

DEPARTMENT OF THE INTERIOR,
CENSUS OFFICE.

ROBERT P. PORTER,
Superintendent.
Appointed April 20, 1889; resigned July 31, 1893.

CARROLL D. WRIGHT,
Commissioner of Labor in charge.
Appointed October 5, 1893.

REPORT

ON

STATISTICS OF FISHERIES

IN

THE UNITED STATES

AT THE

ELEVENTH CENSUS: 1890.



WASHINGTON, D. C.:
GOVERNMENT PRINTING OFFICE.
1894.

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LETTER OF TRANSMITTAL.

DEPARTMENT OF THE INTERIOR,
CENSUS OFFICE,
WASHINGTON, D. C., August 4, 1894.

SIR:

I have the honor to transmit herewith the Report on Statistics of Fisheries in the United States.

The transient and irregular employment of a considerable portion of individuals depending more or less upon the fisheries for a livelihood and the difficulty of finding such individuals at any date when results for the year may be sought prevent the returns, as to the number of persons and the equipment employed, from having an accurate value.

The effort was made at the Eleventh Census to exclude all connected with the fisheries who were not engaged in taking fish. At the Tenth Census, canners and packers and others employed in marketing the fish were included among those employed, which is to be considered in any attempt at comparison with the Eleventh Census.

The amounts and values of products were more readily and definitely obtainable than the number of fishermen and the number and value of boats, vessels, and other equipments, since, in reaching consumers, products generally pass through the hands of those who keep regular book accounts.

When the office was placed in my charge in October, 1893, the work of tabulation as here published was in progress. It was found that the fieldwork had been wholly suspended early in the spring of 1891, and that thereafter no work, either in the field or in the office, had been done upon fisheries for a full year, after which the tabulation of returns made prior to April, 1891, was commenced. It was too late to renew fieldwork. It was deemed best to complete this tabulation and give out the results, notwithstanding the imperfect character of the fieldwork.

I am, very respectfully, your obedient servant,

CARROLL D. WRIGHT,
Commissioner of Labor in charge.

Hon. HOKE SMITH,
Secretary of the Interior.

GENERAL FISHERIES.

Total reported value of product, Eleventh Census	a\$44, 277, 514
Total reported value of product, Tenth Census	b42, 740, 163
Reported value of carp, 1880-1889 (not included above)	284, 650
Reported value of alligators and birds, 1889 (not included above)	256, 300

^a Includes inland fisheries, \$1,554,369, not reported at Tenth Census.

^b Marine salt reported in 1880 with fisheries, not here included; reported in 1890 under manufactures.

The states and territories in the order of the reported value of products at the Eleventh Census are as follows:

Massachusetts	\$6, 367, 033	Wisconsin	\$455,030	Tennessee	\$58, 337
Maryland	5, 654, 024	Texas	364, 017	Georgia	34, 601
Virginia	4, 816, 225	Delaware	310, 181	Kansas	27, 053
New York	3, 793, 815	Louisiana	289, 684	District of Columbia	26, 028
New Jersey	3, 130, 893	Illinois	248, 527	Nevada	21, 856
Maine	3, 046, 939	Mississippi	220, 387	Nebraska	20, 410
California	2, 117, 250	South Carolina	205, 845	Vermont	12, 825
Connecticut	1, 687, 737	Alabama	164, 427	South Dakota	10, 866
Florida	1, 429, 328	Iowa	155, 079	Montana	7, 980
Alaska	1, 373, 790	New Hampshire	148, 576	Utah	5, 167
North Carolina	1, 351, 944	Missouri	128, 008	West Virginia	4, 098
Oregon	1, 186, 188	Minnesota	98, 796	Colorado	4, 561
Rhode Island	1, 160, 454	Kentucky	86, 144	New Mexico	2, 783
Washington	1, 107, 847	Arkansas	74, 626	Indian territory	1, 697
Michigan	1, 090, 581	Indiana	60, 441	North Dakota	890
Pennsylvania	903, 005	Idaho	58, 605	Wyoming	287
Ohio	746, 396				

The returns are for the year 1889, except those for the oyster fishery, closing with May, 1890; the shad and alewife fishery, closing with July, 1890, and the seal fisheries of Alaska for the season of 1890.

In gathering the material for the report on fisheries an effort was made to exclude persons, equipment, expense, capital, and values pertaining to preparation of fish and traffic in the products of fish after they leave the hands of the fishermen.

In some of the fisheries, those taking fish dispose of them mainly as taken from the water, with very little more preparation than is involved in precautions for their safe arrival at market by use of ice or salt, as in the case of the fisheries of the Great Lakes, where a relatively small force of shore help is necessary. In certain other fisheries most of the fish must be manufactured into new forms before marketed, and a relatively large force of shore help and a relatively large investment in shore property are necessary, as in the menhaden fishery.

In still other fisheries a large part of the catch undergoes various preparations before reaching the consumer, but the lines are not sharply drawn between fishermen and manufacturers. In the oyster and salmon fisheries some fishermen sell fish as taken to men who conduct canning factories, while some canners are themselves fishermen.

In confining the report to the catching of fish to the exclusion of processes after the fish leave the hands of the fishermen, the number of shoresmen, or men occupied on shore, is small compared with the number who would be called shoresmen in records that included canneries and the various other manipulations of fish till they reach the consumer.

Packers, canners, and dealers are sometimes purchasers of fish, sometimes the managers of extensive fisheries, and often handle both fish caught by themselves and the fish obtained by purchase.

This variation of practice rendered it difficult to carry out a uniform plan for obtaining statistics for fisheries as distinct from manufacturing and from general trade. It also introduced a liability to a difference of interpretation of the same facts by two persons, or at two censuses.

The aggregates of persons employed, capital, and value of equipment are far less when confined strictly to the taking of fish and their conditions in the hands of the fishermen than when canneries and kindred establishments are included. The value of product is greatly enhanced by the labor and expense of canning and other processes. The preparation of fish by canning or other process after capture falls mainly within the classification of manufactures. There is a difficulty in separating the items when the fisherman is also a dealer.

The investment in fisheries, the number of men employed, and the value of equipment are liable to omissions or duplications even with the utmost care. Nearly every fishery has but a temporary season, and an enumerator is liable to mistake one equipment used in two or three different fisheries during the year for different equipments. Vessels busy fishing in a fishing season are to some extent otherwise employed in other portions of the year, and a question will arise how much of the cost of equipment is to be charged to fisheries and how much to some other pursuit.

Such equipment as is specifically adapted to fishing can be charged to that pursuit without dissent, yet the columns of results of the fisheries are the only ones into which serious variations would not enter if they were made up in duplicate by different persons distributing the same facts, each on his own judgment. Fortunately, the columns least liable to error of fact or of interpretation are these columns of results showing what supply for food or other use has been derived from the fisheries.

GENERAL FISHERIES.

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ATLANTIC AND GULF BOAT FISHERY.

The reported value of the product of the Atlantic and Gulf boat fishery in 1889 is \$5,404,621. The 10 leading states in the order of the reported value of the product are as follows: New Jersey, New York, Massachusetts, Maine, North Carolina, Virginia, Maryland, Connecticut, Rhode Island, and Florida.

ATLANTIC AND GULF BOAT FISHERY: 1889.

STATES.	PERSONS EMPLOYED.			APPARATUS AND CAPITAL INVESTED.			
	Total.	Fishermen.	Shoemen.	Total investment.	Vessels.		
					Number.	Net tonnage.	Value.
Total	16,880	16,880	.....	\$1,648,714	307	3,864.35	\$324,445
Alabama	207	207	.....	9,392	1	30.42	1,800
Connecticut	842	842	.....	160,156	54	1,000.21	81,485
Delaware	275	275	.....	5,239	.....	.....	.....
Florida	680	680	.....	63,398	7	111.05	10,100
Louisiana	37	37	.....	1,949	.....	.....	.....
Maine	3,104	3,104	.....	200,330	16	141.06	3,130
Maryland	550	550	.....	26,602	.....	.....	.....
Massachusetts	2,040	2,040	.....	330,319	8	75.05	8,000
Mississippi	48	48	.....	2,560	.....	.....	.....
New Hampshire	94	94	.....	6,908	.....	.....	.....
New Jersey	3,342	3,342	.....	271,186	79	606.00	45,545
New York	1,626	1,626	.....	309,607	139	1,797.56	172,085
North Carolina	1,827	1,827	.....	55,914	1	10.00	800
Pennsylvania	35	35	.....	1,733	.....	.....	.....
Rhode Island	578	578	.....	83,951	1	10.00	400
South Carolina	227	227	.....	2,588	.....	.....	.....
Virginia	1,215	1,215	.....	66,883	1	11.00	200

STATES.	APPARATUS AND CAPITAL INVESTED—continued.				PRODUCTS.			
	Boats.		Minor apparatus.	Other capital, including shore property.	Total value.	Fish.		Other (Value.)
	Number.	Value.				Pounds.	Value.	
Total	13,505	\$630,267	\$647,055	\$40,047	\$5,404,621	158,538,606	\$3,562,830	\$1,841,791
Alabama	187	3,585	4,007	.....	30,521	1,192,335	32,121	4,400
Connecticut	773	33,173	42,638	2,800	297,323	10,408,850	160,840	136,483
Delaware	201	2,742	2,497	.....	47,851	773,987	34,421	13,430
Florida	470	32,836	13,312	2,150	103,316	6,306,084	160,406	23,321
Louisiana	32	1,341	608	.....	5,000	180,060	4,758	242
Maine	2,796	92,904	98,795	5,501	513,499	21,163,084	378,781	134,768
Maryland	485	17,365	9,247	.....	380,380	2,494,011	107,455	278,925
Massachusetts	2,246	140,387	170,777	11,155	835,846	23,245,705	605,630	230,210
Mississippi	23	1,272	1,288	.....	13,101	165,620	6,076	7,115
New Hampshire	140	4,774	2,134	.....	35,958	1,731,030	33,819	1,539
New Jersey	2,291	130,581	80,188	14,872	1,010,508	14,396,798	620,935	308,573
New York	1,398	81,505	112,262	2,765	949,455	35,014,731	572,868	376,587
North Carolina	726	21,885	31,695	1,534	425,761	15,009,024	415,368	10,303
Pennsylvania	20	951	781	.....	16,089	234,482	16,089	.....
Rhode Island	625	41,918	35,998	5,725	207,846	3,575,690	110,953	96,893
South Carolina	211	1,040	939	.....	16,262	640,040	13,168	3,034
Virginia	882	21,310	34,970	385	405,475	21,309,407	280,103	125,372

The Atlantic and Gulf boat fishery, as its name suggests, embraces the fishing along the eastern coast of the United States, with boats as conveyances, as distinguished from the fishing at sea, requiring vessels large enough for registry, that is, of 5 tons burden or larger. The fish are mostly sold at once to consumers, with only enough of care and labor to insure their delivery. The equipments, sometimes requiring a large outlay for nets and other appliances, are generally of moderate value, with some exceptional expenditure where carrying pleasure parties for fishing affects the expense of equipment, as on the New Jersey coast, or where retailers of fish conduct a large business in hiring numbers of fishermen whose catch they distribute through their own trade facilities, as in the vicinity of various southern cities.

