

REPORT OF THE DIVISION OF STATISTICS AND METHODS OF THE FISHERIES.

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The commercial fisheries of the United States employ about 200,000 persons, the amount of capital invested is \$60,000,000, and the annual value of the products to the fishermen is approximately \$50,000,000. The different regions in which fisheries exist are the New England, Middle Atlantic, and South Atlantic States on the Atlantic coast, the Gulf States on the Gulf of Mexico, the Pacific coast States, Alaska, the Great Lakes, and the various rivers and minor lakes.

At the commencement of the present fiscal year the statistical agents of this division were in the field engaged in investigations of the lobster, sturgeon, menhaden, and salmon fisheries of the Atlantic coast. A thorough canvass was made of the entire lobster fishery, Mr. W. A. Wilcox canvassing Massachusetts; Mr. T. M. Cogswell, Massachusetts and New Hampshire; Mr. E. S. King, Rhode Island; Mr. C. H. Stevenson, New York; Mr. W. A. Roberts, Connecticut and a portion of Rhode Island; Mr. John B. Wilson, New Jersey and Delaware; Mr. G. H. H. Moore, Maine. Mr. C. G. Atkins, superintendent of the Fish Commission station at Craig Brook, Maine, made a canvass of the salmon fishery of the Penobscot River. Mr. J. N. Cobb, who during the summer had been detailed to assist in an investigation of the fisheries of the Hawaiian Islands, was for a short time engaged in making inquiries respecting certain fisheries centered in New York City. In the autumn Mr. C. H. Stevenson made inquiries in Connecticut and Massachusetts respecting the preservation of fishery products. Mr. E. A. Tulian, superintendent of the Fish Commission station at Leadville, Colo., made a canvass of the fisheries of Utah and Colorado.

A canvass of the fisheries of the Middle Atlantic States was then begun, Mr. W. A. Wilcox taking up the work in Virginia and Mr. J. B. Wilson in New Jersey. Mr. Roberts was assigned to the canvass of Maryland and was assisted for a time by Mr. Wilson, who later took up the work in New Jersey. Mr. Cobb was assigned to New York and Mr. Stevenson to portions of Virginia and Maryland. Mr. Thomas B. Gould was temporarily employed in canvassing the fisheries of Pennsylvania and New Jersey on the Delaware River. At the close of the fiscal year the investigations of the fisheries of the Middle Atlantic States were still in progress.

Mr. Townsend, assistant in charge, after representing the Commission at a meeting of the American Fisheries Society at Milwaukee, Wis., in July, made a reconnaissance of the fisheries of the Great Lakes west of Lake Ontario. In June he accompanied the Assistant Secretary of State to The Hague in connection with the arbitration of American whaling and sealing claims against Russia.

Capt. S. J. Martin and Mr. F. F. Dimick, statistical agents of the division located at Boston and Gloucester, Mass., have continued to submit their monthly reports on the quantity and value of certain fishery products landed at those ports by American vessels.

Mr. A. B. Alexander, of the steamer *Albatross*, was employed for a short time in making inquiries relative to the increase, among commercial fishermen, of hook-and-line fishing for salmon at Monterey, Cal., and elsewhere on the Pacific coast.

The following bulletins, issued as single sheets, containing advance statistics in condensed form, were widely distributed during the year:

114. Lobster fishery of the United States, 1900.

117. Statement of the quantity and value of certain fishery products landed at Boston and Gloucester, Mass., by American fishing vessels during the year 1901.

Other bulletins, showing the quantity and value of fishery products landed at Boston and Gloucester, have been issued monthly as usual.

The publications appearing during the year which were prepared in this division were:

Records and bibliography of the steamship *Albatross*, by C. H. Townsend.

Statistics of the fisheries of the Great Lakes.

Notes on the fisheries of the Pacific coast, by W. A. Wilcox (in press).

BOSTON AND GLOUCESTER.

The local agents of the Commission at Boston and Gloucester have continued to make monthly reports on the great fisheries centering there. The total quantity of products landed by American vessels during the year 1901 was 151,165,191 pounds, worth \$4,245,951. These figures as compared with those for the previous year are somewhat smaller, there being a decrease of 11,053,730 pounds and a decrease in value of \$139,151. The total number of fares landed was 6,964, a decrease of 549 as compared with the year 1900.

The fish landed at Gloucester amounted to 92,173,060 pounds, valued at \$2,674,551, a moderate decrease in both quantity and value from the previous year. The decrease is shown in the quantity of fresh fish landed, the amount of fish salted being somewhat larger. The fares landed at Gloucester numbered 3,561, of which 2,899 were from grounds off the New England coast and 662 from the Eastern Banks. The total of fish from grounds off the New England coast was 34,835,456 pounds, worth \$1,050,211. The quantity from the Eastern Banks was much larger, amounting to 57,337,604 pounds, worth \$1,624,340.

At Boston the decrease amounted to 7,828,781 pounds and \$27,106 in value. The fares landed at Boston were 3,403, 170 being from the Eastern Banks and 3,233 from grounds off the New England coast. At this port the greater quantity of the fish was derived from grounds off the New England coast. The total quantity of products landed at Boston was 58,992,131 pounds, worth \$1,571,400, the fresh fish amounting to 56,855,111 pounds, the salt fish being only 2,137,020 pounds. It should be noted that at Gloucester the quantity of salt fish is greatly in excess of that landed in a fresh condition.

Summary, by fishing-grounds, of certain fishery products landed at Gloucester, Mass., in 1901 by American fishing vessels.

Fishing-grounds.	No. of trips.	Cod, fresh.		Cod, salted.		Cusk, fresh.		Cusk, salted.	
		Lbs.	Value.	Lbs.	Value.	Lbs.	Value.	Lbs.	Value.
East of 66° W. longitude:									
La Have Bank.....	132	3,740,485	\$75,619	798,450	\$27,814	198,130	\$2,979	.....	.....
Western Bank.....	187	9,173,636	172,777	5,501,347	185,690	36,600	571	.....	.....
Quereau Bank.....	142	2,104,738	39,834	4,856,906	152,664	8,000	121	5,000	\$175
Grand Bank.....	73	36,620	855	12,405,233	385,245	.....	.....	.....	.....
St. Peters Bank.....	2	.....	.....	9,730	315	.....	.....	.....	.....
Bacalleu Bank.....	22	25,000	500	48,000	1,801	.....	.....	.....	.....
Off Newfoundland.....	88	12,185	274	231,742	8,426	.....	.....	.....	.....
Cape North.....	1	41,230	993	.....	.....	.....	.....	.....	.....
Cape Shore.....	15	89,000	2,211	.....	.....	116,000	1,690	.....	.....
Total.....	662	15,221,894	293,063	23,851,468	761,955	358,730	5,361	5,000	175
West of 66° W. longitude:									
Browns Bank.....	25	298,010	6,424	230,830	7,743	118,494	1,952	10,000	251
Georges Bank.....	298	1,208,656	24,856	5,502,683	200,293	27,210	550	18,000	456
Cashes Bank.....	43	512,630	9,954	26,710	1,025	249,960	3,783	18,980	495
Jeffreys Ledge.....	104	8,250	130	.....	.....	3,000	45	.....	.....
Ipswich Bay.....	19	32,788	659	.....	.....	.....	.....	.....	.....
South Channel.....	25	358,637	7,333	.....	.....	49,795	734	.....	.....
Nantucket Shoals.....	1	38,000	1,469	.....	.....	.....	.....	.....	.....
Off Chatham.....	22	.....	.....	.....	.....	.....	.....	.....	.....
Bay of Fundy.....	129	148,130	2,610	.....	.....	124,315	1,888	.....	.....
Block Island.....	7	.....	.....	91,110	2,958	.....	.....	.....	.....
Shore, general.....	2,226	1,253,079	33,656	.....	.....	7,114	109	.....	.....
Total.....	2,899	3,858,180	87,091	5,851,333	212,019	579,888	9,061	46,980	1,202
Grand total.....	3,561	19,080,074	380,154	29,702,801	973,974	938,618	14,422	51,980	1,377

