UNITED STATES COMMISSION OF FISH AND FISHERIES
SPENCER F. BAIRD, COMMISSIONER

THE FISHERIES

AND

FISHERY INDUSTRIES

OF THE

UNITED STATES

PREPARED THROUGH THE CO-OPERATION OF THE COMMISSIONER OF FISHERIES AND THE SUPERINTENDENT OF THE TENTH CENSUS

BY

GEORGE BROWN GOODE
ASSISTANT SECRETARY OF THE SMITHSONIAN INSTITUTION
AND A STAFF OF ASSOCIATES

SECTION IV
THE FISHERMEN OF THE UNITED STATES

BY GEORGE BROWN GOODE AND JOSEPH W. COLLINS

WASHINGTON
GOVERNMENT PRINTING OFFICE
1887

Blank page retained for pagination

TABLE OF CONTENTS.

A.—NATIONALITY AND GENERAL CHARACTERISTICS: Page.

1. General review 5
2. The shore fishermen of Maine 10
3. The vessel fishermen of Maine 11
4. The fishermen of the Isles of Shoals 13
5. The Indian fishermen of New England 14
6. The British-Provincial fishermen of New England 14
7. The Irish fishermen of New England 20
8. The Scandinavian fishermen of New England 21
9. The Portuguese fishermen of New England 21
10. The negro fishermen of New England 22
11. The "Baymen" or fishermen of Long Island, N. Y 22
12. The oystermen of Maryland 23
13. The oyster-shuckers of Maryland 24
14. The fishermen of Florida 24
15. The fishermen of Mobile, Ala 27
16. The fishermen of New Orleans, La 27
17. The fishermen of Texas 28
18. The American fishermen of California 29
19. The Italian fishermen of the Pacific coast 30
20. The Portuguese fishermen of the Pacific coast 31
21. The Spanish fishermen of the Pacific coast 34
22. The Greek fishermen of the Pacific coast 35
23. The Austrian fishermen of the Pacific coast 35
24. The French fishermen of the Pacific coast 35
25. Southern European fishermen of the Pacific coast 35
26. The Chinese fishermen of the Pacific coast 37
27. Miscellaneous fishermen of the Pacific coast 42
28. The Arctic whalemen from San Francisco 42
29. The fishermen of the Columbia River 42
30. The Indian fishermen of the Pacific coast 43
31. The McCloud River Indians of California 43
32. The fishermen of the Great Lakes 45

B.—THE SAILOR-FISHERMEN OF NEW ENGLAND:

33. Shore education 48
34. Sea education 50
35. Mental and physical traits 53
36. Superstitions 60
37. Dialect 64
38. Literary tastes 68
39. Morals and religion 69
40. Life ashore 72
41. Life on board the vessels 74
42. Public service 79
43. Costume 86
44. Food 89
45. Diseases and longevity 91
46. Financial profits 94

C.—OFFICERS OF VESSELS; DISCIPLINE OF THE CREW; NAVIGATION: Page.
47. Officers and discipline on fishing and whaling vessels 97
48. Navigation 102
D.—DANGERS OF THE FISHERIES:
49.—Dangers to the vessels 104
50. Dangers to the fishermen 119
51. Relief for bereaved families 126
E.—MANAGEMENT OF THE VESSELS:
52. Evolutions of the fishing schooner 130
53. Amount of canvas carried 138
54. Management of disabled vessels 142
F.—APPENDIX:
55. Freeman's description of Cape Cod fishermen 126
56. Autobiography of Capt. N. E. Atwood 142

ILLUSTRATIONS.

Plate. Faces page
1. Camp of shore fishermen near Cape Newagen, Maine 10
2. Portuguese fishermen from Azore Islands 20
3. Portuguese whalemen from Cape Verde Islands 22
4. Chinese fishing village, California 37
5. Camp of McCloud River Indian fishermen 44
6. Gloucester, Mass.; view looking west from East Gloucester 48
7. Home of shore fisherman at Cape Ann, Massachusetts 72
8. Home of haddock and mackerel fisherman at Gloucester, Mass 74
9. Fishermen's houses at Gloucester, Mass 76
10. Fishing schooner tripped by a heavy sea 109
11. Fishing schooner lying-to at a drag in a gale 110
12. Fishing schooner caught in an ice-floe 115
13. Dory crew caught to leeward in a squall 122
14. Seamen's Bethel and Mariner's Home, New Bedford, Mass 126
15. Fishing schooner lying-to in a gale, under riding sail and reefed foresail 132
16. Fishing schooner at anchor, riding out a gale 134
17. Fishing schooner headreaching under short sail 136
18. Fishing schooner running before the wind; scandalizing the staysail 139
19. Mackerel schooner under full sail, with the wind abeam 142

THE FISHERMEN OF THE UNITED STATES.

A.—NATIONALITY AND GENERAL CHARACTERISTICS.

1. GENERAL REVIEW.

In 1880 there were 101,684 professional fishermen in the United States. In addition to the professional fishermen there is a large class of men who have been called "semi-professional fishermen," including the men who derive from the fisheries less than half of their entire income.

In the class of shoresmen may be placed (1) the curers and packers of fish; (2) the vessel owners and fitters who furnish supplies and apparatus for the use of the active fishermen; (3) the shopkeepers from whom they purchase provisions and clothing; (4) the skilled laborers who manufacture for them articles of apparel and shelter; (5) the manufacturers of boxes, barrels, refrigerators, and other appliances used in packing and preserving the catch; (6) the vessel and boat builders and artisans who keep the fleet in repair; and (7) the fish dealers and market men. Taking into account all those persons who are directly employed in the fisheries for a greater or less portion of the year, those who are dependent upon the fishermen in a commercial way for support, and the members of their families who depend on their labors, it cannot be extravagant to estimate the total number of persons dependent upon the fisheries of this country at from 800,000 to 1,000,000.

The total value of the fisheries of the United States to the producers in 1880 was $14,546,053, and a fair estimate of the wholesale market value of the products would increase the amount to nearly $90,000,000.

Of the twenty-nine States and Territories whose citizens are engaged in the fishery industry, sixteen have more than a thousand professional fishermen each. The most important of these is Massachusetts, with 17,105 men; second stands Maine, with 8,110; unless, indeed, the 16,000 oystermen of Virginia and the 15,000 of Maryland are allowed to swell the totals for those States. Maine, however, stands second so far as the ocean fisheries proper are concerned.

In geographical areas the Southern Atlantic States rank first in the number of fishermen, with 38,774 men; followed by the New England States, with 29,838; the Middle States, exclusive of the Great Lakes, with 12,584; the Pacific States and Territories, 11,613; the Great Lakes, 4,493; and the Gulf States, 4,382.

The number of professional fishermen in each State and Territory is as follows:

State or Territory.	Number.	State or Territory.	Number.	State or Territory.	Number.
Alabama	545	Maine	8,110	Ohio	925
Alaska	6,000	Maryland	15,873	Oregon	2,785
California	2,089	Massachusetts	17,105	Pennsylvania	511
Connecticut	2,585	Michigan	1,600	Rhode Island	1,602
Delaware	1,662	Minnesota	30	South Carolina	964
Florida	2,284	Mississippi	100	Texas	491
Georgia	809	New Hampshire	378	Virginia	16,051
Illinois	265	New Jersey	5,659	Washington Territory	729
Indiana	45	New York	5,630	Wisconsin	780
Louisiana	1,300	North Carolina	4,729	Total	101,684

The majority of our fishermen are native-born citizens of the United States, although in certain localities there are extensive communities of foreigners, clinging to the traditions of their fatherlands, and conspicuous in the regions where they dwell by reason of their peculiar customs and physiognomies. Most numerous of these are the natives of the British Provinces, of whom there are at least 4,000 employed in the fisheries of New England, Gloucester reporting 1,600, Provincetown 800, New Bedford 800, and smaller numbers in other minor ports of this region.

There are probably not less than 2,000 Portuguese, chiefly natives of the Azores and the Cape de Verde Islands. In the New Bedford whaling fleet there are about 800 of these men; at Provincetown 400, many of them on the whaling vessels; in Gloucester 250, and on the coast of California, 200. Most of the Portuguese have brought their families with them and have built up extensive communities in the towns whence they sail upon their fishing voyages.

There are also about 1,000 Scandinavians, 1,000 or more of Irish and English birth, a considerable number of French, Italian, Austrians, Minorcans, Sclavs, Greeks, Spaniards, and Germans. In the whaling fleet may be found Lascars, Malays, and a larger number of Kanakas, or natives of the various South Sea Islands. In the whale fishery of Southern New England a considerable number of men of partial Indian descent may be found, and in the fisheries of the Great Lakes, especially those of Lake Superior and the vicinity of Mackinaw, Indians and Indian half-breeds are employed.

The salmon and other fisheries of Puget Sound are prosecuted chiefly by the aid of Indian fishermen. In Alaska, where the population depends almost entirely upon the fisheries for support, the head of every family is a professional fisherman. Though upon a very low estimate one-fourth of the inhabitants of Alaska should be considered as fishermen, few of them catch fish for the use of others than their own immediate dependents.

Only one Chinaman has as yet enrolled himself among the fishermen of the Atlantic coast, but in California and Oregon there are about 4,000 of these men, all of whom, excepting about 300, are employed as factory hands in the salmon canneries of the Sacramento and Columbia basins. The 300 who have the right to be classed among the actual fishermen live, for the most part, in California, and the product of their industry is, to a very great extent, exported to China, although they supply the local demands of their countrymen resident on the Pacific coast.

The negro element in the fishing population is somewhat extensive. We have no means of ascertaining how many of this race are included among the native-born Americans returned by the census reporters. The shad fisheries of the South are prosecuted chiefly by the use of negro muscle, and probably not less than 4,000 or 5,000 of these men are employed during the shad and herring season in setting and hauling the seines. The only locality where negroes participate to a large extent in the shore fisheries is Key West, Fla., where the natives of the Bahamas, both negro and white, are considered among the most skillful of the sponge and market fishermen. Negroes are rarely found, however, upon the sea-going fishing vessels of the North. There is not a single negro among the 5,000 fishermen of Gloucester, Mass., and their absence from the fishing vessels of other New England ports is none the less noteworthy. There is, however, a considerable sprinkling of negroes among the crews of the whaling vessels of Provincetown and New Bedford. New Bedford alone reports over two hundred negroes: these men are, for the most part, natives of Jamaica, St. Croix, and other of the West India islands, and also of the Cape de Verde Islands, where American whaling vessels engaging in the Atlantic fishery are accustomed to make harbor for recruiting and enrolling their crews.

As a counterpart to the solitary Chinaman engaged in the Atlantic fisheries, we hear of a solitary negro on the Pacific coast, a lone fisherman, who sits on the wharf at New Tacoma, Washington Territory, and fishes to supply the local market.

The number of foreign fishermen in the United States, excluding the 5,000 negroes and the 8,000 Indians and Eskimos, who are considered to be native-born citizens, probably does not exceed 10 to 12 per cent. of the total number.

As is shown by the figures given above, considerably more than one-half of the fishing population of the United States, excluding the oystermen of Virginia and Maryland, belongs to the Atlantic coast north of the Capes of Delaware. Of this number, at least four-fifths, or 40,000, are of English descent. They are by far the most interesting of our fishermen, since to their numbers belong the 20,000 or more men who may properly be designated the "sailor fishermen" of the United States, the crews of the trim and beautiful vessels of the sea-going fishing-fleet, which should be the chief pride of the American marine, and which is of such importance to our country as a training school for mariners, and as a medium through which one of the most valuable food resources of the continent is made available.

The fishing population of Maine, Massachusetts, and Connecticut is composed, for the most part, especially in the country districts, of native-born Americans. In the large fishing ports there is, however, an extensive admixture of foreigners, among whom the natives of the British Provinces, chiefly Nova Scotians and Newfoundlanders, are largely in the majority. The Beverly bankers are manned to a large extent by Nova Scotians, who are shipped at the beginning of the summer by the vessels which proceed for that purpose to the seaport towns of that Province. The Plymouth fleet, before 1861, was manned almost wholly by Americans, then for some years chiefly by Nova Scotians, now almost entirely by Americans. Part of the crews and several of the captains of the Bucksport fishing vessels are Provincials, and there is a limited number of these men, principally from New Brunswick, engaged in the shore and vessel fisheries of Eastport. In addition to these, there are many Provincial fishermen at different points along the coast of Maine.

Gloucester has 140 men of British birth, a large proportion of whom are Irish, while the Boston market fleet is manned principally by Irishmen.

Gloucester has nearly 400 Scandinavians among its fishermen and about 70 Frenchmen. The New Bedford whaling fleet, with its motley gathering of sailors from every port of the world, has individuals of nearly every race. In 1880 the crews of this fleet were composed as follows: 900 Americans; 800 Portuguese; 250 English and Irish; 200 British-Provincials; 200 Germans; 200 South Sea Islanders or Kanakas; 200 Negroes; 50 French, and 50 Swedes.

In general traits of character fishermen cannot be distinguished from the population on shore. In some special branches of the fisheries, as the boat fisheries of Maine, the men live a comparatively secluded life, and acquire, after many years, a bearing and physiognomy peculiar to themselves.

The enterprise of New England fishermen is well known. They are not conservative, but eager to adopt inventions and discoveries that may promise to benefit them in their work. This trait is manifest in the readiness with which they have adopted the purse-seines in place of the hook and line in the capture of mackerel; and, again, in their readiness to experiment with and then to adopt gill-nets in the shore fisheries for the capture of cod.

They are a hardy and daring race of men, particularly in New England. Their powers of endurance and their skill are noteworthy. The highest type of seamanship is attained among American fishermen. The whalemen of Nantucket and New Bedford have pursued their prey in all oceans, and have added greatly to the geographical knowledge of the world.

In general education the inhabitants of the fishing towns of New England are among the most

intelligent. The Plymouth colonists, soon after their arrival, set apart by law a portion of the revenue arising from the sale of fishing licenses for the support of public schools.

The schools of New England fishing towns are attended by the boys until they are old enough to go to sea, and by the girls until they are of a marriageable age. It is quite usual for boys to engage in fishing in summer and go to school in the winter; some do this until they have arrived at the age of manhood. The girls are generally better educated than the boys, and the intelligence and refinement of the women of the fishing towns seem to a stranger quite noteworthy. The excellent education of wives and mothers of the fishermen cannot be without important effects upon the intelligence of the class.

The people of most of the fishing villages, from the Bay of Fundy to New York, are generally as intelligent and refined as in the average agricultural and manufacturing communities of the adjoining interior.

The fishermen of the Southern States are not remarkable for their intelligence; in fact, the thousands of oyster dredgers of the Chesapeake Bay are by reputation a degraded class. Their very lawlessness is supposed to recommend them to the service. The oyster-tongers in the same region are of a higher class, yet indolent and improvident. By law of the State of Maryland the revenue from the sale of oyster-tonging licenses, amounting annually to about $20,000, is given to the public school commissioners, who apply it to the support of schools, license-money from colored oystermen being for the support of colored schools, and from white oystermen for white schools.

TRAITS AND CUSTOMS OF NEW ENGLAND FISHERMEN.—The system of discipline upon a New England fishing schooner is such that it requires extraordinary tact and judgment on the part of the commanding officer. The captain or skipper is the sole officer, and, except when he has some order to give in relation to sailing the vessel or catching fish, he has no special authority over the crew, and the respect with which he is treated by the men is only that which his personal character obtains for him. This system of officering the vessels is attended by many serious disadvantages, and it would be a great benefit to our fisheries if the crews could be organized more in accordance with the usage of the merchant marine.

The peculiar dialect of the fishermen affords opportunity for studies of great interest. Of course their language is not free from a considerable amount of slang and technical phrases peculiar to their profession. Many of their words were brought to this country by their ancestors two hundred years ago, and, although at that time common throughout England, have now become obsolete or are regarded as provincialisms. On many parts of the coast a very pure idiomatic English is spoken. The peculiar words which one constantly hears add force and interest to their conversations.

Although the sailor fishermen of New England are not as a class religious, in most of the smaller fishing towns a high tone of morality prevails. Profane language is almost universally prevalent, but in other respects moralists would in general find little to criticise. In very many places the skipper of a vessel loses caste if it is known that he allows his crew to fish on Sunday, and for two consecutive years the Menhaden Oil and Guano Association have passed resolutions forbidding their employés to fish upon the Sabbath. In the early part of the present century a barrel of rum was an indispensable article in the outfit of a fishing vessel; at present it is extremely rare for ardent spirits of any kind to be found on board of the vessels, and popular sentiment is greatly against its use. Most of the fishing ports along the coast have prohibitory laws, which are rigidly enforced.

Bearing in mind the difficulties met by fishermen in obtaining supplies of reading matter, the quantity and quality of their literature is somewhat remarkable. Hundreds of copies of such

papers as the New York Weekly, Saturday Night, Fireside Companion, New York Ledger, Harper's Weekly, and Frank Leslie's Illustrated Newspaper are bought weekly by the fishermen of Gloucester. On their vessels a number of volumes may always be found; Dickens, Shakespeare, Byron, and Abbott's Life of Napoleon being among the most popular works.

The food of the New England fishermen is usually of an excellent quality, and to this improvement during the past quarter of a century may be attributed the increase in the longevity and period of active service among these men; this is so noteworthy as to attract the attention of all observers. The cook is often better paid than the captain, and is, in fact, the most important member of the crew.

Diseases are comparatively rare, the most prevalent being dyspepsia and rheumatism. In the larger ports, where there is much competition, cases of nervous exhaustion are by no means infrequent among the skippers and the most ambitious fishermen. Vessels carry a plentiful supply of medicines, and some of the skippers are quite expert in the application of certain simple remedies.

Ports which, like Gloucester, engage in the winter fisheries, have their fishing population decimated every year or two by severe disasters, but the fishermen do not feel any hesitation in going to sea, never admitting that the disasters which have befallen their comrades can affect themselves.

To describe the routine of life on board of a fishing vessel would be interesting, since it is very unlike that of other men, even mariners of other classes. Three months or more spent on a vessel anchored in its solitary berth on the banks, hundreds of miles from the land, is an experience which necessarily develops many peculiar habits among those who follow such a life. From daybreak until dark they ply their lines from the deck or from little boats, and half of the night is often devoted to preserving the fish which have been caught during the day. Storms are constantly occurring, and the dangers to which these men are exposed are numerous and severe.

A system of mutual insurance, or rather provision for the welfare of their families, is practiced by the fishermen of Gloucester by which a certain percentage of each man's earnings is set aside, to be applied for the benefit of the wives and children of those who have been lost at sea. The financial profits of the fishermen are extremely uncertain. A common fisherman may make $1,000 a year or may find himself at the end of twelve months deeply in debt for the supplies which have been advanced to his family by the shopkeepers during his absence. In 1859 the average yield to the fishermen of Marblehead was $50 each, and in other years the profits have been even less. In some rare instances Gloucester skippers, who were owners of vessels, have made $10,000 to $15,000 a year.

One of the most interesting topics developed by the study of fishermen is that of their superstitions. The most common of these is that relating to "Jonahs." Certain articles of apparel, such as a black traveling-bag or a pair of blue mittens or stockings are thought to be sure to bring ill luck. Some fishermen think it "a Jonah" to leave a bucket half full of water on deck, to drive a nail on Sunday, to keep the deck clean, or to break a looking-glass. Superstitious usages are very little prevalent; the practice of wearing ear-rings, so common among other mariners and believed to be beneficial to the sight, is rarely met with.

Certain curious customs might be referred to, but these are usually carried out in a joking manner. The fisherman who nails a horseshoe on the end of his bowsprit has usually no more faith in its supernatural power than the young lady who hangs it over the door of her parlor.

2. THE SHORE FISHERMEN OF MAINE.

GENERAL CHARACTERISTICS.—The men who are engaged in the shore fisheries of Maine are almost wholly of American birth. The majority of them have been brought up from their boyhood to a life on the water. Because of the decline of the coasting business in which their fathers, to a great extent, were employed before them, many of them have engaged in this particular branch of the fisheries as the only opportunity left them of making a living from the products of the sea.

HARDIHOOD.—Judging from the exposure to which these fishermen are frequently subjected, and the absence of ill effects upon their health by reason of such exposures, it may safely be said that they are a hardy class of men; perhaps not as daring and vigorous, however, as are the men engaged in deep sea fishing and who are often absent from shore for weeks and months together. The shore fishermen are frequently compelled to spend the night in their little open boats waiting for the turn of the tide or for a favorable wind.

SUBMISSION TO DIFFICULTIES.—These fishermen are chronic grumblers, and not altogether without reason. The terrible scarcity of bait, particularly annoying when good fishing is reported by the more fortunate—combined with the miserable prices they sometimes obtain for their fish, is not calculated to make a man jubilant or arouse dormant energies, if such exist. Each is largely dependent upon his "buyer," who, according to the state of the market, or for other reasons, may direct the fishermen either to go fishing next morning or stay at home. If he goes contrary to the advice of his patron he has a very poor chance of receiving from him any sum for his fish which will compensate the loss of time and labor. The wish to accumulate means is therefore absent by reason of its impossibility, and the time devoted to fishing is only so much as will provide himself and family with something to eat and wear. Some of these fishermen, however, are enterprising and industrious, and profiting by the inactivity of their fellows they acquire a fair competence.

It can hardly be said that the "chronic grumbler" is lazy, for when searching for bait or traveling to or from the grounds he will row a large boat several miles and think nothing of it. This apparent contradiction in his nature is due to his inability to change the existing state of affairs or to earn a livelihood in any other way: thus hardship and privations are calmly submitted to as a matter of course.

LACK OF ENTERPRISE.—Money seems to have but small powers of attraction when offered to these fishermen for work not connected with fishing. A member of our staff, who visited the coast in 1880, found considerable trouble in securing the services of some one who was willing to row him from place to place, and thereby earn good wages, though many of them were doing nothing. A larger return than common from selling fish is usually spent as fancy may first dictate or serves as a reason for deferring, as long as possible, the next fishing expedition.

MARRIAGE AND HOME LIFE.—Most of these men marry at an early age, generally from eighteen to twenty years: they thus become responsible for the support of a family almost before arriving at manhood.

The houses occupied by the families of these Maine shore-fishermen are usually old-fashioned wooden buildings, one and a half stories high; in some cases neat and home-like in appearance, but more generally lacking in taste and order. Most of these houses are surrounded by a "patch" of ground from three quarters of an acre to three or four acres in area, which, if properly attended to on the days unpropitious for fishing, might provide largely toward the support of the family, but negligence characterizes the appearance of many and weeds flourish undisturbed. The families subsist, for the most part, upon the products of the sea—fish, lobsters, and clams—and upon the vegetables from their gardens.

Camp of shore fishermen near Cape Newagen, Maine.

Drawing by Capt. J. W. Collins.

When at home the fisherman of this class passes most of his time in lounging about with his companions, relating personal adventures and talking superficially over the outlook. Not possessing a "business head," he does not carry these speculations further than to "hope for better luck." The same time spent in hunting for bait, scarce as it is, might better serve to realize his hopes. He may, despite his failings, be considered as honest, good-hearted, and contented with his lot, or perhaps we may better express it, resigned to fate.

EDUCATION.—Education is not in an advanced state. There are schools in almost all of the fishing towns, where winter and summer sessions are held, attended by the young of both sexes. The boys are taken away permanently from school as soon as they are considered useful, leaving the inference a fair one that the girls are better educated when they leave school than the boys. The means of supplying food for the boys' minds being so limited it is not strange that their heads are undisturbed by constant planning of great schemes having for their end the accumulation of wealth.

FINANCIAL CONDITION.—The fishermen of the present time have lost the privilege of obtaining on credit articles of food, &c., from the storekeepers, who, on account of the tendency on the part of the former to avoid the payment of their bills, have in the past lost heavily. Formerly the fishermen were good customers, buying extensively and making exertions to fulfill their obligations.

A fair average return per annum to the fisherman, since 1875, when bait began to be scarce and the price of fish to diminish, is estimated at $175; in 1879, however, the majority did not realize $100 apiece.

FISHERMEN AT GEORGETOWN.—The shore-fishermen of the Kennebec side of Georgetown are mostly engaged in pound fishing, but a few are interested in boat fishing for cod, haddock, hake, and pollock. They are almost wholly dependent for their support upon the money obtained by the sale of their fish. In summer, however, a few weeks are spent in picking and shipping berries, and in digging clams or cutting ice in winter. They do not engage in any one particular kind of fishing, but turn their attention to that which they believe to be the most profitable at the time. Some of these men always return at night; others, known as "campers," start in the spring with a small stove, blankets, and some cooking utensils, staying away until some necessity compels them to leave for home. The returns earned in this way used to equal the average returns of the deep-sea fishermen, but for the past three or four years the case has been very different.

BOAT-FISHERMEN OF PORTLAND.—The boat-fishermen of Portland live, for the most part, on the islands in the vicinity of the city and at Cape Elizabeth, both for economy and for convenience in getting to and from the fishing grounds. This class represents the better element, being very largely composed of married men, who prefer to undergo lonesome hardship in their little boats remaining near home to being separated from those dear to them in large vessels for a long time. It is estimated that the married boat-fishermen of Portland number one hundred and ten, and that they possess an average of about three children each.

3. THE VESSEL-FISHERMEN OF MAINE.

GENERAL CHARACTERISTICS.—The fishing vessels of Maine are largely manned by men of American birth, most of them natives of this State, who have followed the fisheries from their youth. Their habits of life are in many respects the same as those of the shore-fishermen. They have, as a class, all the enterprise and daring of the fishermen at the larger ports in Massachusetts. They are, however, more conservative and contented, and do not care to risk the great dangers attending the winter fisheries on the Banks, preferring rather to follow the fisheries during the summer months, and to remain idle or engage in other pursuits during the winter. Many of them, however, follow the shore fisheries in winter and the vessel fisheries in summer.

The reason why the Maine fishermen do not engage in the offshore winter fisheries can probably be found in the fact that they have not the system of mutual insurance which prevails in Gloucester. The probability of vessels being lost on winter trips is so great that few individuals or firms care to incur the risk without insurance; and the cost of insuring in stock companies is too high to leave any profits. It is, therefore, seemingly a question of the profitable employment of capital, and not a lack of courage or enterprise in the fishermen, that has commonly prevented the winter fisheries from being extensively prosecuted from Maine.

In substantiation of this statement, it can be said that a large percentage of the most daring and efficient fishermen sailing from Gloucester are natives of Maine. In the sharp competition which exists among the fishermen of this port, those from Maine hold a prominent place and are second to none in bravery, hardihood, and seamanship—qualities which are pre-eminently required in the winter fisheries.

The following notes, communicated to Mr. Earll by a close observer, for many years living in one of the principal fishing ports of Maine, indicate the habits and traits of those fishermen at some of the fishing ports of this State:

"EARLY TRAINING.—A man about to ship in a vessel will make arrangements to take his boy with him. The boy is taken out at the age of ten to twelve years. At first he may be kept aboard the vessel cutting sounds and fishing over the rail, or he may be allowed to accompany his father in his dory; and then he adds to the father's catch. He returns in the fall and again enters school for the winter term, but is taken out again early in spring to go on another trip. By the time he is fifteen, or sixteen at most, he has a dory of his own and forms one of the crew, catching his share of the trip. With his boyish desire to be a man he readily takes to any vice common to others of the crew, and is soon led to be as rough as any of his companions. His chief aim now is to be a fisherman and to be with the fishermen, and he returns in the fall feeling that he is too old for school, and if he enters it is largely that he may have a good time. He now wishes to study only geography and arithmetic, thinks reading and spelling beneath him, while, to use his own language, 'grammar will do well enough for the biled-shirt fellers and the girls, but as for him he has no time for such trash.' The only way now to reach him is by a general black-board exercise and course of oral instruction in those branches against which he is prejudiced. This is being introduced with favorable results, but the average fisher-boy takes so little interest in schools after he has been away for two or three summers that he will improve but little. The fisherman's daughter fares better, for there is little to keep her busy outside of school, and she, if once interested in the work, has the chance of gratifying her desires beyond that of any other class. As a result we find her often a very bright and intellectual young girl where the school privileges will allow and where she is not kept back by the home influences.

"MARRIED LIFE.—When the fisherman marries he soon has a large family, varying with the locality, the inferior communities averaging more than the more intellectual and well-to-do ones. In one section of twenty families, taken in order as they chanced to live, the average was exactly 5, the extremes being 11 and 0. The hard times seem to have no influence upon either the marriage or birth rate, for in 1878, the culmination of a series of adverse years, there were more marriages than for any year since 1874 by considerable, and the birth rate was unusually large.*

* HERRINGS AND MARRIAGES.—"The connection between herrings and marriages may not be obvious to all, but the Scotch registers make it clear enough. In the returns for the third quarter of the present year (1871) the registrar of Fraserburgh states that the herring fishery was very successful, and the value of the catch, including casks and curing, may be set down at £130,000 sterling, and the marriages were 80 per cent. above the average. One registrar, in his return for the quarter, reports marriages in his district 'like angels' visits, few and far between.' At the fishing villages it may be put more briefly—no herring, no wedding."

"LITERARY TASTES; ASSOCIATIONS.—The fisherman reads but little, in fact almost nothing in the way of books, and confines himself almost wholly to story papers, though no one paper seems to have a preference.

"*The seaman, be he fisherman or not, has, from long and constant association with his fellows,* grown to be a man who is discontented in solitude. He has been so long and constantly in the company of others that he cannot endure being alone; and just here we find a partial explanation of his discontent with the ordinary shore life. When at home in winter he is not satisfied to remain by himself; he must have other men around him, and we see him congregating with others at an old wharf where they may while away the time in jesting together and in conversation about things pertaining to their vocation. If one is going to the village half a mile away he will wait an hour for the sake of having some one to walk down with, and, conversing only on subjects connected with his work, he gradually comes to enjoy himself only in the society of fishermen. Who *has not overheard a conversation between two old salts and observed how easily it drifted into* things connected with the sea and how persistently it clung there?

"HOME LIFE.—The man being away so much his wife learns to act as his agent, and generally being the more capable of the two she controls matters at home, and he comes often in the capacity of a boarder. Her word is considered better than his, and she is not infrequently the leader. He neglects work about the house at the proper time and cuts his wood in the snow, &c. During the hard times he has mortgaged his house, and often two families live together with little or nothing attractive about them."

4. THE FISHERMEN OF THE ISLES OF SHOALS.

THE ISLES OF SHOALS FISHERMEN IN 1873.—Concerning the fishermen of these islands off the coast of New Hampshire, Celia Thaxter, in 1873, wrote:

"They lead a life of the greatest hardship and exposure, during the winter especially, setting their trawls 15 or 20 miles to the eastward of the islands, drawing them next day if the stormy winds and waves will permit, and taking the fish to Portsmouth to sell. It is desperately hard work, trawling at this season, with the bitter wind blowing in their teeth and the flying spray freezing upon everything it touches—boats, masts, sails, decks, clothes *completely cased in ice, and* fish frozen solid as soon as taken from the water. The inborn politeness of these fishermen to stranger women is *something* delightful to witness. I remember once landing in Portsmouth and being obliged to cross three or four schooners just in (with their freight of frozen fish lying open-mouthed in a solid mass on deck) to reach the wharf. No courtly gentlemen could have displayed more beautiful behavior than did these rough fellows, all pressing forward with real grace—because the feeling which prompted them was a true and lofty feeling—to help me over the tangle of ropes and sails and anchors to a safe footing on shore.

"Very few accidents happen, however: the islanders are a cautious people. Years ago, when the white sails of their little fleet of whale-boats used to *flutter out of the sheltered bight and stand* out to the fishing grounds in the bay, how many eyes followed them in the early light and watched *them in the distance through the day, till, toward sunset,* they spread their wings to fly back with the evening wind! How pathetic the gathering of women on the headlands when out of the sky swept the squall that sent the small boats staggering before it and blinded the eyes, already drowned in tears, with sudden rain that hid sky and sea and boats from their eager gaze! What wringing of hands, what despairing cries, which the wild wind bore away while it caught and fluttered the homely draperies and unfastened the locks of maid and mother to blow them about their pale faces and anxious eyes! Now no longer the little fleet goes forth, for the greater part of the

islanders have stout schooners, and go trawling with profit, if not with pleasure. A few solitaries fish in small dories, and earn a slender livelihood thereby.

"Most of the men are more or less round-shouldered, and seldom row upright, with head erect and shoulders thrown back. They stoop so much over the fish-tables—cleaning, splitting, salting, packing—that they acquire a permanent habit of stooping."*

5. THE INDIAN FISHERMEN OF NEW ENGLAND.

THE INDIANS OF PASSAMAQUODDY BAY.—The Passamaquoddy Indians in the neighborhood of Eastport, Me., are engaged in various fisheries, the chief object of pursuit being the porpoise, which is taken for its oil. The pursuit is an exciting one, the Indians in their slender birch-bark canoes approaching to within gun-shot, when the animal is killed, and afterward secured with a lance, and either towed to land or taken into the boat.

INDIANS OF SOUTHERN NEW ENGLAND.—The Indians of Gay Head, a well-known settlement at the western end of Martha's Vineyard, and of other points on the south coast of New England, have in days past been famous whalemen, and were often found filling the position of boat-steerer, particularly on the New Bedford ships.

6. THE BRITISH-PROVINCIAL FISHERMEN OF NEW ENGLAND.

There were in 1880 about 4,000 men, natives of the British Provinces, employed on our fishing vessels. They are, as a rule, natives of Nova Scotia, though there are many from Cape Breton and Prince Edward Island, and a considerable number from other parts of Canada and from Newfoundland. The Nova Scotians are, for the most part, of Scotch descent, while the Newfoundlanders are Irish. Many from Nova Scotia and Cape Breton have a share of French blood in their veins. They are all known by the general name "Nova Scotians."

SEAMANSHIP.—A great many of the most skillful fishermen and skippers are from the vicinity of Pubnico, Lockport, Le Have, and Lunenburg, Nova Scotia. These men have an hereditary knowledge of maritime subjects, for there has for a long time been a considerable fleet of bankers owned in that Province. Many other excellent men come from other parts of Nova Scotia, Cape Breton, and Prince Edward Island.

IMMIGRATION.—According to Capt. Epes W. Merchant, of Gloucester, the first Nova Scotian came to that port about the year 1828, on the fishing schooner commanded by Capt. Elisha Oakes. As will be shown hereafter, the practice of enlisting Newfoundlanders was common as early as 1648, and has doubtless continued ever since to greater or less extent

Capt. Fitz J. Babson, the collector of customs at Gloucester, in a letter to the Chief of the Bureau of Statistics in 1875, says:

"For some years there has been a large immigration of male adults coming from the Provinces to engage in the fisheries of Gloucester. They are mostly young men and unmarried. The superior class of vessels belonging to this port employed in the fisheries, the liberal and excellent quality of provisions furnished by the owners, the prompt settlement and payment in cash for the fares obtained instead of payment in goods, &c., which is the usual manner of payment to fishermen at other places, the rapid promotion to the command of a fine schooner consequent upon skill and success, all conspire to draw the ambitious young seamen from the Provinces.

"These immigrants make up to a large degree the crews of our fishing vessels, and hence the loss of life falls principally upon them. If the loss of life were confined to the native population of the town, Gloucester could not long maintain the fishing business.

* Thaxter's Isles of Shoals, 1873, p. 74.

"The capital of the Provinces finds better investment in building, equipping, and running vessels in the foreign trade than in the fishing business. Most of the fishing of the Provinces is pursued in small boats off shore. Many fishermen of the Provinces do not have sufficient capital to build and equip vessels to carry on the fishing business as it is done here. Persons wishing to engage in the fisheries usually apply first at Gloucester. Of the seven thousand men employed in the fisheries at this port three-fourths are not natives of the town, and this season the Provincial fishermen have come direct in vessels to Gloucester rather than by cars, or via Boston and other ports. Very few of these persons return to the Provinces to make their home there again."

Many young women come from the Provinces to the States on the American fishing vessels, in parties of from two to six or more. The passage is generally given to them free, and they are kindly and respectfully treated. Many come as passengers on the same vessels with their husbands or brothers. Large numbers come every year to Gloucester to seek employment, and many of them ultimately marry their countrymen among the fishermen.

THE CAUSES OF IMMIGRATION.—The causes of this immigration may be found primarily in the poverty of many of the coast districts of that Province. In certain of these coast districts the people are to a large extent dependent upon the summer visits of American fishermen. In the winter of 1867 and 1868, for instance, the suffering for want of food among the Nova Scotian fishermen is represented to have been very intense. Government aid and the charity of individuals were insufficient for its relief.*

Another inducement to the enterprising young Provincials is the opportunity for rapid advancement which may be found in a large American fishing port. A man of energy and courage may in a very few years become the skipper of a fine schooner, and be earning a good subsistence for his family, who, had he remained at home, would still have been plying his oars and line in the monotonous, profitless shore fishery.

"Among the Nova Scotians," writes Mr. George H. Procter, "may be found some of the smartest skippers of the fleet. These have made good use of the opportunities presented, and by their good qualities as seamen, capacity to handle a vessel, and possessed with sufficient daring to run the risks of winter fishing, they have attained good positions. Many of them, who came here with scarcely a dollar in their pockets, are now owners, or part owners, of vessels, showing an energetic spirit of industry and perseverance, which has surmounted difficulties and brought, as a reward of their toil, good returns.

"These men, as a class, are naturally fitted for the business. Born and reared by the sea, most of them of poor parents, it became a necessity for them to earn their own living at a very early age. Fishing was about the only occupation in which they could engage in the Provinces, and in this branch they commenced, bringing to it all the energies of youth, and by its pursuit laying the foundation of robust health, which enabled them to bear the toil it demanded, and preparing them for the more advanced positions which were offered on board the American fishing vessels.

"The yearly visits of our fishing fleet into the Provincial waters show these men the contrast between the two classes of vessels, American and Nova Scotian; the one, clipper-built and well appointed in every particular, and the other, clumsy and far behind in all the modern improvements and fittings. It is not strange that they had a desire to connect themselves with the better class of vessels, where opportunities for becoming masters and owners were so temptingly held out as the reward of industry, fidelity, and daring to venture for a trip of fish at the most dangerous and inclement seasons of the year. They caught the inspiration of the Yankee fishermen, as they

* Barnstable Patriot, March 24, 1868—[with many interesting details].

associated with them in their summer visits after mackerel, and learned of the winter fishing on Georges and the Banks; of the chances to make profitable trips; the opportunities to get ahead in the States; and the advantages for their children to obtain an education. They also learned how well the vessels were provisioned. All this led them to seek for chances on board our vessels, and we have drawn from the Provinces hundreds of their population, representing all grades, with a good proportion of really valuable men, who to-day are numbered among the energetic and thriving citizens of Gloucester."

Again, the system of oppression, to which the fishermen of many parts of Nova Scotia are subjected by the fishery capitalists, has had a very important influence in inducing them to seek other homes.

CANADIAN FISHERMEN AT HOME.—Napoleon Lavoie, esq., a Canadian fishery officer, in his report made in 1875 upon the Gaspé and Bonaventure divisions on the Gulf of Saint Lawrence, gives the following account of the condition of the population in that region, which explains in part the causes of the extensive immigration:

"Changes are so few and the rate of progress so slow on the extent of coast placed under my charge, that it is a very difficult thing to present my annual report under a new dress and to suggest matters which have not already been a frequent subject of allusion. There are, however, certain things which require urgent action and which demand continuous public attention. If the large divisions of Gaspé and Bonaventure, with the exceptional advantages presented by reason of their location on the rich shores of Bay des Chaleurs, have only a population of 30,000 souls, most of them neglectful of agricultural pursuits, such a slow rate of progress must be attributed to causes which I have in several instances already brought under your notice, and to which I must again call your attention.

"The actual settlement of the coast of Gaspé and Bay des Chaleurs hardly dates one hundred years back. Scarcely had it begun when powerful firms repaired thither from the Island of Jersey to take advantage of the labor and resources of the growing population. The ignorance and improvidence of the settlers, which repeated experience has not yet cured, unfortunately made them easy tools to the cunning and cupidity of merchants, who took advantage of their own supremacy to keep them in a state of comparative bondage. The policy adopted by the founder of one of these firms, that of Robin & Co., could possibly bring no other results than those witnessed at the present time. This far-seeing man understood at once that in order to keep these people under his power they should be prevented as much as possible from following agricultural pursuits, which would have insured a certain amount of independence. He therefore became purchaser of the seigniories of Pabos and Grand River, and subsequently deeded this land to the people at the rate of ten acres each. In spite, however, of the endeavors made to keep settlers tied to their fishing boats the soil is so fertile and the climate so favorable to agricultural pursuits that remarkable progress has been noticed in late years. The returns, however, of the last four or five years show that agricultural products have had a tendency to decline rather than to increase, although there has been no decrease in the population. It must not be lost sight of that public works, lumbering operations, railways, salmon and lobster canning establishments employed a large number of hands, which thus were lost to agriculture. On the other side the want of markets for the sale of farm produce is a further impediment to the progress of agriculture, the only purchasers being the Jersey merchants, who buy at low prices in order to supply fishermen. Even farmers themselves dare not sell on credit, as they would be sure to lose the amount of their debt, the merchants compelling fishermen to give them all their fish.

"Another reason why agricultural pursuits are more neglected now than they used to be is the

bad system of engaging fishermen. Up to five or six years past the majority of this class hired themselves only until the 15th of August, for what was called summer fishing, the proceeds of which went altogether to merchants in payment of accounts. On the 15th of August, let the bills be settled or not, fishermen began working for themselves, and were thus enabled to purchase their winter provisions wherever they liked, the fish being usually sent to Quebec. Thus they eked out a living, and, working at home, were enabled to cultivate a little plot of ground, which yielded a small return for their industry. The Robins, however, soon found out that this system made the fishermen a little too independent, and anticipating a chance of tightening the bonds under which they were kept, gradually changed their mode of engagement to another, which the improvident and too confiding fishermen adopted without paying sufficient attention to its effect. The mode of engagement now followed on the coast of Gaspé is the half-time system. Most of the fishermen are sent to the large establishments of Percé, Newport, Pabos, and of the North Coast, to fish there until the end of August or September, so that when the fishing is over there is hardly anything left for them to do. The weather is apt to be so stormy at this period of the year that weeks may elapse before they are enabled to fish, and there is no occupation for them on shore.

"This system, which at first sight may seem advantageous, is nevertheless disastrous to the fishermen, as it prevents them from cultivating their small plots of land, and compels them to procure everything from merchants, who are thus enabled to take advantage of the position in which they are placed. This system is still more prejudicial in so far as it increases the exports of Jersey firms, thereby diminishing the supply on our markets and enhancing the price of codfish. It is also, as may be easily understood, ruinous to the coasting trade.

"There is no need to repeat here what I wrote last year about these firms, their mode of trading, and their narrow and ambitious views. What I then said and what I write to-day will, I venture to say, be sufficient to enable you to understand the position of a large and wealthy portion of our Dominion, the situation in which is placed a whole population reduced to an undisguised state of vassalage, the want of resources and education affording them no means of resisting this oppression. It is certainly not useless on my part to try once more to urge your solicitude towards this unfortunate class of our own people, whose position is an anomaly of the age in which we live."*

In the winter of 1861–'62 there was great destitution and suffering among the Newfoundland fishermen, particularly those living about Placentia Bay, owing chiefly to the poor fishing in the summer of 1861.†

TRANSIENT FISHERMEN.—A great many fishermen are every year shipped by American vessels in the Provincial seaports, and a considerable proportion of these men, though yearly making up a part of the crews of our fishing fleet, never became residents of the United States.‡

THE FISHERMEN OF NEWFOUNDLAND.—The following account of the Newfoundland fishermen gives an idea of their peculiarities, most of which are retained by the men of that region who enter the American fishing fleets:

"The speech of the Newfoundland fisherman is full of phrases derived from his every-day employments. To make an engagement for a term of service is to 'ship' with Mr. So-and-so. Even servant girls are said to 'ship for six months' when they engage with a mistress. A young man 'ships' himself to a sweetheart when they are affianced; and a church is said to have 'shipped' a

* Report of Commissioner of Fisheries of Canada for 1875, pp. 39, 40.

† Cape Ann Advertiser, January 24, 1862.

‡ The Gloucester Telegraph of June 8, 1870, remarks: "Our correspondent at Port Hastings, Cape Breton, sends us the following fishing items: Schooner Yazoo, of Provincetown, Captain Morrison, arrived here May 21; took men and supplies and sailed north on a fishing voyage 27th. Schooner Julian, of Provincetown, Captain Donlin, arrived 21st and took men and supplies for a fishing voyage to Grand Bank. Schooner Oriola, of Provincetown, Captain Donlin, arrived 21st and took men and supplies for a fishing voyage to Grand Bank."

new parson, or perhaps he is called the 'skipper' of the church. The master of the house, whatever his occupation, is invariably 'the skipper,' and the mistress is 'the woman.' 'How's the woman?' is the usual way in which a man is asked regarding the health of his wife. Gaining an advantage over a man is called 'getting to windward of him.' 'Mr. Blank is a terrible knowin' man; there's no gettin' to windward of him.' Is a man prosperous, he is said to be making 'headway'; if the reverse, he is 'going to leeward.' To initiate any undertaking is described as 'getting it under way'; and to live meanly and parsimoniously is to 'go very near the wind.' There is a world of meaning in the Newfoundland proverb, 'the big fish eat the little ones.' Thus pithily and with a sort of mournful cynicism do they at times describe their own forlorn condition at the end of a fishing season, when, in payment of their debts, the whole proceeds of their toil go to the store of the wealthy merchant, while they are half starving during winter.

"Of profitless talk, it is said in reproof, 'words fill no nets.' A dull, plodding man, who succeeds in spite of deficiency by honest industry, is said to 'get on by dint of stupidity and hard work'—a most expressive description.

"Another peculiarity of the Newfoundland fishermen, derived from their sea-faring habits, is an inordinate fondness for flags. Every merchant has his flag flying on his storehouse or wharf, as though a state of active warfare existed, while at the principal harbors the approach of each vessel is signaled by a flag, be it schooner, brig, brigantine, or ship. On Signal Hill, overlooking Saint John's Harbor, three masts are erected, and at times, when a number of vessels are approaching the port, these, with their yards, look like a draper's shop, with the various flags streaming in the wind. Flags, however, are utilized in other ways. When any important personage has 'crossed the bourne whence no traveler returns,' the flags are hoisted half-mast; but when a wedding takes place, all the bunting in the place floats in the breeze. Big 'sealing guns' [used in shooting seals on the ice], whose report is like that of small cannon, are brought out and fired continuously, and evidently afford the greatest delight on these joyous occasions. In the 'outports,' as all places but Saint John's are named, it is usual to catch the happy couple in a net as they emerge from a church—a symbolic net, perhaps—indicating that both are netted for life. In these 'outports,' too, church bells are few and far between, and the time for each service is indicated by hoisting on a pole a flag, on which is emblazoned the miter or the cross. Each school-house, too, has its flagstaff, and when the flag is hoisted the urchins are seen coming along the paths, 'creeping like snails unwillingly to school.'

"Near the shores Newfoundland is rocky, the ground being everywhere covered with stones of all sizes. The word 'stone,' however, is rarely used, the smallest pebble and the largest bowlder being alike called a 'rock.' Boys invariably speak of 'firing rocks,' but never of throwing stones. A servant was asked how she had been spending her time lately. Her reply, 'Why, I have been heavin' rocks out of them raisins for the best part of an hour.' Thus 'stoning fruit,' is 'heavin' rocks' in Newfoundland. So abundant are the rocks in some places and so scanty the soil that suitable ground for the burial of the dead cannot be found; and amid huge bowlders the graves are made by soil brought from a distance; or, where this is not possible, the coffin is laid upon the rock above ground and then walled in and covered. It is not very uncommon for graves to be dug less in depth than the coffin. Of course this is true only in certain localities.

"Among the primitive population of the 'outports' there is, among the Protestant portion, a wonderful passion for choosing names taken from the Old Testament, and these at times the oddest and most uncommon they can select. Israels, Reubens, Daniels, Azariahs, and Isaiahs are plentiful as 'rocks.' But it is rather startling to be introduced to Miss Lo-Ruhamah Tucker, or Miss Lo-Ammi Squires, and to be told that the little flaxen-headed girl you are trying to make

friends with rejoices in the name borne by one of the daughters of the patriarch Job, Keren-happuch, or that the baby's name is Jerusha. To those not quite familiar with Scripture names it may be well to say that the first two are to be found in Hosea, I, 6, 9. It is on record that one child was baptized Beersheba, entered in the marriage register in due time as Bathsheba, but always called Bertha by her neighbors. A clergyman of the Church of England relates that once in beginning a service in a private house in an 'outport' a woman near him, intending no offensive familiarity, lifted up a corner of his surplice, and, after examining it with finger and thumb, pronounced it aloud, 'A beautiful piece of stuff.' Under similar circumstances he was startled on another occasion, in the middle of his sermon, by an old woman in the chimney corner calling out to some young ones, 'My gracious, girls, I've forgot the loaf! Julia, go out to the next house and hang on the bake-pot.' It must be understood that these instances occurred in some of the primitive outlying settlements, far from the center of civilization, where the people seldom see a clergyman, and are quite unaccustomed to the solemnities of religious assemblies. They welcome eagerly the rare visit of clergymen in these scattered hamlets, and whole batches of children of various ages are baptized by him at the same time. So cold is weather in winter, in the more northerly parts of the island, and so wretched their houses, that, in order to keep the loaf from freezing at night, it is a practice to wrap it in the blanket and take it to bed when retiring.

"The population is a mixed one, nearly half being the descendants of Irish settlers, the rest English; most of them sprung from progenitors who came originally from Devonshire, Dorsetshire, and Hampshire. The descendants of the latter retain many of the peculiarities of speech which still distinguish the peasants of Devonshire. They say, 'I's took no notice to she,' that is, no notice of her. 'Did 'ee want anything wi' I?' They speak of their 'handses and postses;' of their cows being 'alossed,' and their bread 'amade.' They will say 'Mubbe I's goun home.' The parson is 'pareson,' and they ask him to ''bide a spurt' with them. A 'spell' is either short continuance at labor or a time of rest. Short distances are, in common speech, measured as 'spells.' Thus 'two shoulder spells' is a distance a man would ordinarily carry a burden on his shoulders, resting once in the midst. The word 'obedience' is sometimes used for 'obeisance.' Thus, children are directed to 'make their obedience,' that is, to bow courtesy. The inhabitants of a settlement are called 'liviers,' and if any district be uninhabited there are said to be no 'liviers' in it. An expressive phrase is used to indicate a fall in the temperature—'To-day is a jacket colder than yesterday.' 'How do times govern in Saint John's?' is a common question which is answered by recounting the prices of fish, oil, and provisions. 'Praise the fair day at e'en,' is the Scottish proverb which has its counterpart in Newfoundland,' 'Praise the bridge that carries you over.' The folly of lazy, shiftless expedients is well expressed by saying 'He sits in one of the tilt and burns the other.' When admiration of a benevolent man is expressed, he is described as 'a terrible kind man;' or the weather is commended by saying, 'It's a shocking fine day.' Clever, in Newfoundland, means strong or large. A 'clever man' is a stout, large man. A 'clever baby' is a hearty, big baby. A singular use of the word 'accommodation' is common. A person of bad repute is said to have 'a very bad accommodation.' Or a servant on leaving his master requests 'an accommodation,' evidently a corruption of recommendation.

"With all their primitive and often amusing peculiarities and local customs the fisherfolk of Newfoundland have many sterling qualities of head and heart; and all they want to put them on a level with corresponding classes in other countries more advanced in the arts of civilized life is education. No one could live among them without liking them. In simplicity of character, warmth of heart, kindness, and hospitality, they are unsurpassed.*

* Cape Ann Advertiser, January 15, 1875.

FISHING VILLAGES OF NEWFOUNDLAND.—A writer in Harper's Magazine for 1854 writes:

"Fishing, or some process connected with it, is the occupation of almost every man, woman, and child in the country. Out of Saint John's, either fish or some sign of the finny tribe, visible or odoriferous is met with wherever there is a population. At a distance from the capital, in the small settlements, the fishermen live in unpainted wooden cottages, scattered in the coves, now perched upon rocks or hidden in the nooks, the neighborhood showing small patches of cultivated garden ground and copses of stunted wood. Each cabin has its fish flake, a kind of rude platform, elevated on poles ten or twelve feet high, covered with a matting of sticks and boughs, on which the fish are laid out to dry. At a convenient point on the shore is a stage, much more strongly constructed, jutting out over the water. It forms a small pier, made in part to serve the purpose of a ladder, at which a landing frequently is alone possible on the steep and rock-bound coast.

"On returning from the fishing ground, the boat is brought to the stage with the cargo, and sticking a prong in the head of each fish, they are thrown upon the stage one by one, as hay is pitched into a cart. The operations of cutting open, taking out the entrails, preserving the liver for oil, removing the backbone, and salting, are immediately performed upon the stage, in which the younger members of the family are employed. The drying on the flakes is the last process.

"It is the inshore fishery that is prosecuted by the British, not extending generally more than a mile or two from the harbors, that of the Great Bank being abandoned to the Yankees and French."

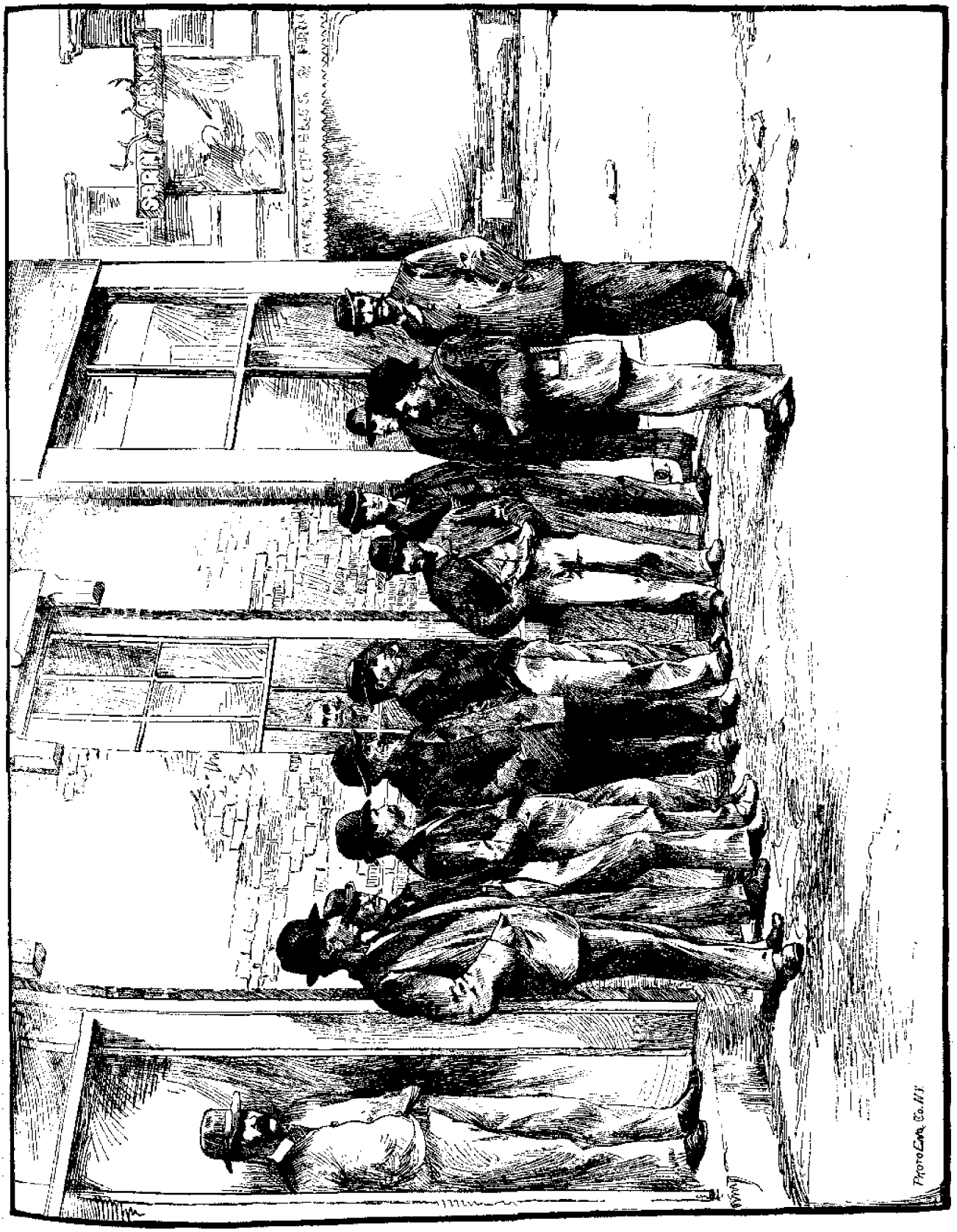
EARLY ENLISTMENT OF NEWFOUNDLANDERS IN THE FISHERIES OF NEW ENGLAND.—The following extract from Hubbard's History of New England, referring to events which took place in 1648, shows that fishermen from the regions now designated as the British Provinces, participated in the fisheries of New England at that time:

"Some of these petitioners being bound for England, their papers were searched by the authority of the governor and council, amongst which were found the copies of some petitions and queries to be presented to the commissioners for plantations. One petition was from some non-freemen, pretended to be in the name, and upon the sighs and tears, of many thousands, &c. In the preamble they showed how they were driven out of their native country by the tyranny of the bishops, &c. One of their petitions was for liberty of conscience and for a general governor. They had sent their agents up and down the country to get hands to this petition, but of the many thousands they spake of, they could find but twenty-five hands to the chief petition, and those were, for the most part, either young men who came over servants and never had overmuch shew of religion in them or, fishermen of Marblehead, feared to be profane persons, divers of whom were brought the last year from Newfoundland for the fishing season, and so to return again. Others were drawn in by their relations, and those depended upon for means how to live."*

7. THE IRISH FISHERMEN OF NEW ENGLAND.

IRISHMEN IN THE GLOUCESTER AND BOSTON FLEETS.—There are many Irishmen in the Gloucester fleet; among them are individuals who have distinguished themselves by their skill as fishermen. As a rule, however, these men, as well as those of Irish descent who have come from Newfoundland, are from the peasant classes, and are remarkable rather for stolidity, indifference to danger, and endurance of hardship, than for enterprise and activity. They are most likely to be found among the crews of the George's-men, the dull monotony of hand-lining being better suited to their temperaments than to that of the Americans, who prefer the cleaner, safer,

*Hubbard's History of New England, from the discovery to 1680. Boston: 1848, p. 515.



Portuguese from Azore Islands, engaged in George's Bank cod fishery from Gloucester, Mass.

From a photograph by T. W. Smillie.

variable, and more nervous employment of mackerel catching, or the more remunerative and exciting experiences of the fresh-halibut fishery.

The Irish fishermen are often clannish, and an Irish skipper soon gathers around him a crew of his own nationality. Vessels thus manned are not noted for their trimness and neatness.

At Boston there is a considerable fleet of market boats owned and manned entirely by fishermen from the west coast of Ireland. Their boats are built precisely like those of Galway and they employ their own home methods. This fishery is described at length elsewhere. A number of these Irish boats may be seen at any time in the docks at Commercial or "T" Wharves, Boston, and it is doubtful if anywhere else in this country can be seen so unadulterated a representation of Irish peasantry as in the old fishermen who sit about the docks counting their fish and chatting in Gaelic.

8. THE SCANDINAVIAN FISHERMEN OF NEW ENGLAND.

SCANDINAVIANS IN THE GLOUCESTER FLEET.—There may be found among the Gloucester fishermen a large percentage of Scandinavians, mostly Norwegian, a considerable number of Swedes, and a few Danes.

They are intelligent, enterprising men, a large proportion of whom rise to the command of vessels. In many of their traits they resemble the fishermen of New England birth. Strong, accustomed to hardship, skilled in the management of small boats from long experience inherited and personal at home, they are best suited for trawling and hand-lining from dories. The schools of Norway and Sweden have taught them navigation thoroughly and most of them are excellent sailors, having served frequently in the merchant marine. Many of these men have families, having brought their wives with them from home, or married their countrywomen who have come over alone. They soon learn to speak English.

9. THE PORTUGUESE FISHERMEN OF NEW ENGLAND.

PORTUGUESE FROM THE AZORE ISLANDS.—The so-called Portuguese fishermen of New England are, with few exceptions, natives of the Azores or Western Islands. Their attention was doubtless directed to this country by the visits of the Cape Cod vessels to their islands. A favorite cruising ground of the Provincetown sperm-whalers was the "Western Ground," which is situated off the Azores. These vessels, as well as those of New Bedford and Nantucket, have for nearly three-quarters of a century been accustomed to touch at Fayal to recruit, to land sick men, and to ship home oil. Extra hands were often shipped at the islands to fill up the complement of the crew or to fill the places of deserters. Many were brought home in the whale ships, and, as a consequence, some of the more enterprising began to bring over their families. A great impulse was given to their emigration in 1853, when the growth of a fungus devastated the vineyards and the wine crop of the Azores began rapidly to fail.

PORTUGUESE COLONIES IN NEW ENGLAND.—The largest colonies are at Provincetown, where there are numerous families established, and four hundred of the fishermen from this port are Western Islanders. At Gloucester, also, there is a considerable colony at "Portugee Hill," and about two hundred and fifty Portuguese fishermen in the fleet. There are many Portuguese families living at New Bedford and about eight hundred of the whalemen sailing from here are of this nationality.

CHARACTERISTICS OF PORTUGUESE FISHERMEN.—The Portuguese at sea are industrious and daring, having been accustomed for generations to lives of hardship and adventure in the boat fisheries at home, and by instinct sturdy laborers and frugal economists. They make good cooks

or "stewards," and are often found serving in that capacity. On shore they live in little homes of their own, built together in small communities, they mingling scarcely at all with their American neighbors, and rarely, if ever, going out to service. Men are absent in summer at sea, and in the winter engage in the shore fisheries. The women and children contribute to the general prosperity by gathering berries and beach plums for sale, and by small household industries. In Provincetown they are rather looked down upon and avoided by the native population, but this is apparently the result of race prejudice, for they are honest and unobtrusive. They are always self-supporting and often well to do. At sea the men are recognized as equals by their shipmates, and there are few vessels which have not among their crews some "Manuel" or "Antone" who talks a dialect of Latin-English and serves as a stimulant to ethnological speculations among his shipmates. The women are not so much in intercourse with Americans as the men, and usually speak English with difficulty. They are always devout Catholics and make up at Provincetown and Gloucester a large part of the congregation in the churches of this sect.

Of late years a number of Portuguese have become skippers of Gloucester vessels and part owners as well. There was formerly a prejudice against allowing them to take these positions, but this is now vanishing. A Portuguese skipper rarely has any but Portuguese in his crew. As a class they seem to prefer the George's cod fishery to the other fisheries, more than two-thirds of all the Portuguese fishermen of Gloucester in 1879 being in the George's fleet.

10. THE NEGRO FISHERMEN OF NEW ENGLAND.

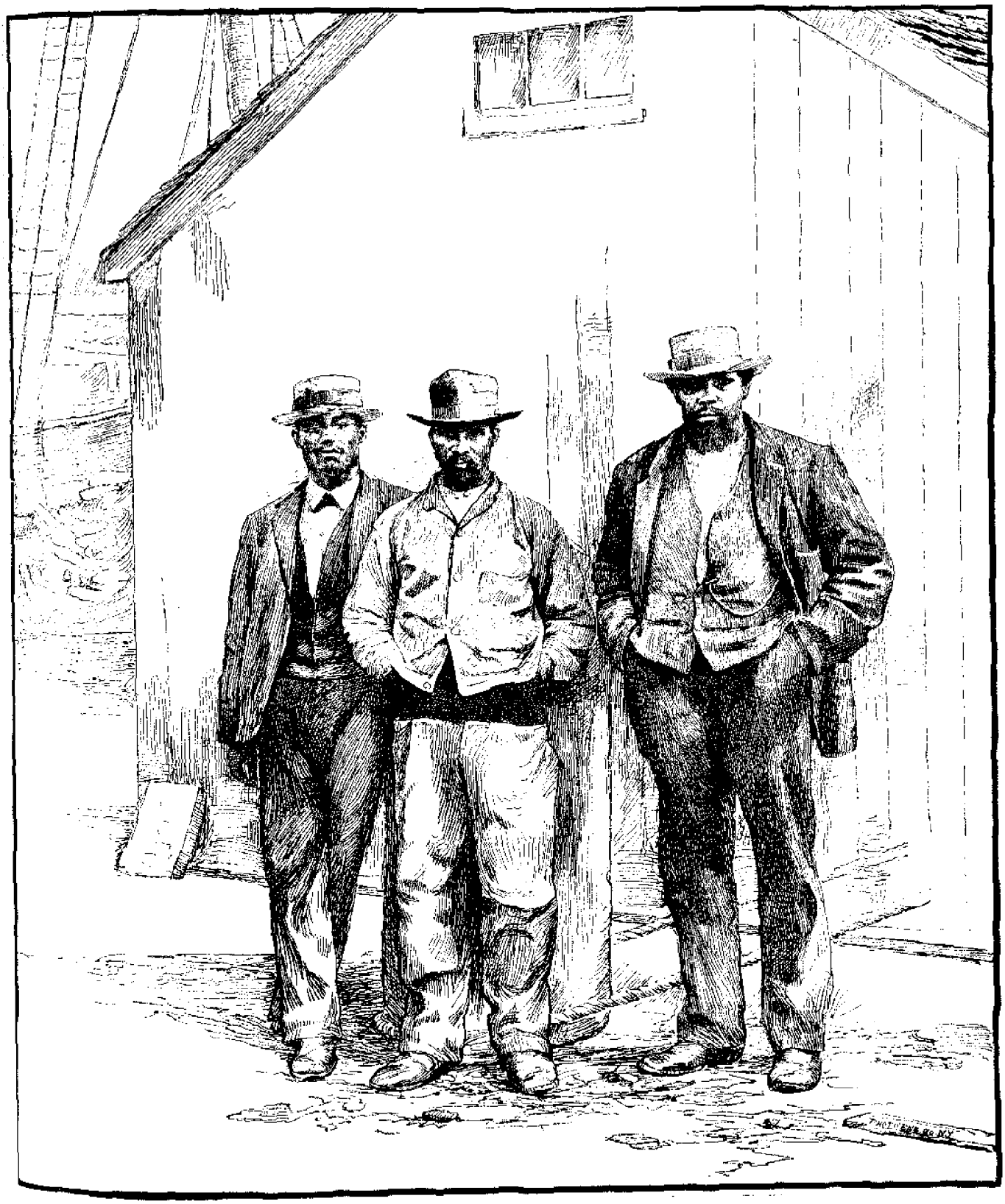
NEGROES AS WHALEMEN.—New England has few negro fishermen except in its whaling fleet, though occasionally one is found serving as cook on a cod or mackerel schooner. In 1880 there was not a negro among the 4,500 men in the Gloucester fleet.

The whaling fleet of New Bedford has among its crews many negroes, some shipped in the West Indies, others picked up at Zanzibar and other recruiting stations. In 1880 there were two hundred negroes in the fleet.

The Provincetown whalers often ship a part of their crew at Jamaica, St. Croix, or other of the West India Islands. These negroes are rarely of mixed blood, and are active, powerful men, speaking a *patois* hardly to be understood even by those who are familiar with the speech of the negroes of their own States. Negroes sometimes attain to the position of boat-steerer, but I have been unable to learn of instances where they have become captains or even mates.

11. THE "BAYMEN" OR FISHERMEN OF LONG ISLAND.

THE HABITS OF "BAYMEN."—The character of the fisheries of Long Island, New York, is such that it is a most difficult matter to determine how many men are professionally engaged in them. The men who fish are also by times oystermen, farmers, clammers, yachtsmen, and gunners, following either of these occupations as they may feel at different times inclined. On the south shore, and in some other parts, they style themselves "baymen." Many of them own yachts of from 3 to 20 tons, are good sailors, and keep their boats neatly painted, so that when taking out parties of anglers to fish for bluefish or other fishes their boat would hardly be thought to have been engaged in oystering most of the winter. This class of men are very numerous in all parts, and while individually they take but few fish, collectively their catch amounts to considerable in the course of the year. These "baymen" get from $3 to $5 per day for sailing a party, and usually get all the fish, although they do not demand it as part of the contract, as is the case at some places on the New Jersey coast.



Portuguese from Cape de Verde Islands, engaged in whale fishery from New Bedford, Mass.

From photograph by T. W. Smillie.

The men engaged in the menhaden fisheries are drawn from all parts of the island, are generally sons of farmers, and, with the exception of the captains of the steamers, engineers, and the superintendents of the factories, are not usually in the business more than a season or two.

MORALS.—The people who are engaged in the Island fisheries have more the manners and appearance of farmers than of the inhabitants of the exclusively fishing towns of the Eastern States, and they will compare favorably in regard to education, thrift, and morals with most rural populations. I think that these virtues increase with the number of miles between the villages and New York City, and that there is also a difference between the north and south sides in this respect which may have had some influence on the selection of so many places of residence by wealthy New Yorkers on the south side, with its flat, low, barren lands, and on the waters of the uninteresting Great South Bay, in preference to the high, rolling north side, with its charming, deep, romantic bays; here there have been more deeds of violence, and among the majority of the native population the language of ordinary intercourse is a shade more profane and loose. We do not mean by this to assert that, even in the district spoken of, these unprofitable vices are in excess of what one often finds in the interior, for most observant men must have noticed that in small villages and country places there is, especially among young men, an affectation of profanity and its accompanying vulgarity which seems strained to a city-bred man, and at first astonishes him when heard from any but the vilest of men. To those who have been much among soldiers, sailors, and fishermen, it is not at all surprising to hear bad language from men who are so well known for their honest and upright conduct that they think that they can afford to be careless in respect to this, a point which, however, impresses the stranger unfavorably.

HOMES.—The dwellings of the fishermen are generally neatly painted and comfortable; their families well dressed; and it is rare to see an exception to this rule, for the varied pursuits included in the list of labors by which a Long Island fisherman earns his living afford him a change from one which is temporarily dull to something better and find him employment of some kind the year around. When fishing is dull he turns his hand and boat to oystering, and if these are out of season the hard or soft clam offers him remunerative employment.

12. THE OYSTERMEN OF MARYLAND.

OYSTER DREDGERS.—There are two distinct classes of oystermen on the Chesapeake Bay, namely, dredgers, and scrapers or tongers. The business of oyster dredging is carried on by about 5,600 daring and unscrupulous men, who regard neither God nor man. The characteristics and habits of these men are discussed, in connection with the oyster fisheries of Maryland, in Section III of this report. Mr. Edmonds there describes them as among the most depraved bodies of workmen to be found in the country. They are "gathered from jails, penitentiaries, workhouses, and the lowest and vilest dens of the city."

OYSTER TONGERS.—The oyster tongers or scrapers are, both socially and morally, somewhat superior to the scrapers, though, as a class, indolent and improvident. Mr. Edmonds, in the section above referred to, also discusses the characteristics of this class of oystermen. The oyster laws of Maryland require every vessel and boat engaged in gathering oysters to be licensed. The amount received from tonging license must be paid by the clerk of the circuit court of the county "to the school commissioners for the public schools of the respective counties where such license is issued; provided, the sum received from white tongers shall go to white schools, and the sum from colored tongers to the colored schools."

DREDGERS AND TONGERS COMPARED.—The two classes may thus be briefly contrasted:

The oyster-dredge-fishermen of the Chesapeake are almost entirely whites of the lowest order.

The oyster tongers are one-third negroes, and the other two-thirds white fishermen, small farmers, and truckers.

The number of men in a crew of a dredger averages eight; in the crew of a scraper, not more than three. The total number of men employed in dredging equals 5,600, and in scraping 5,148. The average returns for a season for each dredger is $175; for each scraper, $225.

13. THE OYSTER-SHUCKERS OF MARYLAND.

OYSTER SHUCKERS.—There are nearly 10,000 persons employed in oyster-shucking in Maryland, about two-thirds of the number being males, and the rest females. Their aggregate annual earnings are about $800,000. About three-fourths of the men are negroes, and they are, as a rule, steady workmen, while the whites are disposed to be idle and intemperate. Nearly all the females are employed in the steam oyster-houses of Baltimore. They are mostly white girls of foreign parentage, and range in age from eighteen to twenty-five years, the proportion of older ones, as of *colored*, being *small*.

14. THE FISHERMEN OF FLORIDA.

BY SILAS STEARNS.

FISHERMEN OF KEY WEST.—The majority of the fishermen of Key West are descendants of the Bahamians who have lived on the island for many years, or are quite recently from the Bahama Islands.

The remainder are Cuban Spaniards, negroes from the West Indies, and the usual sprinkling of Irish, French, Germans, and Swedes, who are found everywhere in this country.

There are some few fishermen from the North Atlantic States, but they do not form so prominent a class as the "*Bahama Conchs*," or the "*West Indian negroes*."

The Bahamians, both black and white, have been brought up on the water, and are probably the best boatmen and fishermen in this region. They know no other professions than fishing, sponging, turtling, and wrecking; and it may be said to be an hereditary profession, since their fathers and forefathers followed the same profession and no others. With the other classes or nationalities it is quite different. They are men who have been drifting about the world as sailors, and have been left here by vessels of all the nations, and for the present have adopted the profession of fishermen.

I can not learn of any disaster happening to the Key West fishermen, beyond an occasional wrecking of some small vessel where no lives were lost. No smacks sailing out of this port have ever been lost.

The manner in which the fishermen live on shore is plain, yet comfortable. The better class, or well-to-do fishermen, are the Bahamians and Americans who have families. They own small, comfortable houses in the city, and have all to eat and wear that other classes of people do.

In society they occupy a good standing, and very often hold responsible and honorable offices in the local government.

Another class, consisting chiefly of young and unmarried men, who are dissipated, and when ashore lead an unprofitable and low life, are looked down upon with contempt and considered a public nuisance. The temperance reform has done great good here, and is rapidly thinning out their numbers.

The older men of all classes are generally very ignorant, but few being able to write their names, but the young people, having fair school advantages, are, as a rule, quite intelligent, and can now transact their own business as their fathers never could.

FISHERMEN OF CEDAR KEYS.—Nearly all of the two hundred and sixty fishermen of this place are Americans or of American birth. The majority of them are men who have been engaged in the different branches of the fisheries on the Atlantic coast, in such places as Chesapeake Bay and coast of the Carolinas, and the balance are natives of West Florida, who have, in most cases, taken up this business quite recently. Taken as a class they are quite intelligent, industrious, and quick to adopt new methods that will tend to facilitate their work.

The Spanish, Italian, and French creoles, who are generally lazy, ignorant, and inclined to keep up old styles of fishing, &c., and are found in the majority at many of the other fishing communities west of Cedar Keys, are not often met with among the fishermen, and are not at all popular.

FINANCIAL PROFITS OF FISHERMEN.—Although they work steadily and well, the seasons for profitable fishing are so short that they do not gain more than a bare subsistence.

There is great wear and tear to the nets also, one man often using up three or four nets in one season. When these nets, perhaps a new boat, and their household expenses are paid for there is little or nothing left to support them during the time that fishing is not carried on. Some are fortunate enough to get other employment, or to be engaged in the turtle fishing, but many are not, and such ones get so deeply in debt to the storekeepers that the profits of the ensuing year are taken to pay them. Nearly all are in debt from various causes, with no prospect of ever getting clear again.

FISHING POPULATION OF APPALACHICOLA.—The fishing population of Appalachicola includes representations of nearly all the nations of the world, the Americans and Spanish creoles being in the majority. Of the older men in this business here, some are Europeans who came in vessels when Appalachicola enjoyed a large cotton trade; others are New Englanders, left by men-of-war at various times, and the rest are natives of the Southern States. Many of the young men are of that class of rovers found aboard all the merchant vessels of this country, who have drifted here in some unaccountable manner, to stay but a season or two and then to continue their wanderings.