In the southern states a large proportion of the fishermen are negroes, who equip themselves in the most inexpensive way, their boats often so simply made as to have but a nominal value. There is such irregularity in their employment that the return of the number employed during the year is especially unsatisfactory.

STATISTICS OF FISHERIES.

COD AND GROUND FISHERY.

The reported value of the product of the cod and ground fishery in 1889 is \$4,262,334. The average time employed is 29.76 weeks. The states interested in taking these fish, named in the order of the reported value of their product, are as follows: Massachusetts, Maine, New Hampshire, New York, Connecticut, Rhode Island, and New Jersey.

COD AND GROUND FISHERY: 1889.

STATES.	PERSONS EMPLOYED.			APPARATUS AND CAPITAL INVESTED.					
	Total.	Fishermen.	Shoresmen.	Total invest- ment.	Vessels.			Boats.	
					Number.	Net tonnage.	Value.	Number.	Value.
Total	10,113	9,759	354	\$5,690,282	855	44,580.00	\$2,443,922	5,529	\$105,723
Connecticut	69	67	2	33,855	14	348.77	22,150	51	1,299
Maine	2,257	2,236	21	831,077	253	9,262.10	407,160	1,004	27,655
Massachusetts	7,505	7,185	320	4,704,063	543	34,001.50	1,937,337	3,028	73,343
New Hampshire	130	120	10	56,398	13	456.30	23,300	109	2,015
New Jersey	26	20	.....	12,327	7	112.93	8,000	0	177
New York	29	29	.....	21,005	3	127.73	19,000	23	590
Rhode Island	97	96	1	30,957	22	279.67	20,975	45	644

STATES.	APPARATUS AND CAPITAL INVESTED—continued.		Total value.	PRODUCTS.				Other. (Value.)
	Minor appa- ratus.	Other capital, including shore property.		Fish.				
				Cod.		Other species.		
			Pounds.	Value.	Pounds.	Value.		
Total	\$1,164,909	\$1,975,728	\$4,262,334	87,462,166	\$2,533,336	79,756,792	\$1,055,326	\$73,673
Connecticut	4,406	6,000	34,382	386,420	11,331	441,470	23,551	.....
Maine	147,827	248,435	565,297	5,231,580	388,090	10,860,140	101,078	16,120
Massachusetts	982,695	1,710,718	3,498,812	70,135,603	2,061,804	64,294,926	1,380,210	56,708
New Hampshire	23,568	7,575	93,300	1,759,001	41,329	2,757,196	51,130	835
New Jersey	1,150	3,000	4,815	25,500	795	94,000	4,020	.....
New York	2,015	.....	51,050	555,000	20,050	1,175,000	31,000	.....
Rhode Island	3,338	.....	14,173	369,060	9,847	134,570	4,331	.....

Near the northeast Atlantic coast the product of the cod fishery forms an important article of food, and in the dried form it reaches remote portions of the country as part of the general food supply. A large fraction of the catch is of other fish, of which the haddock so closely resembles the cod as often to be treated like it and sold with it, while the halibut has characteristics that give it special value on its own merits. The annexed table, made up from returns in the office not elsewhere detailed, indicates the forms under which the catch passed out of the hands of the fishermen:

COD AND GROUND FISHERY—AGGREGATE VALUES OF FISH PRODUCTS: 1889.

CLASSIFICATION.	Total.	Fresh.	Salted.
Total	\$4,262,334	\$2,283,335	\$1,978,999
Blubber and oil	30,266	30,266	.....
Codfish, bank	1,093,910	87,857	1,056,553
Codfish, Georges	684,103	165,700	518,397
Codfish, shore	755,823	534,533	220,790
Cusk	110,629	80,644	23,085
Fish livers	40,573	40,573	.....
Fish roe or spawn	75	.....	75
Haddock	658,242	635,511	22,731
Hako	184,238	125,431	58,757
Halibut	526,927	477,334	49,593
Pollock	60,493	37,556	22,937
Sounds	2,302	1,450	853
Swordfish	28,505	28,505	.....
Tongues	456	338	118
Other species	86,292	82,081	4,211

GENERAL FISHERIES.

FISHERIES OF THE GREAT LAKES.

The reported value of the product of the fisheries of the Great Lakes in 1889 is \$2,615,784. The states in the order of this reported value are as follows: Michigan, Ohio, Wisconsin, Pennsylvania, New York, Minnesota, Illinois, and Indiana.

FISHERIES OF THE GREAT LAKES: 1889.

LAKES AND STATES.	PERSONS EMPLOYED.			APPARATUS AND CAPITAL INVESTED.							
	Total.	Fishermen.	Shoemen.	Total investment.	VESSELS.			BOATS.		Minor apparatus.	Other capital, including shore property.
					Number.	Net tonnage.	Value.	Number.	Value.		
Lakes	6,896	6,598	298	\$3,089,785	111	1,654.83	\$366,450	3,472	\$257,815	\$1,408,880	\$1,052,640
Erie	2,181	1,965	216	1,041,030	42	623.04	143,700	1,063	127,556	693,080	704,303
Huron and St. Clair..	1,444	1,432	12	422,340	12	142.38	30,000	623	83,334	191,031	167,981
Michigan	2,084	2,049	85	739,809	48	777.75	165,400	1,079	54,062	393,718	126,629
Ontario	398	390	8	48,716	.....	.....	.....	253	13,232	29,984	5,800
Superior	789	762	27	228,275	9	111.60	27,350	454	20,631	123,367	47,927
States	6,896	6,598	298	3,089,785	111	1,654.83	366,450	3,472	257,815	1,408,880	1,052,640
Illinois	120	120	.....	37,605	1	26.00	7,000	100	4,294	13,611	12,700
Indiana	29	29	.....	22,759	2	16.62	7,000	14	872	14,272	616
Michigan	3,050	3,003	47	1,031,223	48	735.02	151,750	1,448	79,916	500,971	208,589
Minnesota	162	162	.....	84,585	2	26.29	5,500	112	9,593	20,924	1,596
New York	634	618	16	96,103	5	68.30	10,200	377	20,703	48,980	16,270
Ohio	1,577	1,397	180	1,314,897	27	439.70	110,600	613	87,354	541,847	574,896
Pennsylvania	304	277	27	249,564	10	114.98	22,900	284	31,290	85,907	109,477
Wisconsin	1,020	992	28	204,240	16	227.26	51,500	314	26,831	177,413	38,500

LAKES AND STATES.	PRODUCTS (FISH).											
	Total.		Herring.		Lake trout.		Whitefish.		Sturgeon.		Other species.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Lakes	117,085,568	\$2,615,784	53,060,921	\$717,061	11,201,631	\$452,504	15,326,488	\$601,568	2,798,725	\$105,935	34,097,803	\$648,721
Erie	63,563,332	1,033,758	37,300,850	305,171	66,703	3,714	3,323,772	107,172	1,244,007	47,045	21,727,400	420,636
Huron and St. Clair..	16,939,397	427,252	4,659,221	78,827	2,181,340	86,508	2,556,804	119,850	656,360	19,400	6,885,057	123,167
Michigan	26,000,044	788,536	9,588,587	190,859	5,580,358	249,255	5,523,971	246,493	612,353	26,634	4,721,675	75,795
Ontario	2,091,040	85,431	1,360,140	48,202	6,500	511	23,383	1,476	200,027	10,925	610,986	24,317
Superior	7,883,940	280,807	382,123	5,002	3,366,721	112,516	3,898,668	156,572	84,469	1,931	152,075	4,780
States	117,085,568	2,615,784	53,060,921	717,061	11,201,631	452,504	15,326,488	601,568	2,798,725	105,935	34,097,803	648,721
Illinois	732,830	24,097	77,450	2,977	25,000	1,500	17,375	888	3,200	410	604,805	18,322
Indiana	348,800	16,900	55,000	1,550	150,400	9,032	20,000	1,200	85,400	4,154	38,000	970
Michigan	34,490,184	1,006,240	8,275,511	147,400	6,998,595	275,305	10,348,133	458,445	1,215,958	41,701	7,681,987	143,338
Minnesota	1,304,131	41,081	66,958	1,572	1,099,226	31,460	211,147	7,460	.....	.....	16,800	580
New York	5,403,222	165,116	3,258,355	67,325	73,203	4,225	894,270	20,854	856,727	17,991	1,320,667	54,721
Ohio	47,449,481	683,590	28,731,800	297,883	.....	.....	1,742,566	92,981	410,486	14,741	16,564,530	278,035
Pennsylvania	12,492,300	255,719	6,606,149	74,885	.....	.....	1,150,020	52,213	676,711	25,162	3,049,574	103,659
Wisconsin	14,774,500	363,026	6,589,629	123,659	2,885,207	130,973	1,433,041	57,522	45,243	1,770	3,821,440	49,096

The lakes in the order of the value of their product are: 1, Lake Erie; 2, Lake Michigan; 3, Lakes Huron and St. Clair; 4, Lake Superior; 5, Lake Ontario.