Fishing-grounds.	Pollock, fresh.		Pollock, salted.		Halibut, fresh.		Halibut, salted.	
	Lbs.	Value.	Lbs.	Value.	Lbs.	Value.	Lbs.	Value.
East of 66° W. longitude:								
La Have Bank.....	88,164	\$578	20,000	\$250	144,110	\$14,225	.....	.....
Western Bank.....	66,320	428	2,622	39	67,462	5,110	960	\$58
Quereau Bank.....	16,130	97	.....	.....	1,332,971	119,337	4,660	368
Grand Bank.....	.....	.....	.....	.....	368,633	30,052	1,650	99
St. Peters Bank.....	.....	.....	.....	.....	47,559	4,756	.....	.....
Bacalleu Bank.....	.....	.....	.....	.....	367,042	28,499	447,970	40,128
Off Newfoundland.....	.....	.....	.....	.....	1,034,527	67,043	7,350	398
Total.....	160,614	1,103	22,622	289	3,362,304	259,022	462,590	41,051
West of 66° W. longitude:								
Browns Bank.....	.....	.....	23,120	290	4,000	210	.....	.....
Georges Bank.....	.....	.....	52,000	668	274,029	26,576	.....	.....
Cashes Bank.....	3,500	21	.....	.....	3,000	180	.....	.....
Jeffreys Ledge.....	1,450,820	11,281	.....	.....	.....	.....	.....	.....
South Channel.....	14,000	84	.....	.....	.....	.....	.....	.....
Off Chatham.....	135,000	948	.....	.....	.....	.....	.....	.....
Bay of Fundy.....	12,000	72	.....	.....	.....	.....	.....	.....
Block Island.....	20,000	100	.....	.....	.....	.....	.....	.....
Shore, general.....	3,355,206	25,005	.....	.....	122	15	.....	.....
Total.....	4,990,526	37,511	75,120	958	281,151	27,011	.....	.....
Grand total.....	5,151,140	38,614	97,742	1,247	3,643,455	286,033	462,590	41,051

Fishery products landed at Gloucester, Mass., in 1901—Continued.

Fishing-grounds.	Haddock, fresh.		Haddock, salted.		Hake, fresh.		Hake, salted.	
	Lbs.	Value.	Lbs.	Value.	Lbs.	Value.	Lbs.	Value.
East of 66° W. longitude:								
La Have Bank	1,328,271	\$23,967			1,114,410	\$11,216	10,000	\$225
Western Bank	767,316	10,719	18,690	\$370	129,455	1,373		
Quereau Bank	75,370	943			37,000	459	1,560	39
Cape North					2,000	23		
Cape Shore	81,280	1,903			51,180	611		
Total	2,252,237	37,532	18,690	370	1,334,045	13,682	11,560	264
West of 66° W. longitude:								
Browns Bank	149,160	3,201	3,000	75	196,113	2,554	8,000	181
Georges Bank	1,268,954	20,545	16,160	220	21,210	356	19,200	418
Cashes Bank	82,685	1,310			806,556	9,033	39,460	493
Jeffreys Ledge					85,000	903		
South Channel	134,160	1,706			256,108	2,686		
Bay of Fundy	1,000	8			578,000	6,067		
Block Island			8,120	162			3,560	80
Shore, general	310,675	6,787			386,035	4,838	66,700	834
Total	1,946,654	33,557	27,280	457	2,329,052	26,437	136,920	2,006
Grand total	4,198,891	71,089	45,970	827	3,663,097	40,119	148,480	2,270
Fishing-grounds.	Mackerel, fresh.		Mackerel, salted.		Other fish, fresh.		Other fish, salted.	
	Lbs.	Value.	Lbs.	Value.	Lbs.	Value.	Lbs.	Value.
East of 66° W. longitude:								
Bacalieu Bank					250	\$33		
Off Newfoundland					1,308,800	51,330	8,561,400	\$138,509
Cape Shore			405,400	\$20,601				
Total			405,400	20,601	1,309,050	51,363	8,561,400	138,509
West of 66° W. longitude:								
Georges Bank	34,740	\$1,973	1,622,200	95,546	17,610	1,514	2,080	229
Jeffreys Ledge					10,240	1,085		
Ipswich Bay					167,040	1,856		
Off Chatham	81,000	2,803	397,000	24,817	260	31		
Bay of Fundy	118,260	5,344	2,504,600	155,305	522	42	40,000	400
Block Island			16,000	700				
Shore, general	756,440	31,354	6,435,400	260,395	413,740	5,523	2,095,240	23,983
Total	990,440	41,474	10,975,200	536,764	609,412	10,051	2,137,320	24,612
Grand total	990,440	41,474	11,380,600	557,365	1,918,462	61,414	10,698,720	163,121
Fishing-grounds.	Total, fresh.		Total, salted.		Grand total.			
	Lbs.	Value.	Lbs.	Value.	Lbs.	Value.	Lbs.	Value.
East of 66° W. longitude:								
La Have Bank	6,613,570	\$128,584	828,450	\$28,289	7,442,020	\$156,873		
Western Bank	10,230,789	190,978	5,523,619	186,157	16,754,408	377,135		
Quereau Bank	3,574,209	160,791	4,868,126	153,246	8,442,335	314,037		
Grand Bank	404,253	30,907	12,406,943	385,344	12,811,196	416,251		
St. Peters Bank	47,559	4,756	9,730	315	57,289	5,071		
Bacalieu Bank	392,292	29,032	495,970	41,929	888,262	70,961		
Off Newfoundland	2,355,512	108,647	8,800,492	117,333	11,156,004	255,980		
Cape North	43,230	1,016			43,230	1,016		
Cape Shore	337,460	6,415	405,400	20,601	742,860	27,016		
Total	23,998,874	661,126	33,338,730	963,214	57,337,604	1,624,340		
West of 66° W. longitude:								
Browns Bank	765,777	14,371	274,950	8,540	1,040,727	22,911		
Georges Bank	2,852,439	76,370	7,232,323	297,830	10,084,762	374,200		
Cashes Bank	1,658,331	24,281	85,150	2,013	1,743,481	26,294		
Jeffreys Ledge	1,557,310	13,444			1,557,310	13,444		
Ipswich Bay	199,828	2,515			199,828	2,515		
South Channel	812,720	12,543			812,720	12,543		
Nantucket Shoals	38,000	1,469			38,000	1,469		
Off Chatham	216,260	3,782	397,000	24,817	613,260	28,599		
Bay of Fundy	982,227	16,031	2,514,600	155,706	3,526,827	171,737		
Block Island	20,000	100	118,790	3,900	138,790	4,000		
Shore, general	6,482,411	107,287	8,597,340	285,212	15,079,751	392,499		
Total	15,585,303	272,193	19,250,153	778,018	34,835,456	1,050,211		
Grand total	39,584,177	933,319	52,588,883	1,741,232	92,173,060	2,674,551		

Summary, by fishing-grounds, of certain fishery products landed at Boston, Mass., in 1901, by American fishing vessels.

