

1862	it required	312	quintals to produce one ton of Cod Liver Oil.
1863	"	335	" " "
1864	"	451	" " "
1865	"	"	" " "
1866	"	"	" " "
1867	"	"	" " "
1868	"	225	" " "
1869	"	248	" " "
1870	"	256	" " "
1871	"	235	" " "
1872	"	280	" " "
1873	"	320	" " "
1874	"	517	" " "
1875	"	370	" " "

From this table it appears that while in 1859 it required but 257 quintals of fish to make one ton of oil, in 1864 it took 451 quintals, and in 1874 no less than 517 quintals to produce a ton of liver oil. The inference is that in 1864 and 1874 the fish were poorly fed, and in 1868 and 1871 they were richly fed.

Under date Aug. 7, 1778, Sandwich Bay, Labrador, Cartwright says:—"Fish not well fed this year."

IN NORWAY.

Adopting a different method of comparison with respect to the Norwegian Fish, which the returns permit, we have the following curious result:—

The number of fish required to make a Norwegian barrel of liver and a barrel of fish roe, or spawn, was as given below:—

Year.	No. of fish to a barrel of Liver.	No. of fish to a barrel of Roe.
1870.....	766	1150
1871	864	1187
1872	750	818
1873.....	375	714

According as more fish were required to make a barrel of liver, so also was a greater number required to make a barrel of roe. Roe and liver appear to be mutually dependant upon one another. This may be explained by supposing that the size of the fish varied, or that the fish were less richly fed. The true state of the case is, perhaps, explained by the appearance of the fish caught on the Lofoten Banks in 1870, as stated in the text, page 67.

THE EFFECTS OF THE EARTH'S ROTATION ON THE LABRADOR CURRENT.

The rapidity of the diurnal motion of any point on the surface of the earth, from west to east, varies with its latitude. On the sixtieth degree the speed of rotation is about nine miles in a minute; in the latitude of Paris it is a little more than eleven and a half miles during the same period, whereas on the equator the motion of any point from west to east is at the rate of eighteen miles a minute, or equal to that of a cannon ball weighing 26 pounds and projected from a piece of artillery with thirteen pounds of powder. (1) Hence it is that any current, whether of a river or in the ocean, moving from north to south in the northern hemisphere, must necessarily remain in the rear of the increasingly rapid terrestrial movement which carries it round, and must consequently deviate towards the west. The arctic current moving generally from north to south, continually traverses as it gains a more southern latitude portions of the earth's surface, which are moving with increasing rapidity towards the east, owing to its rotation; the current is, as it were, left behind, being a body possessing a distinct motion of its own, and the result is that it has always an increasing westerly trend, as it progresses towards the equator. The reverse of this is the case with the Gulf Stream, which flows generally from south to north, and is continually attaining parts of the earth's surface, which have a rapidly diminishing motion from west to east, and the tendency to leave it in the rear grows less in proportion, hence its deviation is towards the east or in the direction of the earth's rotation.

In the southern hemisphere exactly the reverse action takes place. This law of deviation is observed by all moving bodies, such as winds, rivers, balls in motion, etc. Rivers in the northern hemisphere flowing from north to south cut away the west bank, whereas rivers flowing from south to north attack the east bank. Rivers flowing from east to west have their currents accelerated, and from west to east retarded, because they flow respectively with or against the motion of the earth.

The Labrador current is thus evidently affected by the rotation of the earth, which causes it to press upon the coasts, and as it rounds capes this pressure is removed, which causes at once strong local currents to the westward, the cause it is feared of many shipwrecks and the loss of life, especially in vicinity of Cape Race, Newfoundland, and in a less degree Cape Sable, N. S.

WRECKS OF FISHING VESSELS ON BRITISH-AMERICAN SHORES FROM 1863 TO 1876.

Nationality.	No. of vessels lost.
Canadian.....	105
American	62
British	1
Newfoundland	1
Total.....	169

Average tonnage of the vessels lost..... 60 tons.

(1.) Consular Report.
(2.) Reclus. "The Earth."