The fish caught in the Great Lakes pass almost directly from the fishermen, so that they need but a relatively small equipment as shore property.

The growing density of population adjacent to the lakes makes a convenient market ready for even more than the supply, so that the fisherman has little occasion to expend any manufacturing energy on his catch.

Very great changes are in progress in the supply of certain species, as will be suggested by an examination of the comparative conditions of the Lake fisheries for the Tenth and Eleventh censuses given on the following page.

The catch of whitefish and the catch of sturgeon have greatly diminished. The decline in whitefish has been met in some measure by extensive planting of fish artificially hatched.

Legislation has restricted commercial fishing on Lake Ontario.

In reporting the fisheries of the Great Lakes the effort was made to exclude all employes engaged in the handling of fish after taken from the water as fish is so largely sold as caught.

STATISTICS OF FISHERIES.

The following table presents the comparative conditions of the fisheries of the Great Lakes for 1880 and 1889:

COMPARISONS OF ALL THE GREAT LAKES FISHERIES: 1880 AND 1889.

CLASSIFICATION.	AGGREGATES.				LAKE SUPERIOR.				LAKE MICHIGAN.			
	1889		1880		1889		1880		1889		1880	
	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.
Total capital invested..		\$2,832,950		\$1,345,975		\$210,825		\$81,880		\$716,549		\$551,135
Persons employed.....	6,896		4,493		789		309		2,081		1,436	
Steamers.....	107	357,650	49	124,800	9	27,350	4	9,400	47	158,400	30	63,400
Sailing vessels and boats, including stake boats or pile drivers.	3,876	325,438	1,880	160,700	475	90,568	157	16,840	1,220	60,115	806	60,875
Pound nets.....	3,831	823,919	1,500	497,400	210	36,810	43	14,950	856	171,146	476	185,425
Gill nets.....		408,797		214,200		72,624		25,280		184,742		124,740
Seines.....	176	15,089	148	20,400	36	3,094	32	2,010	48	4,489	19	2,040
Other apparatus.....		97,252		15,300		0,902		200		25,288		1,455
Shore property.....		684,814		313,175		630,477		12,700		1103,369		104,100
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Total.....	117,085,568	\$2,615,784	68,742,000	\$1,052,000	7,863,940	\$280,807	3,816,025	\$118,370	26,006,944	\$788,530	23,141,875	\$668,400
Whitefish.....	15,326,488	691,503	21,463,900		3,898,558	156,572	2,257,000		5,523,971	240,493	12,030,400	
Trout.....	11,201,631	452,504	6,804,600		3,360,724	112,516	1,404,750		5,580,358	249,255	2,650,450	
Herring.....	53,660,021	717,061	15,967,517		382,123	5,002	34,000		9,568,587	190,359	3,050,400	
Sturgeon.....	2,798,725	105,935	7,557,383		84,460	1,931			612,353	20,034	3,830,600	
All other species.....	34,097,803	618,721	16,948,600		152,075	4,786	60,875		4,721,675	75,795	1,562,025	

CLASSIFICATION.	LAKES HURON AND ST. CLAIR.				LAKE ERIE.				LAKE ONTARIO.			
	1889		1880		1889		1880		1889		1880	
	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.
Total capital invested..		\$376,136		\$144,310		\$1,481,733		\$515,100		\$47,710		\$54,050
Persons employed.....	1,444		732		2,181		1,369		398		687	
Steamers.....	9	28,200	5	10,000	42	143,700	9	38,400			1	3,600
Sailing vessels and boats, including stake boats or pile drivers.	739	38,917	158	18,905	1,183	173,606	593	45,480	253	13,232	106	9,500
Pound nets.....	755	123,818	189	49,425	1,838	483,920	758	233,000	172	8,225	34	14,000
Gill nets.....		43,116		21,680		94,978		22,500		13,337		20,000
Seines.....	40	4,691	70	11,600	34	2,150	18	2,800	9	695	9	1,950
Other apparatus.....		15,623		5,000		38,982		8,645		7,457		
Shore property.....		121,771		27,700		544,897		163,675		64,800		5,000
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Total.....	16,939,397	\$427,252	9,056,200	\$231,650	63,563,332	\$1,033,758	29,087,300	\$474,380	2,091,040	\$85,431	3,640,000	\$150,709
Whitefish.....	2,550,804	119,850	2,778,700		8,323,772	167,172	3,383,800		23,383	1,476	1,064,000	
Trout.....	2,181,346	86,508	2,084,500		66,703	3,714	26,200		6,500	511	569,700	
Herring.....	4,659,221	78,327	497,500		87,200,850	395,171	11,774,400		1,850,140	48,202	611,217	
Sturgeon.....	656,369	19,400	1,202,500		1,244,607	47,045	1,970,000		200,027	10,925	545,283	
All other species.....	6,885,657	123,167	2,493,000		21,727,400	420,656	11,982,900		610,990	24,317	840,800	

a Shoromen, as reported by Tenth Census, not included.

b Including \$70,151 other investments.

c Including \$1,734 other investments.

d Including \$20,498 other investments.

e Including \$3,906 other investments.

f Including \$42,427 other investments.

g Including \$1,886 other investments.

The figures for 1880 used in comparing the fisheries of the Great Lakes for 1880 and 1889 are from 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, 1881, Section II, page 633. In certain items there is some variation from the figures as published in the Compendium for the Tenth Census.

GENERAL FISHERIES.

GULF FISHERY.

The reported value of the product of the Gulf fishery in 1889 is \$466,036. The states in the order of the reported value of their product are as follows: Florida, Texas, Louisiana, and Mississippi.

GULF FISHERY: 1889.

STATES.	PERSONS EMPLOYED.			APPARATUS AND CAPITAL INVESTED.							PRODUCTS.				
	Total.	Fishermen.	Shoremen.	Total investment.	Vessels.			Boats.		Minor apparatus.	Other capital, including shore property.	Total value.	Fish.		Other. (Value.)
					Number.	Net tonnage.	Value.	Number.	Value.				Pounds.	Value.	
Total	849	815	34	\$268,503	64	1,369.93	\$102,000	225	\$31,347	\$20,908	\$105,248	\$400,030	9,472,412	\$438,858	\$27,178
Florida	411	381	30	100,213	37	1,055.38	78,000	53	5,020	10,345	105,248	278,215	5,810,004	275,570	2,639
Louisiana.....	93	93	.....	13,717	10	165.48	9,500	12	2,265	1,952	.....	24,018	524,780	23,643	375
Mississippi	136	132	4	16,573	9	77.30	6,200	35	5,878	4,495	.....	21,245	101,425	6,580	14,605
Texas.....	209	209	.....	30,000	8	71.77	8,300	125	17,584	13,110	.....	142,558	2,090,213	133,050	9,499

In the subdivision of the fisheries the term Gulf fishery has been used to include the fishing with vessels in the Gulf of Mexico. Its markets are mainly in the large cities of the south, from which shipments are made in ice to distant points. The Gulf fishery is in part of the territory covered by the Atlantic and Gulf boat fishery, under which attempts to determine the number of fishermen employed during the year are unsatisfactory.

STATISTICS OF FISHERIES.

INLAND FISHERIES.

The reported value of the product of the inland fisheries in 1889 is \$1,554,359. The states producing over \$20,000 in reported value in the order of their product are as follows: Illinois, Iowa, Missouri, Wisconsin, Kentucky, New York, Arkansas, Ohio, Idaho, Tennessee, Minnesota, Mississippi, Alabama, Indiana, Texas, Pennsylvania, Kansas, California, Michigan, Nevada, and Nebraska.

INLAND FISHERIES: 1889.