Fishing-grounds.	No of trips.	Cod, fresh.		Cod, salted.		Cusk, fresh.		Haddock, fresh.	
		Lbs.	Value.	Lbs.	Value.	Lbs.	Value.	Lbs.	Value.
East of 66° W. longitude:									
La Have Bank	42	569,500	\$18,985	.....	.....	91,500	\$1,449	909,300	\$21,172
Western Bank	38	770,000	19,978	.....	.....	63,000	1,005	103,000	2,705
Quereau Bank	13	266,000	6,280	.....	.....	.....	.....	.....	.....
Green Bank	1	.....	.....	.....	.....	.....	.....	.....	.....
Grand Bank	12	9,000	195	.....	.....	.....	.....	.....	.....
Off Newfoundland	20	.....	.....	6,000	\$120	5,000	100	.....	.....
Cape Shore	44	622,500	15,430	10,000	300	45,000	780	760,000	20,838
Total	170	2,237,000	55,868	16,000	420	204,500	3,331	1,772,300	44,715
West of 66° W. longitude:									
Browns Bank	61	927,200	25,053	.....	.....	137,000	2,128	1,222,000	25,148
Georges Bank	263	2,359,600	65,038	.....	.....	68,000	1,057	4,631,500	101,160
Cashes Bank	51	464,300	11,929	.....	.....	206,900	3,201	344,200	9,234
Clark Bank	11	106,000	2,930	.....	.....	12,000	180	169,000	3,985
Fippenies Bank	9	44,000	1,375	.....	.....	14,000	220	46,000	1,585
Middle Bank	219	391,800	10,608	.....	.....	12,500	190	1,117,500	33,071
Jeffreys Ledge	233	510,200	16,554	.....	.....	63,700	970	1,092,900	34,093
South Channel	450	3,528,300	99,322	.....	.....	70,500	1,155	8,097,800	188,125
Nantucket Shoals	102	1,552,400	37,241	.....	.....	83,300	1,429	194,800	3,828
Off Highland Light	65	197,900	5,522	.....	.....	.....	.....	519,000	14,894
Off Chatham	84	328,300	9,168	.....	.....	8,000	110	839,000	22,309
Shore, general	1,685	4,245,450	124,886	.....	.....	209,900	3,573	4,685,350	136,088
Total	3,233	14,655,450	409,626	.....	.....	885,800	14,213	22,959,050	573,520
Grand total	3,403	16,892,450	465,494	16,000	420	1,090,300	17,547	24,731,350	618,235

Fishing-grounds.	Hake, fresh.		Pollock, fresh.		Halibut, fresh.	
	Lbs.	Value.	Lbs.	Value.	Lbs.	Value.
East of 66° W. longitude:						
La Have Bank	76,000	\$946	29,000	\$300	9,300	\$1,088
Western Bank	101,000	1,528	28,000	374	307,800	24,699
Quereau Bank	21,000	285	.....	.....	207,000	17,200
Green Bank	.....	.....	.....	.....	20,000	2,000
Grand Bank	.....	.....	.....	.....	368,000	28,370
Off Newfoundland	.....	.....	.....	.....	393,000	27,500
Cape Shore	57,500	938	38,000	548	81,700	2,640
Total	255,500	3,697	95,000	1,312	1,336,800	103,497
West of 66° W. longitude:						
Browns Bank	67,700	1,189	26,500	365	11,350	1,109
Georges Bank	216,000	2,563	69,200	1,124	32,800	3,831
Cashes Bank	546,100	8,829	65,500	807	3,600	512
Clark Bank	99,000	1,435	18,000	175	2,900	447
Fippenies Bank	94,000	1,600	2,000	20	400	60
Middle Bank	540,400	6,757	107,200	1,442	.....	.....
Jeffreys Ledge	721,400	12,082	367,900	4,202	2,600	374
South Channel	2,430,300	39,218	350,200	5,509	23,100	3,110
Nantucket Shoals	7,000	120	97,300	1,306	3,000	890
Off Highland Light	107,000	1,408	49,100	547	200	20
Off Chatham	195,800	3,037	134,800	2,582	300	36
Shore, general	2,177,650	35,392	811,100	10,301	4,666	583
Total	7,202,350	113,630	2,098,800	28,370	84,916	10,472
Grand total	7,457,850	117,327	2,193,800	29,682	1,421,716	113,969

Fishing-grounds.	Mackerel, fresh.		Mackerel, salted.		Other fish, fresh.		Other fish, salted.	
	Lbs.	Value.	Lbs.	Value.	Lbs.	Value.	Lbs.	Value.
East of 66° W. longitude:								
Off Newfoundland	.....	.....	.....	.....	410,000	\$12,300	1,468,200	\$23,005
West of 66° W. longitude:								
Georges Bank	208,250	\$11,285	127,200	\$7,407	337,000	33,518	.....	.....
Middle Bank	64,450	4,430	.....	.....	1,400	140	.....	.....
Jeffreys Ledge	.....	.....	.....	.....	4,400	508	.....	.....
South Channel	16,250	1,300	1,000	40	8,700	778	.....	.....
Nantucket Shoals	2,000	90	.....	.....	4,000	460	.....	.....
Shore, general	1,501,405	69,968	504,620	19,741	509,790	23,431	20,000	325
Total	1,792,355	87,073	632,820	27,188	865,290	68,835	20,000	325
Grand total	1,792,355	87,073	632,820	27,188	1,275,290	71,135	1,488,200	23,330

Fishing products landed at Boston, Mass., in 1901—Continued.

Fishing-grounds.	Total, fresh.		Total, salted.		Grand total.	
	Lbs.	Value.	Lbs.	Value.	Lbs.	Value.
East of 66° W. longitude:						
La Have Bank	1,684,600	\$39,030			1,684,600	\$39,030
Western Bank	1,372,800	50,289			1,372,800	50,289
Quereau Bank	494,000	23,765			494,000	23,765
Green Bank	20,000	2,000			20,000	2,000
Grand Bank	377,000	28,565			377,000	28,565
Off Newfoundland	808,000	39,900	1,474,200	\$23,125	2,282,200	63,025
Cape Shore	1,551,700	41,174	10,000	300	1,564,700	41,474
Total	6,311,100	224,723	1,484,200	23,425	7,795,300	248,148
West of 66° W. longitude:						
Browns Bank	2,391,750	51,982			2,391,750	51,982
Georges Bank	7,922,350	219,576	127,200	7,407	8,049,550	226,983
Cashes Bank	1,630,600	34,512			1,630,600	34,512
Clark Bank	406,900	9,152			406,900	9,152
Pippenies Bank	200,400	4,860			200,400	4,860
Middle Bank	2,235,250	56,638			2,235,250	56,638
Jeffreys Ledge	2,763,100	68,783			2,763,100	68,783
South Channel	14,525,150	338,517	1,000	40	14,526,150	338,557
Nantucket Shoals	1,943,800	44,864			1,943,800	44,864
Off Highland Light	873,200	22,391			873,200	22,391
Off Chatham	1,506,200	37,242			1,506,200	37,242
Shore, general	14,145,311	404,222	624,620	20,066	14,669,931	424,288
Total	50,544,011	1,295,789	652,820	27,513	51,196,831	1,323,252
Grand total	66,855,111	1,520,462	2,137,020	50,938	58,992,131	1,571,400

Statement, by months, of quantities and values of certain fishery products landed at Boston and Gloucester, Mass., by American fishing vessels during the year 1901.

Months.	No. of trips.	Cod, fresh.		Cod, salted.		Cusk, fresh.		Cusk, salted.	
		Lbs.	Value.	Lbs.	Value.	Lbs.	Value.	Lbs.	Value.
January	237	988,800	\$28,175			99,000	\$1,654		
February	283	917,100	37,396	6,000	\$120	51,200	1,221		
March	342	1,738,800	49,275			57,700	1,144		
April	308	1,007,200	34,416			44,500	766		
May	288	1,561,200	31,745			195,000	2,759		
June	206	1,632,400	39,937	10,000	300	133,000	1,920		
July	246	1,257,600	32,734			24,000	360		
August	274	1,504,400	42,418			109,800	1,852		
September	265	1,698,000	46,252			28,900	446		
October	357	1,643,100	40,497			132,000	1,925		
November	313	1,387,700	35,103			87,700	1,313		
December	284	1,646,150	47,546			124,500	2,187		
Total landed at Boston	3,403	16,892,450	465,494	16,000	420	1,090,300	17,547		
January	172	443,971	11,622	622,465	21,731	29,475	372		
February	122	319,449	12,025	55,480	2,026	12,460	286		
March	246	2,332,102	50,053	233,639	8,019	3,680	92		
April	205	1,698,776	33,739	279,300	9,621	17,740	224		
May	357	1,819,231	38,687	915,342	34,231	298,269	4,593	18,980	\$495
June	377	2,250,147	41,462	2,308,714	80,594	355,730	5,402		
July	445	2,367,707	43,011	5,792,307	182,311	150,610	2,255	23,000	569
August	368	2,075,340	38,957	4,769,911	165,112	8,000	260	5,000	138
September	334	1,808,920	33,637	3,899,928	129,423	5,000	83		
October	370	1,903,656	34,238	4,019,358	125,458	9,364	141	5,000	175
November	385	908,005	18,306	5,716,343	178,217	44,010	660		
December	180	1,127,770	24,417	1,041,114	37,231	4,280	64		
Total landed at Gloucester	3,561	19,080,074	380,154	29,702,801	973,974	938,618	14,422	51,980	1,377
Grand total	6,964	35,972,524	845,648	29,718,801	974,394	2,028,918	31,969	51,980	1,377
Landed at Boston in 1900	3,731	17,717,650	397,415	131,000	1,850	916,800	13,262		
Landed at Gloucester in 1900	3,782	16,333,742	293,248	29,837,821	722,366	1,101,100	12,534	131,000	2,348

REPORT OF COMMISSIONER OF FISH AND FISHERIES. 149

Statement, by months, of quantities and values of certain fishery products landed at Boston and Gloucester, Mass., by American fishing vessels during the year 1901—Continued.