Those of the fishermen that are really inhabitants of the place are, as a rule, good citizens in every way. There are but few among them whose fathers had been in the fishing business before them, but the rising generation will probably adopt their parents' profession, perhaps more from necessity than choice. Their health is very good, in spite of the popular supposition that men engaged in sponge-fishing are unhealthy. Sickness is a rare visitor, a touch of biliousness or slight attack of "chills and fever" being the only forms. One captain told me that he had been here ten years, and believed there had not been over a dozen deaths of children from sickness in the whole time. In the fall a few cases of fever and ague occur. While on the water, in the bay, or on the "sponge reefs" a case of sickness is a very rare occurrence. They are not especially remarkable for longevity, but many of the old men of seventy, eighty, and eighty five years of age are still hale and hearty, and in some cases perform hard labor. With the women it is different. They marry young, and when thirty five or forty are broken down, and appear as though of twice that age. They very seldom live to be over sixty years of age, and the greater number do not reach their fiftieth year. Nearly every married couple has a large family of from four to twelve children. Their dwellings are unusually good, being in most cases houses that were built for men of wealth, when Appalachicola was in its prime; they are not kept up in their former good condition, yet make very comfortable habitations; and there being a small garden attached, are supplied with vegetables and fruits at little expense or trouble. Orange trees thrive well here, and nearly every yard has some of them.

The food used by these people on shore is plain and offering little variety, consisting mainly of fish and oysters. Fresh meat is not much used, salt pork taking its place. While fishing the men generally live in better style, having all the best articles of food that can be bought at the stores. The reason of this is, that *all* the provisions are advanced on credit, and the storekeepers, having the vessel or boat, gear, and catch as security, are willing to advance more than to any one of the ordinary fishermen with a family, who has only his share of the catch wherewith to pay all of the necessary household bills.

The school system is very poor, only the children of the richer people attending, the tuition and outfit of books being too expensive for most of the poor. However, all the children receive some education in various ways, learning to read, write, and figure a little.

Of amusements there are but few, beyond an occasional gathering of old and young at some private house, where dancing and games are enjoyed, with refreshments at the end.

It is a quiet and orderly place. Every one conducts himself in public in a manner that would stand the severest scrutiny. Even the wild young men who, having "knocked about" over the world, are accustomed to all vices, here seem to be awed by the steadiness of others, and carry themselves accordingly.

When any one commits an act which by the authorities of the town is considered disgraceful, or not in accordance with their ideas, they furnish him an old "bateau," and give him but a short time to choose the direction which he shall take.

There are one or two bar rooms, where the old and middle-aged men obtain their "toddy" without comment from others, but if a young man indulges too freely it will never be forgotten or forgiven. Many of the population, comprising the Spanish, Italians, and French, are Roman Catholics, provided with a priest and church, which they attend with their usual regularity. There are two or three Protestant churches, both white and colored, which are also well attended by old and young. It was said by a stranger, who was rather disgusted with the dullness of the place, that "because of having nothing else to do, the people went to church." The funeral of a young man took place since I have been here, and I must say that the men and boys turned out to attend in a manner that surprised me.

I have not met a fisherman yet who can give me an exact statement of his yearly earnings, for they are engaged in many kinds of work, and are idle part of the time. By putting several statements together, I believe I have arrived at a reasonable estimate of the profits of an active fisherman for one year. Let us suppose such a man is very fortunate and has work at all the fishing trades of the place in succession. First comes the sponge-fishing, beginning in March and ending in September, out of which, with good luck, a man may clear $200. He then is several weeks idle, when he joins a crew fitted out for the fall mullet-fishing. At this he works until the 1st of December, perhaps, clearing $40 or $50. The season for shipping oysters has by that time arrived, and as soon as he is back from mullet-fishing he is offered a chance on an oyster-boat. It is probably the last of December before he gets fully to work at oystering, which he follows until March, when the sponging-vessels again fit out. He will make on the oyster-boat about $75.

Summing up the year's profits, it will be seen that this man makes $300 clear of his own expenses, with which he clothes himself, and clothes and feeds his family.

15. THE FISHERMEN OF MOBILE, ALABAMA.

BY SILAS STEARNS.

Mobile smack and oyster fishermen are as a class so mixed in nationality that there are hardly two individuals of the same general character. Among them one finds a majority of southern Europeans, while the minority are natives of the United States and northern Europe. There are very few negroes in their number, and when such an one is employed it is as cook on some small oyster-boat or bay fishing-boat. There are but few cases where the profession is hereditary, and in such cases the man is quite sure to be of Spanish, Italian, or Greek descent. The older men in the business are, as a general rule, of foreign birth, but the young and middle-aged ones are Americans. Their health is good, and they are a strong, hardy class of people; I think there is far less sickness among them than among the planters and laboring men on land, who are troubled with all the forms of malarial diseases.

Consumption has claimed many of the smack fishermen during the last four or five years, but whether the disease is brought on and aggravated by cold and exposure or by dissipation is hard to say. Rheumatism is a common affliction among the fishermen, and many of them are nearly helpless with it. The fishermen of this section, when not broken down by dissipation, live to a considerable age, retaining active mental and physical powers to the age of eighty or ninety years. The women, marrying young and rearing large families, are worn out in early life and seldom live beyond their fiftieth year. As the greater number of the fishermen have their homes in the city, they live in about the same manner as other laboring men and mechanics do. Those who have enterprise enough to make a home are of the better-behaved class, and they live quite comfortably, though in summer, when not much fishing is done, the family have a hard time to obtain the necessaries of life. The majority of the fishermen do not marry at all, and spend their time ashore in carousing and in the "lock-up."

Very few have any education, and it rarely occurs that a fisherman is found who can read or write. Their children, if their parents live in the city, have good school advantages, and will probably make a better class of citizens. Nearly all who profess any religion are Catholics.

It is impossible to learn the exact profits of active fishermen, but a close estimate can be made. Some months they make $40 or $50 and there are many months when they make nothing. Several intelligent men tell me that they average $1 per day above their own expenses of board throughout the year, with which they clothe themselves and care for their families, if they have any.

16. THE FISHERMEN OF NEW ORLEANS.

BY SILAS STEARNS.

The New Orleans fishermen and oystermen are nearly all descendants of the Mediterranean coast fishermen and sailors, who came to this country years ago to engage in the fishing or fruit trade.

Frenchmen, Spaniards, and Minorcans are probably in the majority, the balance being made up of Italians, Portuguese, Sicilians, Corsicans, Greeks, and there are even a good many Malayans in their numbers. In nearly every case the fathers and forefathers were fishermen or sailors, and these men follow in their footsteps as nearly as they can in a country so different from that of their ancestors. They even preserve the old style of rigging their boats—a style seen nowhere else in this country.

The old and middle-aged men, as a rule, are very ignorant of anything outside of their profession, and it is quite rare to find one who can read or write. The French are generally more intelligent than the others, having been longer in this country, and seem to gain knowledge more readily than the Spanish and Italian creoles. The Malayans are also noticeable for their industry and promptness in business matters, and for their quickness to learn. They all retain much of the superstitiousness of their ancestors, which often influences them to their loss. For instance, a party of seine fishermen go into the marsh-bayous at night for the purpose of seining out some good fish feeding-ground. While they are in the act of hauling the seine, they see the suspended balls of light commonly called "jack-o'-lanterns," and which are often found in the swamps or marshes when peculiar gases and state of atmosphere are favorable, whereupon they become paralyzed with fear, and as soon as possible hasten from the spot, believing the lights to represent some evil being. When once frightened from a place in this way it is hard to entice them there again. The clouds, the sky, the wind, &c., have each their peculiar signification to them at times, and they will run no risk when the signs are unfavorable; not that there can be any great risk of their lives, but they seem to fear invisible objects, or that, if the signs are this way or that, they are sure to catch no fish, and therefore do not try.

Nearly all these people are devout Catholics, and attend the services of their church as regularly and promptly as any class of people.

On their boats or at fishing camps they live quite comfortably, but in rather a peculiar way in comparison with other American fishermen. There seems to be no regular time for anything, either work or recreation.

They work part of the night and sleep a part of the day, and have their meals thrown in at any and all times. The usual plan is to have a lunch at daylight—that is, coffee, bread, and fish—and the work on hand is attended to until about 10 o'clock, when a hearty breakfast is prepared and eaten, after which they sleep until about 4 o'clock in the afternoon, when dinner is served. From dinner-time until midnight, or after, considerable work is done; then come a lunch and more sleep. While at home they live in much the same style, even if working in the markets.

Taken as a class, these people are hardy and strong, seldom having sickness of any kind; even the contagious forms of disease which are so prevalent here in summer are unfeared by them. The men live to a considerable age, and retain their activity to a remarkable degree. But, as is the case in most warm climates, the women here have comparatively short lives. They generally marry at fifteen or sixteen years of age, and, having perhaps reared large families, are worn-out old women at the age of forty-five or fifty years.

17. THE FISHERMEN OF THE COAST OF TEXAS.

BY SILAS STEARNS.

The fishermen of the Texas coast are of much the same class as those of the Louisiana coast, though there seem to be more of Spanish descent than at the latter place. These Spaniards and Mexicans come from Mexico and represent the wandering set of fishermen to be found in every community. As at New Orleans, the Mediterranean countries are well represented.

There are but few negroes to be found among Texas fishermen, and hardly a man from northern Europe or the northern part of the United States.

From all that can be learned it is evident that the fishermen of this coast are very similar to those of New Orleans and vicinity, and therefore it will hardly be necessary to repeat what has already been said. It is probable that the Louisiana fishermen are better off financially, and

live more comfortably than those of this coast, yet there seems no good reason why this should be so, for fish are more abundant in Texas, and bring as good prices. The majority of these men are married and have their homes in the cities or towns near where they sell their catch.

18. THE AMERICAN FISHERMEN OF CALIFORNIA.

The number of Americans engaged in fishing on the coast of California is exceedingly limited, as Prof. Jordan points out in his discussion of the history of the fisheries of this State. The principal fishing towns, San Buenaventura, San Diego, and Wilmington, have grown up entirely within the last twenty years. The Americans introduced the eastern system to some extent, but the more frugal habits of the Chinese and Italians, who enter the field as their rivals, have enabled them to occupy the field to the exclusion of the former, who prefer to turn their attention to more lucrative industries. As is elsewhere pointed out, the markets in this region are very poor, and there is but little encouragement for enterprising men to engage in the fisheries. The fishing of Americans has been, for the most part, confined to seal hunting, shark fishing, whale fishing, trolling in the barracuda season, and similar industries which promise greater returns than ordinary fishing. The first house in San Buenaventura was built in 1860, and in 1870 its houses were nearly all of adobe. The first house about San Diego was built about 1868, while Wilmington arose about 1870. The growth of these coast towns was rapid for a few years. About 1875 it became feverish, and each of the towns went through a "real estate period." Speculation was universal, and hundreds of people came to each town hoping to make their fortunes. Prices were high, and in every department of work about fifteen men were engaged where there is now one. Then came a relapse and a collapse with harder times; there was less speculation and less demand for it. The whale fisheries declined; there were fewer mouths to feed and less cash to buy food, and the fishermen left the region.

19. THE ITALIAN FISHERMEN ON THE PACIFIC COAST.

FROM NOTES BY DAVID S. JORDAN.

In the shore fisheries of the Pacific coast there are engaged three hundred and three Italian fishermen.

SAN DIEGO COUNTY, CALIFORNIA.—In San Diego County, where formerly there was a considerable number of Italians engaged in fishing, there are now none, they having been starved out by the Chinese, who furnished fish to the local market of San Diego at such low rates as to render competition on the part of the Italians impossible. It is not more than ten years ago that the Italian fishermen had the entire business at this place in their own hands. When they left they traveled in a northerly direction.

LOS ANGELES COUNTY, CALIFORNIA.—In Los Angeles County, at Wilmington, there are eight Italian fishermen. They fish in two boats. These boats are not provided with live-boxes; the fish are therefore thrown in a heap on the forward part of the deck.

VENTURA AND SANTA BARBARA COUNTIES, CALIFORNIA.—There is only one professional Italian fisherman in Ventura County, at San Buenaventura. He has a small lateen-rigged boat. He uses two seines, each 240 feet by 10 feet, and one gill-net. His fish he peddles about the town at 6 cents per pound. An Italian shoemaker buys up the catches of some Chinese and Californians and peddles them through the town and among the Ventura Valley farmers, who give vegetables in exchange.

The fishermen in Santa Barbara County are chiefly Genoese, who speak English, French, and

Danish. They nearly all came here from San Francisco about eight years ago. Most of them are Roman Catholics, and, as a rule, are a simple, hearty, honest class of people. They live in reasonable comfort; better than the same class in Italy. Many of them have families, and they *are quiet, industrious, order-loving citizens. Their profits are small, nor could they be increased* much by catching more fish. Their children are generally bright and active. Many of them speak English and Spanish well, besides French and Italian. The first Italian fisherman who came there, Francesco Cavagleri, arrived in 1835. He made money by supplying a Spanish family of wealth with fish. The Italians with their lateen-rigged vessels came to San Francisco in 1848, and spread southward. The winter storms were too severe, and there were no wharves from which they could fish, so they left, and the Italians now there, five in number, have none of them been residents more than eight years. Their profits are small, and have been since the flush times of 1874-'76.

MONTEREY COUNTY, CALIFORNIA.—The Italians living and fishing in Monterey County are *conspicuous in their costume, which consists of black and white checked shirts, red flannel under-*shirts, gray trousers, black felt hats, golden ear-rings, and high rubber boots. On clear days a large Italian flag waves from their principal house inscribed, "Roma, la capitale d' Italia." Two or three of the nine Italians composing this company at Monterey are married. This company came from San Francisco and settled here in 1873. Georgio Vignosi, the captain, says that some sorts of fish, especially the flounders, have diminished in number, and that the bay has been over-fished. They manage to make a profit, on an average, of from $5 to $10 apiece per week. As will be seen by comparison, they make more than the Italian fishermen in San Francisco. They have five sail boats, averaging three-fourths of a ton, and of the usual pattern. One is lateen-rigged, the others sloop-rigged. Besides these, they own three skiffs. They own two hundred pieces of seine, each 240 feet long; some fine-meshed, for the capture of smelt, and some coarse-meshed for taking salmon. They own, in addition, twenty gill-nets, each from 240 to 250 feet long, and forty bunches of set-lines.

SANTA CRUZ COUNTY, CALIFORNIA.—In Santa Cruz, Santa Cruz County, there are fourteen fishermen from Italy. They live in the southern part of the city in detached houses, not forming a fisherman's quarter. They lash their boats, when not in use after hoisting them, to the docks; they do but little fishing in winter, except at certain favorable times, on account of rough weather. At Soquel are three Italians. These own four boats. They ship to San Francisco, and make greater profits than are made elsewhere on the coast.

SAN FRANCISCO COUNTY, CALIFORNIA.—First in importance as the abode of Italian fishermen on the California coast comes San Francisco County. In the city of San Francisco there are probably not less than 220 regular fishermen. About 70 boats are in use here. In 1876 the "paranzelle" was introduced, a drag-net of common use in the Mediterranean Sea.

The fishermen of other nationalities threatened to burn up these nets and the boats used when they were first employed. San Francisco is the only place in this country where this style of fishing has been introduced. There were formerly two rival companies who used these nets; they have now consolidated and divide the profits equally. Each company has three boats and employs 12 or 13 men, one of whom is constantly engaged in selling fish in the market. The stock is owned chiefly by men not actually engaged in fishing. This is divided irregularly, one man owning a net, another a boat, &c. Out of the gross profits are paid first the entire expenses, including provisions of the men, wear of the boats and nets, &c. The remainder is divided into shares, one share to each boat, one to each actual fisherman, and one-half share to each net actually in use. In these

two companies, there being six boats, two nets, and 25 men, the whole is divided into thirty-two shares. The captain sometimes receives one and one-fourth shares.

MARIN AND HUMBOLDT COUNTIES, CALIFORNIA.—In Marin County there are three points at which Italian fishermen may be found: Point Reyes, where are 2 Italians using one boat; at Marshall's, where 20 Italian fishermen live, using six boats; and on the west side of Tomales Bay, opposite Hamlet, where there are three companies of fishermen, chiefly Italians, 12 men in all, using six boats. They ship their fish to San Francisco. The total number of Italian fishermen in this county is 34.

About Eureka, Humboldt County, there are 3 Italian fishermen. At certain seasons some of those engaged in Salmon fishing on the Columbia River, Oregon, come down here for a short time and join in the fishing.

WASHINGTON TERRITORY AND OREGON.—In Washington Territory there are 9 Italian fishermen: 3 at Port Madison, 3 at Utsaladdy, and 3 at Port Townsend, fishing with boat for halibut and dogfish, which they ship to San Francisco or Portland, or else sell in their own town.

In addition to the numbers of Italian fishermen above enumerated and distributed, there are 800 Italians engaged in the Columbia River salmon fisheries, and 400 more in other salmon fisheries, including those of Sacramento River in which 345 Italian fishermen are employed.

These figures give a grand total of 1,513 Italian fishermen in all the regions above discussed.

20. THE PORTUGUESE FISHERMEN ON THE PACIFIC COAST.

THE CAUSES OF IMMIGRATION.—The presence of the Portuguese fishermen in California and New England is explained by Sir C. Wyville Thomson, who, in his "Voyage of the Challenger,"* pointed out the cause of the extensive emigrations of the Portuguese from the Azores shortly after 1853:

"Formerly Pico was the vineyard of the Azores. Previous to the year 1853, 20,000 to 30,000 pipes [from 3,000,000 to 4,500,000 gallons] were exported from the island of a dry, rather high-flavored wine, which commanded a fair price in the markets of Europe under the name 'Pico madeira.' In 1853 the wretched *Oidium Tuckeri* devastated the vineyards and reduced the population of the island, who depended mainly on their wine production for their subsistence, to extreme misery. Nothing would stop the ravages of the fungus. In successive years the crop was reduced to one-fourth, one-eighth, one-tenth, and then entirely ceased, and the inhabitants emigrated in great numbers to Brazil and California. Some few attempts have been made to restore the vines, but up to the present time there is practically no manufacture of wine in the Azores."

Doubtless many of the emigrants also settled in New England, especially the sea-faring portion, where they could have every opportunity of plying their vocation, and their success is referred to in the article on the Portuguese fishermen of New England, while the agricultural portion settled in Brazil and California, countries in every respect suited to their tastes.

THE AZOREANS AT HOME.—The Portuguese, judging from the allusions to some of their peculiarities made by the same author in vol. 2, chap. 1, pp. 45–49, are at home an industrious, unsophisticated, merry, and extremely religious people.

"Their industry and simplicity of life are evinced by the neat appearance which pervaded their 'steadings' and their primitive method of thrashing wheat, which is briefly as follows: The wheat is spread on a baked-clay floor, and two sledges, drawn by a pair of oxen apiece, go round and round 'treading out the corn.' The operation is accompanied by violent good-natured exertions

* Voyage of the Challenger, vol. ii, chap. 1, p. 29.

on the part of the drivers urging the oxen to do their duty, and by a steady resistance on the part of the animals, which, being unmuzzled, find it more attractive to snuffle among the straw for grains of wheat. The sledges are frequently weighed down by a mother or aunt holding a laughing, black-eyed babe."

The high esteem in which they hold religious observances is gathered from the following paragraph taken from pp. 48–50 of the same work:

"In one of the churches of the town* there is an image of our Saviour, which is regarded with extreme devotion. The inhabitants, in cases of difficulty or danger, bring it rich offerings, and the wealth of the image in jewels was variously stated to us at from £1,000 to £100,000, in proportion to the faith and piety of our informants. There had been great want of rain in the island for some months past, and it had been determined to take a step which is only taken in extreme cases—to parade the image round town in solemn procession. * * * The square and streets below us were, for hours before, one sea of carapuças and capotes, male and female, but chiefly the latter, their wearers sitting on the hot pavement, chattering quietly. About 5 o'clock a large number of acolytes in scarlet tunics left the church and formed a double row, lining the streets in the path of the procession. Then came a long double row of priests in violet chasubles and stoles, repeating the responses to a portly brother, who led the column, intoning from his breviary. Then a double row of priests in white, and then a group of the higher clergy in cloth of gold and richly 'appareled' vestments, preceding the image, which was carried aloft under a crimson canopy. The image was certainly not a high work of art, but it seemed to be loaded with valuable ornaments. Behind the canopy walked the civil governor (Count de Praya de Victoria), the military governor, and some of the high State functionaries, and the procession was closed by a column of monks. As the image approached, the people knelt everywhere within sight of it, and remained kneeling until it was past."

A favorite way of spending the hour of recess from work at noon is thus portrayed:

"Within the house, whither most of our party had retreated from the roasting sun, the first large entrance-room was encumbered with the beautiful ripe ears of maize, of all colors, from the purest silvery white to deep orange and red. It was high noon, however, and a lot of bright-eyed girls, who had been husking the maize, had knocked off work; and on the arrival of the strangers a lad brought out a guitar, and they got up a dance, very simple and merry, and perfectly decorous."

The general appearance of the peasants of the Azores is described briefly as follows: "The men are generally good-looking, with spare, lithe, bronzed figures, dark eyes, and wide, laughing mouths, with fine white teeth. The women in the Azores are usually inferior to the men in appearance, but at this farm† some of the girls were very good-looking also, with clear complexions, and more of a Spanish than a Portuguese type."

Their dress is very peculiar. "The girls, as soon as they can afford it, purchase, if they have not already inherited, a long, full blue cloth cloak, coming down to the heels, and terminating in an enormous hood, which projects, when it is pulled forward, a foot at least before the face. The cloak and hood are thus a complete disguise, for if the lower part of the hood be held together by the hand—a very common attitude, while the eyes can be used with perfect freedom—both figure and face are entirely hidden. These cloaks and hoods are very heavy and close, and it seems strange that such a fashion can hold its ground where the conditions are very similar to those in the extreme south of Spain or Italy. The head-dress of the men is singular, but it has a more rational relation to the exigencies of the climate. It is also made of dark blue cloth, a round cap

* Ponta Delgada. † In the house at which the dance, just alluded to, took place.

with a long projecting peak, and a deep curtain falling over the neck and shoulders, an excellent defense, whether from rain or sun. The odd thing about it is that where the hat is made in the extreme of a by-gone 'mode,' which still lingers in the remote parts of the island, the sides of the peak are carried up on each side of the head into long curved points, like horns. The horns are 'going out,' however, although a general festa,* such as we were fortunate enough to see, still brought many grotesque pairs of them into the city."

These strange forms of dress have, of course, been abandoned with their emigration, and the Californian Portuguese fishermen of the present day, whose places of settlement on the Pacific coast are here mentioned, resemble in appearance, so far as dress is concerned, the fishermen of any other nationality.

PORTUGUESE FISHERMEN AND WHALEMEN OF CALIFORNIA.—In San Diego County there is but one Portuguese fisherman, as is also the case in Los Angeles, the county immediately adjoining. In this county, at Portuguese Land, north of Wilmington, formerly existed a whaling fishery, but it was abandoned four or five years ago. The difficulty of obtaining fresh water was the chief cause of the removal of this company.

In Santa Barbara County the same number of Portuguese as recorded for San Diego and Los Angeles Counties is not exceeded.

In San Luis Obispo County there are forty-four Portuguese fishermen; one of these, at Port Harford, fishes at the mouth of San Luis Creek, using a seine of 1-inch mesh, 300 by 16 feet, now worth $25, when new, $75. He sends his fish twice a week, in wagons or by train, to San Luis Obispo, where he sells them at 6 cents per pound. The fish which are not shipped he salts and exchanges with the farmers for produce. In this way he exchanges about 100 pounds per week. The amount salted in summer is greater than that salted in the winter.

Three miles north of this point, on Pecho Rancho, there are two more Portuguese, who spend their time in fishing and hunting for abalones; and five miles still farther north are two more Portuguese fishermen. These last ship to San Luis market, salting what they do not ship.

In summer three of the whalers are engaged in fishing for the San Luis market, salting the surplus. They "still-fish" and troll in the San Luis Bay.

There are two companies of whalers in San Luis Obispo County—one at San Simeon, which is commanded by Captain Clark, and the other at Whalers' Point, about half a mile north of the landing at Port Harford, commanded by Captain Marshall.

The company at San Simeon consists of twenty men, all Portuguese but one, and most of them from the Azore Islands. They are hired by Captain Clark, who owns the entire outfit. This camp has existed for sixteen years past.

The camp located at Whaler's Point consists of twenty-one men, all but one of whom are Portuguese from the Azores. This company was established in 1868 or 1869.

The men at both camps are discharged in summer and a new set hired in the fall. Some of the men, when discharged, engage themselves in fishing for the San Luis market.

The outfits, &c., of these whaling companies are discussed in another section of this report.

In Monterey County there are forty-seven Portuguese fishermen, distributed as follows: At Monterey there are six, divided into two companies, between whom considerable rivalry exists. They use set-lines, and consequently catch little else but red rockfish. Some of these Portuguese have been there since about 1860, others having joined from time to time. They own five boats and three skiffs. They supply the hotels in Monterey and ship the rest to San Francisco. The

* The religious procession already described.

ruling price is 6 cents per pound. When the whaling season is over, the whalemen join in the work of supplying the local markets.

There is one Portuguese at Moss Landing, Castroville. In this county are two whaling companies—one at Carmelo, consisting of seventeen men, all Portuguese, commanded by Captain Mariano. They have two boats, and during the past year took one finback, three humpback, and three gray whales. Last year this company was at Point Sur, farther south in Monterey County. During a great portion of the winter the sea runs so high that the men dare not go out.

The Monterey whaling company consists of twenty-three men, all Portuguese, and all but one from the Azores. Their commander is Captain Verissimo. This company has been in Monterey since 1855. They own three boats of New Bedford make, and during the past year they have taken fourteen whales and two basking sharks.

In San Mateo County there is one Portuguese, residing at Pescadero. He owns a gill-net which he sets at the mouth of Pescadero Creek, catching the salmon as they run up to spawn. He sells his fish in Pescadero, and finds the market so small that, although without family, he makes but a poor living.

In San Francisco there are twenty Portuguese engaged in the shore fisheries. Details of their habits and mode of living will be found in another paragraph below.

There are also thirteen Portuguese engaged in the San Francisco cod fleet, and forty more in the San Francisco off-shore whale fleet.

PORTUGUESE IN WASHINGTON TERRITORY AND OREGON.—In Washington Territory there are probably not more than three Portuguese, who, at Gig Harbor, are occupied in catching dogfish.

On the Columbia River, engaged in the salmon fishery, there are about one hundred Portuguese.

21. THE SPANISH FISHERMEN ON THE PACIFIC COAST.

SPANISH FISHERMEN IN CALIFORNIA.—There are now but few fishermen of Spanish descent in California, though occasionally they may be found among the mixed fishing population of the larger places.

"About one hundred years ago," writes Jordan, "the various missions of California were founded. Later the country became the abode of Spanish grandees, who became the owners of large tracts of land, depending chiefly for subsistence on their herds of cattle, and paying but little attention to fishing. Their descendants and successors, the 'Californians,' men, for the most part, of mixed Spanish and Indian blood, fished and still fish only with hook and line. To the present day they compose the larger portion of those who sit on the wharves in the sun catching sculpins, but they own no boats and are not truly fishermen."

There are at present not more than twenty Spaniards on the Pacific coast who can properly be termed fishermen. Four of this number are in Santa Cruz County, fifteen in San Francisco County, and one in Marin County.

The Spaniards of Santa Cruz County have in use two boats. They live in the southern part of Santa Cruz City, and fish for rockfish, sea bass, and barracuda. Little fishing is done by them or the Italian fishermen, their neighbors, in the winter on account of the rough seas which at that season must be encountered in the fisheries.

Of the Spaniards living in San Francisco City nothing can be stated as to their peculiarities of life. They live at the west end of Vallejo street, about the Vallejo street wharf, with fishermen of several other nationalities. They are employed in fishing with the drag-net.

At Smith's ranch, near the head of Drake's Bay, Marin County, is one Spaniard who, together with two Italians and one Austrian, is engaged in seine and gill-net fishing. The joint catch of these four fishermen will probably equal 50,000 pounds per annum. They send their fish every morning to Marshall's, from which place these men came to Drake's Bay, and whither they will return as soon as the fishing in Tomale's Bay improves. They catch chiefly "smelt."

22. THE GREEK FISHERMEN ON THE PACIFIC COAST.

There are in all fifty-five Greeks employed as fishermen on the Pacific coast of the United States.

Fifty of them live in San Francisco, where, with fishermen of many races, they fish with the drag-net.

At Seattle, Washington Territory, there is a company of three Greeks, who fish with seines along the shore, obtaining young salmon, flounders, &c., which are sold in a stall in the town. During the salmon season these Greeks go to the Columbia River to engage in the salmon fishery. The other two Greeks have settled at Port Madison, Washington Territory.

23. THE AUSTRIAN FISHERMEN ON THE PACIFIC COAST.

In Marin County, California, there is one Austrian engaged in fishing with one Spaniard and two Italians at the head of Drake's Bay.

There are eleven Austrians engaged in fishing in Washington Territory. Three are at New Tacoma. They either salt their fish or ship them fresh to Portland.

At Seattle there are five Austrians who fish with hook and line in the deeper waters of the bay, obtaining halibut, black bass, horse-mackerel, merluch, pollock, tomcod, &c. The remaining three fish at Port Madison, Washington Territory.

24. FRENCH FISHERMEN ON THE PACIFIC COAST.

In Los Angeles County, California, at Wilmington, there are 6 Frenchmen, who combine hook-and-line fishing with the gathering of abalones. They own two boats, the Wild Region and the Josephine, which average about three-fourths of a ton each.

In San Francisco County there are 15 Frenchmen. The remark made concerning the Portuguese in San Francisco will equally apply to the French fishermen of that city.

There are 2 or 3 Frenchmen employed in collecting frogs in Marin, San Mateo, and Kern Counties. These frogs they sell at from $1.75 to $4 per dozen.

In Washington Territory, at Port Madison, there is one Frenchman engaged in fishing. The principal fish sought at that point are perch and flounders, which are dried by the Chinese and Indians. Probably this French fisherman joins them in their work.

On the Columbia River, Oregon, engaged in the salmon fishery, there are 200 Frenchmen, and on the Sacramento and other salmon rivers there are about 50 more Frenchmen.

25. SOUTHERN EUROPEAN FISHERMEN OF SAN FRANCISCO.

A writer in the San Francisco Bulletin in May or June, 1875, thus described the European fishermen of that city:

"Their dark faces and sanguinary shirts, their hoarse voices, and, above all, their picturesque lateen sails have a decided flavor in them of foreign waters. In fact, almost to a man, at some time

they have sailed or fished upon the Mediterranean. They are mostly Italians, but among them are Portuguese, Slavonians, Greeks, and Austrians. They all understand and can converse in Italian. Although many of them belong to benevolent societies pertaining to their different races, they are all bound together in what might be called the Fishermen's Union. It is a protective association. Each boat has certain rights and privileges not to be infringed upon by others. Each man contributes toward a common fund for the purpose of protecting the fishermen's interests, and to aid the families of deceased members. The association has regular attorneys, who are supposed to look after its interests. They have a place of meeting at No. 32 Clay street, called the Fishermen's House. Here is a cheap restaurant, where the single fishermen board, an indispensable bar, card tables, a billiard table, and a few beds. When anything unusual occurs among them they assemble here and hold a grand pow-pow.

"There are about two hundred boats and nearly 1,000 men engaged in the business. The great number of their boats now lie in a slip near the Front-street wharf, their old place at the foot of Clay street having been recently improved for a steamer landing. Each boat pays $1 per week for wharfage. Their present quarters satisfies them very well now, but they are fearful that the winter northers sweeping in from the Golden Gate will destroy their boats. Their attorneys are endeavoring to have their quarters improved. Many of the fishermen are married and have families here, but the majority are single men, who intend some time to return to their native country, of course, rich. The married men live on Telegraph Hill, in houses perched like gulls' nests on the heights above the water. The houses, though small, are kept very neat. The fishermen's wives are usually bright-eyed, little Italian women, but some have become cosmopolitan in their tastes and taken to wife whatever offered itself. The boats, as a general thing, make one fishing trip per day, and the profits per boat are from $10 to $30, and even $100 is sometimes realized from a single trip.

"About forty boats are engaged in fishing without the bay, and go as far as the Farallone Islands. These boats, of course, make longer trips, and the receipts per trip, if not the profits per day, are greater. The boats which fish in the bay use the seine almost exclusively, but outside it is used but little, the hook taking its place. The men are very reckless, and their lateen sails are often seen beating against a wind when our pleasure yachts are glad to find a harbor. It is not infrequently that one of these boats sails out early in the morning and never returns nor is heard from again. They are a very industrious people, and some of them are at work at all hours of the day and night. Some put out in the small hours of the morning and return at night; others put out in the evening and return when the sun is well up. Sundays they mend their nets and rig their boats. They are nearly all nominally Catholics, but their religion does not interfere with secular duties in the least. If you wish to see the whole set forget their English in an instant and appear as inscrutable as the sphinx, go among them as a missionary and inquire as to their spiritual condition. They make considerable money and live well. Macaroni, they find, is not an all-sufficient in this climate, and they take very kindly to pork and beef. As is usually the case with fishermen, they have a great contempt for fish and never eat it when anything better is to be had. They use a great deal of tobacco, chewing and smoking, and a great deal of liquor.

"They are the heaviest consumers of our California wines, although on extra occasions they indulge in imported articles. In spite of this liberal use of wine and whisky, one rarely sees a drunkard or a noisy man among them. Around the dock and upon the water they have a business-like air and say but little, but at the fishermen's house they appear very different. At the latter place they are noisy and merry and often drunk. Few of them, except the masters of the larger boats which cruise outside of the bay, are citizens. The boats are registered, and, according to

Chinese fishing village, California.

From a sketch in London Graphic, 1884.

our maritime laws, it is necessary that the masters should be naturalized when not native citizens. A few years ago, before owners of boats thought well enough of the country to adopt it as their own, rather than be naturalized they would hire some lazy Yankee or Irishman to cruise with them as 'master.' They paid as high as $100 per month, and all that was required of the figure-head was to keep out of the way and furnish his own whisky. But times have changed. They have found that California is not such a bad place after all, and the supply of real masters is now equal to the demand."

26. THE CHINESE FISHERMEN OF THE PACIFIC COAST.

FROM NOTES BY DAVID S. JORDAN.

On the Pacific coast of the United States, and on the banks of rivers on which salmon canneries are established, there are about 4000 Chinamen engaged in catching fish, or in fish-drying and fish-canning. Of this number about 463 Chinamen are living in the maritime counties of California and Washington Territory, while the remainder are engaged in the salmon canneries, probably not less than 3000 being employed on the Columbia River, Oregon, and about 600 on the Sacramento and other salmon rivers.

SAN DIEGO COUNTY, CALIFORNIA.—In San Diego County, California, are thirty-seven Chinese. They settled there about the year 1870, and by the use of very fine-meshed seines have driven out the Italians who were there at the time of their advent. They are divided into eight companies, which are scattered along the coast between San Diego and Cerros Islands. At San Diego all the fishermen, excepting four Americans and their employés, are Chinamen. Upon their arrival they went to work at catching fish, which they salted and dried; these they shipped to China, their methods of fishing being probably the same as those now in use in China. They seek especially sheltered bays, which they sweep clean with their seines, usually commencing operations in the early part of the night. Some of the Chinamen live entirely on their boats, visiting their houses on land perhaps once a month. The upsetting of their junks* is a matter of frequent occurrence, the result usually being a reduction in the number of that particular colony to which the junk belonged. The Chinese take risks in stormy weather which no white man in this region would dream of taking. The two colonies here were established with a special view to fishing—one at Roseville in 1875, and the other in the town of San Diego about 1870. The latter consists of about a dozen houses, arranged in two rows, nearly at right angles to each other, while in close proximity are stagnant pools, stands for drying fish, outhouses and piles of rotten fish, and all manner of abominations full of crawling maggots, all of which tend to give the colony an extremely unsavory odor. The head man of the colony furnishes the greater part of the fishing capital, and the fishermen repay him out of the proceeds of their catches. The Chinese of these two colonies use seines, imported from China, about 300 by 10 feet, with a 1-inch mesh. When new these are worth about $100. Along the coast of this county are gathered, principally by the Chinese, about 700 tons of abalones. North of Cerros Island the Chinamen have stripped the whole coast of this shell. Until lately the Mexican Government paid no attention to the depredations of the Chinamen, but now a license of $60 for each boat is charged upon all coming from the United States in search of abalones, and to collect that tax a Mexican consulate has been established at San Diego. The origin of the abalone business was as follows: The Chinese in China dry the flesh of *Haliotis* (or some other related genus), and, finding that animal in California, they commenced the same industry there about the year 1873. Later, white men began to gather up the shells thrown away by the Chinamen, and the use of them for ornaments soon created a demand for them. Thereupon the China-

* This colony in 1881 owned four large junks, besides three smaller boats.

men saved the shells, and for three years or so the abalone-shell business has been very extensive. By the excessive working of this industry the abalones have been nearly exterminated in all accessible places, and American dealers now ship Chinamen to the neighboring islands difficult of access, receiving in return the shells, the Chinese retaining the meat.

LOS ANGELES AND VENTURA COUNTIES, CALIFORNIA.—In Los Angeles County are about 30 Chinamen, all of whom are engaged in collecting abalones. They ship to San Francisco annually about 150 tons of shells.

In Ventura County, at Point Magie, 9 miles south of Hueneme, is a colony of 6 Chinamen. They settled there in 1877. Two of this number were recently drowned by the upsetting of a junk.

At San Buenaventura there are a few Chinese engaged in fishing from the wharves.

SANTA BARBARA COUNTY, CALIFORNIA.—There are about 25 Chinamen in Santa Barbara County engaged in fishing. At Goleta there is a party of 3 employed in fishing with the seine. Many colonies of Chinamen are transported to the neighboring islands in the schooner Surprise, belonging to Rogers Brothers, for the purpose of collecting abalones, the meat from which they salt, dry, and ship to China, paying for their transportation to and from the islands with shells. On the Santa Cruz Islands as great a quantity as 50,000 pounds of fish have been caught in a season by Chinamen.

SAN LUIS OBISPO COUNTY, CALIFORNIA.—At Port Harford, San Luis Obispo County, there is a colony of 8 Chinamen, 6 men and 2 women, and at San Simeon and other places there are 50 Chinamen engaged in collecting abalones, the shells of which they ship to San Francisco, retaining the meat for shipment as food.

MONTEREY COUNTY, CALIFORNIA.—There are two extensive colonies in Monterey County, one at Pescadero, the other at Punta Alones. The colony at the former place, which is in the northwest corner of Carmelo Bay, was established in 1868, and is composed of 40 persons, living in eight houses. A considerable proportion of these are fishermen. The others attend to housework and to drying and preparing the fish. They use boats built by themselves, obtaining at Soquel anchovies for bait.

Spaniards, who never fish, are hired to cart the fish from the boats to the drying shores and, again, when dry and prepared, to the point of shipment.

The colony at Punta Alones, which is a mile and a half west of Monterey, settled there in 1864 and consists of 25 fishermen. This is a somewhat larger colony than the one at Pescadero. Some of the women here go fishing with the men. Others stay at home and dress the fish, which operation is aided by a heavy hatchet-like knife. One of the Chinamen at Punta Alones is an American citizen and speaks English well. Others have been hotel cooks. This colony compares favorably with any other on the coast. They ship daily to San Francisco, in fine weather, from 200 to 800 pounds of fish. The members of this colony, as well as those at Pescadero, dry and ship to China an unknown quantity of abalone meat and sell the shells. At certain seasons they also dry many tons of different devil-fish, squids, &c.

SANTA CRUZ COUNTY, CALIFORNIA.—Between Soquel and Aptos, Santa Cruz County, is a large colony of Chinese. There are about 50 of them, all men and all engaged in fishing. They ship to San Francisco and to San José direct, especially in summer. Those not so shipped are sent to Soquel, whence they are taken to San Francisco by steamer. The Soquel fishermen make great complaint of the violation of the fish laws by the Chinese, as the latter use fine-meshed seines and take large quantities of young flounders and shad, which are never returned to the water, the

Chinese caring nothing for the future fisheries. These fish are either salted and dried, or are left to spoil on the beach. The waste is said to be enormous.

SAN MATEO AND SAN FRANCISCO COUNTIES, CALIFORNIA.—In the town of San Mateo is a company of 7 Chinamen. They fish with seines and ship their fish to San Francisco or peddle them fresh in the neighborhood.

In San Francisco County the Chinese fishermen devote their attention to catching shrimp with purse-nets. With the shrimp small fish of other species are taken and afterwards salted and dried. At Bay View there is a Chinese colony consisting of about 24 men, who, with a hundred seines and eleven junks, are engaged in shrimping. There is another colony of 10 Chinamen 2 miles farther south. The Chinamen arrange the large shrimp, after removing the carapace, on two sticks of cane placed parallel to each other; these sticks passing through the flesh of the shrimp. These they sell for 30 cents per pound. Others are sold with the carapace and legs removed, simply as meats. The total catch of shrimp and prawn for this county is estimated at 30,000 pounds.

In former years the Chinamen in San Francisco County were accustomed to eat shark fins, both fresh and dried, which were by them esteemed a great delicacy. The entire business of shrimping was then in the hands of the Chinese. Their operations extended from Mare Island to Angel Island. The bulk of the shrimp caught by the Chinese with their fine-meshed nets was shipped to China in sacks. Large quantities of shrimp were sold also to oyster dealers in San Francisco who, after boiling them, would set them before their customers whilst waiting for oysters, thus to temporarily satisfy their appetites. The shells of the shrimp were shipped by Chinamen to China, who paid to the owners of their fishing-grounds a tax of from 50 cents to $1 a month. They also used to catch sturgeon, from whose backbone they would pull with a hook the inside nerve; this, which resembles a piece of macaroni and is nearly 3 feet long, is dried and shipped to China as a rare tid-bit for the epicures.

In 1876 the Italian Fishermen's Union of San Francisco addressed a letter to one of the State Senators, the main object of which was to direct attention to the ruinous methods employed in fishing by the Chinese, their total disregard of the size of the fish they caught, and their waste of all the sturgeon they took, excepting the one nerve in the back above referred to. They fished so excessively that often they would ship to China as much as $12,000 worth of shrimp and dried fish per month. The Italians, therefore, asked that the Chinese fishermen be compelled to adopt a system less destructive.

ALAMEDA COUNTY, CALIFORNIA.—In Alameda County there were established in 1870 Chinese fishing colonies which are now deserted. These fisheries were principally for the capture of smelt and herring from the wharf, which they carried on by the aid of very fine square nets, from which not even the very smallest minnows could escape. They would drop their net about every twenty minutes; when hauled up, a boat would be pushed out under the net, and the contents of the net dumped into the boat. Thousands were thus taken every day.

MARIN COUNTY, CALIFORNIA.—Near Point San Pedro, Marin County, there are two colonies of Chinese, numbering in all about 112 persons, who fish for shrimp. These they ship to San Francisco, after having dried them on the hill-sides and threshed them, in Chinese style, in order to separate the hull from the meat.

As will have been noticed, the peculiarity in the construction of the nets used by the Chinamen is that the meshes are extremely fine, the end in view being the capture of all fish, large and small, young and old; and many complaints have been made regarding their use of this style of net, especially by the fishermen at Soquel, Santa Cruz County.

AVARICE OF CHINESE FISHERMEN.—With a view to illustrate the extreme avarice of the Chinese fishermen, as shown by their exclusive use of very fine-meshed nets, it may be stated here that the Mexican Government has found it necessary to station a consul at San Diego who is instructed to charge every boat coming in search of abalones $60 per annum, their depredations in this fishery having been so extensive as to almost exterminate the species.

SURF-FISHING.—The peculiar method of surf-fishing at Punta Alones and Pescadero in vogue amongst the Chinamen is one entirely unknown to American fishermen, and is described by Professor Jordan, as follows: "At Punta Alones and Pescadero the Chinese fishermen carry on a fishery for the capture of surf-fish [*Embiotoca lateralis*, *Damalichthys vacca*, &c.], and their methods, being characteristically oriental, are of much interest to a stranger. The gill-nets are placed among the kelp-covered rocks, not far from shore, and the boat goes around among the nets to frighten the fish into them. The old man plies the oar, sculling the boat. The young man stands in the bow, with a long pole, which he throws into the water at such an angle that it returns to him. The woman sits in the middle of the boat, with the baby strapped on her back. She is armed with two drum-sticks, with which she keeps up an infernal racket by hammering on the seat in front of her. This is supposed to frighten the fish so that they frantically plunge into the nets. Occasionally this is varied by the woman taking the oar and the old man the drum-sticks."

SHRIMP AND ABALONE FISHERIES.—The principal fishing industries engaged in by the Chinese are the capture and preparation of shrimps and abalones. The greater part of the shrimp are dried, threshed, and sent to market. The hulls are shipped to China and sold at $20 a ton for manure. They are considered by the Chinese to be an excellent fertilizer.

A minor occupation of the Chinese is that of collecting seaweed.

A colony of Chinamen, numbering perhaps twenty-five men, is located at San Pablo, near the mouth of the Sacramento River, on the bay southwest of San Pablo. They are engaged in shrimp fishing, their methods being the same as those employed by the Chinamen about San Francisco.

FISHERMEN'S HOUSES.—The houses of the Chinese colony at Roseville, San Diego, number about ten. They are low, unpainted, dirty-looking buildings, and are surrounded by hen-coops, whose occupants are fed, to a great extent, upon the small fish which the Chinese capture in their fine-meshed seines.

CHARACTERISTICS OF CALIFORNIAN CHINESE.—It is noteworthy that the Chinese, perhaps in mistrust of their own race, never consign their fish to Chinese dealers in the cities, preferring to transact business with the Americans.

A writer in the San Francisco Weekly Bulletin of January 27, 1871, says of the Chinese fishermen of California:

"The Chinese fisherman in China is very different from the Chinese fisherman of California and far above him in equipments, habits, and scale of work. Confident of his seamanship and skill he dashes around in his lateen-sailed junk in a reckless manner, and in hours of recreation indulges his fondness for gambling, while the latter tugs painfully at the oar and finds his brother fishermen too poor to gamble with him. The Chinaman is a good sailor in his native craft, but in other vessels, when difficult duties are to be performed, needs some one to direct him constantly.

"On the southern bank, at the entrance of the San Antonio Creek, is a small Chinese settlement, consisting of some dozen wooden houses, called China Point. The shores of the creek are covered with smelt and herring, drying in the sun preparatory to being compressed into compact bales to be shipped away; the nets, patched and old, are lying around everywhere drying in the sun, and the whole is dirty, filthy, and ill-smelling.

"The fisherman's boat is a long, unwieldy, clumsily-constructed craft, with heavy, ill-shaped

oars. They are not shipped in double rowlocks after the American method, but work on a single pin which passes through the loom of the oar. With the nets piled up in the stern, and the crew at their places, the cockswain, using a large steering-oar, guides the boat to the long flats of the Oakland and Alameda shores, the principal fishing grounds, where the shoals of smelt and herring, which abound here at high water, are encircled by the nets. Stationary nets and seines are also used—one to lay all night, or for some hours, and the other for immediate and active work. At sunset, after drawing the nets, they row home and spread the catch on the shore, ready for the next day's drying. The journey home is accompanied by a song, if the catch has been a large one, or only a grunt, if poor.

"The shores of Islay Creek are the choice of the Chinese fishermen who live on the San Francisco side of the bay. Clams, smelt, and shrimp constitute their catch at low tide, and their manner of procuring the former is extremely remarkable. Either a long plank or ten square pieces of wood are placed under the feet, and using them in the same manner as snow-shoes the fisherman makes very fair time over the mud. His basket or light boat is pushed along to receive the shell-fish as he picks them up, and before the tide has quit falling his shrimp-net does good service. Their cabins border on the creek, and have the same characteristics, though perhaps on a larger scale, as their fellows at the entrance to the San Antonio. But in addition to preparing fish for transportation to China, they supply, in a great measure, the market in the Chinese quarter, but their fishing ground has not the same size or quality of smelt that are found over the flats on the other side." *

CHINESE IN WASHINGTON TERRITORY.—In Washington Territory there are thirty-three Chinamen engaged in fishing. About Cape Flattery and Quartermaster's Harbor there are twelve; near Port Madison there are fifteen engaged in drying fish. They also buy from the Indians. Especial value is set upon flounders, but salmon are held by them in small esteem. At Port Gamble and Ludlow there are six Chinamen who occupy their time in fishing from the wharves. They catch a large quantity of dogfish.

CHINESE IN THE SALMON CANNERIES OF OREGON.—On the Columbia River, Oregon, as many as three thousand Chinamen are engaged in the salmon canneries.

After the salmon have been thrown into a heap on the wharf, the Chinamen cut off the heads, tails, and fins, and remove the viscera. Some Chinamen become so expert at this branch of the work that they can thus clean 1,700 fish per day. After the fish have been washed and cut into sections they are split into three pieces by the Chinamen, one piece being large enough to fill a can, the others smaller. These fragments are placed on tables, at which the Chinamen stand ready to pack them. Other Chinamen put on the covers, while yet others solder them, where this operation is not done by machinery.

The Chinese thus do the bulk of the work at the salmon canneries. The supervisors, foremen, and bookkeepers are, however, white men. The fish-cutters, if expert, receive from $40 to $45 per month. The majority receive $1 per day of eleven hours, and work as required; that is, leaving

* WORSE THAN SEA-LIONS.—Our legislature has attempted to protect the salmon in our rivers by repealing the law protecting seals. It is asserted that the seals destroy the salmon which come down annually from the upper rivers to salt water. This may be true, but opinions are conflicting. However that may be, there is an enemy to the salmon far more dangerous than the round-eyed seal and that is the busy Chinaman. Only a few days since we watched the *modus operandi* of catching fish in our San Joaquin. Two Chinese junks, or schooners, appeared in the river, each holding an end of a remarkably fine net. The schooners then separate and sweep the waters with the net to the shore. Fish of all sizes are thus caught, and none, not the smallest salmon trout, are ever returned to the water. Those too small for market are thrown on the shore or fed to poultry. It is said by those familiar with the Chinaman's mode of fishing that these fine nets leave no young salmon behind, and are far greater enemies to their propagation than seals.—[Antioch Ledger, California, July 6, 1876.

and coming at any hour that may be set, time during which they are actually at work alone being counted. No other race of people could work at such rates and upon such terms as these, and in the present state of things but for Chinese labor the canneries must needs be closed. They come in April and leave in August, and very few return. They are employed directly and without the aid of any agent. The Chinese, as a rule, work very faithfully. They are never engaged in any drunken riot, and their work is uniform. On the other hand, they are not devoted to their employers. If dissatisfied, "they are the hardest class in the world to manage." They would "use a knife for two cents." If their pay should exceed a day's indebtedness, they would very probably resort to foul, mean work. They are inveterate gamblers, and their wages, as earned, go from one to another to pay their gaming debts. A Chinaman dare not fish in the Columbia, it being an understood thing that he would die for his sport. They are only tolerated because they will work for such low wages. Each cannery employs from one hundred to two hundred Chinamen.

27. MISCELLANEOUS FISHERMEN OF THE PACIFIC COAST.

There are fifty Slavonians on the Pacific coast of the United States, employed as fishermen. They all live in San Francisco.

In Los Angeles County, California, there is one Chilian fisherman. In the same county one Irishman is engaged in fishing.

In Santa Cruz County, at Soquel, there are four German fishermen.

At New Tacoma, Washington Territory, there is one negro fisherman.

28. THE ARCTIC WHALEMEN OF SAN FRANCISCO.

Professor Jordan says, concerning the men on the Arctic whaling fleet, that the crews of all the vessels, whether owned East or on the Pacific coast, are made up in San Francisco. The officers are usually American, but there are very few American foremast hands. When an American ships before the mast, he seldom stays there long; he either gets aft or leaves disgusted. Portuguese, Scandinavians, and Germans form the bulk of the crew, and are all very hardy, and like the business. Now and then an Irishman is inveigled into the service by the boarding-house keepers; but Irishmen are never at home on a whaler.

29. THE FISHERMEN OF THE COLUMBIA RIVER.

There are upwards of 2,500 men engaged in salmon fishing on the Lower Columbia; about half of them in Astoria, the rest at the other cannery towns. A few of them, not one-tenth, live permanently in the towns where employed; the rest come from the interior, from San Francisco, and from the crews of various vessels along the coast. They come to the Columbia in April and leave in August, perhaps not half of them returning the next year. Some of them, especially Scandinavians, own small farms in the interior of Oregon and Washington. Many of the Italians and Greeks fish in San Francisco Bay when not upon the Columbia.

As to nationalities, exact information is unattainable. Looking over various lists of names and making inquiries indicate the preponderance of Scandinavians and Italians, with Greeks, French, Finns, Irish, and a few Americans. No Chinamen are employed in this fishery, though they work in the canneries. There are very few Indian fishermen on the Lower Columbia, none of them of pure blood.

About one-third of the men are married, and two-thirds of these, chiefly Scandinavians and

Finns, lead sober, industrious lives; the rest are, as a whole, a reckless and improvident set of men, spending their money as fast as earned upon drink and prostitutes. The proprietor of a "dive" in Astoria is said to have begun a short time since with nothing, and to be now worth $30,000, his establishment being chiefly frequented by fishermen. Many have not enough left at the end of the season to pay their debts and to get away. Many of them, therefore, leave their debts unpaid.

Most of the men board in various establishments fitted up as fishermen's boarding-houses. These are of many grades, the usual rate being $5 per week.

The few fishermen who can read peruse chiefly the Police Gazette and similar publications, the sale of which on the Pacific coast is far greater in proportion than on the Atlantic.

30. THE INDIAN FISHERMEN ON THE PACIFIC COAST.

There are at present no Indian fishermen employed on the coast of California, although certain tribes living inland, for instance the McCloud Indians, depend largely upon the fisheries for support.

Jordan has observed that in earlier times, before the settlement of California by white men, the Indians of the coast must have subsisted on fish to a very large extent. Spines of sharks and rays are found among the Indian remains on the Santa Barbara Islands, and some are thought to have been used for fish-hooks. Fish-bones are found in the refuse heaps of kitchen leavings on Santa Cruz Islands, where the inhabitants must have lived chiefly on fishes and mollusks. The Santa Barbara Islands give evidence of having been once densely populated. Scarcely anything eatable now grows above tide marks.

At the present time the Indian fishermen on the Pacific coast are all seated in Washington Territory and Oregon. There are about 380 of them scattered in groups throughout those regions. Two hundred Indians are employed in the Oregon salmon fishery.

At New Tacoma, Wash., are twenty Indians engaged in fishing for dog-fish, the oil of which is rendered chiefly in kettles.

At Steilacoom are about twenty Indians (Siwashes). They do not, to any extent, sell their fish, but reserve them for their own consumption.

Near Seattle are thirty Indians who fish chiefly for salmon-trout (*Salvelinus*), of which they bring boat-loads almost daily into the town.

Twenty Indian fishermen have been recorded from Port Madison.

In the northeast part of the sound, at Utsaladdy, are twenty Indians engaged in salmon and dog-fish fishing.

Ten Indian fishermen live at Muckilteo.

At Port Gamble are twenty Indians (Siwashes) engaged in fishing for dog-fish, and other small sharks. The oil is rendered by putting the livers into wooden troughs, into which hot stones are thrown; finally the oil is drained off.

Near New Dungeness, on the way toward Cape Flattery, are some ten Indians engaged in fishing for dog-fish.

At Neah Bay there is a considerable reservation of about twenty Indians, who are exclusively engaged in fishing and sealing.

31. THE M'CLOUD RIVER INDIANS OF CALIFORNIA.

Concerning the McCloud River Indians, who are emphatically a race of fishermen, Mr. Livingston Stone, of the United States Fish Commission, writes as follows:

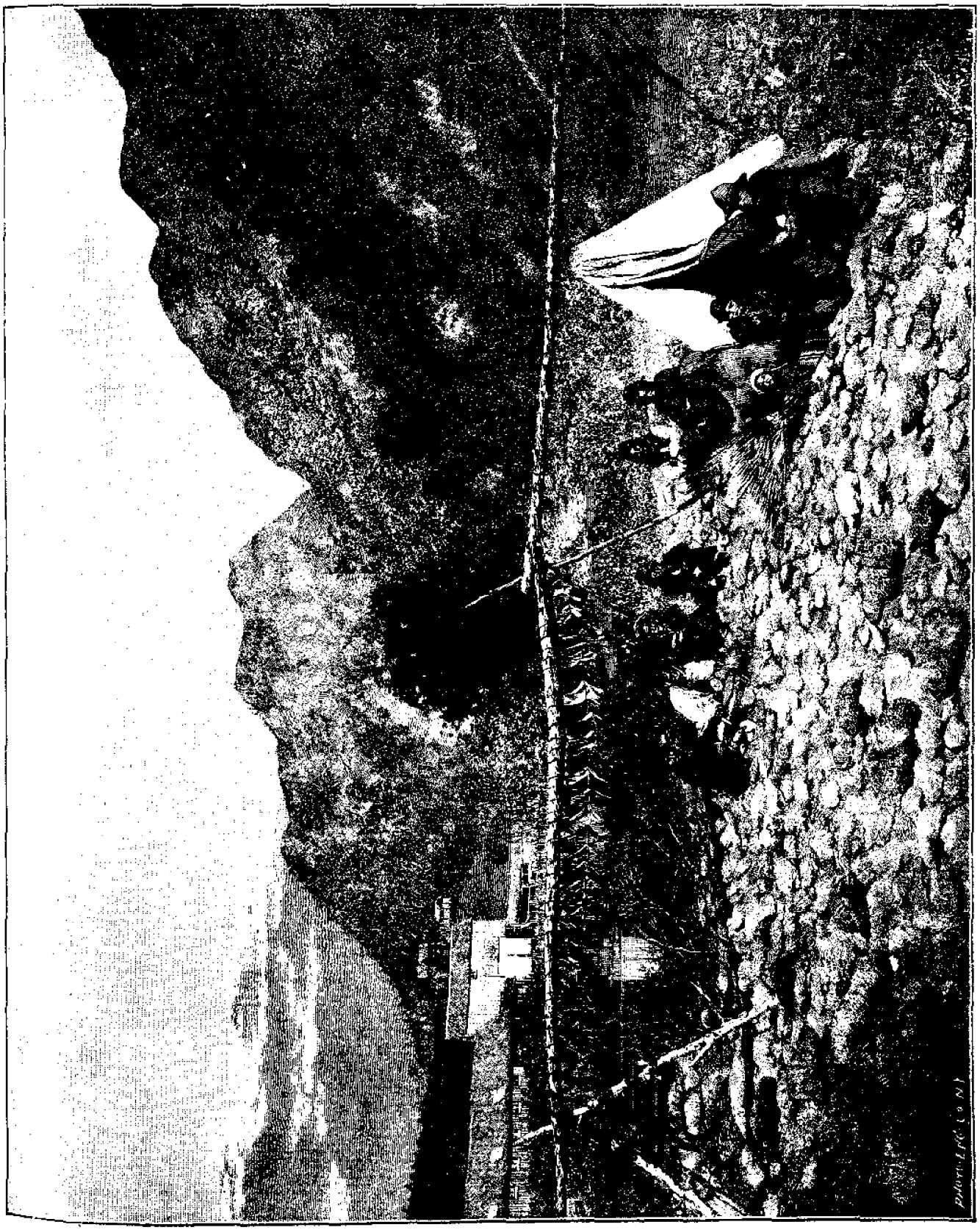
"The Indians themselves are a good-featured, hardy, but indolent race. I found them always

pleasant, genial, and sociable, though, like other Indians, very sensitive when their pride was wounded. They at first adopted the plan of ordering all white men out of their country, and were the last of the California Indians to yield to the encroachments of civilization. Even now they are not slow to say to the white stranger, 'These are my lands,' and 'These are my salmon'; but the stern consequences of conflict with the whites have taught them to abstain from any violent indication of their rights. They still always revenge a wrong inflicted on them by their own people, and deem it a duty to avenge the murder of one of their kindred, but I think they are a well-disposed race by nature, and have no malice naturally in their hearts toward any one, and will not injure any one who does not first injure them. Every one told me, before my arrival and during my stay on the McCloud, that the Indians would steal everything that they could lay their hands on. I am glad that this opportunity is afforded me of bearing testimony to the contrary, which I wish to do very emphatically. I would trust the McCloud Indians with anything. We used to leave our things every day around the house, and even down on the river-bank, for weeks together, where the Indians could have stolen them with perfect safety, and where they would not have remained ten minutes *in a white man's settlement*, and yet I do not know of a single instance of theft of the smallest thing on their part, during all our stay of two months among them. On the contrary, in one instance, an Indian traveled six miles one hot day to return me a watch-guard, which he found in the pocket of a garment which I sold him, and which he might have kept with perfect impunity. And on another occasion, on the arrival of some gold coin, when I had reason to expect an attack from *white men*, I gave the gold to one of my Indians, and told him that I depended on him to protect that and me till morning. I slept soundly, and the next morning the faithful Indian handed me the gold just as I gave it to him. I wish on these accounts to be very emphatic in saying that the charges against these Indians of being a race of thieves, are untrue and unjust.

"With all their good traits, however, murder did not seem to have the obnoxious character that it has among more enlightened people. Almost every McCloud Indian we met had killed one or more men, white or red, in the course of his life, but it was usually because they were goaded to it by ungovernable jealousy or revenge. It was not from motives of gain or causeless malice.

"The McCloud Indians live and sleep in the open air in the summer. In the rainy season they build wigwams or huts of driftwood and dry logs, which they inhabit pretty comfortably through the winter. In the summer and fall they live mainly on the salmon and trout which they spear. In the winter they live on the salmon which they catch and dry in the fall, and on acorns, which they gather in great quantities in the woods. They hunt with bows and arrows, with which they occasionally kill a bear, though a few of the more enterprising have rifles. They trap a very little, but the salmon of the river are so abundant that they are not obliged to resort to hunting and trapping at all, and do not do much of either.

"I have written this long account of the McCloud River Indians partly because their presence here is so singularly connected with the abundance of the salmon in the Sacramento River. Had white men come here, and required the salmon for food, this main artery of the supply system of the river would have been stopped; or had white men come and engaged in mining, as they have done on the Yuba and on the Feather and American Rivers, the spawning-beds would have been covered with mud and ruined, as in those rivers, and in less than three years the salmon supply of the Sacramento would have shown a vast decrease. The presence of the Indians, therefore, in so far as it implies the absence of the whites, is the great protection of the supply of the Sacramento salmon."



McCloud River Indians of California. Salmon drying on poles.
From a photograph by U. S. Fish Commission.

32. THE FISHERMEN OF THE GREAT LAKES.

FROM NOTES BY LUDWIG KUMLIEN.

NATIONALITIES.—Very many nationalities are represented among the fishermen of the Great Lakes, nor is the diversity of origin confined to the fishermen alone, for many of the owners and managers of the fisheries are of foreign birth. Next to the native Americans, Germans and Canadian-French predominate. The Scandinavian nations are also well represented. In some localities, particularly at the west end of Lake Superior and in the vicinity of Sault de Ste. Marie, the Straits of Mackinac, and Saginaw Bay, many pure and half-breed Indians are employed. At Sault de Ste. Marie, Indians are the principal fishermen. In the majority of the towns the nationalities are very much mixed. A catalogue would include Americans, English, French, Germans, Norwegians, Swedes, Russians, Poles, Belgians, Swiss, Dutch, Irish, and Indians. At the east end of Lake Ontario, however, all are either Americans or Canadian-French. In Green Bay the Swedes and Norwegians are said to be the most successful fishermen. With the Indians fishing is, of course, an hereditary profession, handed down from father to son. The western portion of the lake region has been so recently settled, and by so many different classes and nationalities, that it is highly probable that the fathers and grandfathers of the majority of the present fishermen were engaged in other occupations. On the west shore of Lake Michigan, however, especially between Porte des Mortes and Manitowoc, among the French-Canadians fishing is hereditary. The boys begin to assist while yet mere children, and naturally become expert boatmen and skillful fishermen. The fishermen at the east end of Lake Ontario, about Chaumont, Sackett's Harbor, and Henderson Bay, are said to have come originally from Connecticut, where they had been fishermen, and were the first to introduce pound and trap nets.

HEALTH.—As a class the fishermen are strong and robust, and well suited for their occupation. Fishing is considered a healthful pursuit in all respects, and, aside from the disasters caused by storms, conducive to longevity. Very many of the better class of fishermen are married, and in numerous instances favored with remarkably large families.

DISASTERS.—The sudden and violent storms which visit the lakes, particularly in fall, cause many serious disasters, resulting frequently in loss of life. The number of losses, however, is smaller than one would suppose at first thought, for it must be taken into consideration that the fishermen are expert seamen, and cautious withal, and that as a rule their boats are stanch and seaworthy. During the last decade only about seventy-five from all the lake towns have been drowned. The heaviest losses have occurred at Saint Joseph, near the head of Lake Michigan. On the 29th of April, 1875, eleven boats were fishing far from shore, a light wind blowing from the northeast. Suddenly it veered to the northwest, and a violent squall struck the fleet. Some of the boats were returning homeward with all canvas up, and were unable to drop their sails before the storm struck them. Four went down, carrying with them eleven fishermen. Few of the fleet reached shore in safety; some were driven upon the beach, many miles from their harbor, and nearly all sustained some injury, besides the loss of nets, and sails and other parts of apparatus and rigging. From 1869 to 1876 twenty-one lives were lost in all. These disasters, together with the scarcity of fish and low prices, have discouraged many fishermen in this locality, and they have left fishing to follow other occupations.

At Milwaukee as many as twenty fishermen have perished within 15 years. They were accustomed to visit fishing grounds distant from fifteen to forty miles from shore, in boats, frequently remaining two days and nights. The sudden storms oftentimes bewildered them, especially

when occurring in the darkness of night, and their boats were driven far out into the lake where they could not live, or were cast upon a dangerous shore.

Fishermen are sometimes drowned in winter while fishing on the ice, either through carelessness in approaching the holes which are made when setting and hauling nets, or in venturesome expeditions over ice too thin to bear their weight. One man perished thus near Bayfield, Lake Superior, in 1878, and another in 1879 at the Gull Islands, at the entrance of Green Bay.

FISHING VILLAGES.—As a large proportion of the fishermen live in villages and cities whose interest in the fisheries is of minor importance, they dwell in houses in nowise different from those of the same class of men engaged in other pursuits, partake of the same food and comport themselves in essentially the same manner. In some localities, however, fishing is the only important industry, and in these places it is possible to trace some peculiarities in the character and surroundings of the fishermen. Some such villages exist in Green Bay, particularly on the west shore, north of Cedar River. The fishermen dwelling here, as a rule, are well fitted for their occupation, temperate and industrious. The gains of many, however, for the past five years, have been hardly sufficient to support them, fish having been scarce and prices low. Their houses, which are barely comfortable, are always built near the fishery, close to the beach. A few have cleared fields of considerable extent around their dwellings, but the majority have tilled only sufficient land on which to raise potatoes and some other vegetables. A few miles north of Menominee the road terminates northward, and the only communication by land between the villages is by an imperfectly marked trail leading through an almost impenetrable pine forest. Communication with the outside world is carried on entirely by water. The Menominee dealers send boats along the shore every day during the height of the season and gather up such fresh fish as the fishermen may have for sale. They stop at every fishery and the fishermen bring out their fish in the pound boats. The fish are weighed and the dealers give receipts stating the number of pounds, the kind, and price, and at the next trip bring the requisite amount of money. At these times the fishermen send to town for whatever supplies they need, receiving them at the next visit of the dealers' boats.

At Green Bay City and the southern end of Green Bay generally, many fishermen are well-to-do and several in very good circumstances. Some others, as one might expect, on account of the variety of nationalities, are shiftless, and seem to have little tact in providing for their families. In many cases their gains are sufficiently large to enable them to live well if they but used judgment in expending them. Nearly all the fishermen are land-owners to some extent, several possessing valuable farms in addition to their fisheries.

At Two Rivers, situated on the west shore of Lake Michigan, on the Green Bay peninsula, the fishing population—nearly all French-Canadians—live in one locality at the mouth of the two rivers, forming quite a colony, known in the vicinity as "Canada." The men are apt to be extravagant during profitable seasons, taking little thought for the future. It has been stated that, as a class, the fishermen of this locality were formerly quite intemperate, but recently a decided improvement has taken place in this respect.

In the vicinity of the Straits of Mackinac the fishermen are of all grades, nationalities, and conditions. The least industrious, perhaps, are the French gill-netters. About two-thirds of them barely succeed in gaining a livelihood. They sometimes allow their nets to remain in the water for several weeks untouched, the fish caught in them becoming putrid. During seasons of plenty these, as well as some in other localities, are apt to indulge in extravagant living and comparative idleness, returning when their means are expended, to activity and humble living.

The fishermen of Huron are generally considered a better class of men than the Lake Erie

fishermen. The majority have entered the fishing business at a mature age and are less reckless and improvident and more energetic and hardworking than in some other localities. Fishing is not now prosecuted on Sunday as it formerly was in this vicinity.

CREDIT SYSTEM.—The system of credit, until recently in operation in many of the fishing towns, had a demoralizing effect among the fishermen and led to general financial disaster among the out-fitters. It was customary for the capitalists to furnish the fishermen with outfits and provisions on credit and take pay in the fish caught. This system encouraged the fishermen to contract large debts, and to live extravagantly, while they continually looked forward to the time when the capture of fabulous quantities of fish should relieve them of their indebtedness. The out-fitters, on the other hand, discovered in the course of time that the value of the fish caught was frequently less than that of the outfits they furnished, and while out of charity for the fishermen, who were dependent upon them, or for lack of the knowledge necessary to establish a better system, they continued to give unlimited credit, many became involved in financial difficulties which resulted in utter ruin. At present, however, except in a few localities, dealers will not take uncaught fish in security, and finances are in a better condition.

FINANCIAL PROFITS.—It is almost impossible to gather any information in regard to the financial profits of individual fishermen, except of those who receive salaries. In many localities fishing is thought to be becoming less and less profitable every year, while in others the profits are considered to be larger than formerly. The opinions expressed, however, are based so largely upon the success or failure of the individuals furnishing them, rather than upon an average of the profits of all the fisheries of any given locality, that they must be taken with allowance. Moreover, so few statements of the value of the lake fisheries have been published in past years that there is nothing with which to compare the figures obtained for the present report. It must be the work of the next census to make such comparisons and to determine whether the lake fisheries are increasing or decreasing in importance and profitableness. More in regard to this subject will be found in the section of this report which treats of the methods of the fisheries.

B.—THE SAILOR FISHERMEN OF NEW ENGLAND.

33. SHORE EDUCATION.

SCHOOLS AND CHURCHES.—In the early days of the Massachusetts colonies the coast fishery was one of the most important industries upon which the people relied for support. In the early records of the Plymouth colony and, later, in the various town records may be found ordinances for the establishment of free schools, the teachers of which were to be supported by appropriations from the proceeds of certain public fishery privileges, and similar provisions were made for the maintenance of "an able, godly minister," an agent of equal importance in the educational system of the colonists.

The following order is on record:

"Whereas, at the General Court of His Majesty holden at New Plymouth, in June, 1670, the court, upon due and serious consideration, did freely give and grant all such profits as might or should annually accrue to the colony, from time to time, for fishing with nets or seines at Cape Cod for mackerel, bass, or herrings, * * * to be improved for and toward a free school in some town."

The records of the Plymouth colony show that in July, 1677, the Cape Cod fishery was let for seven years, at £30 per annum, to certain individuals who are named, to seine mackerel and bass. They were restricted to take in the Plymouth colonists with them; and if none offer to admit strangers, and a portion of the profits of the hire which accrued to the colony were distributed to the schools.

For the maintenance of a minister:

"The first Court of Assistants, holden att Charlestown, August 23, 1630, Ordered, that Mr Phillips [a minister] should have allowed him 3 hogsheads of meale, 1 hogshead of malte, 4 bushells of Indean corne, 1 bushell of oatemeale, halfe an hundred of salte fishe; for apparell, and other provisions, £20, or els to have £40 given him in money per annum to make his owne provisions if hee chuse it the rather, the yeare to begin the first of September nexte."*

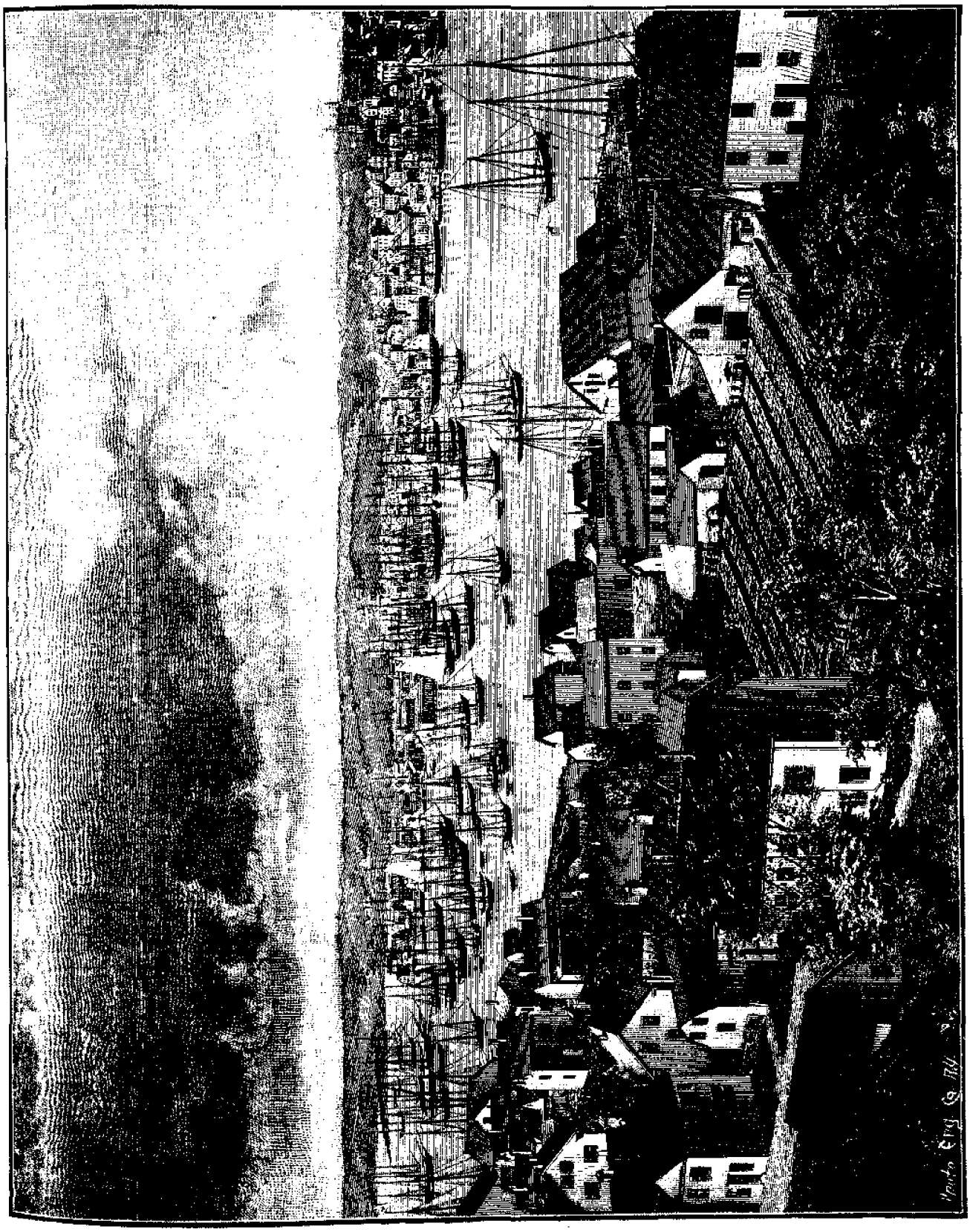
In 1662 for the support of a minister in the Plymouth colony the following order was—

"Made and concluded by the Generall Court held att Plymouth for the Jurisdiction of New Plymouth the third of June Anno 1662. The Court proposeth it as a thing they Judge would bee very comendable and benificiall to the Townes where God's Providence shall cast any whales; if they should agree to sett apart some part of every such fish or oyle for the Incorragement of an able Godly Minnester amongst them."†

From that time until now the New England coast towns, like those of the interior, have as a rule been well provided with free schools. These are attended by the boys until they are old enough to go to sea and by the girls until they are sixteen or seventeen years old, and sometimes still longer. It is quite usual for boys to engage in fishing in summer and to attend school in winter, and some do this until they arrive at the age of manhood. As a class the girls are almost always better educated than the boys, and the intelligence and refinement among the women along the coast, some of whom are always school teachers, seems to a stranger very noteworthy. The excellent education of the wives and mothers of the fishermen cannot be without a very important effect. The people of most of the fishing villages from the Bay of Fundy to New York are intel-

* Records of Massachusetts, vol. i [1628–1641], p. 73.