STATES AND TERRITORIES.	PERSONS EMPLOYED.			APPARATUS AND CAPITAL INVESTED.				PRODUCTS.			
	Total.	Fisher- men.	Shores- men.	Total in- vestment.	Boats.		Minor apparatus.	Total value.	Fish.		Other. (Value.)
					Number.	Value.			Pounds.	Value.	
The United States.....	7,711	7,711	.....	\$393,635	8,058	\$131,376	\$262,259	\$1,554,359	30,877,159	\$1,552,223	\$2,136
Alabama.....	215	215	.....	13,103	291	3,102	10,001	44,078	810,488	43,818	290
Arkansas.....	207	207	.....	17,830	312	5,410	12,420	74,026	2,008,010	74,372	254
California.....	221	221	.....	3,523	184	3,595	5,628	25,238	553,500	24,888	350
Colorado.....	27	27	.....	673	10	248	425	4,564	103,207	4,564	.....
Connecticut.....	54	54	.....	3,000	50	1,490	2,110	0,793	311,237	9,793	.....
Florida.....	78	78	.....	2,769	67	1,348	1,421	0,349	222,480	9,349	.....
Georgia.....	69	69	.....	2,163	81	1,166	907	7,859	93,480	7,820	30
Idaho.....	115	115	.....	4,390	120	2,141	2,749	58,005	919,900	58,005	.....
Illinois.....	679	679	.....	59,175	757	10,340	42,826	224,430	6,004,408	224,430	.....
Indiana.....	263	263	.....	16,764	335	6,074	10,000	43,535	775,200	43,181	354
Indian territory.....	13	13	.....	743	10	61	682	1,097	36,452	1,097	.....
Iowa.....	348	348	.....	27,900	401	0,373	21,527	155,079	3,554,386	155,071	8
Kansas.....	175	175	.....	7,687	194	2,132	5,555	27,053	434,428	27,053	.....
Kentucky.....	374	374	.....	26,884	506	9,088	17,706	80,144	2,169,738	80,124	20
Louisiana.....	72	72	.....	5,932	89	2,858	2,074	17,353	661,300	17,353	.....
Maine.....	73	73	.....	4,895	117	683	3,712	8,925	100,070	8,877	48
Maryland.....	12	12	.....	339	22	258	81	946	10,570	040	.....
Massachusetts.....	20	20	.....	1,182	14	658	474	3,651	77,420	3,651	.....
Michigan.....	110	110	.....	8,025	128	2,340	5,679	24,332	962,002	23,757	676
Minnesota.....	312	312	.....	13,054	388	5,820	7,734	57,715	1,481,813	57,715	.....
Mississippi.....	163	163	.....	7,841	176	2,559	5,282	48,555	1,010,509	48,408	147
Missouri.....	504	504	.....	30,204	661	10,080	20,214	128,008	2,009,571	128,008	.....
Montana.....	43	43	.....	1,270	41	713	554	7,080	131,500	7,080	.....
Nebraska.....	90	90	.....	3,101	106	1,134	1,907	20,410	323,233	20,410	.....
Nevada.....	211	211	.....	2,205	81	1,725	540	21,856	331,310	21,856	.....
New Hampshire.....	27	27	.....	847	23	209	548	2,183	41,312	2,183	.....
New Jersey.....	52	52	.....	339	10	130	203	1,778	23,288	1,778	.....
New Mexico.....	8	8	.....	418	8	146	272	2,783	24,510	2,783	.....
New York.....	537	537	.....	26,329	661	14,785	11,544	82,412	994,534	82,412	.....
North Carolina.....	111	111	.....	2,776	176	1,514	1,262	8,901	133,023	8,901	.....
North Dakota.....	9	9	.....	243	9	113	130	890	12,000	890	.....
Ohio.....	435	435	.....	13,731	465	3,205	10,526	62,806	1,827,927	62,720	80
Oregon.....	70	70	.....	872	21	285	587	9,252	105,505	9,252	.....
Pennsylvania.....	320	326	.....	7,816	180	2,377	4,939	31,330	883,100	31,330	.....
South Carolina.....	20	29	.....	540	29	206	334	1,563	21,045	1,563	.....
South Dakota.....	62	62	.....	2,142	52	935	1,207	10,866	139,206	10,866	.....
Tennessee.....	369	369	.....	16,113	498	5,207	10,906	58,337	1,305,015	58,327	10
Texas.....	175	175	.....	6,264	183	1,969	4,295	31,044	490,544	31,044	.....
Utah.....	18	18	.....	388	10	150	238	5,167	143,425	5,167	.....
Vermont.....	96	96	.....	3,203	86	1,506	1,697	11,024	163,504	11,024	.....
Virginia.....	74	74	.....	1,918	44	309	1,609	4,020	52,554	4,020	.....
Washington.....	290	290	.....	4,070	28	860	3,201	19,733	937,540	19,733	.....
West Virginia.....	45	45	.....	2,496	49	713	1,783	4,608	59,640	4,608	.....
Wisconsin.....	464	464	.....	32,405	426	9,608	22,887	92,004	2,470,556	92,004	.....
Wyoming.....	7	7	.....	83	.....	.....	83	287	1,150	287	.....

The inland fisheries have not before been reported in census returns. The products of minor lakes and rivers are obtained by those whose equipment is of the simplest kind, hardly even of nominal value, and who use in fishing only odd moments, without disturbing a record of regular occupation in some other pursuit. This occasional fishing is carried on to a greater extent than upon the Great Lakes and the salt water.

A large amount of fish is taken at the time of the flood in our rivers or in winter through holes in the ice of northern lakes and streams, to which the fish crowd at times, by farmers and others who in 1 or 2 days of all the year take noteworthy quantities often at considerable distances from their homes, and no enumerator, unless a near neighbor, would be apt to expect them to report fish taken. The table of inland fisheries therefore must fall considerably short in its showing of the food supplied by our rivers and minor lakes.

GENERAL FISHERIES.

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LOBSTER FISHERY.

The reported value of the product of the lobster fishery in 1889 is \$879,322. The states in the order of the reported value of their product are as follows: Maine, Massachusetts, Connecticut, Rhode Island, New Hampshire, New York, New Jersey, and Delaware.

LOBSTER FISHERY: 1889.

STATES.	PERSONS EMPLOYED.			APPARATUS AND CAPITAL INVESTED.				PRODUCT (LOBSTERS CAUGHT).						
	Total.	Fisher- mon.	Shores- men.	Total invest- ment.	Boats.		Minor appara- tus.	Other capital, including shore property.	Total.			Sold to canners and packers.		
					Num- ber.	Value.			Number.	Pounds.	Value.	Number.	Pounds.	Value.
Total	3,044	3,044		\$538,089	4,858	\$241,723	\$221,745	\$75,221	16,865,617	28,007,052	\$870,322	5,354,580	5,050,101	\$77,599
Connecticut	166	166		52,018	207	36,078	14,882	058	687,994	1,087,005	58,757			
Delaware	2	2		50	1	20	30		3,750	5,625	248			
Maine	2,759	2,759		328,836	3,404	123,185	137,195	67,050	12,552,866	20,273,477	521,644	5,951,580	5,944,191	77,419
Massachusetts	735	735		113,501	928	54,593	55,409	3,400	2,624,218	4,955,450	210,707			
New Hampshire	62	62		4,169	66	1,474	2,687	8	176,733	348,006	15,861			
New Jersey	20	20		5,190	11	1,475	1,615	2,100	74,866	148,800	5,160	3,000	6,000	180
New York	67	67		7,835	89	3,360	3,475	509	266,875	310,450	15,331			
Rhode Island	133	133		28,081	137	20,938	6,943	200	538,315	987,270	40,024			

STATES.	PRODUCT (LOBSTERS CAUGHT).											
	Sold to smacks alive.			Sold to market alive.			Shipped to market cooked.			Local sales.		
	Number.	Pounds.	Value.	Number.	Pounds.	Value.	Number.	Pounds.	Value.	Number.	Pounds.	Value.
Total	5,084,832	10,164,268	\$316,193	5,044,937	9,457,118	\$383,603	193,092	388,803	\$10,582	1,187,566	2,186,607	\$85,255
Connecticut	50,000	119,200	2,340	417,747	678,706	40,317				210,647	289,045	16,100
Delaware				1,750	2,625	88				2,000	8,000	160
Maine	4,435,041	8,871,345	269,820	2,202,442	4,339,607	140,038	108,030	217,101	8,593	455,797	901,173	25,774
Massachusetts	590,191	1,178,723	44,033	1,745,438	3,235,250	147,926	82,866	165,707	7,710	295,723	880,770	17,119
New Hampshire				144,533	284,566	12,583				32,200	64,400	2,778
New Jersey				10,000	20,000	800				61,866	122,800	4,180
New York				108,275	113,250	4,821				98,600	107,200	10,510
Rhode Island				414,752	783,000	37,120	3,000	6,000	270	120,568	178,270	8,034

More than one-half the catch is packed for shipment to a distance. The demands of a growing population near the localities where lobsters are taken and the demand for the canned product at a distance crowd hard upon the supply, and the average weight of lobsters is diminishing.

STATISTICS OF FISHERIES.

MACKEREL FISHERY.

The reported value of the product of the mackerel fishery in 1889 is \$685,947. The states in the order of the reported value of their product are as follows: Massachusetts, Maine, Rhode Island, and Connecticut.

MACKEREL FISHERY: 1889.

STATES.	PERSONS EMPLOYED.			APPARATUS AND CAPITAL INVESTED.					
	Total.	Fisher- men.	Shores- men.	Total investment.	Vessels.			Boats.	
					Number.	Net tonnage.	Value.	Number.	Value.
Total	3,734	3,701	33	\$1,177,065	373	14,380.89	\$740,778	1,097	\$81,570
Connecticut	75	75	.....	24,292	15	301.60	10,525	64	2,341
Maine	695	686	9	215,058	65	2,322.71	113,725	209	15,017
Massachusetts	2,772	2,748	24	832,252	252	11,211.15	573,678	700	61,832
Rhode Island	192	192	.....	55,463	41	485.43	42,850	55	2,350

STATES.	APPARATUS AND CAPITAL INVESTED-- continued.		Total value.	PRODUCTS.				Other. (Value.)
	Minor apparatus.	Other capital, in- cluding shore property.		Fish.				
				Mackerel.		Other species.		
				Pounds.	Value.	Pounds.	Value.	
Total	\$242,250	\$103,467	\$685,947	6,725,060	\$604,527	2,707,808	\$81,420	.....
Connecticut	1,426	1,000	30,791	5,800	454	505,400	30,337	.....
Maine	53,096	33,190	112,071	1,177,112	103,701	340,700	8,370	.....
Massachusetts	179,815	66,927	499,720	5,224,298	474,836	1,300,308	24,884	.....
Rhode Island	7,913	2,350	43,305	817,850	25,536	461,900	17,820	.....

Mackerel are important food fish, and salted are found in well furnished provision stores in nearly every part of the country.

PACIFIC COAST FISHERIES.

The total value of the product of the Pacific coast fisheries in 1889, inclusive of Alaska, where the year ended in 1890, is \$4,933,412. The states and territories in the order of the reported value of their product are as follows: Alaska, California, Oregon, and Washington.

PACIFIC COAST FISHERIES: 1889.

STATES AND TERRITORIES.	PERSONS EMPLOYED.			APPARATUS AND CAPITAL INVESTED.					
	Total.	Fisher- men.	Shores- men.	Total investment.	Vessels.			Boats.	
					Number.	Net tonnage.	Value.	Number.	Value.
Total	10,340	10,245	95	\$3,351,564	181	18,484.33	\$934,786	5,937	\$675,254
Alaska (a).....	1,837	1,742	95	994,898	49	16,812.18	790,500	722	91,818
California.....	3,181	3,181	.....	726,406	105	995.78	63,086	1,994	291,183
Oregon	2,832	2,832	.....	913,427	12	521.26	63,100	1,517	169,672
Washington	2,490	2,490	.....	716,773	15	155.11	17,500	1,704	122,681

STATES AND TERRITORIES.	APPARATUS AND CAP- ITAL INVESTED— continued.		Total value.	PRODUCTS.				Other. (Value.)
	Minor apparatus.	Other capital, in- cluding shore property.		Fish.				
				Salmon.		Other species.		
				Pounds.	Value.	Pounds.	Value.	
Total	\$1,155,240	\$586,284	\$4,933,412	110,913,702	\$3,458,000	30,142,281	\$848,073	\$627,893
Alaska	112,580	.....	1,373,700	36,085,040	1,020,865	(b)	88,000	314,925
California.....	292,527	79,070	1,318,402	16,653,913	477,955	24,121,734	672,182	168,265
Oregon	418,035	292,120	1,170,936	34,731,154	1,116,465	1,152,244	31,885	28,586
Washington	381,498	245,094	1,064,284	23,442,695	842,721	4,808,803	106,006	115,557

a For the year ending in 1890.

b Not reported by pounds.