Months.	Haddock, fresh.		Haddock, salted.		Hake, fresh.		Hake, salted.	
	Lbs.	Value.	Lbs.	Value.	Lbs.	Value.	Lbs.	Value.
January	1,641,900	\$41,315			409,800	\$8,249		
February	2,521,600	78,565			326,300	10,230		
March	3,852,600	81,424			190,500	5,566		
April	1,741,900	52,102			60,000	1,745		
May	1,620,900	34,528			400,900	4,418		
June	1,457,800	31,380			341,750	3,957		
July	1,838,900	32,046			277,100	5,562		
August	1,683,650	37,293			390,300	8,163		
September	2,749,300	58,655			815,700	13,889		
October	2,307,900	59,766			1,826,600	19,987		
November	1,669,400	53,677			1,646,400	21,231		
December	1,745,500	57,484			772,500	14,340		
Total landed at Boston	24,731,350	618,235			7,457,850	117,327		
January	411,615	10,179			46,360	697		
February	689,232	16,795			16,515	368	1,560	\$39
March	1,219,310	14,975			530	9		
April	447,590	8,700			49,780	767		
May	239,715	2,305	2,000	\$30	463,413	5,952	39,460	493
June	233,890	2,332	17,280	280	1,018,834	10,972	8,560	193
July	180,161	1,365	8,000	138	1,033,655	9,307	14,200	305
August			13,690	220	16,930	153	8,000	181
September	27,280	218			216,480	2,131		
October	211,065	2,248	5,000	150	279,220	3,317		
November	236,755	4,722			449,840	5,422	76,700	1,059
December	302,278	7,250			71,540	994		
Total landed at Gloucester	4,198,891	71,089	45,970	827	3,663,097	40,119	148,480	2,270
Grand total	28,930,241	689,324	45,970	827	11,120,947	157,446	148,480	2,270
Landed at Boston in 1900	28,235,850	589,105			6,917,100	98,119		
Landed at Gloucester in 1900	4,806,652	71,452	6,000	75	4,528,456	41,830	78,000	1,068

Months.	Pollock, fresh.		Pollock, salted.		Halibut, fresh.		Halibut, salted.	
	Lbs.	Value.	Lbs.	Value.	Lbs.	Value.	Lbs.	Value.
January	86,000	\$1,189			129,000	\$11,940		
February	72,100	2,084			83,300	6,095		
March	42,100	1,041			74,500	5,335		
April	9,500	235			112,700	7,280		
May	45,800	377			215,300	13,957		
June	116,800	1,044			132,900	9,430		
July	119,400	1,432			198,400	16,880		
August	153,200	2,587			177,200	15,943		
September	296,200	3,770			39,050	3,712		
October	510,200	4,548			119,766	14,476		
November	326,500	3,420			40,200	3,804		
December	416,000	7,955			69,400	5,117		
Total landed at Boston	2,193,800	29,682			1,421,716	113,969		
January	73,830	739			378,736	34,018		
February	11,602	124			328,508	26,609		
March	28,150	210			315,172	23,903		
April	30,630	184			557,395	31,948	4,350	\$218
May	99,074	888	6,000	\$90	572,705	35,927	5,640	282
June	105,867	585	19,000	239	244,050	18,451		
July	78,955	478	16,000	201	189,813	16,010	3,000	150
August	6,410	54	36,742	467	320,105	27,796	14,770	887
September	164,900	1,314			203,586	18,830	392,330	35,476
October	2,077,320	16,040			157,238	16,281	42,500	4,038
November	2,324,620	16,807			235,671	22,291		
December	149,882	1,241	20,000	250	140,476	13,879		
Total landed at Gloucester	5,151,140	38,614	97,742	1,247	8,643,455	286,033	462,590	41,051
Grand total	7,344,940	68,296	97,742	1,247	5,065,171	400,002	462,590	41,051
Landed at Boston in 1900	1,173,500	13,296			1,588,150	104,788	180,000	9,900
Landed at Gloucester in 1900	4,104,324	28,957	41,070	514	5,686,506	371,616	1,389,335	78,599

150 REPORT OF COMMISSIONER OF FISH AND FISHERIES.

Statement, by months, of quantities and values of certain fishery products landed at Boston and Gloucester, Mass., by American fishing vessels during the year 1901—Continued.

Months.	Mackerel, fresh.		Mackerel, salted.		Other fish, fresh. ^a		Other fish, salted. ^a	
	Lbs.	Value.	Lbs.	Value.	Lbs.	Value.	Lbs.	Value.
January.....					140,000	\$3,850	240,000	\$3,250
February.....					190,000	4,850	232,200	5,205
March.....					80,000	3,600		
May.....	61,530	\$1,904	1,600	\$64				
June.....	456,198	12,939	331,000	12,638				
July.....	446,850	23,539	164,420	6,115	228,400	23,979		
August.....	295,877	18,143	112,200	6,732	262,100	23,038		
September.....	183,200	13,430		1,639	50,200	6,616		
October.....	348,700	17,118			137,440	2,243		
November.....					166,600	2,711	20,000	325
December.....					20,650	248	996,000	14,550
Total landed at Boston.....	1,792,355	87,073	632,820	27,188	1,275,290	71,135	1,488,200	23,330
January.....					441,000	14,880	1,151,400	17,769
February.....					306,000	11,050	171,000	2,779
March.....					235,800	13,100	50,000	1,000
April.....					108,000	3,900		
May.....	3,600	150	83,000	3,273				
June.....	277,470	9,601	3,479,000	132,620				
July.....	220,320	8,222	3,521,400	150,157	3,530	388	44,720	893
August.....	200,690	9,410	2,351,000	141,643	28,454	1,347		
September.....	119,430	6,369	1,108,000	77,378	59,928	1,397		
October.....	168,930	7,722	679,600	43,671	339,550	5,130	759,400	9,288
November.....			158,600	8,723	178,200	1,822	3,240,200	49,519
December.....					218,000	8,400	5,282,000	81,873
Total landed at Gloucester.....	990,440	41,474	11,380,600	557,365	1,918,462	61,414	10,698,720	163,121
Grand total.....	2,782,795	128,547	12,013,420	584,553	3,193,752	132,549	12,186,920	186,451
Landed at Boston in 1900.....	4,019,362	155,544	1,404,300	68,662	3,079,400	123,850	1,457,800	22,715
Landed at Gloucester in 1900.....	4,869,932	234,408	14,561,200	769,081	2,104,872	65,445	5,818,000	93,056