† *Plymouth Colony Records, vol. xi, 1623–1682, Laws, p. 135.*



Gloucester, Mass.; view looking west from East Gloucester.

From a photograph by T. W. Smillie.

ligent and refined to a noticeable degree, and in many instances to a greater degree than those of the average agricultural and manufacturing communities of the interior.

PUBLIC LIBRARIES AND LYCEUMS.—In many of these villages libraries and reading-rooms are sustained throughout the year. Courses of lyceum lectures are kept up and well attended in the winter.

In some villages, such, for instance, as Provincetown, literary societies are kept up in the winter, and readings, essays, and lectures by members provide entertainment for the weekly meetings. In Provincetown several lectures on the fisheries have been given by one of the old fishermen of the place. Through the influence of the pastors of the churches, "sociables" are often held in connection with the church, a large part of the evening's entertainment consisting of reading and music furnished by members of the church community. The intellectual grade of the fishing towns of Massachusetts and Maine may be judged from the fact that the churches of these towns are able to secure and keep in their service clergymen of fine education. In Maine and Massachusetts the Methodist Church is one of the most popular, and the appointments in the principal fishing communities are deemed to be among the best in the conferences within whose limits these towns are embraced.

We have spoken thus far of the smaller towns and fishing villages. In cities like Gloucester and New Bedford, which are supported chiefly by the fishing interests, there is a large proportion of the population which, though in a certain sense dependent on the fisheries, can hardly be considered as belonging to the sea-faring classes. In these communities the opportunities for intellectual culture are more extensive than in smaller places.

Nantucket is still to be regarded as a fishing town, although its interest in the fisheries is entirely retrospective. The intelligence of the inhabitants of this and other whaling ports is too well known to require mention.

We have spoken of the atmosphere of intellect and culture in the average fishing towns in order that the home influences of the young fishermen may be properly understood.

FOREIGN FISHERMEN.—The fishermen who come to the United States from certain towns in Nova Scotia are noted for their intelligence, while those from other localities, Judique, for instance, are equally noteworthy for their ignorance and brutality. Among the better towns of Nova Scotia may be mentioned Yarmouth and Pubnico, and many other ports on the southern coast of the Nova Scotian peninsula. Yarmouth is well known to be a town of intelligence and enterprise, and has, in proportion to its size, perhaps the largest fleet of square-rigged vessels in North America.

The schools of Nova Scotia, especially those of the southern portion, are said to be excellent, comparing favorably with those of New England.

Certain districts on the island of Cape Breton have a reputation very different from that of Nova Scotia, and the fishermen from these districts, especially in past years, have had a very bad name in the fishing fleet. The fishermen of Newfoundland are remarkable for their lack of intelligence and gentleness. This is largely due to the fact that on the coast of this island the fishermen do not gather together in communities to any great extent. Their houses are scattered here and there along the coast, singly or in small clusters, and it is impossible for the people, with the best of intentions, to provide educational facilities for their children.

We have referred to the education and the home influences of the Provincial fishermen because so large a number of Gloucester vessels are manned by them. Until within thirty years the fishing population of Gloucester was almost entirely native born, and the remarks which have already been made regarding the other towns on the New England coast would apply with equal force to Cape Ann. At present the large foreign element there must be taken into account in esti-

mating the intellectual and moral condition of this city. The influence of the Gloucester educational institutions is, however, soon felt by the foreigners who settle there.

FISHERMEN'S CHILDREN.—The children of the foreign-born fishermen sailing from Gloucester, as well as those whose parents are natives of New England, have profited much by the excellent system of schools which is as marked a feature of this port as of any other city of its size in Massachusetts. It is a common occurrence to see children of fishermen—both of foreign and native born parents—carrying off the honors at the schools, and a few years later occupying responsible positions. As a matter of fact, some of the most competent teachers in the Gloucester schools—if not, indeed, a majority of them—are the daughters of fishermen, nor is this specially surprising in a city which has often been represented in the Massachusetts legislature by men who had formerly been fishermen, while its city government, mayor included, has been largely drawn from this class.

HIGHER EDUCATION.—Thus it will be seen that while the majority of New England fishermen generally acquire only education sufficient to enable them to pursue their vocation, there are, nevertheless, a considerable number who, profiting by the opportunities of going to school in winter, acquire sufficient knowledge of books to enable them in after years not only to take command of fishing vessels, but to enter into fields of labor, and to accept responsibilities which require no ordinary amount of intelligence and judgment. It is by no means uncommon to find fishermen who have a remarkable store of general knowledge, and some who have come under our personal observation could quote at length from many of the poets, history, and the Scriptures. In more than one instance that might be mentioned, fishermen have shown considerable taste for art. This usually exhibits itself in making various kinds of scrimshaw work, such as minature vessels and carving on wood or bone. In rarer instances they learn to paint or draw and sometimes produce very creditable work.

Many of the songs and ballads published in the local papers of the fishing towns, and in a collection of such, called "The Fishermen's Song Book," printed in Gloucester, have been written by fishermen.

34. SEA EDUCATION.

TRAINING OF THE YOUTH FOR FISHERMEN.—The young fisherman enters upon his career with a store of hereditary and acquired attainments which render it possible for him soon to become an excellent mariner. Along the coast of Maine, where the old methods of fishing are still practiced by the boat fishermen, small boys are taken out to help their fathers and brothers as soon as they are old enough to be of practical assistance. It is not uncommon to see boys of eight or nine handling fish almost as large as themselves. On the cod and halibut vessels, and upon mackerel vessels which use the purse seine, boys are of little use until they are large enough to do a man's work; consequently, at the present time they are rarely shipped until fifteen or sixteen. This change has many advantages, yet there can be no doubt that its effect is derogatory to the general grade of intelligence among the fishermen. Boys, who at the age of ten would be willing to ship on a fishing vessel, when five or six years older have obtained a fair education, and the taste for some occupation on shore has created a dislike in their minds to the life of fishermen, whom they consider to be their inferiors in ability and education; consequently, they do not become fishermen, and, though they make useful members of the shore community, the fishing class loses. These remarks apply particularly to large ports like Gloucester and Provincetown, where, at present, it is rather unusual for the son of an intelligent fisherman to be a fisherman himself, though, until within the last twenty or thirty years, the occupation of fishing had been for several

generations hereditary in their families. The fishermen of these ports who are not foreigners, are, for the most part, drawn from the coast of Maine and the smaller ports of Cape Cod and Southern Massachusetts, where the old customs are still somewhat prevalent. The fact that the sons of well-to-do fishermen do not follow in the footsteps of their fathers is in part due to the fact that the fisheries of the United States are now much less profitable than they formerly were, the existing treaty with Great Britain having recently given an unfair advantage to the fisheries of British North American Provinces.

The youngster sailing upon a fishing vessel—whether he be ten or sixteen years of age—enters on a course of practical training under the direction of the skipper and his shipmates. If intelligent, ambitious, and industrious, he, in two or three years, thoroughly understands how to fish and how to manage a schooner, and what is more, he has learned to perform such duties as are within the limits of his strength by pure force of habit. He has acquired many of those points of skill which become more and more a second nature with him as he grows older, being able to lay his hand on any rope in the dark, to steer a vessel at night by the feeling of the wind on his face, to ease a vessel in a seaway by an involuntary movement of the hand as it rests upon the helm, to safely enter various harbors, either at night or day, and to know by instinct just what sails to change with varying circumstances. He has learned to distinguish between the different species of fish that he habitually sees, by peculiarities of their motion as they swim around the vessel at night, leaving shining tracks of fire behind them in the water, and to determine the presence of fish by the movements of the vessels in the offing, by the action of flocks of birds, or by the different sounds which some species of fish make as they flip with their fins at the surface. He knows how to dress mackerel, cod, or halibut, in darkness, guided by the sense of feeling. These feats of skill, which are soon learned by the observant and easily impressed mind of the younger boy, require a much longer time for acquisition by a boy of fifteen or sixteen, whose powers of observation, as well as his interest in such matters, have doubtless been dulled by his training on shore, however much his reflective powers may have been improved. An experienced skipper states from his own knowledge that boys who have gone with him at the age of fourteen or sixteen cannot usually be trusted to take their place at the helm or on the watch until they are eighteen or nineteen, but that those boys who went at the age of ten years can generally perform the duties of the watch when fifteen, and in some cases as young as thirteen. Many boys, trained in the old manner, have become skippers of vessels when from seventeen to nineteen years of age. Some of the most successful "fitters" at Gloucester had command while still in their teens.

These men have generally acquired a fair education by their own efforts, and in strength of character, ability, and general intelligence they are to-day by far the best men in the fishing fleet. These are the men who have been trained from early boyhood to face danger and hardship, and to meet and overcome emergencies, and exhibit traits of quickness, bravery, and presence of mind. It may, indeed, be stated as a fact that a fisherman never attains to the highest excellence in his profession who has not been accustomed to a sea-faring life from early boyhood.

TRAINING IN NAVIGATION.—A boy is trained in navigation precisely as in the management of the vessel and in the methods of the fisheries. He first learns to steer, perhaps by a landmark, then he learns the compass, and, later, how to shape the course or to measure distance on a chart, by observing the actions of the skipper. In this way he also learns to take the bearings of the land and to estimate its distance. The skipper often gives instruction to those of his crew who desire it in taking observations and calculating latitude and longitude. In former days it was an accomplishment which every ambitious boy was anxious to learn to be able to estimate the velocity of

the vessel by observing her motion through the water. The old-fashioned log was seldom carried on the fishing vessel, though at present the patent log is in general use.

Another important accomplishment which is sooner or later acquired by the young man who is anxious to be a skipper is to become familiar with the shape and character of the bottom on the fishing-grounds and along the approaches to the ports which he frequents. This is learned by sounding and thus ascertaining the depth of water and the nature of the bottom, and again by a study of the charts. All of these branches of navigation a smart boy learns long before he is of age, and, as a rule, they are acquired on board of the vessel as opportunity offers from day to day. In some of the larger ports, such as Provincetown, there are, in winter, schools of navigation which offer opportunities to study this science. These schools are usually well attended; but, of course, lessons there given are of little value unless they are practically applied on shipboard in the summer.

Besides the skipper who instructs his crew in navigation, there are frequently experienced navigators among the crew who become the instructors of their younger associates. Such instruction is always given as a matter of good fellowship and without remuneration. The fishermen of New England, as a class, are acknowledged to be excellent navigators, and from the fishing communities have been drawn thousands of masters of merchant and coasting vessels in all parts of the United States.

During the late war between the States, fishermen were, in some instances, employed in the Navy as sailing-masters, this position requiring the highest grade of seamanship and skill in navigation. Some of them rose to still higher positions. From their intimate knowledge of the coast-line fishermen are recognized to be the best local pilots, and they are often called upon to act in that capacity by vessels unable to procure regular pilots.

Although the results of the present system have been in the main satisfactory, it cannot be denied that there are many masters of fishing vessels who are shamefully deficient in their knowledge of navigation, and who are unable to ascertain their position at sea with even a fair degree of accuracy or to shape their course with a definite knowledge of where they will strike the coast. There are instances of vessels bound for Gloucester from the Banks or Bay of St. Lawrence making land south as far as Montauk Point or the mouth of the Chesapeake.

The schools of navigation should be more generally encouraged and supported. A system of examining and licensing the masters of fishing vessels would be of great importance. There is no reason why this should not be insisted upon in the fishing fleet as well as in the case of the merchant marine, for the fishing schooner carries a larger crew in proportion to its size, and is generally a more valuable piece of property.

TRAINING OF CAPE COD FISHERMEN.—Freeman, in his history of Cape Cod, thus speaks of the training of the young fishermen of that district:

"Whales, that formerly were so common on this coast, must now, if sought, be looked for in distant waters. The other fisheries are prosecuted with success; and the merchant service has from the first been indebted to Truro for some of its most able ship-masters. The youth of the place are often scarcely of age when they rise to the command of a vessel. It has been remarked that though the youth and strength of a place be employed two-thirds of the year in obtaining, by hardy and audacious toil, the wealth of the seas beyond the line, and even on the further side of Cape Horn; and, though early habits and the love of voyages occasionally prosperous induce the employment, the business is often precarious. Great dangers, and hardships, too, are often encountered; but they who survive them are generally successful in acquiring good estates. We must here be indulged in quoting from the English traveler of 1807 his relation of an incident that

illustrates the enterprise of early youth. He says: 'In passing from Truro to Provincetown,' by the bay route, 'I had in company an inhabitant of the latter place. As we approached the mouth of the inlet, the vertebras of a small species of whale, here called the blackfish, became frequent on the beach, together with other signs of the fisheries. Soon after, at the distance of half a mile, on the sandy flat from which the sea was now fast retiring, we discovered a boy, and near him appeared to be a great fish. The solitariness of the boy and his smallness compared with the fish, formed a combination sufficiently remarkable to draw us to the spot; and we found our fisherman of about ten years of age astride a porpoise about 10 feet long, in the midst of a sea of blood collected in the hollow of the sand. Alone, with a common table-knife for his instrument, he was cutting the blubber from the ribs of the monster, a task which he performed in a very workmanlike manner. Upon inquiring, we learned that he alone had killed the fish. His employment in the morning had been the tending of his mother's cows; and from the hills on which he was he had seen a shoal of porpoises enter the inlet. As the tide was ebbing, and the shore flat, many of them were soon embarrassed by the want of sufficient water to move in; and he flattered himself that by leaving the cows and coming down to the beach, he might be able to make a prize! So going into the water as far as he dared, he selected one struggling to regain deep water. This fish he boldly caught, from time to time, by the tail, thereby increasing its difficulties, till at last the water running away left the porpoise upon the sand. He staid by the fish till he was sure that escape was impossible; and then running home, a distance of a mile, procured a knife. Thus armed, he proceeded to wound and kill the fish—a task of some labor and danger; and, according to his account, he had accomplished it only by watching opportunities—alternately striking and retreating. My companion said it would yield 10 gallons of oil, and give the little cowherd $10 for his exploit.'

"Of even children, on the lower parts of the Cape, the little porpoise-killer at Truro is a fair specimen. Boys are often at sea at a very early age. Many of them at ten have become expert fishermen; and all who have a mind for promotion find their way from the forecastle to the cabin in due time. Many of our best commanders in foreign voyages are furnished here. The testimony of Burke, in the House of Commons, before the Revolution, 1774, in regard to the mariners of New England, was especially applicable to this and other parts of Cape Cod. 'No sea but what is vexed by their fisheries; no climate that is not witness to their toils. Neither the perseverance of Holland nor the activity of France nor the dexterous and firm sagacity of English enterprise, ever carried this most perilous mode of hardy industry to the extent to which it has been pursued by this recent people. * * * A more hardy or enterprising race of mariners is nowhere to be met on the watery element.'"

35. MENTAL AND PHYSICAL TRAITS.

CHARACTERISTICS OF AMERICAN FISHERMEN.—It has been the custom of many writers upon the fisheries to consider the fishermen as a peculiar class of men, with striking mental characteristics by which they could be distinguished from the population of the shore. This may be justifiable in cases where the profession of fishing is hereditary, in which event those who pursue it are prevented by social limitations from entering upon commercial or other pursuits upon land. It has been quite a common practice to consider the fishermen of all countries as possessed of similar traits.

In Sabine's well-known report on the American fisheries he devotes a chapter to the public services and character of fishermen,* in which he gives many interesting facts concerning the serv-

* Report on the Principal Fisheries on the American Seas, pp. 198-210.

ices of the fishermen of New England in time of war. At its conclusion, however, he falls into the vein of thought alluded to, and brings instances from the pages of history to prove that the fisherman is of necessity a grateful man, a patriotic man, a benevolent man—his proof of this, perhaps, being derived from an adventure of Mungo Park in one of the fishing villages of Africa—a sympathetic man, a law-abiding man, and a man who is loyal to duty. He illustrates the latter point by reference to the fishermen of Galilee, and incidentally eulogizes the fisherman's wife by quoting instances where fish-women in France, England, and Italy have performed charitable deeds, or, standing upon the sea-shore as evening approaches, chant melodies and listen until they hear answers from their husbands, who are guided by the sounds from their own villages.

A study of the fishermen of North America forces one to the conclusion that the fishermen are in all respects very similar to their neighbors on shore in the region in which they were born and educated. The crews of the cod and mackerel schooners of Massachusetts and Maine, when once they set their feet upon the shore, cannot be distinguished from their brothers and cousins who are clerks in the shops and mechanics in their native villages. The ignorant and lawless natives of certain parts of the British Provinces may be precisely matched among the agriculturists of the same district, while the enterprising and skillful Provincials, who are in command of a large number of vessels in the American fleet, are very little different from the better class of farmers and shop keepers of their old homes. The negroes, by whose strength the shad fisheries of the Southern rivers are carried on, are not to be distinguished from other negroes of the same district; in fact, except during the limited season of the fisheries, they are engaged in the same pursuits as their neighbors. The Portuguese fishermen retain the prejudices and habits of their native Azores. The Mediterranean fishermen, of whom so many are to be found on our Southern and Western coasts, might be transplanted with their boats to the coasts of Calabria, Greece, or the Balearic Islands, and would there be at home. The Irishmen of Boston, with their sloop-cutters and primitive fishing-tackle, are west-coast Irishmen still. All retain the peculiar mental characteristics of the districts in which they were trained, though all are more or less broadened and developed by the greater freedom which they find in the United States. A large percentage, probably more than a half, of the number of those enumerated in this report as fishermen are actually engaged in the fisheries only a few months in the year, and at other times are occupied in farming or any other pursuits on shore.

We refer here not to the crews of the fishing vessels belonging in the larger ports, but to many of the fishermen on the coast of Maine, and to almost all of those from Cape Cod southward, except the Connecticut fishermen, who supply the markets of New York and Havana, a few men engaged in the market fisheries of the large Southern States, the oyster fishermen of the Chesapeake, and the sponge and oyster fishermen of the Gulf of Mexico, and the men who fish habitually for the San Francisco market.

The fishermen of New England are of special importance and interest, since they correspond more closely to the professional fishermen of Northern Europe and constitute the class usually thought of when the fishermen of the United States are spoken of. For them especially treaties are made, tariffs are imposed, and from their ranks the merchant marine is recruited.

FISHERMEN AS CAPITALISTS AND MERCHANTS.—The ease with which the New England fisherman, accustomed to the constant sea-faring life, adapts himself to changing circumstances, may be judged from the fact that many so often abandon fishing and enter successfully upon other pursuits. Most of the fishery capitalists of Gloucester and other fishing ports are men who have been trained as fishermen. This is also the case with the fitters of the whaling fleet in Southern New England. In many ports these men carry on, in connection with their fishing business, a general

mercantile business. In Provincetown, for instance, all the principal shops are located upon the wharves, and are carried on by the fishery capitalists. The banks and insurance companies in the fishing ports usually have many retired fishermen upon the board of directors and other officers. Thousands of men from different parts of the coast have abandoned the fishing interest entirely, and have been successful in farming, in business, and in many other branches of industry. It has already been mentioned that a very large number of merchant vessels are officered by fishermen. Many fishermen have entered the Christian ministry and have been successful. Mr. John J. Watson, a well-known musician of New York City, who has met with considerable success upon the concert stage, began his career as a fisherman on a Gloucester schooner at the age of eight years, and continued fishing until after he had reached manhood.*

PATRIOTISM.—During the late war several companies of infantry were organized at Gloucester, composed largely of fishermen, and their record was excellent. Instances of this sort might be given by the page.

PECULIARITIES.—The fisherman rarely acquires any peculiarities of carriage or address by which he can be distinguished from his neighbors on shore. When he has left his vessel and assumed his "shore togs" no one would suspect him of being a sea-faring man. We speak here of the better men, whom we choose to regard as representatives of the class. Of course there are among fishermen many men who have the manners and appearance of common laborers, and who never change their costume or mingle with men engaged in other pursuits. These are commonly men of foreign birth, whose peculiarities are those of their native country rather than those appertaining to their profession.

A certain class of fishermen, however, must be excepted from these remarks. We refer to those men who are engaged in the shore fishery from little boats, and who spend their lives in solitude, fishing among the ledges near their homes. These men are seldom brought into contact with the world, and acquire peculiar mental traits, and in the course of dozens of years of solitude develop a bearing and physiognomy which mark them unmistakably as men of a peculiar class. These men are usually to be found upon isolated parts of the coast, such as the Isles of Shoals, Block Island, No Man's Land, and isolated islands on the coast of Maine.

Celia Thaxter, in her charming little monograph of the Isles of Shoals, thus speaks of the carriage of the fishermen: "Most of the men are more or less round-shouldered, and seldom upright with head erect and shoulders thrown back. They stoop so much over the fish-tables—cleaning, splitting, salting, packing—that they acquire a permanent habit of stooping."

These same peculiarities of bearing were also noticeable among the Bank cod fishermen of the olden time, who were accustomed to fish over the rail of the vessel, and were consequently, for a large part of the time, in a stooping position. The introduction of trawling has had the opposite tendency. The hauling of the trawls and the constant exercise in rowing the boats to and from the vessel has a tendency to expand the chest and throw the shoulders back, so that the fishermen are now upright, broad-chested looking men. The crews of the whaling vessels are also marked examples of a fine physique and good muscular development.

The following paragraph from the book just quoted from describes very picturesquely the conditions and circumstances of the life of a boat fisherman of the olden time:

"Till Bennaye grew very feeble, every summer night he paddled abroad in his dory to fish for hake, and lonely he looked, tossing among the waves, when our boat bore down and passed him with a hail which he faintly returned as we plunged lightly through the track of the moonlight, young and happy, rejoicing in the beauty of the night, while poor Bennaye only counted his gains

* Fisherman's Memorial and Record Book, pp. 149–153.

in the grisly hake he caught, nor considered the rubies the light-house scattered on the waves, or how the moon sprinkled down silver before him. He did not mind the touch of the balmy wind that blew across his weather-beaten face with the same sweet greeting that so gladdened us, but fished and fished, watching his line through the short summer night, and when a blush of dawn stole up in the east among the stars wound up his tackle, took his oars, and paddled home to Nabbaye with his booty—his 'fare of fish,' as the natives have it. Hake-fishing after this picturesque and tedious fashion is done away with now. The islands are girdled with trawls, which catch more fish in one night than could be obtained in a week's hard labor by hand." *

POWERS OF OBSERVATION.—The fishermen of the present day are, mentally, broader and more vigorous than those of former times. The management of the vessels requires more skill and presence of mind; the various labor-saving appliances in the rigging of the vessel, such as the patent windlass and the patent blocks, and various other contrivances of the same kind, have diminished the necessity for severe muscular exertion and the consequent exhaustion which, often repeated, must have a tendency to sluggishness of mind. The training, already described, through which a man must pass to become a successful fisherman, in a very large degree strengthens the mental faculties and develops at the same time great readiness and promptness of thought. The fisherman in a smaller vessel, to be successful, also needs to develop great powers of observation to protect himself and his boat from sudden changes of weather, and to follow the changes in the habits and motions of the fish from one season of the year to another. Many fishermen whom we have met have exhibited great aptness as observers of nature.

FISHERMEN AS INVESTIGATORS.—We need only refer to the wonderful contributions to science which have been made by the fishermen of the Gloucester fleet during the past three years, to demonstrate the interest which they have taken in matters which incidentally came under their observation. More than thirty Gloucester schooners have habitually for three years carried on their voyages a collecting tank full of alcohol, in which they preserved every unusual species of animal which they obtained on their lines or from the stomachs of the fish as they dressed them. Their interest in the subject is an intelligent one, and they soon learn to discriminate between species and to save only those things which they recognize to be novel. Our lists of donations by the fishermen to the National Museum are published weekly in the Cape Ann papers. After specimens have been sent to Washington for identification they have anxiously awaited the letters which announce the result of their examination, and, after they have learned their names, adopt them into their vocabulary. They quickly become familiar with the English names which are applied to certain species, and in some instances adopt the Latin nomenclature. The curious fish known to naturalists by the generic name chimera, is also known to the fishermen by the same name. There are at least a hundred men in the Gloucester fishing fleet who keep track of all the new discoveries on the fishing banks, and are interested in learning the opinions of naturalists on the subject. When a vessel has brought in a tank full of specimens, the majority of the crew of ten to fourteen men are interested in knowing about their identification. Such an intelligent interest as this, is by no means confined to Gloucester, for fishing vessels from several other ports carry collecting-tanks. Some very important contributions to the natural history of the menhaden, for instance, the discovery of the fact that this species feed upon floating crustaceans, a fact which had long been sought after by trained naturalists, was brought to light last summer by J. F. Fowle, the engineer of one of the menhaden steamers. One of the Connecticut vessels fishing for the Charleston market, has rendered important service in collecting. Certain fishermen have

* Thaxter's Isles of Shoals, 1873, p. 76.

attained a national reputation as observers: men like Capt. N. E. Atwood, of Provincetown, the success of whose course of twelve lectures on ichthyology before the Lowell Institute, of Boston, is a matter of record; Capt. U. S. Treat, of Eastport, Me., who was for several years employed by the Japanese Government to instruct their people in the methods of fishing; Simeon Chaney, of Grand Manan, N. B., and others whose powers of observation are no less remarkable, although they have not come so prominently into notice. In the investigation the results of which are detailed in the present volume, as well as in the previous work of the United States Fish Commission, circulars containing from fifty to eighty questions have been sent out to fishermen all along the coast, and in this manner information has been sought regarding the general character of the fisheries of the coast, the natural history and methods of capture of the cod, the mackerel, the mullet, the menhaden, the lobster, and several other species. In few instances have the circulars failed to receive answers, and in the archives of the Fish Commission may be found many thousands of pages of manuscript, written by the hands of fishermen, in which are given probably more important and previously unobserved facts concerning the natural history of these species than had ever hitherto been brought to light by the labors of all the trained naturalists of America. The Fish Commission has published a report of over five hundred pages upon the natural history of the menhaden and the menhaden fisheries, the material for which was supplied in large part by men engaged directly in the fisheries. A similar report, the material for which was obtained in the same manner, has recently been published. In preparing the chapter on the whale fishery for this report it has been necessary to correspond with many retired whalers, and the answers have been explicit and satisfactory in the extreme, far more so than answers to circulars relating to another subject which were sent out to sportsmen and professional men throughout the interior of the country. In fact, it is hardly possible to praise in sufficiently high terms the intelligent interest and the valuable coöperation which our fishermen have everywhere shown in the preparation of this report upon the fisheries. They rarely withhold information, and almost without exception, even at great inconvenience to themselves, render every aid in their power. If space would allow, an interesting illustration of the intelligence of the men engaged in the American fisheries might be given by printing in full some of the letters in response to circulars. Not only do they convey in a very concise and intelligible manner the information which was sought for, but the language is strong, idiomatic English, the grammar and orthography are faultless, and the handwriting graceful and legible.

In response to the invitation of the Commissioner of Fisheries, many fishermen of Gloucester and some from other ports have kept journals of their voyages, noting down the movements of their vessels, the locations of the fishing grounds as they change from day to day, and the peculiarities in the movements of the fish which fall under their observation.

There are before us at least thirty journals of this description, some of them covering a period of three or four years, and, in addition to discussing the points already mentioned, describing the peculiar methods of fishing employed by them. Many of these men, and many of the men on the menhaden steamers, have voluntarily kept records of the temperature of the water three times a day during the entire fishing season, appreciating the importance of placing upon record information of this sort for the use of those who are studying the habits of the fishes and methods for improving the fisheries. The records received have, as a rule, been kept in an accurate and satisfactory manner.

Three or four representatives of the Fish Commission have been sent out upon long trips on board of fishing vessels to study the methods of the fisheries and the natural history of the regions

visited. Mr. Scudder went to Greenland on a three months' cruise; Mr. Osborne to the Grand Bank on a three months' cruise; Mr. Newcomb to the Western Bank on a three weeks' cruise. Other representatives of the Fish Commission have for three years been accustomed to visit almost every vessel as it entered the harbor of Gloucester on its return from a fishing voyage, and the same system of visiting the vessels has been, to a less extent, carried on upon every part of the coast; and, almost without exception, these gentlemen have been received with courtesy, all information given them which they desired, and usually intelligent interest shown in the work in which they have been engaged.

It is due to the fishermen to say that they gave their services without the offer or the hope of remuneration of any kind. A number of the fishermen of Grimsby, England, two or three years ago, kept logs of their voyages in a similar manner, but it was in consequence of offers of valuable prizes. It is but fair to say, however, that many English fishermen and boatmen have manifested the same spirit of appreciation of scientific work to which we have just referred as having been displayed by the fishermen of the United States, and some of them, like Capt. David Gray, of Peterhead, have made for themselves excellent reputations as observers.

ENTERPRISE.—The enterprise of the New England fishermen is strikingly manifested by the manner in which they stand ready to adopt new improvements in the methods of fishing. There are, of course, conservatives among them, but the most enterprising of the class are ready to adopt at once any device which seems to promise greater efficiency in the prosecution of their business. It is not in this place necessary to describe in detail the manner in which improvements have been brought about. We need only refer to the rapid and general adoption of the patent windlass on the off-shore vessels; to the sudden changes from the old methods of drailing for mackerel to that of catching them with jigs, and again from that method to the use of the purse-seine; to the extensive and speedy adoption of steamers in the menhaden fishery; to the improvements which during the past one hundred years have been brought about in the model of the whale-boat, and within one-quarter of that time in that of the seine-boat; to the energetic manner in which gill-nets have been brought into use in the cod fishery, and the equally great improvements which have of late years been made in other fisheries.

HARDIHOOD AND DARING; SEAMANSHIP.—There is no hardier or more daring race of seamen in the world than the sailor fishermen of New England. Their training begins at an early age and their constant occupation on board the boats and vessels soon gives them a perfect familiarity with the waves and the winds in all their phases of manifestation. There is no coast upon which the winds and weather are more changeable and more trying to the endurance and skill of the seamen than that of North America from Florida to Davis' Straits. There are no fishermen in any other part of the world who venture so far from the shore at all seasons and carry on their fisheries to so large an extent in the open sea, hundreds of miles from any harbor. Then, too, there is no vessel which requires so much skill and judgment in its management as the American schooner; none which is, perhaps, more capable of remarkable achievements when properly managed, and none which is more liable to disaster when in the hands of the unskillful. In the same way the favorite American fishing boat, the dory, is peculiar in its demands upon the pluck, strength, and keenness of the person who is controlling its movements. Certain other boats, such as the whale-boat and the seine-boat, which are exclusively used in certain branches of the American fisheries, require less skill to prevent disaster in their use, but quite as much in their proper and successful management. The last-mentioned boats may be regarded as the special development of the ingenuity and observant experience of the fishermen. In no instance have the fishermen of other

countries essentially modified, within the past century, the general form of their fishing boats and the appliances which belong to them. Exception should be made, perhaps, with reference to the introduction of ketch-rigged cutters and steamers into the fisheries of Northern Europe, remarkable progress having been made, especially by Great Britain, Germany, and Holland, during the past twenty-five years in the adoption of fleeter and more manageable vessels for the herring, cod, and beam-trawl fisheries. The numerous labor-saving appliances, which may be found on board of the American fishing vessels and fishing boats, are, for the most part, peculiar to the United States.

At the International Fishery Exhibition at Berlin, the contrast between the appliances of this kind in the European and American exhibits was very noteworthy and was the subject of constant remark among the European fishermen who visited the American section. The demand for the speedy adoption of so many appliances in the rigging of vessels and boats may be fairly accounted for by the fact that our fishermen feel the necessity of every aid that can be rendered them in the trying circumstances to which they are so often exposed. It should also be mentioned that the necessity, which is especially felt by our fishermen, of attaining great speed for their fishing vessels, has led to the development of a high grade of seamanship, and has led also to the adoption of many labor-saving appliances, by the aid of which more sails and larger sails can be managed with ease and rapidity by ordinary crews.

There can be no question that seamanship of a very high type is found among the fishermen. While many methods are common to the fishing fleet and to the merchant fleet, the fishing vessels are often obliged to execute maneuvers which would be impossible to the heavier vessels in the merchant marine.

The fishing vessels are smaller, sharper, and carry sails which are larger in proportion to the size of their hulls. They are, therefore, swifter, and, as the fishermen express it, "handier." Relying upon the speed and "handiness" of his vessel, the fisherman takes greater risks in running for harbors in heavy weather and is consequently frequently exposed to emergencies which put to the utmost test his own seamanship and the stanchness and manageability of his vessel.

Many of the most skillful masters of merchant vessels have been trained in the fishing school; and during the late war between the States it was not unusual for fishermen to enter the Navy and to rise to responsible positions.

As might naturally be expected, the fishermen are courageous almost to a fault, both in the performance of ordinary duties and in rescuing men or vessels in peril. Some of the rescues accomplished by them will be mentioned in the chapter on public services.

"Theirs is a life of toil," writes Mr. Procter, "and although fortune smiles upon them occasionally and sends a good school of fish, yet they spend hours and hours at the rail, in the bitter cold of winter, waiting for a bite—'grubbing,' as it is termed—with a family at home, whom they love as well as any one loves his own; and the bread of this family depending upon the catch of fish. Oftentimes these fathers will lie awake at night in their berths, tossed up and down by the waves of Georges, each hoping that he may do well this trip for the sake of his loved ones who are in need of many things for their comfort. This is no fancy picture, but the earnest facts in the lives of the married fishermen, who cannot stay at home in winter, because there is bread to win, and they must win it. Theirs is no holiday existence, but a continued grappling with the elements, a struggle for life, with storm and old ocean in its anger to meet; and with pluck and daring they wring success from the very verge of the grave."

36. SUPERSTITIONS.

THE CAUSES OF SUPERSTITION.—It is customary among writers to give fishermen credit for an extraordinary amount of credulity and superstition. There are among the fishermen superstitious men, just as there are among their kindred on shore; while, on the other hand, the more intelligent and practical men among them, especially those born in the United States, are, perhaps, among the least superstitious of men, certainly as little credulous as any class of sea-faring men. It is not unusual to find the master of a fishing vessel, while humoring the prejudices of his crew, himself thoroughly incredulous as to the power of any supernatural influences over the movements of the vessel or the success of the voyage.

Mr. J. P. Gordy thus writes concerning some of the superstitious notions among the Gloucester fishermen:

"I will not undertake to say to how many causes superstition may be due, but one cause, at least, every one will admit—a weakness of imagination and reason. Whenever you find a mind too weak to form such a conception as law, you find a mind which, if left to itself, will be superstitious. The development of the religious notion may modify the form of the superstition, but with that I do not propose to deal, since it is at present among fishermen in too varying proportions to make valid any conclusions that may be drawn therefrom. Now, in most circles of society the weaker minds are not left to themselves. They borrow the opinions as they do the manners of the highest culture and the best intellects in the circles in which they move. Those pronounce superstitions ridiculous and they echo their laugh. Even then the thoughts in their minds answering to abstract terms have a grotesqueness that would deserve to be called superstitious had not that name come to indicate a peculiar class of grotesque ideas. Now fishermen are very emphatically left to themselves. They have as little culture, as little contact with culture, as any class in the land. The most intelligent among them are prevented by their limited opportunities for intercourse from wielding the influence which naturally belongs to power, and superstition, as a rule, is the natural result. This is especially so when you take into consideration another cause which works with peculiar force among fishermen. I think that among people whose mental structure inclines them that way superstitions are more or less prevalent according to the frequency with which they come in contact with variable and incalculable events. Superstitions are due, in part at least, to the cause-seeking instinct; and when a new phenomenon appears, or an old one at times and under circumstances which cannot be predicted, this instinct demands satisfaction. Now, of all classes in the world, fishermen deal with phenomena with the cause of which they are most thoroughly unacquainted. When and from what quarter the wind will blow; when and why fish will be abundant; why the schools are large at some times and small at others—are questions they cannot answer. These are the facts which determine their success and upon which their observation is constantly directed, and unless the fisherman has the balance of mind which enables a man of strength to hold his judgment in suspense, he is likely to assign a cause which, if realized in his imagination, is almost certain to be a superstition. From these three causes, therefore—their lack of intelligence and culture, their lack of contact with these, and their constant observation of irregular facts—fishermen as a class are extremely likely to be superstitious."

Without further discussion as to the causes of superstition, we will consider some of the most common and widespread superstitions—such as may be found on any fishing vessel, and such as are always firmly believed in by many of the crew. We shall speak particularly of the superstitions prevalent among the Gloucester fishermen. Among the fishermen of European birth, so many of whom may be found on the whaling and other vessels on the coast of California, entirely

another class of superstitions doubtless prevail, similar to or identical with those current in the countries whence they came.

The superstitions of the fishermen may be roughly classified into three groups: (1) Causes and indications of ill luck; (2) superstitions regarding the weather and other natural phenomena which may or may not relate to causes; (3) superstitious usages which have no special bearing upon the welfare of the fisherman.

CAUSES AND INDICATIONS OF ILL LUCK.—A Jonah is any person, thing, or act which is supposed to bring ill luck upon a voyage. It is characteristic of the fearlessness of the Gloucester fisherman and the energy with which he throws himself into his occupation that these prejudices of ill luck are rarely applied to the fate of the vessel itself. Concerning this the men have but little anxiety, their whole interest being in the successful completion of the voyage. There are many kinds of Jonahs.

Certain persons are often selected by the fishermen as Jonahs, being those men who have been unlucky in their fishing voyages. The belief in luck is very deep-seated. When a vessel is unlucky on one of its voyages some of the crew are pretty certain to leave and to ship on other vessels. In the course of constant changing from one vessel to another certain men chance for a number of successive voyages to ship on board of unsuccessful vessels. The "ill luck" of these men soon becomes known among their comrades, and they are branded as Jonahs. A man may be extremely successful for a number of years and later he may fail on a few voyages, and it is at once said of him that his luck has changed and that he has become a Jonah. Men are sometimes discharged from vessels because of their reputation as Jonahs, although no other fault can be found with them. Sometimes when a vessel is unlucky the crew resort to a strange method of determining the unlucky one. They induce the cook to put a nail or a piece of wood or coal in a loaf of bread, and the man who happens to get this is declared a Jonah. It has been observed, however, that when the cook's verdict has been pronounced against a man who holds a good reputation as a fisherman and lucky man it has little effect. "Luck" is everything, and no kind of divination will counteract its influence upon the reputation of its happy possessor. Sometimes the fisherman resorts to strange expedients to free himself from the odor of "ill luck" which clings to him. For instance, he will carry his bed-sack on deck and set it on fire, and fumigate himself thoroughly, for the purpose of exorcising the evil influence.

Vessels sometimes get the reputation of being Jonahs. These vessels have considerable difficulty in getting crews until their luck changes. They are sometimes withdrawn from the fisheries on this account. The schooner Florence, which was sold from Gloucester to New London, and afterwards made exceedingly successful far-sealing trips in the Antarctic Ocean, once had a bad reputation as a Jonah, which perhaps influenced her owners to take her out of the fisheries. The same vessel subsequently transported the Howgate expedition to Cumberland Sound.

Certain articles of personal property or apparel are thought to be Jonahs. A man carrying a black valise or wearing white woolen stockings or blue mittens would find much difficulty in shipping on board of a Gloucester vessel. A black valise is regarded with special disfavor, and the almost universal use of white mittens and nippers is largely due to this common prejudice regarding color. It is not uncommon for the more influential and skillful fishermen to carry with them some of these suspicious articles for the purpose of overcoming the prejudices of their associates, and the influence of such men is having good effect. There are other kinds of Jonahs which are not so generally believed in. Some fishermen, for instance, think that it is a Jonah to make toy boats or models on board the vessel; others, that a fiddle or a checker-board is a Jonah; others, even, that it is a Jonah to leave a bucket half-full of water on deck, or to soak mackerel in a bucket,

saying that "so long as you soak them in a bucket you will never get enough to soak in a barrel." Some think it is a Jonah, when a vessel is coming to anchor on the Banks and is "sticking out" her cable, to have a splice stop in the hawse-pipe, and it is frequently remarked by such that the vessel will not be successful in that berth, and the result will be that she will have to change her position. It is also thought, by a very few however, that it is a Jonah to have a dory, in leaving the vessel, turn round from right to left or in a direction contrary to that of the sun. Some skippers think it is a Jonah to keep the vessel's deck clean when on the fishing grounds, and they will allow only such cleaning as is absolutely necessary. Others, on the contrary, are very particular in the matter of having their vessels kept clean.

The prevalent belief in "luck" has already been mentioned. Certain vessels and men acquire the enviable reputation of being the luckiest in the fleet, and it is always thought a piece of good fortune to be able to ship on board of such vessels or in company with such men. Certain articles also gain the reputation of bringing good luck. For instance, during the past two or three years, since the United States Fish Commission has been sending out collecting tanks full of alcohol on some of the vessels, it has come to be regarded by many of the fishermen as a matter of good luck to have one on board. One of the most successful Gloucester skippers went out on a voyage in 1880 without the tank which he had been accustomed to carry and was unsuccessful. Upon his return he came to the headquarters of the Commission and begged for a tank, saying that he would not, on any account, go out again to the fishing grounds without collecting materials on board. Such instances as these are mentioned simply to indicate how great importance is given to little things, and to show how the superstitious instincts of these men lead them rapidly from one belief to another, while the general skeptical tendency of the age prevents any very strong and permanent belief in any particular form of superstitution.

UNLUCKY DAYS AND ACTS.—The belief that Friday is an unlucky day still holds among many of the fishermen, but the old idea is fast dying out. A quarter of a century ago few Gloucester fishermen would go to sea on a Friday, but at the present time little attention is paid to this; and in this respect the fishing vessels are perhaps in advance of many vessels in the merchant marine and in the Navy. This revolution in opinions has been brought about simply through the influence of a few independent and determined men.

Certain acts are considered unlucky; for instance, to kill a "Mother Carey's chicken" or petrel. This superstition is also going out since many of the vessels during the past years have been obliged to kill these birds for bait. It is regarded unlucky by a great many fishermen to drive a nail on Sunday. To combat this idea certain skippers have been known to amuse themselves on that day when at sea by driving nails. It is unlucky to leave a hatch bottom side up upon the deck; such an act is supposed to be the possible cause of some future disaster to the vessel.

Accidents, too, are unlucky and are sometimes regarded as sufficient reasons for disaster. To let a hatch fall down into the hold is considered especially unfortunate, while to break a looking-glass is disastrous not only to the vessel but to the person, family, and friends of the man who is the cause of the breakage.*

Fishermen are not as a rule given to forebodings of ill. They always go to sea with brave hearts, the idea that they may never return to port seldom being allowed consideration, no matter how many of their comrades have been lost within a few days.

* The superstition regarding the ill effects which may result from breaking a looking-glass is very wide-spread on shore as well as among seamen. In various parts of the United States—in the cities as well as in rural districts—the remark is often heard that the breaking of a glass indicates "seven years hard luck." It will be seen that this belief is not confined to fishermen, but, like many other superstitions with which they are credited, is doubtless borrowed from people on shore.

BELIEFS REGARDING NATURAL PHENOMENA.—Among fishermen we find the ordinary beliefs regarding the influence of changes of the moon upon the weather. The fisherman, like any other sailor, will often whistle for a wind or will stick his knife into the aft side of the mast to insure a fair wind. The fishermen observe carefully the direction of shooting-stars, thinking that the wind will come from the direction toward which the stars shoot. There is a common belief in Maine that the flood-tide brings in a wind, that the wind is likely to die out with its ebb, also that it is more likely to rain on the ebb than on the flood; and this belief is more or less common all along the New England coast. In Maine the fishermen believe that children are always born when the tide is at the full and die when it is ebbing, and that only at this latter stage of the tide do deaths occur.

When the sun "sets up its backstays," or "draws water" in the morning, it is a sign of foul weather; at night, of fair weather; "sun-dogs," or parhelia, indicate foul weather.

When the wind backs, or veers from right to left or against the sun, it is believed that it will *not continue steady*. This belief is so common among seamen that an old distich tells us that:

When the wind backens against the sun
Trust it not, for back it'll run.

If the wind moderates with the setting of the sun, it will rise again when the sun rises.

The peculiar appearance in the water which the fishermen describe as "a crack in the water," seen in calm weather, is the sign of an easterly wind.

The fire of St. Elmo, the "composants" (*corpo santo?*), as the fishermen call it, is regarded as a natural phenomenon. It is believed to rise higher upon the mast as the storm increases, and at the culmination of the storm to reach the highest point on a vessel's spars or rigging.

Backing winds are generally followed by unsettled weather; hauling winds are thought to indicate settled weather.

The following are old saws of general prevalence:

Mackerel sky and mares' tails,
Make lofty ships carry low sails.

Rainbow in the morning,
  Sailors' take warning;
Rainbow at night,
  Sailors' delight.

Evening red, and morning gray,
Is a sure sign of a pleasant day;
But evening gray and morning red,
Will bring down rain upon your head.

If the morning is marked by an easterly glin,
The evening will bring rain to wet your skin.

If in the southwest you see a smurry sky,
Douse your flying kites, for a storm is nigh.*

Some of these beliefs concerning the weather doubtless have more or less foundation in fact, and are based on a close observation of results growing out of natural causes, though the "weather-

*On the east coast of the United States and British North American Provinces storms generally follow more or less closely the direction of the Gulf Stream, which, north of Cape Hatteras, closely approximates to a northeast course. Therefore, an easterly or northeasterly storm "begins to leeward," as the fishermen say; that is, it gradually moves to the northeastward, notwithstanding the wind may be blowing heavily from that direction. As a result, the first indication of a storm, particularly in winter, is generally noticed in the changes that appear in the sky to the south and westward. If the sky assumes a hazy, greasy look—called "smurry" by the fishermen—with small patches of leaden or inky clouds, a storm is imminent; here lies the force of this distich. The same rule applies to the first distich in regard to the "easterly glin:" since, if the morning sky is specially clear in the east, so as to form a glin, it is generally thick with an approaching storm in the opposite direction.—J. W. C.

wise" observers may not always be able to explain the relation between the "signs" and the changes which they predict.

SUPERSTITIOUS USAGES.—Some fishermen will not have their hair cut except when the moon is increasing in size, fearing that otherwise their hair will fall out. This idea, which is akin to the common one found throughout the rural districts of the Eastern and Middle States that animals killed in the waning of the moon will shrink when cooked, is by no means peculiar to the fishermen. The fishermen of former days, like other sea-faring men, were accustomed to wear ear-rings to improve their eye-sight; but this custom is almost, if not entirely, extinct among the American-born fishermen. Once in a while a veteran is still to be found with the picturesque old ear-rings in his ears. The European fishermen of California and the Southern States still adhere to this practice. Some fishermen carry potatoes in their pockets as a preventive of rheumatism, and wear nutmegs round their necks to cure scrofulous or other humors. These usages are also shared by hundreds of thousands of our shore population, who carry in their pockets the "lucky-bones" of fishes, certain bones of animals, as well as horse-chestnuts and other vegetable products as prophylactics. Many of the Roman Catholics among the fishermen of course wear amulets as personal safeguards. A fisherman who has wounded his finger with a fish-hook will immediately stick the hook into a piece of pine wood, thinking that he thus may hasten the cure of his wound. Warts are supposed to be removed by counting them and pronouncing over them a certain formula of words. In dressing codfish, some fishermen always save the largest fish to dress last. It is a very common custom to nail a horse-shoe on the end of the bowsprit for good luck. Among the French Canadians employed on our fishing vessels there are a few who still retain their ancestral belief in spirits and fairies; and the Scotch and Scandinavians and others have brought over with them the folk-lore of their fatherland. They soon become ashamed of talking about such beliefs. Whatever their private opinions may be, they seldom refer to them after having been associated for a few years with their unpoetical and skeptical shipmates.

A curious custom is found on many of the cod vessels, especially those of Cape Cod, connected with the process of dressing the fish. After a fish has been decapitated, its body is passed by the header to the splitter. If the body still exhibits signs of life, the splitter will usually ask the header to kill the fish, which he does by a blow upon the back of the skull. This act, performed upon the severed head, is supposed to have an immediate effect upon the body, which is in the hands of another man. A Gloucester fishing captain of thirty years' experience, who sits near us while we write, remarks: "It is a singular thing, but *it is surely true*, that when the head is treated in this manner the body always straightens out."

37. DIALECT.

PECULIARITIES OF DIALECT.—Among the native-born fishermen of New England, particularly those of the rural districts of Cape Cod and Maine, a very pure, forcible English dialect is spoken. The inhabitants of this region retain the peculiar modes of expression in use among their English ancestors, who came to this country two hundred years or more ago. It is estimated that 80 per cent. of the inhabitants of Cape Cod at the present day are lineal descendants of English ancestors who settled the towns of that district between 1620 and 1750, and the percentage is probably equally as great, if not larger, on the coast of Maine. As is well known, very many of the English immigrants to these regions were men of education and good family. As a consequence the English of the shore populations and of the fishermen belonging to those districts is pure, idiomatic, and strong. Many provincial words, or words which were in common use in England two centuries ago and are now marked as obsolete in the dictionaries, are still in use among

them. There is now in preparation, in connection with the work of the United States Fish Commission, a dictionary of words and phrases in use among the fishermen of the United States, which, when published, will afford much material deserving of the attention of philologists. There are many expressive words and phrases in use among the fishermen—the technical language of their handicraft applied to the operations of daily life—which are full of meaning to those who know enough of fishing to understand them. Various names for tools and operations connected with their trade have been coined by them which are peculiar and have never found place in dictionaries. Slang is, as might be expected, very popular, and the slang phrases invented by the newspaper paragrapher, the negro minstrel, and the actor in the variety theater are as current among them as in the streets of our towns and villages. The ordinary professional slang of seamen is also prevalent among them, its vocabulary being greatly increased by slang used only by the fishermen themselves.

Mr. Charles Nordhoff, in a collection of short stories published under the title "Cape Cod and All Along Shore," has given excellent illustrations of the Cape Cod dialect, particularly that of Chatham, Harwich, and the neighboring towns, the truthfulness of which is all the more apparent when compared with the dialect in Miss McLean's "Cape Cod Folks." "Peter Gott, the Cape Ann Fisherman," a story by Dr. Joseph Reynolds, is also a treasury of good old Cape Ann language. The "Fisherman's Own Book," the "Fisherman's Memorial and Record Book," and "The Fisherman's Song Book," three little volumes published by Proctor Brothers of Gloucester, contain many verses in dialect.

The following lines by Hiram Rich, of Gloucester, represent a fairly satisfactory attempt—perhaps the most successful yet made—to record the dialect of the fishermen of the olden time:

THE SKIPPER-HERMIT.

For thirty year, come herrin'-time,
  Through many kind o' weather,
The "Wren" an' me have come an' gone,
  An' held our own together.
Do' know as she is good as new,
  Do' know as I am, nuther;
But she is truer'n kit' an' kin,
  Or any but a mother.

They're at me now to stay ashore,
  But while we've hand an' tiller,
She'll stick to me an' I to her,—
  To leave the "Wren" would kill her.
My feet have worn the deck; ye see
  How watches leave their traces,
An' write on oak an' pine as plain
  As winters on our faces!

But arter all is said an' done,
  There's somethin' sort o' human
About a boat that takes at last
  The place o' child and woman;
An' yet when I have seen some things—
  Their mothers let me toss 'em—
My boat, she seemed a barnacle
  'Longside a bran-new blossom.

Sometimes to me the breeze off-shore
  Comes out upon the water,
As if it left the grave of her—
  No wife to me nor daughter.
Lor! if I knowed where green or no
  The turf is sweet above her,
I'd buy a bit o' ground there,—wide
  As a gull's wings would cover.

We know the tricks o' wind an' tide
  That mean an' make disaster,
An' balk 'em, too—the "Wren" an' me—
  Off on the Ol' Man's Pastur'.
Day out an' in the blackfish there
  Go wabblin' out an' under,
An' nights we watch the coasters creep
  From light to light in yonder.

An' then ag'in we lay an' lay
  Off Wonson's Cove or Oakses—
None go by our compass-light,
  Nor we by other folkses.
Ashore, the ball-room winders shine
  Till weary feet are warmin',
But here an' there's a sick-room light
  That winks away till mornin'.

An' Sundays we go nigher in,
  To hear the bells a-ringin',—
I aint no hand for sermons, you,
  But singin's allers singin'.
The weathercocks—no two agree—
  Like men they arg' an' differ,
While in the cuddy-way I set
  An' take my pipe, an' whiff her.

My pipe—eh! p'ison? mighty s-l-o-w;
  It makes my dreamin' clearer,
Though what I fill it with now-days
  Is growin' dearer 'n' dearer.
I takes my comfort when it comes,
  Then no lee-lurch can spill it,
An' if my net is empty, Lor'!
  Why, how can growlin' fill it?

An' so we jog the hours away,
  The gulls they coo an' tattle,
Till on the hill the sundown red
  Starts up the drowsin' cattle.
The seiners row their jiggers by;
  I pull the slide half over,
An' shet the shore out, an' the smell
  Of sea-weed sweeter'n clover.

The following sketch, quoted from a Boston newspaper, contains a fair example of the fisherman's dialect: *

"'Wall, you, I see another fisherman has gone down,' said a rugged, weather-beaten veteran of the sea to a reporter who, as was his wont, had invaded the quarters of the old salt near Commercial wharf. The speaker sat on an upturned keg, and had just finished reading the account of the loss of the Maud S., which had gone down near Half-Way Rock, off Portland Harbor, not long before.

"'It's cur'ous. Sometimes a vessel 'll go down 's easy's nothin', 'n' then agin she'll live whar you wouldn't say th' wus a ghost of a show. Now, thar was the Rattler, pitchpoled over the shoals off Cape Ann at midnight, some thirteen years ago, in a gale of wind, 'n' come right side up 'n' got into port safe with every man on board,' and the old man paused and patiently waited for the usual—

"'How was that, cap'n?'

"With a preparatory 'wall,' while a satisfied look overspread his face, the captain continued:

"'One of the wust shoals on the New Englun' coast is 'bout twenty-two league off Cape Ann, called Cashe's Shoals; yet fur all that th'r ain't much said 'bout 'em, which I never could explain, fur more vessels uv gone down thar than on any shoal of the same size along the coast.'

"'How large are the shoals?'

"'Wall, sailin' either side a quarter 'v a mile an' you're in sixty or seventy fathom, but right on the shoals, which is only a few rod across, the water ain't much over twenty feet deep. Why, it's so shaller I've seen kelp growin' up on top o' the water, an' when thar's a blow an' the big seas come rollin' in thar's I've seen 'em—a hundred feet choppin' down on the bottom—I tell *you* it's cruel. No ship could live thar in a storm, an' only smaller vessels can go over in calm weather. Wall, the Rattler, as I was a speakin' of, wus comin' 'long down the coast from Newf'n'land loaded with frozen herrin'. The night wus a black one, 'n the cap'n was off his reck'nin'. Least-

* The facts in the case are truthfully described. The Rattler, while returning to Gloucester from a voyage to *Newfoundland, in January, 1867, was overtaken by a furious gale in the vicinity of Cashe's Ledge. She was struck* by a heavy sea, thrown on her beam ends or rolled over, and finally righted with the loss of both masts. She arrived in Gloucester a few days later.

ways, fust thing any one knowed, a big sea lifted the vessel an' pitched her forrard. She struck her nose on the bottom, an' just then another big one struck her fair in the stern, an' lifted it clean over the bow; her masts struck an' snapped off, an' she went over the shoals an' floated in deep water on the other side, fair an' square on her keel, with both masts broke off to 'ithin fifteen feet o' the deck.'

"'Where were the crew?'

"'Oh, they were down below. They said it was all over afore they knew what was up; they didn't sense it at all at first. They said, all it was they was settin' thar 'n then,' illustrating by a motion of the hand toward the ceiling and back to the floor; 'they struck the deck 'n then came down agin all in a heap on the floor. They got up on the deck, kind o' dazed like, an' thar she wus, a complete wreck.'

"'How about the man at the helm?'

"'Oh, he was lashed. But he said arterwerds, when he felt the old craft spinnin' over, he thought it was all over with him. He held on ter the wheel fur dear life an' never lost his grip; but I tell you that's a tremendous strain on a man.' And the old captain clenched his large muscular hands as if he thought he, too, for a time, was being subjected to the same strain. 'He wus pretty nigh gone; but they unlashed him, took him down below, and did for him all they could. Arter they got into port, he was laid up fur a long time, but finally come round all right.'

"'How did they manage to get into port with their vessel a wreck?'

"'They had a fair wind, the current was in their favor, an' they finally fell in with a vessel that towed 'em in all right. That was the nar'rest 'scape I ever heerd of fur a vessel.'

"'Their good angels were watching over the crew that night, sure. If any one but you, captain, had told me that story I must say I should have doubted it.'

"'Wall, you needn't doubt it, for it's gospel truth, an' the man who owned the vessel was Andrew Leighton, of Glo'ster, an' the cap'n who sailed her was named Bearse.' And the veteran fish-dealer brought down his clinched hand upon an ice-chest that stood within reach with an emphasis that settled all debate more effectually than the most successful gag-law ever put in practice by the most astute politician."

DIALECT OF MARBLEHEAD FISHERMEN.—The first settlers of Marblehead came from the south of England, and many of them from the Guernsey and other channel islands, and the peculiarities of the dialects of their ancestors are still observable in this old town. Roads, in his History of Marblehead, says:

"So broad and quick was their pronunciation, and so strange were the idioms characterizing their speech, that a native of the town was known wherever he went. Nor was this peculiarity confined to any class or condition of men residing in the town. All shared it alike, of whatever rank or condition in life. The words were clipped off very shortly, and in some sections there was a slight difference in the dialect noticeable. The 'Cuny Lane' people always dropped the 'h' in speaking, and their vernacular was much like that of a cockney Englishman, in addition to that which betrayed them 'to the manner born.'

"Hardly a family in the olden time escaped with a correct pronunciation of its name. The name of Crowninshield became 'Grounsel;' Orne was transformed to 'Horne; Trefry was variously pronounced 'Duvy,' 'Tevy,' 'Trevye,' and 'Trefroy;' Quiner became 'Coonier;' Florence was clipped to 'Flurry,' and Thrasher was abbreviated to 'Trash.'

"So accustomed were many of the inhabitants to the cognomen by which they were known that in some instances they did not recognize their own names when called by them. An instance of this kind is related in the 'Life and Letters of Judge Story,' who was a native of the town. Once

while he was trying a case in the circuit court, in Boston, the clerk called out the name of one of the jury as Michael Treffrey (it being so spelt). No answer was given. Again he was called, and still there was silence. 'It is very strange,' said the clerk, 'I saw that man here not two minutes ago.' 'Where does he come from?' asked the judge. 'Marblehead, may it please your honor,' said the clerk. 'If that's the case,' said the judge, 'let me see the list.' The clerk handed it up to him. He looked at the same a minute and, handing back the list, said, 'Call Mike Trevyé' (throwing the accent on the last syllable). 'Mike Trevyé,' called the clerk. 'Here,' answered a gruff voice. 'Why did you not answer before?' asked the clerk. 'Treffrey is no way to pronounce my name,' said the juryman; 'my name is Mike Trevyé, as the judge knows.'

"Another anecdote to the same purpose is related in the work: 'On one occasion, when some of our fishermen were in court to settle a mutiny which had taken place on the Grand Banks (of Newfoundland), one, on being called to state what he knew, said that the skipper and one of his shipmates had what he called a 'jor of ile.' The presiding judge in vain endeavored to get a more intelligible answer, and finally Judge Story was called upon, as usual, to act as interpreter to his townsman, which he did, telling the court that a 'jor of ile' in the Marblehead dialect was 'a jaw, awhile,' which, being interpreted, meant that the two men abused each other grossly for some time.

"Though the dialect once so general among the people is now almost extinct, there are many words used occasionally to know the meaning of which would puzzle a stranger. Often when any of the natives feel cold or chilly they will say they are 'crimmy.' If they lose their way in the dark and become confused or bewildered, they will say that they were 'pixilated.' In speaking of the ceiling of a room many of the older people still call it 'planchment.' When a lady on examining a piece of sewing finds that it is carelessly or improperly done, it is not unusual for her to call the work a 'frouch.' When food has been improperly cooked it is spoken of as 'cautch.' When very angry for any reason it is a common occurrence to hear some one exclaim, 'Squeal 'im up!' 'Squeal something at him!' or 'He ought to be squealed up!' which being interpreted means, 'Throw something at him!' 'He ought to be stoned!' 'Stone him!' A crumb or a small piece of anything is called a 'grummet,' and a sulky or ill-natured person is said to be 'grouty.'"

FISHERMEN OF GRAND MANAN.—A writer in the Gloucester Telegraph of July 16, 1870, says:

"The fishermen of Grand Manan have a *patois* of their own. When one of them speaks of his 'brush' you do not at first suspect that he refers to his hair. His boots are 'stompers,' while his knife is a 'throater,' and his apron a 'barvil.' His hook is a 'dragon,' and his boats 'pinkies,' 'pogies,' and 'jiggers.' He counts time by the tide, and covenants with the parson to marry him to Suke about 'slack water.' The various preparations of flour and meal are known as 'fish-smother,' 'duff,' and 'joe-floggers'; hard bread and apples are 'grunt.' He applies 'she' to everything, from his wife to a cart-wheel or clock."

38. LITERARY TASTES.

Through the great abundance of cheap publications, at the present day, the fishermen are enabled to provide themselves with literary entertainment at small cost. The liability of having valuable books impaired or destroyed is often a reason for not carrying them on shipboard. We quote the statement of Mr. A. Howard Clark concerning the general character of the literature sold to fishermen by the newsdealers of Gloucester. He writes:

"I have called upon the newsdealers to ascertain the character and quantity of reading matter sold to the fishermen. The result as to character is a little better than I expected. They do not read magazines, such as Harper's Monthly, Scribner's, or the Atlantic. The great favorites with them used to be trashy dime novels, but the large variety of story papers now published

has largely taken their place, although some are still sold. The following are the weekly papers taken by Gloucester newsdealers and read mostly by the fishermen: New York Weekly, 100 copies per week; Saturday Night, 90 copies per week; Fireside Companion, 90 copies per week; New York Ledger, 70 copies per week; Police News, 55 copies per week; Family Story Paper, 50 copies per week; Yankee Blade, 25 copies per week; Harper's Weekly, 20 copies per week; Frank Leslie's Illustrated, 20 copies per week. About 350 copies of the Cape Ann Advertiser are sold to the fishermen; some daily papers, when the fleet is in port, for home reading; and about 1,000 copies yearly of dime novels and cheap library stories, such as make up Seaside Library."

It is by no means unusual to find on board fishing vessels some of the choicest books in the English language—history, poetry, and biography.

Dickens' works are very popular among many of the fishermen; Shakespeare, Byron, Cowper, and Abbott's "Life of Napoleon" are among the works which we ourselves have seen on vessels.

Philanthropists might secure a very great influence over the fishermen of Gloucester and other ports by systematically supplying the vessels with a small library of well-selected books, or, better still, by establishing for the use of the fishermen a well-planned circulating library. The fishermen are men of active minds, and many of them have *refined and studious tastes. Such a library* should be in the charge of some person who could help the fishermen in selecting their books, and who would take pains to stimulate their interest in literary subjects.

In Gloucester alone are over four thousand men, half of whom, at least, would doubtless rejoice greatly over the possession of some such facilities for mental improvement.

39. MORALS AND RELIGION.

The question of morals and religion is extremely difficult to discuss. The fishermen are, doubtless, on an average, far superior in moral character to other classes of sea-faring men. In *large ports, like Gloucester, whither flock the discontented, the disgraced,* and the ne'er-do-wells, as well as the most enterprising and ambitious of the young men from the whole coast, there is, of course, less attention paid to the question of morals than in rural communities, and the general moral tone of the fishing classes is below the average for the whole coast. There are, however, in Gloucester hundreds of men of upright character and unimpeachable veracity, and hundreds more whose character for honesty and truth is unquestioned, but whose views upon other moral questions might be subject to criticism. There are very few indeed of the men in the Gloucester fleet who may properly be called religious. The very fact that they are at sea *during all months* of the year, and unable to give attention to any subjects except those directly connected with their occupation, accounts for the fact that fewer of them are identified with religious organizations than in the smaller towns, where the fishermen are on shore for at least half the year, and are surrounded by influences which would lead them to such association.

OBSERVANCE OF THE SABBATH.—The observance of the Sabbath is practically obsolete among the fishermen of Gloucester, when on the fishing grounds; though when they are making a passage to and from port it is not customary to perform any work except that which is necessary for the management of the vessel. There are, however, a few Gloucester fishermen who observe the Sabbath, a practice which is almost universal among the fishermen of Cape Cod and the smaller ports of Massachusetts, and some of those of Maine. It is believed that the captains of vessels from certain portions of Cape Cod would lose their commands, or would at least suffer much damage to their reputation as respectable citizens, if they were known to fish on Sunday. When the vessels are in port, Sunday is very generally observed everywhere along the coast of New England. The

families of our fishermen are almost always identified with some religious sect, and the churches of fishing ports are as well supported as those in any other section of the country.* In the whaling fleet where, as a rule, morality among the men is at low ebb, Sunday is rarely observed. It is a matter of history, however, that during the present century the masters of several whalers sailing from the eastern end of Long Island, although they came in with full cargoes of oil, lost their commands because they would not go in pursuit of whales on Sunday.

At two successive annual meetings, those of 1880 and 1881, the United States Menhaden Oil and Guano Associations unanimously passed a resolution to the effect that the steamers and other vessels belonging to members of this association should not be allowed to fish on Sunday.

Shore fishing is almost entirely suspended on Sunday in New England, and it is believed that the same practice is prevalent throughout the whole length of the Atlantic coast, extending even to the shad fishermen of the rivers. In fact, many of the laws which have been framed for the protection of shad in our rivers, provide a close time every week, from sunset Saturday night to sunrise Monday morning, taking advantage of the well-known practice of refraining from fishing on the Sabbath day.

The shad fishermen of the Saint John's River, Florida, fish on Sundays, though there is a general sentiment against this practice among the fishermen who are forced into it by the example of one or two of the most powerful capitalists.

PROFANE LANGUAGE.—The use of profane language is extremely prevalent among fishermen, and there are but very few vessels from any part of the coast on which oaths are not constantly heard; particularly is this so on Gloucester vessels. A few of the masters are opposed to the practice and endeavor to restrain it, but ordinarily no effort is made in this direction. Almost as common is the use of vulgar and indecent words. The atmosphere of the fishing vessels is full of coarse language, and the ears of young fishermen become so habituated to it that, not being

---

*One said to him, "Well, Jud, how many fish have they caught to-day at Star?" Jud looked askance, and answered like one who did not wish to be trifled with, "We don't go a-fishing Sundays."—Thaxter's Isles of Shoals, 1873, p. 102.

"While Mr. Brock resided at the Shoals he persuaded the people to enter into an agreement that, besides the Lord's day, they would spend one day in every month together in the worship of God. On a certain day, which, by their agreement, was to be devoted to the exercises of religion, the fishermen came to Mr. Brock and requested that they might put by their meeting that day and go a-fishing, because they had lost many days by the foulness of the weather. He pointed out to them the impropriety of their request, and endeavored to convince them that it would be far better for them to stay at home and worship God, according to their agreement, than to go a-fishing. Notwithstanding his remonstrance, however, five only consented to stay at home, and thirty determined to go. Upon this, Mr. Brock addressed them thus: 'As for you, who are determined to neglect your duty to God and go a-fishing, *I say unto you, catch fish if you can.* But as for you, who will tarry and worship the Lord Jesus Christ, I will pray unto Him for you that you may *catch fish till you are weary.*' Accordingly, the thirty who went from the meeting, with all their skill, caught through the whole day but four fishes, while the five who tarried and attended divine service, afterwards went out and caught five hundred.

"To a poor man who had lost his boat in a storm Mr. Brock said, 'Go home, honest man; I will mention the matter to the Lord; you will have your boat again to-morrow.' Mr. B., now considering of what consequence this matter, that seemed so small otherwise, might be among the untractable fishermen, made the boat an article of his prayers, and behold, on the morrow the poor man came to him rejoicing that his boat was found, the anchor of another vessel that was undesignedly cast upon it having strangely brought it up from the unknown bottom, where it had been sunk.

"During the ministry of the Rev. Mr. Moody at the Shoals one of the fishing shallops, with all hands on board, was lost in a northeast storm in Ipswich Bay. Mr. Moody, anxious to improve this melancholy event for the awakening of those of his hearers who were exposed to the like disaster, addressed them in the following language, adapted to their occupation and understanding: 'Supposing, my brethren, any of you should be taken short in the bay in a northeast storm, your hearts trembling with fear, and nothing but death before you, whither would your thoughts turn? What would you do?' 'What would I do,' replied one of these hardy sons of Neptune, 'Why, I should immediately hoist the foresail and scud away for 'Sqnam.'"—Coll. Mass. Hist. Soc., vol. vii, 1st series, pp. 247-252.

accustomed to more refined discourse, they think nothing whatever of it and see no impropriety in its use.

TRUTHFULNESS: SOCIAL VICES.—Concerning other virtues, such as truthfulness, honesty, and general reliablity, fishermen do not appear to have any special peculiarities, but it is believed that they will compare favorably with other men of similar grades in society.

Social vices are much less common among fishermen than among other sea-faring men, except in the largest ports; the morality of the communities to which fishermen belong is unimpeachable, or, at least, will compare favorably with those of any other section of the country, while in the larger towns the social evil is by no means so prominent as in the manufacturing towns. There are, of course, depraved men among the fishermen whose vicious instincts are increased by the irregular character of their occupation, but a large majority of the fishermen, even of Gloucester, are pure in their morals.

The laxity of morals, which is often attributed to certain classes of our fishermen and to the provincial ports which they visit, in connection with their cruises upon the off-shore banks, is believed to be very much exaggerated. Outside of the larger ports, as has been stated, there is but little in the practice of the men upon the fishing vessels which can be criticised by those who are familiar with their habits.

INTOXICATING DRINKS.—In most of the fishing towns along the coast spirits cannot be obtained upon any pretext whatever, except in the large cities which incidentally engage in fishing. There is no fishing port except Gloucester in which fishermen, or indeed any strangers, would not find extreme difficulty in obtaining intoxicating liquor. In Gloucester strenuous efforts have been made to overthrow the liquor traffic, both by prohibition laws and license laws, and it cannot be said that liquor is there freely sold, although those who are familiar with the town have but little difficulty in obtaining it. Drunkenness is not a vice to which fishermen are addicted.

In the chapter upon "Life on shipboard," allusion is made to the custom, once universally prevalent, of carrying a supply of rum on Massachusetts vessels, and it was no less common for the shore fishermen to carry their jugs with them when they went out in their boats upon the fishing grounds. This custom has become obsolete to such an extent that the shipping articles of every fishing vessel require that "no ardent spirits shall be carried on board," and many Gloucester shippers are so opposed to intemperance that they promptly discharge men who are known to have been guilty of drunkenness. The medicine-chest is not supplied with liquor, even though the use of so important a restorative would perhaps frequently to be attended with good results. It seems as if public sentiment were somewhat too radical when it forbids to the fishing vessels the privilege of carrying a small supply of spirits for use in cases of exhaustion. Many experienced men, however, agree that such benefits are more than counterbalanced by the evils that would result from the practice of carrying even the smallest quantity of intoxicating spirits on board of our fishing vessels where discipline is so entirely absent as it is at the present time.

Much trouble is caused by the free sale of liquor in the ports of Newfoundland, where our cod fishermen frequently make harbor, and until within a few years the same difficulty has been met with in the ports of Nova Scotia and Cape Breton. At the present time prohibitory laws are there enforced with great strictness, and nowhere save in Halifax and some of the other large ports can liquor now be bought. In ports where liquor is sold, vessels are often detained on account of men wha get drunk and refuse to go on board, or become involved in brawls.

The "temperance reform" in Gloucester in 1876 seems to have had a wide-spread influence among the fishermen—an influence which is felt to the present day. The local papers for some months were full of the subject. In the Cape Ann Advertiser of February 25, 1876, is printed a

list of twenty-two vessels from Gloucester manned entirely by temperance men. On the 3d of March a grand reception was given by the "Reynolds Temperance Reform Club," of Gloucester, and in the street procession four hundred George's fishermen marched.

The oystermen of the Chesapeake are, as has already been remarked, lawless and quarrelsome, and the same characteristics are met with among the other fishermen of the same region, many of whom are engaged in the oyster fisheries part of the year, in the shad fishery in the spring, and the menhaden fishery in summer. Conflicts occasionally occur between fishermen from different sections. The war between the Maryland and Delaware fishermen in 1876 was a serious affair, resulting in injuries to several men.

40. THE FISHERMEN'S LIFE ASHORE.

HOME LIFE.—The home life of the fishermen has already been partly described under the head of education. In Gloucester, perhaps from twenty-five to thirty per cent. of the fishermen are married and have homes of their own, while in other fishing ports the percentage of married men is still greater, and very few indeed among the fishermen are homeless. On Cape Cod and in the smaller fishing ports of Massachusetts and Connecticut, as well as on the coast of Maine, the fishermen, as a rule, own their own houses, marry young, and are surrounded by large families of children. As has been already said, their wives and daughters are usually well educated and refined in their tastes. Even on remote islands on the coast of Maine many of the fishermen's houses are comfortably and tastefully furnished. The walls are hung with engravings, and books and musical instruments are to be found. It is not at all uncommon to find a piano in the house of a fisherman. The earnings of the successful fisherman are almost always applied to the building up of a pleasant home for his family, and to the education of his children, for whom he almost always has the ambition that they shall be fitted to follow some other occupation than the one to which his own life has been devoted. This is true in the outlying ports as well as in the larger towns. It is amusing and seems incongruous, after making the acquaintance of a rough-looking old fisherman, sun-browned and weather-beaten, who looks as if he rarely put foot upon the shore, to be invited to his house, and to find him perfectly at home among the well dressed and gentle women of his family, surrounded by luxuries and conveniences which, three centuries ago, would hardly have been found in the palace of a king.

The old age of the fisherman is usually spent pleasantly in the home which his industry has established, his daily amusement being to visit the wharves and talk over the experiences of the past and discuss the doings of his successors.

Many of the sea-port towns of New England are made up, in large part, of the houses which have been reared by fishermen of the past or present generation.

Mr. Henry L. Osborne makes the following observations on the routine life of the Gloucester fishermen when on shore:

"UNLOADING THE VESSEL.—After the fisherman returns from a voyage he is not at once free, but must work for a few days in unloading the vessel's cargo. His first few hours ashore are very likely to be spent in cruising about to learn the news, and it is not improbable that he may take a few drinks with any old comrade whom he meets, while the two 'talk things over' and compare notes. He must, however, settle down to work not long after his return, because the owner is anxious to have the cargo brought to light, to have his vessel empty, and thus to be ready for any new and promising venture. The work of unloading usually takes two or three days, or even more in case of large vessels. When ready to begin operations, all hands, armed with pews, invade the hold, the deck, and the wharf, and pitch out the fish from the kenches in the vessel's hold.

