

### WHALES AND WHALING.

BY J. B. HOLDER.

Time was in our memory when whales were out of fashion, but whales and the whale fishery are more familiar subjects to-day than they have been any time in these forty years past. Why is this? Two very good reasons occur to us: the reappearance of a once very common right whale that was well nigh extinct, and the increased demand for whalebone and oil.

The discovery of mineral oil promised at one time to leave whale oil quite an undesirable commodity; but by pressure of the unnumbered wants attendant on the marvelous strides of civilization, this product has again assumed a commercial value.

The story of the whale fishery is an interesting one, and through certain circumstances is one little understood.

Prior to the American Revolution, and as far back as our history reaches, a species of right whale was indigenous to the temperate Atlantic Ocean. The earliest white settlers in New England found the aborigines hunting right whales off the shore. A canoe with two or more individuals constituted the whaling outfit; the great creatures being towed to shore, and there cut up for the various purposes then calling for their capture.

The whites, of course, early introduced their small vessels and improved apparatus; yet during many years the whale fishery consisted in but small improvement on the Indian methods.

It was not until the whales became scarce that larger vessels and a more elaborate outfit were in use. It is now that the New England people, as an old writer has it, "began to whale out in the deep sea."

This right whale, called by the early authors the "second sorte," in contradistinction to the large Arctic whale, is first mentioned A.D. 890, in "Orosius Voyages," written by Alfred the Great.

In the twelfth century an old Icelandic clergyman published in Konigspeil ("Mirror of Royalty") a list of cetaceans, in which he enumerates a "second species, called Nordcape, from it having been seen first off the North Cape of Iceland." Other writers mention this whale under the name Sarde and Sletbag, the latter meaning a whale without a dorsal fin—the finback probably being familiar to the peoples of that day, as it is now.

The earliest English record of this whale seems to be that of John Smith, in "Annals of Salem, Mass." He says: "The whaling business began on the New England coast prior to 1614, guaranteed by royal authority to Mass. Bay." The same author states that in 1690 "whales were occasionally killed in Cape Cod Harbor. Nantucket first sent boats this year from shore, and in 1700 they began to fit out small vessels. In 1714 small vessels were sent to Newfoundland, and southward along the gulf. In 1748 whales became so scarce that they were pursued in larger vessels, an hundred sails being fitted out from Boston." The whale thus pursued was the Atlantic right whale, not the finback, which was not regarded as worth capturing as long as there were any right whales within reasonable distance.

It was on the account of the finback being undesirable in these early days that the larger baleen whale was called right whale, as it was the right one to search for; the latter giving much more oil and valuable baleen, or whalebone. The finback has very narrow, short, and coarse baleen.

New Bedford commenced the business of whaling in 1755, their boats going as far south as the capes of Virginia.

In 1770 these temperate Atlantic whales became so scarce the vessels employed were built for long voyages, across the Atlantic.

This right whale was first hunted by the Basques, a colony of fishermen on the coast of the Bay of Biscay, who had from early times pursued this occupation. As the whales became less numerous the voyages were extended, until the great Arctic whale, which is essentially confined to the waters of the Arctic zone, was accidentally met with. Seafaring people are not always acutely observing of characters of marine creatures that do not concern their occupation; consequently no one chanced to discover that they had come upon a different species of whale entirely. Nor did they care, especially as the new one proved to be much more valuable, having "whalebone" of very much greater size, and, of course, more value, and superior oil, in quality and thickness—the northern sea creatures evidently requiring heavier layers of fat.

This state of things continued until 1775, or about the time of the Revolution. The "second sorte" had been growing scarcer, until now it had become practically extinct. None were caught. Naturalists in

Europe had some knowledge of this lost whale, that, as we have seen, was recorded by old authors, but the record was meager. It was understood by them that there was a larger species in the north, and that this was a "second sorte." So long as this "second sorte" was available, the whalers desired nothing better; but when they became so scarce, it was necessary to push north and capture what the whalers of that day thought were no more than a larger kind.

The truth is, and this, though, as we have seen, was known vaguely to the few cetologists of the time, there are two distinct species of baleen or right whales—the great Arctic or Greenland whale, bowhead, so called by the present race of whalers (*Balæna mysticetus*); and the Atlantic right whale, nordecape, sletbag, and sarde of the old authors, black whale of the early settlers of New England (*Balæna cisarctica* of Cope).