Months.	Total fresh.		Total salted.		Grand total.	
	Lbs.	Value.	Lbs.	Value.	Lbs.	Value.
January.....	3,494,500	\$96,372	240,000	\$3,250	3,734,500	\$99,622
February.....	4,164,600	140,441	238,200	5,325	4,402,800	145,766
March.....	6,036,200	147,375			6,036,200	147,375
April.....	2,975,800	96,544			2,975,800	96,544
May.....	4,000,630	89,688	1,600	64	4,002,230	89,752
June.....	4,270,848	100,607	341,000	12,938	4,611,848	113,545
July.....	4,390,610	136,532	164,420	6,115	4,555,070	142,647
August.....	4,576,527	149,437	112,200	6,732	4,688,727	156,169
September.....	5,770,550	145,770	23,600	1,639	5,794,150	148,409
October.....	7,055,706	160,600			7,055,706	160,600
November.....	5,324,600	121,259	20,000	325	5,344,500	121,684
December.....	4,794,600	134,877	996,000	14,550	5,790,600	149,427
Total landed at Boston.....	56,855,111	1,520,462	2,137,020	50,938	58,992,131	1,571,400
January.....	1,824,987	72,507	1,773,865	39,500	3,598,852	112,007
February.....	1,713,666	67,347	228,040	4,844	1,941,706	72,191
March.....	4,134,744	102,342	283,539	9,019	4,418,283	111,361
April.....	2,909,911	79,462	283,650	9,839	3,193,561	89,301
May.....	3,496,007	89,452	1,070,422	38,894	4,566,429	127,346
June.....	4,485,988	88,805	5,892,554	213,835	10,378,542	302,640
July.....	4,224,751	81,036	9,422,627	334,724	13,647,378	415,760
August.....	2,655,929	77,977	7,189,113	308,648	9,845,042	386,625
September.....	2,600,524	63,979	5,400,258	242,277	8,000,782	306,256
October.....	5,146,343	85,147	5,510,858	182,780	10,657,201	307,927
November.....	4,377,101	70,030	9,190,843	237,518	13,567,944	307,548
December.....	2,014,226	66,235	6,343,114	119,354	8,357,340	176,589
Total landed at Gloucester.....	39,584,177	933,319	52,588,883	1,741,232	92,173,060	2,674,551
Grand total.....	96,439,288	2,453,781	54,725,903	1,792,170	151,165,191	4,245,951
Landed at Boston in 1900.....	63,647,812	1,496,379	3,173,100	103,127	66,820,912	1,598,506
Landed at Gloucester in 1900.....	43,535,583	1,119,490	51,862,426	1,667,106	95,398,009	2,786,596

^a Includes herring from Newfoundland, 1,718,800 pounds frozen, \$63,630, and 10,029,600 pounds salted, \$161,514.

FISHERIES OF UTAH.

The fisheries of Utah in 1900 employed 505 persons, most of whom fished in Utah Lake. The capital invested was \$52,985; \$33,400 of this amount is credited to Utah County. Seines and hand lines constituted the principal forms of apparatus in use. The products amounted to 1,081,863 pounds, valued at \$47,458. By far the greater part of the catch was derived from Utah Lake, in Utah County. Weber, Rich, and Garfield counties are next in regard to the quantity of fish taken. The principal species taken were, carp, 353,885 pounds, valued at \$4,494; trout, 145,798 pounds, \$24,678; black bass, 104,800 pounds, \$11,105; suckers and mullet, 452,780 pounds, \$4,833.

Mr. E. A. Tulian reports that black bass, carp, trout, and bullheads have greatly increased in Utah County since 1895. The bass, carp, and bullheads were nearly all taken in Utah Lake and its tributaries. Bass weighing 7 to 8 pounds are sometimes taken, and are said to be of excellent quality. The bullheads introduced into the lake four or five years ago are increasing and find a ready sale at good prices. The black bass and carp are also introduced species.

It appears that an important quantity of fish is taken and sold contrary to law, so that the yield of fish from the waters of Utah is larger than the present figures show.

Most persons engaged in fishing in these waters carry on the business in a desultory manner. Considerable quantities of fish are taken by farmers living in the vicinity of Utah Lake, many of them spearing carp in the winter time for their own use.

Table showing, by counties, the number of persons employed in the fisheries of Utah in 1900.

Counties.	Fisher- men.	Shores- men.	Total.
Utah	295	47	342
Garfield	21	1	25
Piute	4		4
Sevier	20		20
Salt Lake	12	25	37
Cache	20		20
Weber	47	2	49
Morgan	3		3
Rich	5		5
Total	430	75	505

Table showing, by counties, the apparatus and capital employed in the fisheries of Utah in 1900.

Designation.	Utah.		Garfield.		Piute.		Sevier.		Salt Lake.	
	No.	Value.	No.	Value.	No.	Val.	No.	Val.	No.	Value.
Apparatus:										
Boats	100	\$2,150	15	\$75			30	\$150		
Hand lines	70	350	15	115	15	\$75	100	500	5	\$25
Seines	11	200	2	30					2	100
Spears	200									
Shore and accessory property		27,275		575						14,700
Cash capital		2,600		350						1,000
Total		33,400		1,145		75		650		15,825

152 REPORT OF COMMISSIONER OF FISH AND FISHERIES.

Table showing apparatus and capital employed in the Utah fisheries in 1900—Continued.

Designation.	Cache.		Weber.		Morgan.		Rich.		Total.	
	No.	Value.	No.	Value.	No.	Val.	No.	Val.	No.	Value.
Apparatus:										
Boats.....			2	\$50		\$50	3	\$55	150	\$2,480
Hand lines.....	20	\$100	31	155	10				266	1,370
Seines.....			8	120			2	45	25	1,120
Gill nets.....							1	15	1	15
Spears.....									200	200
Shore and accessory property.....				500						43,050
Cash capital.....				800						4,750
Total.....		100		1,625		50		115		52,985

Table showing, by counties and apparatus, the yield of the fisheries of Utah for the year 1900.

Apparatus and species.	Utah.		Garfield.		Piute.		Sevier.		Salt Lake.	
	Lbs.	Value.	Lbs.	Value.	Lbs.	Value.	Lbs.	Value.	Lbs.	Value.
Seines:										
Brook trout.....									3,000	\$1,500
Bullheads.....	10,050	\$603								
Carp.....	194,685	2,434							4,200	85
Rainbow trout.....									1,800	900
Suckers and mullet.....	387,880	3,879	3,000	\$150					5,400	108
White-fish ^a			1,000	100						
Total.....	592,615	6,916	4,000	250					14,400	2,593
Lines:										
Black bass.....	92,300	9,280							12,500	1,875
Black-spotted trout.....			39,500	3,950	3,500	\$350	2,900	\$290	10,200	2,050
Trout.....	40,098	6,015								
White-fish ^a	4,100	410								
Total.....	136,498	15,655	39,500	3,950	3,500	350	2,900	290	22,700	3,925
Spears:										
Carp.....	150,000	1,875								
Grand total.....	879,113	24,446	43,500	4,200	3,500	350	2,900	290	37,100	6,518

Apparatus and species.	Cache.		Weber.		Morgan.		Rich.		Total.	
	Lbs.	Value.	Lbs.	Value.	Lbs.	Value.	Lbs.	Value.	Lbs.	Value.
Seines:										
Brook trout.....									3,000	\$1,500
Bullheads.....									10,050	603
Carp.....			5,000	\$100					203,885	2,619
Chubs.....			1,500	40					1,500	40
Rainbow trout.....									1,800	900
Suckers and mullet.....			4,500	115			50,500	\$558	451,280	4,810
White-fish ^a									1,000	100
Total.....			11,000	255			50,500	558	672,515	10,572
Gill nets:										
Suckers.....							1,500		1,500	23
Trout.....							100	8	100	8
Total.....							1,600	31	1,600	31
Lines:										
Black bass.....									104,800	11,105
Black-spotted trout.....	13,500	\$3,375	27,400	5,480	3,800	\$760			100,800	16,255
Trout.....									40,098	6,015
White-fish ^a			6,950	1,045	1,000	150			12,050	1,605
Total.....	13,500	3,375	34,350	6,525	4,800	910			257,748	34,980
Spears:										
Carp.....									150,000	1,875
Grand total.....	13,500	3,375	45,350	6,780	4,800	910	52,100	589	1,081,863	47,458

^aThe species called white-fish in this table is *Coregonus williamsoni*, commonly known in this region as mountain herring or Rocky Mountain white-fish.

CARP.