House of shore fisherman at Cape Ann, Mass.

From a photograph by T. W. Smillie.

From below the fish are thrown on deck; they are then thrown to the wharf, placed on scales, and weighed. It is the duty of all hands, except, I believe, the cook and the skipper, to help in this work. If the cook be a worthy one, he improves the occasion to clear out the forecastle lockers, to wash up the pans, kettles, and other utensils, knives and forks, spoons and crockery, and, in short, to leave things after him in a decent state. If the vessel has ended her year's work and is ready to lay up for the winter, he will pack up the dishes and other kitchen furniture, clean up the galley stove and treat it liberally with oil to keep away rust, and will remove to the storehouse of the firm all of the ship's stores that have not been consumed. The skipper's duty is to direct the unloading of the fish, a labor in which he may possibly bear a hand, though I believe he is not obliged to. The work proceeds, enlivened by stories and small talk and occasional potations of beer and other liquors, until all the fish are out of the vessel. All hands are then free to do as they please, and, after drawing their pay, may ship for another trip, or may depart, never to be seen again.

"In some cases a man may not care to unload a cargo, or at least to do his share in the unloading. In such a case he is allowed to hire some one to do this portion of the work. A man may be sick when the vessel gets in, or having so much money coming to him, may feel too lazy to work; or he may find a chance to ship, and, not caring to lose it, engage a substitute to do his work. Hence the practice of hiring substitutes to work in the unloading is not unusual.

"DRAWING PAY.—When the work of unloading has been finished the trip is considered at an end. The market value of the fish is then determined, and the proper share of each man is ascertained. The share of each man is at his disposal in the form of a check payable to bearer. Any money he may want to use before drawing his share is advanced by the firm, and subsequently deducted.

"THE BOARDING-HOUSE.—On reaching land after a trip the fisherman's first move, if unmarried or without a home at Gloucester, is toward his boarding-house. Here his arrival is unannounced, yet its suddenness creates but little surprise, because such things are every-day matters. His ambitions for the time center themselves in putting on some clean clothes and then in getting a thorough renovation at the hands of a barber.

"These boarding-houses are sailor's institutions. They are similar to the sailor boarding-houses which exist in every seaport town, yet in morality they are higher than these, nor are their owners such incorrigible rascals. The price of board varies from $3 to $6 per week, and at the latter price very good fare is furnished. The boarding-houses vary greatly in their reputation. Some are *pleasant, home-like places of good character; others are dingy and tumble-down houses, and in* many cases of a not altogether enviable reputation.

"By the more careful, the board bill is paid at frequent intervals, before it can become large. In other instances it is allowed to run until it has grown to an important amount. In such cases the fisherman often loses all track of its amount and he is then placed at the mercy of his boarding-master. If the boarding-master be dishonest, he may liberally increase the amount of the bill in defiance of detection, for the cheated man has no means of defending himself. In this way the fisherman is very often imposed upon, sometimes knowing nothing of it, and at others knowing it, but unable to protect himself.

"TRUSTEEING.—In order to protect the boarding-masters, lest the fisherman depart without paying his bill, a practice exists in Gloucester known as trusteeing. It is, in effect, attaching for the debt the proceeds of the fisherman's trip. A practice similar to this, called "factorizing," by which the factory hands are forced to pay their bills, exists in factory towns. The necessity is quite evident for such a law in Gloucester to protect honest boarding-house keepers against dishonest guests. It would seem that a law to protect the fishermen might also be a wholesome

thing. I am informed that the boarding-house keeper cannot trustee for small amounts, it being regarded as unjust that the fisherman should pay the lawyers' fees, unless the suit be an important one.

"AMUSEMENTS.—During his stay on shore, after the vessel has been unloaded, the fisherman's life is an aimless hunt after excitement and new forms of amusement. A few days are enough to tire him utterly of land and shore doings and he is looking again for a new chance. During these leisure days his day-time when not at meals is spent in visiting the wharves, sail-lofts, various stores of the firm owners, and similar places. There he meets others of his vocation and with them talks of the deeds of the past or the prospects for the future. With them he may go to some not far distant bar-room where they can compare notes over their beer. At these times a circus or any similar excitement is gladly welcomed.

"SEEKING A NEW BERTH.—In his pursuit of pleasure ashore the fisherman always seems somewhat ill at ease and anxious to get back to his work. Almost as soon as he is free from one trip he begins to look about for another. If his vessel is going out again as soon as she unloads, he may stay by her.

"MAKING READY FOR A NEW TRIP.—Having shipped for his new trip the fisherman's life again presents to him a definite object. The vessel must be put in order for her voyage: the sails, when they are not strong enough, must all be renewed; old ropes, too weak for a blow, must be replaced by others; new gear must be provided for use in case of emergency; complete outfits of hooks, gangings, and other elements of trawl structure must also be laid in; as well as all sorts of odds and ends that may be needed during a long absence.

"There is salt to be procured and stowed in the various compartments of the vessel's hold, and the water barrels must be filled. The cook, meanwhile, must busy himself about the various stores needed for the crew during the entire time of absence. He must draw from the store of the firm flour, tea, sugar, molasses, pork, lard, fish, cheese, candles, salt, and kerosene, and a thousand articles, convey them on board, and stow them away all safely below.

"Each man has stowed in his bunk his bed-sack and other belongings, and all hands on deck present to Gloucester Harbor the familiar sight of stout forms hoisting the huge mainsail, heaving up with a monotonous click, click, at the windlass. Now her bow falls off from the wind, the mainsail draws, the other sails are quickly set, and she soon leaves Gloucester far behind."

41. LIFE ON BOARD THE VESSELS.

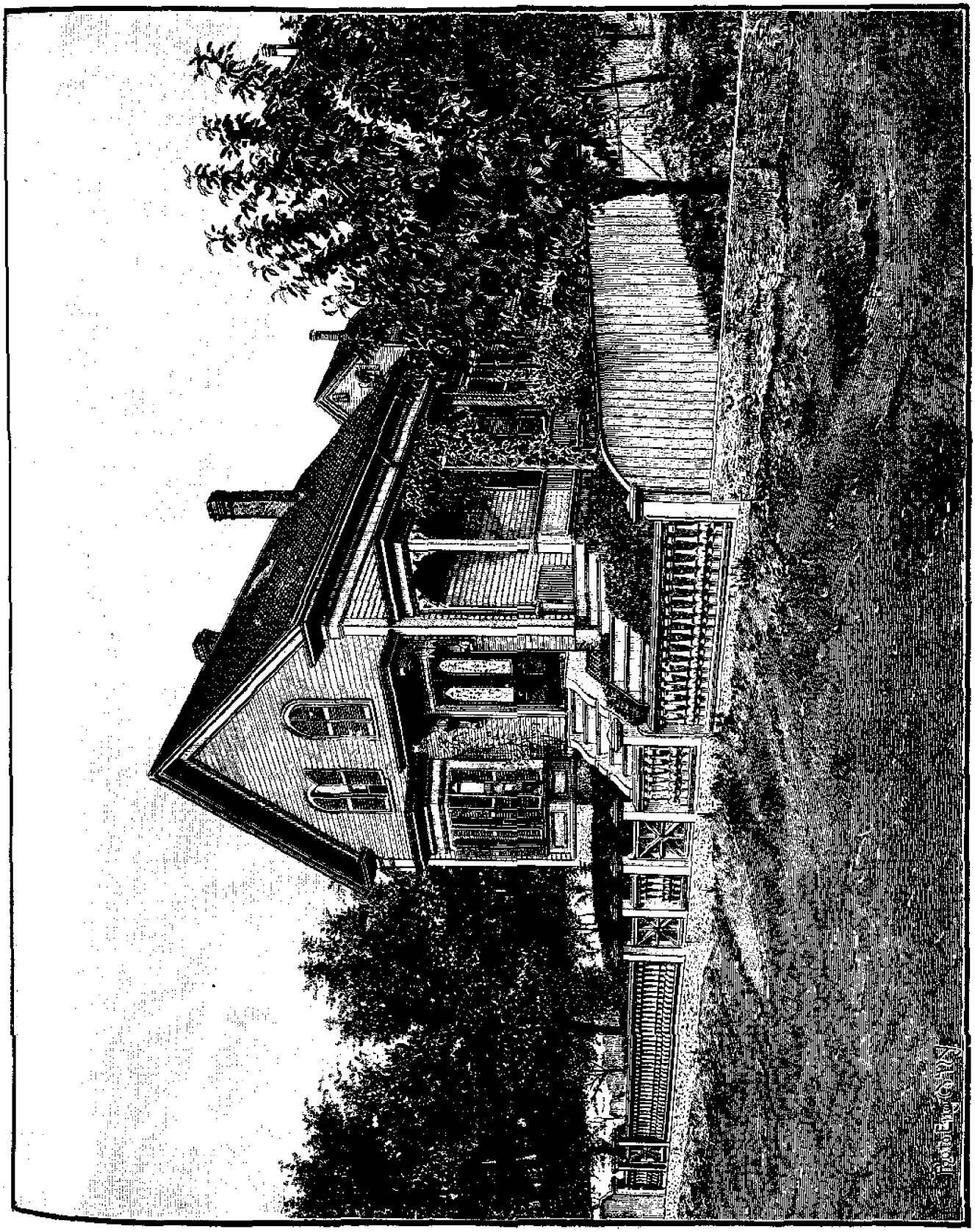
The life of the fishermen on board their vessels is so well discussed by Mr. Henry L. Osborne that little more need be said concerning it. By reading his descriptions, one may form a very vivid and accurate mental picture of the life of the fishermen. Mr. Osborne's notes were collected during a trip to the Grand Bank in the cod-fishing schooner VICTOR, of Gloucester, in the summer of 1879, in behalf of the United States Fish Commission.

Mr. Osborne discusses the subject under three heads: (*a*) Routine of daily life on the Banks; (*b*) Pastimes on board ship; (*c*) Routine of life at baiting stations.

"ROUTINE OF DAILY LIFE ON THE BANKS.

"MEALS.—As soon as the first indications of daylight were noticeable in the east, the cook would emerge from his berth, rake up his fire, which he never permitted to go out, and proceed to prepare for breakfast. At 4 o'clock, or not far from that hour, he announced the meal by a blast with his whistle, a summons which was usually obeyed with somewhat of tardiness.

"Dinner was usually ready at 11 o'clock, though never much earlier. Sometimes it inter-



Home of haddock and mackerel fisherman, at Gloucester, Mass.

From a photograph by T. W. Smillie.

rupted the work of cleaning the fish. In this case the men washed the gurry off their clothes and hands and sought the table. As a rule, the dinner was announced after one gang of cleaners, at least, were done; these would then wash up and go below. In this case, some from each table would sit down together, those properly belonging to the second gang occupying the place of the absentees of the first division.

"The supper was usually served about half past 3 or 4 o'clock, coming directly after the trawls had been baited up for the night-set. The men, if they wore the oil-skin suits in 'baiting up,' did not take them off before sitting down to the table.

"In addition to three regular meals, two very definite informal meals were provided, besides slight lunches at all times. It was a fixed habit with the men to proceed below to 'mug up' the instant they came aboard from a haul or set. At evening, when he came on board from setting the trawl, the fisherman invariably went at once to the dish-locker and took from it one of the brown earthen mugs. This he filled from the tea-pot, which the cook had left partially full of tea from supper. Then turning to the provision-locker, he extracted thence bread, pie, cake, or meat, according to his fancy and the state of the larder. From these he made a very enjoyable meal, talking meanwhile with those who were going through the same operations in their turn. This 'mugging up' was also regularly practiced in the morning after the return from a haul.

"One might expect that the food of the fishermen, especially when fishing, would consist quite largely of fish. I had expected that it would be so, but found nothing of the sort. Only once a week did the cook furnish fish, and that was on Friday, which was quite natural, since nearly all hands were Catholics. The fare of the fishermen is far better than one would suppose who has heard stories of the poor living of other sailors. They live far better than any other class of seafaring men, and have provisions of a better grade and in greater variety.

"FISHING.—After they had finished breakfast, the crew at once got ready their dories and, embarking, pulled away toward their outside buoys. This was usually just about sunrise; very often, indeed, when the day was clear the dories were away from the vessel before the sun came up. When the weather was foggy—and it was foggy almost all the time during July and August—the skipper was occupied, during the absence of his men, in blowing a horn and ringing a large bell which hung from the main-boom, just over the wheel-box, to guide the men in their rowing, and upon occasion he used to fire off a swivel to let them know the vessel's position.

"The haul usually occupied the time till nearly 8 o'clock, sometimes longer, when any one failed to find his outside buoy or 'parted,' or was overtaken by any other accident to his trawl. After the dories had come back and were unloaded the crew 'mugged up,' and then dressed the fish and salted them down in the hold. This usually kept them leisurely at work until toward 11 o'clock, at which time they 'washed up' and went to dinner.

"After a brief respite they began to make preparation for baiting up the trawls for the evening's set. Any who had their trawls snarled took this occasion for 'clearing' them; others, more fortunate, forgot their troubles in sleep. By 1 o'clock or thereabouts all hands were turned out by the skipper's 'Well, boys, let's bait up,' and ere long all were industriously at work getting bait from the pens, chopping it into pieces of the proper size or fastening it to the hooks.

"While the men thus occupied themselves, the cook improved his time by 'cutting out' sounds. This business our cook pursued assiduously, often snatching a few moments from his work before dinner to cut out sounds while the crew were 'dressing down,' and finishing his task while they were baiting, and his assiduity repaid him when he reached Gloucester to the extent of an additional $20. After supper, which was purposely placed early, the dories were hauled up from the stern, where they had been left fastened since morning, and loaded up with the trawls, five tubs

in each. Then the men jumped into them and pulled strongly away, each in his own direction. After their departure, the vessel was again left vacant. The only sound to be heard at this evening hour was the scrape, scrape, scrape, thud, thud of the cook's knife, or the tramp of the skipper's boots as he paced the quarter-deck for exercise. The men usually finished setting and returned to the vessel just at sunset. The dories were hauled on board, the men took the bearings of their buoys, and then all was done for the night.

"WATCHES.—The watch on the bank was only kept at night, and was much shorter than when the vessel was on a passage. It was usually set from 7 or 8 o'clock in the evening until 3 the following morning, or later, when the sun rose later during the last baiting. A single man kept the deck during his portion of the watch, then called his successor. The password in those times used often to contain directions as to the proper care of the vessel. Each man was expected to pump the vessel out at the end of his watch on blowy nights; one of his duties was to watch the cable and 'fleet the strad in the hawse-pipe,' if necessary; that is to say, veer out the cable a little to prevent it from being chafed and parted.

"The watch was not always very strict in the performance of his duty. He made frequent excursions into the cabin to consult the clock, and to assure himself that he was not losing track of the flight of time. Indeed, it is said that the men sometimes regulated the clock during their watch so that the man of the last watch found the dawn breaking much later than usual.

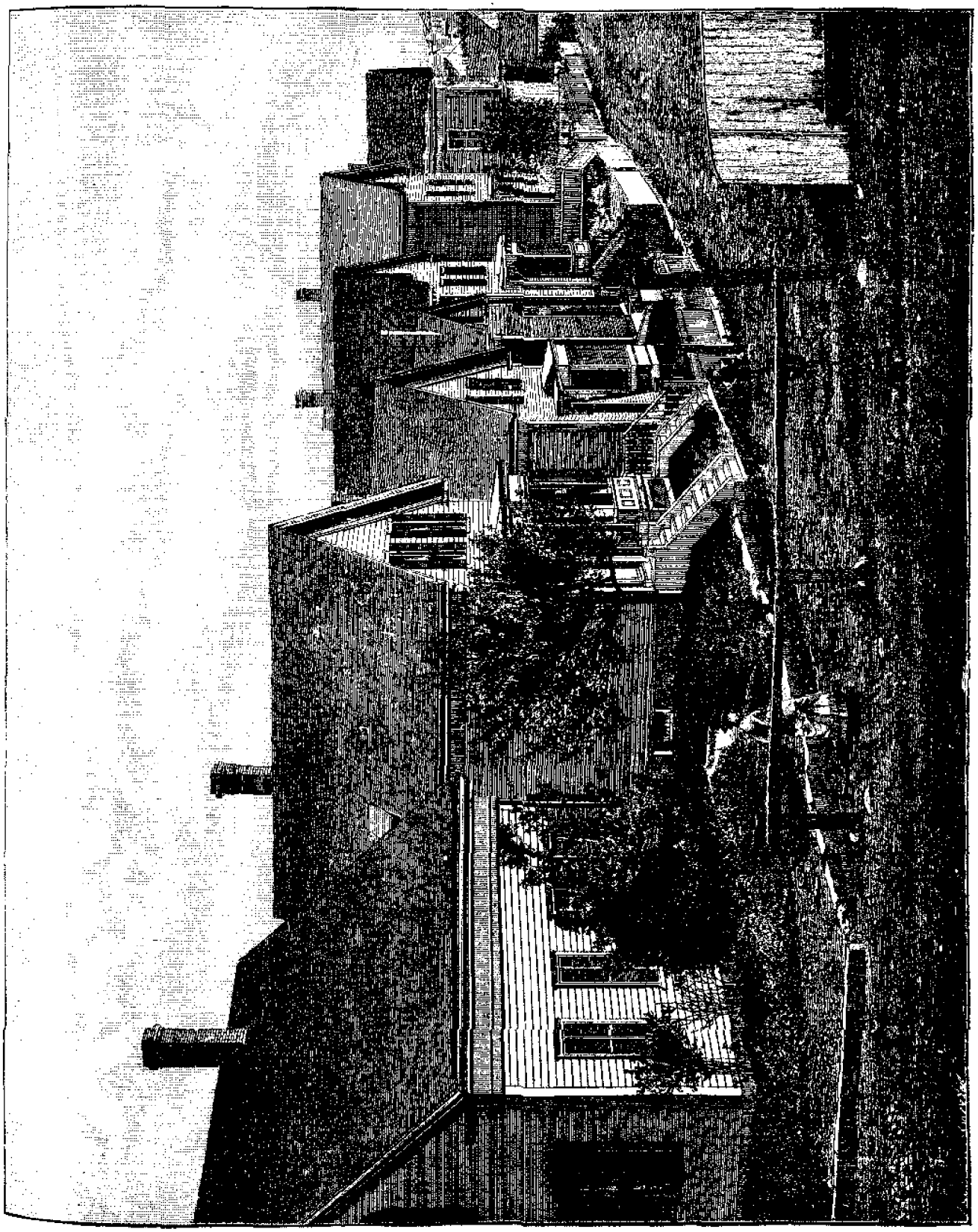
"LIGHTS.—In the evening, as soon as it began to grow dark, the cook lighted a large lantern, with convex lenses on four sides, and hung it in the fore-peak halyards. This was the only light used to warn off vessels: the red and green lights were used only when the vessel was running.

"BLOWY DAYS.—Sometimes we had 'blowy days.' All day and all night long the wind would whistle through the rigging and the sea become so rough that even the stanch dories could not be trusted over the side. On such days fishing was interrupted. If the trawls were out they must remain till the wind moderated. The men did not seem to enjoy their enforced leisure at such times. Meals were served at more suitable hours than during moderate weather, and they slept much; the sense of ennui seemed overpowering.

"PASTIMES ON BOARD SHIP.

"CONVERSATION.—The fishermen, for the most part, passed their spare time, of which they had abundance, in idling. In order to break up the monotony of silence they talked a very great deal on various subjects.

"At such times a good story-teller was a great blessing, and even one of poor grade was willingly listened to. All sorts of short stories circulated, also Irish bulls, witty retorts, &c., and a good story was usually greeted with hearty laughter. Among the stories told one might frequently hear those of which the morality was unquestionable, yet it was noticed that when a smutty story was told it was partly excusable, since it was usually irresistibly ludicrous. Indeed, in some cases stories were begun in which the principal point lay, not in fun, but in filth, and these were growled down by more than one of the hearers. Narratives of personal adventure were also in great demand. Those who had been in the merchant service; who had sailed to foreign shores, and who could acceptably describe these scenes or tell of their adventures, were heard with a great deal of interest. One fertile topic of discussion was the oppression of sailors, particularly in the merchant service. Instances of ill-treatment were often told, and the conduct of the captain roundly condemned. When the maltreated sailor came off first best the expressions of satisfaction from the listeners plainly indicated the side with which they sympathized. The oppressions of the boarding-house keepers were also examined into, and to have left one of these



Fishermen's homes at Gloucester, Mass.

From a photograph by T. W. Smillie.

houses without paying one's bill was thought very praiseworthy. Among the narratives of personal adventure there were a great many stories of conquests among the fair sex, especially of flirtations and intrigues in the various harbor-ports frequented by fishermen.

"In addition to these were yarns, often listened to with close attention by a crowd collected forward or down aft. The story would often be merely the adventures of some sailor or the plot of some robber story of dime-novel circulation. Sometimes the hero was placed in the first person, or, in other words, the story-teller represented the adventure as his own. More often, however, they belonged to an imaginary hero, who was invariably called Jack: sometimes the supernatural powers were invoked, thus adding to the complication of the plot. Among their stories fairy tales had a place: I noticed several that I recognized, notwithstanding their new dress, as nursery tales told to me when I was a boy. In all these tales the imagery was such as a fisherman author would imagine. It was homely; comforts were those regarded by him as such, and beauties were those which were beautiful to him. Thus, in a version of Beauty and the Beast, the father, all tired and wet, was led into a warm kitchen, where a dry suit was hanging before the fire ready for him. He was then conducted into a warm dining-room where he found a good supper of beefsteak awaiting him. After supper he 'turned in.' In all the fairy stories Jack used to slay the dragon, and, after he had exposed the deceits of his rival, all hands made a triumphal march to the church, where he was married happily to the king's daughter.

"MUSIC.—Somewhat akin to yarn-spinning was ballad singing, which, however, was less frequently indulged in, since singers were scarce, while any one could tell a story. The song was always a solo, and the words, in the form of a ballad, the story of some shipwreck, of sailor-life, or of some kindred subject, to which they listened intently.

"CARDS.—As might be expected, one of the favorite pastimes was cards. On the evening of the very first day out from Gloucester, as I made my way forward to the knight-heads, I found a group of six playing 'forty-five.' They paid five cents each for the privilege of playing, and then the man who made forty-five points first won the stakes. Later during the cruise the game of 'loo' began to create a great stir and for several nights the players continued their game far into the night. This was however effectually opposed by the other inhabitants of the forecastle, who were unwilling to have their slumbers disturbed. Various other games of cards prevailed at various times, and among them cribbage seemed quite a favorite. Card-playing, however, finally died out from the fact that the cards became utterly worn out and no other pack could be procured

"ROUTINE OF LIFE AT BAITING STATIONS.

"FILLING WATER.—While in harbor the fisherman's duties are extremely light and his time is left almost entirely free for any form of diversion that may suggest itself. Any work that in the vessel's economy may need doing he must, however, perform. One of these duties is the replenishing of the water supply. As often as the vessel goes to land all the barrels are overhauled and the empty ones are filled. This process, known as 'filling water,' was performed several times by our crew. I remember it most distinctly at Cape Broyle on the occasion of our first visit. We anchored at two or three o'clock well up the harbor and not far from a shelf of rock, over which a pure mountain stream ran down into the sea. This stream dropped down from the rocks above in a small cascade and furnished nice water and a convenient place for filling the barrels. Soon after the anchor had been let go and the sails snugged up for a short stay, the skipper gave out the order to bring up the water barrels and 'fill water.' Two or three barrels were then put into each of the three dories and the men then rowed away to this natural reservoir. It so chanced that the men forgot to bring a funnel with them from the vessel. Any one else in this condition would

have been in trouble, but a fisherman generally can extemporize a very good one. When they reached the stream and were ready to begin filling the barrels, one man drew off his oil-skin trousers and crumpling up one leg at the bottom, introduced it into the bung-hole. He then held up the leg of the trousers, while bucket after bucket of water was poured in, and found its way into the barrel. This stream and many others like it running from this natural spout and thus easy to catch are found in the various coves and harbors that indent the shore line of Newfoundland, and the places where they occur are known among bankers as 'good places to fill water.'

"TAKING IN ICE.—Another duty of the fisherman while in harbor is the care of the ice, which is used in preserving fresh bait. In some cases the vessel can be hauled up to a wharf and the ice brought down in wagons and slung on board with very little trouble, but often this cannot be done, because of the shallow water in the harbor, and it is then necessary that it should be brought aboard in dories. When our vessel iced at Trinity Bay the dories were all sent ashore and beached out of reach of the swell which would have otherwise kept them too unsteady. The ice was then taken from the rude wagon in which the dealer drew it to the shore, carried to the dories and packed in them. The men handled the ice, for the most part, without tongs, their hands being protected by mittens, and carried the huge blocks in their arms. As each dory was loaded it was shoved off and rowed to the vessel. Coming alongside, the ice was slung on board with a tackle and dropped into the hold, where it was received by men and stowed in the ice-pens.

"ICING BAIT.—A third duty of the fisherman, at this time, is to care for all the bait which is brought on board, icing or salting it as the skipper directs. I presume that all kinds of bait are treated alike, but my personal observation relates only to the squid as iced at Trinity Bay. When some thousands had accumulated, several of the crew 'oiled up' and prepared to 'ice' them. The labor was divided and operations began. One gang brought blocks of ice from the ice-pen, passed them to the deck and into one of the huge tubs used in splitting. The tub was placed during this operation on the quarter-deck, just aft the main shrouds, and the squid usually lay in one or more piles somewhere near the tub of ice.

"Two men stood by the tub and each one began with his pew to pick the ice into small pieces. After it had been reduced to the proper size, it was thrown into a basket and passed through the after hatch into the hold. Here it was received by a second man who passed it into the bait-pen to a third, who, receiving the basket, emptied the ice on the floor of the pen and spread it evenly in a layer 3 or 4 inches thick. When he had thus covered the bottom of the pen, he called for squid. A layer of squid was now spread over the ice followed by another layer of ice. In this way four or five baskets of ice and squid were alternately laid down until at last the bait was all iced. The man in the bait-pen handled the bait and the ice with mitten-covered hands, standing on the floor till the layers of ice and squid rose too high for convenience and afterward he stood on the bait.

"It was the regular practice to ice at night all the bait which came on board during the day. Several times the bait came to us so fast that by noon as many as 5,000 had accumulated. When this happened all hands would turn to and ice them, also icing in the evening those received later.

"VISITING, STROLLING, &c.—As soon as the vessel is anchored and properly cared for one of the first things is to go ashore and 'take stock.' Soon a dory may be seen leaving the vessel's side. One or two men are rowing and the others are grouped in the bow and stern. Rowing toward one of the rude wharves that line the shore, they all scramble up, and, making the dory fast, spread out over the town, generally in little knots of two or three. In accordance with the habit of Newfoundlanders, they enter any house that may seem attractive, and without any introduction proceed at once to talk of the fish, the bait, their trip, or kindred subjects of mutual interest.

They are very likely to ask if milk can be bought there, or where they can buy it. Quite often something stronger than milk is asked for, and wines or gin or red rum are drunk. None of our men became intoxicated to excess, though two or three came aboard in a pretty jolly condition. Sometimes the men did not go into any of the houses, but contented themselves by talking to the men they met on the street, or strolled around the town or into the outskirts, noting the people and the houses.

"DANCES.—One of the favorite pastimes of a crew, while 'in baitin,' is a dance. So often have they had these dances in Newfoundland that one of the first questions that a 'livier'* puts to a new-comer is, 'Are you going to get up a dance?' Usually they hire the house of some native, and when they have no fiddler in the crew hire some one to fiddle. They then summon all the girls in the place by a general invitation. The crew, during our cruise, went to several dances, two of which they got up themselves. At Bay of Bulls, on our last baiting, they decided to have one of these dances, and secured a most miserable house for this purpose. There was no fiddler, but only a boy who sang for them, or, according to the Newfoundland vernacular, made 'chin-music.' The reports from the party on the following morning made me anxious to see one of those dances, and I was therefore glad to hear talk of their having another one.

"I went into the room—the living-room of the house—in which the dancing was to take place. The ball had already opened. The room was one of the poorest I had yet seen, even in Newfoundland. The uneven floor was utterly barren of carpet, mats, or any covering. A shaky, crazy-looking lamp on one wall threw a dismal light about, and showed the crew and about eight girls seated on benches that lined the wall. In the immense fire-place sat the mother of the family, holding in her arms a baby of two years. When I entered, the host was leading off with an opening break-down. His unwieldy movements as he tried the double-shuffle in his heavy cowhide boots were very grotesque. The orchestra furnished 'chin-music.' The musician was a young man who hummed in a sort of grunting nasal tone various tunes of proper time for square dances. It is utterly impossible to describe the sound which this musician produced; it was a succession of nasal tones in the key of C. The minstrel was at intervals inspired by such words as these, 'That's it, Thommy, me b'y, gi' de bies a tune,' and kindred exhortations. Their dances were all the square dances, and generally the well-known lancers. The various figures were called off by one of the crew. The sailors apparently enjoyed themselves just as well as if the music had been very much better. They paid the old man a couple of dollars for his house, gave the sweet singer a fee, and were finally on board the vessel at about four o'clock in the morning."

42. PUBLIC SERVICES.

SERVICES IN TIMES OF WAR.—The importance of the fisheries to the prosperity of nations has frequently been alluded to by the writers who have taken this subject into consideration. In Sabine's "Report on the Principal Fisheries of the American Seas"† numerous instances are given in which the fishermen of the United States have rendered important services of this kind.

The people of Marblehead, Gloucester, Salem, Beverly, and other fishing ports of New England were among the foremost to meet the enemy in the Revolutionary war. The privateers which played so important a part then and in the war of 1812–1815 were largely manned by fishermen, especially those from Newburyport.

"The services of the people of Marblehead," says Sabine, "are entitled to particular notice. They were invaluable upon the sea and upon the land. When, in 1774, the port of Boston was

* A resident of the Newfoundland coast is, in fishermen's dialect, a "livier."

† Pages 198–210.

shut by act of Parliament, they tendered to their suffering brethren of the capital the use of their wharves and storehouses free of charge. The first actual avowal of offensive hostility against England which is to be found in the revolutionary annals, is an act passed by the Provincial Congress of Massachusetts in November, 1775. It was framed by Elbridge Gerry, a merchant of Marblehead, whose business depended upon the fisheries. It authorized captures upon the sea. With its preamble it was printed in the London Magazine as a political curiosity, and John Adams calls it 'one of the most important documents in the history of the Revolution.' Who 'hoisted the first American flag?' and to whom 'the first British flag was struck?' are questions in dispute between the friends of different claimants; but Mr. Adams confers both honors upon John Manly, of Marblehead, who captured a transport having on board a mortar, which, transferred to Dorchester heights, 'drove the English army from Boston, and the navy from the harbor.' The fishermen of this town appear to be entitled to the same precedence in naval affairs under commissions authorized by the Continental Congress, since it is stated that John Selman and Nicholas Broughton were the first commanders appointed by Washington after he assumed the direction of affairs. Another commander of merit was Mugford, who took a powder ship early in the war, and perished in the enterprise. And still another was Samuel Tucker, who, successful beyond his compeers, is said to have captured more British guns and British seamen than Paul Jones, or any other captain in the service of the thirteen States. Of the exploits of individuals of humbler rank, two examples must suffice. In 1783 'three lads' were put on board of a brig at Quebec to be sent prisoners to England; on the passage they gained possession of the vessel and carried her safely to Marblehead, their native town. The same year three other young fishermen—all minors—prisoners in the British ship Lively, conceived the plan of capturing her, and, inducing ten other prisoners to join them, were successful; and, conducting their prize to Havana, made sale of her for a large sum.

"For service in the field Marblehead raised one entire regiment. It has been remarked of these 'fishermen soldiers' that, inured to fatigue and hardship, they were not reduced by sickness or camp diseases during the war. This regiment composed a part of the force of the illustrious commander-in-chief in his retreat through New Jersey, and in the crisis of the Whig cause. The American army, composed of regulars and militia, hardly three thousand in number, almost destitute of tents and utensils for cooking, badly armed, nearly naked and barefooted, dispirited by losses and worn down by sufferings, were pursued, in November and December, to the northerly bank of the Delaware, by the well-appointed army of the enemy, flushed by success, and panting for a last decisive victory. For a moment the destruction of Washington, either from the waters in front or from the royal troops in rear, seemed certain. The heroic daring of the men who, perhaps, saved him, and with him their country, is nowhere related in history. But Henry Knox, the chief of artillery, whose own services on the occasion will ever be remembered and excite admiration, has done them justice. After the peace, and while General Knox was a member of the legislature of Massachusetts, an application was made by citizens of Marblehead for the charter of a bank. Their petition was opposed. He rose and stated their claims. 'I am surprised,' he said, 'that Marblehead should ask so small a privilege as that of banking, and that there should be opposition to it. Sir, I wish the members of this body knew the people of Marblehead as well as I do. I could wish that they had stood on the banks of the Delaware River in 1777, in that bitter night when the commander-in-chief had drawn up his little army to cross it, and had seen the powerful current bearing onward the floating masses of ice which threatened destruction to whosoever should venture upon its bosom. I wish, that when this occurrence threatened to defeat the enterprise, they could have heard that distinguished warrior demand, 'Who will lead us on?' and seen

the men of Marblehead, and Marblehead alone, stand forward to lead the army along the perilous path to unfading glories and honors in the achievements of Trenton. There, sir, went the fishermen of Marblehead, alike at home upon land or water, alike ardent, patriotic, and unflinching whenever they unfurled the flag of the country.'"

Starbuck, in his history of the American whale fishery, gives the following glowing tribute to the public service of the whalemen of this country:

"Few interests have exerted a more marked influence upon the history of the United States than that of the fisheries. Aside from the value they have had in a commercial point of view, they have always been found to be the nurseries of a hardy, daring, and indefatigable race of seamen, such as scarcely any other pursuit could have trained. The pioneers of the sea, whalemen, were the advance guard, the forlorn hope of civilization. Exploring expeditions followed after to glean where they had reaped. In the frozen seas of the north and the south their keels plowed to the extreme limit of navigation, and between the tropics they pursued their prey through regions never before traversed by the vessels of a civilized community. Holding their lives in their hands, as it were, whether they harpooned the leviathan in the deep or put into some hitherto unknown port for supplies, no extreme of heat or cold could daunt them, no thought of danger hold them in check. Their lives have ever been one continual round of hair-breadth escapes, in which the risk was alike shared by officers and men. No shirk could find an opportunity to indulge in shirking, no coward a chance to display his cowardice, and in their hazardous life incompetents were speedily weeded out. Many a tale of danger and toil and suffering, startling, severe, and horrible, has illumined the pages of the history of this pursuit, and scarce any, even the humblest of these hardy mariners, but can, from his own experience, narrate truths stranger than fiction. In many ports, among hundreds of islands, on many seas the flag of the country from which they sailed was first displayed from the mast-head of a whale-ship. Pursuing their avocation wherever a chance presented, the American flag was first unfurled in an English port from the deck of one American whaleman, and the ports of the western coast of South America first beheld the Stars and Stripes shown as the standard of another. It may be safely alleged that but for them the western oceans would much longer have been comparatively unknown, and with equal truth may it be said that whatever of honor or glory the United States may have won in its explorations of these oceans, the necessity for their explorations was a tribute wrung from the Government, though not without earnest and continued effort, to the interests of our mariners, who, for years before, had pursued the whale in these uncharted seas, and threaded their way with extremest care among these undescribed islands, reefs, and shoals. Into the field opened by them flowed the trade of the civilized world. In their footsteps followed Christianity. They introduced the missionary to new spheres of usefulness, and made his presence tenable. Says a writer in the London Quarterly Review: 'The whale fishery first opened to Great Britain a beneficial intercourse with the coast of Spanish America; it led in the sequel to the independence of the Spanish colonies.' * * * 'But for our whalers, we never might have founded our colonies in Van Dieman's Land and Australia—or if we had we could not have maintained them in their early stages of danger and privation. Moreover, our intimacy with the Polynesians must be traced to the same source. The whalers were the first that traded in that quarter—they prepared the field for the missionaries; and the same thing is now in progress in New Ireland, New Britain, and New Zealand.' All that the English fishery has done for Great Britain, the American fishery has done for the United States—and more. In war our Navy has drawn upon it for some of its sturdiest and bravest seamen, and in peace our commercial marine has found in it its choicest and most skillful officers. In connection with the cod-fishery it schooled the sons of America to a knowledge of their own strength, and in its protection developed and

intensified that spirit of self-reliance, independence, and national power to which the conflict of from 1775 to 1783 was a natural and necessary resultant."

The Boston Journal of Commerce of January 25, 1879, in speaking of some of the old whalers sunk in Charleston Harbor during the late war between the States, gives the following account of the capture of one of them from the British:

"The Corea came from England during the Revolution, bound for New York with army stores. Putting into Long Island in a storm, a small vessel with nearly one hundred fishermen put out to capture her, and, with only four men and a boy on deck, anchored on the fishing grounds, and were apparently busy fishing when a gun from the Corea summoned her crew to run down to her, and when alongside a part of the crew were made to bring their fish on board. While the English sailors were looking at their prize one of the fishermen threw some fish on the schooner's deck, and the armed men swarmed up from the hold and on board of the Corea, which was taken to New Bedford, and eventually became a whaler."

During the war of the rebellion the Navy of the North, as has already been stated, received large accessions from among the fishermen of New England. Two or three companies of infantry were recruited at Gloucester, the members of which were chiefly fishermen.

Capt. F. J. Babson, collector of customs for the port of Gloucester, gives the following concise statement of the relation which Gloucester has held, and still holds, to the United States as an element in its system of coast defenses: "For the defense of the Union in the late war it is estimated that fifteen hundred men went into the service from Gloucester, two-thirds at least being seafaring men or fishermen. The availability of fishermen for offensive war on a foreign nation must be computed on the privateering basis. At least fifty swift-sailing steamers for privateering could obtain crews in Gloucester in one week, while service in the regular Navy is not, and never will be, popular with our people. Our men desire chances for promotion, such as is possible in the volunteer service in the Army, and the country, if she ever fights, must fight a war of the people, by the people, and for the people."

There is an almost complete lack of statistics showing to what degree our fishermen rendered service during the late war. It may be taken for granted that fishing towns furnished their full quota to the Army for these wars, no distinction in the drafts between mariners and landsmen, while all of them contributed a greater or less number of men to the naval forces of the north. Most of the men entering the Navy, as well as a large number of those who joined the Army, were volunteers. The extent to which fishermen were employed in the Navy is not understood, even by persons, not residents of fishing communities, who profess to be well informed on such matters. The fishermen usually went to large recruiting stations, such as those in Boston or New York, and no record was made of their former occupation. After the war had closed, scarcely a fishing vessel sailed from Gloucester or any other large fishing port which had not in its crew several veterans.

The following account of the resistance of a whaling captain to being captured by the Confederate privateer Shenandoah, as recorded in the newspapers of the time, serves to illustrate the dogged determination and courage of a New England whaleman.

Capt. Thomas G. Young, of the Favorite, of Fairhaven, a man between sixty and seventy years old, who had all his property invested in his vessel, loaded his bomb guns and other weapons and took his stand on top of the cabin of his doomed vessel, and, when the Shenandoah's boat came alongside, drove her off by threatening to fire upon her. Captain Waddell, of the Shenandoah, ordered his gunner to train a gun on the Favorite and fire low; but Young's subordinates, having in vain

tried to dissuade the old hero from resistance, removed the caps from his guns, and, taking a boat, pulled off to the Shenandoah. Another boat was sent alongside and the officer in charge hailed the old man and commanded him to surrender.

The brief dialogue which now took place was too full of seaman's expletives to be repeated in this place. Captain Young defied the privateersmen, in the most emphatic words, and as the men boarded his ship he leveled his huge bomb-gun and pulled the trigger; but the piece, which had been tampered with, failed to explode and he was soon made a prisoner.

FISHERMEN EXEMPTED FROM TAXATION IN COLONIAL TIMES.—When the colonies of Massachusetts and Virginia were established, it seems to have been the intention of the English Government to encourage in every possible manner the establishment of fisheries; in fact, one of the chief objects of the Massachusetts colonies in seeking a station so far north upon the coast was evidently to gain increased facilities in the prosecution of this industry.

In the early history of the Massachusetts colonies may be found numerous acts whose direct purpose was to encourage men to engage in the fisheries. Many of these provide for the exemption of fishermen from military service. The following law is recorded as having been passed:

"At the Generall Courte, houlden at Boston, the 22th of the 3th M°, called May, 1639." "All fishermen, while they are abroad during fishing seasons, shipcarpenters, wch follow that calling, & millers shall bee exempted from training, yet they are to bee furnished with arms."*

Again we find another act passed:

"Att a Genneral Courte held at Boston, 14 of October, 1657." "In answer to ye peticon of Edw̃ Rainsford, Gamaliel Waite, John Shawe, Mathew Abdy, Richard George, John Peel, Richard Hollige, Richard Woodhouse, Robt Linkhorne, Abell Porter, Peter Till, Abraham Browne, Jn° Mellows, fishermen, humbly desiring that they may be exempted from traynings during time of the fishing season &c, the Court grants their request."†

HUMANE SERVICES.—Important services are constantly being rendered by the fishermen in the way of rescuing vessels and men in peril. The medal of the Massachusetts Humane Society has frequently been awarded to fishermen, and in several instances valuable gifts have been received by our fishermen from foreign Governments, especially from Great Britain, for services rendered in saving the lives of British subjects. A long chapter might be devoted to recounting instances of heroism, where lives have been saved by our fishermen at great risks to themselves by acts of daring, which scarcely any but men like our fishermen, thoroughly accustomed to the sea, would have dreamed of attempting.

It is a well-known fact that fishermen habitually take extraordinary risks in rescuing their shipmates, or others, in peril. Whittier has unintentionally done a great injustice to the New England fishermen by the implications expressed in his poem, "Skipper Ireson's Ride":

> Small pity for him! He sailed away
> From a leaking ship in Chaleur Bay—
> Sailed away from a sinking wreck
> With his own townspeople on her deck.
> "Lay by, lay by," they called to him.
> Back he answered, "Sink or swim,
> Brag of your catch of fish again!"
> And off he sailed through the fog and the rain!
> Old Floyd Ireson, for his hard heart,
> Tarred and feathered and carried in a cart
> By the women of Marblehead.

---

* 1639. The legislature of Massachusetts passed an act to free from all duties and public taxes all estates employed in catching, making, or transporting fish. All fishermen, during the season for business, and all ship-builders were, by the same act, excused from trainings. [Hutch., I, 92.] Holmes' American Annals, 1805, vol. i, p. 312.

† Records of Massachusetts, vol. iv, Part I, page 312.

As a matter of justice we print in a foot-note what is doubtless a true review of the facts of the case; it appeared in the Marblehead Statesman.*

---

* SKIPPER IRESON.

Many a time when traveling away from his native heath the writer has met individuals whose only knowledge of our good old town was that gained from reading the poem of Mr. Whittier which is the theme of this article. When the formula of introduction had proceeded far enough to announce that we were from Marblehead, the reply has too often come, "Oh! yes, Morble'ead, where old Flud Oirson for his hord hert was tar'd and feathered and corrid in a cort." So often has this been repeated that there grew within us a feeling of exasperation, and the very name of Whittier had an unpleasant sound. This experience gave us the firm resolve that, if opportunity ever offered, we *would place upon record the protest of one Marbleheader against the libel upon his native town and the insult upon* the fair fame of her noble women. We have been forestalled in our original design by the publication of the true story of Skipper Ireson's ride, by Mr. Samuel Roads, jr., in his "History and Traditions of Marblehead." Immediately upon the publication of the history by Mr. Roads, the poet sent him a letter, in which he gracefully acknowledges the truth of the story as told by Mr. Roads, and bears testimony to the honorable record of old Marblehead. Mr. Roads's story is as follows:

"On Sunday, October 30, 1808, the schooner Betty, commanded by Skipper Benjamin Ireson, arrived from the Grand Banks. Shortly after their arrival the crew reported that at midnight on the previous Friday, when off Cape Cod light-house, they passed the schooner Active, of Portland, which was in a sinking condition, and that the skipper had refused to render any assistance to the unfortunate men on board the wreck. The excitement and indignation of the people upon the reception of this news can be better imagined than described. Two vessels, manned by willing volunteers, were immediately dispatched to the scene of disaster, with the hope of their arrival in time to save the shipwrecked sailors. But their mission was a failure, and they returned with no tidings of the wreck. The resentment of the people was still further provoked when, on the following day, the sloop Swallow arrived, having on board Captain Gibbons, the master of the ill-fated schooner. He corroborated the story told by the crew of the Betty, and stated that the Active sprung a leak at about 11 o'clock on Friday night. An hour later the Betty was spoken, 'but, contrary to the principles of humanity,' she sailed away without giving any assistance. On Saturday, Captain Gibbons and three of the passengers were taken off the wreck by Mr. Hardy, of Truro, in a whale-boat. Four other persons were left on the wreck, but the storm increased so rapidly that it was found impossible to return to their rescue. Captain Gibbons was placed on board the revenue cutter Good Intent, and afterwards went on board the sloop Swallow, in which he came to Marblehead.

"This statement, by one who had so narrowly escaped a watery grave, made a deep impression upon the fishermen, and they determined to demonstrate their disapproval of Skipper Ireson's conduct by a signal act of vengeance. Accordingly, on a bright moonlight night, the unfortunate skipper was suddenly seized by several powerful men and securely bound. He was then placed in a dory, and, besmeared from head to feet with tar and feathers, was dragged through the town escorted by a multitude of men and boys. When opposite the locality now known as Workhouse Rocks the bottom of the dory came out, and the prisoner finished the remainder of his ride to Salem in a cart. The authorities of that city forbade the entrance of the strange procession, and the crowd returned to Marblehead. Throughout the entire proceeding Mr. Ireson maintained a dignified silence, and when, on arriving at his own home, he was released from custody, his only remark was, 'I thank you for my ride, gentlemen, but you will live to regret it.' His words were prophetic. When too late to make reparation for the wrong they had committed, the impulsive fishermen realized that they had perpetrated an act of the greatest injustice upon an innocent man.

"At this late day, when for years his memory has been defamed throughout the land, and the fair name of the *women of Marblehead has been sullied by the fictitious story of one of our best New England poets, it is but just that* the true story of the affair should be written. Skipper Ireson was not more to blame than his crew, and, it is believed, not at all. When the wreck was spoken and the cry of distress was heard, a terrific gale was blowing. There was a consultation on board the Betty as to the course to be pursued, and the crew decided not to endanger their own lives for the sake of saving others. Finding that they were resolute in their determination, Skipper Ireson proposed to lay by the wreck all night or until the storm should abate, and then go to the rescue of the unfortunate men. To this they also demurred, and insisted on proceeding on their homeward voyage without delay. On their arrival at Marble*head, fearing the just indignation of the people, they laid the entire blame upon the skipper. This version of the* affair is generally accepted as true, and for the credit of the town, be it said, that it is one of the few incidents in its entire history that its citizens have any reason to regret."

Mr. Whittier's letter is as follows:

"OAK KNOLL, DANVERS, *Fifth-month*, 18, 1880.

"MY DEAR FRIEND: I heartily thank thee for a copy of thy 'History of Marblehead.' I have read it with great interest and think good use has been made of the abundant material. No town in Essex County has a record more honorable than Marblehead; no one has done more to develop the industrial interest of our New England seaboard, and certainly none have given such evidence of self-sacrificing patriotism. I am glad the story of it has been at last told, and told so well. I have now no doubt that thy version of Skipper Ireson is a correct one. My verse was solely founded on a fragment of rhyme which I heard from one of my early schoolmates, a native of Marblehead. I supposed the story to which it referred dated back at least a century. I knew nothing of the particulars, and the narrative of the ballad was pure fancy. I am glad for the sake of truth and justice that the real facts are given in thy book. I certainly would not knowingly do injustice to any one, dead or living.

"I am truly thy friend, "JOHN G. WHITTIER."

Numerous instances of humane acts by fishermen are on record; a volume could be filled in their narration, and we quote here two or three as examples of many:

About the year 1863 a fishing schooner, commanded by Capt. Thomas Dench, of Gloucester, encountered a heavy gale on George's Bank, in which she was driven from her anchorage and met with some damage, losing among other things a boat. Soon after the gale began to moderate, and while yet the sea was very rough, she fell in with a British vessel in a sinking condition. Not having any boat, it was a problem how the fishermen could succeed in rescuing the imperiled crew. This they did by taking some of the ice-house planks which were in their vessel's hold and nailing them to the bottom of a gurry-pen.* With this imperfect boat they succeeded in rescuing the crew from the sinking vessel and brought them to Gloucester. For this humane and daring act, performed under such difficult circumstances, the captain was awarded a very fine telescope by the British Government.

The following paragraph, from the Cape Ann Advertiser, April 22, 1881, gives an idea of the nature of the rescues which are frequently made:

"A DARING DEED—TWO GLOUCESTER MARINERS RISK THEIR LIVES TO RESCUE A COMRADE.—The two men who went from the schooner Star of the East, Captain Dowdell, to rescue Albert F. Fitch on Brown's Bank on the 3d instant, as narrated in our last issue, were Michael Doyle and Joseph Hackett, and they are deserving of great credit. Fitch was washed overboard while engaged in dressing fish, the schooner being at anchor upon the Bank, and was fortunate enough to catch hold of a shifting plank which was washed overboard, on which he succeeded in keeping afloat for an hour and ten minutes before being picked up. [This is probably an error in regard to time.] It was blowing a heavy gale from the northwest, with a strong tide running to leeward, and any attempt to go to his rescue was fraught with great peril. But, unmindful of the serious risk, Doyle and Hackett jumped into an old dory and started away before the wind and sea to rescue their imperiled comrade. After they got him on board of their frail boat they found it absolutely impossible to return to their vessel, but succeeded in boarding the schooner Joseph O., which was also lying at anchor on the Bank. It took some three hours of constant labor, after arriving on board the Joseph O., to resuscitate Fitch, and the three men remained on board the latter vessel from Sunday night until Tuesday afternoon, when the Star of the East was signalized and ran down and took the men on board."

The Cape Ann Advertiser, of the same date, also contains the following note:

"RECOGNITION OF BRAVERY.—Collector Babson has received the sum of $150 from the Massachusetts Humane Society, to be handed over to the crew of the fishing schooner Laura Sayward, of this port, for their heroic conduct in rescuing the crew of the British schooner Maggie Blanche, in the midst of a furious gale on George's last September. Two of the crew, James Lord and Dean Crockett, who went in a dory and took off the captain and mate of the Maggie Blanche, who were lashed to the wreck, will also receive the medals of the society. It will be remembered that the men named have also received handsome watches from the British Government in recognition of their bravery. The Maggie Blanche was bound from Digby to Barbadoes; her owner, who was on board, and two of her crew, were drowned. The master, Capt. John C. Winchester, and mate, Thomas Lewis, were lashed to the deck when the wreck was discovered by the Laura Sayward. Capt. James Moore, master of the latter vessel, finding that the wreck was likely to sink before the men could be rescued, promptly cut his cable to allow his vessel to drift, and Crockett and Lord put off in a dory, at the risk of their lives, and succored the imperiled mariners."

* A gurry-pen is an oblong pen on the deck of the vessel, usually 12 feet by 4 or 5 feet, and without any bottom, which is secured to the deck by lashings. In this is put the offal of the fish, or fish-gurry, while the vessel is on the Bank.

43. COSTUME OF THE SAILOR-FISHERMEN.

Fifty years ago the costume of our fishermen was similar to that of the average European fishermen of the present day. Indeed, among the early records of the Plymouth colony we find mentioned a number of articles of fishermen's clothing sent over by the English capitalists who interested themselves in the development of the fisheries. A writer in the "Fisherman's Memorial and Record Book" describes the dress of the Gloucester fisherman in the olden time as follows: "It consisted generally of the tarpaulin hat and monkey-jacket or Guernsey frock (sometimes both); the barvel, a stout apron of leather, and the ponderous fishing boots, of astonishing breadth of beam, made of the thickest of russet cow-hide, with tops turning up high over the knees, which, though cumbrous and heavy, constituted an efficient protection against cold and wet."

The fishing dress chiefly in use at the present time is much lighter, more comfortable, better fitting, and better made than that worn by any other class of sea-faring men, except by sailors in the Navy and on yachts. At the Fishery Exhibitions at Berlin and London were exhibited a number of garments of rubber and oiled cotton which excited much interest. Not only was the excellence of the material a subject of general remark, but patterns of these garments were requested by public officers interested in introducing them into use in the fisheries and naval marine of Norway, Russia, and Germany. The contrast between the American clothing and the heavy leather garments shown in the Norwegian, Danish, German, and Dutch sections was very striking.

The dress of the fisherman at the present day, with the exception of waterproof articles, consists of trousers, waistcoat, and coat of some woolen fabric. The coat is, however, very frequently replaced by a monkey-jacket or reef-jacket of a heavy woolen fabric, and, in warm weather, a jumper, or loose jacket of calico, gingham, or wool, similar to that worn by butchers. Their underclothing is nearly always of some stout wool, and their feet are covered with woolen socks. The ordinary coverings for the feet, when the men are off duty in the cabin, or when on deck in warm weather, are heavy leather slippers. The head covering is generally a wide-awake or slouch hat of felt, though every kind of hat or cap seen on shore is used upon the fishing vessels. A close-fitting cap of dogskin or lambskin, with flaps for protecting the face, ears, and back of the head, was formerly commonly worn in cold weather. This cap is still occasionally used in winter, but a broad-brimmed hat of felt, chip, or straw is in more general use in pleasant weather.

The outer garments of the fisherman, worn when he is at work, are put on over his ordinary clothing. Since they are peculiar in shape they will be described separately:

Oil trousers and jacket.—The trousers are made very large and are provided with an apron which covers the entire front of the body with a double layer of cloth, extending high up on the chest and held in that position by straps passing over the shoulders. It has wings or flaps extending back upon each side of the hips, which are buttoned or tied with a string at the front of the waist.

The oil-jacket is a double-breasted garment, shaped much like a pea-jacket. It has upon the right-hand side an extra flap, called the "weather piece," which buttons over the flap on the left side, thus effectually excluding the water. The collar is about three inches wide at the back and is intended to stand up and button closely around the neck. These are sometimes lined with flannel.

The sou'wester.—This is a hat of the ordinary sou'wester pattern. There are several shapes in use among our fishermen. The Cape Ann sou'wester is regarded by the fishermen as better than any other.

The jumper.—This is a light oil-cloth garment shaped like a shirt, but with the smallest

possible opening at the neck and buttoning closely round the wrists. It extends down to the hips and is worn outside of the trowsers. This is worn instead of the oil-jacket in warm weather, especially by men dressing fish.

The barvel.—This is a stout apron of oil-cloth. The barvel is made in different shapes: (*a*) the barvel proper, which is an apron of heavy oil-cloth, extending from the waist downward to below the boot-tops, and upwards, in a flap, almost to the neck, and is held in that position by a strap passing around the neck. The flaps almost meet at the back and are held in place by two strings which cross each other at the small of the back, passing around the body and fastening in front. It is generally used in place of the "pants," especially when cod fishing in summer, and sometimes when dressing fish, and is occasionally worn in connection with the jumper or the jacket; (*b*) the petticoat barvel, which is in general form like the ordinary barvel, but has a much larger flap, closed at the back and extending under the arms. It extends higher up on the waist than the ordinary barvel. This has but recently come into use among our fishermen, but is essentially the same as the garment worn centuries ago by the French and English fishermen in the Newfoundland and Labrador fisheries. These fishermen used to stand inside of a barrel when dressing fish, and the petticoat hung over the outside. The petticoat barvel is chiefly in use among the hand-line fishermen and the seiners.

Oil-sleeves.—These are false sleeves fastened tight about the wrist and extending high up on the arm, generally secured at the shoulder with a button. They are used by the men while dressing fish and hauling the seines or engaged in any other work in which the arms are likely to get wet.

Monkey-jackets and mufflers.—There is comparatively little difference in the temperature on the fishing grounds in summer and winter, especially on the distant grounds where cold fogs constantly prevail, and where, as the fishermen express it, the year is made up of nine months' winter and three months late in the fall. The monkey-jacket is substituted in the coldest weather for the jumper, and sometimes both are worn together. The only special provision for comfort is a woolen muffler, or comforter, with which the neck and face are enveloped.

Boots.—Fishermen's boots are either of leather or rubber, the latter material being in more general use in winter, while leather is chiefly worn in summer. Ordinary rubber boots, costing from $3.50 to $5, are commonly used. The hip boots are sometimes, though not frequently, worn. Among the Bank fishermen boots of russet leather are preferred to the black ones, but whether red or black, the leather fishing boots are generally of thick cowhide or "grain-leather," with very heavy soles.

Quality of oiled clothing.—The oil-clothes made in New England are acknowledged to be the best in the world. The oil is applied with more skill, the materials are better, and the patterns the most convenient. Both double and single thickness of oil-cloth are used, the latter chiefly in summer. All of the garments described, except the barvels, are also made of rubber, and are frequently used by the fishermen. These wear longer and are preferred in winter because they do not stiffen or crack in cold weather; the price, however, is considerably higher. The cost of a jacket and "pants" of oil-cloth, in 1880, was from $3 to $3.50. A corresponding suit of rubber costs about $10.

HAND COVERINGS.—A variety of coverings for the hands are in use:

(*a*) *Woolen mittens.*—These are made of coarse yarn. Inappropriate as it may seem, they are almost always white, colored mittens being considered by some fishermen unlucky or "Jonahs." The more liberal fishermen respect the prejudices of their companions. These mittens are used not only for warmth but as a protection to the hands when dressing fish. They are always

washed after the work of dressing the fish is finished. Men going on a long cruise provide themselves with several pairs of these mittens. They may be bought in the shops for about 50 cents a pair, but are often made by members of a fisherman's family.

(*b*) *Cotton mittens.*—These are similar in shape to the woolen mittens; they are made of pieces of cotton drilling sewn together, and, like the woolen mittens, are white. They are used principally for dressing mackerel in the summer season and handling the seines, being cooler and more comfortable in warm weather than those made of wool. The cotton ones cost about 25 cents a pair.

(*c*) *Rubber mittens.*—These are sometimes lined with flannel, and when not so lined are made very large in order to fit over the ordinary woolen mittens. They are used to a limited extent by the winter fishermen and cost about $1 a pair.

(*d*) *Oil-mittens.*—These are usually made of stout cotton drilling and oiled. They are used in the same manner as the unlined rubber mittens, being worn over woolen mittens. They cost about 50 cents a pair.

(*e*) *Mackerel gloves.*—These are made of woolen yarn and resemble mittens, except that the forefingers have separate coverings. By this arrangement greater freedom of motion is allowed to forefingers of men who are eviscerating or "gibbing" the mackerel.

(*f*) *Hand-haulers.*—These are tight-fitting gloves of woolen yarn, with long wrist pieces, extending half way up the forearm, and very short finger and thumb stalls. These are used by the hand-line fishermen in the winter, being worn with the nippers, described below. The short finger-stalls are supposed to facilitate the free use of the fingers in baiting the hooks. The hand-haulers are not sufficiently common to be kept for sale in the shops.

(*g*) *Nippers.*—These resemble wristlets in general appearance, but are worn around the lower part of the fingers instead of around the wrist. They are knit of woolen yarn and, like the mittens, are always white. They are used by all trawl and hand-line fishermen, but not by mackerel fishermen. They are held in the hollow of the hand, when the line is being hauled, for the sake of greater ease in obtaining a grip. They are stuffed with woolen cloth in such a manner that there is a narrow crease in the center between the two edges, by the friction of which the hand is aided in its effort to retain a grasp upon the line. Nippers are for sale in all the shops, and cost 50 cents a pair. Unlike all the other articles of clothing and hand wear, the nippers form part of the outfit of the vessel and are included in the "stock charges," of which the crew pay one-half. The only exception to this rule is the usage, which occasionally prevails, of giving a suit of oil-clothes, at the expense of the vessel and crew, to an expert "salter" for his services on a Bank trip. A halibut vessel, expected to be absent from port about six weeks, carries from a dozen and a half to two dozen pairs of nippers, and the Grand Banker carries a still larger supply, sometimes four or six dozen pairs. Large quantities of nippers are made by the fishermen's widows at Gloucester, to whom this industry affords a partial support. These women also knit some of the mittens, though the greater part come from the maritime districts of Nova Scotia and Maine. Nippers are also made by the young ladies of seaboard towns for sale at church fairs.

(*h*) *Finger-cots.*—These are separate finger-stalls of rubber or wool worn by mackerel fishermen upon the forefinger when hand-lining for mackerel. They are kept in the shops and cost about 5 cents or 10 cents apiece.

CARE OF CLOTHING.—The fisherman's wardrobe is seldom stored in chests or trunks. The number of men living in the cabin and the forecastle renders it unadvisable to fill up the space with furniture of this description. The skipper, however, sometimes carries a chest, or "donkey," as the fishermen call it. The oil clothes, which form the bulkiest portion of the fisherman's dress, of which he carries two or more suits, cannot be stowed away in a confined space, but are always

hung up in some convenient place. If they were put away wet they would mold, and if dry they might heat and ignite; above all, it is necessary that they should be ready for use at a moment's notice. Each member of the crew has his own nails or hooks upon which his oil clothes are always hung. The act of donning the oil-skin suit is called "oiling up." Every man carries from two to five changes of clothes, which he stows away in a canvas bag called a "clothes-bag." Convenience, as well as the fisherman's prejudice against valises, causes this custom to be almost universally observed. The bag is about 18 inches in diameter and from 3 to 4 feet long, and is stowed in the back part of the berth. Some men use it for a pillow.

BED-CLOTHING.—Another part of the fisherman's outfit, which may properly be considered in connection with his wardrobe, is his bed-clothing. This includes a mattress, or, more generally, a sack of a coarse hempen fabric stuffed with straw, called a bed-sack. In Gloucester these are kept in the outfitting stores and are furnished by the owners and charged to the men; when filled and ready for use they cost $1.25. The other bed-clothing, furnished by the men themselves, consists of blankets or quilts, of which each man carries one, two, or more. The pillows are stuffed with feathers or straw, and are provided by the men. When a man changes from one vessel to another he carries with him his clothes-bag, his bed-sack, and his bed-clothing; hence the common expression which is used to describe the man who is leaving a vessel and who is said to "jerk his straw."

SHORE CLOTHES.—The clothes which the fishermen wear on shore are in no way peculiar. The better classes in Gloucester live at home or in their boarding-houses; and after returning from a trip they cast aside their vessel clothing, and appear well dressed and well behaved.

44. FOOD ON THE VESSELS.

Mr. Osborne gives the following list of stores carried by a Grand Bank cod schooner with a crew of twelve men setting out for a three months' cruise:

Beef	barrels	5	Coffee	pounds	15
Pork	do	1	Condensed milk (cans)	dozen	4
Pigs' knuckles	do	1	Onions	bushel	1
Butter	pounds	200	Potatoes	do	10
Lard	do	150	Beans	barrel	1
Flour	barrels	8	Dried apples	do	1
Rice	bushel	1	Dried peas	bushel	1
Oatmeal	do	½	Essence of lemon (bottles)	dozen	2
Indian meal	pounds	20	Raisins	boxes	4
Hard-tack crackers	barrel	¼	Pepper	pounds	2
Corn-starch	papers	12	Salt	bags	3
Saleratus	pounds	5	Mustard	pounds	2
Baking powder (packages)	dozen	4	Cloves	do	1
Hops	pound	1	Ginger	do	2
Brown sugar	pounds	350	Cassia	do	1
Molasses	barrel	1	Sage	boxes	4
Tea	pounds	20	Nutmegs	pound	½

In connection with his discussion of life on board the vessels, Mr. Osborne speaks of the manner in which these articles are prepared for the table. He writes: "From a glance at the list of provisions it is evident that, in the hands of a good cook, there is no reason why the crew should not be provided with excellent fare. The table on board the vessel was very good indeed; the lack of fresh provisions was felt, but the bread and the butter, and, in fact, the fare generally, was far better than that of the Provincials in the ports where we landed. I was surprised to find the fishermen living so well, and spoke of it, asking if it were generally so. In answer to this I was informed that on our vessel living was not better than the average, and that the crews of many

vessels fared far better, since, fishing upon grounds closer to the shore, they had more frequent chances of obtaining fresh provisions."

In former years fishermen did not fare so well as at present. Capt. Gideon Bowley, of Provincetown, made his first trip to the Grand Bank about the year 1828, in the schooner Plant. He gives the following account of the provisions carried by the vessel, and the routine of life on board while fishing on the Bank: "The schooner Plant was a topsail schooner of 63 tons O. M., carrying eight men and a boy cook. The provisions for three months consisted chiefly of the following articles: 1 barrel of flour, 1 barrel of beef, ½ barrel of pork, 20 bushels of meal, 16 bushels of potatoes; beans, dried apples, 1 barrel of molasses, 1 barrel of rum, 2 cords of wood for use in the fireplace, and 40 barrels of water. Sometimes they carried no flour, and then the larder was always supplemented by two or three barrels of rum. The vessel had a large open fireplace in the forecastle, in which over a wood-fire the cooking was done.

"The daily routine of meals was as follows: Breakfast at 7.30 a. m., consisting of brown bread, fish chowder, and tea and coffee, sweetened with molasses. When there was no fish the chowder was replaced by a dish called 'smotheration,' composed of potatoes and salt beef. Dinner at 12. We had sometimes soup, either made of salt beef with rice in it, pea soup or bean soup. Nothing under heaven but boiled beans. Brown bread, boiled potatoes, boiled beef twice a week, Wednesdays and Sundays (when there was beef enough). When there was no fish on the table there was something else, such as corned fish and potatoes, or fried fish. Supper at 6: brown bread and the fish or whatever else was left over from dinner."

Capt. Chester Marr gives the following description of the fare on board the fishing vessels of Gloucester about the year 1830: "The Gloucester fleet numbered about fifty boats, most of them 'Chebacco boats' or 'dog-bodies' and pinkies. The manner of living on board of the vessels was very simple; the food was mostly fish, no meat at all, and no soft bread; no butter nor sugar, nor knife or fork unless we carried them ourselves. Each man had a pan and a mug. We had black tea boiled in an iron kettle. We had our food in one tin pan, and each man had a spoon and we'd all sit 'round and eat our victuals out of it. We used to make our own matches out of pine wood and sulphur. I shall never forget the first time I went to the Bay of Saint Lawrence. After I went on board I asked the skipper how long he had taken stores for; he answered, for about four months. When I got a chance I went down into the hold to see what he had, and this was what I found: 2½ barrels of molasses, 16 barrels of hard bread, ½ barrel of salt beef, ½ barrel of pork; rice, potatoes, beans, pepper, and chocolate.

"This was for four months. We used to boil our chocolate with rice, in a sort of pudding. I never saw a bit of sugar on vessels for years—nothing but molasses. The whole outfit did not cost $200. We lived jist so to home as we did on board of the vessels, pretty much."

The fishermen of former days employed, as cook, a boy of from twelve to sixteen years, whose pay was almost nothing. On European fishing vessels the practice of having a boy for cook is still universal. The cook of New England vessels at the present day, on the contrary, is one of the most important men on board; with the single exception of the captain, he is the best paid man on the vessel, and is often given a "lay" that makes his remuneration quite equal to that of the skipper. He is therefore expected to be a skillful cook and a generally capable and reliable man, and to him is usually intrusted the responsible duty of naming the quantity of the provisions which he which he selects and takes on board for any given cruise.

All the members of a schooner's crew, from the captain to the smallest boy (if any boys are carried), eat at the one table, and fare precisely alike. The cook almost always decides what he

shall prepare for each meal, and if he be well qualified for his work the dishes are sufficiently numerous and varied to suit any but the most fastidious appetite.

Salted or corned meats are now always carried, though most vessels on leaving port take more or less fresh meat, and some which are engaged in market fishing have more fresh meat than any other kind. Hard bread is rarely or never used, except to make puddings. The "soft tack" made on the fishing vessels often equals in excellence the best bread that can be obtained on shore. Canned milk, eggs, fruit, and other delicacies are often carried.

There can be no question that fishermen, ordinarily, are provided with much better food than the people of the same class engaged in shore pursuits. To the improvement in the food is perhaps due the greater longevity of the fishermen, and the long period during which they may be actively engaged in a sea-faring life. The changes in the manner of fitting out the fishing vessels have been slow. It is said that the Marblehead and Beverly fishermen began the innovations by carrying extra supplies of provisions, the property of individual members of the crew. Sometimes every man would have his own butter tub and can of sugar on board. Gloucester has always taken the lead in improving the food of its fishermen, and, as early as 1850, vessels were fitted out from that port in much the same manner as at the present time. The introduction of canned provisions has been of great importance to the fishermen, and, of course, there is dissatisfaction at the change on the part of many of the older men, who think that their successors are indulging in needless luxury, and also on the part of some of the fitters upon whom falls a portion of the increase in the expense; such articles as milk and eggs are, however, paid for by the crew. There is, of course, some foundation for the feeling that the profits of the business are decreased by this more expensive style of living, but it is also true that men of the better class would not be willing to submit to the privations and hard fare endured by their predecessors.

The shrewdest fishery capitalists have satisfied themselves by experiment and observation that it is to their interest to provide their vessels with good provisions and a good cook, and to keep their vessels in the best of order generally, since by these means they secure good men, who are contented to remain in their service. Those firms in Gloucester which have a reputation for liberality have no difficulty in securing any men whom they may desire to have in their service.

One of the most striking changes is that ardent spirits are no longer supplied as a part of the outfit of the vessel. The history and significance of this change is discussed elsewhere.

On some of the smaller vessels of the New England coast, such as those employed in the shore fisheries of Maine, and many of the Boston market boats, the fare is probably little better than in the olden times. Some of the vessels are correspondingly antiquated in their rigging and outfit, and the fishermen retain many of the characteristics which have been referred to in connection with the offshore fishermen of olden days. The fishermen of France still live in the old way. Our vessels on the Grand Bank are sometimes boarded by the crews of the French bankers, who look upon them much as the hungry school boy looks upon the baker's shop. They eagerly ask for soft bread, which they consider a luxury.

The American fishermen undoubtedly fare better than any other class of sea-faring men, except, perhaps, the officers of merchant vessels.

45. DISEASES AND LONGEVITY.

DISEASES OF FISHERMEN.—The most common diseases among the fishermen of Gloucester are consumption, rheumatism, typhoid fever, and dyspepsia; but the pure air which the men breathe and their active lives save them from many of the ailments which are common upon shore. As might naturally be expected from the exposure to which they are subjected, consumption is the

most prevalent disease, but since they are well fed this disease is much less common than would be supposed. An experienced physician of Gloucester says that consumption is especially prevalent among young men under thirty-five years of age.

Colds are somewhat prevalent in severe weather, though many fishermen have the idea that if they go to sea with a cold it will disappear as soon as they get out of sight of land.

The occurrence of dyspepsia is accounted for, by one who knows, in the following manner: "Fishermen eat from three to five meals a day, and mug up between meals whenever they can get a chance, and in rough weather, when they are getting no exercise, they frequently eat a hearty meal and lie down immediately; this injudicious course results in many cases in chronic indigestion."

Rheumatism frequently results from exposure to cold and wet, and men who are engaged in packing fish in ice are especially liable to this complaint.

As is always the case on shipboard, there is much irregularity, and bowel complaints are very prevalent; and this also has its effect upon the health of the men. The dissipation into which some of the crews plunge when upon land has an injurious effect upon their constitutions, and breaks down many strong men.

Cases of nervous exhaustion are not at all uncommon, especially among skippers and fishermen who are ambitious for promotion or to become wealthy. This is particularly observable in the halibut fishery, in which the skipper, while making passages to and from the fishing grounds, is constantly watchful and wakeful for many days and nights, and sometimes does not remove his clothing for many days. The immoderate use of tobacco is believed, in some cases, to have aggravated the effects of such over-exertion. Strong young men, in this way, break themselves down in the course of three or four years, so that they are obliged to turn their attention to less arduous branches of the fisheries. The custom prevalent among cod fishermen on George's of fishing night and day in order to be "high line," or first in success among their shipmates, is also wearing in the extreme, and does not fail to tell upon the constitutions of those who practice it. The exhausting character of the halibut fisheries, indeed of the winter fisheries generally, may be judged of from the fact that men over forty-five years of age rarely engage in them except as masters of vessels, young blood and strong limbs being necessary; and those who have not succeeded in attaining to the dignity of skipper before reaching that age, having become exhausted by the arduous labors, seek either some other branch of the fisheries in which there is less hardship, or some employment on shore.

MEDICINES.—All the first-class Gloucester fishing vessels carry medicine chests, but the judicious use and proper condition of these depend upon the skipper, who usually administers any remedies which may be needed. These medicine chests are fitted up by reliable druggists in Gloucester, especially for the needs of the fishermen, and are accompanied by a book of instructions, by the aid of which any intelligent man can prescribe for the diseases to which fishermen are liable. Aperients, cathartics, purgatives, salves, and liniments are the remedies most frequently called for. Next to those come expectorants and other cough medicines. The only surgical instrument which accompanies the outfit is the lancet.*

---

*A typical medicine-chest was exhibited in the American sections at the International Fishery Exhibitions of Berlin and London. It is described in the catalogue as follows:

FISHERMAN'S MEDICINE-CHEST.—This chest is filled and ready for use. The contents are: 1, sulphur; 2, cream of tartar; 3, epsom salts; 4, arrow-root; 5, chamomile flower; 6, flax-seed; 7, flax-seed meal; 8, bicarbonate of soda; 9, Turner's cerate; 10, mercurial ointment; 11, basilicon ointment; 12, simple ointment; 13, glycerine ointment; 14, extract of paregoric; 15, extract of vitriol; 16, laudanum; 17, Fryar's balsam; 18, essence of peppermint; 19, spirits of niter; 20, balsam copaiba; 21, sulphuric ether; 22, syrup of squills; 23, soap liniment; 24, spirits of lavender; 25,

MARINE HOSPITALS.—There is no provision for the reception of invalided fishermen into hospitals. Vessels sailing under a fishing license pay no hospital dues, and so far as we can learn have no hospital privileges. In early colonial days New England fishing vessels were obliged to *contribute to the support of the Greenwich Hospital in England, but this abuse was remedied in* 1760 upon the representations of Mr. Fairfax, collector of Salem.*

The hospital at Halifax, Nova Scotia, affords a refuge to our fishermen such as they cannot find in any of our own ports.

DISEASES OF WHALEMEN AND SEALERS.—Scurvy appears to be the commonest disease among the crews of whaling vessels. This is caused by an excess of salt in their food, and usually begins to show itself about six or eight months after the vessel has left the home port. The principal symptoms of scurvy among the men belonging to the South Sea whaling vessels is in the swelling up and softening of the limbs of the sufferer. This disease affects the crews of whalers in the Arctic Seas in a very different way, the limbs of the sufferers turning black and shriveling in size. Scurvy often leaves sequelæ which render the victims lame for life.

The venereal disease is not unusual on whalers for a few months after a stay in port: This disease is rarely met with among the crews of the fishing vessels.

The sealing crews from Stonington and New London engaged in the capture of fur seals and sea elephants in the Antarctic, about Cape Horn, and in the Southern Indian Ocean, are subject to disease from exposure, *and, worst of all, they are afflicted with scurvy.* A veteran sealer tells us that in all his experience he never had his crew suffer from scurvy, because he required them to subsist largely on seal meat, which he considers a sure preventive of that disease.

In cases of sickness on board of whaling vessels the captain and mate have charge of the sick. Medicine chests are carried, usually larger than those on the Gloucester fishing vessels, and the patients are prescribed for by the aid of an accompanying book, which contains instructions sufficiently explicit to enable any man of intelligence to treat such sicknesses as ordinarily afflict men at sea.