The fisheries of the Pacific coast have their principal headquarters in San Francisco, where much of the capital used in Alaska belongs, and where a large part of the product of the fisheries is landed for immediate consumption and for distribution.

The salmon fishery produces the largest results of any on this coast. The character of the southern coast is forbidding to fishermen. The northern coast, so indented with inlets and fringed with islands that a vessel may go hundreds of miles without coming into the open sea, is more favorable for catching fish, but it is too far from ready markets to furnish great additions to the supply of fish sold fresh. The conditions in Alaska are so peculiar that they call for a special explanation.

Alaska embraces a vast area of water whose undetermined limits were matters of international negotiation at the time of the census. Were fisheries to be fully credited to the regions in which the fish are taken, a large amount would be given as of Alaska fisheries which now appears under the fisheries of the states where the vessels and equipments of the fisheries are owned. Whales, for example, taken in Alaskan waters form part of the returns of the states where the whalers keep their records.

It has not been practicable to make a complete separation of results growing out of fisheries in Alaskan waters from results growing out of fisheries in other waters.

The fish caught in Alaska and not used for local consumption are partly canned and partly salted at sundry points adjacent to the waters where they are taken.

The vast extent of coast, the scant population, and the brevity of the season for travel would of themselves make it difficult to gather complete returns.

STATISTICS OF FISHERIES.

The following tables represent the salmon fisheries carried on in Alaskan waters by California capital, as tabulated from schedules obtained from San Francisco county, California.

ALASKA SALMON FISHERY.

CAPITAL INVESTED.

CLASSIFICATION.	Number.	Net tonnage.	Value.
Total			\$1,608,426
Vessels	49	10,812.18	700,500
Boats	722		91,818
Minor apparatus			112,580
Lands, buildings, and wharves			613,528

PRODUCTS (FISH).

KIND.	Pounds.	Value.
Total as taken	36,085,940	\$1,020,805
Salmon	36,081,940	1,020,705
Other species	4,000	100

PRODUCTS (FACTORY).

KIND.	Number.	Value.
Total as canned		\$2,780,700
Canned fish	577,063	2,365,840
Canned fish	2,055,084	266,110
Oil	500	175
Oil	40	750
Pickled fish	8,700	85,325
Boneless and prepared fish	25,000	112,500

There were employed, exclusive of factory hands, 1,837 men. Of the 2,487 factory hands, a large proportion were Chinese.

In pursuing the inquiry regarding the resources of Alaska for the report on the population and resources of that territory, it was found (see page 221 of that report) that 642,175 cases of salmon were landed therefrom at United States ports on the Pacific coast. A record was also found that 11,000 cases were landed from the same territory at Vancouver, British Columbia, but not enough is known regarding the circumstances attending the latter to justify adding the figures to others known. There is a possibility of a partial duplication.

The canvass as to the fisheries of Alaska was not wholly satisfactory, for general and special reasons indicated in this connection, yet the conditions so far concentrate the outfit and the return, especially at San Francisco, that a much better approximation to the true product of Alaska is practicable than would seem possible were we to think only of the opportunity for finding fishermen to report their work in the wide Alaskan seas or the half explored passages among the islands.

There is a general coincidence between the product of salmon recorded as landed from Alaska at Pacific ports of the United States and the number reported on census schedules as put up by parties who were equipped in San Francisco for fishing in Alaska.

By dividing \$2,365,840, the value of the cases of salmon reported by cases, by 577,063, the number of cases, the average value of one case is found to be \$4.25, and by dividing \$266,110, the value of the canned salmon reported in pounds, by this average value, the probable number of cases, 62,614, reported by pounds, is obtained. Adding 62,614 to the 577,063 cases of salmon reported in cases would give 639,677 cases as the total number of cases of canned salmon reported on census schedules. This number differs but 2,498 from the number of cases brought to San Francisco from Alaska, as shown by the customhouse records. (See the Report on Population and Resources of Alaska, Eleventh Census, page 221.)

While it would be possible that neither the customhouse record nor the schedules received of work done with San Francisco capital could be claimed to reach every portion of the salmon catch of Alaska, it is evident that the record of the aggregate results of the salmon fishery reported by fishermen equipped for Alaska at San Francisco tallies very closely with the product from Alaska landed at United States ports on the Pacific coast.

Temporary causes increased the difficulty of obtaining a full report of the fish taken in Alaska in the census year or of separating those taken in Alaska from others taken by fishermen who reported in some state.

Canning of fish is reported with the general manufactures of the United States, and not under fisheries.

The Report on Population and Resources of Alaska, page 221, shows a production of 18,039 barrels of salted salmon, valued at \$162,351.

The catch of cod for 1890, as shown in the Report on Population and Resources of Alaska, Eleventh Census, page 223, aggregated 506,000 fish, producing 760 tons of dried fish, valued at \$38,000.

The shipment of halibut consisted of a few thousand boxes of smoked fish, the number not definitely ascertained. This fish forms a great staple for consumption by natives, and sells at from 9 to 12½ cents per pound.

Herring forms an important item in the food supply of the natives. The shipments of salted herring from Alaska have not been of much magnitude.

The fur seal skins sold in London in 1890, as shown in the Report on Population and Resources of Alaska, Eleventh Census, page 216, numbered 62,714, of which 21,700 were sold by the Alaska Commercial Company, 38,315 by other traders, and 2,699 were dried and dressed.

The catch was greatly reduced in the latter part of the decade preceding the census year 1890. The sales in London in 1889 were 141,808 skins, and in but one year of the decade did sales fall below 113,000.

The subject of the seal catch has perplexed national authorities on both sides of the Atlantic. The figures of the general traffic are given above, but only those which represent the lawful catch on the Pribilof islands under the leasing company are used for an estimate of value for the seal product of Alaska in the tabulation. Traders not licensed to take seals on those islands make various claims as to the places in which they are caught, and some of those sold in 1890 may have been caught in the previous year.

It is altogether probable that a considerable portion of the fish mentioned in the Report on Population and Resources of Alaska is additional to the fish reported directly to the Census Office by fishermen, yet it is impracticable to determine just what duplication may exist. This arises in part from the peculiar conditions under which certain returns from Alaska have given its products, with a secondary regard for a record of ports of the parties who took the product, while the fishermen belonging to the states have given more prominence to their place of record than to the location of their fisheries.

According to a statement furnished by the Treasury Department, the North American Commercial Company, lessees of the Pribilof islands, took 20,995 fur seal skins during the season of 1890. A tax of \$2 per skin and a bonus of \$7.62½ per skin was paid by the lessees, in addition to \$12,597 paid by them as rent. There is also a claim by the Treasury Department for additional payment on account of rental still under consideration.

Without attempting to estimate the number of skins taken by those of questionable right or without right to take seals in Alaskan waters, we have, at an estimated value of \$15 each for the skins accounted for as taken (20,995 skins at \$15 each), a value of \$314,925 in fur seal skins. Combining with this only the reported value of fish taken in the salmon fishery, \$1,020,865, and of dried codfish, \$38,000, we have an aggregate of \$1,373,790 products of Alaska.

These figures are but suggestive. There are great quantities of seals and fish, partly marketed, partly consumed in Alaska, which have failed to become matters of definite record.

The employes, investment, and equipments of the company leasing the seal islands are not included. The men and the product of the salmon factories are clearly distinguishable from those of the fisheries proper, but the return of shore property does not discriminate between that used for fishing and that used for canning, which, under the conditions, is likely to be mainly the factories, and is omitted from the summary table.

It has been the effort to present here the facts as known with somewhat more minuteness than those for other regions of the country, that it may be clearer what are the resources of this part of the national possessions and what are the present difficulties in preparing complete statistics thereof, and to furnish the best possible basis for a judgment as to the real contribution of Alaska to the public welfare.

It appears that in the census of 1880 the fishermen and the men employed in the manufacturing of fish were counted together as the total number engaged in the fishery. If that plan were pursued at this census it would add 2,487 shoresmen to the number here given as fishermen.

This great region contained no more than a dozen post offices in 1890, which is but a faint indication of the difficulty of communication with its settlements or with localities where there are no dwellings except the temporary quarters of those present for a few days or weeks of the year for special pursuits.

The statements given are those available, omitting from tabulation all conjecture and belief not established in authoritative form.

STATISTICS OF FISHERIES.

SEA HERRING FISHERY.

The reported value of the sea herring fishery product in 1889 is \$1,188,652. The states in the order of the reported value of their product are as follows: Maine and Massachusetts.

SEA HERRING FISHERY: 1889.

STATES.	PERSONS EMPLOYED.			APPARATUS AND CAPITAL INVESTED.							PRODUCTS (FISH).						
	Total.	Fishermen.	Shoresmen.	Total investment.	Vessels.			Boats.		Minor apparatus.	Other capital, including shore property.	Total.		Sold or used for the manufacture of oil.		Sold or used for bait.	
					Number.	Net tonnage.	Value.	Number.	Value.			Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Total....	2,340	779	1,561	\$807,177	75	1,478.58	\$48,705	531	\$26,414	\$102,381	\$089,017	33,725,812	\$1,188,652	648,105	\$6,100	2,845,888	\$16,901
Maine.....	2,301	746	1,555	801,252	70	1,854.11	44,605	517	25,630	101,334	680,017	33,184,112	1,183,079	648,105	6,100	2,670,888	14,891
Massachusetts..	39	33	6	5,925	5	124.47	4,100	14	778	1,047	.....	541,700	5,573	.....	.....	175,000	2,100

PRODUCTS (FISH)—continued.