The wholesale trade in carp in New York City.—During the progress of the canvass of the fisheries of New York City for the year 1901 Mr. Cobb made inquiries respecting the trade in German carp. The item of carp in the fish supply of the city is quite important, amounting to 6,906,950 pounds, valued in New York at \$197,451. While small quantities are received incidentally by most dealers, the handling of the greater part of the supply is done by a few firms only.

Carp in the New York markets are mainly from the Illinois River and from Lake Erie, the balance coming generally from eastern points, notably East Bay, L. I., the Delaware River, Havre de Grace, Md., and Washington, D. C. Most of the carp are received from April to September, inclusive, the remainder arriving in the winter months. Hebrew retail dealers and peddlers dispose of the greater part on the East Side, some going to Philadelphia and to points in New England. As the Hudson River contains many carp, it is probable that New York will in time be supplied with cheap fish from that source.

The following table shows the quantity and value of German carp handled in the wholesale markets of New York City during 1901:

Seasons.	Lbs.	Value to fishermen.	Value to dealers.
Jan. 1 to Mar. 1.....	364,950	\$10,649	\$17,748
Mar. 1 to Apr. 15.....	689,500	7,370	11,790
Apr. 15 to June 15.....	2,040,000	20,040	34,000
June 15 to Sept. 1.....	1,485,000	29,700	44,550
Sept. 1 to Dec. 1.....	2,032,500	51,813	71,138
Dec. 1 to Jan. 1.....	405,000	13,163	18,225
Total for the year.....	6,906,950	132,735	197,451

The above values represent the selling price in New York. The value of this quantity of carp to the fishermen was \$132,735, which does not include freight or express charges.

The carp trade in general.—The carp industry of the Illinois River has been important for several years, the catch in 1901 amounting to 5,780,200^a pounds, valued at \$173,406. The catch in Lake Erie in 1900 was 4,598,090 pounds. The quantity marketed in the United States is, according to the latest statistics available, 17,160,873 pounds, valued at \$407,633. As the figures for some sections of the country are over three years old, and as the consumption of carp is increasing, the quantity put on the market annually is probably over 20,000,000 pounds.

Where dealers have worked up regular markets for carp, and handled them in quantities large enough for profit at the low prices obtained, hopeful opinions will be heard; where these fish are received incidentally they can not be handled with profit, and opinions just the reverse will be expressed regarding their presence in the fish trade.

^a Report of the Illinois Fishermen's Association for the year ending December 31, 1901.

HOOK-AND-LINE FISHING FOR PACIFIC SALMON.

Mr. A. B. Alexander, of the steamer *Albatross*, has furnished some interesting notes relative to the taking of Pacific salmon with hook and line.

Trolling for salmon in Monterey Bay has increased steadily each year since its beginning, and in 1901 there were taken by this method, approximately, 190,786 pounds of salmon, or about 10,000 fish in number, most of which was placed in cold storage and shipped to various Eastern markets. About 100 boats were engaged in the fishing.

Previous to 1893 few salmon were taken in Monterey Bay by any kind of apparatus. In that year trolling for them was found to be very successful and the discovery was quickly taken advantage of by anglers and commercial fishermen. It was not known that salmon could be taken with the hook in this bay in paying quantities, the reason being, doubtless, that the fish do not appear leaping at the surface, as is the custom when entering fresh water. Most of the fishing is done in the summer time, but a moderate number of fish can also be taken in Monterey Bay during the winter months.

The fish appear in numbers about the first week in June, when the sardines are most numerous. The salmon are also found feeding on smelts and squid. The fish are taken in two ways, by trolling with the spoon with and without bait, and with the baited hook used at a considerable depth with a heavy sinker. Previous to the arrival of the sardines and other species on which the salmon feed the fishing is done mostly by trolling with the rod and spoon, but as soon as bait is to be had this method is abandoned for the sinker and hook. As a substitute for bait the baited spoon is sometimes used, but the baited hook is preferred by the commercial fishermen.

Sportsmen who visit the bay from San Francisco and elsewhere use split bamboo rods ranging from 10 to 12 ounces. Both silk and linen lines are employed, varying in length from 150 to 200 yards. The spoons vary in size from Nos. 5 to 7. The average hook used in connection with the spoon corresponds in size to the No. 14 cod trawl hook, with a slightly longer shank. Some fishermen use the brazed treble hook, but it is not a favorite with sportsmen. All the fishing is carried on from skiffs and small rowboats.

As the numerous commercial fishermen do not often use a spoon, many more salmon are taken with baited hooks. A common bamboo pole is used by the fishermen, with a cotton line of 32 thread, from 80 to 100 feet in length. The hook is 5 inches long and shaped like a halibut hook, with a longer shank. In baiting the hook care is taken to have the shank entirely covered, leaving the barb and point bare. The sinker is quite heavy, being about 4 pounds in weight and fastened to the line 25 feet above the hook. When the salmon is hooked the pole is dropped and the line is hauled in hand over hand, great

care being taken that the fish does not break away. Frequently the fishing is done without the use of the rod. When the sinker is used the trolling is done at a depth of at least 20 feet. The usual sailing speed in trolling is 4 miles an hour, and the average size of the salmon taken is a little over 20 pounds, although 50-pounders are sometimes caught. The best fishing is usually to be had during the afternoon, and 25 fish are considered a good day's catch for one hook.

Monterey is the most southerly point where salmon are taken, either commercially or for sport. Very few salmon are taken with the hook in San Francisco Bay and the Sacramento River. In the Eel River there is good salmon trolling to be had in the fall. The fish are taken in tide water chiefly by professional fishermen, using from 20 to 30 boats, but many anglers visit these waters for the sport fishing. It takes the angler an hour on an average to land one of the larger fish. Similar fishing is done by anglers in a number of the smaller coast rivers, such as the Russian and Nevarro, the Olema, and about the head of Tomales Bay. Steelhead salmon are frequently taken in these waters with artificial flies.

The Indians of Neah Bay, Washington, do considerable trolling for silver salmon and have been known to take as many as 4,000 fish in a day. The principal fishing-grounds lie off the mouth of the bay and in the vicinity of Tatoosh rock off the coast and some 2 or 3 miles farther south. The catch is usually disposed of at Port Townsend. The Indians repair to the grounds early in the morning, remaining out all day and sometimes after dark if the weather permits. The spoons employed are larger than those used elsewhere on the coast. The lines are usually of 30 thread and about 150 feet long. Pieces of salmon and small herring are used for bait. In trolling the canoe is paddled, except in very light breezes, when the sail is set.

Salmon trolling has long been practiced in Puget Sound, where sportsmen use the rod and reel.

At Killisnoo, Alaska, the king salmon take the spoon readily, the fish coming in to feed on the herring which annually visit these waters in great numbers. Spoons and lines of the same pattern as those used at Neah Bay are employed by the Killisnoo Indians. The same bait is used and the fish taken are for their own consumption.

When salmon will not readily take a spoon at the surface, a baited hook towed near the bottom frequently induces them to bite.

There can be no doubt that there are many other places along the west coast where salmon could be taken by trolling. They have recently been taken from vessels 10 or 12 miles off the coast of Washington, the bait being towed at 30 fathoms where the soundings were 40 fathoms. It now seems probable that a thorough trial by deep trolling all along the west coast will show that the salmon are "on soundings" and not far from the coast during most of the time they spend at sea.

THE LOBSTER FISHERY.

During the summer of 1901 a canvass was made of the entire lobster fishery of the Atlantic coast of the United States. The number of persons engaged this fishery was 4,348, including 4,059 fishermen and 289 shoresmen. There were 191 vessels employed, aggregating 1,888 tons, valued with their outfits at \$216,674. The boats in use, with launches and steam vessels under 5 tons, numbered 3,960, and were valued at \$261,918. There were 208,563 lobster pots employed, worth \$224,111. Shore and accessory property was valued at \$454,457, and the cash capital amounted to \$510,900. The total investment in the fishery was \$1,668,060; of this amount \$960,529 is credited to Maine, \$570,923 to Massachusetts, \$54,516 to Rhode Island, \$59,133 to Connecticut, \$14,589 to New York, \$5,960 to New Hampshire, \$2,320 to New Jersey, and \$90 to Delaware.