LONGEVITY.†—In former days, when the mackerel fishery was carried on by hand-lining, it was not infrequent for boys to begin their fishing life at ten or twelve years of age, and two or three such were usually found on every mackerel vessel; but at present boys are rarely shipped until they have attained to manly stature and the age of fifteen or sixteen. A smart young man of American parentage is likely to have won his position as master before he is twenty-five years

---

spirits of camphor; 26, spirits of hartshorn; 27, tincture of rhubarb; 28, tincture of bark; 29, wine of antimony; 30, mercurial solution; 31, muriatic tincture of iron; 32, Seidlitz mixture; 33, castor-oil; 34, purging pills; 35, gum arabic; 36, blue pills; 37, opium pills; 38, fever powders; 39, calomel and jalap; 40, Dover's powders; 41, quinine; 42, ipecac; 43, calomel; 44, tincture of myrrh; 45, rhubarb; 46, magnesia; 47, Peruvian bark; 48, tartar emetic; 49, powdered cubebs; 50, nitrate of potash; 51, sugar of lead; 52, white vitriol; 53, blue vitriol; 54, tartaric acid; 55, red precipitate; *56, alum; 57, gum camphor; 58, iodide of potash; 59, lunar caustic; 62, lancet; 63, syringe; 64, the Mariner's* Medical Guide. Gloucester, Mass., 1880.

* *November 7, 1723.*—A letter from the General Court to their agent, Francis Wilkes, in London, contains this passage: "Ever since the tax upon seamen called the six-penny duty for Greenwich Hospital has been required here there has been some uneasiness, but of late it has increased very much upon the demand of it from fishing vessels that go out a fishing and many times return at night, and never go to any other port, but return into the harbors of Marblehead, Salem, Gloucester," &c. Shortly before this time, William Fairfax, collector of Salem, summoned some of our fishermen for non-compliance with the custom. Suits against them were abated in our courts. Mr. Fairfax sent a representation of the matter to the British authorities. No further demand of the kind was made for the *hospital money to 1760, as a Boston Gazette of that year certifies.* Felt's Annals of Salem, vol. ii, 2d ed., p. 217.

† Mr. William Abbott, of Rockport, Mass., 94 years old, is very active and smart. He frequently goes out in his dory fishing, and into the woods nearly every day to bring out his burden of fire-wood.—Cape Ann Advertiser, April 15, 1881.

Capt. John Paine Havender, of Provincetown, has made fifty-eight voyages to the Grand Bank.—Gloucester Telegraph, April 16, 1870.

old, and in some instances by the time he is eighteen years of age. A man who has not become a skipper by the time he is forty-five years old is usually thrown out of the more arduous fisheries and seeks employment in those requiring less exposure and fatigue. Skippers, especially those engaged in the mackerel and summer-market fisheries, often retain their positions until they have attained a ripe old age: Capt. Chester Marr, for instance, over seventy years of age, and a great-grandfather, is still actively engaged in the summer fisheries, and Capt. King Harding, of Swampscott, who is one of the most successful masters in the well-known Swampscott market fleet, still holds his prominent position. It very frequently occurs, however, that a skipper after reaching middle age engages in some more lucrative employment on shore. If he has been sufficiently fortunate in his career as a fisherman to have laid up the necessary amount of capital he may become a vessel-fitter; otherwise he is likely to take some responsible position on shore in connection with the curing or packing of fish. It is estimated that not over 12 per cent. of the skippers of the Gloucester fleet are over fifty years of age. This is rather an exceptional case, for the fisheries of Gloucester are more arduous than those of other places. At Provincetown and some other ports there is a much larger percentage of elderly men in command of the vessels and among the crews. In talking with several elderly fishing captains of Provincetown we have gained the impression that the career of activity and usefulness is much longer now among fishermen than it was at the beginning of the present century. The Provincetown fisheries are not especially laborious or perilous, yet we are told that fifty years ago a man forty-five years old was considered aged and only fit to sit around on shore and chop kindling wood and perform other household tasks, while now a man of forty-five is regarded as in his prime. This, of course, may readily be accounted for by the difference in the character of the accommodations on shipboard and the better quality of the food which is now provided.* As regards the actual longevity of men who have engaged for the whole or part of their lives in the fisheries it is probably not less than that of men engaged in any other outdoor pursuits. In Gloucester one may find dozens of hearty old men who have spent thirty or forty years at sea, and similar instances may be found among the whaling captains of New Bedford and Provincetown; and especially is this true in the case of the retired fishing captains of Maine, of whom it is a common saying among their associates that "they never die until some one kills them." Even in Nantucket may still be found many veterans of the whale fishery so many years ago discontinued. Of course, in considering these facts, we must bear in mind that the general average of longevity has much decreased in consequence of so many fishermen having lost their lives by accident in the period of their greatest vigor and health.

46. THE FINANCIAL PROFITS.

DIVISION OF PROFITS.—In another section the manner in which the fishing vessels are fitted out is discussed, and the business arrangement or "lay" according to which the expenses of the outfit are divided and the proceeds of the year's work distributed. Here it is only necessary to speak of the manner in which the fishermen are affected by these various business arrangements and of their personal relations to the fishery capitalist.

The more extensive and more profitable the fishery, the more necessary and natural is the division of the persons engaged in carrying them on into two classes—the capitalists and the fishermen.

*In the opinion of Capt. Gideon Bowley, of Provincetown, in his youth men got unserviceable for sea after they got to forty-five years, and were thought old men. A man after forty-five could not get a berth on Bank vessels. Now they go up to sixty. After forty-five he staid at home, made fish and tended lobster pots. Capt. Bowley attributes this partly to the use of liquor. He has been on the Grand Bank when the vessel carried two barrels of Medford rum.

Prior to 1840 almost all the fishing vessels of New England were owned in large part by the fishermen themselves. In 1850, in the larger ports, like Gloucester, Portland, and Provincetown, the control of the vessels passed to a great extent into the hands of capitalists, or owners, as they are called. In the smaller ports, including most of those on the coast of Maine and Connecticut, the fishing vessels are still owned almost entirely by the fishermen themselves. In the whaling fleet the change has not been so radical. As might be supposed, this fishery has almost always been under the control of capitalists. The outlay for building and provisioning vessels so large and so long absent from port is ordinarily beyond the means of men who are willing to undergo the hardships of the fishery.

At present, the majority of the vessels engaged in the Grand Bank cod fishery, hailing from Provincetown, Plymouth, Beverly, and the ports of Maine, as well as many of those from Gloucester, are manned chiefly by fishermen who are hired by the trip or paid monthly wages. In all the other fisheries the crew, as a rule, "go upon shares," receiving at the end of the season (but in Gloucester, and occasionally in other ports, at the end of the trip) a specified proportion of the proceeds from the sale of the vessel's catch.

The universal adoption of this practice in Gloucester has had the effect of drawing from other ports many of the most capable of their fishermen. These men prefer to realize at once the amount which they have earned rather than to wait until the end of the season, becoming indebted to the capitalists for the supplies needed by themselves and families, thus placing themselves somewhat at the mercy of these men if they choose to be exacting. This is especially the case with the younger men, who want their money as fast as they earn it.

FISHERMEN'S EARNINGS.—The statistics of the Gloucester fisheries for 1879 show that the average earnings of each fisherman amounted to $175. This amount, however, is below the average annual earnings, and does not give a fair idea of the amount that can be earned by a man in a year, or of the amount that is ordinarily earned by a successful fisherman.

In the "Fisherman's Memorial and Record Book" may be found the record of a large number of "big trips" in the George's mackerel and haddock fisheries. In many instances the share of each member of the crew is mentioned. In the Grand Bank halibut fishery for salt fish, in one instance, the vessel was absent twelve weeks, and the crew shared $286 each. In another, after five months' absence, $326; in another, after fourteen weeks, $257 each.

Allusion is also made to "big trips" in the fresh-halibut fishery on the Banks. In one instance the "high line," or most successful of the crew, realized $1,300 as his share of the year's stock; in another each of the crew shared $858. On a single trip in 1871 the crew shared $213 each, being absent five weeks, and on another, occupying nine weeks, $363. In another instance, on a trip of thirty-four days, $236; in another of twenty days, $171; in another of four weeks, $161.

The largest amount made by one man on a George's trip is recorded at $243. These trips occupy from two to three weeks. Other instances are given where these trips yielded $125 to $160. The largest season's share mentioned was in 1865, when the "high line" made in the year $1,105, and the cook $1,402.

Much larger average shares have been made by successful mackerel men. Several instances are mentioned in which the "high-liner's" share ranged from $260 to $575 for a summer's work.

In the haddock fishery, occupying four or five months of the winter season, instances are mentioned where the crew shared from $377 to $560 each.

It should be stated that in all of these instances the profits of the skipper of the vessel, including captain's commission, are usually double the share of any member of the crew.

It will be seen, also, that men engaging in summer in the mackerel fishery, and in winter

in the haddock fishery, have an opportunity of making a yearly profit considerably larger than those mentioned.

The various cases just cited are, however, extraordinary ones, and the fishermen were regarded as unusually fortunate. A capable fisherman, with ordinary success, engaging in fishing at all seasons of the year, should make at least from $300 to $500. It is probable that the fishermen of those New England ports which do not engage in the winter fisheries do not, as a rule, make more than half as much.

The profits of the labors of the shore or boat fisherman are generally much less. In the winter shore fisheries of Provincetown, in some seasons, the fishermen pay out more for bait than the fish which they catch are worth. The price of clam bait at that port is $6 per barrel, and, since a barrel will last a dory only two days it is evident that their fishing must be uniformly successful to insure them the slightest profit.

CREDIT SYSTEM.—In many fishing ports the fishermen become largely in debt to the men who supply them with boats, and provisions needed by their families while they are fishing, and they are often obliged to labor under considerable disadvantages. There is little evidence, however, that the capitalists are to blame for this, since they are quite as dependent upon the vicissitudes of the fisheries as the men to whom they supply the means of carrying on the actual work.

MARBLEHEAD FISHERMEN in 1834.—The financial condition of the fishermen of Marblehead in 1834 was described by a correspondent of the Marblehead Gazette, as follows:

"I promised to lay before your readers the reasons why fishermen of this town are unable to gain more than a bare subsistence by means of their laborious and dangerous occupation. Many of the young fishermen are addicted to gambling and other bad habits which reduce their circumstances. Not so with the older ones; they are an industrious and persevering class of men who endeavor, by all the means in their power, to gain a livelihood and be independent. These men have many obstacles to contend against besides those common to us all; they have to contend against the speculators on fish; these men often get the fish for one-third part less than they are worth, on account of their combining themselves and frightening some one of the shoresmen with a story respecting the low price fish will shortly stand at; or perhaps the shoresman is interested, and can make more money by selling part of the fish in his possession, thereby setting a standard price for others to sell at, and shortly after purchasing directly or indirectly the remainder and then speculating upon it. They also have to contend against enormous prices levied upon stores and provisions of all kinds for themselves while at sea, and their families at home. These, sir, are the causes why the fishermen of Marblehead are always poor. It is easily seen that if the speculator is successful in establishing his price that the fishermen will fare but poorly, as the speculator will not be contented with a small profit if he can have a larger one. I therefore advise the fishermen of this and all other towns to form societies for the purpose of protecting themselves. It is not a hard matter for them to gain the ascendency, if they keep a bright eye to windward, and do not trust A, B, and C with the management of their affairs."

C.—OFFICERS OF VESSELS; DISCIPLINE OF THE CREW; NAVIGATION.

47. OFFICERS AND DISCIPLINE ON FISHING AND WHALING VESSELS.

THE SKIPPER AND HIS DUTIES.—The fishing vessels of New England have practically only a single officer, the "master" or "skipper," familiarly known to the crew as the "old man." On some Cape Cod vessels, and also on some from the coast of Maine, one of the crew is known as the "first hand," and is recognized as the person left in charge during the captain's absence, though he otherwise has no authority. The skipper has the entire responsibility of the management of the vessel, and has absolute control of her movements. In the Gloucester fleet, and, with the exception already mentioned, all along the coast, the crew are on a footing of absolute equality, and, in case of accident to the skipper, some one is selected by common consent to take command during the remainder of the voyage. The skipper has no authority except that which his personal influence gives him and the deference which men accustomed to control instinctively command. He must be a natural leader, and generally gifted with superior intellect and tact, in order to get along with the crew, there being no special laws like those in the marine service, which give him authority over his men. In cases of insubordination he must have recourse to his physical strength. If he cannot sustain himself in this manner, his influence over the crew is gone. There have been many instances of vessels, commanded by the most skillful skippers of Gloucester, having been compelled to return home without completing their trip on account of insubordination, which the skipper could not overcome. Skippers naturally hesitate to come into personal conflict with their men, because by so doing they render themselves liable to arrest for assault and battery. The skipper is in every respect on an equality with the members of his crew, except when he is directing them in some kind of work, and the commands are usually given more in the form of a request than of an order. The cabin in which the captain sleeps and lives is shared by the crew, a part of whom sleep there, while all of them are at liberty to use it as a sitting-room when they choose; the skipper and the entire crew eat together in the forecastle.

DISCIPLINE.—An excellent idea of the discipline on the Grand Bank cod vessels is given by the observations made by Mr. Osborne, in another part of this report.

On the whaling ships a strict system of organization is maintained similar to that in the merchant marine, except that it is even more formal and severe. The captain and his officers are secluded from the rest of the crew, occupying another part of the ship and eating by themselves. The captain has absolute control over his men, and is assisted in maintaining this control by his officers, of whom there are always from five to seven. The manner in which the whale ships are officered will be described elsewhere. On the sealers a similar system of discipline is kept up, though it is less formal, the vessels being smaller and the crew, since they are picked men and usually of American birth, are naturally more upon terms of equality.

It is easy to understand how the present system of officering the fishing vessels has grown up. The fisheries have grown in importance and the vessels have increased in size, while the customs of previous centuries have remained unchanged. Men who were neighbors on land and were engaged in the shore fisheries together would have no need of special officers or of special systems of

discipline. They fished on terms of perfect equality, and frequently any one of them was equally competent to take charge of the vessel in case of necessity. It is probable that in the early days of the New England fisheries vessels were often fitted out for the fisheries without the form of selecting any one to take charge. This, of course, could be the case only with very small vessels. As vessels increased in size, it became necessary for some one to be designated as the leader, but since it was usually the case that many or all of the crew owned shares in the vessel the position was not one of undivided responsibility. The position of master was often kept up simply to fulfill the requirements of the law, and the person occupying the position had no more actual authority than any other man on board. Traces of the old manner of doing things may still be found on vessels from some of the smaller New England ports. The Swampscott vessels, for instance, are to the present day usually owned by several members of the crew, and the master holds his position more as a matter of form and honor than on account of any particular responsibility which he assumes. Sometimes each member of the crew owns a share in the vessel in which he ships. Many of the Cape Cod vessels are managed in very much the same way. The captain always has associated with him two or three "sharesmen" who are members of the crew. These men usually own a part of the vessel or, at least, assume a part of the responsibility of fitting her out with stores and apparatus for a voyage. If they are not possessed of sufficient capital to assume this position on their own responsibility, they are supplied with capital by the actual fitter of the vessel, and the position is maintained in a fictitious manner. The "sharesmen" are, as a rule, unable to advance the money, and they are consequently obliged to obtain the fittings on credit from the capitalists or "owner," who undertakes the financial responsibility of the voyage.

In Gloucester and other large ports the influence of the old traditions is seen in the condition of the discipline on the fishing vessels. The members of the crew seldom have any pecuniary interest in the success of the voyage, other than their share from the sales of the fish. The majority of the skippers likewise are not directly interested in the vessel which they command, except so far as their share and percentage on the stock are concerned.

The fishermen have so little responsibility and interest in the vessel that they are accustomed to leave her whenever they choose. Some of the fishermen seldom make two trips on the same vessel, and it is not uncommon for parts of the crew to abandon their vessel when she is on the point of leaving port on a fishing voyage, even after the sails have been spread for departure. The success of fishing trips is occasionally materially injured by members of the crew leaving a vessel when she is obliged to touch at other ports during the progress of her voyage. The crew, under such circumstances, have the master of the vessel very much at their mercy, for it is against the law of the United States for a vessel to leave any of the crew ashore in a foreign port until they have been absent more than twenty-four hours, and they cannot therefore be considered as deserters. The master has but a limited power to compel his crew to remain on board, and they sometimes take advantage of this fact by going ashore at will, saying that if the master leaves them on shore he is liable to the penalty of the law.

The character of the master's authority has been already explained, but he is not supported in this by law. His only legal hold upon the movements of the men, when the vessel is at anchor in the harbor, is his power over the boats belonging to the vessel. These are the property of the owners and in his charge, and men taking them without leave may be prosecuted for stealing. About the year 1877 Capt. Dennis Murphy was prosecuted for damages by two of his crew, whom he had left ashore at Liverpool, Nova Scotia. They were not successful in their suit; the captain proved that they had taken one of the vessel's dories without leave and were therefore guilty of

theft. Notwithstanding the fact that they were unsuccessful, the suit cost the captain a large sum, probably more than his profits for the entire voyage, in addition to his loss of time.

Such instances of disobedience as the one referred to above are most liable to occur during the absence of the master from the vessel. He is, of course, obliged to attend to business upon the land, and, since he has no one on board to whom he can delegate his authority, the vessel is left without authority to enforce discipline.

The crew are supposed to sign shipping papers when they join the vessel, though many masters ship their crews without any formality whatever. These shipping papers, when signed, usually attach some penalty to absence from duty without leave, but the utmost penalty that can be inflicted is one which, within the memory of man, has never been enforced—that the fisherman's share in the proceeds of the trip shall be forfeited.

In cases where the American consuls at foreign ports have been appealed to for assistance in controlling an unruly crew, they have stated plainly that they had no authority in the matter. The difference in this respect between the fishing and whaling vessels is too evident to require comment. A severer system of discipline is needful no less at sea than on shore. Many of the fishing vessels are absent from two to six months, with crews of from ten to twenty-five men. It cannot be otherwise than that frequent necessity should arise for the exercise of authority to quell insubordination and to enforce proper attention to duty.

It is evident, from a consideration of the above facts, that there is need of a reform in the methods of officering the fishing vessels of the United States and maintaining discipline on board of them. On the smaller vessels the demand for a change of this sort may not be so strenuous, but even in these a different system of organization could result in no harm.

NEEDFUL REFORMS.—In the opinion of many of the most experienced fishing masters and fishery capitalists of Gloucester and other ports, the following changes would seem to be extremely desirable:

(1) More care in the selection of masters of fishing vessels. They should not only be required to pass an examination in seamanship and navigation, their proficiency to be attested and signed by a board of examiners, as in the case of the merchant marine, but they should be selected with reference to their good judgment, prudence, and humanity. Mere ability to obtain good "fares" of fish by some sort of haphazard luck should not be regarded as a sufficient recommendation for a man to whom are to be intrusted the lives of a number of men, and property worth several thousand dollars. The skippers of Gloucester vessels are frequently selected for no other reason than because they are supposed to have good luck, or, as the fishermen express it, because they are "killers." Luck of this sort is, of course, but little to be relied upon, and in the long run such men are perhaps less successful than their rivals who are skillful and observant.

(2) Since the needs of the fishing vessels are at the present day not very different from those employed in the the whaling and merchant marine, it seems evident that there should be more than one officer. There should be a mate, or first officer, who should share the responsibilities of the captain. He should have authority in the absence of the captain, and in case of accident to the latter should at once take charge of the vessel. This man should, of course, be subject to examination, like the captain, or, at any rate, should give evidence to the proper persons of his ability to perform the duties of his office. The creation of a grade of subordinate officers among the fishermen would undoubtedly have a good effect upon the whole body of men engaged in the pursuit. The number of responsible positions would be doubled, and the responsibility placed upon these men would render them more sedate and reliable. They would be recognized as in the line of promotion, and their efforts to improve themselves would be greatly stimulated. The advantage to the fishery

capitalists also would be very great, since they would be able to supply vacancies in the list of skippers from men who had been systematically trained for the position, instead of being obliged to select untried men at random from among the crews. At present the only means by which the owner can select a skipper for one of his vessels is upon the recommendation of some other skipper with whom he has sailed, and every one knows how little value such recommendations ordinarily possess.

(3) The enactment or the confirmation of laws by which the relations between the crew, the skipper, and the owners shall be clearly defined. It is the common belief that the same laws apply to the fishing vessels that are in force with respect to merchant vessels. Even if this be the case, the question of law is but little considered by the fishermen in the discipline on board of a fishing vessel. The officers should be supported in the necessary measures which they may take to quell insubordination or mutiny and to prevent disorderly conduct, the same rights being recognized as in the case of merchant vessels. The crews should be obliged to sign shipping papers in regular form, and these papers should be regarded as legal contracts, and means for their enforcement should be provided; this, too, without the necessity of protracted and expensive law suits. American consuls in foreign ports should be instructed to aid the masters of vessels in controlling disorderly men. Such a provision as the last one would have an important effect in controlling the acts of crews in provincial ports. It is now possible for two or three of the crew, by drunkenness and disorder, to neutralize the well-meant efforts of all their associates and prevent the success of the voyage.

(4) The investment of the officers of the vessel with a greater amount of dignity. It is, of course, impossible on board a fishing vessel to maintain the same kind of exclusiveness which prevails on a merchant vessel or a whaler. The number of officers is less, and the nature of the employment prevents all ceremony. At the same time it is within the power of the officers, by their personal bearing, to prevent familiarities on the part of the crew, and thereby greatly to increase their own influence.

Such provision for the maintenance of discipline on board of the vessels are especially necessary in a port like Gloucester, where the fishermen are of different nationalities and are often men who have been unable to hold their own in other ports on account of their notoriously bad characters. A considerable percentage of the fishermen of Gloucester resemble, more than those of any other American fishing port, the ordinary sailors, though far superior to the average men who compose the crews of merchant and whaling vessels.

SABINE ON DISCIPLINE OF FISHERMEN.—The following words, written by Sabine in 1852, and referring more particularly to the Labrador cod fishery, are none the less applicable at the present time, and to all branches of the fisheries of the United States:

"The selection of a master is a point so important to owners that a word upon his qualifications will not be amiss. Besides all the responsibilities at sea which devolve upon a master in the merchant service, he has cares and anxieties which are unknown to that branch of maritime adventure. His passage being safely made, the master of the merchantman is relieved by the counsel and assistance of the owner or consignee. But it is not so with the master of the fishing vessel. During the period devoted to fishing his labor is arduous in the extreme, and, come what will, in the desolate and distant regions which he visits his own sagacity and prudence are his only reliance. If, as not unfrequently happens, he be so unfortunate as to have among his crew two or three refractory spirits who seek to poison the minds of all the rest; if others, who boasted loudly, before sailing from home, how well and quickly they could use the splitting-knife, or how true and even-handed they were in distributing the salt, prove too ignorant to be trusted; or if

every man under his charge, without being dogged or incapable, is still of so leaden a mold as to remain immovable under promises of bounty or promotion, these difficulties must be but new inducements to use extraordinary personal exertions and to preserve his reputation at the expense of his health and strength. Even if there are none of these embarrassments to contend with, his ordinary employments require an iron frame and an unconquerable resolution.

"A friend who has seldom failed to accomplish what he has undertaken, and whose life has been full of daring enterprises, has often assured me that while on the Labrador shore his duty and the fear of making a 'broken' voyage kept him awake and at his post full twenty hours every day throughout the time employed in taking fish. 'Once,' said he, 'I was deceived by every man that I had on board my vessel, my mate alone excepted. Each shipped, as is usual, to perform a particular service, and each boasted of his accomplishments in catching, dressing down, or salting away; but there was neither a good boatman, an adroit splitter, nor a safe salter among them all. My situation was painful enough. I was interested in the loss or gains of the voyage, and was too poor and too young in command to bear the consequences of returning without a full fare; and, besides, I was never good at accounting for bad luck, and felt that it was far easier for me, even under these untoward circumstances, to fill my vessel than to explain to every one who would question me at home as to the causes of my failure, and the result of the matter was that I got as many fish per ton and per man as any vessel that I met on the coast.' 'Another season,' says the same friend, 'while in the West India trade, I was disappointed in obtaining a cargo, and was compelled to go to Labrador or haul my schooner up. I was too restless to be idle and resolved upon fishing. It was three weeks too late, and, on attempting to ship a crew, I found that no good men were to be had, and that I must take raw Irishmen, and a drunkard for a mate.

"'The chances, as you may well suppose, were all against me, but I made the voyage and obtained as many fish as my vessel could carry. But I always had pistols in my pockets, and enforced most of my orders with a threat or a handspike. I slept full dressed, and with arms in my berth. A battle with one or more was almost of daily occurrence, and I was in constant fear either of losing my own life or of being compelled to take that of some one of my crew to overawe the rest.' These incidents occurred on voyages made from a port on the frontiers of Maine, and before the commencement of the temperance reform, and are, of course, to be regarded not only as having been rare in former times but as never happening now. But the master's duty, if he be an efficient man, is never an easy one. If he would provide for every contingency and make sure of a cargo despite of every adverse event, he must not even allow the full repose which nature craves. It is upon his regularity and perseverance in procuring fresh bait, a service which must sometimes be performed at the hazard of his life; upon the frequency of his visits to his boats, which are often miles asunder; upon his readiness to use his own hands to make up the laggard's deficiency; upon his economy and system in the use of time and outfits; upon the degree of energy and regularity which he infuses; and, finally, upon the care which he exercises in dressing and salting the object of his search that the success or failure of the voyage mainly depends. Masters who are able and willing to sustain these varied and incessant calls upon their bodily vigor and mental activity are to be found, probably, in every fishing port. But it is very certain that the number has sensibly diminished during the last twenty years, and that the transfer to other and more profitable and ambitious commands is still going on. The mercantile men of the commercial emporium of the North, and the packet-ships of the commercial emporium of the Union, rank deservedly high; but were their counting-rooms and quarter-decks to yield up all, or even half, of those whose birth-places were on the two capes of Massachusetts, and whose earliest adventures were made in fishing-craft, they would lose many high and honored names. So, too, were either

to cease recruiting from the same sources, the humble employment of which I am speaking would speedily become more prosperous, in public estimation more respectable, and of consequence be considered more worthy of the care and protection of our rulers."*

48. NAVIGATION.

NAUTICAL INSTRUMENTS CARRIED.—The best equipped schooners carry the following nautical instruments: (1) A chronometer; (2) a quadrant, octant, or sextant; (3) an aneroid barometer; (4) a spy-glass; (5) a clock; (6) a patent log, and (7) compasses, of which three kinds are used, viz, the wooden, brass, and liquid compasses. Every vessel carries two compasses, usually a wooden and a brass one; the former being used in light weather, the latter in stormy weather. The liquid compass is now often substituted for one of the others; in fact, the liquid compass has come into very general use of late years among the better class of Gloucester vessels.

The use of compasses on board of dories is not unfrequent. Some three or four extra compasses for this purpose are sometimes carried by different members of the crew on a vessel engaged in the off-shore fisheries. This practice is not as general as it should be, since these compasses are not furnished by the owners of the vessel, but are purchased by the crew for their personal use. Many men are unable to provide themselves with this very essential safeguard.

The vessels always carry one or more charts, with the parallel ruler and dividers necessary for their proper use, and many of them have a "Manual of Navigation"—commonly known as an Epitome—and a Coast Pilot.

Every sea-going vessel carries two compasses and occasionally an extra one in addition.

A clock is a part of the regular outfit, and there are very few of the larger vessels which do not carry a spy-glass.

Very few vessels go to sea without a barometer. This is the case not only with vessels from Gloucester but also those from other ports, except the small boats engaged in shore fishing. Nearly all the vessels which fish out of sight of land carry either a quadrant, sextant, or octant, the former being most commonly in use, while the latter, by its higher price, is prevented from being so generally adopted, although they are recognized as being better. The chronometer is very rarely carried, except on the vessels engaged in the halibut fishery, and not always on those. The Epitome and Nautical Almanac are necessary on board of vessels which carry a chronometer; but they are sometimes carried by vessels not thus provided.

The charts most popular among the fishermen, and generally in use, are those prepared by Capt. George Eldridge. The Coast Survey and Hydrographic Office charts are also occasionally included in the list. The Admiralty charts of the coast of the British Provinces are used to some extent by vessels fishing in the Gulf of Saint Lawrence, or such as are habitually visiting Provincial ports for bait.

Blunt's "American Coast Pilot" is generally in use; the excellent manual published by the Coast Survey rarely finds its way on board of our vessels.

It is very unusual to find a vessel without an almanac, in which are given, in a convenient form for reference, tide-tables for the important ports along the coast. The Farmer's Almanac, published in Boston, is the favorite among the New England fishermen.

The vessels are fitted out with these instruments in the following manner: The compasses and the clock are a part of the regular outfit of the vessel and are supplied by the owner, as also is generally the spy-glass; but the remainder of the apparatus and the charts are generally owned

* American Fisheries, pp. 171, 172.

by the skipper; the extra compasses for use in the dories, as has already been mentioned, being supplied by different members of the crew.

When a chronometer is used, it is ordinarily hired by the skipper, the crew paying half and the vessel half. It is insured by its owner, and the cost of insurance charged in the rent, so that *if it is lost with the vessel there is no demand for restoration upon those who hired it.*

Previous to 1865 few fishing vessels carried a log of any description. Occasionally an old-style "chip-log" was seen on board, but as a rule fishermen estimated their speed by noting alongside how fast the vessel passed through the water—a somewhat unique method of keeping "dead reckoning." It may seem remarkable that anything like accuracy could have been thus attained, but we are assured that many of the old fishermen became exceedingly expert in judging a vessel's speed, and with their knowledge of local currents and the frequent use of the sounding-lead they seldom failed to make good "land-falls."

Some form of patent "harpoon" log is now most commonly used, since these are less expensive than the patent taffrail logs. The liability of the former to injury in shallow water or to loss through sharks biting off the tow-line has of late led to the more general use of the taffrail logs, which are considered the most reliable.

USE OF NAUTICAL INSTRUMENTS.—The manner in which the masters of fishing vessels learn the art of navigation is discussed in another chapter. It is sufficient to remark here that those in charge of the vessels belonging to the Gloucester off-shore fleet are frequently very competent navigators, others, though they may have sufficient knowledge to sail a vessel back and forth, are really not so competent as they should be.

The skippers of mackerel schooners and other vessels which are usually in sight of land have less use for instruments, and rarely, if ever, take observations.

Much of the success of the fishermen, in bringing their vessels into harbor without accident, is due to their habit of taking frequent soundings, and to their intimate knowledge of the shape and character of the bottom along those portions of the coast which they chiefly frequent.

D.—DANGERS OF THE FISHERIES.

49. DANGERS TO THE VESSELS.

The characteristics of the fishing schooner and its management will be discussed hereafter. We shall here consider the dangers to which these vessels and their crews are exposed.

The dangers to which these vessels are liable may be considered under nine heads: (*a*) Dangers on the fishing grounds; (*b*) dangers encountered while making passages to and from the grounds; (*c*) dangers in approaching and leaving the shore; (*d*) dangers from collision; (*e*) dangers of the harbor; (*f*) dangers from ice; (*g*) dangers from fire or lightning; (*h*) dangers from attacks of marine animals; (*i*) and dangers from defects in the construction of the vessel itself.

DANGERS ON THE FISHING GROUNDS.

DANGERS OF THE COD FISHERY ON GEORGE'S BANK.—Judging from the record of disasters, the George's fishery is probably the most dangerous one in the world. On this ground over one hundred Gloucester vessels are constantly employed, winter and summer. In summer a few New London vessels resort there, principally for halibut, and it is also visited by a fleet of mackerel catchers. The peculiar dangers of this fishery are encountered chiefly in the winter. It is the custom for the vessels in winter to anchor close to one another upon some portion of the Banks. The favorite locality is in the immediate vicinity and to the eastward of extensive shoals, on which there is from 2 to 12 fathoms of water, and where the waves break in rough weather. There are few instances where vessels which have been lost in this locality have left any record of the nature of the disaster which befell them. There is therefore doubt as to how most of the losses have occurred, but the theory is generally accepted that the vessels drifted into shallow water and foundered. There have been a few cases in which vessels have righted with loss of masts after being rolled over by the waves, and the crews have survived to tell the tale. Most of the losses have been during heavy easterly gales, when the vessels may have been forced into shallow water. The proximity in which the vessels are anchored greatly enhances the danger to which they are exposed, for if one of them goes adrift it may become necessary for many of those to leeward to cut their cables and also go adrift. Sometimes nearly the whole fleet has been thus set adrift at once. Of course, if they can retain their hold upon the bottom they are in comparatively little danger.

The theory is held by many fishermen that loss is often occasioned by a drifting vessel coming into collision with one at anchor, an accident which is most surely attended with fatal results to both. There is only once instance on record where a vessel thus drifting into contact with another escaped destruction, and in this case the vessel which she struck immediately sunk. This theory receives strong support from the fact that there have been so many hundreds of narrow escapes from collision between vessels thus drifting about. In the columns of the Cape Ann Advertiser and in the Gloucester "Fisherman's Memorial and Record Book" may be found recorded numerous instances of this kind. These gales are generally accompanied by dense snow and often also by with extreme cold which renders it quite impossible for the men to look to windward and to see a drifting vessel in time to cut the cable and escape collision. It is the common custom for the entire crews at such times to remain on deck, prepared for any emergency, and if it is possible

to see the drifting vessel in time they may succeed in getting clear. Since there is no insurance on cables, there is great reluctance to cut them as long as there is a possible chance of escape from collision in any other way. Then, too, the men feel that if they can hold fast to their anchorage they are safer than they would be if adrift and running the risk of going on the shoals or colliding with other vessels. For these reasons they often refrain from cutting the cables until it is too late, in hopes that the drifting vessel will clear them. Numerous instances are told of cables having been cut only when the approaching vessel was on the top of a wave and the one at anchor was in the hollow of the sea directly under it. At such times a moment's delay would be fatal. There are doubtless many instances of careless negligence in failing to keep a proper watch and in not having the appliances at hand for cutting the cable. Very often the ropes are stiffened with ice and the sails so heavy with snow that it is impossible to raise them in time to avoid disaster, even though there may be time to cut the cable. Perhaps, however, the principal cause of disaster is the reckless daring of the fishermen, who persist in remaining at anchor in close proximity to other vessels even when they see the gale is coming, and, by removing their anchorage a short distance, they might greatly lessen the risks of disaster. They are led to remain in the same position, and to take resulting risks, both from the fear of losing an opportunity of securing a fare of fish, and from a dislike to the appearance of timidity. In spite of all the dangers, and the fact that so many vessels of the George's fleet are yearly wrecked, there are many skippers in the service who have never sustained even a serious loss of property. An old Gloucester skipper told us that for 24 years he had fished on George's and had never lost even a cable. He attributed his good fortune to the fact that in the pleasantest weather he never "turned in" at night without seeing that everything on deck was ready for the most unexpected emergency. The skippers who can boast such a record as this are men usually renowned for prudence, skill, and intelligence. In many instances the greatest care is rendered ineffectual by the recklessness of others.

DANGERS ENCOUNTERED BY THE BANK FLEETS.—Vessels fishing on Le Have Bank, the Grand Bank, and other banks of this region, are exposed to dangers scarcely less to be dreaded than those which have just been described. On account of the greater depth of the water the likelihood of foundering upon the shoals is less, except in the vicinity of Virgin Rocks and Sable Island. The vessels do not congregate in fleets to such an extent as upon George's, and the peril from collision is therefore less imminent. Although, when the number of vessels engaged is taken into account, the losses in the Bank fishery have not been so numerous as on George's, still there have been several seasons when the losses have been large, as in December, 1876, when twelve sail and one hundred men were lost on Le Have, the Western Bank, and Banquereau; and again in the fall of 1879, when the loss was little less severe. Another element of danger from collision is met with in the Bank fisheries, for in the summer and fall the fishing fleet is located directly in the track of the ocean steamers plying from Europe to the United States. There are few, if any, recorded instances of the destruction of vessels in this manner, but losses have occurred in summer when the weather was pleasant and when the only plausible theory to account for their loss was that they had been run down by passing steamers.

Vessels of the Gloucester halibut fleet are accustomed to lie at anchor in winter in water from 100 to 200 fathoms deep, and are consequently much more likely to go adrift than the George's-men, which are anchored in water varying in depth from 25 to 35 fathoms. When once adrift, they are obliged to "lie to" in heavy weather, and are exposed to much greater danger than when at anchor. The greatest danger to the drifting vessel is its liability to drift into shallow water and to bring up suddenly by the anchor taking a fresh hold upon the bottom. This often causes them to ship heavy seas or to be knocked down—that is, to be turned over flat on their sides so

that the masts touch the water. The schooner David A. Story, in December, 1880, got adrift in this manner, and one of her crew reports that in his opinion the anchor caught, and that she shipped a sea which knocked her down, causing her cable to part. Fortunately none of her crew were lost, but the man on watch had his leg broken, the vessel's deck was swept, her foresail split to pieces, fore boom and gaff broken, and 400 fathoms of cable lost. A similar accident occurred to the schooner Andrew Leighton, of Gloucester, December 10, 1876. While adrift she was knocked down by a sea so that, according to the statement of her crew, her mast-heads lay in the water. Fortunately, however, she righted, and ultimately succeeded in reaching home in safety. This vessel was lost in October, 1879, and it may be met her fate in this manner.

Vessels lying at anchor on the Grand Bank under riding-sail alone are sometimes knocked over by tornadoes. An instance of this kind occurred on the 29th of August, 1876, when the schooner Walter F. Falt, of Gloucester, was blown over. The crew was lost, and the vessel was afterward seen floating upon her side. In the fall of 1875 the schooner Epes Tarr, of Gloucester, anchored on the eastern part of the Grand Bank, was knocked down and dismasted.

The frequent loss of the rudders of fishing vessels, while at anchor on the Banks, is another danger to which they are liable. Many instances of this kind have occurred. In most cases the fishermen have succeeded in rigging a temporary steering apparatus, by which they have been enabled to reach the home port in safety. Some vessels have been lost through the rudder-braces getting loose, and the consequent wrenching of the rudder-head starting a leak which caused the abandonment of the vessel. An instance of this kind occurred on the Grand Bank in the spring of 1879, when the schooner Edwin C. Dolliver, of Gloucester, sprung a leak and sunk. Her crew was taken off and brought home by the schooner Thresher, of the same port. In addition to the danger of being knocked over, there is that of shipping a sea while at anchor, which is sometimes attended with serious results, both to the vessels and the men.

Heavy seas are so often shipped that numerous instances might be cited, but one or two will suffice. In the early part of 1877 the schooner John S. Presson, of Gloucester, while riding out a heavy northwest gale on the western part of the Grand Bank, shipped a sea which swept her decks and injured her about the stern to such an extent that, after the gale abated, she was obliged to put into Halifax for repairs. In January, 1879, the schooner Howard, while at anchor in the deep water on the southern edge of Le Have Ridges, shipped a heavy sea which swept her decks, smashing several of the dories and starting the house on deck, causing her to leak considerably.

DANGERS TO WHALING VESSELS.—Whaling vessels are not exposed to so great danger as the merchant vessels passing over the same portions of the ocean. The whalers, while on the cruising grounds, are under short sail and keep a careful lookout, especially at night, when, if there be anything unusual or unexpected, demanding speedy work, all hands can be called, and only a few moments are then required to shorten sail and make everything snug. In thick weather, however, especially on the Arctic grounds, there is greater danger on account of ice and of collision with other vessels.

DANGERS TO SEALING VESSELS.—The fur-seal fishery is carried on in the Antarctic Ocean, where the vessels are at all times exposed to sudden changes of wind, and frequently to heavy gales, which unexpectedly overtake them on a lee-shore and sometimes cause their loss.

The schooners used in the seal fisheries are liable to some of the disasters to which the Gloucester fishing vessels are subjected, except those accidents caused by carrying too heavy press of sail, for in this respect the seal fishermen exercise more prudence. Sealing schooners are compelled to keep comparatively near land, following up the boats sent ashore to take the seals, and are exposed to the dangers of being blown ashore or driven on rocks. In landing boats, sent from

the sealing schooners ashore to bring back the seal-skins, there is great danger of being swamped, or upset, and injured by the heavy surf. About four years ago a boat's crew of twelve men was lost in this manner. A successful landing is, of course, attained only by carefully watching for an interval between the breakers, allowing sufficient time for the boat to be run upon the shore.

In the sea-elephant fishery vessels are lost by being driven ashore, or on the rocks, from their anchorage, there being no protection, in the way of good harbors, from the violence of on-shore gales.

The bottom of the bays of Heard's Island, in the Southern Indian Ocean, which is the principal resort for sea-elephants, is hard, slaty rock, and therefore extremely poor ground for anchorage. On this account, as well as from the fact that the harbors afford indifferent shelter, several vessels have been lost in that locality, having been driven ashore, though having out anchors disproportionately large compared with the size of the vessels.

The vessels used in this fishery are exactly like whaling vessels, and the boats belonging to the vessels are the same as those used in both sealing and whaling, than which no boats are better fitted for landing in the surf.

DANGERS TO VESSELS FISHING ALONG THE COAST.—The principal dangers to which the mackerel vessels are exposed are heavy and sudden gales, by which they are taken unawares and driven upon a lee-shore. They generally fish near the coast, and are therefore specially liable to this danger. They are, however, excellent sailers, and, except under extraordinary circumstances, can make a harbor, or gain an offing before the gale is too heavy. The chief disasters to the mackerel fleet have occurred in the Gulf of Saint Lawrence, in the vicinity of the Magdalen Islands, Cape Breton, and Prince Edward Island. The north shore of the latter island has been the scene of many disasters. This is a peculiarly undesirable spot for vessels in a gale. There is a long stretch of coast, crescentic in shape, without available harbors in a gale, while at either end of the crescent are long sand-bars, the whole forming a pocket out of which it is very difficult for a vessel to beat its way. In the "Yankee gale" of 1851 a great many vessels were cast ashore along this whole coast. Losses have occurred since then, the severest ones in 1873, when many vessels and lives were lost in that vicinity. Disasters have been frequent at the Magdalens, resulting in loss of property and lives. As many as twenty-four sail of vessels were driven ashore at Pleasant Bay, on Amherst Island, one of the Magdalens, in 1873. Cheticamp, a one-sided harbor or anchoring place on the north side of Cape Breton Island, has also become somewhat noted for the losses that have occurred to the mackerel fleet in that locality. These have been chiefly during the prevalence of southeast gales, which blow with almost irresistible fury from the highlands forming the southern side of the harbor. In this region most of the harbors have a bar at the entrance, and are consequently most difficult of access at the very time when most needed. The water, too, is shallow, and in heavy gales the seas are sharp and exceedingly dangerous, making it very difficult for a vessel to work off from a lee-shore. To add to the danger, there is a current usually setting in the same direction as the wind. When the winds blow over the highlands of the islands they are squally and baffling. A gale in the Gulf of Saint Lawrence is, perhaps, more dreaded by fishermen than one on any other part of the coast, as it can rarely occur without bringing them in close proximity to a lee-shore.

Gloucester has suffered less in proportion to the size of its fleet in the Gulf of Saint Lawrence than have Provincetown, Wellfleet, and the various ports of Maine. Cape Cod lost largely in the gale of 1851, but not so much in that of 1873. One reason for the fewer wrecks among the Gloucester vessels was the fact that they are better prepared with anchors and cables than any other vessels in the world. Great loss of life has resulted from these disasters, though the drifting of a

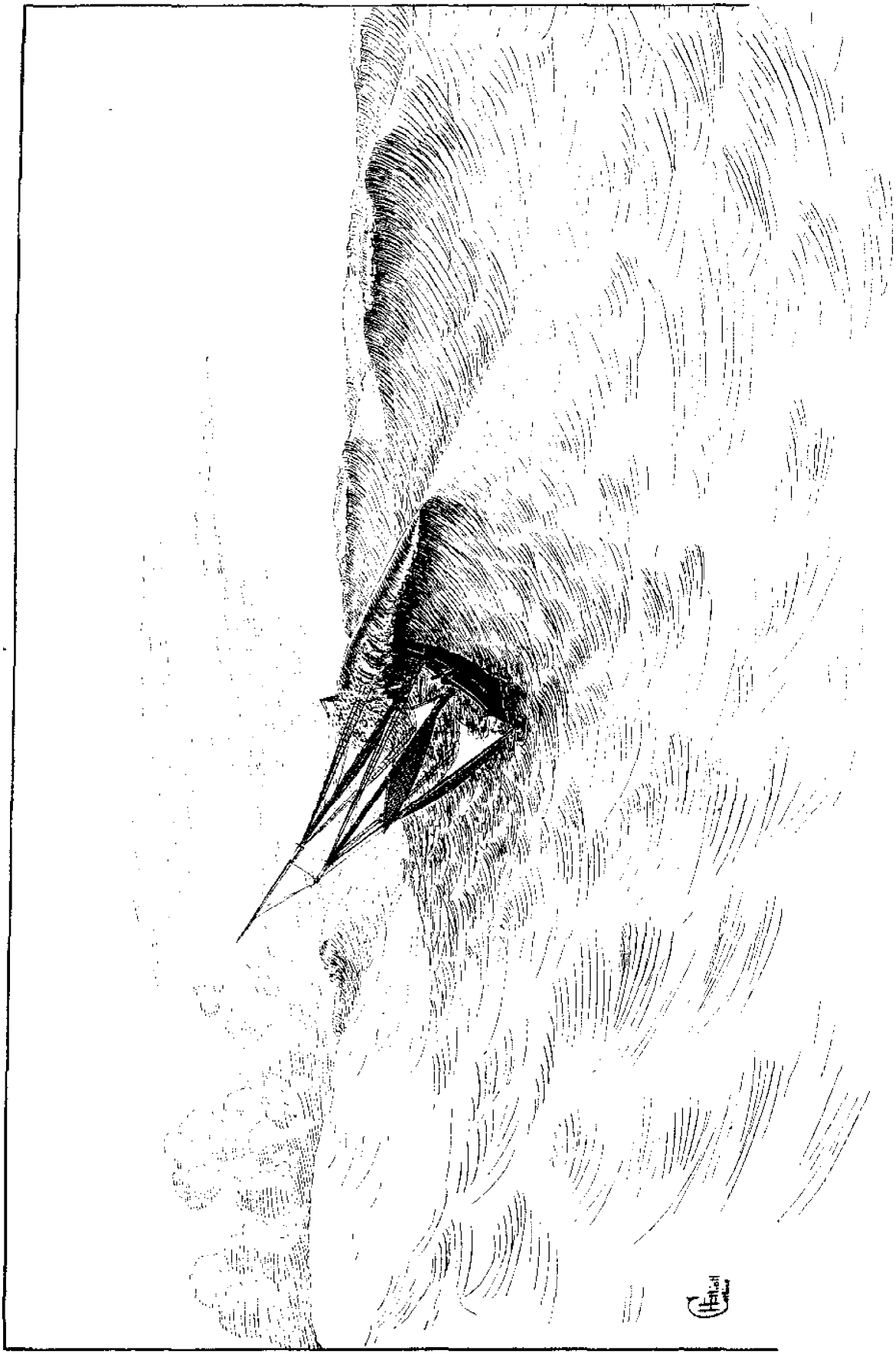
vessel upon the shore is not always attended with fatal consequences. In many cases the shores are sandy, and the crews are enabled to land in safety before the vessel goes to pieces. In some instances the vessels are forced ashore by putting on a great amount of sail, so that the men can land dry-footed when the tide ebbs. It is frequently the case that vessels are launched again, after the gale has abated, without suffering any serious injury. When this is not possible, the fish are landed and sent home, and the fittings and stores, and even the hull itself, sold at auction for the benefit of the owners. The American vessels are so strongly and well built that even after they have been sunk they are sometimes sold at auction as they lie under water, and afterward raised and refitted for active service.

The best chance for safety, in cases where it is seen that a vessel must go ashore, is to run them bow first upon the land, especially where the beach is sloping. When this is done, all sail that the vessel is capable of carrying is spread.

DANGERS WHILE MAKING PASSAGES TO AND FROM THE FISHING GROUNDS.

Fishing vessels making passages at any season of the year are subject to the same dangers as other sea-going crafts. In summer the dangers are comparatively few, for the winds are usually moderate, and in warm weather the crew is in better condition to handle the vessel properly and to meet any exigencies that may arise. Tremendous hurricanes, however, sometimes occur in August and September, and at times there are gales even during the other summer months. Two of the most remarkable hurricanes in recent years were those of September 8, 1869, and August 24, 1873, both of which caused a great amount of destruction to life and property in the fishing fleet. At the time of the hurricane of 1873 several vessels were on the passage home from the Grand Bank. They were deeply laden with fish. Some vessels were lost and many met with serious damage and narrowly escaped destruction. Mention of a few instances of this kind will perhaps suffice. The schooner B. D. Hawkins, of Gloucester, was caught in a hurricane in the vicinity of Sable Island. At first she was hove to under a two-reefed foresail, which was later reduced to a three-reefed. After lying in this manner for some hours, she began to drift toward the northwest bar of Sable Island and was soon in shoal water. It became necessary to take in sail and to anchor, but the wind blew with such violence that the anchor would not hold and the vessel drifted into only 11 or 12 fathoms of water. As she would certainly be lost unless something were done to check her onward course, the spars were cut away and let go "by the board," and, with considerable difficulty, were cleared from the wreck. With the masts gone, she presented a much smaller surface to the wind, and as the current set to windward the anchor held and she rode out the gale. After the gale, jury-masts were rigged and the vessel worked toward the land. She was finally towed to Port Hawkesbury, in the Strait of Canso, to be repaired.

The schooner Sarah P. Ayre, of Gloucester, which was also on her passage home from the Grand Bank, encountered the hurricane in the vicinity of the eastern part of Banquereau. The wind blew with such violence that it was soon impossible to keep sail on the vessel. She was kept nearly head to the sea by the aid of a "drag" rigged to the anchor, which was paid out more than 100 fathoms. After drifting for a few hours the anchor caught bottom on the shoal part of Banquereau in from 16 to 20 fathoms of water, and where the sea ran so high and sharp that for a time it was thought that the vessel would founder. The crew, however, with difficulty succeeded in cutting the cable. The vessel then drove under bare poles before the gale, broadside to the sea and wind. By throwing out oil the force of the waves was so reduced that she met with little



Fishing schooner under sail, tripped by a heavy sea.
Drawing by H. W. Elliott and Capt. J. W. Collins.

loss. It is supposed that the schooner Henry Clay, of Gloucester, another of the Grand Bank fleet returning home, was lost in this same hurricane.

Although the fishermen are exposed to more or less dangers in the summer season, these are greatly increased in the winter months, when heavy gales are very frequent, and the perils made greater by extreme cold. The rigging and sails are then coated with ice and snow and it is almost impossible to either set or shorten sail.

DANGER OF BEING "TRIPPED."—A vessel may be knocked down or tripped, either while running before the wind or lying to in a gale. The comparative shallowness of the American fishing schooners renders them particularly liable to this class of disasters. Some branches of the fisheries, especially those for fresh halibut and haddock, render it imperative that the passage home should be made with the utmost dispatch, in order that cargoes may arrive in good condition and therefore bring the highest prices. Great risks are taken by these fishermen in running their vessels during gales, frequently in the trough of the sea. This is extremely hazardous and likely to result in the vessel being "tripped," or knocked on her beam ends. In February, 1876, the schooner Howard, while returning from the Grand Bank with a trip of fresh halibut, was running in a strong northeast gale. She was knocked on her beam ends twice in one day. At first she was running with a two-reefed mainsail, and when she tripped she went over so far that the men who were sleeping below were thrown from the weather into the leeward bunks and everything movable was upset. Fortunately, she righted with slight damage. Notwithstanding this narrow escape, the demands of the business were such that instead of the vessel being hove to, the sail was shortened and she continued to run safely until just before night, when another sea took her on the quarter and threw her down so low that the sails again lay in the water, the whole after part of the vessel was submerged, and the water ran over the forward companion-way, partially filling the forecastle. For a short time it was thought that she could not regain her upright position, but everything held securely and she soon righted. On the 28th of January, 1881, the schooner Edith M. Pew, employed in the haddock fishery, was thrown on her beam ends, partially filling the cabin and forecastle, and throwing the cabin stove, full of hot coals, into the captain's bunk. The fire was extinguished before any damage was done. She fortunately righted again without any serious disaster. These occurrences are dangerous in the extreme, and fishermen who escape with their lives may be accounted fortunate.

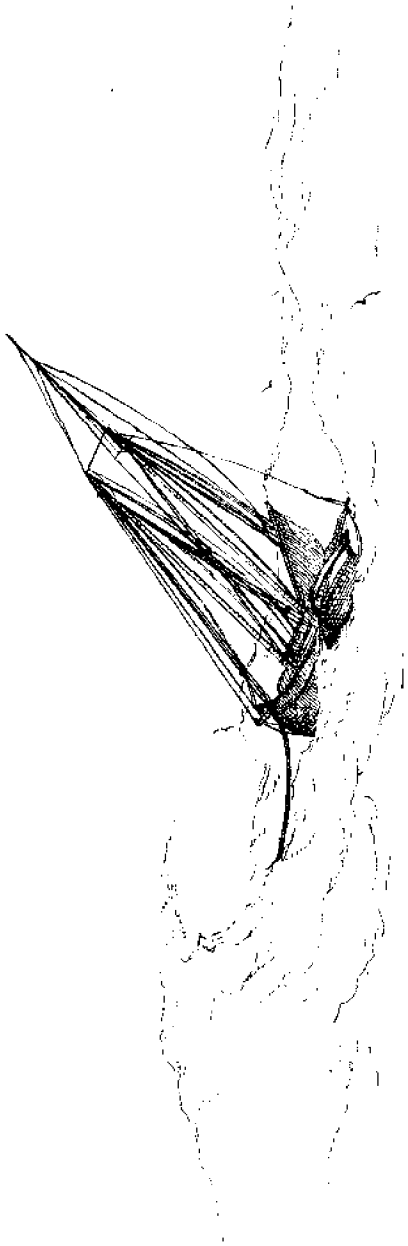
"The schooner Sarah C. Pyle, Capt. Richard Warren, was struck by a cross sea and capsized January 30, 1870. The crew found safety by clinging to the sides of the vessel, until one of their number was able to cut away the main shrouds with a pocket-knife, when the vessel righted, nearly full of water. The foremast was cut away and a jury mast rigged with the foreboom, and such progress as was possible was made in a westerly direction. For eight days the men were obliged to cook their food in sea water, their water casks having been lost, and to melt ice to furnish drink. At the end of that time they encountered a vessel and were furnished with water and other necessaries. Five of the crew were transferred to the vessel, but the skipper and four men remained on the wreck, determined to get it into port. In this condition they encountered a terrific gale, of three days' duration, and were blown off seawards a distance of 245 miles. Even then they remained undaunted by danger and firm in their intention of rescuing the property under their charge, and declined an offer to be taken off. The wreck was towed into a New Jersey port February 13, two weeks after the disaster—a fortnight crowded with great hardship and danger to the men so faithful to duty."*

* Gloucester and its Fisheries, p. 65.

SPARS AND SAILS CARRIED AWAY.—The danger of losing masts and rigging has already been considered. Spars and sails are, however, often carried away under other circumstances. Accidents of this sort are liable to occur at all times, though naturally much more so in the winter season. Perhaps no class of sea-faring men take greater risks than fishermen in carrying a heavy press of sail. In branches of the fisheries where it is extremely desirable to make rapid passages this propensity is carried to an extreme, and, as a result, the sails are sometimes blown away or masts are broken, and, perhaps, other dangers are incurred. Perhaps the most common way in which vessels are dismasted is by carrying a press of sail against a head sea. Another cause of accident is that of jibing fore and aft sails suddenly from one side to the other when there is a strong wind. This generally results in breaking the booms or the mast. The temptation to make a speedy passage is so strong that risks will be taken, although the ultimate results of such reckless daring may be a loss rather than a gain.

RUNNING UNDER, OR CAPSIZING.—The tendency to carry a heavy press of sail may result in greater loss than that of spars and sails. The vessel may run under while going before the wind or capsize when sailing by the wind or with the wind abeam. As there have been numerous and oft-repeated hair-breadth escapes from such disasters, it is probable that much property and many lives have been thus lost. Such disasters are perhaps sometimes unavoidable, because of sudden and unexpected squalls, especially in the night, although many of them are the result of gross recklessness. Not only does the master imperil his own life but also the lives of his crew. So fearless and ardent are the fishermen that the better judgment of the skipper is frequently overcome by the solicitations of the crew, and in the hope of outstripping some rival vessel sail is carried in unreasonable excess. This is often the case when a vessel has just left port. The crew are then, perhaps, under the influence of spirituous liquors, which renders them more regardless of danger than common, and unable to properly perform their duty. Several vessels have been lost, presumably soon after leaving port, and their loss is ascribed to such causes. Of the many instances related by the fishermen of narrow escapes either from carrying sail or being struck by sudden squalls, we will mention the following: In the fall of 1877 the schooner Wachusett was running for the Grand Bank in company with the schooner Howard. With a strong northwest breeze the vessels left Gloucester together, and the following night, when about a hundred miles from Cape Ann, the wind increased. The Howard shortened sail, but the Wachusett, attempting to carry all she had spread for some time longer, was struck by a heavy puff and driven under so that her forecastle was partly filled with water. The men on watch at once lowered the mainsail part way down, which relieved the vessel and a disaster was averted. In March, 1878, the schooner Marion, while returning from the Grand Bank, was running in a southeast rain-storm under three lower sails. It was night and intensely dark. The wind blew strong and was increasing fast. All hands were called to shorten sail. Before it could be done a squall struck the vessel and buried her lee side completely under water and came near sinking her. The blackness of night made it difficult to shorten sail, but the sails were lowered with the least possible delay and fortunately in time to avoid any serious disaster.

The narrow escapes described were in the case of vessels running free from the wind. There is also great danger in carrying a heavy press of sail while sailing by the wind or with the wind abeam. It is not uncommon for some of the more headstrong of the fishing skippers to carry so much sail on their vessels that the lee rail is completely under water most of the time. A few vessels may be able to stand being driven in this manner with comparative safety, but with the majority of them it is highly dangerous, and liable to result not only in the loss of the vessel by capsizing and filling, but also in the loss of the lives of the crew. Many instances are related by the fisher-



Fishing schooner lying to at a drag in a gale on the Banks.
Drawing by Capt. J. W. Collins.

men of narrow escapes from serious disasters while sailing by the wind under too much canvas, and a few instances of loss of vessels, with more or less lives, are on record where they have been capsized in this manner. The schooner Angie S. Friend, engaged in the haddock fishery, while beating up Boston harbor in a strong northwest wind, was capsized, and, having filled, sank to the bottom. Part of the crew succeeded in getting into one of the dories; they were without oars, but fortunately drifted ashore. The rest of the men, with the exception of one, who was drowned, climbed to the masthead, which remained above water, and clung there through the night. They were rescued the following morning in an almost senseless condition. The schooner Henrietta Greenleaf, of Gloucester, while making her first passage to the Grand Bank in the spring of 1876, was struck by a squall in the night and knocked on her beam ends, and quickly filled with water. Four of the crew were drowned in the cabin and forecastle. The rest escaped in two dories, but being without oars they drifted helplessly about. They suffered greatly from exposure to the cold and flying spray. The dories soon separated from each other. One of them was picked up by another fishing vessel, though not until one of the men had died from exposure. The other dory, with five men, was never heard from.

The fury with which these squalls sometimes strike can scarcely be comprehended by those who have not witnessed them. The schooner Abby Dodge, which was making a passage to the Grand Bank in December, 1868, was struck by a tornado with such force that, although she was at the time lying-to under a two-reefed foresail, she was knocked nearly on her beam ends, and only by the prompt lowering of the sail was the vessel saved.

RUNNING ON SHOALS OR ROCKS.—While making passages to and from the fishing grounds, vessels are liable to strike on shoals or outlying ledges. In that part of the Western Atlantic most frequented by New England vessels there are many of these dangerous places, either in the track to the grounds or on the banks themselves. The most remarkable of these shoals, and possibly those which have been the cause of more losses to the fishing fleet than any other, are those of George's Bank. These are but little out of the course of the vessels frequenting George's in winter. A small error in the compass may bring a vessel unexpectedly on these shoals. The more prudent fishermen guard against this danger by the careful use of the sounding-lead. It is difficult to tell how extensive these losses have been. Many vessels have had narrow escapes, but the lost ones leave no survivors to tell the tale.

The shoal of Cashe's Ledge is a source of special danger, as it lies almost directly in the vessel's track, both in going to and coming from most of the fishing grounds. Although this ledge is not shoal enough for a vessel to strike under ordinary circumstances, it nevertheless breaks in heavy weather and is therefore extremely dangerous to be encountered at such times. There is no mark, no buoy nor light-ship, to distinguish the shoal places, and it is not easy to tell when the vessel is approaching them. It cannot be wondered at that several disasters have occurred in that vicinity.

The schooner Rattler, while returning from Newfoundland to Gloucester with a trip of frozen herring, on the 17th of January, 1867, passed over this shoal, where she encountered heavy seas which threw her on her beam ends and dismasted her. It was supposed that the schooner John W. Low was lost there in the same gale.

There is a shoal on the northern part of Brown's Bank on which there is said to be not more than 9 to 14 fathoms of water. This shoal, though not to be dreaded so much as George's or Cashe's Shoals, is, nevertheless, a danger to be carefully avoided. It is in the direct track of the fishing fleets on their way to and from the various banks. Several instances are related in which vessels have met with perilous adventures in that locality and only narrowly escaped destruction.

The long sand-bars that extend out from either end of Sable Island, for a distance of 10 to 12

miles, are very dangerous to vessels on the passage to and from the Grand Bank and other eastern banks. For a great portion of the year this island is enveloped in dense fogs, and the currents in the vicinity being very irregular, it is extremely difficult for the mariner to tell his exact position.

There are outlying rocks and ledges off the coast of Nova Scotia which are in the track of vessels going to and from the Gulf of Saint Lawrence and the eastern banks. Many serious disasters have occurred on these ledges and rocks and there are several instances of narrow escapes from destruction.

DANGERS TO WHALERS.—The principal dangers thus far mentioned have been those encountered by vessels in the cod, mackerel, and halibut fisheries from New England. We have yet to consider the dangers to the whaling and sealing fleets. These vessels are, of course, liable to many of the same perils as the fishing craft, especially to heavy gales and squalls. On the passage to the cruising grounds the whaling vessels do not carry so much sail as merchant or fishing vessels, time not being to them of such vast importance. Dangers, common to other vessels, are less likely to happen to whalers. From the start of a voyage, men are continually aloft on the watch for whales, and are likely to see approaching danger more quickly than in the case of a merchant ship, where only one man is on the lookout, and he, as a rule, not expecting any immediate danger. Whalemen are generally well trained and ready for duty at a moment's notice. Only one-half of the crew, comprising one watch, is on deck at a time, but in case of danger or the approach of whales, all can be quickly summoned. As a rule, the half of a whaling crew includes more men than the entire crew of a merchant vessel of the same size.

Instances of whaling vessels being blown over or of waves breaking over them, thereby causing damage, are not common. Such disasters sometimes, however, occur to vessels in the Arctic or Antarctic Oceans, where they are exposed to severe gales.

DANGERS IN LEAVING AND APPROACHING THE SHORE.

The dangers incurred in approaching and leaving the shores are perhaps more to be dreaded than any others, and great skill, coolness, and prudence are requisite to avoid disaster. This is especially the case in the fisheries of New England, because nearly all of the larger and most frequented fishing grounds lie in an easterly direction from the coast. Easterly winds, which are fair for making passages toward the land, are generally accompanied with thick weather. This is especially the case in winter, when severe snow-storms often overtake the fishermen when but a few miles from land and on a lee shore. The density of the snow often renders it impossible to discern objects far enough off to clear them, and it is at the utmost hazard that the fishermen undertake to make a harbor. They often approach so near the land before the weather becomes thick that it is as dangerous to attempt to keep off shore as it is to approach it. Fishermen are induced to take the latter risk for the reason that if they do succeed in making harbor they will escape being exposed to the storm on a lee shore, and may also obtain a higher price for their fish. Probably no other class of sea-faring men take such great risks in running for the land, but such is the fishermen's knowledge of the coast and their skill in handling their vessels that, although there are many hair-breadth escapes, there are comparatively few disasters resulting from this cause. The following are given as a few of the many instances of this character that have occurred to our fishing fleet:

On the 26th of February, 1863, the schooner Mary E. Hiltz was lost off Marblehead during a violent snow-storm while on her homeward passage from Newfoundland, and one of her crew was drowned.

During a gale on the 10th of January, 1878, the schooner Little Kate went ashore near Duxbury, and her entire crew of thirteen men were drowned.

In February, 1878, the schooner Eastern Queen, of Gloucester, while returning from George's Bank, ran into Massachusetts Bay in the night. The wind was blowing strong from the northeast, and the vessel was running under a press of sail when the lookout suddenly descried land ahead. He instantly shouted to the man at the wheel. The helm was put down and the vessel brought to the wind, but before this had been fairly accomplished she struck on a ledge. Notwithstanding the imminent peril in which they were placed, they succeeded in getting the sheets trimmed by the wind, and this careened the vessel so much that after striking two or three times she jumped over the sunken ledge. Although she had struck heavily she still remained tight and was worked off the lee shore, arriving in Gloucester the following day in safety.

Vessels leaving the land, bound to the fishing grounds, though starting with a favorable wind, may meet with violent easterly gales before obtaining sufficient sea-room. These gales are generally accompanied with snow, and the vessels being on a lee shore it is sometimes difficult to escape disaster. The class of vessels under consideration are better provided with cables and anchors than any other sea-going craft, and are thus enabled to ride out a gale safely on a lee shore, in which no vessel carrying canvas could successfully work to windward. This is, doubtless, one of the reasons why the loss of vessels from being driven ashore in gales is comparatively small. Although gales are less frequent in the spring and summer seasons, the prevalence of dense fogs exposes the fishermen and all seamen to considerable dangers when approaching the land, and many disasters, some of them serious in character, have happened from this cause. Such dangers are not unlike those already discussed, except that they are not usually accompanied by such high winds, and, occuring during the warmer part of the year, are not so sure to be disastrous.

THE DANGERS OF COLLISION WITH OTHER VESSELS.

COLLISIONS ON THE FISHING GROUNDS.—The danger of collision is to be dreaded. Many losses have resulted from accidents of this kind, and lives, as well as property, have been sacrificed. Collisions are especially liable in localities where great numbers of vessels are passing and repassing, as in the vicinity of Long Island Sound, or off Sandy Hook, New York, on Nantucket Shoals, off Cape Cod, or near Cape Sable, Nova Scotia.

Fishing vessels are perhaps more liable to collision than any other vessels, because of their tendency to gather in large fleets, where fish—and especially mackerel—are found abundant. Such is the ardor of pursuit that the loss of booms and other light spars is considered of small importance, and the risk of losing them is often incurred in hopes of obtaining some advantage in the fishery.

Another fruitful season of collision is when a fleet of several hundred sail makes the attempt to enter the same harbor at one time. They crowd in such numbers at the harbor's entrance that it is next to impossible for them all to escape some damage. The injuries thus sustained are generally of minor importance, such as carrying away booms or bowsprits. Some of the serious losses by collision are the following:

On September 26, 1869, the schooner Isaac Walton, of Gloucester, while returning from George's Bank, came into collision with the schooner William Babson, and received such injuries that she sank shortly afterward. The crew were saved.

On March 17, 1864, the schooner Triumph, of the same port, while bound to New York, was run down and sunk by the steamer Western Metropolis. The captain and three of her crew were saved by a boat from the steamer, but two of the crew were drowned.

On January 17, 1873, the schooner Franklin A. was run down by the schooner E. B. Phillips, off Falkland Island, Long Island Sound. The E. B. Phillips struck the Franklin A. amidships, carrying away both masts and cutting through the hull, causing the latter to sink almost immediately. The captain and the mate were knocked overboard by the shock of the colliding vessels, but were rescued, narrowly escaping a watery grave.

On May 31, 1865, the schooner Northern Chief, returning to Gloucester from the Western Bank, was run down and sunk off Cape Sable by the English steamer Bosphorus. The schooner had a crew of eleven men; five of them were in the cabin, and, rushing on deck, succeeded in scrambling up the rigging and boarding the steamer just as the schooner was going down. The rest of the men were drowned. This disaster was attributed to carelessness on the part of those keeping watch on board the steamer.

On May 2, 1853, the schooner Ocean Nymph, of Gloucester, was run down by the ship Sarah Jane off Cape Cod, but the crew were saved.

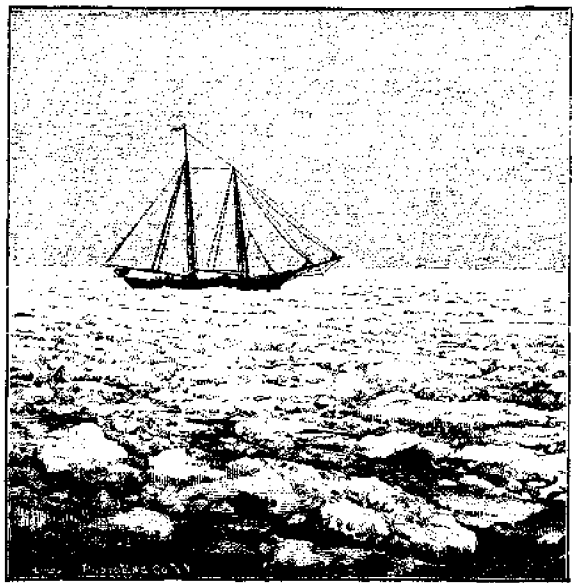
Many other instances might be related where vessels and lives have been lost from collision, and many more in which the vessels were badly injured.

Collisions sometimes occur through gross recklessness, or perhaps purposely in a spirit of retaliation or spite.

Among the vessels engaged in the mackerel fishery, when jigging was the method of capture employed, there was a sharp competition not only between the Provincial and American fleets, but to a still greater extent between vessels from different ports along the American coast, and sometimes among those who were close neighbors at home.

When mackerel were plenty in any one locality, large fleets congregated there, lying to in close proximity. At such times each was anxious to secure as great a share of fish as possible, and in the attempt to do this the rights of other vessels were considered of secondary importance. One practice, that of "lee-bowing," as it is called, was often a cause of ill feeling. To "lee-bow" a vessel is to heave to directly under her lee, thus tolling away the fish which are playing alongside, having been attracted by the bait which has already been thrown overboard. The skippers of the vessels thus deprived of fish to which they had the first right, often seek a rather savage revenge. By dint of skillful seamanship they carry away a boom or a boat of their rival without receiving any injury themselves. Such injuries may sometimes be repaired at once, though they may cause the loss of much valuable time spent in port. When from two hundred to four hundred sail of vessels are closely packed together it is not uncommon for many accidents to happen even when they are unintentional, especially when there is a fresh breeze blowing. It is then not unusual for a number of vessels to meet with such minor disasters as the carrying away of mainbooms or bowsprits, and even more serious damage may be inflicted.

One of the many instances of this kind took place off the northern shores of Cape Breton in the fall of 1867. A fleet numbering between two and three hundred sail had collected in the vicinity of Cheticamp, and, as it was late in the fall and the mackerel were moving rapidly on their way from the fishing grounds, it was evident that another chance of catching them during that season was unlikely to present itself. The mackerel bit freely, but would stay only for a short time alongside of the vessels. For this reason the vessels were under way most of the time. The wind blew fresh and the crews were eager to improve this last opportunity for that season. A great many of them were reckless in the extreme. A number of the vessels had their sails torn, their spars carried away, and many were run down and cut nearly to the water's edge. The disabled vessels were obliged to cease fishing and haul out of the fleet for repairs. The loss of the opportunity to fish seemed to be the lesser evil, for they were on a rock-bound coast and far from any



Fishing schooner on the Banks, caught in an ice-floe.

From a photograph.

good harbor. With a sudden change of wind they would have been exposed to the dangers of a lee shore, which, in their disabled condition, would probably have resulted in the loss of the vessel.

DANGERS IN HARBORS.

To a person unacquainted with a seaman's life it might seem probable that vessels in harbor would be free from danger, but this is not always the case. There have been instances of great loss of property, and even of life, in the case of vessels in harbor at the time of the disaster. These losses are sometimes due to the insecurity of the harbors during gales. More especially is this the case if there is a large fleet of fishing vessels at anchor together with coasting vessels, which are not so well provided with cables and anchors. Sometimes a vessel of the latter class will strike adrift, and, coming in contact with others, will be the means of driving them ashore. Many losses of this kind have occurred in the Gulf of Saint Lawrence, where several of the places resorted to by fishermen for shelter are simply "one-sided" harbors, affording protection to the vessels when the wind is in certain directions and are open to other winds. Mention has already been made of losses at Pleasant Bay and Cheticamp, which are two shelters of this class, where many serious disasters have occurred.

On September 8, 1869, a severe hurricane occurred on the New England coast, in which several Gloucester vessels were lost in shelters of this insecure kind. Serious disasters have also taken place at Souris, Prince Edward Island. Many losses have also occurred in harbors thought to be secure. Among these may be mentioned several disasters that have occurred at Port Hood, Cape Breton, Malpeque or Richmond Harbor, Prince Edward Island, and many other harbors along our coast and that of Nova Scotia. Instances of losses occurring in harbors of this kind might be multiplied, but this is probably not necessary, since those interested in the subject can find numerous disasters of this kind recorded in newspapers printed in the large fishing ports.

DANGERS FROM ICE.

DANGERS TO FISHING VESSELS.—The danger from collision with ice is one to which the vessels engaged in the Grand Bank, Newfoundland, Cape North, Labrador, and Greenland fisheries are particularly liable.

In the latter part of winter and in early spring large masses of field ice, as well as many icebergs, drift far south, covering a large extent of the eastern fishing grounds, including Flemish Cap, Grand Bank, Saint Peter's Bank, and Banquereau, and ice has in some seasons extended so far to the westward as to drive the vessels from parts of Western Bank. There are periods of a few years in succession when the fishermen are troubled but little by the floating ice, but there is more or less danger each spring on the Banks, and still more danger while making passages to and from them.

For several weeks in the springs of 1875 and 1876 the whole of Banquereau and Green Bank, part of the Western Bank, and the greater part of the Grand Bank, were covered with immense fields of drifting ice. Many vessels were driven from the fishing grounds and obliged to lay by, waiting for the ice to recede. Several of them were in collision with the ice or it drove foul of them when they were at anchor. Some vessels received considerable damage, their planking being so badly chafed as to necessitate repairs. It is not positively known that any vessels engaged in the Grand Bank fishery met with very serious damage by collision with ice during those seasons, but it is supposed that the loss of the James L. Shute and Janet Middleton, in the spring of 1876, was caused in this manner. This seems the more probable as the ice, for some weeks about the time they were on their passage to the Grand Bank, was drifted from 75 to 100 miles south of the lati-

tude of Sable Island, and was, therefore, directly in their course. Much of this ice was very heavy, and a collision with it, especially when a vessel was running at great speed, would result in almost certain destruction. Many narrow escapes from disaster occurred to the halibut fleet while on the passage home, but as most of the fishermen were aware of the presence of the ice they generally managed to escape without any serious loss.

Vessels engaged in the Newfoundland herring fishery have been surrounded by field ice for weeks at a time,* while on the passage home, and many thrilling tales are told of such narrow escapes from disaster. Doubtless some of the losses of vessels engaged in this fishery have been the result of collisions with ice, although none of the crews of the missing schooners have been left to tell the story of such disaster.