STATES.	Sold for fertilizing purposes.		Sold for canning or packing.		Canned or packed.		Sold to be smoke cured.		Smoke cured.		Sold for food.		Salted and pickled, shipped in barrels.		Disposition not reported.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Total....	3,451,900	\$8,881	7,860,510	\$35,044	11,128,195	\$1,018,020	641,645	\$2,109	4,822,200	\$68,517	500,500	\$7,068	62,000	\$795	2,255,869	\$24,497
Maine.....	3,451,900	8,881	7,322,810	34,454	11,128,195	1,018,020	641,645	2,109	4,822,200	68,517	488,000	7,065	2,000	45	2,008,869	22,367
Massachusetts..	.....	.....	47,200	590	.....	.....	.....	.....	.....	.....	12,500	63	60,000	750	247,000	2,070

Of the product of the sea herring fishery, canned, packed, or smoke cured, the greater part was treated before leaving the possession of the fishermen, thus requiring a relatively large proportion of shore help and shore investment.

The following table indicates the quantity and the value of the herring catch, and the mode of its disposition:

SEA HERRING FISHERY: 1889.

PRODUCTS.	Pounds.	Value.
Total	33,725,812	\$1,188,652
Sold or used for the manufacture of oil	648,105	6,100
Sold or used for bait	2,845,888	16,901
Sold for fertilizing purposes	3,451,900	8,881
Sold for canning or packing	7,860,510	35,044
Canned or packed	11,128,195	1,018,020
Sold to be smoke cured	641,645	2,109
Smoke cured	4,822,200	68,517
Sold for food	500,500	7,068
Salted and pickled, shipped in barrels	62,000	795
Disposition not reported	2,255,869	24,437

SHAD AND ALEWIFE FISHERY.

The reported value of the product of the shad and alewife fishery is \$5,071,898. The 10 leading states in the order of the reported value of their product are as follows (Pennsylvania and Delaware being of the same rank): Virginia, Maryland, North Carolina, Florida, New Jersey, Pennsylvania, Delaware, Massachusetts, South Carolina and New York.

SHAD AND ALEWIFE FISHERY: 1889.

STATES AND TERRITORIES.	PERSONS EMPLOYED.			APPARATUS AND CAPITAL INVESTED.					
	Total.	Fishermen.	Shoresmen.	Total invest- ment.	Vessels.			Boats.	
					Number.	Net tonnage.	Value.	Number.	Value.
Total (a).....	27,497	27,497		\$2,758,411	144	2,338.71	\$187,255	13,034	\$539,405
Delaware.....	1,118	1,118		78,938	5	157.00	5,550	505	28,558
District of Columbia.....	102	102		23,003	4	56.83	6,400	29	931
Florida.....	1,438	1,438		194,487	20	225.57	24,000	805	30,008
Georgia.....	180	130		5,465	1	10.51	890	105	1,030
Maine.....	1,100	1,100		75,806	10	159.20	2,240	535	8,206
Maryland.....	5,190	5,100		523,224	16	884.24	10,415	2,738	116,901
Massachusetts.....	843	843		154,121	10	213.83	7,650	428	14,077
Mississippi.....	52	52		2,097				17	515
New Hampshire.....	11	11		932				17	246
New Jersey.....	3,497	3,407		404,106	6	103.27	7,800	1,498	104,130
New York.....	1,100	1,100		110,145	4	65.55	7,000	630	27,557
North Carolina.....	5,445	5,445		515,514	20	217.72	40,250	2,357	99,439
Pennsylvania.....	1,240	1,240		128,538	15	335.10	24,000	550	21,127
Rhode Island.....	265	265		57,185	7	126.26	13,700	164	8,222
South Carolina.....	1,330	1,330		55,181	9	165.06	15,800	714	15,116
Vermont.....	21	21		533				10	208
Virginia.....	4,422	4,422		332,981	8	118.48	15,400	1,026	62,084

STATES AND TERRITORIES.	APPARATUS AND CAPITAL INVESTED— continued.		Total value.	PRODUCTS.						Other. (Value.)
	Minor apparatus.	Other capital, includ- ing shore property.		Fish.						
				Shad.		Alewives.		Other species.		
				Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	
Total.....	\$1,262,531	\$700,220	\$5,071,898	59,071,113	\$2,418,051	84,145,532	\$584,513	69,452,685	\$2,041,783	\$27,551
Delaware.....	41,413	3,417	174,847	1,767,372	50,131	1,013,328	8,442	2,772,840	104,755	2,519
District of Columbia.....	10,332		20,028	179,090	4,754	1,230,000	7,417	221,185	13,857	
Florida.....	50,434	83,445	612,104	6,108,516	234,472			12,693,440	373,228	4,404
Georgia.....	2,045	600	10,270	115,000	10,208	3,203	120	154,830	5,951	
Maine.....	46,794	17,976	120,171	1,273,353	37,992	3,305,591	35,193	948,520	46,649	337
Maryland.....	254,105	135,083	755,013	8,422,049	252,000	36,093,714	185,444	5,897,081	310,266	7,207
Massachusetts.....	91,436	40,958	174,569	83,609	5,140	4,416,118	52,109	6,078,095	116,901	320
Mississippi.....	1,002	580	8,074					302,680	7,739	335
New Hampshire.....	680		2,374			111,500	1,005	5,700	400	
New Jersey.....	158,840	223,827	597,050	12,329,692	438,050	2,740,873	20,691	6,730,695	138,309	
New York.....	70,506	5,022	133,403	2,404,423	92,063	340,768	3,472	2,728,051	36,048	1,220
North Carolina.....	298,500	137,925	751,309	7,083,087	893,169	18,300,310	166,195	6,623,378	188,472	3,563
Pennsylvania.....	27,750	55,050	174,847	2,071,940	92,050	615,500	3,439	1,815,739	79,340	
Rhode Island.....	30,328	4,935	88,000	17,194	1,348	4,036,875	10,734	4,036,093	71,877	40
South Carolina.....	15,700	9,059	161,051	784,520	48,879	22,575	838	3,428,503	104,015	7,319
Vermont.....	325		1,801	40,000	1,000			17,850	801	
Virginia.....	203,794	50,743	1,278,320	15,359,708	747,072	14,038,240	88,424	14,097,569	443,097	227

a For the year closing with July, 1890.

The returns for the shad fishery are for the year ending with July, 1890. The fishery is of great local importance along the Atlantic coast for some weeks, beginning with December or January at the extreme south, and at later dates northward, as the fish run from the sea up the rivers to spawn until they have finished with the extreme northern streams. The pollution of the water, the obstruction by dams, and other causes have greatly modified the importance of the fishery on various rivers. The national and state fish commissions have taken great interest in stocking the headwaters of streams and lakes draining to the salt water.

STATISTICS OF FISHERIES.

WHALE FISHERY.

The reported value of the product of the whale fishery in 1889 is \$1,821,178. The states in the order of the reported value of their product are as follows: Massachusetts, California, Washington, Connecticut, and New York.

WHALE FISHERY: 1889.

STATES.	PERSONS EMPLOYED.			APPARATUS AND CAPITAL INVESTED.							PRODUCTS.			
	Total.	Fisher- men.	Shores- men.	Total in- vestment.	Vessels.			Boats.		Minor appara- tus.	Other capital, including shore property.	Total value.	Value of whale.	Value of fur seal and sea otter.
					Num- ber.	Net tonnage.	Value.	Num- ber.	Value.					
Total	3,513	3,513	.....	\$2,081,636	121	23,611.87	\$1,079,500	566	\$59,220	\$111,208	\$831,708	\$1,821,178	\$1,697,875	\$123,303
California	1,295	1,295	.....	898,464	39	8,034.80	400,600	184	19,120	45,480	373,255	773,610	688,410	85,194
Connecticut	69	69	.....	28,310	4	402.33	15,000	10	900	3,073	9,337	20,684	12,074	8,610
Massachusetts	1,930	1,930	.....	1,131,427	71	14,898.62	587,300	311	36,220	61,116	446,791	994,306	688,637	5,669
New York	28	28	.....	600	.....	.....	.....	4	400	260	.....	8,748	8,748	.....
Washington	191	191	.....	22,775	7	275.82	16,600	57	2,580	1,270	2,325	23,830	.....	23,830

The product given includes the results of what is called shore whaling, in which a total of 25 whales were taken close to the coast without equipment for a voyage; also the sea otters and the seals that are taken on the voyages to whaling grounds.

The following table, prepared from schedules, but not elsewhere tabulated, shows the special products of the long voyage whale fishery, omitting those of the shore whaling and the catch of other mammalia:

LONG VOYAGE WHALE FISHERY: 1889.

PRODUCTS.	Quantity.	Value.
Total .....	.....	\$1,681,167
Ambergris	73	23,200
Ivory	12,894	8,451
Sperm oil	740,414	472,667
Whalebone	282,882	904,800
Whale oil	488,864	181,053

c Not including shore whaling or incidental products in other sea mammals, as otters and seals.

GENERAL FISHERIES.

MENHADEN FISHERY.

The reported value of the product of the menhaden fishery in 1889 is \$1,817,878. The states in the order of the reported value of their product are as follows: New York, Rhode Island, Virginia, Connecticut, New Jersey, Maryland, Delaware, Maine, North Carolina, and Massachusetts.

MENHADEN FISHERY: 1889.