The total yield of the fishery was 15,767,741 pounds, with a first value of \$1,390,579. The yield is credited to the States as follows: Maine, 12,346,450 pounds, worth \$1,062,206; Massachusetts, 1,805,042 pounds, \$171,825; Rhode Island, 660,017 pounds, \$58,026; Connecticut, 550,450 pounds, \$51,484; New York, 156,260 pounds, \$21,224; New Hampshire, 205,122 pounds, \$19,078; New Jersey, 40,800 pounds, \$6,400; and Delaware, 3,600 pounds, \$336.

Table showing details of the lobster fishery of the United States in 1900.

States and counties.	Persons employed.		Vessels fishing.			Vessels transporting.		
	Fisher- men.	Shores- men.	No.	Tonnage.	Value.	No.	Tonnage.	Value.
Maine:								
Washington.....	542	33	10	65	\$3,750	8	60	\$6,890
Hancock.....	600	19	56	417	22,235	5	94	6,465
Waldo.....	6							
Knox.....	553	37	25	161	10,510	3	31	22,660
Lincoln.....	488	18	1	5	365			
Sagadahoc.....	88							
Cumberland.....	417	51	5	33	2,103	37	601	106,275
York.....	176	7						
Total.....	2,870	165	97	681	38,963	53	786	142,190
New Hampshire:								
Rockingham.....	45							
Massachusetts:								
Essex.....	178		2	16	825			
Suffolk.....	34	110				1	25	1,250
Norfolk.....	22							
Plymouth.....	161							
Barnstable.....	100		1	5	800			
Nantucket.....	14							
Dukes.....	61		1	5	800			
Bristol.....	35		3	17	2,100			
Total.....	605	110	7	43	4,025	1	25	1,250
Rhode Island:								
Newport.....	163	11	6	32	3,408			
Washington.....	45							
Total.....	208	11	6	32	3,408			
Connecticut:								
Fairfield.....	19		2	13	795			
New Haven.....	39		1	10	398			
Middlesex.....	23							
New London.....	141	3	19	180	18,020			
Total.....	222	3	22	203	19,213			

REPORT OF COMMISSIONER OF FISH AND FISHERIES. 157

Table showing details of the lobster fishery of the United States in 1900—Continued.

States and counties.	Persons employed.		Vessels fishing.			Vessels transporting.		
	Fisher-men.	Shores-men.	No.	Tonnage.	Value.	No.	Tonnage.	Value.
New York:								
Kings	20							
Richmond	14							
Suffolk	18		2	18	\$1,725			
Westchester	5							
New York	26		3	100	5,900			
Total	83		5	118	7,625			
New Jersey:								
Monmouth	20							
Delaware:								
Sussex	6							
Grand total	4,059	299	137	1,077	73,234	54	811	\$143,440

States and counties.	Boats.*		Lobster pots.		Shore and accessory property.	Cash capital.	Total investment.	Lobsters caught.	
	No.	Value.	No.	Value.				Lbs.	Value.
Maine:									
Washington	608	\$36,431	29,740	\$29,740	\$18,310	\$21,200	\$116,321	2,116,350	\$148,039
Hancock	561	34,255	37,560	37,560	10,530	23,500	131,545	2,865,600	252,153
Waldo	6	90	125	125	60	60	275	5,175	517
Knox	578	27,879	31,335	31,335	30,415	43,200	165,899	2,937,175	260,014
Lincoln	603	34,433	30,280	30,280	35,740	32,000	132,818	2,353,450	213,770
Sagadahoc	88	1,265	3,300	3,300	890	890	5,455	268,500	23,770
Cumberland	330	18,272	15,555	15,605	95,475	142,500	380,230	1,211,500	114,262
York	183	9,010	7,720	9,515	2,461	4,000	24,986	588,700	49,681
Total	2,957	161,635	155,615	157,460	193,881	266,400	960,529	12,346,450	1,062,206
New Hampshire:									
Rockingham	44	1,520	2,501	3,515	925		5,960	205,122	19,078
Massachusetts:									
Essex	137	6,690	6,953	7,141	2,340		16,996	465,651	47,721
Suffolk	31	1,175	2,385	2,385	235,625	240,000	480,435	163,136	17,250
Norfolk	24	1,665	2,250	2,250	375		4,290	85,464	9,200
Plymouth	155	14,220	9,127	11,904	3,015		23,139	768,291	63,553
Barnstable	94	9,470	3,488	3,488	2,780		16,038	110,375	11,987
Nantucket	15	1,365	672	672	100		2,137	16,083	1,930
Dukes	90	9,165	2,388	2,388	625		12,978	129,990	13,174
Bristol	25	5,140	1,390	1,390	280		8,910	69,162	7,010
Total	571	48,890	28,653	31,618	245,140	240,000	570,923	1,805,042	171,825
Rhode Island:									
Newport	153	21,582	9,175	11,330	9,350	4,500	50,170	575,492	60,850
Washington	38	2,137	1,470	1,784	425		4,346	84,525	7,176
Total	191	23,719	10,645	13,114	9,775	4,500	54,516	660,017	58,026
Connecticut:									
Fairfield	16	1,025	459	676	249		2,745	13,350	2,001
New Haven	39	2,045	1,240	1,921	303		4,667	46,250	5,938
Middlesex	30	1,810	669	1,180	135		3,125	25,150	2,746
New London	65	17,675	4,594	9,027	3,874		48,596	465,700	40,799
Total	150	22,555	6,962	12,804	4,561		59,133	550,450	51,484
New York:									
Kings	10	700	1,020	895			1,595	24,530	3,120
Richmond	7	610	850	760			1,370	19,170	2,300
Suffolk	11	900	725	1,241			3,866	29,860	3,084
Westchester	4	375	51	73	175		623	6,300	1,260
New York			810	1,235			7,135	76,400	11,460
Total	32	2,585	3,456	4,204	175		14,589	156,260	21,224
New Jersey:									
Monmouth	12	900	665	1,330			2,320	40,800	6,400
Delaware:									
Sussex	3	24	66	66			90	3,600	336
Grand total	3,960	261,918	208,563	224,111	454,457	510,900	1,668,060	15,767,741	1,390,579

*Includes sulboats, etc. and naphtha launches, and steamboats under 5 tons.

YIELD AND VALUE OF LOBSTERS IN VARIOUS YEARS.

The following table showing the yield and value of the lobster fishery in former years is compiled from the reports of the U. S. Fish Commission, and shows the yield and value of lobsters in each of the lobster-producing States on the Atlantic coast in all years for which the fishery has been investigated from 1880 to 1898. No lobsters were reported for Delaware in 1880, but, with this exception, the omission of statistics for any of the States in any of the years enumerated is due to the fishery not being canvassed. The total yield of lobsters for all the States in 1880 was 20,128,033 pounds, value \$483,891; in 1887, 28,882,180 pounds, value \$799,717; in 1888, 28,108,970 pounds, value \$836,617, and in 1889, 30,771,573 pounds, value \$861,297. Complete totals can not be shown for other years because the fishery was not investigated in all the States. The total yield in 1892, omitting New York, was 23,559,432 pounds, value \$1,046,647; and in 1898, omitting Delaware, it was 15,118,062 pounds, value \$1,318,299.

Yield and value of the lobster fishery in former years.