The vessels engaged in the cod fishery about Cape North, north end of Cape Breton Island, sometimes meet with considerable difficulty from drifting field-ice and are often driven from the fishing ground. In one instance a vessel started her planking by collision with ice in that vicinity so that she sprung a leak, and only by great exertions was kept afloat until she reached a place of safety. More or less difficulty is also experienced by vessels engaged in the Magdalen herring fishery. They encounter drifting ice on their passage to those islands in the spring, and, although we have no accounts of any serious disasters, the immunity from such may be ascribed to the extreme vigilance of the fishermen. Vessels fishing on the Flemish Cap are very much exposed to contact with icebergs even as late as July.

Perhaps no other vessels are so much exposed to danger from ice as the halibut fleet of New England. They meet with many drifting icebergs and, occasionally, with large masses of field-ice, on their route to the northern grounds. In the spring of 1880 several vessels which started for Greenland were obliged to give up the voyage and return to the Grand Bank on this account.

Ice, freezing in masses on the vessel's sails and rigging in extremely cold weather, is, perhaps, more to be dreaded than collision with floating ice.

In the winter season the temperature is often so low that every bit of flying spray congeals wherever it strikes, and the vessels soon become so loaded down that they are almost unmanageable. This is one of the commonest perils of the winter fisheries, and one that requires great fortitude and resolution to overcome. Any neglect to improve every opportunity of freeing the vessel from ice would soon result in her foundering. Sometimes, for days and nights together, the men must remain on deck, constantly employed in pounding the ice and always at the imminent risk of being swept overboard. Vessels sometimes arrive in fishing ports so badly "iced up" that it is impossible to lower the sails or to bring them to an anchor.

DANGERS TO WHALING VESSELS.—On the homeward passage the Arctic whaling vessels, in thick weather, are in constant danger from icebergs, especially about Hudson's Bay, Cumberland Gulf, and Davis Straits. There is less danger on the outward passage, as the "watch on deck" is more eagerly on the lookout. On the homeward voyage, however, when the approach of whales

* *Twenty-four days in the ice.*—Schooners Hereward and Rattler, which left this port for Newfoundland for a load of frozen herring in December last, got frozen in while on the homeward passage, February 9, in Fortune Bay, and remained there eleven days. Got clear the 19th, and went into the ice again the same day and remained there until March 3. Schooners S. C. Noyes, of Newburyport, and Charles A. Ropes, of Camden, Me., were also in the same predicament. Captain Pennington (of the Hereward) made a drawing of the scene, in which the four vessels are visible fast locked in the ice, and the crews of the Hereward and Rattler busily engaged in getting some provisions from the S. C. Noyes, which lay at a distance of 3 miles. The ice was so rough that they were obliged to carry the flour in bags, and the men with the bags on their backs, and the captain with the empty barrel to put it in when it reached the vessel, makes a lively scene. It was a tedious experience for all hands, and glad enough were they to get clear of their icy bonds. Fortunate it was that the Noyes could supply them with flour, otherwise the men would have suffered for this necessary of life.—*Cape Ann Advertiser, March* 17, 1876.

is not so much an object of interest, the lookout is not kept with such vigilance. The greatest precautions against collision with ice are taken from the time the vessels approach the region where they expect to find ice—about the latter part of June—through July, August, and the first part of September.

Vessels engaged in the whale fisheries of the Arctic Sea, north of Bering's Straits, are exposed to great danger from ice, and many of them have been lost, either by being driven on shore by the ice or crushed between masses of heavy pack-ice.

Since 1871 more than fifty whaling vessels have been lost in the Arctic, north of Bering's Straits. In 1871 thirty-four out of a fleet of thirty-nine vessels were crushed in the pack-ice. In 1876 twelve out of a fleet of twenty sail were lost under similar circumstances. The story of the great disaster of 1871 is told by Starbuck, in his History of the Whale Fishery. He says: "In the fall of 1871 came news of a terrible disaster to the Arctic fleet, rivaling in its extent the depredations of the rebel cruisers. Off Point Belcher thirty-four vessels lay crushed and mangled in the ice; in Honolulu were over twelve hundred seamen who, by this catastrophe, were shipwrecked. * * * On the 2d of September the brig Comet was caught by the heavy ice and completely crushed, her crew barely escaping to the other vessels. * * * Nothing but ice was visible offshore, the only clear water being where the fleet lay, and that narrowed to a strip from 200 yards to half a mile in width, and extending from Point Belcher to 2 or 3 miles south of Wainwright Inlet. * * * On the 7th of September the bark Roman, while cutting-in a whale, was caught between two immense floes of ice off Sea Horse Islands, whence she had helplessly drifted, and crushed to atoms, the officers and crew escaping over the ice, saving scarcely anything but their lives. The next day the bark Awashonks met a similar fate, and a third fugitive crew was distributed among the remaining ships." There appeared no chance of relief to the ice-bound vessels, and after consultation among the captains it was agreed to abandon their ships, and a day set when they would take to boats in hopes of reaching other vessels which were outside the barrier. "The morning of the 14th of September came, and a sad day it was to the crews of the ice-bound crafts. At noon the signals, flags at the mastheads, union down, were set, which told them the time had come when they must sever themselves from their vessels. As a stricken family feels when the devouring flames destroy the home which was their shelter, and with it the little souvenirs and priceless memorials which had been so carefully collected and so earnestly treasured, so feels the mariner when compelled to tear himself from the ship which seems to him at once parent, friend, and shelter." After two days' struggling with the ice and waves, the boats, heavily loaded with their freight of 1,200 whalemen, reached the more fortunate vessels and were kindly cared for by their fellows. Fortunately no lives were lost by this disaster, though the money loss was upwards of a million and a half of dollars. The loss by the disaster of 1876 was fifty men, and vessels and cargoes valued at $800,000. Further details of these and other disasters to the Arctic fleet are given in another section of this report, which discusses the history and methods of the whale fishery.

DANGERS FROM FIRE AND LIGHTNING.

Fishing vessels are sometimes exposed to dangers from fire and lightning, which cause many mishaps, if not serious disasters. In June, 1864, a fire broke out in the forecastle of the schooner Sea Witch, at anchor on Cashe's Ledge. It was discovered by the men who were on deck dressing fish. They immediately rushed forward with buckets, and by the most strenuous efforts, exposing themselves the while to the flames, succeeded in extinguishing the fire before any very serious damage had been done. Another instance of this kind occurred to the schooner Princess, of

Bucksport, Me., a few years later, while lying in Prospect Harbor, Nova Scotia. All of the crew except the captain had gone to the wreck of the steamer Atlantic, a few miles distant from the harbor. The fire broke out in the forecastle. It was first observed by the crews of some vessels near by, and they proceeded to the rescue. Although the fire was well under way, they succeeded in extinguishing it by cutting holes through the deck, but not before the vessel was badly damaged.

Instances of vessels having been struck by lightning are not at all rare, but as a general thing they are only dismasted or receive some other slight injuries. There are a few cases, also, where some of the crew have been very seriously injured.

DANGERS OF ATTACKS FROM MARINE ANIMALS.

Fishing vessels are liable to attacks from whales and swordfish. In the "History of the Swordfish"* instances are recorded of attacks upon vessels by swordfish. Many of the New England fishermen have their stories of swordfish striking their vessel. A New London fisherman of many years' experience states that there are several broken swords in the hull of his vessel. The danger from these attacks is from leaks, which have sometimes resulted in much damge.

Whales have been known to strike and cause the destruction of merchant and whaling ships, but we have no record of such disaster to fishing craft. "The Fisheries from 1623 to 1876," published at Gloucester, gives the particulars of a vessel of that port being towed by a whale. The fluke of the anchor caught in the blow-hole of the whale, and the frightened animal rushed through the water with the vessel in tow. It became necessary to cut the cable in order to save several of the crew, who were away from the vessel hauling their trawls. In 1878 the ship Columbia was sunk off the Newfoundland Banks by a blow from a whale. The crew took to the boats, and were rescued by Captain Deddes, of the steamer P. Caland. The story of the loss of the whaleship Essex in the southern seas is one of the most familiar in the annals of the whale fishery. "The boats of the Essex had killed the calf of a whale, when the mother, apparently understanding their connection with the ship, attacked it, retreating about a mile to get headway, and striking the vessel on the bows, staving in its timbers and making a hole so large that it was useless to attempt to stop the leak." The crew took to the boats, and were finally picked up.

DANGERS FROM THE DEFECTS OF BAD CONSTRUCTION OR FROM AGE.

Although the majority of the fishing vessels are as substantially built as any in the world and are well calculated in this respect to withstand the strains which may be brought to bear upon them, yet unprincipled builders sometimes take advantage, when building a vessel for sale, to slight them in certain particulars. These may be briefly mentioned as—(1) by putting in defective timber or planks; (2) by insufficient fastening; and (3) by a lack of care in calking the vessel.

If to these defects are also added others in the rigging of the vessel, it follows as a matter of course that she is poorly calculated to withstand the vicissitudes and perils incident to the pursuit of the fisheries. Vessels of this kind are sometimes built to be sold at a cheap rate, but such a practice is entirely wrong, for it exposes the lives of many men to the danger of being lost at sea. There should be provision for the legal punishment of those who engage in such nefarious enterprises.

Defects are, however, more frequently to be met with in old vessels, which are in some cases sent to sea as long as it is possible to obtain a crew for them, and it is to be wondered at that more fatal disasters have not resulted from such a practice. There is no doubt that the cause of

* Report U. S. Fish Commissioner, Part VIII, 1880.

the loss of many valuable lives might be traced to this source; and owners who will persist in exposing men to such peril, certainly are deserving of the severest condemnation.

The fisherman, who is called upon to meet many dangers with which each voyage brings him in contact, and for the results from which the owners may not be held responsible, should have at least the security of a stanch and well-rigged vessel.

50. DANGERS TO FISHERMEN ON VESSELS AND IN BOATS.

DANGERS TO FISHERMEN ON VESSELS.

SEAS STRIKING THE DECK.—The most common accident which is liable to occur is caused by heavy seas, which strike the fishermen as they stand upon the deck of a vessel, knocking them down and often inflicting serious injuries.

In the winter of 1877 William Brown, one of the crew of the schooner Howard, of Gloucester, was struck by a sea and severely injured by being knocked against the bows of the dories which were lashed amidships.

In December, 1880, one of the crew of the schooner David A. Story was standing on watch at the bow of the schooner when a heavy sea struck the vessel. To avoid being thrown overboard, he grasped the iron braces of the forward stove funnel. The sea knocked the vessel upon her beam-ends, and when she righted he was found insensible, with his leg broken and several splinters from the fore boom, which had been broken by the force of the sea, driven entirely through the limb.

Instances of this sort might be multiplied, but it is sufficient to say that they occur frequently every winter, and rarely without serious or fatal results to the victims, who are sometimes washed overboard.

DANGERS OF FALLING FROM THE RIGGING.—Another serious danger is that of falling from aloft. This kind of accident, however, occurs less frequently than the former.

Capt. Garret Galvin, in the spring of 1875, fell from the masthead of the schooner Restless, while on the Grand Banks, striking the cable-tier. He received no serious injury. His was a very fortunate escape, for lives are sometimes lost in this way, and a person thus falling rarely escapes with less serious results than the fracture of a limb.

In the spring of 1878 Capt. Joseph Campbell, of Gloucester, fell from the masthead of his vessel, which lay at anchor on the Banks, and was killed. Men sometimes fall from the main boom while engaged in reefing the mainsail. In most cases these accidents are fatal, since at such times the weather is generally too rough to permit their being rescued. Such falls are usually occasioned by a sudden lurching of the vessel, causing the men to lose their hold.

Whalemen sometimes fall from the rigging. Such accidents are usually the result of carelessness on the part of the sailors themselves. At times, while the crew are taking in sail, the canvas wraps itself around a sailor and throws him from the yard. Whether he falls on deck or overboard depends upon the position he occupies on the yard.

DANGERS FROM MOVEMENTS OF THE BOOMS.—Fishermen are sometimes injured by a blow from one of the booms, usually the fore-boom, as it swings from side to side. The injuries are usually to the head, though sometimes the man is further wounded by being knocked upon the deck. It is quite common, also, for them to be thrown overboard by a blow of the boom or by becoming entangled in swinging ropes.

Men are sometimes thrown overboard by a sudden lurch of the vessel. They are generally lost, for at such times it is too rough to lower a boat to rescue them.

DANGER OF BEING WASHED FROM THE BOWSPRIT OR JIB-BOOM.—Another danger is encountered by fishermen while on the bowsprit engaged in furling or reefing the jib. As the vessel plunges up and down, the bowsprit is often completely submerged. It is then very difficult for a man to retain his hold and to prevent being washed off and drowned. The force of the sea added to the resistance of the water to the rapid motion of the plunging vessel brings tremendous power to bear upon any object on the bowsprit.

A remedy for disasters of this class is possible. If, as in the English cutter and some other European vessels, our schooners were provided with two jibs, or rather with a fore staysail and a small jib, instead of the immense jib which is now commonly in use, in heavy weather the jib could be furled and the men would not be obliged to go outside of the bow to shorten sail. This style of rigging has been introduced to some extent upon the New England pilot-boats and upon the larger class of Nova Scotia schooners, and is quite as applicable to all fishing vessels.

Men going on to a jib-boom to furl the flying jib are liable to be washed overboard, and many instances are on record of disasters of this kind, most of which have resulted in loss of life.

Men also sometimes fall overboard by the parting of the foot-ropes, or by missing their hold during a sudden lurch of the vessel.

DANGERS MET WITH IN HOLDING THE CABLE.—There is danger in connection with "holding the cable" when it is "hove up" or hauled in, either to change the arrangements of the chafing gear or to "weigh the anchor." The sudden rise of a vessel on the crest of a wave may jerk the cable forward and throw the persons who are holding it with much violence over the windlass and into contact with the iron brakes, thus inflicting injuries.

DANGER FROM LIGHTNING.—Vessels are sometimes struck by lightning, their masts shattered, and injuries inflicted to the crew. This sometimes occurs on the Banks, and in 1878 several vessels were thus injured while lying at the wharves at Gloucester.

DANGERS FROM FURNITURE.—Minor accidents are frequent on shipboard. When a vessel is knocked down by a sea the cabin stove may break loose and tumble about, burning some of the men. In the gale of December 9, 1876, such an accident occurred to one of the crew of the schooner Ruth Groves, of Gloucester.

DANGERS FROM CUTS OR BRUISES.—In dressing fish or cutting bait sudden movements of the vessel are likely to cause fishermen to cut their hands. Such accidents, however, are not generally serious, though fingers and thumbs are sometimes sacrificed. When a man is engaged in fishing the least cut or scratch soon becomes a painful sore, for it is impossible to protect the raw surface from the slime and salt with which the hands are constantly in contact. Sometimes painful abscesses, or what are called by the fishermen "gurry sores," are the result. In the summer months fishermen suffer a great annoyance from the stings of "sun-jellies," "sun-squalls," or "sea-nettles," usually of the species *Cyanea arctica*. The tentacles of these animals cling to the lines and seines and the stings of the lassoo cells cause the most intense pain at times. On the southern coast even more serious results are caused by contact with the tentacles of the Portuguese man-of-war, which sometimes produces a temporary paralysis of the muscles and always acute suffering. All fishermen protect their hands, when dressing fish, by wearing mittens, but, nevertheless, slime will penetrate between the fibres and get upon the skin. In handling the lines, the fishermen use the so-called "nippers," knitted from woolen yarn. Cots of rubber or wool are used by the mackerel fishermen in order to protect their fingers when fishing with hand-lines; and sometimes they wind yarn around their fingers for the same reason. Almost all of the fishermen upon the Banks are afflicted with small boils (called "Pin-jinnets") upon the forearm, caused by the chafing of the

heavy clothing saturated with salt water and the contact of the cuff of the oil-jacket with the flesh of the wrist.

DANGERS TO FISHERMEN IN SMALL BOATS.

The fishermen in trawling on the Banks usually go out in their dories from one to three miles from the vessel for the trawls, and are exposed to numerous dangers.

CAPSIZED BY HEAVY SEAS.—Boats are capsized either when the men are rowing to and from the vessel, or when they are engaged in hauling or setting the trawls. Pages could be filled with instances of this kind, often resulting in loss of life, and frequently remarkable for examples of heroism on the part of fishermen who have made attempts, at the risk of their own lives, to save their weaker comrades.

"Schooner Neptune's Bride was wrecked at Malcomb's Ledge, Me., September 22, 1860. Twelve of her fourteen men found a watery grave by the swamping of the boat in which they sought to reach the shore. One man, Henry Johnson, was enabled to regain the boat. She was full of water, but fortunately there was a bucket in her, and a coil of rope. With the former he *commenced bailing, and by dint of hard labor managed to free her, although she was continually* taking in water. A hogshead tub from the vessel had drifted across the boat amidships. This he secured with his rope, and that made the boat ride more easily. When he got tired of bailing the boat he would crawl into the tub, and when that got full of water he would commence bailing the boat again. He knew not whither he was drifting, and became so utterly exhausted that, long ere daylight dawned, he fell asleep. At noon-time a Belfast schooner sighted the craft, bore down to her, and her single passenger was received on board and kindly cared for. One other of the crew, named Marsh, secured a resting place at the foremast-head, where for eighteen hours he endured *greater agonies than death could inflict. The surging waters reached to his waist, while the pitti*less rain beat upon his unprotected head, and the pangs of thirst and hunger clamored that he should cease the unequal strife and seek oblivion in the seething flood. But the instinct of self-preservation was strong, and he maintained his position until his feet were chafed and raw, and delirium set in. His critical position was at last discovered by two fishermen on Seal Island, and he was taken off and tenderly cared for until reason resumed its throne and he was able to take passage for home."*

CAPSIZED BY WEIGHT OF TRAWL.—There is danger of being upset by the strain on the trawl line, as the dory rises upon the sea when the men are hauling in the line. The line is usually, in such cases, around the trawl-winch, or "hurdy-gurdy," and cannot be slackened quick enough to prevent upsetting the dory.

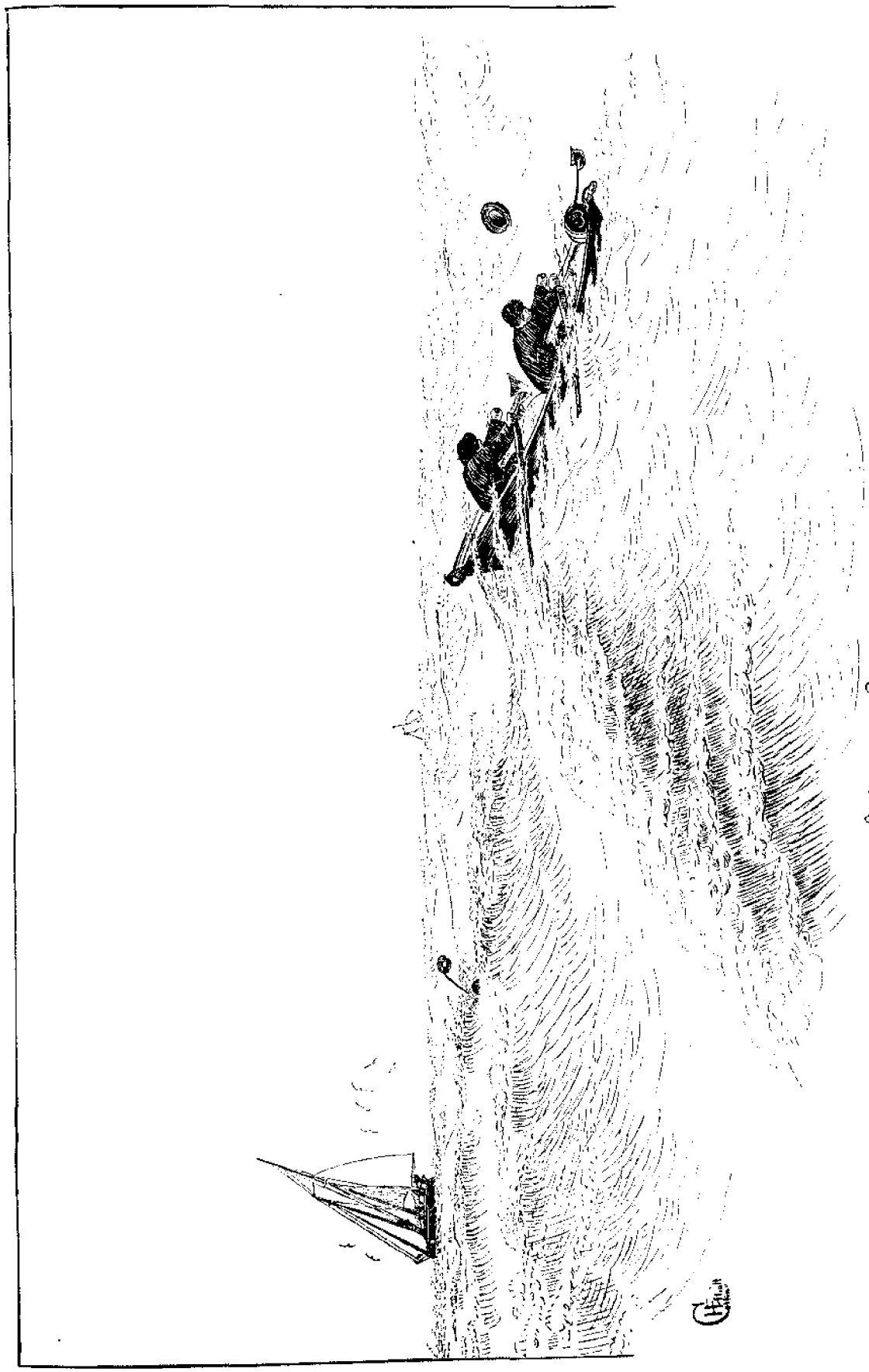
CAPSIZED BY SHIPPING WATER.—A dory heavily loaded with fish is liable to be upset by shipping a quantity of water which brings the gunwales below the surface. When a boat is upset in this way the men seldom escape from drowning. They are clothed from head to toe in heavy clothing, besides stiff outer clothing of oiled cotton or rubber, and with heavy boots, so that they have little power of movement in the water. In addition to this the water is extremely cold on the Banks, in summer being rarely above 40° or 42°, and in winter nearly at the freezing point; the unfortunate fishermen become so chilled that they are incapable of much exertion. Of late years the Gloucester fishermen have adopted the custom of fitting the dories with "plug beckets," which are loops of rope fastened to the under side of the plug in the bottom of the dory. This loop, or "becket," is large enough for a man to thrust his arm through, and he can thus cling to the bottom of the boat until help may reach him. A "life-line" is also occasionally used. This is

* Gloucester and its Fisheries, pp. 66, 67.

a light rope stretched along the bottom of the dory nearly from stem to stern, being fastened at each end and in the middle to small staples, and with two or three "beckets" large enough for a man's arm. These are preferable to the "plug-beckets" because they enable two or three men to cling to the bottom of one dory, which is sufficiently buoyant to support them without difficulty, but not to allow them to rest upon it. Numerous instances of the preservation of life by the use of this simple means are on record, and it is simple inhumanity to send men away from the vessel in dories which are not equipped with some such means of safety, for it is almost impossible for a fisherman to retain hold of the smooth slippery bottom of a capsized dory, constantly swept by the breaking seas. The "life-line" was introduced a few years ago, but the "plug-becket" has been in use 10 or 15 years, though not to much extent until recently. These ropes do not impede the speed of the dory, and the only objection ever urged against them is that they interfere with sliding the dories about on the decks of the vessels.

WASHED FROM THE BOAT.—The fishermen are quite often washed out of their dories by breaking seas. In the fall of 1880 Thomas R. Lee, of Gloucester, while engaged in hauling a halibut trawl on the Grand Bank, was struck by a sea and thrown 15 or 20 feet from his dory. He rose to the surface twice, but was so much encumbered by his clothing that he was unable to swim. As he was sinking the third time he caught the trawl, which was fastened to the dory. By means of this he tried to haul himself up, but when still about three fathoms under water one of the hooks caught in his finger and went completely through it. He then grasped the trawl above his head with the other hand and by a sudden jerk tore the hook from his finger. He hauled himself up and reached the gunwale, but just then another hook caught in his clothing, which rendered it difficult for him to get into the boat. He called to his dorymate for help, but the man was too frightened to assist him. By a great effort he pulled himself over the side of the dory and fell down exhausted. This is an instance of the dogged pluck of the typical Gloucester fisherman, for after recovering from the first exhaustion he persisted in hauling his trawl and filling his dory with fish before returning to the vessel.

DANGER FROM SQUALLS.—While tending their trawls fishermen are liable to be overtaken by heavy squalls, especially in the winter season, and are unable to reach their vessels. Such squalls are particularly dangerous because of the force of the wind, which creates high seas, and they are often accompanied with dense snow, which adds to the anxiety and peril. Instances of this kind are constantly occurring, and afford some of the most exciting episodes in the fisherman's life, since, in every instance, a determined and heroic effort is made to regain the vessel in spite of the wind and sea. Their efforts are often aided by their shipmates on the vessel, who fasten a line to a dory or buoy and allow it to drift out to the men who are struggling to reach the vessel. Sometimes over a mile of rope is paid out in this manner, which expedient has resulted in the saving of numerous lives. When that is not available the cable has sometimes been cut or the anchor broken out by putting sail on the vessel, which then runs down toward the dory and rescues the men. At night a light is sometimes rigged to the paid-out dory. When all these expedients fail the lost fishermen may be rescued by other vessels in the neighborhood, but too often they drift about for several days before being picked up. Fishermen have been thus adrift for six days without food or water and finally rescued, and many more have perished after drifting for a long time or have been soon swamped by the breaking waves. When fishermen are thus adrift and exposed to heavy seas they may succeed in keeping the dory afloat by means of rigging a "drag," a contrivance by which the head of the dory is kept to the wind and sea, and it is thus prevented from swamping. This "drag" is often made of the body of a dead halibut by tying it by the head and tail. A buoy keg, with a hole in it, which will fill with water and thus present a



Dory crew of halibut fishermen caught to leeward in a squall; trawl buoy and line drifted astern for their rescue

Drawing by H. W. Elliott and Capt. J. W. Collins.

resistance to the sea, is also used with the same result. The men meanwhile steady the boat with their oars to prevent it from swinging "side to the wind."

PRECAUTIONS AGAINST LOSS OF LIFE.—Much suffering and loss of life might be prevented if the fishermen would carry food and water in their dories when they go out to haul the trawls. So many vessels are passing daily in the vicinity of the fishing grounds that the chances are against a boat drifting for many days without being picked up, provided the men are able to keep up their strength and spirits. Many of the banks are so near the land that the men could succeed in reaching it if they had provisions to support their strength for a few days. The custom of carrying water and occasionally provisions in the dories in thick weather is, it is claimed, coming more into favor, but this simple precaution against disaster and suffering should be insisted upon by humane public sentiment, and possibly also by legal enactment.

It has been suggested that it would be useless to make laws for the government of fishermen when they are out of sight of the officers of the law, but no matter how careless the crew and skippers may be, if a law allowed the fishermen to bring a suit for damages against the master and owners of a vessel which sent them out in a small boat without provisions, it would be clearly to the interest of the latter to oblige them to carry the necessities of life, no matter how careless the men themselves might be.

John Maynard, of New London, and William Corthell, of Lyme, Conn., of schooner Gilson Carman, left that vessel on George's on Wednesday, March 17, 1869, in a dory, to haul their trawls, and while doing so a very heavy thunder-squall sprang up, driving them from the banks. They had at the time several halibut and from sixty to seventy codfish, which they had to throw overboard, with the exception of one, which they retained to eat. After eating a little it made them sick, and they were obliged to throw it away. On Thursday night they saw a vessel, but were unable to attract her attention; were drifted about all day Friday and Friday night, without anything to eat. On Saturday morning a duck lit in the vicinity of the boat, which they managed to kill and ate it raw. On Saturday night, when they had nearly given up the idea of being saved, they made a light a few miles ahead. They immediately pulled for it, when it proved to be the schooner Henry Clay. During the time they were in the boat they had a steady storm of rain and snow and were frequently capsized, but with the aid of a bucket they managed to keep the boat clear of water. Corthell had his feet badly frozen. Maynard's arm was badly chafed and swollen, and both suffered greatly.*

"The Dominion Government steamer Newfield, Captain Guilford, arrived at Halifax from Sable Island to-day, and brought up William Coleman and James McGrath, who had landed on the island. The two men belonged to the fishing schooner Procter Brothers, of Gloucester, Mass. They left the vessel in a dory on the western banks of Newfoundland on the morning of Sunday, April 18, to attend to their trawls. While at this work a gale sprang up, and they were unable to get back to the vessel. For five days they drifted about at the mercy of wind and waves, without food or water. Their sufferings were intense, as the weather was very cold. McGrath had both feet badly frozen. On the evening of Tuesday, April 22, their dory drifted ashore on Sable Island, and the two men are kindly cared for by the men stationed there to aid wrecked people."†

DANGERS OF FOG OR THICK WEATHER.—There is constant danger, at all seasons of the year, of fishermen, while out in the boats, losing sight of the vessels. In summer, when there is no snow, the fogs are most prevalent. To prevent accidents of this sort, so far as possible, vessels are provided with bells, horns, and guns. The common tin horn and Anderson's patent horn, in which the air is forced through a reed by a piston, are the most common horns in use. Occasionally the

* Gloucester and its Fisheries, p. 66. † Boston Herald, April 30, 1880.

old-fashioned conch-shell horn is carried, and this is considered by many experienced fishermen superior to the tin horn. Some vessels carry muskets and a few of them small cannon. The firing of cannon is so expensive and dangerous that they can only be used in an emergency, and they are not generally fired until too late to be of any assistance to the men who are astray. It is estimated that an ordinary horn can be heard in calm weather from 1 mile to 1½ miles; with an ordinary breeze it can be heard to the windward perhaps not 200 yards, to the leeward perhaps a mile; but in much of the weather in which fishermen are out hauling their trawls such a horn cannot be heard to a greater distance than one-quarter the length of one of their trawl-lines.

An objection to the Anderson piston horn is that it gets so easily out of repair that sometimes, after being used for a few hours, it is of no further service until it has been overhauled.

There are very serious objections to the use of the mouth horn. The labor of blowing this devolves upon the skipper, who remains on board the vessel, and is obliged to keep blowing from morning until night, in order that the boats may keep within a safe distance of the vessel. This continual blowing is very exhausting, so that the skipper's power to aid his men is very much diminished at the close of the day, when the sound of his horn is generally most needed. Some device by which a succession of loud blasts, at frequent intervals, can be kept up on board of the vessels, especially some horn which can be worked without the aid of the human lungs, and powerful enough to be heard a long distance, would be of the greatest importance to our fishermen, as well as to sea-faring men of all classes and nations.

Much of the danger incurred by the thickness of the fog preventing the men in the dories from seeing their vessel may be averted by the use of a compass in each dory. Although this custom has been growing in favor within the last ten years, yet probably not more than one-half of the dories belonging to Gloucester vessels are provided with this instrument, and the proportion in vessels from other ports is very much less. It seems culpable negligence on the part of the owners not to provide compasses for their crews, since the cost of an instrument sufficiently accurate to answer every purpose does not exceed $3. It is a fair question whether they should not be obliged by law to furnish such additional safeguards to prevent suffering and loss of life. It should be mentioned in this connection that where compasses are used they are in every instance furnished by the crews, and not by the owners of the vessels.* Fifty-two men were reported to have gone astray, from Gloucester vessels, in about two months, in the spring and early summer of 1883.

DANGERS FROM COLLISION.—There is danger, in foggy weather, of a dory being run down by steamers or passing vessels, though disaster can usually be avoided by cutting the trawl or anchor line. Dories are sometimes capsized by heavy seas when unloading their fish and gear alongside the vessel. The manner of setting trawls under sail is described in the chapter on the halibut fishery. This is the only method of setting trawls in the haddock winter fishery. As the vessel under sail approaches the dories to pick them up, there is a danger of the man at the wheel miscalculating the exact distance, and, striking the dory, of upsetting her. Many instances of this kind are recorded. Seine boats, with ten or twelve men on board, have been upset in this way, though loss of life has not been frequent as a result of such accidents.

DANGER OF THE UPSETTING OF SMALL BOATS WHEN UNDER SAIL.—This is a not uncommon cause of loss of life, not so much in the case of the Bank fishermen in their dories as in the shore fisheries, often carried on in sail boats by men who are reckless in their management.

* LOST IN THE FOG.—James Burke and Henry Fitzgerald, of schooner E. B. Phillips, from Le Have Bank, 14th, left their vessel at 4 p. m. New Year's day. A thick fog setting in, they were not able to regain her, and they rowed all night and the next day, when, at 6 o'clock, they were fortunate enough to get alongside schooner Tragabigzanda, where they got something to eat, and, taking a fresh start after getting rested, reached their own vessel at midnight, after having been absent thirty-six hours.—*Cape Ann Advertiser, January* 21, 1876.

DANGER FROM DRIFTING ICE.—During the latter part of winter and in early spring the halibut catchers on the Grand Bank and Banquereau are in danger of drifting ice, which may separate the dories from the vessels. In the spring of 1875 several dories got astray in this way, though they were afterwards picked up and the men were returned to their vessels or brought into port.

DANGERS OF BEING BLOWN OUT TO SEA.—The liability of fishermen, who are engaged in the shore fisheries in small boats or dories, to be blown off to sea by sudden and high winds is a danger to which this class are especially exposed. Instances of fatal results from this cause are not uncommon in most of the fishing communities, and narrow escapes from perilous positions have been frequently recorded. A mishap of this very kind is vividly described in Celia Thaxter's "Isles of Shoals":

"One of the most hideous experiences I ever heard befell a young Norwegian now living at the Shoals. He and a young companion came out from Portsmouth to set their trawl, in the winter fishing, two years ago. Before they reached the island, came a sudden squall of wind and snow, chilling and blinding. In a few moments they knew not where they were, and the wind continued to sweep them away. Presently they found themselves under the lee of White Island Head; they threw out the road-lines of their trawl, in desperate hope that they might hold the boat till the squall abated. The keepers at the light-house saw the poor fellows, but were powerless to help them. Alas! the road-lines soon broke, and the little boat was swept off again, they knew not whither. Night came down upon them, tossed on that terrible black sea; the snow ceased, the clouds flew before the deadly cold northwest wind; the thermometer sank below zero. One of the men died before morning; the other, alone with the dead man, was still driven on and on before the pitiless gale. He had no cap nor mittens; had lost both. He bailed the boat incessantly, for the sea broke over him the livelong time. He told me the story himself. He looked down at the awful face of his dead friend and thought 'how soon he should be like him'; but still he never ceased bailing—it was all he could do. Before night he passed Cape Cod and knew it as he rushed by. Another unspeakably awful night, and the gale abated no whit. Next morning he was almost gone from cold, fatigue, and hunger. His eyes were so swollen he could hardly see; but afar off, shining whiter than silver in the sun, the sails of a large schooner appeared at the edge of the fearful wilderness. He managed to hoist a bit of old canvas on an oar. He was then not far from Holmes' Hole, nearly two hundred miles from the Shoals! The schooner saw it and bore down for him, but the sea was running so high that he expected to be swamped every instant. As she swept past, they threw from the deck a rope with a loop at the end, tied with a bow-line knot that would not slip. It caught him over the head, and, clutching it at his throat with both hands, in an instant he found himself in the sea among the ice-cold, furious waves, drawn towards the vessel with all the strength of her crew. Just before he emerged he heard the captain shout, 'We've lost him!' Ah, the bitter moment! For a horrible fear struck through him that they might lose their hold an instant on the rope, and then he knew it would be all over. But they saved him. The boat, with the dead man in it all alone, went tossing, heaven knows where."

An early accident of this kind is recorded by a chronicler of colonial history:

"In January, 1641, a shallop, with eight men, would go from Piscataqua (though advised to the contrary), on the Lord's day, towards Pemaquid, but were by the northwest wind driven to sea for fourteen days; at length they reached Monhegin, and four of them in this time perished with the cold."

DANGER FROM DROWNING.—In considering the various dangers to which the fishermen are exposed by the upsetting of boats and by being thrown overboard, it is well to remember that the men have little chance of saving themselves by swimming, however expert they may be.

Overloaded, as they are, with thick clothing, rendered doubly heavy by saturation, they have comparatively very little use of their limbs, and, besides, the water is so cold that their muscles would soon become paralyzed. The majority of New England fishermen are completely ignorant of the art of swimming; in fact, the ability to swim is not considered by them to be of any special importance, as it scarcely increases their chances for safety. In talking with fishermen upon the subject they will refer to instances which have fallen under their observation of two men in a boat, one of whom could swim and the other could not. The former, trusting to his skill when the boat was capsized, attempted to swim to a place of safety and was drowned, while the other, clinging to the boat, was rescued unharmed.

PRECAUTIONS, ACTUAL OR POSSIBLE, FOR THE SAFETY OF LIFE.—Strange to say, there are rarely any provisions on our fishing fleet for the succor of those who are overturned into the water. If fishing vessels, like merchant and other vessels, could be compelled by law to carry life-buoys or preservers, many lives might yearly be saved. This law might be enforced much in the same way as has already been suggested for the provision of life-ropes and catables upon the fishing dories. A small outlay by the owners of the fishing vessels to provide such simple safety apparatus as would be needed by a vessel and its crew of twelve or fifteen men, would yield results of immense importance in the way of preserving valuable lives.

DANGERS OF SALMON-FISHING IN THE COLUMBIA RIVER.—As the salmon have become less abundant up the river, the men go farther down, and now the best fishing is found near the bar at the river's mouth, where the breakers are very dangerous, especially in the spring.

Many of the fishermen are drunk or asleep in the bottom of the boat when it nears the bar, and hence lose their lives. Often, too, sober and skillful men take dangerous risks for the sake of a good catch. Sometimes miscalculations as to wind and tide result in the boats being driven into the breakers, where they are swamped at once.

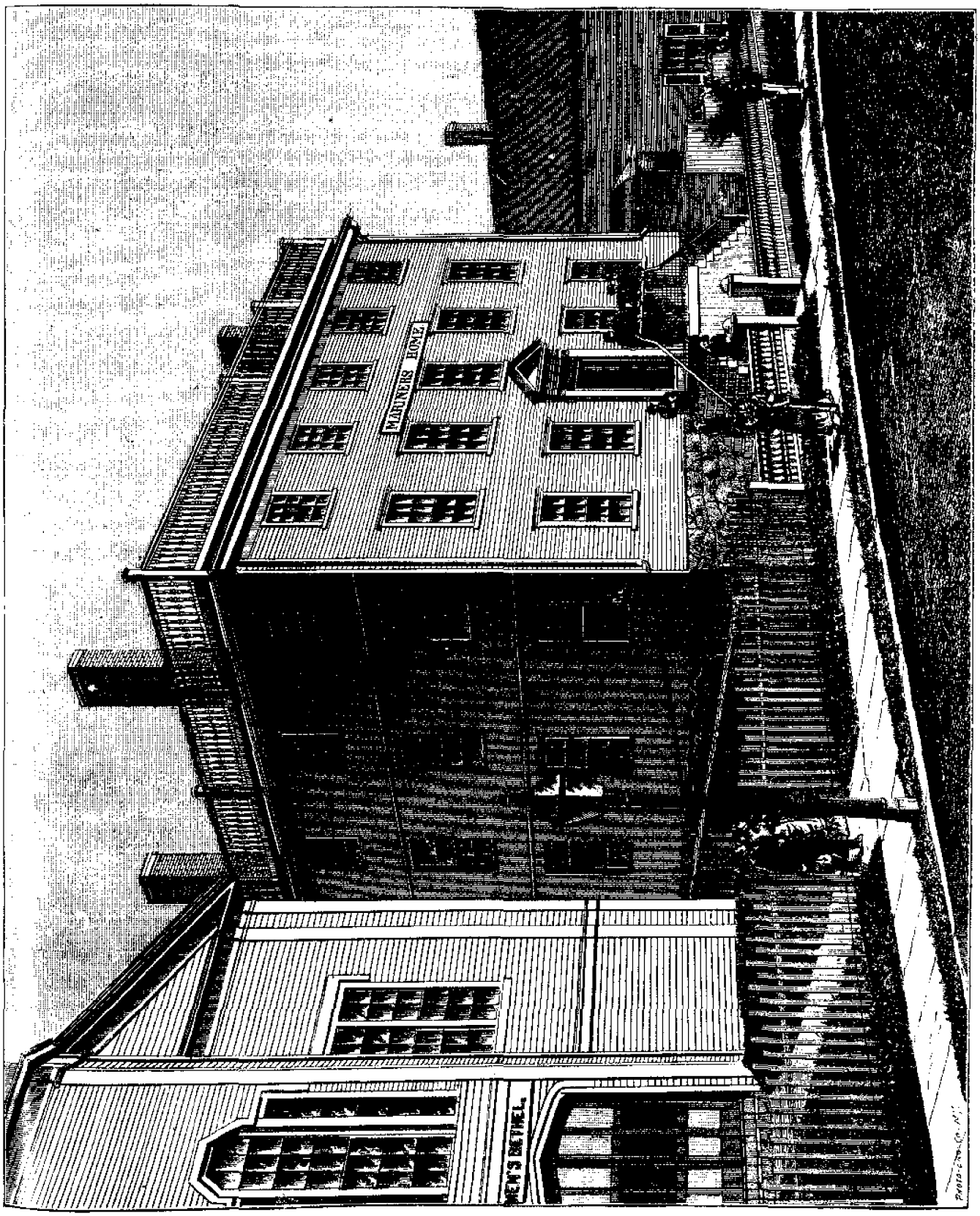
In stormy weather, for various reasons, some men are drowned almost every night. In 1879 about forty men were drowned, and more than that number in April and May of 1880. Little outside notice is taken of these accidents. Most of the fishermen are foreigners, without family or friends, and, unless their bodies are taken in gill-nets, when drowned they drift out to sea and the boat is reported as missing.

DANGERS TO WHALEMEN AND SEALERS.—The whaleboats sent out from the vessels to kill and secure the whales are often struck by the whale's flukes, and many whalemen have lost their lives at such times. Sometimes the men are caught by a foul line and being carried overboard are drowned. Men engaged in the fur-seal and sea-elephant fisheries have lost their lives by the capsizing of the boats while making a landing on the rocky shores of the seal islands. In the description of the whale and seal fisheries, in another section of this report, numerous instances of these and other dangers to whalemen and sealers are more fully discussed.

51. PROVISION FOR THE BEREAVED FAMILIES OF FISHERMEN.

The nature and extent of the disasters to which our fishermen are constantly exposed having been considered, it is of interest to know what systematic efforts are made for the relief of their families when, as is usually the case, they are left without adequate means of support.

Private benevolence and the organized charity of the different religious denominations have been found sufficient for the needs in this respect of many of the smaller fishing communities. In the larger ports private charity is very extensively practiced, notwithstanding the existence of various charitable organizations.



Seamen's Bethel and Mariner's Home at New Bedford, Mass.

From a photograph by U. S. Fish Commission.

In Gloucester, subscription lists are often circulated, musical and literary entertainments are given, and benefit balls are organized by the friends of impoverished families.*

On the occasion of extensive disasters, such as occurred in 1862 and 1879, large subscriptions have been made both in Gloucester and in other cities. The contributions through various sources for the relief of sufferers at Gloucester after the great losses of February, 1879, amounted to about $30,000.

Many fishermen belong to such organizations as the Masonic fraternity, the Odd-Fellows, and the Knights of Pythias; and in some communities the systems of assurance and mutual help thus provided are called into much activity. A large percentage of the native-born fishermen are probably Freemasons. In Gloucester there are two lodges of Freemasons, and in Provincetown, at Boothbay, Me., and at other ports on the coast of Maine this organization is large and influential.

There is no doubt that if the town records of the early days were searched many instances might be found of especial provisions for individual cases like that in the law here quoted, which, though not directly to the point, illustrates the usage of the colonies in the seventeenth century:

"Att the Generall Court of his Matie held att Plymouth, on the 4th of October, 1675.

"This court, being informed of the low condition of Apthya, the relict of John Knowles, of Eastham, whoe was lately slayne in the collonies seruice, towards the releiffe and support of the said widdow and her children, haue ordered to receiue ten pounds out of the proffitts of the fishing att Cape Codd, wherof fiue pounds to be payed to her this yeer, and the other fiue the next yeer."†

One of the earliest instances of public aid to fishermen's families, of which record has been found, was in 1771, when the provincial government of Massachusetts placed in the hands of a committee the sum of £118 for distribution among the families left destitute by the destruction of twenty-nine vessels in a storm on the Grand Bank.

Charitable societies have been organized at various times and places. Such was the Marine Society of Newburyport, which had, in 1861, funds to the amount of $26,000, mostly the contributions and legacies of sea captains. Among its beneficiaries at that time were said to be some of the most respectable people of Newburyport, superannuated seamen, widows, and children. The fishing interests of this town have of late declined to such an extent that there is no need of such a society except to continue its past benefactions.

Wellfleet, in its days of importance as a fishing port, supported a charitable organization called "Wellfleet Marine Benevolent Society." In 1861 this society had a reserve fund of $3,000.‡

At Portland, Me., there are no organizations to provide for the fishermen's widows and orphans, but the masters of merchant vessels are cared for by the Marine Charitable Society. The comparatively rare cases of destitution among fishermen here, as in many other fishing ports, are provided for by the town poor laws.

In some of the largest fishing ports, such as Gloucester, where the frequent recurrence of disasters is so extensive as to be practically beyond the reach of individual or extemporaneous efforts for relief, charitable societies have been organized, but we cannot learn that any are now particularly active outside of Gloucester.

---

* A MERITORIOUS ACT.—Capt. Ezekiel Call, who was lost in the schooner William Murray during the severe gale of April 2, 1871, left a widow and five small children. Soon after his loss she was presented with a house-lot at Riverdale, and her relatives and friends signified their intention of building a house thereon and making her a present of it. The money for the lumber was raised by subscription, the cellar dug and stoned by willing hands; then followed the carpentry work, painting, &c., all done by volunteers. The house was ready for occupancy in the spring of 1873, and the thanks of the widow and the fatherless will descend as a benediction upon the hearts of those who assisted in its erection either by money or labor.—*Cape Ann Advertiser*, 1873.

†Plymouth Colony Records, Vol. V, 1668–1678, p. 177.

‡Provincetown Advocate, Jan. 25, 1871.—"A notice of the annual meeting in the Methodist church Jan. 17."

The most important and most efficient of these is the Gloucester Fishermen's and Seamen's Widows and Orphans Aid Society. This was first organized in March, 1862, as the Widows and Orphans Fund Society, and since that date the yearly collections have been as follows: 1862, $18,544; 1863, $155; 1864, $7,500; 1865, $4,601; 1866, $4,913; 1867, $3,546; 1868, $4,556; 1869, $4,897; 1870, $4,420; 1871, $4,020; 1872, $4,220; 1873, $5,485; 1874, $5,192; 1875, $5,120; 1876, $4,605; 1877, $4,860; 1878, $3,252; 1879, $18,559; 1880, $3,550; 1881, $3,900. Total receipts to 1881, $115,895. Funds held by the society (invested) at close of season, 1881, $20,500. Total expenditure in nineteen years, $95,395.

In 1862 the money was raised by public subscription. The terrible gales in January and February of that year resulted in a loss to Gloucester of twenty vessels and one hundred and forty men, leaving seventy-five widows and one hundred and sixty fatherless children needing aid. A meeting of the citizens was held in the Town Hall and a committee appointed to distribute circulars stating the facts and calling for subscriptions. In response to this call money was received from various parts of the country, a generous citizen of Salem contributing $500; in other cities and towns upwards of $10,000 was raised; and the people of Gloucester contributed more than $5,000. About $8,000 of the receipts of the society that year were disbursed for the immediate relief of sufferers, and the balance held as a fund for future needs.

The following year, 1863, efforts were made to induce fishermen to join the society, and certificates were issued at $1 each which entitled their families to receive benefit in case the one paying for the certificate should be lost. Owing to the superstitious of the fishermen this plan was not very successful, only about one hundred and fifty of them being induced to buy the certificates. In March, 1865, the society was reorganized under its present name, and established on a permanent basis. An attempt was made at this time to induce the fishermen to become life members by the payment of $10 each, but this plan met with no greater favor than selling certificates.

The most successful plan for raising money, and the one still in force, was first attempted in 1864. By this method an assessment of ½ of 1 per cent. is made on the earnings of the fishermen. This amount is deducted from the fisherman's share at the settling up of each trip, and the total collections of the season are handed over to the society by the fishing firms at the end of each year. Additional amounts are received from private contributions. The large collections of 1879 were very largely from outside sources. Several other aid societies were organized in that year, and their total collections reached nearly $30,000. From $5,000 to $6,000 are now annually disbursed by the Widows and Orphans Aid Society, a widow with three or four children receiving $50, and smaller families about $30. Besides allowances of money, clothing and fuel to the amount of $75 to $125 per family are distributed. The number of families receiving aid in 1874 was 120; in 1875, 135; in 1876, 136; in 1877, 157; in 1878, 134; in 1879, 208; in 1880, 193.

The financial report of this society for 1879 shows contributions from abroad amounting to $14,353.83; by legacy, $437.25; from fishing firms and other Gloucester subscribers for 1879, $2,705.07; from interest, back subscriptions, and other sources, $2,397.78; total receipts, $19,893.93. The amount paid out in cash allowances was $5,351.53; for fuel, $1,082.35; for clothing and shoes, $378.41; provisions, $664.79; aid to Rockport families, $325; paid balance due treasurer, $965.80; expenses, $310.77; invested, $9,000; cash on hand, $1,815.28; total, $19,893.93. The number of families assisted was 208, of which number 109 were added during the year. There were 22 packages of clothing received and 860 garments distributed during the year.

The annual report for 1880 shows receipts—from a friend, $500; from fishing firms for 1880, $1,771.85; from back subscriptions, interest and other sources, $4,675.96; total receipts, including cash on hand ($1,815.28) at beginning of year, $8,763.09. The disbursements were—in allowances

of cash, $5,623.09; in fuel, $1,165.24; provisions, $213.06; clothing and shoes, $258.12; amount loaned, $500; paid for books, printing, &c., $17.42; for treasurer and collector, $250; cash on hand, $736.16. The number of families receiving assistance during the year was 193, and the number taken off the list during the year was 38.

Gloucester has three other charitable societies, one of which, the Tenement Association for Widows and Orphans, was organized in 1871. Its object is "to furnish, at moderate rate, homes for the widows of our lost fishermen." It has erected, at a cost of $7,500, a building containing ten tenements. This is a neat structure in the western part of the city, on "The Meadows." It was, unfortunately, not built in a sufficiently central location and has not fully served the purpose for which it was intended. The poor women are obliged to work for their living and this tenement is too remote from the busy part of the town.

The Gloucester Female Charitable Association was organized in 1834, for the purpose of assisting the poor. Its funds are derived from annual memberships and donations. In 1875 it aided 126 families, most of which were those of fishermen. The financial report of this society for the year 1879 shows receipts from contributions, $4,182.02; from assessments, interest, &c., $254.50; cash on hand at beginning of year, $36.27; total, $4,472.79. The disbursements for the same year were as follows: For groceries, $601.05; for dry goods, $307.53; for shoes, $541.50; for fuel, stoves, meat, milk, &c., $499.03; invested, $2,500; cash on hand, $23.68; total, $4,472.79. The number of garments distributed for the year was 1,145.

The Gloucester Relief Association was organized in 1877 for the relief of the deserving poor of that city. It had no accumulated fund, but depended upon voluntary contributions of the benevolent to meet the pressing demands constantly made upon its charity. It has no salaried officers. After the disastrous gale of February 20, 1879, the association made an appeal to its earlier beneficiaries and to the charitable public for the relief of the 53 widows and 149 children thus left dependent upon charity. The appeal was nobly responded to, the amount collected being $6,846.04. Of this amount $6,496.37 was distributed to the needy, and the balance in the treasurer's hands in March, 1881, was $349.67. Besides the contributions of money, the association received large quantities of clothing and provisions, which were given to the families of the fishermen. It is intended to make the association a permanent one, as there is constant need of its kindly services.

Apart from the organized charitable associations, much good work is done at Gloucester in a more private way. What is known as the Cape Ann Advertiser Fund was contributed by subscribers of that paper for the relief of sufferers by the gales of February and March, 1879. This fund amounted to $671.59 and was the means of doing much good. At the same period the Boston Theater Company sent a generous donation of money to Gloucester, which was disbursed by the mayor, assisted by citizens. Collections have been taken in Gloucester churches from time to time for the relief of suffering families of lost fishermen, and donations are frequently received by Gloucester ministers from benevolent persons in other places.

E.—MANAGEMENT OF THE VESSELS.

By JOSEPH W. COLLINS.

52. EVOLUTIONS OF THE FISHING SCHOONER.*

There are numerous evolutions to be performed in conforming the movements of the vessel to the changes of the wind; also, in changing her course, and in making those maneuvers incidental to fishing which are peculiar to the New England fishermen, whose methods of seamanship are in many respects very different from those elsewhere in use.

These evolutions may be discussed under the following heads: (1) tacking, or coming about; (2) jibing, or wearing; (3) boxhauling, or hauling around; (4) shooting to; (5) heaving to, or lying to; (6) bringing a vessel to an anchor; (7) bringing a vessel to a drag; (8) getting under way; (9) breaking out anchor under sail; (10) shooting alongside of a seine-boat; (11) shooting alongside of a dory; (12) shooting alongside of a wharf; (13) lee-bowing another vessel; (14) running a vessel upon a lee shore; (15) jumping a vessel off a ledge on a lee shore.

TACKING, OR COMING ABOUT.

The act of tacking a fishing vessel is precisely the same as with any other fore and aft rigged vessel. This is done by putting down the helm and making fast the jib-sheet to leeward, so that, as the vessel comes to the wind, the jib will take aback and cause her to fall off in the opposite direction. To tack an ordinary fishing schooner takes from forty to eighty seconds, the time varying with the strength of the wind, the force of the waves, and the peculiarities of the vessel. The only danger in this evolution is that of "missing stays" when the vessel is in a dangerous place on a lee shore or in a narrow channel. Fishing vessels very rarely miss stays. The orders for tacking are: (i) *Stand by for stays;* (ii) *Tend the jibs* (this means to put the "tail-rope" on the jib-sheets, and if the vessel carries a flying-jib, to slacken the lee sheet and stand by to trim down on the other sheet as the vessel comes around); and (iii) *Let her come round;* to which the man at the wheel answers: *Hard-a-lee*, as he puts his helm down.

JIBING, OR WEARING.

This evolution on a fishing schooner is the same in principle, as on other sailing vessels. It is precisely the opposite of tacking, the direction of the vessel being changed while running before the wind, so that the stern rather than the bow crosses its direction. With a moderate wind the act of jibing occupies but a few seconds, but when the wind is strong and the sheets must be hauled in and gradually slackened out on the opposite side, it may take from ten to twenty minutes. The orders for jibing are as follows: (*a*) *With light winds*, (i) *Put the wheel up and let her jibe over* (to the man at the wheel). As the direction of the vessel is changed the wind catches the sails aback, and of their own accord they pass over to the other side of the vessel.† The flying-jib sheets are properly adjusted in obedience to the order, (ii) *Draw away the flying-jib.* (*b*) *With stronger winds.* When running before the wind with a fresh breeze a schooner usually has a boom-

* This chapter, as well as that which follows, might very properly be included in the description of the fishing schooner, but as it illustrates the duties of the fishermen under certain conditions, we have thought it proper to publish it in this place.

† This is called "jibing all standing," or "North River jibe," and is common on the Hudson River.

tackle, which is attached to the main boom and hauled taut to prevent the boom from swinging in when the vessel lurches in a sea. The orders are, (i) *Call all hands to jibe the mainsail.* This order is given to one man, who calls to the men in the forecastle, *Stand by to jibe the mainsail; all hands on deck.* The skipper usually repeats the same order to the men in the cabin. (ii) *Unhook the boom-tackle.* When necessary to jibe in this manner the vessel is usually running winged out, with the foresail on the opposite side to the mainsail; but if not, it may be necessary to haul aft on the fore-sheet and jibe it over before the mainsail is jibed. In this case the order is, (iii) *Gather aft on your fore-sheet and jibe the foresail.* After the foresail is jibed over, and the boom-tackle has been unhooked, the order is, (iv) *Haul aft the main sheet.* When the main sheet is sufficiently flat, the order is given, (v) *Take a turn with your main-sheet,* and a round turn is taken on the cavil. The next order is to the man at the wheel, (vi) *Put up your wheel and let her come over.* The vessel having changed her course, and the wind catching on the opposite side of the sail, the next order is, (vii) *Slack off the main sheet and hook on the boom-tackle.* The boom-tackle is now hooked on and hauled taut; the lee flying-jib-sheet is then hauled taut in obedience to the order, (viii) *Draw away your jibs,* and the vessel pursues her way upon a new course. When the vessel has been sailing wing and wing it is not usually necessary to jibe the foresail, that being already on the proper side; but when it is necessary, after jibing the mainsail, to wing the foresail out on the other side, this is generally done in obedience to the orders, (i) *Wing out the foresail on the other side.* When the foresail is winged out, the fore-boom is usually held in position by a guy, which answers the same purpose as the boom-tackle on the main boom. One end of the guy is fastened to the end of the boom, and the other taken to the bow of the vessel. The next order is, (ii) *Slack up the fore-boom guy and haul aft the fore-sheet.* The helmsman is cautioned by the order, (iii) *Be careful how you steer, and don't let her come over too quick.* When the fore-sheet is sufficiently flat, the next order is, (iv) *Take a turn with your sheet;* and the helmsman is then directed to, (v) *Let it come over.* As the sail catches full on the opposite side, the order is, (vi) *Slack away on the fore-sheet and haul taut the fore-boom guy.*

There is considerable danger attendant upon jibing when there is a fresh breeze, and booms are sometimes broken or even the masts are carried away. For this reason it is quite common for vessels to tack when the breeze is fresh instead of "wearing round," although it is necessary in this case to make nearly an entire circle and thus take much more time for the evolution. In order to avoid accidents when jibing, it is customary for some to slacken down the peaks of the foresail or mainsail, or both, so that less strain will be brought to bear on the ends of the booms and on the mastheads. This, however, involves the danger of "goosewinging" the sails.

BOXHAULING OR "HAULING ROUND."

This evolution differs entirely from that performed by a square-rigged vessel and called by the same name. It is generally done on a fishing vessel after she has been lying to under a foresail and mainsail, in order to get her upon the opposite tack without the necessity of setting more sail and gathering headway. In order to understand this evolution it may be stated that when a vessel is lying to in this manner, the main boom is guyed out broad over her quarter by the boom-tackle, and the fore-sheet is eased off slack, so that the sail holds no wind, and the wheel is hard down. The vessel is governed by her mainsail and the action of the helm, lying with her head within four or five points of the direction of the wind and drifting to leeward. When it is necessary to boxhaul, the order is given, (i) *Haul aft the fore-sheet.* This is pulled in sufficiently, when the order is, (ii) *Make fast fore-sheet, unhook the boom-tackle, and haul round.* The main sheet is now hauled aft rapidly, the helm being still kept down, and as the vessel comes nearly head to

the wind the order is, (iii) *Stand by to hoist the jib.* When the vessel is head to the wind the order is, (iv) *Hoist away on the jib.* At the same time it is customary to also give another order, (v) *Hook on the crutch-tackle and haul over on the main boom.* As the jib is hoisted up, the sheet being made fast on the proper side, that is, the side which was to leeward, it catches aback and the vessel's bow is swung off from the wind. The next order, as her sails get full, is, (vi) *Draw away the jib.* Under some circumstances the vessel may gather stern-way while this evolution is being performed, in which case it is necessary to give the order, (vii) *Shift the wheel.*

SHOOTING TO.

This evolution is peculiar to fore and aft rigged vessels, perhaps especially to fishing vessels. It is performed for a variety of purposes, such as sounding, speaking a vessel, or at any other time when it is desirable to deaden the headway without hauling down the sails or heaving to. To shoot a schooner to, it is only necessary, when sailing by the wind, to put the wheel part way down, and as she comes head to wind to keep her in that position by the management of the helm until her headway is stopped. One who is skillful in managing a vessel in this manner may be able to sound even in more than 100 fathoms of water with little trouble and loss of time, much less than would be taken if the vessel were hove to.

When speaking another vessel it is customary to pass by her stern and shoot to alongside of her. In this way the captains are enabled to converse, under ordinary circumstances, for a number of minutes. There are other purposes for which this evolution is performed. These will be considered below.

HEAVING TO, OR LYING TO.

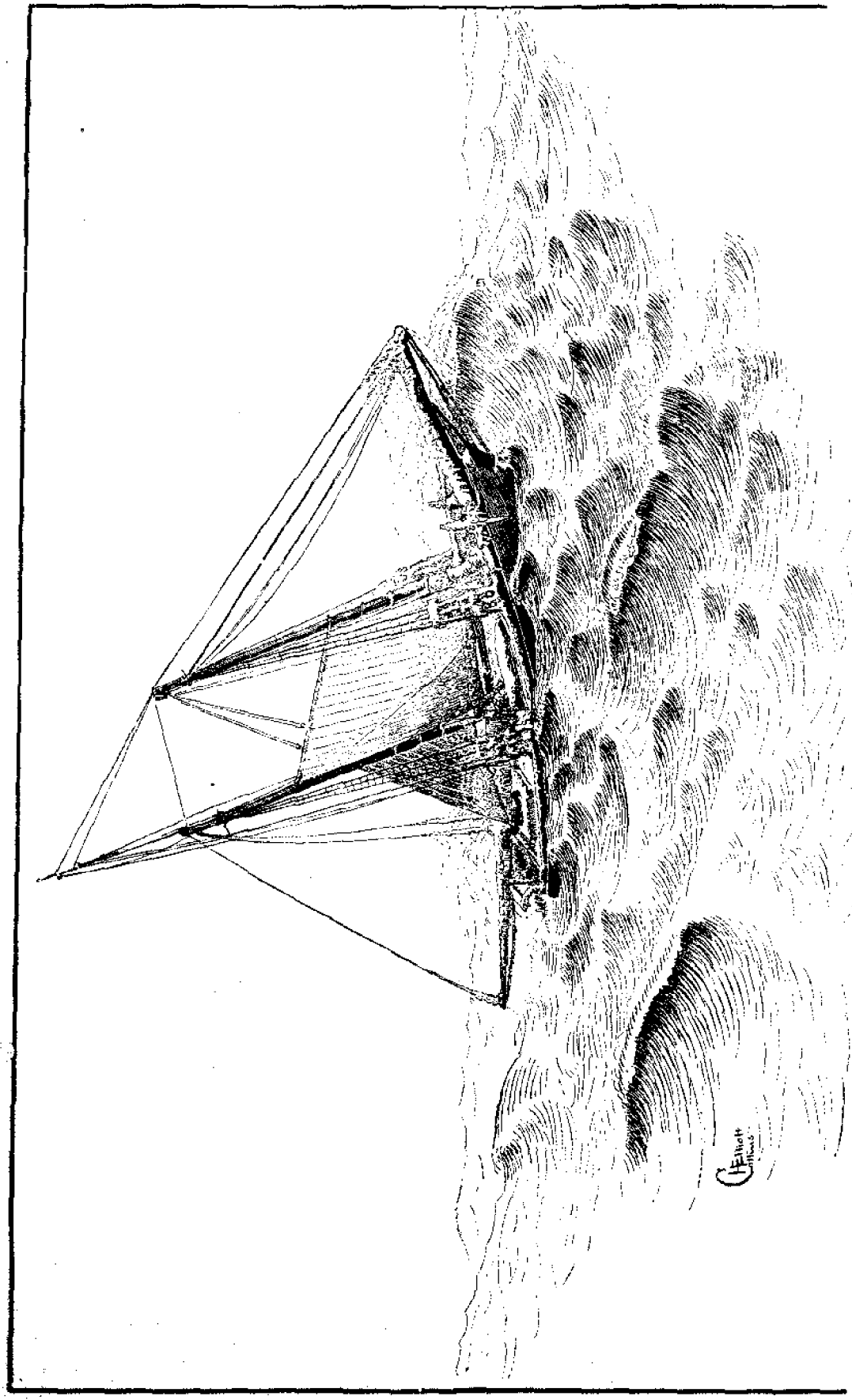
This evolution may be performed in several ways:

(*a*) *Heaving to with jib to windward.* (*b*) *Heaving to under two sails.* (*c*) *Heaving to under foresail.* (*d*) *Heaving to under mainsail.*

A vessel may be "hove to" under various circumstances, either for a temporary purpose, such as taking a boat on board, or picking up anything which has dropped overboard. Again, on the fishing ground, when sounding, while making observations upon the fish, or waiting for their appearance, or when waiting for the small boats which are setting trawls or otherwise engaged; or, again, in a storm, when it is not safe to be under other sail. Vessels frequently lie to on the fishing grounds at night in order to keep their position, and in the day-time to catch fish.

LYING TO WITH A JIB TO WINDWARD.—This is accomplished by fastening the jib-sheet on the weather side and putting the wheel down, the fore-sheet being sometimes slackened off and at other times trimmed in its proper place. This is a favorite method with the mackerel seiners during the day, when they are watching for the appearance of fish, and also for the vessels engaged in the haddock fishery, while on the fishing grounds. A vessel lying to under this sail can be filled away and managed with little delay and by a few persons.

HEAVING TO UNDER TWO SAILS.—The method of heaving to with mainsail and foresail was the favorite one with mackerel catchers when that fishery was prosecuted with hook and line, and is also practiced to some extent by other vessels. To heave to in this manner it is simply necessary to guy out the main boom, haul down the jibs, and ease off the foresheet, at the same time putting the helm down. The orders are given as follows: (i) *Stand by to heave to.* (ii) *Ease off the main-sheet; hook on the boom-tackle and haul it taut.* (iii) *Haul down the jibs.* (iv) *Ease off the fore-sheet;* and (v) *Let her come to.* In obedience to the last order the wheel is put down so that the vessel comes up to the wind. As the vessel comes to the wind her mainsail catches aback and her



Fishing schooner lying-to in a gale on the Banks, under riding sail and double-reefed foresail

Drawing by H. W. Elliott and Capt. J. W. Collins.

headway is deadened; she soon stops, and makes a square drift at right angles with the direction in which she heads. A vessel is also very often hove to in this manner when sounding or fishing for cod on the Banks and elsewhere.

HEAVING TO UNDER FORESAIL.—A vessel is "hove to" under a foresail either to hold her position on the fishing grounds in the night, as is the custom with the mackerel catchers, or during a heavy storm or gale, when it is not practicable to have mainsail and jib set. In the latter case, however, the foresail is always reefed, the other sails are taken in and furled, the foresheet trimmed aft, and the wheel put down. Sometimes a riding sail is set on the mainmast to keep the vessel steady and closer to the wind than she would be under reefed foresail alone. The vessel in this way heads within about five points of the wind and goes ahead slowly. The leeway is usually from three to six points—that is, the course is from three to six points to leeward of where she heads, the amount of leeway depending somewhat on the force of the wind and waves.

HEAVING TO UNDER MAINSAIL.—Heaving to under a mainsail is an evolution which is less common than formerly. This method was practiced almost exclusively by the mackerel catchers when engaged in hook-and-line fishing and was usually done to give the vessel a steadier and square drift. It is done in the same manner as heaving to under two sails, with the exception that the foresail is lowered and furled.

BRINGING A VESSEL TO ANCHOR.

ON THE BANKS.—If the vessel is under bank sail (for description of this sail see under "Schooner rig") it is customary to haul down the jib and to ascertain the depth of water by sounding. If the proper depth is obtained the orders are given, (i) *Let go the anchor;* (ii) *Pay away* (*or "stick out"*) *the cable;* while this is being done by part of the crew the next order is (iii) *Furl the jib.* The foresail is usually kept up until the anchor reaches the bottom and occasionally for a few minutes later. The order is then given, (iv) *Lower away* (*or haul down*) *the foresail.* The foresail is then furled (being sometimes first reefed). When it is thought that sufficient cable has been paid out to enable the anchor to catch the bottom the order is given, (v) *Weather-bit the cable.** As soon as the anchor catches the bottom the vessel fetches up and swings head to the wind; the order is then given, (vi) *Strad her up.*†

The method of anchoring on the Banks is much the same in rough weather, the only difference being that sometimes the foresail is taken in sooner. While it is quite a common occurrence to bring a vessel to anchor in moderate weather with mainsail up, this is rarely undertaken with strong winds and a rough sea. When this is done, however, the vessel is hove to under two sails before the anchor is let go, and while the cable is being slacked away, or "paid out," the foresail is lowered and furled, and the jib is also furled. When it is supposed that there is sufficient cable out for the vessel to fetch up, the order is given, (i) *Stand by to take aft the main sheet.* As the vessel swings head to the wind the boom-tackle is slackened and the sheet is pulled in until the main boom is directly amidships or parallel with the direction of the vessel. The crutch-tackles from each side of the stern are then "hooked on" to steady the boom, which is lowered into a crutch and the tackles are hauled taut. The mainsail is then usually lowered away and furled,

* Weather-bitting the cable is to take an extra turn with it round the end of the windlass and over the windlass-bit, so that it can be held firmly from slipping or "rendering" when the vessel fetches up, and consequently brings a heavy strain on the cable.

† "Stradding the cable up," is winding round it a number of braided ropes called strads, each from 9 to 12 feet long. These are pointed at the ends, and one after another is put on until several fathoms of the cable have been covered, so that the lower part of that which has been stradded will reach nearly to the water, while the upper part is some distance inside of the hawse-pipe. This is done to prevent the cables from chafing in the hawse-pipe or about the stem.

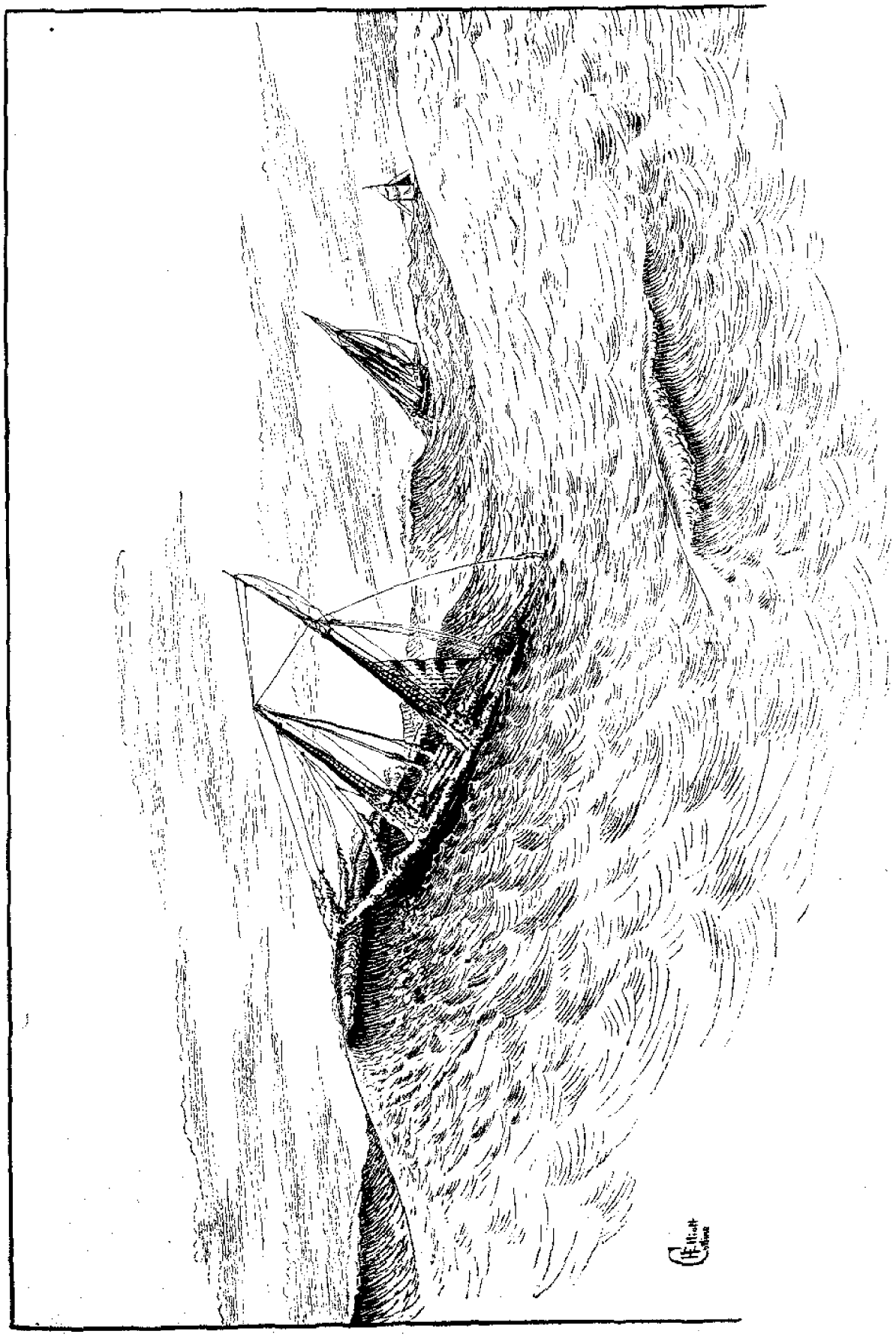
except in special cases, when it may be temporarily kept up. Occasionally, when anchoring in this way, it may be desirable to lower the mainsail before the foresail is taken in.

ANCHORING IN HARBOR IN SHOAL WATER.—To bring a fishing schooner to anchor in a harbor, if there is sufficient room, the jib or jibs are first lowered and the helm put down so that the vessel shoots dead in the wind until her headway ceases. When she has stopped and begins to gather sternway the anchor is let go. There are, however, quite a number of ways of doing this, dependent altogether upon surrounding circumstances. If running into a harbor with a fair wind where there is a large fleet at anchor, there may not be room enough to handle a vessel in the manner just described. The after sails are then first taken in and furled, and last of all the jib is lowered. The anchor is let go "under foot" while the vessel is still forging ahead. Sometimes all the sails but the mainsail are hauled down; at other times all but the foresail. Indeed, the management of the sails varies with the occasion, and therefore no definite rule can be laid down.

BRINGING A VESSEL TO A DRAG.

The act of bringing a fishing vessel to a drag is necessary only in the most furious gales. As a general thing, when this is done, the vessel is lying to under a close-reefed foresail, with, occasionally, also a reefed riding-sail set on the mainmast. On fishing vessels it is customary to attach the drag, whatever it may be, to the riding anchor on the port side, and for this reason, the vessel, if she is lying to on the starboard tack, is worn around so that she will be on the port tack before the drag is put out. Sometimes the seas are so dangerous that it is impracticable to wear around, and in such a case the starboard tack must be used instead. The simplest form of using a drag on a fishing vessel, when drifting in deep water, where there is no probability of the anchor taking bottom, is only to throw out the anchor and pay out from one to two hundred fathoms of cable. The foresail is then taken in and furled, and the reefed riding-sail, or perhaps the peak of the "balance-reefed mainsail," is set, in order to keep the vessel steady in the sea and close to the wind. The necessity of frequently heaving the vessel to a drag in the extremely violent gales which the fishermen encounter has led to the substitution of several devices much more effective than a simple anchor in offering a resistance to the water and keeping the vessel's head near the wind. One method is to sling one or more casks or barrels, and to attach them to the anchor. The casks have holes in them so that they are soon filled with water and they then offer considerable resistance to the drifting craft and assist materially in keeping the vessel in proper position. Planks and spars have been used for the same purpose, being slung at the ends or in the middle. Some special appliances have also been made, constructed of plank, canvas, and iron. The last mentioned are commonly made fast to the anchor and cable, which are paid out in the manner described. It is probable that with a suitably devised apparatus much better results could be obtained by simply attaching it to a hawser, without any anchor.