STATES.	PERSONS EMPLOYED.			APPARATUS AND CAPITAL INVESTED.								FISH AND FISH PRODUCTS.			
	Total.	Fisher- men.	Shores- men.	Total in- vestment.	Vessels.			Boats.		Minor appara- tus.	Other capital, including shore property.	Total value.	Value of fish prod- ucts.	Value of fish sold for bait.	Value of fish dis- posed of in oth- er ways.
					Num- ber.	Net ton- nage.	Value.	Num- ber.	Value.						
Total	3,500	1,004	1,566	\$2,433,207	150	6,071.21	\$703,285	436	\$64,828	\$168,657	\$1,136,437	\$1,817,878	\$1,580,527	\$31,007	\$205,444
Connecticut	188	98	90	101,355	6	278.35	45,500	28	2,137	17,218	126,600	120,400	114,400	925	5,105
Delaware	66	36	30	53,180	1	59.07	11,000	6	680	7,290	34,300	16,000	16,000	.....	.....
Maine	79	75	4	87,407	7	247.24	15,000	30	1,706	7,591	12,510	14,053	1,210	88	12,799
Maryland	75	40	35	49,920	2	138.93	14,000	5	620	5,000	30,300	44,300	44,300	.....	.....
Massachusetts	56	30	26	20,162	5	90.13	13,200	5	890	2,172	4,400	10,030	9,007	6,933	.....
New Jersey	277	214	63	128,103	14	266.49	23,200	41	8,100	40,153	56,050	111,234	47,002	17,102	47,130
New York	1,030	516	520	1,019,856	25	1,381.44	274,600	98	14,510	170,190	560,530	628,212	600,305	657	18,250
North Carolina	40	40	.....	10,800	4	60.47	8,035	9	1,240	925	.....	13,980	.....	.....	13,980
Rhode Island	715	345	370	487,815	24	1,179.27	179,300	86	11,880	149,735	140,900	508,342	475,390	6,152	26,800
Virginia	1,028	600	428	434,620	71	2,860.19	178,250	128	23,565	68,478	164,341	351,177	269,757	100	81,320

The menhaden is taken along the Atlantic seaboard from Maine to Florida, chiefly from 3 to 7 miles from shore.

The parties who take menhaden maintain factories for converting their catch into oil and fertilizer before making sales.

The refuse of the fish from which the oil has been extracted is used as a fertilizer, known in the crude state as fish scrap, or chum, and in a prepared form as fish guano.

The shore help, as well as the investment employed in this preparation for market, is a large item.

The following table, prepared from schedules not fully tabulated elsewhere, indicates by states the results of the menhaden fishery and the forms in which the products are sold by fishermen:

MENHADEN FISHERY: 1889.

STATES.	Total value of fish and fish products.	FISH PRODUCTS.				Other products. (Value.)	Value of fish sold for bait.	Value of fish dis- posed of in other ways.	
		Value of oil and scrap.	Oil.		Scrap, or chum.				
			Gallons.	Value.	Tons.				Value.
Total	\$1,817,878	\$1,580,527	3,406,127	\$750,344	52,837	\$796,473	\$38,210	\$31,007	\$205,444
Connecticut	120,400	114,400	200,000	57,250	1,400	24,000	83,150	925	5,105
Delaware	16,000	16,000	81,000	8,000	500	8,000	.....	.....	.....
Maine	14,053	1,216	2,038	674	35	482	80	88	12,799
Maryland	44,300	44,300	57,000	6,840	2,876	37,520	.....	.....	.....
Massachusetts	10,030	9,007	9,108	2,241	54	850	.....	6,933	.....
New Jersey	111,234	47,002	56,140	11,007	1,451	85,095	.....	17,102	47,130
New York	628,212	600,305	1,382,989	807,049	20,410	302,256	.....	657	18,250
North Carolina	13,980	.....	.....	.....	.....	.....	.....	.....	13,980
Rhode Island	508,342	475,390	1,398,016	200,127	18,208	185,203	.....	6,152	26,800
Virginia	351,177	269,757	299,751	66,756	12,903	203,001	.....	100	81,320

STATISTICS OF FISHERIES.

OYSTER FISHERY.

The reported value of the product of the oyster fishery in 1889 is \$13,294,339, nearly one-third of the commercial product of all the fisheries. The 10 leading states in order of the value of their product are as follows: Maryland, Virginia, New York, New Jersey, Connecticut, Pennsylvania, Rhode Island, Louisiana, Texas, and North Carolina.

OYSTER FISHERY: 1889.

STATES.	PERSONS EMPLOYED.			APPARATUS AND CAPITAL INVESTED.								PRODUCT (OYSTERS).	
	Total.	Fishermen.	Shoresmen.	Total investment.	Vessels.			Boats.		Minor apparatus.	Other capital, including shore property.	Bushels.	Value.
					Number.	Net tonnage.	Value.	Number.	Value.				
Total (a)	65,328	42,586	22,742	\$19,173,418	4,805	655,430.00	\$4,060,829	22,677	\$1,066,174	\$1,250,203	\$11,902,212	25,349,668	\$13,294,339
Alabama	336	155	181	60,126	102	1,020.00	32,956	130	2,040	2,680	21,811	246,525	83,828
Connecticut	1,789	1,035	784	4,578,688	212	2,554.00	403,309	945	50,396	70,324	4,054,668	1,278,742	1,115,017
Delaware	520	225	205	177,693	65	780.00	67,725	98	10,131	8,747	100,000	152,374	71,235
Florida	205	107	128	32,373	44	528.00	15,765	199	4,011	3,697	8,000	178,265	54,530
Georgia	249	13	236	103,691	12	120.00	13,550	57	981	3,895	85,295	67,374	10,463
Louisiana	709	540	169	102,278	34	340.00	18,115	573	60,920	11,780	72,003	524,358	243,313
Maine	13	9	4	0,548	1	15.00	5,000	5	208	1,000	3,340	5,500	8,250
Maryland	30,609	20,064	10,545	4,518,758	1,380	16,560.00	1,261,927	6,759	987,194	617,612	1,652,025	10,282,752	4,467,325
Massachusetts	301	120	181	140,291	39	585.00	15,752	340	11,900	4,035	108,004	112,382	127,729
Mississippi	615	416	199	104,880	139	1,390.00	44,380	62	4,307	22,318	33,875	709,281	120,322
New Jersey	3,020	2,832	788	2,172,109	590	7,080.00	608,004	1,479	86,830	95,655	1,381,014	1,613,052	1,391,339
New York	4,124	2,501	1,623	3,407,741	633	6,330.00	668,407	2,053	239,720	102,722	2,556,886	1,731,547	1,766,088
North Carolina	1,507	1,189	318	130,756	98	980.00	43,790	864	36,193	10,523	40,250	664,437	151,003
Pennsylvania	717	179	538	347,890	129	1,548.00	184,050	2	3,000	34,500	125,440	488,700	425,020
Rhode Island	234	136	98	298,620	15	180.00	28,190	208	13,858	4,790	251,782	104,187	250,700
South Carolina	109	154	36	87,277	5	60.00	11,424	160	5,423	3,105	67,325	49,188	27,029
Texas	430	300	130	177,641	102	1,620.00	58,595	11	1,585	31,243	80,218	488,421	189,515
Virginia	19,070	12,581	6,489	2,693,058	1,145	13,740.00	688,900	8,726	440,556	226,577	1,246,926	6,572,493	2,776,733

a For the year closing with May, 1890.

b Estimated.

While the fisheries are local, the canned products reach the remotest settlements.

The returns for oyster fisheries are for the season September, 1889, to May, 1890, inclusive.

The tonnage of vessels in the oyster fisheries was imperfectly gathered and the figures for tonnage are partly estimates, based on the relation of vessels reporting tonnage to all vessels engaged in the fishery.

Of the 4,805 vessels engaged in the oyster industry, 1,139, or nearly 24 per cent, were engaged in the transportation of oysters from the beds to market. They were distributed among the states as follows: Alabama, 14; Connecticut, 19; Delaware, 24; Louisiana, 36; Maine, 1; Maryland, 492; Massachusetts, 1; Mississippi, 1; New Jersey, 77; New York, 81; North Carolina, 68; Pennsylvania, 12; Rhode Island, 12; Virginia, 301.

SPONGE FISHERY.

The reported value of the product of the sponge fishery in 1889 is \$281,754. The state furnishing the sponge product is Florida.

The equipment for taking sponges is simple and inexpensive. Many small boats are used, carrying but 2 men or even but 1 man each, and the sponges are torn from the bottom of water so shallow that a pail with glass set in the bottom forms a rude apparatus with which to look for the sponges, and a pole with a hook at the end suffices to secure them.

STATISTICS OF FISHERIES.

