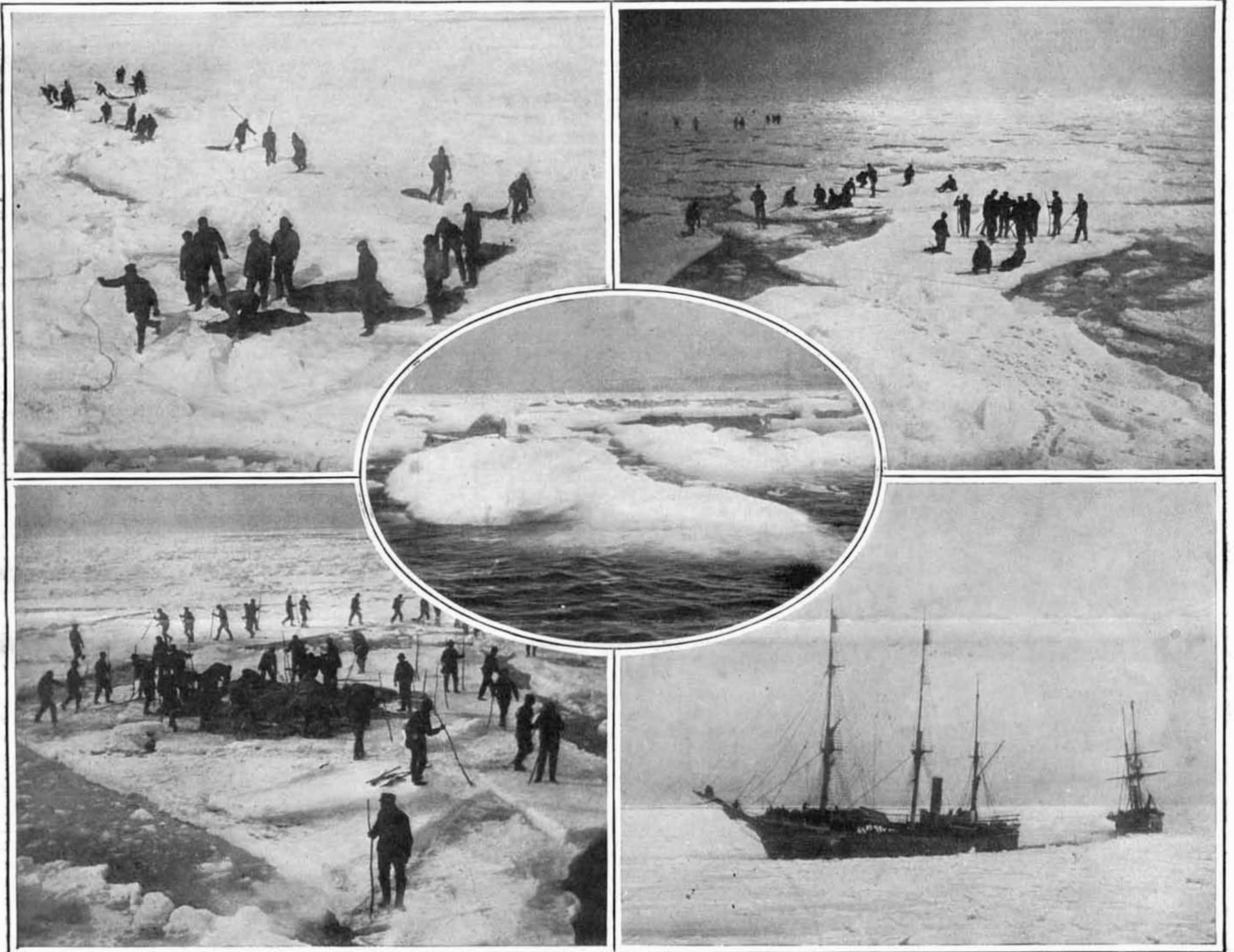
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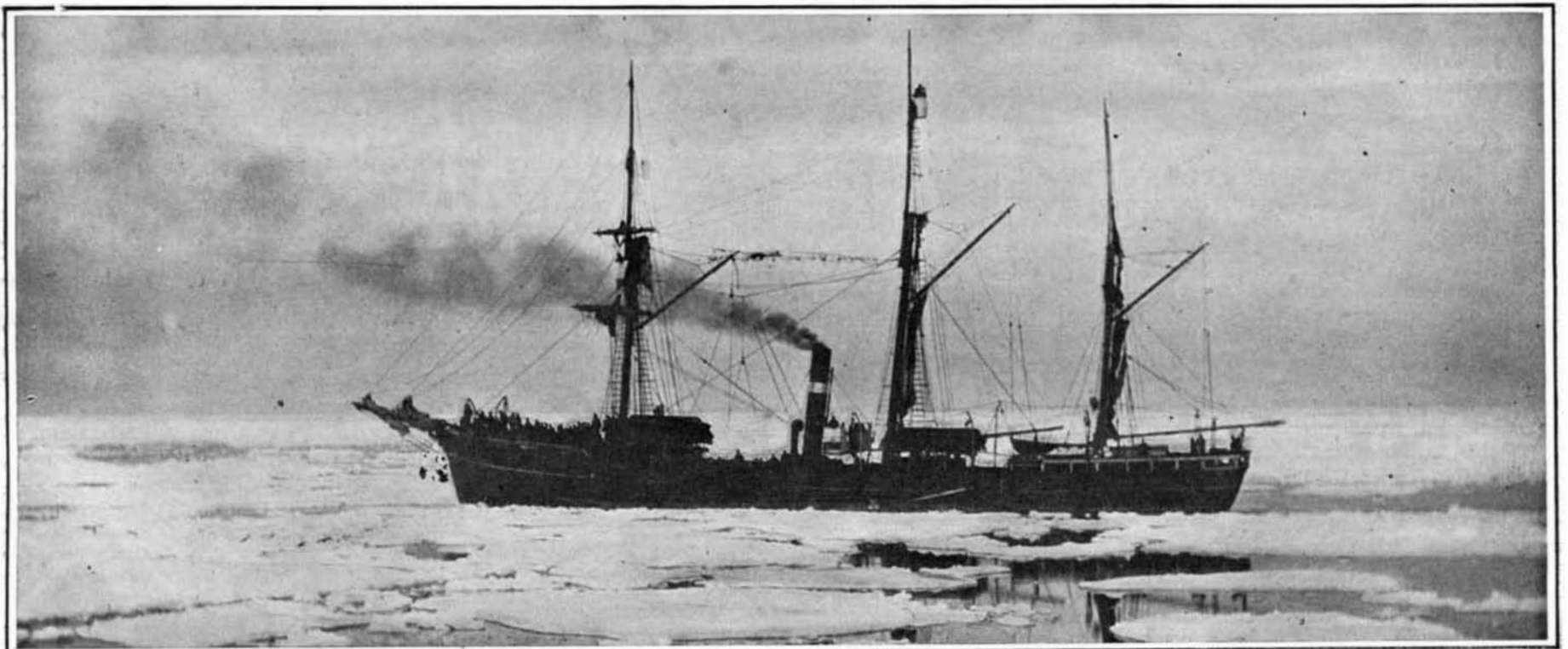
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Dragging Seal Carcasses to the Steamer.  
File of Dead Seals Ready to be Towed to Ship.

Ice Floe on the Labrador Coast.

Gunning for Seals.  
Sealing Steamer on the Sealing Grounds.



Sealing Steamer Among the Ice Floes.

HOW SEALS ARE KILLED OFF THE COAST OF LABRADOR.—[See page 308.]