The practice of carrying drags or floating anchors is, unfortunately, too much neglected on our fishing vessels. The object of this form of apparatus is to prevent foundering of sea-going vessels when lying to in heavy gales, especially when sails have been blown away, or when from other causes a vessel has become unmanageable, or is lying in a dangerous position. Unless a vessel is provided in such an emergency with some sort of a drag to be put out at the bow, so as to prevent her from falling into the trough of the sea, she is liable to meet with serious disaster, amounting in many cases to an entire loss of the ship and crew. It is believed by many whose experience renders them capable of judging correctly that a large percentage of the loss by foundering which occurs to the fishing fleet of New England might be obviated by the use of properly constructed drags. As is well known, heretofore seamen have generally been compelled in such



Fishing schooner at anchor in winter on the Grand Banks, riding out a gale.

Drawing by H. W. Elliott and Capt. J. W. Collins.

emergencies to rely on some sort of floating anchor improvised from spare material on shipboard, such as spars, casks, &c., the rigging of which is generally attended with much danger and delay, at a time, too, when the utmost dispatch is desirable, if not imperative. And when completed these rudely constructed affairs are rarely, if ever, found to answer well the purpose for which they were designed, shipwreck and loss of life often being the result of their faulty construction. Unfortunately, too, there is created a prejudice in the seaman's mind against using such contrivances, and unless provided with apparatus specially designed for this purpose he must take the fearful alternative of chance to insure his safe return to port.

To obviate these difficulties various improved forms of drags or floating anchors have been designed, some of which are acknowledged to be meritorious; but it is a somewhat remarkable fact, in view of the serious losses which have occurred to the fishing fleet, that almost none of the vessels are provided with even the simplest form of sea anchor, which, used in conjunction with a small amount of oil, might often prevent serious disaster.

GETTING UNDER WAY.

The usual method of getting under way in a harbor is: (i) to hoist the mainsail; (ii) to hoist the foresail (sometimes the main gaff-topsail is set at the same time); (iii) to heave up the anchor; (iv) (as the anchor breaks ground) to hoist the jib or jibs, and fill away, although the head-sails are not always hoisted until the anchor is up to the bow; (v) the anchor is catted and taken on the bow; (vi) the staysail or other light sails that may be required are set.

There are several other methods of getting under way in a harbor, dependent wholly on circumstances, such as first heaving up the anchor and filling away under the jib, and afterward hoisting the other sails; getting under way under reefed sails, and also under the mainsail and jib or jibs.

In getting under way on the Banks the anchor is first heaved up and taken on the bow; the foresail is then loosened and hoisted, and after that the jib. The vessel is then under "bank-sail," since she also has a riding-sail up, and, unless she is about to go a considerable distance, no other sail is set, except, perhaps, the flying-jib or staysail. If, however, it is necessary to set the mainsail, the riding-sail is first hauled down and the mainsail hoisted in its stead. If the winds are light and the vessel going a long distance, a main gaff-topsail is also usually set.

BREAKING OUT ANCHOR UNDER SAIL.

This evolution is rarely performed, except under some sudden emergency when it is not practicable to weigh the anchor. Fishermen, while out in their dories hauling trawls, are sometimes caught to leeward in a squall, or the wind may be blowing too hard to allow them to reach their vessel. At such a time, to prevent the loss of the cable and anchor, and to rescue the men, the foresail and jib are hoisted, and an endeavor made to break the anchor clear of the bottom. By this means the vessel may be brought far enough to leeward for the men in the dory to get on board. There are a few instances on record where this has been successfully accomplished, and the lives of several men have thus been saved.

It is a very common occurrence for the halibut vessels, when lying in deep water, to heave short on their cable and then to hoist the sails and break the anchor out in that manner. They then tow it along to another position on the edge of the bank instead of heaving it up to the bow, which would take several hours. At other times they heave in the cable until the anchor is broken out from the bottom, and, setting sail in the same manner, it is towed along, sometimes for a distance of seven or eight miles.

We give the following as an instance of breaking out an anchor under sail in order to rescue

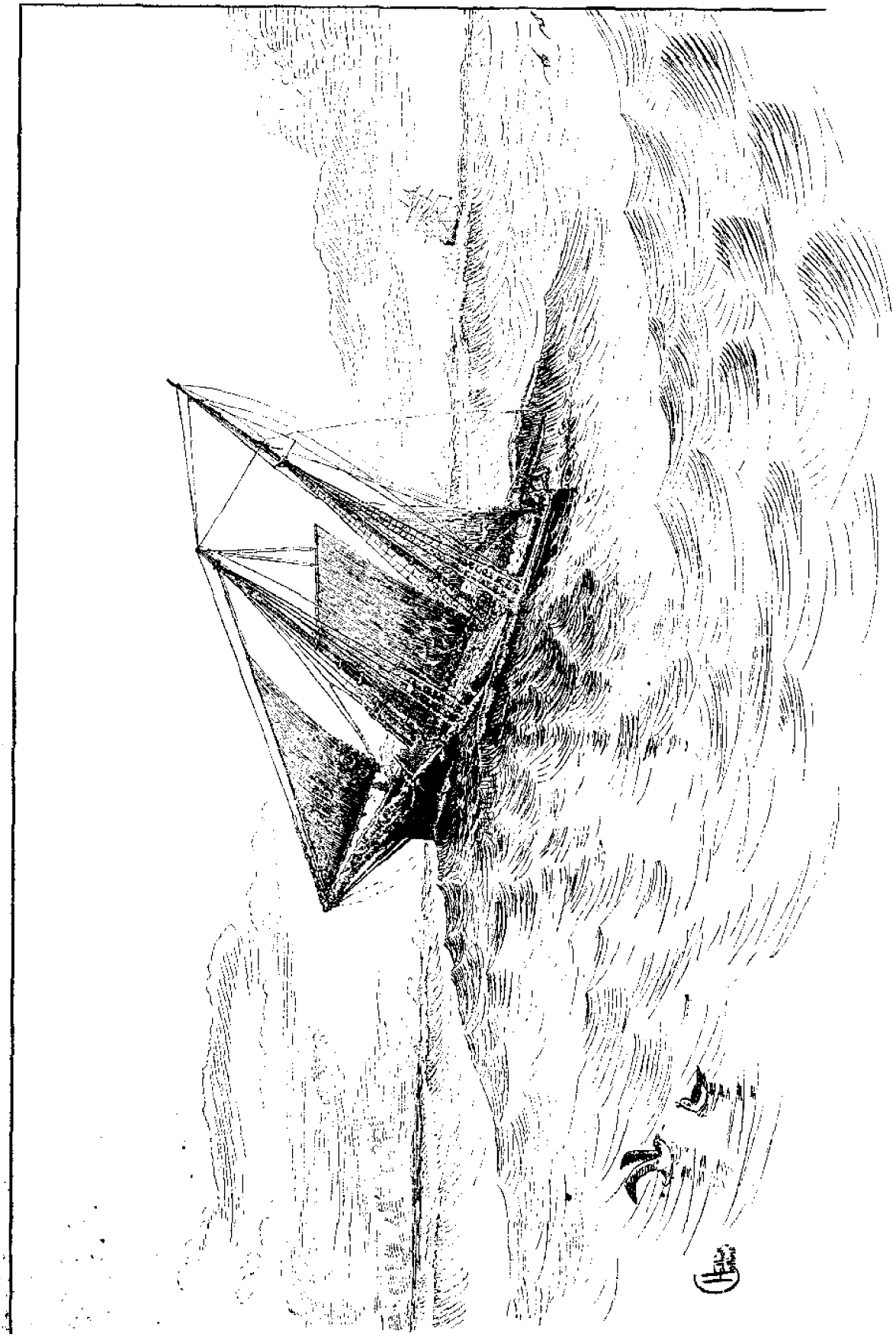
men who were to leeward: In October, 1878, the schooner Marion, of Gloucester, was lying on the southern edge of Banquereau at anchor in 150 fathoms of water. The dories had been out to haul the trawls, and all had succeeded in reaching the vessel except one, which had been detained to leeward, and, at the time of starting for the vessel, was more than a mile distant. The wind had been blowing fresh all the morning and was increasing rapidly. There was but little prospect of the dory reaching the vessel. The ordinary expedient of paying down another dory, attached to a buoy and line, was resorted to and more than a thousand fathoms of buoy-line paid out. The men in the dory succeeded in getting hold of this, but unfortunately the line parted and only one thing could then be done to rescue the men. This was accomplished as follows: The foresail was hoisted and then the jib, which had been guyed out on one side so that the wind would catch it aback and fill the vessel away. The anchor, having firm hold on the bottom, did not at once break out, but it finally let go its hold, after which the vessel ran to leeward and the men and dory were picked up. When vessels are at anchor in shallow water on rocky bottom, the anchor sometimes becomes caught in the bottom, or "rocked," as it is called. It is then necessary that sail be set, and, by tacking back and forth, it may be possible to clear the anchor and thus prevent its loss.

SHOOTING ALONGSIDE OF A SEINE-BOAT.

This is a maneuver peculiar to the mackerel fishermen engaged in purse-seining, and it is one which requires a considerable amount of skill and judgment in its execution. To shoot a vessel to, or to heave her to, alongside of a seine-boat so that she will stop headway almost at a given point, or within a few feet of it, requires an intimate knowledge of the peculiarities of a vessel, and a skillful management of sails and helm, especially since this must be done under different circumstances, which vary with the strength of winds, tides, and sea. The ordinary method is the same as heaving to under two sails, which we have already described; at other times, perhaps, only under the mainsail, the evolution being performed in such a manner that the vessel shoots to close alongside of the seine boat, so that a rope may be thrown to the men in it, the vessel at the same time stopping short at that point. Long practice and an intimate knowledge of the vessels has enabled our fishermen to perform this evolution with a precision and exactness truly surprising.

SHOOTING ALONGSIDE OF A DORY.

In some branches of the fisheries, especially the haddock fishery, the shore cod fishery, and, occasionally, in the halibut and bank cod fishery, the vessels make "flying sets," or, as it is more frequently termed, "set under sail." This particular method of setting trawls will be discussed elsewhere. It is unnecessary to go into details here further than to state that the vessels, instead of being anchored, are kept under sail while the trawls are being set and hauled. While the fishermen are out in the dories setting and hauling, the vessel is managed by the captain and cook, and whenever one of the dories has finished the operation or has secured a load of fish, the vessel is shot to close alongside of it, so that it may come on board at once. This evolution is often performed when there is a strong wind and quite a rough sea, and it requires the same amount of knowledge and skill in handling the vessel as it does to shoot alongside of the seine-boat. In the latter case, though it is not absolutely necessary that the vessel should shoot so close to the dory or stop so short, the feat is more difficult because there are only two men to manage the vessel. As a general thing the vessel is shot to, or hove to, with her jib to windward, and sometimes the fore-sheet is eased off, so that the vessel makes a drift nearly at right angles with the direction in which she heads. At other times, especially in rough weather, when there is



Fishing schooner bound home in winter; head-reaching under short sail; deck, sails, and rigging covered with ice.

Drawing by H. W. Elliott and Capt. J. W. Collins.

a sufficient number of men on board to accomplish it, the vessel is hove to close alongside of the dory under two sails, and in all respects this evolution is then similar to that of shooting to alongside of a seine-boat. There are, perhaps, some other ways of shooting to alongside of a dory, such as shooting up and tacking at the same time, thus reaching the dory and shooting to without the jib to windward, and occasionally, when the winds are light, a vessel may be run alongside of the dory and it may be picked up while she is going before the wind.

SHOOTING ALONGSIDE OF A WHARF.

This is an evolution which is constantly being performed in any of our larger fishing towns, but while it is of such common occurrence and is, almost without exception, performed with an astonishing degree of skill and judgment, there are so many different ways of performing the maneuver, dependent upon surrounding circumstances, that only a few of those in common use can be given here. It is, perhaps, scarcely necessary to say that on returning from a voyage it is the ordinary practice for a fishing vessel to go at once to the wharf where her cargo is to be landed and where she will be refitted for another cruise. This might be accomplished, as with larger vessels, by first anchoring and either being towed in by a tug or hauling in by warps without any great risk or display of skill, but this would involve a loss of time and an amount of extra labor which it is at all times desirable to avoid. One of the most common ways of shooting alongside of a wharf, when the wind is blowing from it, is for the vessel to be kept under sail and under headway until she approaches comparatively close to it and some distance to leeward. The head sails are then hauled down and she is luffed to the wind, after which the mainsail is lowered. It is customary at such times for the skipper, or master, to take a station where he can command the scene. An experienced man is placed at the wheel, who steers the vessel in conformity to the orders of the captain. Other men stand by with ropes to throw out as the vessel approaches the wharf, these being fastened by persons on the wharf in readiness to receive them. The headway of the vessel is thus checked and she drops into her berth. To shoot into a wharf with a free wind all sails are hauled down while the vessel is yet some distance from it and she is allowed to run in with bare poles. This, however, can only be accomplished with safety when there is a comparatively moderate wind, or when perhaps the tide is partially ebbed, so that the vessel may bring up on the bottom. It is by no means an unusual occurrence for a vessel to shoot alongside of a wharf with her mainsail, and sometimes her foresail, up when the wind is blowing from it.

LEE-BOWING ANOTHER VESSEL.

At the present time this evolution is seldom performed. When mackerel were taken by jigging or with hook and line, one vessel would sometimes attempt to draw away, or "toll," a large school of fish from another. This was done by heaving to, either under two sails or under mainsail, close under the lee bow of the vessel which was catching the fish and by throwing out of a great amount of "toll" bait. The mackerel usually followed this bait, and the consequence was that the leeward vessel soon had the best fishing. This maneuver corresponds, in many respects, to heaving to alongside of a seine-boat, since the vessel must be stopped directly under the lee bow of the other, but of course it differs in that she is not brought as close to the windward vessel as she would be to the seine boat. Some twelve to twenty years ago it was not uncommon on our New England coast, especially in the fall, to see from two hundred to four hundred or even five hundred sail of vessels lying to, in apparently a compact mass, fishing for mackerel. This was the result of one after another lee-bowing such vessels as had secured good fishing.

RUNNING A VESSEL UPON A LEE SHORE.

Most of the fishing vessels are employed at all seasons of the year, and probably more exposed than any other class of vessels to the dangers incident to approaching the land. One of the greatest of these dangers is being caught on a lee shore. Vessels are seldom compelled to resort to the expedient of running on the land in a gale, for they are usually well provided with ground tackle to ride out at anchor almost any gale. This expedient is almost always resorted to when others fail. Occasionally, however, a vessel may be caught on a lee shore in a heavy gale, in which she is unable to carry sufficient sail to work off, and may not be provided with proper tackle for holding on at anchor. When it is quite certain that the vessel will be driven ashore by the force of the gale (it may be during the night), it is considered more prudent, for the safety of the men, to run the vessel "head on" upon the land while it is yet light enough to select the best place "to beach." When such a course is decided upon, it is customary to set all the sail that the vessel can carry, and to keep this on her even after she has struck, if it be a sloping shore, until she has been driven up as high as the winds and waves will force her. If this is done at high tide or on the first of the ebb, it is probable that the crew will be saved. There have been numerous instances in the Bay of Saint Lawrence, especially on the north side of Prince Edward Island, or in the bend of the island, as it is called, of fishing vessels running ashore in this manner. The vessels have sometimes been driven so high that they were but little injured, and after the abatement of the storm were again launched and employed in the fisheries for many years thereafter.

In the fall of 1851, and again on August 23 and 24, 1873, many instances of this kind occurred in that locality, together with many of a sadder nature, which will long be remembered by those interested in the fisheries.

JUMPING A VESSEL OFF A LEE SHORE.

When a vessel strikes on a ledge a heavy press of sail may be set, and by careening the vessel down she may "jump off." This maneuver is often assisted by the sea, as the vessel, with a crowd of sail on her, will move ahead as often as she raises on a wave, and unless the ledge is too near the water's surface for her to pass over, or other circumstances are very unfavorable, the attempt is generally successful.

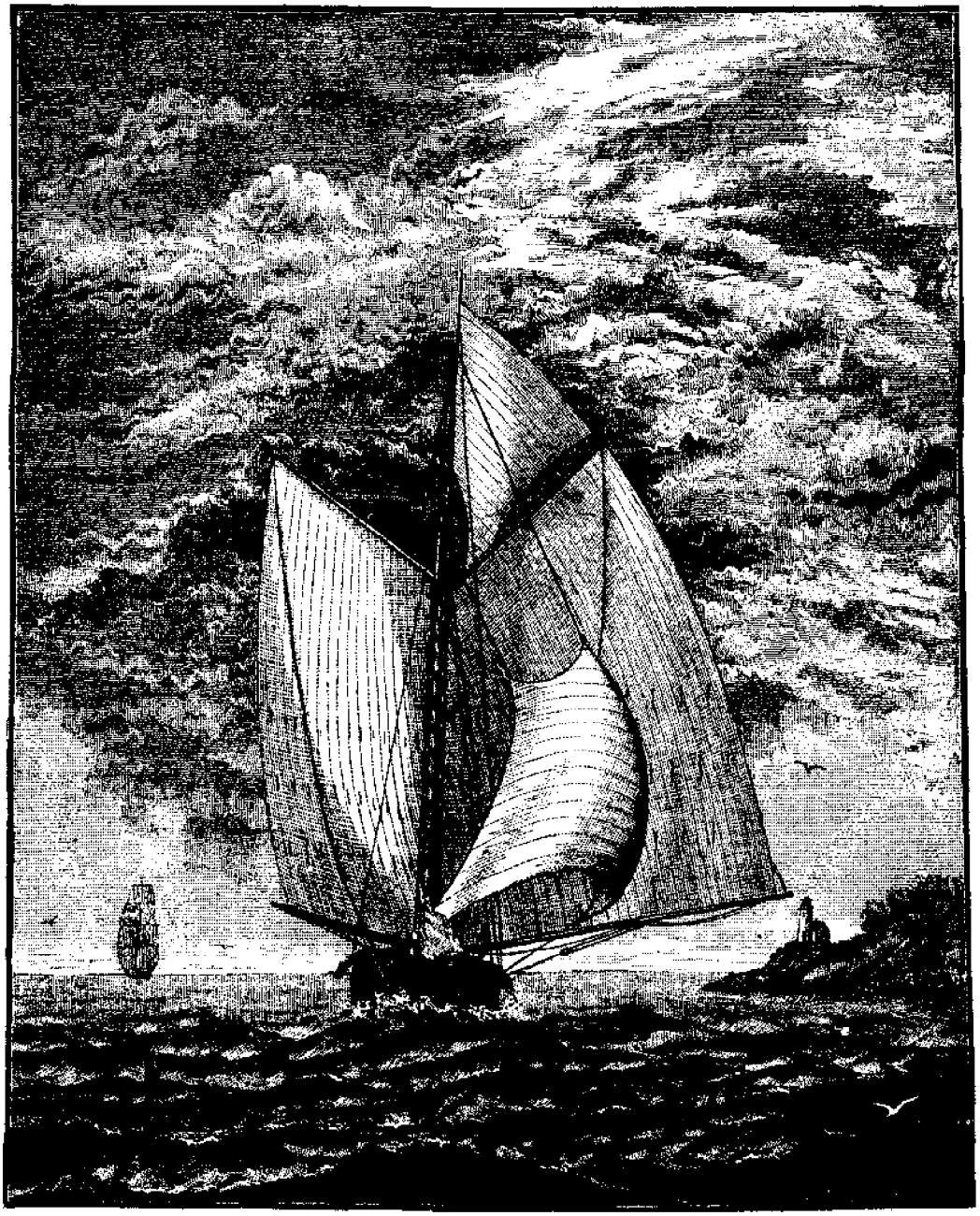
53. AMOUNT OF CANVAS CARRIED BY A SCHOONER.

Although a schooner can carry more sail when the wind blows from a direction abaft the beam, her peculiar excellencies are best seen when the wind is forward of the beam, and when she is said to be "sailing by the wind."

In discussing the amount of canvas carried under different circumstances by the same vessel, we propose to speak of her management (1) when sailing with the wind "on the quarter," (2) when sailing "by the wind," (3) when sailing with a "beam wind," (4) when sailing with the wind "astern."

Wind coming from a direction abaft the beam—that is, stern winds and quarter winds—are called "free winds," while those at right angles to the keel are beam winds, and those blowing from a direction forward of the beam are called "scant" or "head" winds.

The difference between a "scant" and a "head" wind is thus defined: When a vessel can keep on her course while sailing by the wind, it is called a "scant wind," but when she is unable to do this it is called a "head wind," a head wind being any wind which necessitates tacking back and forth—that is, beating to windward.



Fishing schooner running before the wind, wing and wing, with the staysail scandalized.

Drawing by Capt. J. W. Collins.

While this may not be the place to discuss the ability of the schooner to sail close to the wind, it may be stated that the average fishing schooner may be steered within five points of the wind, and the best sailers, under favorable circumstances, within four points. In this respect their performance is equal to that of many yachts. There are probably no modern vessels in the New England fishing fleet which cannot sail within five points of the wind. To sail within four points of the wind it is necessary for a vessel to head northeast when the wind blows directly from the north or at an angle of 45° with the direction of the wind; when sailing within five points of the wind the vessel would be heading northeast by east—the wind being still from due north—or at an angle of 56° 30′. When a vessel is sailing more than five points off from the direction of the wind, she is no longer sailing "by the wind," and the sheets must be slackened and the sails allowed to go farther out upon the leeward side. As her course deviates farther and farther from the direction of the wind she is said to be running with "free sheets," until the wind becomes "abeam" or at an angle of 90° to the direction of her keel. When the wind comes from a direction which is more than 90° from that in which the bow is pointed and at an angle as great as or in the vicinity of 135°, she is said to be sailing with the wind "abaft the beam." When the wind is about 45° abaft the beam, she is sailing with the wind on her quarter, the direction of the wind having the same relation to the stern of the vessel that it had to the bow when the vessel was sailing "by the wind." When the wind is blowing in such a way that its direction forms with the keel an angle of less them 45°, the wind is said to be "aft," and if directly astern, the vessel is said to be sailing "dead before it."

WITH THE WIND ON THE QUARTER.

The average schooner sailing with the wind "on her quarter," with her fullest complement of sails, will carry all her sails until the wind blows what the fishermen would call a "good breeze." The first sails to be taken in, as the wind freshens, are the balloon-jib and staysail. This is necessary in order to prevent the topmasts from being carried away. A vessel carrying all her sails with a fresh breeze would probably heel over until her scuppers touched the water, and sometimes deeper, before it would be necessary to take in the balloon-jib and staysail, and, under these circumstances, would sail at the rate of 10 to 12 knots an hour.

Under these conditions the vessel makes its best speed, the water usually being smooth and the "point of sailing" favorable. Large vessels belonging to the port of Gloucester and other fishing ports have, under such circumstances, made a speed of 13 or 14 miles an hour.

As the breeze increases in strength the foretop-sail and then the maintop-sail are removed. The heeling over of the vessel would remain about the same, and her speed would be practically undiminished. The flying-jib is next taken in. The vessel is now moving ahead with what is called a "whole-sail breeze," and when the jib, foresail, and mainsail are set, is said to be under "whole sail," the other sails being known as the "light sails."

The differences in the shape and rig of vessels render it possible for some to carry a certain amount of sail much longer than others, and to heel to an extent which would be dangerous to others. The average schooner must shorten sail when the lee-rail is level with the water.

With a whole-sail breeze and a comparatively smooth sea the speed of the vessel remains about the same as when the breeze is lighter and all sails set. It is supposed that a whole-sail breeze, for a vessel with the wind on her quarter has a velocity not far from 30 miles an hour.

A schooner-rigged vessel will carry a larger proportion of sail in comparison with a square-rigged vessel when sailing by the wind than under any other circumstances. As the wind increases, the mainsail is taken in and reefed. It is usually the custom at such times, especially

if the wind is increasing rapidly, to put either a single or a double reef in the mainsail. The Gloucester fishermen usually put in a double reef at once. At the same time the bonnet is taken out of the jib. When it has become necessary to shorten sail to this extent the sea is always rough and the speed of the vessel may be somewhat diminished, perhaps to 9 or 10 knots.

As an instance of speed made under such circumstances, it may be stated that the schooner William H. Foye, in the spring of 1875, made a passage to the Western Bank, a distance of 380 miles, in about forty-two hours, or an average speed of 9 miles an hour, running almost all the time under reefed mainsail, jib with the bonnet out, and whole foresail.

Before it is necessary to shorten sail further the wind has strengthened to nearly a gale. The pressure upon the foremast is now so great that it soon becomes necessary to reef the foresail, to prevent the foremast being carried away.

If the wind is increasing rapidly two reefs are at once put in the sail; if otherwise, a single reef. A vessel with mainsail and foresail double reefed and the bonnet out of the jib can carry that sail, while running free, until the wind blows a gale.

The following instances illustrate the relative amount of sail carried by schooners and square-rigged vessels when it is necessary to put the former under this sail:

The schooner Ocean Bell, in the spring of 1874, while on a passage to Gloucester from the Grand Bank, sailing under double reefs, fell in with and passed a large bark, head-reaching under close-reefed topsails and foretop-mast staysail. Again, in the autumn of 1875, the schooner Howard, under double reefed sails, fell in with and passed a large bark lying to under a goose-winged lower maintop-sail, having no other sail set. Numerous and possibly more striking instances of this sort might be related. These schooners were sailing by the wind, and under these circumstances the comparative merit of the schooners appears at best advantage, although they cannot carry the sails so long when sailing by the wind as when the wind is on their quarter. A schooner with the wind as last mentioned may carry this sail until the wind blows a smart gale, and it is more frequently the case that they have to shorten sail still further on account of the roughness of the sea, and the consequent heavy lurching, than because of their inability to carry so much canvas. The wind is now whistling, or, in fishermen's phrase, "squealing" through the rigging; and even an ocean steamer, if heading the sea or in its trough, would be tossing about in a manner which would be very uncomfortable and alarming to most of the passengers.

As the sea and the wind increase there is a danger of carrying away the main boom, the end of which is frequently dipped under as the vessel lurches to leeward. The mainsail is now, therefore, taken in and furled, and in its stead the riding-sail, especially on the Bank vessels, is bent to the mainmast and hoisted, this sail being without a boom and considerably smaller than the two-reefed mainsail, therefore causes the vessel to lurch much less than when she has the long main-boom over her lee quarter.*

Under the present arrangement of the sails, riding-sail, double-reefed foresail, and jib without the bonnet, the vessel continues until the wind blows a heavy gale.

When a schooner is going ahead under these sails an ocean steamer would be making slow progress if heading the wind, and would be obliged to alter her course to avoid lying in the trough of the sea if she should be steering with the wind abeam.

In the heavy gale of January 27, 1879, the schooner Marion, of Gloucester, while running under this sail, passed a large ocean steamer near the Western Bank, making slow progress to the west-

* Sometimes the riding-sail is not set, but the vessel is allowed to run under double-reefed foresail and jib. The method of setting the riding-sail as described is, however, perhaps the most common.

ward, with the wind on her starboard bow, and having only the fore and main spencer set. During this gale several merchant and fishing vessels met with disasters. The sea at this time is so high that it is frequently necessary to run nearly dead before the wind to prevent the vessel being "knocked down" or "tripped," or a sea boarding her on her quarter. The next move is to take in the riding-sail and jib and furl them up. When this becomes necessary the wind is blowing nearly a hurricane. The vessel is now running under a double-reefed foresail, and can continue under this sail as long as the canvas will stand. Instances in which it has been blown away are not unusual. Fishing vessels are not often obliged to come down to a double-reefed foresail in the summer months, though they do so sometimes during the so-called "fall hurricanes." In the winter a voyage of a few weeks is seldom made without running under double-reefed foresail at least once, and, in many instances, ten or twelve times during the trip, particularly if long passages are made.

It is unfortunate that there is no means of estimating the force of the wind as it blows in mid-ocean, but many observers consider that its velocity far exceeds anything that has been recorded on the land, except perhaps at such exposed locations as the top of Mount Washington.

When the anemometer at the signal station on Thatcher's Island records a wind velocity of 65 to 70 miles an hour, it has been reported that fishing vessels in the immediate vicinity have, in some cases, carried double-reefed foresail and mainsail, and jib without the bonnet, and, in other instances, double-reefed foresail, jib with two bonnets removed, and riding-sail. This, too, was when they were sailing by the wind and carrying less sail than they could carry had they been running free. The remarks with reference to sailing with the wind "on the quarter" apply in a general way when the wind is "abaft the beam" or "well aft."

SAILING "BY THE WIND."

When the vessel is sailing by the wind the management of the sails is similar to that already described, except that sail is reduced sooner as the wind increases in force. The sheets being hauled tight, the booms, within a few degrees, parallel to the line of the keel, and the sails showing a flat surface to the wind, a much greater lateral pressure is brought to bear upon the vessel. A vessel running free is, of course, going in the same direction as the wind, and feels its force in a less degree. A vessel sailing by the wind will come down to double-reefed sails, when, with the wind on her quarter, she might, perhaps, carry whole sail. When a vessel running with the wind on her quarter would be under double-reefed sails, one sailing by the wind would need to be "hove to" under double-reefed foresail.

WITH THE WIND "ABEAM."

When the vessel is sailing with the wind abeam sail is reduced in the same manner as already described. When the wind is abeam sail can be carried longer than when sailing by the wind, though not so long as when the wind is on the quarter. This is not so much on account of limitations connected with the management of the sails themselves, but because when a gale is blowing it is necessary to avoid sharp seas directly upon the beam, which are frequently very dangerous and sometimes result in "knocking the vessel down." Occasionally a vessel sailing with the wind on the beam must be "hove to" sooner than when sailing "by the wind," and always sooner than with the wind "on her quarter."

WITH THE WIND ASTERN.

When the wind is astern a comparison between the schooner and the square-rigged vessel is least favorable to the schooner, except perhaps during very light winds. Every possible device

is used to spread the sails to the wind. The most common one of these is "winging them out," which is done by having the mainsail and main-gaff topsail on one side and the foresail on the other, with their sheets slackened well off, so that the sails are nearly at right angles with the direction of the vessel, and in such a position as to receive the greatest amount of pressure from the wind. When running "winged" the main jib is generally hauled down, and sometimes also the other jib or jibs. It is useless at this time to set the staysail in its proper place, and when the winds are moderate it is therefore frequently set to leeward opposite the foresail, and in such a manner that it catches the wind which passes through between the mainsail and foresail, adding materially to the speed of the vessel. This method of setting it is called "scandalizing the staysail." The rate of speed attained by vessels with their sails "winged out" is nearly the same as with the wind "on the quarter." Sail may be carried thus for a long time, but it is not customary to do so, because it is difficult to take in sails during strong winds when they are "winged out." A vessel will sail under double-reefed mainsail and foresail "winged out" when, with the wind on her quarter, she would be running under the same sails with the jib up. Much caution and judgment is needed in sailing with a freshening wind astern. Headstrong skippers have carried whole sails in this manner when the wind was blowing a gale. Serious damage has sometimes resulted as a consequence.

54. MANAGEMENT OF DISABLED VESSELS.

In the chapter on disasters the injuries to which fishing vessels are liable have been fully discussed. Each kind of injury is repaired in its own way. There are, however, certain kinds which are repaired in a peculiar manner, requiring special skill and daring on the part of the fishermen. A few of the most prominent of these will be mentioned: (*a*) Management of vessels which have lost their spars. (*b*) Repairing damages to the rigging. (*c*) Repairing or improvising of sails. (*d*) Repairing or improvising rudder. (*e*) Repairing leaks. (*f*) Righting vessels which have been knocked down. (*g*) Repairs of boats.

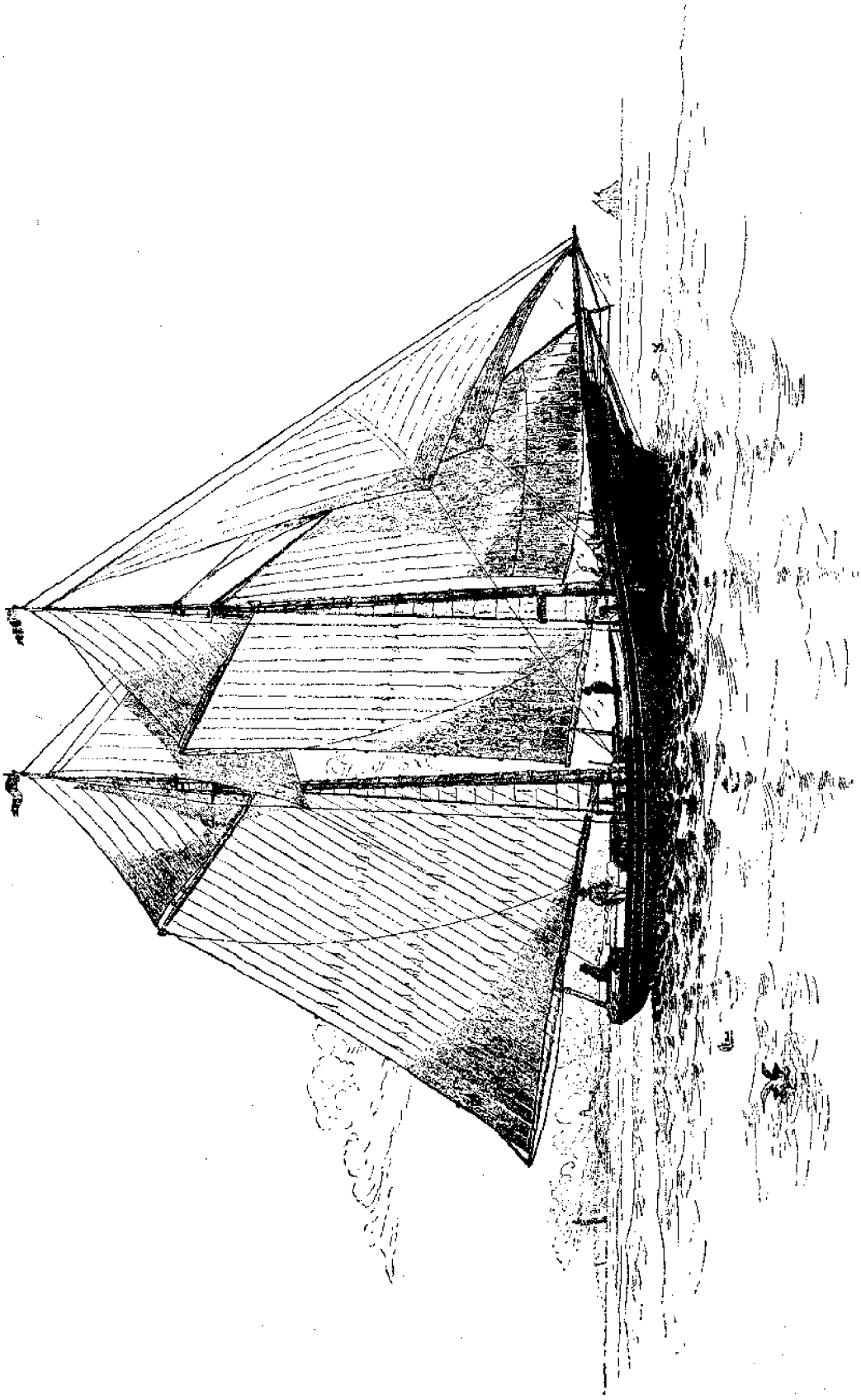
MANAGEMENT OF VESSELS WHICH HAVE LOST THEIR SPARS.—When the topmast is carried away, generally no attempt is made to supply another at sea, although in some cases it is fitted anew and replaced.

The main boom, if carried away, is generally "fished" by means of an improvised apparatus, which can usually be made to answer every purpose.

In the case of losing a flying-jib boom attempts are rarely made to repair it at sea, as most of the fishing vessels can do without it.

The fore boom and the fore and main gaff are frequently "fished" or repaired in such a manner when broken that they will answer until new ones can be obtained.

When the foremast is carried away or broken, a purchase is usually taken from the mainmast head and hooked into the eye or to the upper end of the jib stay, and hauled taut, so that the mainmast may receive support, and at the same time the jib may be set on the stay. By this means the vessel is enabled to sail under her jib and mainsail, and perhaps with the staysail set between the masts, as well. This arrangement is feasible when the mast is broken but a short distance above the deck. When, however, it is broken near the cross-trees the jib-stay may be placed on the foremast, and a reefed foresail and a jib with the bonnet out may be set instead of the sail as already described.



Mackerel schooner under full sail, close-hauled by the wind.

Drawing by H. W. Elliott and Capt. J. W. Collins.

When the mainmast is broken or carried away, if broken close to the deck, it is difficult to set any after-sail unless a jury-mast is rigged. This may be done by lashing the main boom or some other spar to the stump of the mainmast and attaching the halyards to its top, in such a manner that either a reefed mainsail or riding-sail may be set on it. When, however, the mainmast is broken higher up, it frequently becomes possible, by shortening the shrouds and putting on a "preventer spring-stay," to set a reefed mainsail, or, more commonly, a riding-sail, which, together with the jib and foresail, generally enables the vessel to make fair headway, even against a head wind. Vessels rigged in this manner have often made passages of 600 to 800 miles in a reasonably short time.

When the bowsprit is carried away or broken, either by a sea or by carrying sail, the jib-stay is usually taken in through the "hawse-pipe" and hove taut on the windlass, in such a manner that the jib with the bonnet out may be set on it, and thus the vessel can make steerage way on the wind by having the mainsail reefed; but when running free, may be able to carry the whole mainsail.

Vessels are sometimes so unfortunate as to lose all their spars. It then becomes necessary that jury-masts should be improvised, in order that the vessel may reach port without assistance. There are many ways of doing this, as well as performing the other operations we have mentioned, which can only be determined by the surrounding circumstances. The most general method is to lash some light spar, boom, or gaff, or perhaps even the jib sheet traveler, to the stump of the mast, having the halyard-blocks attached to the topmost end, whereby the sails may be hoisted; fishing vessels rigged in this manner have often arrived safely in port without assistance.

REPAIRING DAMAGES IN THE RIGGING.—Fishing vessels, in common with all other sea-going vessels, are very liable to have their rigging broken or otherwise damaged while at sea, in such a manner that it is of the utmost importance that it should be repaired promptly, both to insure the safety of the vessel and the prosecution of the voyage. As vessels are now rigged, however, one of the accidents of this kind to which they are most liable is that of having the iron work, by which the rigging is attached, broken rather than the rigging itself. On fishing vessels this more frequently occurs to the iron-work connected with the bobstay and jib-stay than to that of any other, since upon this is brought to bear a very heavy strain. These accidents are more likely to occur during gales when there is a heavy sea running than at any other time, and generally call for a display of skill and seamanship such as is rarely needed elsewhere. Usually, when the iron-work on the stem to which the jib-stay sets up is carried away, the end of the stay is taken in through one of the hawse-pipes and set up by tackles to the windlass and secured in a proper manner. It is quite often the case that the iron work at the end of the bowsprit to which the bobstay is attached is broken, and it sometimes becomes necessary to replace this and to set the bobstay up anew, even under the most difficult and dangerous circumstances. Fishing schooners are occasionally liable to have their spring-stays unhooked, or the bolts in the shackles get loose, in such a manner that the mainmast is left without that support. If this occurs when the vessel is under sail, it can be usually replaced without a great deal of trouble by running the vessel before the wind, so that the mainsail may assist to keep the mainmast straight.

If lying at anchor, however, or under some other circumstances, it is generally necessary to get a strap on the mainmast, to which a purchase from the foremast is hooked and the head of the mainmast hauled forward far enough to enable the men to attach the spring-stay in its proper position. The performance of this duty is usually one requiring a great amount of skill and judgment to successfully accomplish it.

The parting of shrouds, laniards, &c., are accidents to which all vessels are liable, and the

same methods of repairing these are adopted on fishing vessels as on other vessels. These methods are fully explained in all manuals of seamanship."

Vessels engaged in the Bank fishery always have their bobstays and the lower part of their jib-stays provided with chafing-gear, to prevent the cable from coming in contact with them. It sometimes happens that while the vessels are riding at anchor in gales of wind this chafing-gear gets loose, and there is imminent danger of the cable being chafed off and lost on that account. To repair this damage and to prevent the loss of the cable there is generally required a great amount of daring and skill on the part of the fishermen, and many schemes are resorted to for the accomplishment of this end, none being, however, free from danger.

The parting and consequent replacing of running rigging is something that is of such frequent occurrence and so common to all vessels that it hardly need be described at length in this place.

REPAIRING OR IMPROVISING SAILS.—The ordinary repairs to the sails made necessary by their being torn, &c., do not differ materially from those on other vessels. We may mention here that in one instance, at least, a great deal of ingenuity was exhibited by fishermen in improvising sails from their bed-clothing, and their vessel, the schooner Onward, of Gloucester, came safely into port. It may also be said that the riding-sail, which we have before described, is frequently substituted for a jib when the latter sail has been damaged or blown away, and is also made to do duty for either the mainsail or foresail, which may have been rendered unfit for use. The staysail may be used to take the place of either the mainsail or foresail in light weather, and occasionally the gaff topsail is substituted for a jib, or even for a flying-jib.

REPAIRING OR IMPROVISING A RUDDER.—Since fishing vessels are liable to lose their rudders at sea, it is highly important that some means should be devised for steering, in order that the vessel may reach port without assistance. Various contrivances have been resorted to, among which we will name the following:

(*a*) By taking an anchor-stock and lashing to one side of it successive tiers of the hawser or cable. Then the bight of a rope is attached to its lower end, and another farther up, at the upper part of the hawser. It is then put overboard and the upper end of the anchor-stock is brought into the rudder-port. The ends of the ropes attached to it are then taken forward and hauled taut on either side in such a manner that the improvised rudder is held in its proper place. The tiller is next lashed to the upper end of the stock, and this serves the purpose very well, and a vessel can usually be steered with it without much difficulty. Sometimes plank or timber may be substituted for the hawser. In cases where an anchor-stock is not to be had a light spar, gaff, topmast, or even the jib-sheet traveler are taken instead.

(*b*) Another method is to make a coil of hawser, which is securely lashed together in all its parts. This is towed astern, and the movements of the vessel are controlled by tackles leading from either side of the stern to the standing parts of the hawser, the direction of the vessel being changed by hauling in either one or the other of these.

(*c*) A cask filled with water is sometimes substituted for a coil of cable, and may be made to answer nearly the same purpose.

REPAIRS FROM LEAKS.—The method of repairing leaks caused by collision is the only one that will be considered here. It sometimes happens that fishing vessels are cut down by another nearly to the water's edge, and, unless repaired promptly, are liable to sink before reaching a place of safety. In such cases a man is generally lowered over the side and fastens over the aperture some canvas, over which boards are fastened, if they are obtainable. If this is well done the vessel can be tightened so that she may reach port without accident.

RIGHTING VESSELS WHICH HAVE BEEN KNOCKED DOWN.—Although most of our fishing vessels

have their ballast secured in such a manner that it is not liable to give way, this can not be said of the Bankers engaged in "salt fishing," which depend entirely upon their salt for their ballast. This salt is stowed in "pens," or "bins," built in the hold, and if they are not well built they are very liable to give way when the vessel takes a heavy lurch. This sometimes occurs in a gale, and when it does the vessel is generally "knocked down" in consequence, and thus placed in a very dangerous position. At such a time, when the vessel is lying nearly on her beam-ends, the hold cannot be reached by the usual manner of going through the hatches, and the only thing to be done is to enter the hold through the bulkheads from either the forecastle or cabin. She is then "righted up" by shoveling the salt to windward. This plan is not always successful, since losses have occurred from this cause. Before it was customary to secure the ballast as it is now, it occasionally happened that a vessel was "knocked down," shifting her ballast into the lee side, as the Bankers shift their salt, rendering it necessary for the same efforts to be made in order to bring her again upright.

REPAIRS OF BOATS.—Vessels engaged in the Bank fishery, especially in the winter, are more liable than others to have their dories injured. It frequently becomes necessary that the fishermen should be able to repair them. Many of the men become adepts in this kind of work, and there are quite a number of instances recorded where, by exhibiting their skill and ingenuity in repairing boats almost entirely destroyed, they have succeeded in making a good voyage, which otherwise would have resulted in considerable loss to all concerned.

This applies more particularly to our cod and halibut fishermen, since the whalers are generally provided with professional boat-builders and carpenters, especially hired for the purpose of repairing boats that are damaged, and for constructing new ones.

F.—APPENDIX: CAPE COD FISHERMEN IN 1862; AUTOBIOGRAPHY OF CAPT. N. E. ATWOOD.

55. FREEMAN'S DESCRIPTION OF CAPE COD FISHERMEN.

The following excellent sketch of the fishermen of Cape Cod is from Freeman's History of Cape Cod, published in 1862. It will apply as well to the men of the present day.

"Cape Cod has, not inappropriately, been called the 'Right Arm of Massachusetts.' Without reference to the topographical outline, the designation is merited, if regard be had to the employments, the nautical skill, the enterprising and hitherto morally upright character of its inhabitants; and it is doubtless to these considerations that reference was primarily intended in the figure employed. The glory of the Cape, we unhesitatingly assert, without the possibility of contradiction, has been the character of the men who settled here and, through successive generations, their numerous descendants. We make this declaration ingenuously, unawed by the fear of an accusation of self-laudation or egotism; for we speak of the community as a whole, not gnoring the few anomalies that might possibly be found, as among all people, to constitute the exceptions that prove the general rule; nor claiming for history the unfinished career of generations now on the stage of action.

"The almost entire population of the Cape has been made up of those who were descendants from the Puritans, perpetuating their names and their virtues; and the races here are generally more purely English than in any other part of our land. The Cape has, at all times, furnished its full proportion of enterprise, talent, genius, learning; and the merit of her sons has been acknowledged in all lands. The moral sense and general intelligence of the people, from the time of the earliest settlements, compare favorably with the inhabitants of any age, clime, or country.

"A large proportion of the male inhabitants ofthe Cape are, as is well known, early addicted to the seas. This is a necessary incident of their locality. As seamen their aim, generally, is to command; and perhaps no one portion of the globe, of similar extent, has furnished so many able commanders of ships. A vague impression, we are aware, has long possessed a portion of the public mind, that a seafaring life is not promotive of virtue; but, that the seamen of Cape Cod are as remarkably exempt from the vices and frailties of humanity as any class of people whatever, challenges denial; and the apprehension to which we have adverted has, whether just or merely imaginary, no support from what is observable here. Our seamen are generally, as before intimated, very soon commanders of ships, rather than ordinary sailors; and such as have not arrived at the distinction are, for the most part, employed in vessels under those commanders or engaged in the fisheries. Their visits to all lands and their intercourse with the wide world give them large views that tend to the formation of a liberal, manly, noble character. Even in their fishing excursions they are, as it were, at home among their relatives and their early associates; and when returned to the land and under their own roofs—whatever privations they may have suffered in the times of peril, or because of national calamities, involving embargoes and wars—their dwellings are pre-eminently abodes of comfort, and exhibit the marks of healthy thrift and enjoyment beyond

the allotment to other sections of our country, so far as relates to the general and equable distribution of the bounties of a good Providence.

"The fishing voyages, it is admitted, are not always conducted without auxiliaries from abroad. For many years there has been a disposition on the part of persons from the interior to place themselves on board these vessels, to participate in the toils and advantages of these excursions. But, after all, the home hands are the majority. Moreover, those from abroad who seek a place on board our fishing vessels are in many instances agriculturists, mechanics, sometimes tradesmen, and clergymen, whose health has required that they try the salubrious air and salutary exercise of the voyage for the restoration of wholesome and vigorous action of the system—an experiment that seldom fails.

"The sweeping remark of Talleyrand, that 'all the qualities, all the virtues, which are attached to agriculture, are wanting in the man who lives by fishing,' has been readily seized by many minds of superficial observation, as if 'A gem oraculous on Aaron's breast, or tongue of seers of old infallible'; but let it be borne in mind that those engaged in fisheries from the Cape are many of them agriculturists. This community is very far from being made up of mere fishermen. Unlike the ancient Tyrus, when in fulfillment of its ruin foretold it became 'the destroyed in the midst of the sea, like the top of a rock, a place for the fishers to dry their nets on,' the Cape embraces an extent of territory without an overcrowded population, sufficiently productive yet, if not to save from famine the two old colonies of Plymouth and Massachusetts, to remunerate the homely toils of a few practical husbandmen. Indeed, very few persons in the county are exclusively fishermen; nor are the circumstances under which the fisheries are prosecuted such as to stigmatize any class. Admit that under certain circumstances the exclusive vocation of fishing is not most favorable to mental development, the remark would not be applicable at all to the larger class engaged upon the seas and in other employments, nor to the many occupied in various pursuits. Besides, the constant emigration induced by that characteristic enterprise which leads so many to seek wider fields of action, and which has been populating every part of our country ever since the first settlement of the Cape, leaves ample room, so that none are debarred for want of space of the opportunity of associating with other chosen pursuits that of agriculture, horticulture, or kindred avocations. We readily concede, however, that there is nothing necessarily ennobling in mere fishing; indeed, we are constrained to acknowledge that there is always discernable a marked difference just in proportion to the degree in which certain fisheries engross the time of individuals to the exclusion of a larger acquaintance with the world and the neglect of books. Yet, this difference is not more apparent than in the influence of continual application to other callings everywhere. Lumbering, rafting, boating on canals, &c., are attended with similar results. When the Cape shall have become a community of fishermen alone, we shall have better opportunity of testing the axiom of Talleyrand. The Cape Cod man loves his native home. Wherever he may be, whether in foreign climes, or buffeting the winds and plowing the waves of the billowy deep; whether a merchant prince in some one of our large cities, or located on the fertile lands of some new territory; whether north, or south, or east, or near the declining sun, his thoughts ever turn to his place of nativity with fond delight and peculiar yearning; and he is proud to hail from this garden-spot of creation—for such, to him, in an important sense, it appears, whatever impressions others may have conceived of its sterility and stereotyped dullness.

"Of this parvenu aristocracy of some parts of our country at the present day, the Cape makes no boast. It is plebeian, though it has wealth, and that wealth liberally distributed. What is elsewhere often mere show and empty ostentation, is here, generally, substantial reality. A man's brains are not regarded as lodged in his purse; nor his character and claims as depending on the super-

cilious devotion of sinister and false-hearted hangers-on, nor yet his principles a thing to be determined by the fortuitous chances and mutations of events. Refinement exists, without its sickening affectations and diseased sensibilities; and intelligence, without attempt at the display of the transcendental, unreal, or impracticable. Common sense—we use the term in its good old import—has not so far become obsolete that it is is no longer destined to dwell among the denizens of the Cape, a fixed trait. Do we utter extravagances? Does our delineation of the character of the mass of the people seem to partake of a vain boast? Let the verdict of the whole world in regard to the sons and daughters of Cape Cod be the decision of the issue.

"The diffusion of education among all classes is proverbial. One native-born who cannot read and write as soon as seven years of age, would here be regarded as a phenomenon. And here we are forcibly reminded of that peculiar trait in the early settlers of the colony forever worthy of commemoration—their appreciation of the general blessing of early education, and their untiring efforts to secure it for posterity. The education of all was regarded by them as of primary importance to the well-being of the rising generations, the best good of the state, and the greatest happiness of the human race; and to the furtherance of this end their best energies were directed. It was truly fortunate for New England that so large a proportion of its first settlers were people of intelligence and education; and it may well be a subject of devout gratitude to God at the present day, as it is of admiration, that in circumstances so unpropitious to the support of schools, the settlers just beginning to plant themselves in a wilderness in the midst of many privations; obliged to fell the forests and erect for their protection against the rigors of the climate such habitations as they might; compelled to cultivate the lands for their daily subsistence, and oft to defend themselves against apprehended dangers from the aboriginal race—should, with so slender means, have given so much thought to the subject of education, and especially that their thoughts should have been so directed to the education of the masses. It was not enough that they made it a religious duty to instruct their offspring in the family, to enable them to read the Bible; they must have other and greater facilities—an educated ministry, educated officers of state, and teachers thoroughly educated; and we hazard nothing in saying sacrifices were endured and pains taken to accomplish the noble end which are a monument of distinction to the praise of our forefathers, enduring as eternity.

"Never has there been a time in the history of this or any other country when ministers of the gospel were generally—perhaps without exception—better qualified by education and sound learning to give impulse to such a movement, and never were a set of men more influential than the early settlers; nor was it the ministry alone. However much deference was paid to that class of men, the laity, which embraced very many highly educated and a full proportion besides of those who had a large share of (that to which we have already adverted, too generally at the present day most uncommon kind of sense, called by a singular misnomer) common sense, had minds of large views and well disciplined, nor did they fail to employ their efforts—happily in concert with their religious teachers—in effecting what they conceived to lie at the foundation of good morals, good government, and the public weal.

"Private schools were, indeed, necessarily the first resort; but the subject of public schools was agitated from the very first. In 1663 the colony court 'proposed to the several townships within its jurisdiction, as a thing which ought to be taken into serious consideration, that some course be taken in every town that there be a schoolmaster set up to train children to reading and writing'; and in 1670 that which may be regarded as the very germ of our present truly noble and beneficent system of free schools was enacted: A law freely granting 'all such profits as may or shall accrue annually to the colony from fishing with nets or seines at Cape Cod for

mackerel, bass, or herring, to be improved for and towards a free school in some town in this jurisdiction, for the training up of youth in literature for the good and benefit of posterity.' That school was established at Plymouth, the seat of government, and was supported six years by the Cape Cod fisheries; when, in 1687, it 'was ordered,' by the general court, 'that in whatever township in this government, consisting of fifty families or upwards, a meet person may be obtained to teach a grammar school; and that such township shall allow at least £12 to be raised by a rate on all the inhabitants of said town; and that those who have the more immediate benefit thereof, with what others shall voluntarily give, shall make up the residue necessary to maintain the same; and that the profits arising from the Cape fisheries, heretofore ordered to maintain a grammar school in the colony, shall be distributed to such towns as have such grammar schools, not exceeding £5 per annum to any one town, unless the court treasurer or others appointed to manage that affair shall see good cause to add thereunto; and further, that every such town as consists of seventy families and upwards, and has not a grammar school therein, shall allow and pay to the next town that has a grammar school the sum of £5, to be levied on the inhabitants by rate, and gathered by constables of such towns by warrant from any magistrate of this jurisdiction.' This law was in force until the union with the Massachusetts colony, or until about that time. The fisheries were then made free to all persons, and other provisions for schools were made.

"The attention of the community has ever thus been carefully directed to the cause of education. The poor and the rich have enjoyed the means of good education. Hence there are few in New England (and, as we have suggested, it would be difficult to find at the present day any adult born on the Cape) who cannot at least read and write, with, in addition, a competent knowledge of figures; whilst generally the opportunity has been afforded to secure that full amount of education requisite to qualify for successful business. In later years, the Cape has kept pace with the educational improvements of the age, and may point to many of its distinguished sons and accomplished daughters as proof that it has never been greatly derelict in this duty.

"The inhabitants of the Cape are a religious people. The entire freedom of religious opinion claimed by them has led to a diversity of denomination, in almost every village as well as town, places of public worship being reared by differing sects. But it is here disreputable to have no religious belief, and there are scarcely any to be found who do not give their support to some one mode of religious worship and form of faith.

"We may add that health, that greatest of all mere earthly blessings, here waves her wand and crowns the votaries of frugality, industry, temperance, and virtue.*

56. AUTOBIOGRAPHY OF CAPT. NATHANIEL E. ATWOOD, OF PROVINCETOWN, MASS.

The following sketch of the life of the veteran fisherman of Cape Cod is given in his own words as told to members of the United States Fish Commission in the summer of 1879. It reviews the life of a man who began fishing in 1816, at the age of nine years, and continued in active service in many branches of the fisheries until 1866, when he became a fish-curer on shore. He said:

My memory is pretty good, and I know in what way I have spent my life. I remember all about my early voyages. I have looked over my notes, going back for several years, so that I know their dates precisely. I know every vessel I have been in and all their voyages from the beginning until the time I quit in 1866, thirteen years ago.

I was born in Provincetown on the 13th of September, 1807. The first that I had anything

* Freeman's Hist. of Cape Cod, Boston, 1862, Vol. I, pp. 741-749.

to do with the fisheries was when I was nine years old. My father quit going to sea, and the next season he was going to take me in the boat with him. That fall he, with some others, got a catch of 250 barrels of sea-herring, and he called me out. He got me in the night to go with him in a boat. I remember it very well, although it was a great while ago, because the boat was nearly full of herring, and I undertook to row, and made a poor piece of work of it. I remember the herring quiddling around my legs. That is the first I had to do with fishing.

The next spring I went, with one other boy, with my father in a boat cod-fishing. We went to Race Point, and used, as the sailors say, to carry our "grub" out with us. Before Saturday night we had to come in and get a recruit. We used a lap-strake boat a little smaller than a whale-boat. The whale-boat rows with five oars, and these had four oars, and we used to call them five-handed boats. There were six-strake boats and seven-strake boats. They were 18 feet keel, and I should think about 5 feet beam, with four thwarts. We sometimes used a small sail, which we made of 9 yards of top-gallant duck, ¾ wide. The mast was about 12 feet long.

We landed at the Race and hauled the boats up. We had little fish-huts there. My father built his hut there, which was 6 feet by 8. He was 6 feet tall, and had a berth across the end, and could touch his head at one end and his feet at the other. The hut had a wooden chimney. We took such provisions as we could. Some fared better than others. We were pretty poor. I came from poverty and obscurity. I suppose we were there about two months fishing for codfish. During the season a man and a boy, a youngster like, would probably average about 25 quintals to a boat. That is a fair average for the two months that we stopped there.

After this we came off here and set mackerel nets in the harbor, beginning about the 20th of May to catch mackerel for sale fresh. These were sent to Boston market. After the mackerel season was over there was little doing here in the summer, through July and August, but about the middle of September the dogfish struck in on their way south. The dogfish were here in the spring, as they passed by the Cape going north, but we didn't get many of them. We followed fishing for dogfish two months, from about the middle of September till the middle of November. That was the best fishing of the season, as dogfish oil was worth about $10 a barrel. A man and a boy would get some 15 barrels in that time. They were mostly females when they came in, but the last school in November were about all males. The males generally had better livers than the females.

When winter came they dropped me, as I was too small to go winter fishing. Two men went together in a boat cod-fishing. We didn't have any haddock at that time. In 25 quintals of fish we didn't get more than 1 quintal of scale fish (haddock, hake, and pollock). The codfish were sold by the hundred pounds, from 50 cents to $1 per hundred, while the haddock were always counted. One boat would have two haddock and another three, and perhaps two or three boats would have none. Haddock, weighing four, five, or six pounds, would sell for 15 or 20 cents. For many years haddock were altogether higher than codfish, owing to their scarcity. This was in 1817. The business on the whole during the winter helped them out considerably, because there was nothing else to do here. They used clams in the winter altogether for bait. Most of them we dug in the vicinity, at House Point. About the first of March the winter school of fish was over, February being the best month. Then very little was done in cod-fishing until herring made their appearance, which came in generally about the first of April, and when they caught this fresh bait, for two or three days they would do pretty well. We used to catch some few with clams in March.

Now I have told you about what we did the first year, and that is the character of the fishing that we followed right straight along, although some who were able to build pollock seines were

engaged in fishing pollock. They caught them out at the Race in the month of May, but we had no such thing as a seine. We fished every year just about the same from one year to another.

In 1818 I was eleven years old. In November of that year we moved to Long Point and fished from the shore there. Nobody lived there then. I went to school a little while when I was over here, but not much. I was in the fishing boat most of the time excepting a short period in the winter.

In 1819 we carried on the fishery as in the two preceding years. Up to this time I had staid ashore, although I now felt anxious to go to sea, but my father thought I could do better to go with him in the boat and help him. I said I wanted to go to sea, but he would not go to ship me, but said I could go if I wanted to. There was then a vessel fitting out for Labrador, the Dexter, Joseph Sawtell, master, and he wanted a cook. Father said I might go over and ship with him. I asked $40 for the run—that is, for the voyage. I finally traded with him for $37.50 to go to the coast of Labrador as cook.

We sailed from Provincetown on the 6th of June. All but two of the crew belonged there. There is one man of them still living. The rest are dead. We went to the coast of Labrador, but, as it happened, we were unfortunate in getting codfish. Our men were not the best of fishermen, so that we got a very small share. We carried, I think, 160 hogsheads of salt, and we brought back about 30 hogsheads, and were so much short on the fare. I don't know now how far we went north. We went to what was familiarly known to us as Grosswater Bay. It is not down on the chart. On my return home I found that I had made more than any man on the voyage. Our mode of fishing then was to let the vessel lie in the harbor and send the boats out. We at that time had no vessel on the Grand Bank, and but two or three small vessels went to the Gulf of Saint Lawrence fishing for mackerel. All our fisheries were at Labrador at that time. We carried four boats. We used one boat to get capelin for bait. When fish were plenty during the capelin school the bait boat would seldom go fishing. The fishing boats were baited out of her. We had one of the crew to throat, one to head, one to split, and a salter in the hold of the vessel, salting the fish as they came down. On our arrival on the coast of Labrador few codfish were to be caught until the capelin schools came in, and then the cod came in with the capelin schools. The capelin school lasted about three weeks. If you had some salt when the capelin school was over you might get some herring for bait and fish with them. But we picked up fish very slowly after the capelin went away. When the capelin came on the coast the first that arrived were males. You can tell the male from the female by external signs, so as to distinguish the sexes perfectly well. When the males had been on the coast about a week, then came a mixture of females. They look very much like a smelt, and are soft and full of spawn. We did not use them for food. On an average about one-tenth of the capelin were females. When they had deposited their spawn the males deposited their milt and made the whole water white. Then the females went off. Soon after the fishing slacked off, and we used to say they were capelin sick.

On my return from that voyage, having been absent sixteen weeks and two days, I went to Long Point and was very glad to see another house being erected close by my father's, so that we had two families there in the following winter. In the winter I went in the fishing boat, as I was then old enough to stand the winter. The voyage of the Dexter was in the summer of 1820. After fishing through the autumn and winter and in the shore fisheries the next spring, I shipped for another Labrador voyage. My father shipped me on the schooner Favorite, Captain Paine. We had ten shares in all, and I had three-fifths of a share. I thought as I was thirteen years old I would not like to go again as cook, and I shipped as a hand before the mast. One of the principal men had a brother about my age, and he was not willing that his brother should cook more

than half the time and wanted to make me cook half the time. I objected, but what was the use? I finally had to submit to it. We went early that spring, about the 10th of May, to the coast of Newfoundland. We fished with clams on the north side, being ahead of the capelin school, in the Straits of Belle Isle and at Bonne Bay. When it came time to go north to meet the capelin school we left the Newfoundland fishing and went to Grosswater again, and fished in Indian Harbor on the south side of Grosswater Bay. We then fished until we consumed our salt, with the exception of a few hogsheads. We got a good fare of fish, about 1,200 quintals. Then we came down into the Straits of Belle Isle and went to a place called Pinwire, and there we washed our fish out and took them ashore on the rocks to dry. We brought them home green the year before. We had to turn and dry them on both sides, because we couldn't dry them underneath. I think we staid there about four weeks. We then took our fish in and started for home. On our arrival home the fish were not dry enough for market, and we went to Gloucester and took our fish out and dried them over again, and then went to Boston for a market. My share amounted to $83.00. I then came home in October and engaged in the shore fishery and winter fishery, as in years before.

In 1820 we fitted out the first whaling vessels from Provincetown. There were five that went to the Azores and about that region for sperm whales. In 1821 we had twelve vessels from Provincetown in the sperm-whale fishery. My father went as ship-keeper on one of the whalers, and he made a pretty good voyage, so that he felt richer than ever before. In 1822 we fitted out eighteen vessels, and I shipped in the brig Laurel, Cook, master. In the two years previous the whalers, on an average, did considerably better than the cod fishermen, and that was the reason why the whalers increased so fast. We sailed on the 3d day of April from this port, and went southwest out across the Gulf Stream. On the morning of the sixth day from home one man cried out, "Towno!" They now say, "There she blows," when they see a whale. I was below asleep, and the noise on deck woke me. We lowered a boat and went out. There were three or four or half a dozen whales together, but finally they tricked us and got away and we went back to get our breakfast. We saw in the evening a bunch of whales to the leeward, and we got out and struck a small one and held on to her a short time, but she became loose. I saw, however, that she was spouting blood and they didn't throw the harpoon again, but went to work lancing the whales, and we soon had seven spouting blood, and gave them their death wounds very soon. It soon began to look squally, with heavy clouds in the west. The first whale died and the rest moved slowly to the windward, but it blew so heavy that we went back and took the first one aboard and cut her in. It made but twelve barrels of oil. This was south of the Gulf Stream. I could not say just what latitude and longitude it was in, but I think we may have been one-third the way to the Azores. We then run down, without seeing anything more, hunting around until we made the isle of Corvo; and on the following day we went over to the western side of the island of Terceira. We cruised up and down the shore day in and day out. We saw whales once, but they were going very fast. We chased them until night, but lost them. That was the second time we saw sperm whales. Afterwards, in cruising off to the east side of Terceira, the wind came on to blow heavy from the northwest, and we went through the south side and anchored between Port au Pré and Port Angra. I think there were a dozen out of the eighteen of our fleet anchored there. There was a Portuguese boat came down from Angra just to get a list of the crews and a bill of health. All had a bill of health. He boarded the schooner Nero, Captain Miller, of Provincetown, and when he came to call the crew up to examine them one man was below sick in his berth. He says, "I will take you up to Angra;" but the captain didn't like that. Finally he hesitated some and said, "I think I better go up first and get orders." He went off, I

think, two or three miles, and when he got half way up there Captain Miller up with the sails and went off. The boat didn't come back.

The next day the wind moderated, and we all went out, but didn't get to the whaling ground until just at night. The next morning there was the Nero, with a great big whale alongside, and they were cutting her in. We soon struck one. The whale made good play (as the whalemen say), and we soon killed her and took her alongside. She made 28 barrels. That is what I call a small take. We then cruised there some time longer, and our next move was to go north, passing the island of Corvo and Flores, about latitude 42. There we cruised six weeks. When we had been out a week or ten days it was very windy one morning, from the southwest, and we discovered a whale coming up close to us. The captain said, "The wind is blowing so that we will not lower down, but run her down." We reefed the sails and soon the whale went down. We looked around another hour, but didn't see her at all. At the end of that time we discovered a whale as much as five or six miles to the north of us, and we stretched on towards it, the wind increasing all the time. Before we got to him he went down. He spouted some forty times in forty minutes, and then went down and staid as long as that. When we got to about where we thought he went down we luffed to. Pretty soon he came up. We lowered the boats and got quite near him, but he moved off faster than we could. That was all we ever got near to in all the six weeks.

Then we went in to recruit, to get potatoes, onions, and other fresh vegetables. In the morning the wind was from the northwest, with a light, moderate breeze. We discovered a whale a long distance ahead. We got our breakfast as the vessel was heading along that way. We saw the whale when it went down, and we lowered our boats and rowed out to about where we thought the whale disappeared. The captain said we better stop rowing, and we stopped. Pretty soon the whale came up close to the mate's boat, and he pulled on and fastened to it. It was a monstrous great whale. At that time we used what we called "drogues." We took pieces of thick board about 15 inches square, the boards crossing each other, with a square hole through them. Then we had a piece of hard wood with a shoulder to it, and had a rope strapped to it, so that when we threw the harpoon into the whale, having a warp 6 or 8 fathoms long, if the whale took to running she would have this drogue to tow through the water. We worked on that whale for an hour and a half and it never went down. At the end of the hour and a half we had got in six drogue irons. The whale ran on the top of the water very swiftly. We could not get near enough to the whale so that we could hurt it at all. We lanced it above the hump or behind the abdominal cavity. By and by the whale went down and took about 400 fathoms of line. We carried 220 fathoms in each boat and we had put the two together. I think we had 40 fathoms left. At this time the whale was a good ways off. Whenever we attempted to approach him he would start. He went down six or seven times, and the last time the warp parted and he carried everything with him, and we never saw him again till he was miles and miles away. If we had not put in the drogue irons we might have held him up alongside and killed him. The next day we landed at Pico to get some grapes and figs. All the whales we got made about forty barrels of oil. That was all we saw at the Azores.

The captain then conceived the idea of stopping out over winter. As the other vessels were coming home, one spared us a little bread, another a little meat, and so we recruited out of the other vessels. We left the Azores early in September and went to the Cape de Verde Islands. When we arrived there we had pretty good reports. We went down to the Isle of Sal, which is a salt island. There was no very good anchorage there on account of there being some sharp rocks at the bottom, and we had hemp cables. During the winter while staying here we got our cables chafed off several times. We remained here until the 10th of February. The wind was blowing

most of the time, the regular northwest trades. It finally blew so strong that we couldn't hold, and we went into Madeira Bay and lay there two or three days at a time in the heavy wind. When the wind subsided we went out and worked off the windward of the islands. We went out, I think, some time in December, and got off to the windward of the Isle of Sal, and one Sunday morning we were surrounded with whales. We were not in the habit of whaling Sunday. Some of the crew were anxious to go out and some opposed it. Suffice to say the captain was opposed to whaling Sunday and didn't go. But some of them swore a good deal that night. The captain said we were going to have a good spell of weather, and there were so many whales we could get a good many.

The next morning we had splendid weather, but we never saw a whale all day. Then, Tuesday morning we were surrounded by whales. We were only a few miles to the northward of the Isle of Sal. There was the biggest school I ever saw. We lowered the boat early in the morning and went out and fastened to a whale. We soon killed it and took it alongside and went to cutting it in. The captain then thought if more whales came along we would try to get another that day. The one we took made 28 barrels. He sent me aloft to look out. I was then a boy fourteen years old. It was the fall before I was fifteen. I kept looking, and discovered, away to the northward, whale spouts. I sung out, "Towno!" The captain wanted to know where, and I told him off the weather bow. He came up and saw them. He said, "Let me know when they go down." I told him, and he saw what o'clock it was, and by and by he said, "Keep a sharp lookout." Pretty soon I saw them coming up, about half a mile away, and coming towards the vessel—right at it. We then rowed out, and we had not been out more than five minutes when up came one, close to us. We let the boat run, keeping close to them. There were about a dozen of them. Just before we got to them one of them dropped his tail down and brought his head up ten feet high and hung there. Our boat-steerer wanted to go ahead. He was a young man, and the captain said he expected to head the boat himself. But the young man said he wanted to go in the head and to strike the whale. He did so, and we shot up alongside of the whale and threw the first harpoon. We have two; one called the preventer iron. He threw both of his harpoons, and thought the first one went into the whale some, but the second he knew didn't go in. The whale went off about a hundred yards, and out came his harpoon, and away went the whales, and that was the last of them. The next day the wind began to breeze up. We were to the windward of the islands when I discovered a bunch of whales to the east of us. I gave the alarm and we stood towards them. We soon found there was quite a number of them. We got where they were and went out and fastened to one of them, a fifty-barrel whale. She made pretty good play, and I don't remember whether they drogued her or not. I think they didn't put any drogue irons into her; but we lanced her, and pretty soon she began to spout blood. I was in the mate's boat. We didn't have a full crew. The captain said to the mate, "You better go aboard and unbend the cables from the anchor and have it ready to put around this whale's flukes." We set about to go aboard, and she went down as plump as she could. We bent on our warp after she went down and had taken as much rope as she wanted. When she came up she didn't spout any blood at all. We set out to go up and lance her, and as quick as we tried to do it she turned her head at us. We couldn't get any lance into that. The blubber is composed of what is called white-horse. When we got near her she would turn her head around, throw her jaw out, and come up at the boat. We watched her and tried to get a chance at her. Then they threw a drogue iron right into her breast, when she gave chase to us with her mouth open. We backed away, and didn't know but we should be eaten up. Then she turned right around, and I tell you she made the splinters fly. She went off with the head of the harpoon in her. We had a small sail, and just

after dark we got aboard of the vessel and went into the harbor. There we lay about three days. The next good spell of weather we went out again. We beat to the northward, when we saw something black stretched along out there. We went to it and found it was this whale. She had been dead four days, and had swelled up so much that she was as high as the brig's rail. We made fast to her and secured her. We ran down by the bend of the island, and before morning we were at anchor in smooth water. The captain said, "If we cut this whale, as soon as we cut into the case the oil will run out. The only way we can do is to scuttle the head on the broad side and then get in there and dip it out." We did so, and bailed out ten barrels of liquid oil. It was limpid and clear. Then we undertook to get off the blubber. This was a very fat whale, and when we hooked on to hoist up the blubber the oil would come down faster than any rain-storm I ever saw. We blocked up the scuppers as well as we could and dipped two or three barrels off the deck. After stripping it, we let the carcass go. We staid until the 10th of February. We then ran down to Buena Vista. Then we went to Brava, southwest of the Cape de Verde Islands, and then bore off to the West Indies and went to Martinique. There we found a brig that belonged to New Bedford, Captain Phillips. He was captain when there was no whale in sight, but Captain Warren was captain when there were whales. When we got to Martinique we saw some whales. We lowered a boat and went out and struck a whale—a humpback—and finally killed it and took it alongside the vessel and cut her in. After we had cut up the whale we went and anchored in one of the coves between Saint Pierre and Port Royal, and there we lay and tried it out. That whale gave us five barrels apiece. Then we started for home. On our voyage we had fair weather and were twenty days from Martinique to Provincetown, arriving on the 27th day of March. We sailed the 3d of April the year before. My share was $20. I wanted to go whaling again, but father said, "You can't afford to go," and that wound up my whaling.

The whalers all broke down here then. There was one, Captain Soper, master of the Ardent, who went the next year and coming home he was capsized in a hurricane and four of the crew were washed off. The remainder staid on the brig, and five, after remaining on the wreck twenty-six days, were taken off alive and carried to England. The mate died, but Captain Soper and three men got home. All have since died except one, who is in Fernandina, Fla.

Then I had to go to sea somewhere, and I shipped in the schooner Favorite again, but not with the same captain. They generally hire as cheap as they can. Sometimes the parties who hire crews give them their boots. I got $12 a month and one boot. She was a schooner of 80 tons, Reuben Ryder, master. I think we carried 160 hogsheads of salt, and that multiplied by eight will give the bushels. We sailed from home about the middle of May. We proceeded first to the northern coast of Newfoundland and made a stop at the Bay of Islands, where we commenced fishing with clam bait. We carried the clams with us. You see it was ahead of the capelin school. After fishing a week or ten days we then proceeded northward and arrived at Indian Harbor, the other side of Grosswater Bay. Soon after we arrived, the capelin came upon the coast, and we wet nearly all our salt during the capelin school, which lasted some three weeks. Having some salt left we proceeded homeward, stopping at the Straits of Belle Isle at a place called Henley's Islands. The capelin were gone and we were compelled to fish with sand-eels or lants (*Ammodytes*). There we finished all our salt but a few bushels, left the coast, and proceeded on our voyage homeward. We arrived home about the 20th of September from the voyage, and the fish were brought home in a green state. That ended my voyage. I had earned my $12 a month and a boot, and got my discharge. Then I commenced in the shore fisheries, fishing for dogfish and mackerel in the fall and in the winter fishing for cod. That completed 1823.

After fishing through the winter and spring I shipped again to go another new voyage in the

schooner Independence, of Boston, Capt. Lewis L. Smith. The crew consisted of Lewis L. Smith, master; Daniel Smith, father to the captain, and Lewis and Daniel Smith were his sons. The cook was Daniel, and that was his grandfather's name, and he was on board. Then there were Atkins Smith, the captain's brother, and Job Hill, the captain's brother-in-law. Then there were Ambrose Hill, Job's son, and I. We sailed for the Gulf of Saint Lawrence on the 27th of April. That was too early to get into the Gulf for ice. We first harbored in Barrington, near Cape Sable. Then we made a move eastward and harbored in Liscomb's Harbor. The next move we got to Canso, where we remained several days. The northern part of the straits was filled with ice. After some days of southerly wind, the ice drifted northward and we made another move along, harboring again at Port Hood, where we were detained a few days. We were bound for the Magdalen Islands. We got about half-way, and had to come back on account of the ice. After a few days the ice cleared so that we reached the Magdalen Islands and went into harbor. The vessel went out into the gulf and brought their fish to shore as soon as they got part of a fare, and they were cured by a Frenchman living on the island, who received 10 per cent. for curing them. We didn't fish any to speak of at Magdalen Islands, but we went over to Bank Bradley fishing, also to North Cape, Prince Edward Island. We didn't get more than two-thirds of a cargo of fish, and when it came time to come home we left the Gulf, notwithstanding some 40 hogsheads of salt were not consumed. After taking the fish on board at Magdalen Islands the schooner sailed and arrived home in the latter part of September. When I left the vessel I engaged in the shore fisheries through the autumn, winter, and following spring. This completes 1824.