During the Revolution, the men usually employed in whaling were occupied in some service of the conflict. But little if any whale fishing was carried on during the several years of war. It will be borne in mind that the Atlantic right whale was nearly extinct at the commencement of this war. At this time there was little of cetological literature credited to North American authors, and in Europe there was but little more, touching this species.

During the years of the war and succeeding years nothing was heard of the Atlantic whale. The great Arctic animal occupied all attention.

Meantime the great deep held a small family, or at least a pair, of the lost whales, and in 1854 a female, accompanied by its young, visited the old "hunting

seen on our coast; that was thrown ashore on Long Island about 1860. Peter Cooper secured the bones, with the baleen, and generously gave it to the American Museum of Natural History on the occasion of its founding—in 1870. A male specimen was captured in Charleston Harbor in January, 1880, after an exciting chase of several days' duration. Steam tugs were used, and several times the harpoon lines had been made fast, but the creature, which measured nearly 50 feet, struck the tugs in its furious lashings, and injured them to the extent that the whalers were obliged to resort to the old methods of whaleboats, oarsmen, harpooners, and lancemen—when the great creature was captured.

During the extremely cold weather of last January, six examples of this whale appeared off Montauk and Southampton, on Long Island. The hardy seamen and whalers of that region put out in regular trim, and captured four of them, two being young. A large one gave the old whalers a deal of trouble. During the coldest night of that notable cold "spell," Captain Edwards, who is over 60 years of age, stood at the bow of his boat, lance in hand, the icy waves beating most unkindly over him, while hour after hour of anxious trial passed.

At length the opportunity came, and the well-poised lance brought the monster cetacean to death. It now seems that the Atlantic right whale is gradually increasing in numbers.

The finback—*Balænoptera*—has long been a familiar creature off our North Atlantic shores. Systematically, it is of another family, the distinguishing features being the small head, with very insignificant baleen or whalebone, and a fleshy, fin-like member on its back. The balænopters are notably long and slender, compared with the baleen whales. The great rorqual, the largest known mammal, is of this group.

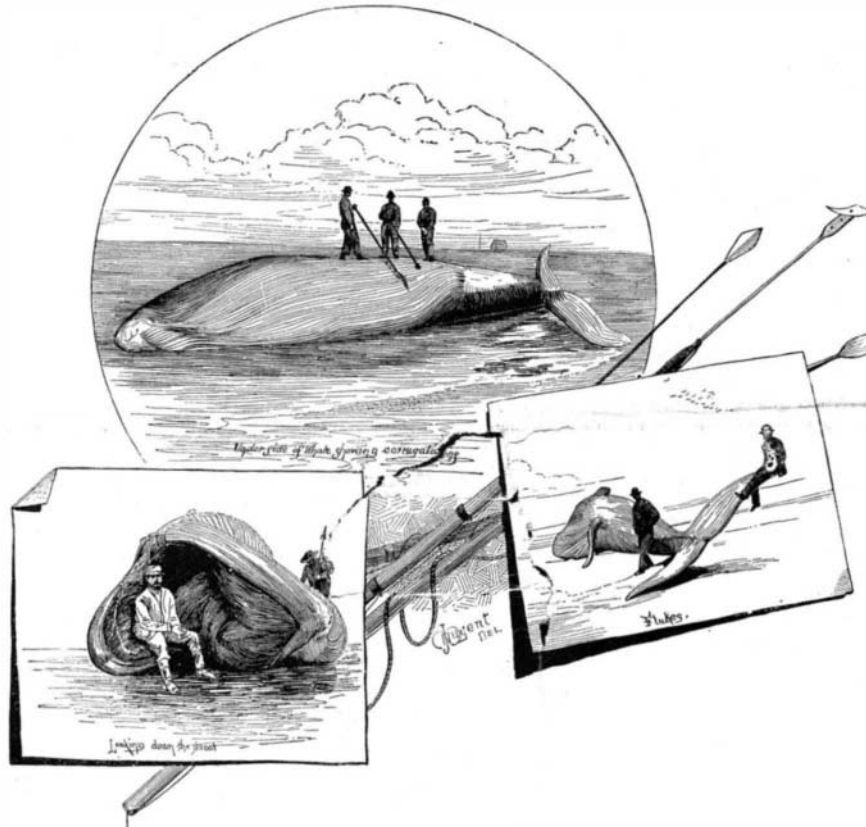
The finback is the whale so frequently seen off vessels along our coast and in mid-Atlantic. This whale is so active, it proves a dangerous enemy when once attacked and wounded, consequently it is not sought after extensively; though it were implying a lack of courage and enterprise on the part of our seamen to say this without explaining that the baleen of this whale is so small and coarse it is useless, and the fat is so meager in quantity it does not pay well.