Years.	Maine.		New Hampshire.		Massachusetts.		Rhode Island.	
	Lbs.	Value.	Lbs.	Value.	Lbs.	Value.	Lbs.	Value.
1880	14,234,182	\$268,739	250,000	\$7,500	4,315,416	\$158,229	423,250	\$15,871
1887	22,916,642	512,044	142,824	6,268	3,611,075	156,204	570,039	27,128
1888	21,694,731	515,880	136,350	6,256	3,743,475	172,936	588,600	28,047
1889	25,001,351	574,165	137,175	6,415	3,353,787	148,492	466,000	21,565
1892	17,642,677	663,043	196,350	11,700	3,182,270	205,638	774,100	53,762
1897 ^a	10,300,880	683,082	90,300	5,493	2,089,502	167,330		
1898	11,183,294	992,855	108,515	9,372	1,693,741	147,702	578,066	43,290
1900	12,346,450	1,062,206	205,122	19,078	1,805,042	171,825	660,017	58,026

Years.	Connecticut.		New York.		New Jersey.		Delaware.	
	Lbs.	Value.	Lbs.	Value.	Lbs.	Value.	Lbs.	Value.
1880	613,385	\$23,002	135,000	\$5,062	156,800	\$5,488		
1887	1,487,020	82,594	114,000	6,850	101,580	7,719	39,000	\$910
1888	1,477,226	85,723	248,000	13,900	181,688	12,965	39,000	910
1889	1,501,290	83,099	124,023	12,780	188,347	14,301	9,600	480
1890			150,400	14,754	185,321	13,683	7,200	360
1891			165,093	15,655	165,664	12,463	8,200	410
1892	1,614,530	101,358			143,905	10,861	6,600	285
1897 ^a			130,610	10,913	79,230	6,197		
1897			381,020	31,458	90,230	8,573	5,095	459
1898	1,098,192	83,748	332,378	30,235	123,876	11,097		
1900	550,450	51,484	156,260	21,224	40,800	6,400	3,600	336

^a Fiscal year

NOTES ON THE LONDON FUR-SEAL TRADE.

While en route to The Hague, where he was detailed in connection with the arbitration of whaling and sealing claims against Russia, Mr. Townsend made inquiries in London respecting the trade in fur-seal skins, which has long been centered there.

The prices of fur-seal skins have been subject to considerable fluctuation for several years, owing to the effect of pelagic sealing in Bering Sea and the North Pacific Ocean on the sealing industries of the Pribilof and Commander islands. Frequently the majority of the seal skins on the market has consisted of the low-grade skins yielded by the pelagic fisheries.

The following table, showing the numbers and values of salted fur-seal skins from all sources placed on the London market during the period from 1871 to 1901, was procured from Messrs. C. M. Lampson & Co., of London. It is interesting chiefly on account of comparisons presented between the prices of the miscellaneous skins resulting from the wasteful pelagic sealing, and those of seals taken under the best conditions. The classification of the skins is that customarily used in the fur trade. The numbers indicate the catch of salted skins received from each source, not the yearly sales, as in some cases catches are not all sold during the years in which they were taken.

Yearly catch.	Alaska.		Copper.		Northwest coast.		Lobos.	
	Skins.	Average price realized.	Skins.	Average price realized.	Skins.	Average price realized.	Skins.	Average price realized.
1871	104,899	\$10.26						
1872	96,283	10.91						
1873	103,724	12.65						
1874	99,150	12.77	30,349	\$9.73	5,071	(a)		
1875	99,634	12.35	34,479	9.98	2,224	(a)		
1876	90,276	8.35	33,198	6.04	3,104	(a)	11,353	\$3.53
1877	75,410	9.71	25,380	6.43	3,772	(a)	13,066	3.45
1878	99,911	16.83	18,686	9.41	2,698	(a)	12,301	8.37
1879	100,036	20.62	28,215	14.05	14,609	(a)	12,295	9.91
1880	100,161	22.24	38,900	19.47	13,501	(a)	14,865	9.81
1881	99,921	19.40	45,209	14.60	15,887	(a)	13,569	7.50
1882	100,100	13.04	39,311	11.05	22,886	(a)	13,200	4.07
1883	75,914	20.13	36,480	9.33	8,704	(a)	12,422	4.56
1884	99,994	12.59	26,675	14.38	19,357	(a)	14,580	3.61
1885	99,874	14.01	48,929	9.02	10,148	\$6.28	10,862	4.34
1886	99,947	16.85	41,760	9.73	49,079	7.16	15,049	4.40
1887	99,949	13.61	54,584	9.73	39,419	6.33	14,831	3.97
1888	100,037	18.96	46,296	9.33	30,285	8.43	17,774	4.99
1889	100,031	16.28	47,411	12.29	39,884	10.22	13,205	6.73
1890	25,152	33.72	52,765	14.15	47,467	15.65	14,241	8.52
1891			59,746	20.01				
	13,494	30.50	30,681	16.67	63,733	13.32	13,634	8.15
1892	7,654	30.50	31,880	19.73	72,973	16.69	12,202	6.45
1893	7,600	26.40	32,832	17.48	106,368	12.47	13,624	7.38
1894	16,030	20.90	27,298	13.87	135,686	8.66	12,146	5.13
1895	15,002	19.89	17,721	13.14	102,460	10.66	12,017	4.87
1896	30,004	16.42	14,415	10.99	71,033	7.79	19,172	5.19
1897	20,762	21.13	13,727	13.67	40,280	10.34	15,926	4.38
1898	18,032	38.08	9,487	16.76	31,407	10.89	14,422	5.07
1899	16,804	33.54	9,786	29.97	42,857	15.44	14,918	7.36
1900	21,924	27.54	13,237	19.66	44,379	15.09	15,116	4.89
1901	22,672	(b)	11,298	23.31	31,476	13.99	12,831	8.05

Yearly catch.	Cape Horn.		Cape of Good Hope.		Australasian.		Unalaska.		South Sea.	
	Skins.	Average price realized.	Skins.	Average price realized.	Skins.	Average price realized.	Skins.	Average price realized.	Skins.	Average price realized.
1886	2,171	\$3.36	3,166	\$3.41			4,214	\$1.90		
1887	2,867	4.96	1,439	3.55	345	\$4.28	4,705	1.60	200	\$37.43
1888	4,662	5.37	4,794	4.87	183	7.54	1,416	4.80	120	21.57
1889	3,812	7.79	3,195	5.70	265	6.97	3,333	3.93	315	13.38
1890	3,627	10.03	2,308	7.64	428	6.51				
1891	4,389	10.91	4,005	8.70	322	9.77	2,276	5.33	126	26.79
1892	6,386	7.99	1,397	6.45	393	8.31			834	21.39
1893	2,131	10.28	1,127	7.91	73	5.66	1,329	3.67	43	26.46
1894	62	6.47	1,528	10.20	15	6.08	1,272	5.86		
1895	1,888	7.81	1,394	8.74	2,354	8.74	1,148	2.87		
1896	2,510	7.28	3,080	6.77	2,011	6.49	2,602	1.70	589	12.57
1897	3,451	4.09	457	3.01	747	3.45	655	2.89		
1898	4,204	6.14	2,337	3.91	619	3.20	571	1.32		
1899	6,908	7.40	651	3.65	617	3.16				
1900	8,766	6.49	1,379	3.93	87	2.92				
1901	11,329	6.91	4,773	4.11	5	1.95				

Besides the above, data exist as follows: Robben Island, 1886, 1,832 skins at \$7.87; Galapagos, 1886, 993 skins at \$1.70; 1887, 99 skins at \$1.46. Sundry sources; 1887, 239 skins at \$4.14; 1899, 64 skins at \$0.44.

^a Figures for August not obtained.

^b Not yet all sold.

The sources from which fur seals are derived are as follows: The skins known to the trade as "Alaskas" are those of surplus male seals killed on the Pribilof Islands, under United States government supervision; "Copper" and "Robben Island" are similar in character, and are killed on the Commander and Robben islands, respectively, under direction of officers of the Russian Government; "Lobos" skins are those derived from the Lobos Islands in the mouth of the Rio de la Plata, and are killed under supervision of the Government of Uruguay. The term "Northwest coast" is used to designate the entire pelagic catch of the North Pacific Ocean and Bering Sea. Skins known as "Cape Horn," "Cape of Good Hope," "Australasian," "Galapagos," and "South Sea" are the result of irregular sealing in all of these regions, seals being killed indiscriminately on their breeding-grounds. "Unalaska" skins are those of young seals of the year, commonly known as "Gray Pups," and are killed by natives, in the passes of the Aleutian Islands during their first southward migration.