The next spring I shipped in the schooner President, Ebenezer Atkins master. That schooner was 84 tons, and carried 160 hogsheads of salt. During both of these voyages we fished wholly with mackerel bait, and we could catch as many as we wanted. The mackerel were caught with jigs, there being enough offal thrown over from the decks to keep them on the surface. We nearly always took the spawn of codfish and used it for mackerel toll-bait to keep them at the surface. We fished mostly on Bank Bradley, off North Cape, Prince Edward Island, and along the west shore from Escuminac Point to Point Miscou. We finished our salt and then commenced our homeward passage, arriving home the latter part of September. When we were on the way home I was looking out to see the barren and sterile sands of Cape Cod come into view. After arriving in Provincetown the fish were washed out by the crew and delivered to the owner for preparing for market. I engaged in the shore fishery until the fish were ready for market, when I again joined the vessel. After taking in the fish, we went to Boston for market. The cod-fishermen then went up and tied alongside the Long Wharf. The dock came up to the Faneuil Hall building. Where the Quincy Market building now stands, there was water when I first went to Boston. When I was on the Independence the vessel's jib-boom extended up to North street (Ann street it was called then). Our vessels went up there and hauled up to Long Wharf to wait for a buyer. They kept coming, one after another, until there was quite an accumulation of vessels there. The meat they ate was chiefly sheep, and they would buy them for 12½ cents, but they used to generally give about 25 cents. There was at that time considerable work for the crews in unloading vessels while they were waiting for a purchaser to buy their fish. We sold the fish for $2 a quintal. I made $150.

I was engaged in the following year, during the spring, in fishing for codfish at Race Point. In the winter the fishing was in Cape Cod Bay. I shipped then in a new schooner belonging to Wellfleet, the Aurora, Capt. Freeman A. Baker, master. She was a vessel of 55 tons and was built at Newburyport. We engaged in the mackerel fishery on the New England coast from Cape Cod to Mount Desert. On that voyage the vessel came over from Wellfleet and took me aboard,

also my brother and another boy, and sailed the 29th day of June, 1826. On the first day out, about sunset, we discovered a school of mackerel. We luffed to, threw bait, and called the school alongside, and got some 5 or 6 barrels. That is the first fishing that ever I made jigging. From this we proceeded to Cashe's Ledge and in some two or three weeks we got 150 barrels of mackerel; after which the mackerel ceased biting, and there was ten days passed, and we never got but two barrels of mackerel cruising from Cashe's Ledge to Mount Desert; after which we fell in with mackerel off Mount Desert and soon completed our cargo. We then proceeded for Boston. We arrived in Boston the 2d day of August. We were gone just five weeks. We carried altogether butts, that is, molasses hogsheads, and a vessel of any great size would have four tiers of hogsheads. We took those barrels on deck to strike the mackerel in, to dress them in, and to soak them in. We only carried twenty butts, and the remaining fish were salted and barreled just as they do now. We arrived in Boston and packed our mackerel out. We had 238 barrels: 38 of No. 1, 23 of No. 3, and 177 of No. 2. These mackerel were sold for $4.25 for No. 1, $3.25 for No. 2, and $2.25 for No. 3. Inspection cost us 92 cents a barrel. The inspector hired the butts. After a day or two we packed out and the vessel came home. We were in a hurry to get out. The wind came on from the northeast and kept us ten days, after which the wind hauled to the southward, when we left for the fishing ground. The wind changing to the eastward we bore up for Cape Ann and remained in the harbor of Gloucester for a week; after which the wind changed to the westward and we left the harbor. We arrived off Mount Desert and it came on a storm and we landed in Cranberry Islands. We had got 26 barrels in getting so far on our voyage. After leaving the harbor the next day we proceeded eastward. The 11th of September we got 38 wash barrels, the 12th we got 45, the 13th of September (which was my birthday) we got 51, on the 14th we got 28, and the next day 24. The wind then came on from the eastward and we bore up and went to Cranberry Islands again, with 140 barrels of mackerel. When the weather became good again we went out and found plenty of mackerel, and completed our cargo. We proceeded to Boston, where we packed out 253 barrels. We had 177 barrels of No. 1, 8 barrels of No. 3, and 68 barrels of No. 2. As we were going into Boston we hailed a mackerel schooner that was coming out, and they said that mackerel were worth $3, $4, and $5. Our skipper remarked that if they kept as high as that he wouldn't ask any more. He would get rich enough. The crew made $105 to a share.

Then we made another trip, the third, fishing between Cape Cod and Cape Ann, on what is called Stellwagen Banks. During fall we got 225 barrels more that we packed. About 190 barrels were No. 1, and the rest No. 2. The last day we were wide off shore from Marblehead, on the 20th of November, and caught 20 wash barrels. Then it began to snow and we came into Boston Harbor. The next morning there was ice over the wash barrels. We went up then and quitted the voyage. I made $200 for the three trips. That following winter and spring I engaged in the shore fishery.

Early in June I went to Boston and took the schooner Missouri, 33 tons. She wasn't very big. This was my first trip as captain. After fishing about a month for codfish we abandoned that and fitted for the mackerel fishery on the New England coast. We had two men beside myself, and two small boys, and got about 200 barrels of mackerel during the season. We closed up our fishing about the middle of November. We jigged the mackerel and sometimes picked up a few barrels with a gaff. When we fitted in the fall I bought a quarter of the vessel, for which I paid $100. The next spring I started codfishing in our bay about Cape Cod. About the 1st of May we left off fishing there and fitted for the Gulf of Saint Lawrence cod fishery. We carried 45 hogsheads of salt. I don't know what time we left the Gulf. We wet all our salt. On our arrival

at Cape Canso we were short of provisions, but I supposed we would not be more than a week, but we were fifteen days, so we were half starved when we got home. After landing our fish we fitted for the mackerel fishery, and I was employed in that until the middle of November, 1828. In the winter I engaged in the winter fishing in the same vessel. We went to the north shore off Lynn and remained there six weeks. I made $12. We came home and the vessel was laid up until the next season.

By going four months out of the nine, exclusive of the winter, we obtained a bounty at the rate of $4 a ton on the vessel's measurement. We commenced early in March and fished until about the 1st of June for codfish; after which we engaged in the mackerel fishery until November on the coast of Maine and Massachusetts. Then we went bounty catching about a week or ten days. We called it bounty catching because we shouldn't have gone if it hadn't been for the bounty. After spending the winter at home I was still in the Missouri, and in the spring engaged in the halibut fishery along the shores of Cape Cod and Nantucket Shoals. At that time it took only a small quantity to glut the Boston market with halibut. The most we got was 3 cents a pound. I have carried 2,000 weight, and when I got to Boston would let them (the dealers) come into the hold and pick out 1,000 weight which I would sell for half a cent a pound and throw the rest overboard. Some vessels could'nt sell their cargoes at all. The reason of this was because Boston was small in population. Ice never had been used for icing halibut; but was used only in the city of Boston, and that was as far as they could be carried without ice. Gloucester was not engaged in the halibut fishery at the time, so that we, particularly Wellfleet, supplied the Boston market with halibut. The halibut season commenced in March and lasted until July. When mackerel got fat there was no sale for halibut.

Early in June, 1830, we fitted for the mackerel fishery. We went first off about the vicinity of Cashe's Ledge and fished from there to Mount Pleasant Rock. We got a trip of 100 barrels and were absent four weeks. I think we made $30 to a share. There were three men, including myself, and two boys on board. It was the custom of mackerel vessels to carry stone ballast in the bottom and stow the barrels on the top of the stones. We threw out the stones and only took in and headed up 12 barrels of stone, and stowed the vessel full of empty barrels and salt.

We sailed from Provincetown the 1st day of August. On the following day, at 9 p. m., it commenced to blow a gale from the northeast. We were just near the western edge of George's Bank. It blew so hard the vessel could hardly stand up, and lay over on her side, and we were pretty scared. The gale moderated, however, the next morning. When we had been out a week we had 2½ barrels. The vessels fitted out for short voyages, from one to six weeks. When we were out two weeks we had 16 barrels. It looked pretty blue. One-third of our time was gone and we had caught only 16 barrels. We then ran eastward down off the coast of Grand Manan, and when three weeks were out we had 60 barrels. Afterwards, for some ten days, we caught very few mackerel, and proceeded westward. When off Mount Desert hills, bearing about northwest, we fell in with plenty of mackerel and filled all our barrels. We arrived in Boston after an absence of about six weeks, with 127½ barrels. We had 83 barrels of No. 1, and the balance No. 2. There were only about 2 barrels of No. 3, and we didn't pack them, but kept them for grind bait and toll bait. We shared clear $103. We got about $6.50 for No. 1, and $5.50 for No. 2. Our outfits were very light. The vessel drew one-quarter.

We then fished in Massachusetts Bay between Cape Cod and Cape Ann and got about 75 barrels, which closed the year's fishing. We thought that was doing pretty well, and the owner wanted me to leave the vessel and take a larger one. He bought a new vessel on the stocks for me, of 75 tons, but he had no written contract and the fellow backed out because the price raised and

wouldn't sell. I went to Boston in March, expecting to have that vessel. About the last of March the schooner Mary arrived from the West Indies and I took her and fitted for the Grand Bank. We sailed from here the 11th of April for the cod fishery. We depended at that time more particularly on mackerel fishing. All the Provincetown Bankers came in early so as to be ready for the mackerel fishery. This was not the case with Plymouth and Marblehead, which were engaged exclusively in the cod fishery. That April, May, June, and half of July were spent on the Banks fishing for codfish, and on the return the vessels fitted for mackerel fishing, and in the fall at the close of the mackerel fishery they put in the remainder of the four months in cod fishing in order to secure the bounty. We had eight men and a cook, so that we fished half and half, having four for a dress gang; one to throat, one to head, one to split, and one to salt. They exchanged places every watch of two hours. The fishing was all carried on from the deck of the vessel. We carried salt clams for bait and generally took about 20 barrels. We returned home about the middle of July; after which we engaged in mackerel fishing on the coast of New England from Cape Cod to Mount Desert. During the summer we caught 400 barrels of mackerel. We quit fishing in the early part of November, 1831, to make out the rest of our time to obtain the bounty. We made $163 to a share. We could live very well with a family then on that, if the family wasn't too big. I staid ashore that winter and didn't go fishing.

On the 2d of February, 1832, I sailed for the West Indies as captain of the Mary, although I had never been engaged in the coasting trade and knew nothing about it. We were bound for Ponce, Porto Rico. After landing the cargo we engaged a freight of molasses for New York. We arrived there about the first of April, and from there we went to Murfreesborough, North Carolina, in ballast, after a cargo of white-oak pipe staves for Boston. We arrived in Boston with our cargo and then proceeded to fit for the mackerel fishery. That year the mackerel were poor and scarce and we made a small voyage, only making $10 apiece. We left the vessel in the fall.

In January, 1833, I had a new schooner called the Caroline. We loaded on the owner's account and went to Ponce again. After discharging our cargo we loaded with sugar and molasses for New York and returned without incident. Then we chartered to go to North Carolina and load with red-oak hogshead staves for Falmouth, Jamaica. After discharging cargo we went up the river to Tobasco, Mexico, in ballast and loaded logwood for New York. After having an ordinary passage to New York we took in ballast for Boston. This year it was so late that all the good men were employed, and I preferred to leave the vessel and go fishing with my brother, who was then on a cod-fishing voyage. So I went with him mackerel fishing on the schooner Nelson. We sailed about the middle of July and ended about the first of November. We made $120 to a share. There were seven men in the crew, but three of them were hired. These were paid about $10 or $12 a month. The owner wanted me to take a schooner called the Lucretia, on shares, and go to North Carolina and get freight, and I took charge of her. She was a vessel of 77 tons. I sailed the 26th of December. I started to go to Ponce again with red-oak staves and cypress shingles, and then I agreed to return with a cargo of molasses for the same parties. I staid at Ponce twenty-nine days, and subsequently loaded with molasses and returned to Edenton, North Carolina. On my return I received instructions from my owners to purchase a cargo of red-oak hogshead staves, which I did, and returned to Boston for the fishery. I gave up the vessel in Boston. It was an unprofitable voyage. I lost my time and $50.

Then I shipped again with my brother to go mackereling on a schooner called the Lucy Mary. We had five on shares and the rest were hired. After going out and spending some three weeks, and being off the coast of Grand Manan, my brother was taken sick with fever and we brought him home. We only got half a dozen barrels of mackerel. On our arrival home I then took

charge of the vessel. First I went to Chatham and found nothing, and then went into Massachusetts Bay and fished on Middle Bank, and in about three weeks got a trip of 160 barrels. We went into Boston and packed them out. We fished a second trip in the bay, between Cape Cod and Cape Ann, and caught about 150 barrels more. At the end of the season, 1834, we hauled the vessel up.

I sailed in the schooner Lucy Mary on the 28th of April, 1835, for the Grand Bank, and was absent 11 weeks and 3 days, obtaining 600 quintals of fish. The Lucy Mary measured 59 tons O. M. (about 38 N. M.) We carried three sharesmen, and three men and a cook, hired at a cheap rate, and made $200 to a share. On our return we landed our fish, which could not be cured at that time of year, salted them in kenches, and put them in the store to wait for cold weather. After this we fitted for mackerel fishing in the Gulf of Saint Lawrence. We shipped one more sharesman and sailed August 2, fished for a while about the Magdalen Islands, and returned home about the middle of October with 180 barrels of mackerel. We fished for the rest of the season for cod and mackerel in Massachusetts Bay, making $220 after the 2d of August. After the end of the season we carried our codfish and mackerel to Boston and sold them, the codfish selling for $2.75, the mackerel for $7 and $8. I spent the winter at home. I didn't feel like going fishing, and went to building dories, which, at this time, were just coming into use. (See account of dory business elsewhere.)

In 1836 I was still in the Lucy Mary, my brother, John Atwood, master, and we started in the spring for the Grand Bank. We sailed the last of April, and after a short passage of six days anchored on the Grand Bank. In the first two or three weeks we caught between 4,000 and 5,000 fish. Then it came on to blow heavy from the north and northeast. We were at an anchor, and as many as twenty vessels—square-rigged French brigs and American schooners, all catching some fish—were around us. The blow lasted nine days, and when it was over there was not a vessel in sight, all having drifted away or been obliged to change their berths. The wind brought down hundreds of great icebergs, which were floating all around us. We got our anchor and ran for the eastern end of the Bank, but we met a vessel which said that it was full of ice there, so we ran to the north, and there, on the edge of the Bank, between latitude 45° and 46°, through the whole voyage, when it was clear, we could see twenty icebergs or more floating all around us. We were frightened almost to death all the time, particularly when the fog shut down thick, but none of them came foul of us. The ice was there as long as we were. When we got home we had been gone eleven weeks and three days, and had on board 572 quintals of fish. This year my brother and I had fitted the vessel and hired the whole crew, paying $18 apiece a month for three men, $16 for one, and $8 for a cook. We made $460 to a share. On our arrival home we discharged all our crew, and my brother and I landed all our fish ourselves and put them in salt. Then we got on board the salt and the barrels and everything for the Gulf of Saint Lawrence. We sailed on the 1st of August, and on our arrival we could not hear of any mackerel being caught. We spoke vessels from Bank Bradley and Prince Edward's Island and Gaspé, but they all said there was no fishing. So we bore up and went to the Magdalens. When we got there we found that they had been catching mackerel the day before off Black Land, near Tantenore, off the northwest coast. So the next day we went down there. We found nothing till we got to the east end, and there we caught a few. The wind blew up to the northwest heavy and drove us around to the west of the island, where we anchored under the lee. The next day the weather moderated, and then we could get no mackerel at all. Then we bore up and went to Newfoundland. We went as far as Port au Port, and never caught a mackerel—not a mackerel. Then we went back to the Magdalens as quick as we could get back, and fished there for the rest of the voyage. We returned home

about the 10th of November, and packed our mackerel—192 barrels of No. 1 and 33 of No. 2. After packing the mackerel out we took them in and carried them to Boston. They were then worth $7.31 and $8.31. We concluded not to sell, and brought them home, and laid up the vessel alongside the wharf to wait for them to raise. In February we went up to Boston, I think, again, and they had raised $1 a barrel, so we made $225 by keeping them. From this trip we netted $430 to a share, or $890 for the whole voyage. This was a big year for us.

In the spring of 1837 the owner of our vessel sold out to go into the commission business. He had a large packet called the Tam O'Shanter, a brig; and when we were in Boston to sell our mackerel in February he asked me to take charge of her. So I shipped in the brig, and came down home to get my clothes. The first voyage was to Savannah, with an assorted cargo. I hired at $50 a month. We left the 27th of March, and returned to Boston with a cargo of cotton. This was the time of the panic, and we could get no freight, so we chartered to go to St Thomas to look for freight there. There was no freight there, so we went to the island of Bonaire and loaded with salt for Boston. We loaded deep and came out through the Mona passage. The next day came a hurricane. What a time that was! It blowed away my sails, split off seven stanchions, water-ways, and the bulwarks, and it was all we could do to keep her afloat. She was leaking badly, and the crew could not leave the pumps. I lost my mainsail, and had to lie to under a close-reefed foresail. Then it died away a flat calm and held calm six days. Then it breezed up fair, and we came up to Boston. We left home early in September. The brig was next chartered to go to Port au Prince. My folks would not let me go, because it was sickly there, and I engaged for the rest of the fall in fishing for dogfish and mackerel, and that winter I went winter fishing until March, 1838, at which time we had got into the habit of going fishing in dories.

In 1838 my brother John and I bought a pink-stern boat of 46 tons, called the Orlando. She was an old cheap thing, but we thought she would do to putter around the shore in. So we let our schooner out to go to the Grand Bank. We fished around the shores of Cape Cod and on Nantucket Shoals for cod and halibut, and carried them to market. Then in May, when the dogfish began to trouble us, we came inshore to fish for mackerel, which were plenty along the Truro shore. We fished until June, and then went to the Gulf of Saint Lawrence. Our sails were so poor we did not stay there long, and we got only about 20 barrels. We returned home, and fished along our bay for the balance of the fall. That winter I didn't go fishing. I didn't feel very well, for I had hurt my knee in the summer. The folks over on the Point had got disappointed in their school-teacher, so they got me to teach school, and I got sick enough of it. I had about thirty scholars.

In the spring of 1839 we got another man to take the Orlando, and I took the Lucy Mary and went to the Grand Bank with one sharesman and a cheap crew. I didn't go very early, for I fished on the backside of Cape Cod the first part of the season, and sailed for the Grand Bank about the 6th of June, returning about the middle of September. That was one of the years when mackerel were scarce. As the prospect looked so bad for mackerel we concluded to wash out the fish and lay up the vessel. So John and I cured up the fish. We could do better at that than to hire them cured and go mackereling. When we arrived home with 557 quintals, fish were worth a good price, $3.50 a quintal, but when we got ours cured they had fallen to $2.50. We concluded we wouldn't sell them, but keep them until spring. In February, 1839, we took the Lucy Mary and went fishing for halibut in the gully between the cape and the middle grounds at a depth of 20 to 30 fathoms. We fished there in the spring, and then went down the backside of the Cape after halibut and cod. After the season was over I took in my fish and carried them to Boston, and could hardly sell

them at all. I sold 300 quintals at $2 a quintal to one dealer in Albany, and another Albany man took half the rest on condition that I would ship the remainder, which I did, and got $1.71 a quintal for them. So on that Grand Bank voyage I made only $50.

In 1840 mackerel were extremely scarce. People who had been whaling at the Azores said that they were plenty there, and large ones, so I conceived the idea of going to the Azores in search of mackerel. We fitted out the vessel and I went there with a crew of five men, all sharesmen. We found no mackerel there, but a sort of bonito, probably the *Auxis rochei*, so I got home as quick as I could. So we hauled up until winter and then we fished in the gully for halibut. Only one other vessel, the Adrian, was fishing there, and we did very well. We had the monopoly of the Boston market, for at that time the Gloucester vessels did not begin the halibut fishery until the 1st of March. Sometimes we got 10 cents a pound for the fish.

In 1841 I was still in the Lucy Mary, and in the spring we went off Monomoy and Chatham and fished for shad. This was a new kind of fishery. Years before, when I used to go there for bait, I saw a man catching shad, but could get no information from him, and it was evident that he tried to be shy. In 1840 we mistrusted they were catching shad there, and two or three vessels went down there from Provincetown, and fished with others from Chatham and got a good many. In 1841 great preparations were made for catching shad, and vessels went there from Connecticut, Rhode Island, and all around. A petition was sent to the legislature to prevent out States folks from fishing. The law passed, but the fishermen came nevertheless. The law must have scared the shad away, for none came there that year. We found no shad at Monomoy, so we went over to Nantucket. We got a few in the course of our absence of three or four weeks, or we should have made a broken voyage. The Lucy Mary was high boat, for we ventured out in rougher weather than the others. We had four boats and eight men, and made about $60 to a share, my brother and I. Shad were worth about $7 a barrel, and weighed 3 or 4 pounds each. They came late in May and early June, and were not there more than a fortnight. When fishing for them we went out in small boats and drifted, each boat carrying about 800 yards of gill-net, which we made ourselves on purpose. The year before everybody had done well. After the shad had left we returned and engaged in the mackerel fishing. This year, before the nets were set, mackerel had been seen outside the cape, and we concluded to drift for them as we had for shad, and made a good thing of it. We used common mackerel nets, each boat setting ten nets of 60 yards each. We used to put them over and let them drift all night, and in doing this we found an everlasting sight of whiting, which were very troublesome. We sometimes had to draw in our nets for fear that we should catch so many whiting we couldn't haul them out the next day. We used to get tons and tons of them. They had always been plenty and staid until the bluefish tipped them out. We made perhaps $100 in mackerel netting, sending them to Boston fresh, and paying a quarter for carrying them. After the spring mackerel net-fishing was over, we fitted the Lucy Mary for the Gulf of Saint Lawrence. We shipped a crew of seven men, all sharesmen. This was one of the awful scarce years for mackerel, and only 55,000 barrels were packed in the whole State. We went direct to the Magdalen Islands, fished down to the eastern end and staid there and kept catching a few on the ledges. They were good mackerel what we did catch. We kept hearing from the west shore of the gulf that there were no mackerel there. We staid until October and then came out with 100 barrels. That was as well as we could have done at anything, for mackerel were considerable high. We got a good price and made about $100 apiece. In the winter we went halibuting again.

In 1842 I got a letter from Dr. D. H. Storer, of Boston, saying that he was preparing a book on the fisheries of Massachusetts, and asking about the torpedo, which he had heard occurred on

our shores. I knew all about it. I supposed, having been a fisherman so long, I knew a good deal. He was a doctor of physic, and I thought I would aid him without any pecuniary pay, and he accepted. After I had answered questions about thirty-two kinds of fish he sent me his report, and said that was all they knew about fish and anything I could do would be important. I looked over it and found that I could do a good deal, and this was the beginning of my acquaintance with scientific men.

In 1842 I was fishing for halibut and cod on the backside of the cape, but left off soon enough to go shadding again, a second time, at Monomoy, from the last of May to the 20th of June. We had our nets already made and could go without any additional cost of outfit. We were unsuccessful and made only about $20 to a man, the crew consisting of eight men. There were probably fifty sail of vessels off Chatham fishing for shad. After this was over we commenced mackerel dragging in the bay, and continued it until the middle of July. Then we fitted for the Gulf of Saint Lawrence, sailing the latter part of July. We fished altogether at the Magdalens and got only 60 barrels; but this was a good share compared with other vessels. There were very few Provincetown vessels in the mackerel fishery that year, they being engaged mainly in the cod and whale fishery. There were a few from Cape Ann in the gulf with us. We returned home late in the fall, and our profits were very small.

In the winter, from the 1st of February, 1843, to May, we fished as usual in the gully for halibut, and went to Boston eight or nine times, sometimes carrying 5,000 or 6,000 pounds of fish sometimes not more than 2,000. About this year we began setting trawls for halibut, as has been described elsewhere. Before we began trawling we carried ten dories and eleven men, one man staying on board while every other one of the crew took a dory and went out to fish with hand-lines at various points within sight of the vessel. After trawling began we carried only five dories and sent two men out in each of them. When we first began fishing for halibut in the gully the fish would weigh on an average about 135 pounds. This was in 1838; but after we had fished there three or four years they didn't average more than 75 pounds. We used haddock for bait. After we got through halibut fishing there was no encouragement to fit for mackereling. Our vessel was old and would not pay for repairing, so I went to Saint Pierre and sold her to the French for $600. I ballasted her with brick, which also brought a good price. That wound up the old Lucy Mary.

In the spring of 1844 I commenced to fish in a little old sloop which my brother had bought. It wasn't good for anything, and was called the Mars. We had a crew of two men and a boy. We fished on what we called Mill Ledge, not more than a mile from Highland light, in from 14 to 25 fathoms of water. We caught about 500 or 600 weight the first day out, and as we couldn't get them into the well alive we struck them with a club as big around as my arm, and then put them into the well dead. The wind sprung up and the next morning it was still blowing fresh. We started to haul our dead halibut up to dress them when to our surprise every one of them was alive! We hit them as hard as we could. On this trip we made $100 to a share.

After the spring fishing was over we then engaged in the mackerel net fishery for the season. The mackerel came in here to spawn the latter part of May and through the month of June. We didn't use the sloop in this fishery, but had a boat.

The plaice, *Platessa oblonga* of Storer, was extremely abundant here then. At that time there were a great many squid, and the plaice fed on them. We caught 2,000 plaice in one afternoon. We sold them in Boston for turbot. Here and there we could find a marketman who would buy 150 or 200 pounds, but generally there was no demand for them. So we gave them away very frequently. After we went two or three times to Boston with plaice we found it wouldn't pay at

all. We could catch enough, but couldn't find a market for them. When bluefish came they became very scarce.

After we got through carrying plaice to Boston we went out in the bay and fished for cod and hake, and whatever we could catch, until about the 1st of September. We didn't like the sloop very well. We got tired of pumping. Hearing of a sloop for sale at New London I went there and bought the smack J. Sawyer, 33 tons. After buying that smack we brought her around in the fall of 1844, and commenced fishing in her, and fished into 1845. The 1st of January we were fishing for codfish. We had a crew of five men and carried four dories. The men were all on shares. We fished for cod in our bay and on Mid Bay Ledge, 7 miles from here towards Sandwich, the first of the winter and into January, 1845. Subsequently the fish left the ledge and we went out into deeper water off Race Point. After fishing till spring, about the 1st of April we went on to Nantucket Shoals with that smack for halibut, and I think we stocked about $400 while we were there. We went four trips, about five weeks altogether.

Then we stopped at home to engage in the mackerel net fishery, and let our smack out to a man who carried the fish to Boston market fresh and got a quarter for carrying them. We fished in our boats in our bay, drifting for mackerel.

After that mackerel season was over there was no prospect of doing much here and we came to the conclusion to go down to the coast of Maine. We went to Monhegan, and the fishermen there said we couldn't catch mackerel in nets; but we went out in our dories and set our nets in the night. We were gone from home four weeks and made $90 to a share. We thought that was doing pretty well and went down again, but the next time there were so many sharks that we couldn't do much and came home. The sharks would get in and tear the nets.

After returning home in the fall we set nets in our bay. We set them in the night and would draw them in the morning if the weather would permit. We fished in this way till about the middle of November and then fitted out for winter fishing in Cape Cod Bay. We fished for codfish in the bay and carried them alive to Boston market. In the spring of 1846 we engaged in halibut fishing as the year before. Then we let out our smack for a man to go in her to run mackerel while we fished for them in the bay. Then, after we got through with that, which might be about the 1st of July, we went to Monhegan as the year before. Several others went that year. We didn't do much. Returning home we fished with mackerel nets (gill-nets) here in the fall, until about the middle of November, when we commenced winter fishing again. (See Storer, Fishes of Massachusetts, pp. 58–174).

During the winter we had carried to Boston 3,999 cod, which weighed 51,263 pounds, and we stocked $734.18. In the spring we caught 2,205 cod and stocked $240.43.

We went cod-fishing in the winter until May 8, 1847. Then we went dragging for mackerel. This year we concluded not to go to Monhegan, so two of us took the smack and took two loads of lobsters to New York. We didn't do much with them. They died, for we didn't know how to take care of them very well. After returning, about the 1st of August, from New York, we commenced fishing for hake and pollock and fished way into the autumn. We didn't save the hake sounds then.

After that fishing was over we set mackerel nets until late in December and then commenced winter fishing again.

In the spring we went halibuting, fishing down on Nantucket Shoals until May. Mackerel catchers didn't do much, so that I didn't go at all to set mackerel nets. After the spring halibut fishing was over I commenced to carry lobsters to Boston. After the Boston trade fell off we then made five trips to New York with lobsters. We brought home fruit to sell. We bought the lobsters

here. We stopped about the 1st of September, 1848, and then commenced fishing for hake and pollock again. We did better at lobstering than we could at anything else. In the fall we set mackerel nets, but did not do much and fitted out for winter fishing as usual.

In 1849 we were in the J. Sawyer still fishing for cod in the winter and halibut in the spring. We had contracted to furnish lobsters to Boston, but we heard of cholera being at the south and the dealers backed out.

During the spring of 1849 I was in Boston selling codfish. We were accustomed to take our livers to Boston, and we sold them for 25 cents a bucket. Some parties came and offered us 37 cents. I made inquiry and found they wanted them for medicine, but I thought it was pretty coarse medicine. I was acquainted with doctors, physicians, and chemists, and I inquired about cod-liver oil, and they told me that it had been used in France for some years and was getting more common every day. Afterward I made a little oil and they said at Boston it was just as good as they ever saw.

I conceived the idea of going to Labrador to get cod livers, and Prof. Jeffries Wyman, Horatio R. Storer, and Frank H. Storer went with me. We started in pursuit of objects of natural history and the manufacture of medicinal cod-liver oil. It was late in the season, and most of the cod-fishing was over. I carried two dories. I got 300 gallons of cod-liver oil. We then returned home, and resorted to setting mackerel nets through the fall. My wife died while I was absent that voyage. This was the commencement of my manufacture of cod-liver oil, and I have been engaged in it ever since. I sold my smack when I came home, and in the spring of 1850 I bought the schooner William Gray, 58 tons, and fitted for Labrador. The main object of the voyage was to procure cod-liver oil. I carried 200 bushels of salt which I consumed on the codfish of my own catch. We got 20 barrels of medicinal oil. Then I returned home about the middle of September.

During that fall our fishermen were fishing for hake and pollock, and I commenced buying them. I didn't fish myself. I made $200. My schooner was hauled up at this time. My brother had a schooner, the Ned Buntline, and I went fishing for cod in the bay with him in the December of 1850. We fished for halibut, and did very well. After I left the Ned Buntline there were some men who wanted to go halibuting, and I told them if they were a mind to get the schooner off I would go. They got her off and I put a new suit of sails on her and started about the early part of April. I shipped my crew upon their own hooks. Every one had what he catched. I got 2,000 weight of halibut and went to Boston and sold them for 2½ cents a pound. We then went to Nantucket Shoals, and we caught 67 halibut that day and they weighed 6,000 pounds. This was Thursday, and the next day the wind struck us northeast and we went to Edgartown. Monday we came out and by night we were off Chatham and we tried to get up by the Cape. The next morning it blew heavy and I run down and run in after sounding on the shoal ground of Stellwagen Bank. Finally we got here and anchored in Herring Cove. The wind increased that night and the next morning the schooner dragged her anchor. Then I put on another and she dragged that too. Finally I put out the chain anchor and that held her till the gale was over. That night Minot's Ledge Light was blown over. I then went to Boston and found halibut in good demand. The first sold for 6 cents. Then I sold some for 5 and sold the last for 1 cent a pound. We stocked about $120. I owned the whole vessel and drew a quarter for her, so that I made a considerable good trip. After recruiting with bait we started out again and the first day we caught 67 again, and the next day we caught about 60, and the third day about 20 and started for Boston. Where I fished was in about 18 fathoms, Chatham Light bearing northwest by west. We went to Boston and sold our halibut for 5 cents right through. My share was $175. We were gone five days. Then we went one other trip down there and got about $100. Then we came home and fitted for the Bay Chaleur, Gulf of Saint Lawrence.

We sailed about the middle of July, 1851. We went down the coast of Maine and tried to get some menhaden but didn't catch much. After arriving in the gulf we went to the Magdalen Islands to fish and fished there until about the middle of September, when we went to Prince Edward Island. We took a heavy squall from the northeast. There were six vessels in company with us. We could see where the harbor went in, and I had a man aboard who had fished there before and who said he was just as well acquainted there as with Provincetown Harbor. One of these other schooners was half a mile ahead and one was behind. Then it got dark and I lost sight of these vessels. I saw a tremendous breaker ahead and I put Nat, my little boy, below and hauled to the north and luffed, and I hadn't run but a minute when I saw a sea coming from the other quarter. When that sea came along midships it broke right over us. The next sea that struck us didn't strike us so hard. She came working over till she came to the main beach of the island. She was up so high that the tide didn't wet her keel. I stripped her and sold her there. She brought most as much as she was worth. I was there a week. I went aboard another Provincetown vessel that was coming home and got off at Saint Peter's that night, and there came on what was known as the Yankee gale. I think it was the 4th of October, 1851. We hauled off that night and the next morning it was blowing a gale of wind. We sailed on till nearly night heading up northwest, and I saw a big breaker ahead. A sea struck us and took off our jib and flying jib and the boat off the stern. We were carried right up on the north part of Saint Peter's. I had twenty barrels of my mackerel aboard, which I saved. Then I finally came home in another vessel. I made pretty well that voyage. She was insured for $600, and I got my mackerel out and shipped them for home. We made $40 to a share on our mackerel, and did tiptop.

My brother was building a vessel at Northport, L. I., called the Golden Eagle, 80 tons. In the spring of 1852 I went fishing for halibut on Nantucket Shoals and took them to New York. Then we came here for mackerel fishing and this vessel carried them to Boston. Then we went to George's Bank for halibut in June, and carried our halibut to New York. We went two trips. After the two trips we fitted for mackereling—salt mackereling. We went off east of Cape Ann, and subsequently in the bay, and fished until the 1st of October, and then came home, and my brother took the vessel and went packeting to Boston and I set mackerel nets. In those winters I made cod-liver oil, but that didn't stop me from dory fishing.

When we returned from the George's in August, 1852, we stopped at Provincetown and took in 2,000 lobsters. There were three sharesmen and we each took our wives and children to New York to the World's Fair. There were eleven of us, and we stopped a week in New York.

In 1853 I was in the Golden Eagle on Nantucket Shoals, and afterwards went to George's Bank until the 1st of September, as the year before. In autumn I fished with gill-nets in our bay. I bought 200 quintals of hake and pollock.

In 1854 John, my brother, left, and I took charge of the schooner and fished for cod and halibut on Nantucket Shoals and George's Bank as the year before, and afterwards fished for mackerel from the shore. Then my brother-in-law took her and went mackereling.

In 1855, in the spring, I commenced dory fishing for cod, and preparing for catching mackerel with nets. I built a new boat, called the Ichthyologist, which cost $240, for a drag-boat to drift with nets in the bay. My son Nat was going with me and seemed to think that there was small chance for me to be high boat, until I undertook to explain to him why I thought I should be. I said to him, "I know what the mackerel come here for. They come here to deposit their spawn. They spawn in the head of the bay, in 7, 8, or 10 fathoms of water. If you go up to the spawning grounds you will find them more numerous." Accordingly, we got our boat ready and on the 20th day of May we left and went up the bay into about 10 fathoms of water. There we put over our

nets just as it was dark. All the rest of the fishing boats went out southwest from the Wood End to pick up those scattering mackerel, except one that chased me. When we drew our nets in the morning I think we had 2,050 mackerel, when we returned home. The other boat, the one that chased me, got 3,000. We then put them on a schooner and sent them to Boston and paid one-quarter for carrying. Of the boats that went off the Wood End the high boat got 140. My brother thought it was strange that he didn't get more; that he got his best night's work out there the year before, but he didn't remember at what time of the year it was. The following night it was still pleasant, and *all* the boats went up the bay. One of the vessels was afraid if they didn't haul their nets that night they wouldn't get any fish, so they drew their nets at 9 o'clock, and only got 1,500. When I hauled in in the morning I had 3,500. When I arrived I found that the vessel that took mackerel was all full, and I landed at home and salted them, and E. S. Smith & Co. gave me 2 cents apiece for them, so I got $70. After the mackerel deposit their spawn in the head of the bay they want something to eat, and I thought that where there is the most bait is where the tide running into Cape Cod bay meets with still water. I went there and got a full fare. At the close of the fishing we were high boat. We stocked about $320, which was about $100 more than any other boat. After the fishing season was over, which terminated about the middle of June, I shipped in the schooner Wave Crest, Captain Doane, and went to Monhegan to catch mackerel with nets, and took my boat and nets with me. We fished with gill-nets, drifting off the island. The fishermen there took a great fancy to my boat and I sold her for $240.

In the spring of 1855 I built a new boat. In the summer I went with that boat to Monhegan for mackerel, returning home the 1st of September. Then I fished from the shore for mackerel until late in the autumn. In the winter I engaged in fishing and making cod-liver oil.

In the spring of 1856 I built another boat and commenced about the 20th of May to drag mackerel nets, which lasted until about the middle of June. The 1st of July I received an appointment as commissioner to inquire into the expediency and practicability of the artificial propagation of fish. I located at Sandwich to watch the habits of the trout (*Salmo fontinalis*) during the spawning season. I had two colleagues on the commission with me, Hon. Reuben A. Chapman, of Springfield, and Dr. Henry Wheatland, of Salem. In the following winter we made our report, which terminated the commission. In November I was elected a member of the State house of representatives, which took me away from the fishing here.

When it came January of 1857 I went to the legislature, which was in session one hundred and forty-six days, and did not return home until June. On my return home I took the sloop-smack Federal and engaged in buying lobsters and carrying them to Boston until September, after which I was engaged in the shore fisheries in autumn, and the mackerel fishery.

The following January, 1858, I was returned to the house. After the close of the session I joined the sloop Federal and engaged in the lobster and bluefish trade, sending the fish to Boston until September. In the autumn I engaged in the shore fishery.

In 1859, in January, I was winter fishing, and in the spring I joined the sloop Federal again and engaged in the lobster and bluefish trade again, as the year before. In the fall I engaged in the shore fishery and mackerel net fishery.

The next spring, 1860, I again joined the Federal and went in her until about the 1st of June, when I went to Plymouth and there I swapped this smack for a better one called the Wave, by paying $400 to boot. I continued in the same business, fishing and buying lobsters and bluefish when I could get them, and selling them in Boston, until the 1st of September. In autumn I engaged in the mackerel net fishery and later in winter fishing.

In the spring of 1861 I took the sloop Wave and commenced fishing for cod and halibut, after

which I engaged in carrying fresh mackerel and lobsters to Boston until September. In the autumn I was fishing for mackerel with gill-nets in Massachusetts Bay.

In 1862 I did not go fishing in the winter—only occasionally. In the spring I was fishing for cod and halibut again, and in the summer for lobsters and bluefish. In the winter I engaged in the manufacture of cod-liver oil; in fact, I did so every winter. In the fall I set mackerel nets.

In 1863 I was in the sloop Wave, and engaged in fishing the same as the year before.

In 1864 I was in the Wave off Cape Cod in the spring and carrying mackerel and bluefish to Boston until September. In the winter I engaged in the manufacture of cod-liver oil.

In 1865 I was still in the Wave, engaged in cod and halibut fishing in the spring, and carrying fresh mackerel to market that we caught in gill-nets here, which lasted until about the middle of June. After that I engaged in carrying bluefish to Boston and fishing in the bay for codfish. In the autumn I fished for mackerel with gill-nets. In the winter I made cod-liver oil.

In 1866 I was in the sloop Wave, halibut fishing, as in springs before. After which carrying mackerel to market until June; and through the summer I engaged in the bluefish and dogfish fishery. In September I sold my vessel. That is when I coiled up my lines and quitted going vesseling.

Ever since that time I have been engaged in the manufacture of medicinal cod-liver oil and in smoking halibut brought from the Grand Bank.

In 1866 I bought 250 quintals of halibut, but was about three months smoking them, and the price fell, and I lost all my labor and $500. The next spring I received a notification to deliver a course of lectures before the Lowell Institute, which I gave in the winter of 1868.* I smoked 400 quintals of halibut for Boston parties. In 1869, 1870, and 1871 I was in the fishery. Each and every year we smoked from 400 to 700 quintals of halibut, until the last three years. Last year we smoked 130 quintals, but the manufacture of cod liver oil has been my main business.

* The lectures delivered by Captain Atwood at the Lowell Institute in 1868 were largely attended and very successful.—*Editor.*

INDEX.

Page.

Abalone fishery 37, 38, 40
Abalones, dried 37, 38, 40
shells of 37
Abby Dodge, schooner, struck by tornado 111
Accidents considered unlucky 62
Aid societies 127, 128
Alabama, fishermen of 5, 27
Alameda County, California, Chinese in 39
Alaska, fishermen of 5, 6
American Coast Pilot 102
American fishermen 7, 11, 24, 25, 27, 28, 29, 42, 46
Amusements of fishermen 26, 74
Anchor, breaking out of 130, 135
Anchoring a vessel, method of 130, 133
Andrew Leighton, schooner, accident to 106
Antarctic seal fishery 61, 93, 106
dangers of 126
Appalachicola, fishermen of 25
Spanish creoles at 25
Arctic whaling, dangers of 117
Ardent spirits on vessels 8
Atwood, Capt. N. E., autobiography of 149
lectures by 57
Austrian fishermen 6, 35, 36
Authority of skipper of vessel 98
Avarice of Chinese 40
Azoreans at home 31
dress of 32
Azores, destruction of vineyards at 31
fishermen from 6
habits and customs at 31, 32
reason for emigration from 31
whale fishery at 152
Babson, Capt. F. J., on patriotism of fishermen 82
on provincial fisheries 14
Bahama fishermen 6, 24
Bait, capelin for 151
clams for 150
effects of scarcity of 10, 11
manner of icing 78
sand-eels as 155
Baiting-stations, life at 77
Baiting the trawls 75
Ballads, fishermen's 50
Bank Bradley, fishing on 156
Bank fisheries, dangers of 105

Page.

Barometer 102
Barraguda, fishery for 34
Barrels, fish, manufacturers of 5
Barvel or apron 68, 86 87
Bass fishery, profits of, for schools 48
Bay des Chaleurs fishermen 16
Baymen of Long Island 22
B. D. Hawkins, schooner, accident to 108
Bed-clothing 89
Belgians on Great Lakes 45
Beliefs regarding natural phenomena 63
Berlin exhibition, fishery exhibition at 59, 89, 92
Beverly, fishermen of 79, 91
Black bass fishery 35
Block Island, fishermen of 55
Bluefish fishery 168
Blunt's American Coast Pilot 102
Boarding-houses, sailor 43, 73
Boat builders 5
Boat-fishermen of Maine 7, 10
of Portland 11
Boats, Chinese 40
Italian 36
repairs of 142, 145
Books read by fishermen 68, 70
Boots, called stompers 68
fishermen's 87
part of share for trip 155
Bosphorus, steamer, in collision 114
Boston, fishermen of 7
Irishmen at 21
Bounty to vessels in cod-fishery 158
Bowley, Captain Gideon 90, 94
Bowsprit, loss of 143
Box-makers 5
Boxhauling a schooner 130, 131
Boys, training of 50, 51
Bravery of fishermen 85
British fishermen 7
British Provinces, whalemen from 7
British Provincial fishermen 6, 7, 14, 49, 54
Boughton, Nicholas 80
Brown's Bank, dangerous shoal on 111
Burke, James, rescue of 124
Buyer, dependence on 16
Cables, loss of 105

Page.
California, Austrians in 53
Chinese in 6
fishermen of 29
Frenchmen in 35
Indians in 44
Portuguese in 6,33
Spaniards in 34
statistics of fishermen of 5
Campers on Maine coast 11
Canadian fishermen at home 16
Canadian-French on Great Lakes 45
Canvas carried by a schooner 138
Cape Breton, dangerous fishing at 107
fishermen of 14, 49
"Cape Cod and all alongshore," cited 65
Cape Cod fishermen, dialect of 65
Freeman on 146
training of 52
"Cape Cod folks," cited 65
Cape de Verde Islands, fishermen of 6
whale fishery at 153
Cape Flattery, Chinese at 41
Capelin for bait 151
Cape North, dangers from ice at 116
Capitalists, fishery 95, 96
fishermen as 54
Capital of the British Provinces 15
Capsized, boats 121
Capsizing, dangers from 110
Cards, game of 77
Cashe's Ledge, dangers at 111
Cedar Keys, fishermen of 25
French creoles at 25
Italians at 25
Spaniards at 25
Chaney, Samuel 57
Chapman, Hon. Reuben A 167
Characteristics of American fishermen 53
Californian Chinese 40
Charitable organizations 126
Charles A. Ropes, schooner, locked in ice 116
Charts carried on fishing vessels 102
Cheticamp, one-sided harbor at 107
Children, fishermen's, intelligence of 50
Chilian fishermen 42
Chinese, fisheries destroyed by 41
fishermen 6, 29, 37, 40, 41, 42
in Oregon 41
salmon canneries 41
Washington Territory 41
on *Atlantic coast* 6
Chronometer carried on vessels 102
Churches supported by fisheries 48
Clam fishery by Chinese 41
Clams, for cod-bait 150, 152
Clothing, care of 88
of fishermen 86
Key West fishermen 24
Codfishery 164, 166, 168
at Labrador 151
Race Point 156

Page.
Codfishery, bounty to vessels in 158
dangers of 104
early methods of 150, 151
Grand Bank 74, 151, 160
profits of 95
Cod oil 165
Cod-liver oil 165, 167, 168
Coleman, William, rescue of 123
Collins, Joseph W 130
Collision, dangers from 104, 113, 124
Columbia River, dangers of fishing in 126
fishermen of 42
Italians at 30
Columbia, ship, struck by whale 118
Compasses carried on vessels 102
Conchs, Bahamans called 24
Connecticut, fishermen of 7, 54
statistics of fishermen of 5
Consumption, fishermen subject to 91
Conversation among fishermen 13
on shipboard 76
Cook, duties of 73, 74, 75, 90
wages of 9
Cooking meals on shipboard 90
Corsicans at New Orleans 27
Corthell, William, rescue of 123
Costume of fishermen 86
Cots, finger 88
Cranberry Island, Maine 157
Credit system 25, 26, 47, 96, 98
Crew, duties of 99
management of 99
Crochett, Dean, awards to 85
Cuban-Spanish fishermen 24
Curers and packers of fish 5
Customs of New England fishermen 8
Dances at baiting stations 79
Danger of fishermen being washed overboard 120
Dangers of the fisheries 104
from collision 104, 124
cuts and bruises 120
defective construction of vessels 118
drowning 125
ice 125
loss of sails 110
loss of spars 110
in approaching the shore 112
leaving the shore 112
on the fishing grounds 104
to fishermen 119
the vessels 104
vessels from fire 117
vessels from ice 115
vessels from lightning 117
vessels from marine animals 118
vessels in harbors 115
while cruising 104
Danish fishermen 21
Daring of fishermen 58
David A. Story, schooner, accident on 106, 119
Delaware, statistics of fishermen of 5

Page.
Dench, Capt. Thomas 85
Dialect of Marblehead fishermen 67
of Newfoundlanders 17, 19
peculiarities of 17, 19, 64, 67
Disabled vessels, management of 142
Disasters 9, 24, 107
on Great Lakes 45
to vessels 104
Discipline of the crew 97
Diseases of fishermen 9, 27, 91
sealers 93
whalemen 93
Dogfish fishery 41, 43, 155, 161
oil 43
Drag, bringing a vessel to a 130, 134
Dragging for mackerel 164
Dragon, hook called 68
Drawing pay 73
Dress of fishermen 86
Dried fish, prepared by Chinese 37
Dried flounders and perch 35
Drowning, danger from 125
Drunkenness 8, 36, 71, 101
Duff, food called 68
Dutch fishermen on Great Lakes 45
Dwellings of Chinese fishermen 37
Long Island fishermen 23
oystermen 23
Dyspepsia among fishermen 90, 91
Earll, Mr., on Maine fishermen 12
Early training of Maine fishermen 12
Earnings of fishermen 9, 10, 11, 25, 26, 27, 30, 47, 73, 92, 94, 95
Eastern Queen, schooner, accident to 113
Eastport, Me., Indians near 14
E. B. Phillips, schooner, accident to 114
Edith M. Pew, schooner, accident to 109
Edmonds, Mr., on oystermen 23
Education 7, 11, 23, 24, 27
Education, higher 50
of Cape Cod fishermen 146, 148
fishermen's children 8, 48
New Orleans fishermen 28
wives and mothers 8, 48
sea 50
shore 48
Edwin C. Dolliver, schooner, loss of 106
Elbridge Gerry, of Marblehead 80
Eldridge's charts 102
English fishermen 6, 7, 45, 64, 67
whalemen 7
Enterprise of Cape Cod fishermen 146
New England fishermen 7, 58
lack of 10
Epes Tarr, schooner, dismasted 106
Eskimo fishermen 7
Essex, whaleship, destroyed by whale 118
Examination for masters of vessels 99
Farralone Islands, fishing at 36
Filling water 77

Page.
Financial profits 9, 11, 25, 26, 27, 30, 47, 73, 92, 94, 95
Finns on the Columbia River 42
Fire, danger to vessels from 117
Fish dealers 5
Fishermen's life ashore 72
Fishermen's Memorial and Record Book 65, 95, 104
Fishermen's Own Book 65
Fishermen's Song Book 65
Fishermen's Union of San Francisco 36
Fishing towns, education in 7, 46, 49
villages of Newfoundland 20
Fish-smother, food called 68
Fitch, Albert F., rescue of 85
Fitzgerald, Henry, rescue of 124
Florence, schooner, in fur-seal fishery 61
Florida, fishermen of 24
statistics of fishermen 5
Flounders, dried 35, 41
Fog, dangers from 123
Fog-horns 124
Folk-lore of Scandinavians 64
Food of Appalachicola fishermen 26
Italian fishermen 36
Key West fishermen 24
New England fishermen 9, 10
on fishing vessels 74, 89, 90, 91
Foreign fishermen (see Nationality) 6, 7, 49
Fowle, J. F., menhaden food discovered by 57
Franklin, A., schooner, sunk by collision 114
Freeman on Cape Cod fishermen 52, 146
French-Canadian fishermen 46
French Creoles 25
French fishermen 6, 7, 24, 27, 35, 42, 45
on Great Lakes 45
French fishing-vessels, food on 91
Frenchmen on the Columbia River 42
on the Pacific coast 35
Frogs, capture of, in California 35
Fur-seal fishery, dangers of 106
Gambling 40, 96
Games on shipboard 77
Gaspé, fishermen of 16
Gay Head Indians 14
Genoese fishermen in California 29
George's Bank fishery 166
fishery, dangers of 104
profits of 95
Georgetown, fisherman of 11
Georgia, statistics of fishermen of 5
German fishermen 6, 7, 24, 42, 45
in California 42
on Great Lakes 45
whalemen 7, 42
Getting under way with a vessel 130, 135
Gill-net fishing by Chinese 40
Gill-nets, cod, adoption of 7
Girls, education of 8, 48
Gloucester, British Provincials at 6, 14
Danes at 21
Englishmen at 7

Page.
Gloucester fishermen, public services of 79, 82
Fishermen's and Seamen's Widows and Orphans Aid Society 128
Frenchmen at 7
Irishmen at 7, 20
Portuguese at 6, 21
Relief Association 129
Scandinavians at 7, 21
Swedish fishermen at 21
vessels, discipline on 98
Gloves, mackerel 88
Gordy, J. P., on superstitions 60
Grand Bank codfishery 74, 151, 160
Manan, fishermen of 68
Gray, Capt. David, of Peterhead 58
Great Lakes, disasters to fishermen of 45
fishermen of 5, 45
health of fishermen of 45
nationality of fishermen of 45
Greek fishermen 6, 27, 35, 36, 42
Greeks at New Orleans 27
San Francisco 36
on the Columbia River 42
Pacific coast 35
Green Bay City, fishermen at 46
Greenwich Hospital, contributions to 93
Grunt, food called 68
Gulf of Saint Lawrence, dangers in 107
mackerel fishery in 151, 162
Gulf States, number of fishermen in 5
Habits of Long Island fishermen 22
Haddock fishery, dangers of 109
early history of 150
sold by count 150
used for halibut-bait 163
Hake fishery 164, 165
Halibut fishery 161, 163, 164, 165, 166, 168
dangers of 104, 105
in Washington Territory 35
profits of 95
smoked 168
Haliotis fishery 37
Hand-haulers 88
Hardihood of fishermen 7, 10, 58
Harding, Capt. King 94
Head wind 138
Health of fishermen 25, 27
Cape Cod fishermen 149
Great Lakes' fishermen 45
Heaving to, method of 132
Henrietta Greenleaf, schooner, loss of 111
Henry Clay, schooner, loss of 109
Hereward, schooner, locked in ice 116
Herring fishery in California 39, 40
profits for schools 48
Home life of fishermen 10, 11, 13, 49, 72
Cape Cod fishermen 147
Homes of Long Island fishermen 23
Honesty among fishermen 71
Horse-mackerel fishery 35
Hospitals, marine 92
Hospital tax 93
Houses of Chinese fishermen 40
fishermen 10, 23, 24, 36, 72
Great Lakes' fishermen 46
Howard, schooner, accident on 119
speed of 140
Hubbard's History of New England, cited 20
Humane services 83
Humboldt County, California, Italians in 31
Huron, fishermen of 46
Icebergs on Grand Bank *160*
Ice, dangers from 115, 125
taking in 78
Icing bait, method of 78
Illinois, statistics of fishermen of 5
Ill luck, causes and indications of 61
Immigration of Provincials 14
Azoreans 31
Indiana, statistics of fishermen of 5
Indian fishermen 6, 7, 14, 42, 43, 45
of New England 14
the Pacific 43
on the Columbia River 42
Indian half-breeds on Great Lakes 45
whalemen 14
Indians, traits of 44
Inspection of mackerel 157
Insurance, mutual 9
Intellectual grade of fishermen 49
Intelligence in fishing villages 8, 48
of fishermen 48, 50
Intemperance 8, 26, 36, 46, 71, 101
International Fishery Exhibition 59, 86, 92
Intoxicating drinks on vessels 8, 71, 90
Investigators, fishermen as 56
Irish fishermen 6, 7, 20, 24, 42, 46, 54
of Boston 54
New England 20
on Great Lakes 45
the Columbia River 42
whalemen 7, 42
Isaac Walton, schooner, loss of 113
Isles of Shoals, fishermen of 13, 55
observance of Sabbath at 70
Italian boats at San Francisco 36
fishermen 6, 25, 27, 29, 30, 36, 42
at New Orleans 27
in San Francisco 36
on the Columbia River 42
fishermen's union 39
Jamaica fishermen 6
James L. Shute, schooner, loss of 115
Janet Middleton, schooner, loss of 115
Jibing a schooner 130
Jiggers, boats called 68
Joe-floggers, food called 68
John S. Presson, schooner, accident to 106
John W. Low, schooner, loss of 111
Jonah, definition of 61
Jonahs, objects called 9
Jordan, Prof. D. S., on California fishermen 29

Page.
Jordan, Professor D. S., on Chinese fishermen 37
Spanish fishermen 34
Journals kept by fishermen 57
Judique, fishermen from 49
Jumper, oiled 86
Kanakas 6, 7
Kanaka whalemen 7
Key West, Bahamians at 24
fishermen of 24
Frenchmen at 24
Germans at 24
negroes at *6, 24*
Swedes at 24
Knights of Pythias, fishermen belong to 127
Kumlien, Ludwig, on Great Lakes' fishermen 45
Labrador codfishery 100, 151
Lake Erie, fishermen of *46*
Lake Huron, fishermen of 46
Lake Michigan, fishermen of 46
Lake Superior Indians 45
Lascar fishermen 6
Lavoie, Napoleon, on Canadian fishermen *16*
Lay system 94
Leaks, repairing 142, 144
Lee-bowing another vessel 130, 137
Le Have, fishermen from 14
Lewis, Thomas, rescued from wreck 85
Life ashore 72
Life on shipboard *74, 90*
Life, routine, on barks 74
Lightning, danger to fishermen from 120
dangers to vessels from 117
Literary societies 49
tastes *13, 68*
Literature on the vessels 8, 9
Livier, Newfoundlander called 79
Lobster trade 164, 166
Lockport, fishermen from 14
Log-books kept by fishermen 57
Log, patent 102
London Fisheries Exhibition 86, 92
Longevity of fishermen 9, 25, 28, 91, 93
Long Island, fishermen of 22
Lord, James, awards to 85
Los Angeles County, California, Chinese in 38
Italians in 29
Louisiana, statistics of fishermen of 5
Luck, fishermen's 61, 62, 101
Lucky-bones carried by fishermen of 64
Lunenburg, fishermen from 14
Lyceums supported by fishermen 49
Lying to, method of 132
Mackerel dragging 164
fishery 151, 156, 157, 161, 166, 167
dangers of 107, 114
in Gulf of Saint Lawrence 162
profits of 48, 95
net-fishery 164, 168
Magdalen Islands, disasters at 107
fish-curing at 156
fishery at 156, 160
Magdalen Islands, mackerel fishery at 166
Maggie Blanche, schooner, wreck of *85*
Maine, fishermen of 7, 50
shore fishermen of 10
statistics of fishermen of 5
vessel fishermen of 11
Malayans at New Orleans 27
Malay fishermen 6, 27
Malpeque, disasters at 115
Management of vessels 130, 142
Manly, John, hoisted first American flag 80
Marblehead, fishermen of *79, 91, 96*
Road's history of 84
Statesman, quotation from 84
war record of 79, 80, 81
Marin County, California, Chinese in 39
Italians in *31*
Marine hospitals 93
Marion, schooner, speed of 140
Marketmen 5
Marr, Capt. Chester 90, 94
Marriage among Maine fishermen *10, 12*
Married life 10, 12, 25, 27
Mary E. Hiltz, schooner, loss of 112
Maryland, oystermen of 23
statistics of fishermen of 5
Masonic fraternity, fishermen belong to 127
Massachusetts, fishermen of 7
Humane Society 83, 85
statistics of fishermen of 5
Master, duties of 97, 100
Masters of vessels must be naturalized 37
Maynard, John, rescue of 123
McCloud River Indians 43
McGrath, James, rescue of 123
McLean, Miss, "Cape Cod Folks," by 65
Meals on fishing-vessels 74, 90
Medicinal cod-liver oil 165
Medicine chests 93
Medicines, supply of 9
used on fishing-vessels 92
Menhaden fishermen, observance of Sunday by 70
of Long Island 23
fishery 166
food discovered 56
Menominee, methods for collecting fish at 46
Mental traits 53
Merchant, Epes W. 14
Merchants, fishermen as 54
Merluch, fishery for 35
Mexican fishermen 28
Michigan, statistics of fishermen of 5
Middle States, fishermen of 5
Milwaukee, disasters to fishermen at 46
Minnesota, statistics of fishermen of 5
Ministers, fishermen as 55
salary of, paid by fishermen 48
Minorcan fishermen 6, 27
at New Orleans 27
Mississippi, statistics of fishermen of 5
Mittens, blue, considered Jonahs 61

Page.
Mittens, woolen 87
Mobile, fishermen of 27
Greeks at 27
Italians at 27
Spaniards at 27
Monkey jackets 86, 87
Monterey County, California, Chinese in 38
Italians in 30
Moon, superstitions regarding the 64
Moore, Capt. James 85
Morality among salmon fishermen 42, 43
in New England fishing towns 8
of Cape Cod fishermen 146
Morals of fishermen 69
Long Island fishermen 23
oystermen 23
Mufflers 87
Mugging up 75, 92
Mullet fishermen 26
Musicians, fishermen as 55
Music on shipboard 77
Nantucket, intelligence of fishermen at 57
Nationality and general characteristics 5
Nationality of fishermen, American 7, 11, 24, 25, 27, 28, 29, 42, 46
Austrian 6, 35, 36
Bahaman 6, 24
Belgian 45
British 7
British Provincial 6, 7, 14, 49, 54
Cape Breton 14, 49
Chilian 42
Chinese 6, 29, 37, 42
Corsican 27
Cuban 24
Dutch 45
English 7, 45, 64, 67
Eskimo 7
French 6, 7, 24, 35, 42, 45
Genoese 29
German 6, 7, 24, 42, 45
Greek 6, 27, 35, 36, 42
half-breed 6, 45
Indian 6, 7, 14, 42, 43, 45
Irish 6, 7, 20, 24, 42, 46, 54
Italian 6, 25, 27, 29, 36, 42
Kanaka 6, 7
Lascar 6
Malay 6, 27
Mexican 28
Minorcan 6, 27
Negroes 6, 7, 22, 24, 27, 28, 42, 54
New Brunswick 7, 14, 49
Newfoundland 7, 14, 17, 49
Norwegian 21, 45
Nova Scotian 7, 14, 49
Polish 45
Portuguese 6, 21, 30, 31, 33, 36 42, 54
Prince Edward Island 14

Page.
Nationality of fishermen, Russian 45
Scandinavian 6, 7, 21, 42, 45
Sclav 6
Sicilian 27
Slavonian 36, 42
South Sea Islanders 6, 7
Spanish 6, 25, 27, 28, 34
Swedish 7, 24, 42, 45, 46
Swiss 45
Nautical instruments 102
Navigation 97, 102
training in 51
Negro fishermen 6, 7, 22, 24, 27, 28, 42, 54
on Pacific coast 6
Negro oystermen 23
Neptune's Bride, schooner, loss of 121
Nervous exhaustion, fishermen subject to 92
Nets, Chinese 41
New Bedford, British Provincials at 6, 7
Englishmen at 7
Germans at 7
Irishmen at 7
Kanakas at 7
Portuguese at 6, 7, 21
New Brunswick fishermen 7, 14, 49
Newburyport fishermen as privateersmen 79
Newcomb, Mr., cruise to Grand Bank 58
New England fishermen, number of 5
traits of 8
sailor fishermen of 8, 48
Newfoundlanders 7, 14, 17, 20, 49
Newfoundland, baiting stations at 77, 78
destitution among 17
fishermen of 17, 20, 49
fishing villages of 20
herring fishery at, dangers of 116
New Hampshire, statistics of fishermen of 5
New Jersey, statistics of fishermen of 5
New Orleans, Corsicans at 27
fishermen of 27
Frenchmen at 27
Greeks at 27
Italians at 27
Minorcans at 27
Malayans at 27
Portuguese at 27
Sicilians at 27
Spaniards at 27
Newspapers read by fishermen 69
New Tacoma, Washington Territory 35
New York, statistics of fishermen of 5
Nippers, hand 88
No Man's Land, fishermen of 55
Nordhoff, Charles, on Cape Cod people 65
North Carolina, statistics of fishermen of 5
Northern Chief, schooner, loss of 114
Norwegian fishermen 21, 45
on Great Lakes 45
Nova Scotia fishermen 7, 14, 49
Nova Scotians came to Gloucester in 1828 14
Number of fishermen, statistics of 5

Page.
Oakes, Capt. Elisha 14
Observation, powers of 56
Ocean Belle, schooner, speed of 140
Ocean Nymph, schooner, loss of 114
Octant, carried on vessels 102
Odd Fellows, fishermen belong to 127
Officers of vessels 97
Ohio, statistics of fishermen of 5
Oil, cod-liver 165, 167, 168
dogfish 43
whale 48
Oiled clothing 86
Oil-sleeves 87
Onward, schooner, improvising sails on 144
Oppression of sailors 76
Oregon, Chinese in 6, 41
Frenchmen in 35
Indians in 43
Italians in 31
Portuguese in 34
statistics of fishermen of 5
Osborne, Henry L. 58, 72, 74, 89, 97
Ownership of vessels 95
Oyster dredges of Maryland 23
fishermen of the Chesapeake 54, 72
Gulf of Mexico 54
Oystermen 26
of Chesapeake Bay 8
Long Island 22
Maryland 23
New Orleans 27
moral character of 72
Oyster shuckers of Maryland 24
tongers 8, 23
tonging licenses 8
Paranzelle fishing in California 30
Passamaquoddy Indians 14
Pastimes on shipboard 74, 76
Patriotism of fishermen 55, 79, 80
Pay, drawing 73
Pennington, Captain, drawing of ice-scene by 116
Pennsylvania, statistics of fishermen of 5
Perch fishery 35
Peter Gott, the Cape Ann fisherman 65
Physical traits 53
Pinkies, boats called 68
Plaice, abundance of 163
Pymouth colony, schools and churches of 481
Pogies, boats called 68
Polish fishermen on Great Lakes 45
Politeness among fishermen 13
Pollock fishery 164, 165
Porpoise fishing by Indians 14
Port Hood, disaster at 115
Portland, boat fishermen of 11
Port Madison, Washington Territory 35
Portuguese at New Orleans 27
colonies in New England 21
customs of 32
fishermen 6, 54
of New England 21
Portuguese in salmon fisheries of the Columbia 34
on Pacific coast 30, 36
whalemen 7, 21, 33, 42
Prawn, capture of, by Chinese 39
Precautions against loss of life 123, 126
Prince Edward Island, dangerous fishing at 107, 115
fishermen of 14
Princess, schooner, fire on 118
Privateers manned by fishermen 79
Procter, George H., on fishermen 15, 59
Products of fisheries, total value of 5
Profane language 8, 70
Professional fishermen, number of 5
Profits, division of 31, 94
financial 26, 155
of Great Lakes' fishermen 46
Provincetown, fisheries near 150
literary societies at 49
negro whalemen at 22
old fishermen at 94
Portuguese at 21
Provincials at 6
Provision for bereaved families 126
Public libraries 49
services of fishermen 79
Pubinco, fishermen from 14, 49
Puget Sound, fishermen of 6
Purse-nets for capture of shrimp 39
Purse-seines, adoption of 7
Quadrant carried on vessels 102
Quartermaster's Harbor, Chinese at 41
Rattler, schooner, capsized 111
ice-blocked 116
Reading by fishermen 8, 13
Reforms needed on vessels 99
Refrigerators, manufacturers of 5
Relief associations 127, 128, 129
Religion among fishermen 8, 26, 28, 30, 36, 49, 69, 75, 149
Portuguese 32
Repairs to disabled vessels 142
Reynolds, Dr. Joseph, on fishermen 65
Rheumatism among fishermen 9, 27, 91
Rhode Island, statistics of fishermen of 5
Rich, Hiram, on dialect 65
Riding-sail 140
Rigging, repairing damages to 142, 143
Roads, Samuel, on Skipper Ireson 84
Rockfish, fishery for 34
Roman, bark, loss of 117
Rudder, repairing 142, 144
Rum on fishing vessels 8
Running under, danger of vessels 110
Russians on Great Lakes 45
Sabbath, observance of 8, 69, 154
Sabine on discipline of fishermen 100
public services of fishermen 53, 79
Sable Island Shoals 112
Sacramento River, Indians at 44
Sailor fishermen 7
of New England 8, 48
Sails carried away 110

Page.
Sails, repairing of 142, 144
Saint Croix, fishermen from 6
Salem fishermen, patriotism of 79
Salmon canneries, Chinese in 37, 41
dried 41, 44
method of canning 41
fishermen 6
fishery 42, 43
Chinese in 41
Greeks in 35
dangers of 126
Salmon-trout 41, 43
Salt fish, ministers paid in 48
Salt used in fish-curing 151, 156
San Buenaventura, first house at 29
San Diego County, California, Chinese in 37
Italians in 29
Portuguese in 33
San Diego, first house at 29
San Francisco, Austrians in 36
Chinese in 38
cod fishermen of 34
Greeks in 35, 36
Italians in 30, 36
Portuguese in 34, 36
Slavonians in 36
whalemen of 42
San Luis Obispo County, California 38
San Mateo County, California, Chinese in 39
Portuguese in 34
Santa Barbara, California, Chinese in 38
Italians in 29
Portuguese in 33
Santa Barbara Islands, Indians at 43
Santa Cruz County, California, Chinese in 38
Italians in 30
Santa Cruz Islands, Chinese at 38
Sarah P. Ayre, schooner, accident to 108
Sarah C. Pyle, schooner, capsized 109
Sault de Ste. Marie, Indians at 45
Scandinavian fishermen 6, 7, 21, 42
of New England 21
Scandinavians, folk-lore of 64
on Great Lakes 45
Scandinavian whalemen 42
Scant wind, canvas carried in 138
Schools 8, 49
at Apalachicola 26
Key West 24
establishment of public 148
supported by fisheries 23, 48, 149
Schooner, evolutions of 130
Science aided by fishermen 56
Sclav fishermen 6
S. C. Noyes, schooner, locked in ice 116
Scotch fishermen, folk-lore of 64
Scudder, N. P., cruise to Greenland 58
Sea bass, fishing for 34
Sea education 50
Sea-elephant fishery, dangers of 107

Page.
Sealers, dangers to 126
Sealers, diseases of 93
Seal fishery, dangers of 106, 107, 126
discipline on vessels in 97
Sealing at Neah Bay 43
Seals, destruction of fish by 41
Seal, fur, fishery for 61
Seamanship 7, 14, 40, 58
of British Provincials 14
Seas striking the deck, danger of 118
Seattle, Washington Territory 35
Seaweed collected by Chinese 40
Sea Witch, schooner, fire on 117
Seines, Chinese 37, 41
purse 7, 39
Services of fishermen in war times 79
Sextant carried on vessels 102
Shad, capture of, by Chinese 38
Shad fishery at Monomoy 162, 163
Shares, fishermen's 155
Sharesmen 98
Shark-fins eaten by Chinamen 39
fishing in Washington Territory 43
Shenandoah, privateer 82
Shipping papers signed by crew 99, 100
Shoals, dangers from 111
Shooting alongside of a dory 130, 136
wharf 130, 137
Shooting-to 130, 132
Shore education 48
fishermen of Maine 10
peculiarities of 55
Shoresmen 5
Shrimp, dried 39, 40
fishing by Chinese 39, 40, 41
shells, shipped to China 39
Sicilians at New Orleans 27
Sickness among fishermen (see Diseases) 25, 91
whalemen and sailors 93
Siwash Indians 43
Skipper, duties of 97
Hermit, poem called 65
"Ireson's ride" quoted 83
selection of 99
Slang used by fishermen 64, 65
Slavonian fishermen 36, 42
Smelt fishery in California 35, 39, 41
Smoked halibut 168
Smotheration, food called 90
Snow-storms, dangers in 112
Social vices 71
Songs, fishermen's 50
South Carolina, statistics of fishermen of 5
Southern Atlantic States, fishermen of 5
States, fishermen of 8
South Sea Islanders 6, 7
Sou'wester hat 86
Spaniards at New Orleans 27
Spanish Creoles 25
fishermen 6, 25, 27, 28, 34

Page.
Spanish fishermen of San Francisco 34
Spars carried away 110
loss of 142
Speed of fishing schooners 140
Sponge fishermen 6, 26, 54
Squid, abundance of 163
method of icing 78
Squalls, dangers from 122
Starbuck, on disaster to arctic whalers 217
patriotism of fishermen 81
Statistics of fishermen of United States 5
Saint Croix fishermen 6
Stearns, Silas, on fishermen of Florida 24
Mobile fishermen 27
New Orleans fishermen 27
Texas fishermen 28
Stellwagen Banks 157
Stompers, boots called 68
Stone, Livingston, on McCloud Indians 43
Storer, D. H. 162
Horatio R 165
Storer on fishes of Massachussetts 164
Story, Judge, of Marblehead 67
Stradding the cable up 133
Straits of Belle Isle, fish-curing at 151, 152
Straits of Mackinac, fishing at 46
Sturgeon, backbone of, dried 39
Sunday, observance of 8, 154
Sun-dogs, superstitions regarding 63
Superstitions among fishermen 9, 28, 63, 64
causes of 60
Superstitious usages 9, 64
Surf fishing by Chinese 40
Swedes on Great Lakes 45
Swedish fishermen 7, 21, 24, 42, 46
Swiss fishermen on Great Lakes 45
Swordfish attacking vessels 118
Tacking a vessel 130
Talleyrand on fishermen 147
Taxation, fishermen exempt from 83
Tax, hospital 93
Temperance of Cape Cod fishermen 149
reform at Gloucester 71
Tenement association at Gloucester 129
Texas, fishermen of 28
negroes in 28
Spaniards in 26
statistics of fishermen of 5
Thaxter, Celia, on dangers of fishermen 125
Isles of Shoals fishermen 55
Thaxter's Isles of Shoals, quoted 70, 125
Thomson, Sir C. W., on Portuguese 31
Throater, knife called 68
Tobacco, use of 36, 92
Tomcod, fishery for 35
Training in navigation 51
Training of Cape Cod fishermen 52
of youth 50
Traits and customs 8
Trawls, baiting the 75
Treat, Capt. U. S 47

Page.
Tripped, danger of vessels being 109
Triumph, schooner, sunk by collision 113
Trustee system 73
Truthfulness 71
Tucker, Samuel, public services of 80
Two Rivers, French Canadians at 46
Unloading cargoes, duties of crew in 73
Unlucky days and acts 62
Value of fishery products 5
Velocity of wind at sea 141
Ventura County, California, Chinese in 38
Italians in 29
Vessel-builders 5
fishermen of Maine 11
Vessels as Jonahs 61
disasters to 104–118
management of 130
ownership of 95
Vices of fishermen 96
Villages, *fishing, on Great Lakes* 46
Virginia, statistics of fishermen of 5
Vulgarity 70
Wachusett, schooner, accident to 110
Wages of fishermen 9, 25, 26, 155
oyster shuckers 24
Walter F. Falt, schooner, loss of 106
Washington Territory, Austrians in 35
Chinese in 41
fishermen of 5
Frenchmen in 35
Greeks in 35
Indians in 43
Italians in 31
Portuguese in 34
Watches, arrangement of 76
Wearing a schooner 130
Weather-bitting the cable 133
Weather, superstitions regarding 63
Wedding flags 18
Wellfleet Marine Benevolent Society 127
West Indies fishermen 24
Whaleboats at Isles of Shoals 13
Whaleboats used in codfishery 150
Whale fishery, dangers of 106, 112, 116, 117
decline of 26
in California 33, 34
Provincetown 152
Whalemen 6
Arctic 42
British Provincial 7
dangers to 119, 126
discipline among 97
diseases of 93
English 7
German 7
Indian 14
Irish 7
Kanaka 7
longevity of 94
negro 22
observance of Sabbath by 70

	Page.
Whalemen, patriotism of	81
peculiarities of	55
Portuguese	7, 21, 33
resistance to privateer by	82
Whales attacking vessels	118
Wheatland, Dr. Henry	167
Whittier, John G., cited	83, 84
Widows and Orphans Aid Society	128
William Babson, schooner, accident to	113
Wilmington, California	29
Winchester, Capt. John, rescued	85
Wind abeam	138
Wind, superstitions regarding	63
Wisconsin, fishermen of	5
Wyman, Prof. Jeffries	165
Yankee gale of 1851	107
Yarmouth, fishermen from	49
Yarns told by fishermen	76, 77
Young, Thomas C.	82
Youth, training of	50
Zanzibar, whalemen from	22