The Cape Cod whalers and fishermen have in late years pursued them in steam tugs, and each autumn there are many captured in that manner. The blackfish (*Globocephalus*) is the most common cetacean pursued by the Cape Cod people. It is in the habit of visiting the vicinity of Cape Cod harbors in droves, and much sport is had driving them in and beaching them.

They feed on the squid (*Octopus*), and follow the schools of that mollusk; sometimes fifty or a hundred blackfish are seen on such occasions. They swim with much of the body exposed when going rapidly, thus giving a most singular exhibition of marine maneuvering. They have a habit, like that of the sperm whale, of "standing" in water perpendicularly, with a portion of the head above water. This cetacean is equally common on both sides of the continent and the equator; and they even extend to high northern and extreme southern latitudes.

The term blackfish is misleading to those not acquainted with cetaceans. It is one of the dolphin family—related to the porpoise—but is larger. The white whale is about its size, reaching some 15 feet, though the latter is oftener about 10.

The extreme beauty of the tail and its admirable adaptation for its purposes as a propeller are well shown in the picture of the finback. The great mouth of these creatures seems out of all proportion, but the food being mostly soft marine animals, like the mollusca, going in immense schools, the creature scoops up vast quantities at once. The swallow, or œsophagus, is very small, not larger in a whale 50 feet in length than one's two fists. The great tongue is closed over the mass of jellies after they are taken in the mouth, pressing them against the roof of the mouth, when the water that has been taken in oozes through the plates of whalebone, and the morsel of food is pressed into the stomach. The great rorqual, or sulphur bottom—a Pacific species—often has reached near a hundred feet in length. Examples measuring over a hundred are recorded. Some errors are extant concerning the great Arctic whale (*Balæna*) and the sperm whale (*Physeter*). Both are equally bulky, and both about the same length. None ever reach over 60 feet in length. Their heads are, in both cases, about one-third their total length, but are much the greater bulk. The sperm whale is well known as a carnivorous cetacean, living on fishes, its lower jaw being supplied with long rows of teeth.



WHALES RECENTLY TAKEN NEAR LONG ISLAND.

grounds," the Bay of Biscay. The cub only was taken. It is a pleasing circumstance that the first appearance, after so many years, of this species should be in the waters from which the creature first derived its specific name. Eschricht named it *Balæna biscayensis*.

In 1865, Prof. Cope, of Philadelphia, examined the first nearly adult example that has come under scientific inspection. William Penn, in 1683, relates that eleven of these were taken that year, called by the whalers black whale. Prof. Cope's examination proved the identity of these with the Biscay whale, consequently the terms *cisarctica* and *biscayensis* have been applied to the same species.

So far science had not gained a full account of this lost and found whale. It had been gone so long, no one knew anything of it. To the "lay" reader it was an unknown quantity; to the cetologist it was known only as a cub, and by certain features handed down by very crude drawings and carved blocks, which, however, prove to be accurate, so far as they appear.

A little more than ten years after Prof. Cope's identification, an adult female, 48 feet in length, was captured off Montauk Point by some whalers. This was exhibited in New York Harbor in the spring of 1883. We had the privilege of examining this specimen, and through the courtesy of the owners and the captor, Captain Josh. Edwards, we made an exhaustive description of its characters, externally. The first feature noticeable, in comparison with the Arctic whale, is the shortness of the head. The latter whale has a head measuring one-third the total length. The present species has a head one-fourth the same. The baleen is not half the length of that of the Arctic species; consequently the value is much less, while the oil is much less in quantity.

Only one more specimen was known to have been