TABLE 1.—COMPARATIVE STATISTICS

	STATES AND TERRITORIES.	GRAND TOTALS.			PERSONS EMPLOYED.		APPARATUS AND CAPITAL INVESTED.			
		Persons employed.	Capital invested.	Value of products.	Fishermen.	Shoresmen.	Vessels.			
							Number.	Net tonnage.	Value.	
1	The United States (a)	1880..	163,748	\$43,602,123	\$44,277,514	136,665	26,683	7,257	174,020.74	\$11,133,265
2		1880..	151,426	37,955,349	342,740,163	101,684	20,742	6,605	208,207.82	9,357,382
3	Alabama.....	1880..	848	82,621	164,427	667	181	103	1,050.42	34,756
4		1880..	635	38,260	119,275	545	90	24	317.20	14,585
5	Alaska (c).....	1880..	1,837	994,898	1,373,790	1,742	95	40	16,812.18	790,500
6		1880..	6,130	447,000	2,661,640	6,000	130			
7	Arkansas.....	1880..	207	17,830	74,626	207				
8		1880..								
9	California.....	1880..	4,697	1,634,153	2,117,250	4,697		144	9,030.58	524,286
10		1880..	3,094	1,130,675	71,558,714	2,089	1,005	49	5,246.80	535,350
11	Colorado.....	1880..	27	673	4,564	27				
12		1880..								
13	Connecticut.....	1880..	3,252	5,072,274	1,687,737	2,376	876	305	4,954.26	586,960
14		1880..	3,131	1,421,020	1,456,866	2,685	546	291	9,215.95	514,050
15	Delaware.....	1880..	1,681	315,109	310,181	1,656	325	71	900.67	74,275
16		1880..	1,970	268,231	597,695	1,662	317	69	1,226.00	51,000
17	District of Columbia.....	1880..	102	23,663	26,028	102		4	56.83	0,400
18		1880..								
19	Florida.....	1880..	3,537	631,277	1,420,328	3,370	158	170	2,667.64	200,715
20		1880..	2,480	406,117	643,237	2,284	196	124	2,152.97	272,645
21	Georgia.....	1880..	448	111,919	34,001	212	236	13	130.51	14,440
22		1880..	899	78,770	110,993	809	90	1	12.00	450
23	Idaho.....	1880..	115	4,800	58,605	115				
24		1880..								
25	Illinois.....	1880..	799	96,780	248,527	799		1	26.00	7,000
26		1880..	300	83,400	60,100	205	35	3	209.73	8,500
27	Indiana.....	1880..	292	30,523	60,441	292		2	16.02	7,000
28		1880..	52	20,300	32,740	45	7	1	21.90	2,500
29	Indian territory.....	1880..	13	743	1,697	13				
30		1880..								
31	Iowa.....	1880..	348	27,000	155,079	348				
32		1880..								
33	Kansas.....	1880..	175	7,687	27,653	175				
34		1880..								
35	Kentucky.....	1880..	374	20,884	80,144	374				
36		1880..								
37	Louisiana.....	1880..	911	183,876	280,684	742	160	44	595.48	27,615
38		1880..	1,597	93,021	362,010	1,300	297	49	539.60	29,821
39	Maine.....	1880..	12,537	2,502,709	3,046,989	10,944	1,593	422	13,592.41	591,520
40		1880..	11,071	3,375,904	3,614,178	8,110	2,961	606	17,632.05	633,642
41	Maryland.....	1880..	36,436	5,118,843	5,654,024	25,856	10,589	1,398	17,083.20	1,292,342
42		1880..	20,008	0,342,443	5,221,715	15,873	10,135	1,450	43,590.00	1,750,000
43	Massachusetts.....	1880..	16,250	7,433,193	6,307,033	15,693	557	933	61,200.05	3,147,017
44		1880..	20,117	14,334,459	68,137,880	17,165	2,952	1,054	83,232.17	8,171,189
45	Michigan.....	1880..	3,160	1,039,248	1,090,581	3,113	47	48	735.62	151,750
46		1880..	1,781	442,665	710,170	1,600	181	36	914.42	98,500
47	Minnesota.....	1880..	474	47,639	98,796	474		2	20.29	5,500
48		1880..	35	10,160	5,200	30	6	1	33.59	5,000
49	Mississippi.....	1880..	1,014	183,951	220,387	811	203	148	1,467.30	50,580
50		1880..	186	8,800	22,540	110	76			
51	Missouri.....	1880..	594	30,294	123,098	594				
52		1880..								
53	Montana.....	1880..	43	1,270	7,950	43				
54		1880..								
55	Nebraska.....	1880..	90	3,191	20,410	90				
56		1880..								
57	Nevada.....	1880..	211	2,265	21,856	211				
58		1880..								
59	New Hampshire.....	1880..	324	60,254	148,576	314	10	13	456.30	23,300
60		1880..	414	209,465	176,684	376	38	23	1,019.05	51,500
61	New Jersey.....	1880..	10,834	3,033,360	3,130,893	9,983	851	606	8,229.59	692,549
62		1880..	6,220	1,492,202	3,176,589	5,659	561	590	10,445.90	545,900
63	New Mexico.....	1880..	8	418	2,733	8				
64		1880..								
65	New York.....	1880..	9,321	5,125,361	8,798,815	7,162	2,159	809	9,770.64	1,052,192
66		1880..	7,266	2,629,585	4,380,565	5,650	1,616	541	11,582.51	777,600

a Includes the inland fishery, with a product of \$1,554,359, not counted in 1880.

b Marine salt, reported in 1880 with fisheries, not here included; reported in 1890 under manufactures.

OF FISHERIES: 1880 AND 1889.

APPARATUS AND CAPITAL INVESTED—continued.				VALUE OF PRODUCTS BY FISHERIES.						
Boats.		Minor apparatus. (Value.)	Other capital, including shore property.	General fish- eries.	Whale fish- eries.	Seal fisheries.	Mouthalen fisheries.	Oyster fisheries.	Sponge fish- eries.	
Number.	Value.									
80, 201 44, 804	\$4, 826, 150 2, 465, 993	\$8, 363, 462 8, 145, 261	\$10, 270, 246 17, 087, 413	\$26, 747, 440 22, 405, 018	\$1, 697, 875 2, 323, 943	\$438, 228 2, 289, 813	\$1, 817, 878 2, 116, 787	\$13, 294, 339 13, 403, 852	\$281, 754 200, 750	1 2
614 119	0, 330 10, 215	16, 658 7, 000	21, 811 6, 400	80, 599 74, 325				80, 828 44, 950		3 4
723 8, 000	01, 818 60, 000	112, 580 7, 000	380, 000	1, 058, 805 564, 640		314, 025 2, 096, 560				5 6
312	5, 410	12, 420		74, 626						7
2, 312 853	313, 898 01, 485	343, 644 205, 810	452, 325 307, 000	1, 343, 640 1, 341, 314	688, 416 201, 050	85, 194 15, 750				9 10
10	248	425		4, 564						11
2, 127 1, 173	128, 414 73, 585	155, 577 375, 535	4, 201, 323 457, 850	431, 546 383, 887	12, 074 32, 043	8, 010 111, 851	120, 490 250, 205	1, 115, 017 672, 875		13 14
811 839	42, 131 93, 227	54, 806 70, 324	143, 807 114, 080	222, 946 309, 029			16, 000 941	71, 235 687, 725		15 16
29	931	16, 333		20, 028						17
1, 935 1, 058	65, 757 28, 508	131, 445 39, 927	203, 360 65, 037	1, 093, 044 426, 527				54, 530 15, 950	281, 754 200, 750	19 20
243 358	3, 207 15, 425	7, 807 18, 445	65, 865 44, 450	24, 138 84, 993				10, 463 85, 000		21 22
129	2, 141	2, 740		58, 605						23
857 101	20, 643 2, 000	56, 437 11, 900	12, 700 61, 000	248, 527 60, 100						25 26
840 15	6, 040 1, 050	21, 962 20, 210	615 5, 000	60, 341 32, 740						27 28
10	61	682		1, 697						29
401	6, 373	21, 527		155, 079						31
194	2, 132	5, 555		27, 653						33
500	0, 088	17, 796		86, 144						35
700 105	66, 884 4, 800	17, 314 18, 060	72, 063 50, 000	46, 371 192, 610				243, 313 200, 000		37 38
9, 307 5, 920	205, 320 245, 624	597, 344 934, 593	1, 078, 525 1, 562, 235	3, 024, 080 3, 676, 078			14, 053 37, 500	8, 250 37, 500		39 40
10, 000 2, 825	1, 122, 388 180, 448	886, 105 297, 145	1, 818, 008 4, 108, 850	1, 142, 359 479, 388			4, 300 11, 851	4, 467, 325 4, 730, 476		41 42
8, 623 0, 740	304, 178 851, 730	1, 548, 946 8, 528, 925	2, 369, 052 7, 282, 000	5, 234, 068 5, 681, 204	988, 037 2, 080, 337	5, 669	10, 030 61, 769	127, 729 405, 550		43 44
1, 570 454	82, 262 10, 345	506, 650 272, 920	298, 580 716, 170	1, 090, 581 716, 170						45 46
500 10	11, 885 900	28, 658 3, 700	1, 560 500	68, 790 5, 290						47 48
313 58	14, 531 4, 000	34, 385 1, 000	34, 455 2, 600	91, 065 12, 540				120, 322 10, 000		49 50
661	10, 080	20, 214		128, 008						51
41	716	554		7, 980						53
100	1, 134	1, 007		20, 410						55
81	1, 725	540		21, 856						57
355 211	8, 808 7, 780	20, 569 60, 985	7, 583 89, 800	148, 570 170, 034				6, 650		59 60
5, 339 4, 065	331, 435 229, 963	377, 313 232, 839	1, 082, 063 400, 000	1, 628, 320 949, 078			111, 234 140, 286	1, 391, 339 2, 080, 625		61 62
8	140	272		2, 783						63
5, 289 3, 441	403, 226 289, 885	527, 964 390, 200	3, 141, 979 1, 171, 900	1, 990, 767 1, 080, 357	8, 748		628, 212 1, 114, 158	1, 765, 088 1, 577, 050		65 66

* Alaska, 1890; imperfect returns.

STATISTICS OF FISHERIES.

TABLE 2.—STATISTICS OF FISHERIES,

STATES AND TERRITORIES.	GRAND TOTALS.			PERSONS EMPLOYED.		APPARATUS AND CAPITAL INVESTED.		
	Persons employed.	Capital invested.	Value of products.	Fishermen.	Shoresmen.	Vessels.		
						Number.	Net tonnage.	Value.
1 The United States.....	163,348	\$43,602,123	\$14,277,514	136,065	26,683	7,257	174,020.74	\$11,133,265
2 Alabama.....	848	82,621	164,427	667	181	103	1,050.42	34,750
3 Alaska.....	1,837	994,898	1,873,790	1,742	95	49	16,812.18	790,600
4 Arkansas.....	207	17,830	74,620	207				
5 California.....	4,697	1,634,153	2,117,250	4,697		144	9,630.58	524,280
6 Colorado.....	27	673	4,564	27				
7 Connecticut.....	3,252	5,072,274	1,687,737	2,376	876	905	4,054.26	586,960
8 Delaware.....	1,081	315,109	310,181	1,056	325	71	996.67	74,275
9 District of Columbia.....	102	23,663	26,023	102		4	56.83	6,400
10 Florida.....	3,597	631,277	1,429,323	3,379	218	170	2,667.64	200,715
11 Georgia.....	448	111,310	34,601	212	236	13	130.51	14,440
12 Idaho.....	115	4,800	58,605	115				
13 Illinois.....	790	90,780	248,527	790		1	26.00	7,000
14 Indiana.....	292	30,523	60,441	292		2	16.62	7,000
15 Indian territory.....	13	743	1,667	13				
16 Iowa.....	348	27,900	155,079	348				
17 Kansas.....	175	7,687	27,653	175				
18 Kentucky.....	374	26,844	86,144	374				
19 Louisiana.....	911	183,876	280,684	742	169	41	505.48	27,015
20 Maine.....	12,597	2,562,700	3,046,989	10,044	1,593	422	13,562.41	601,520
21 Maryland.....	36,436	5,118,843	5,654,024	25,856	10,580	1,398	17,083.20	1,292,342
22 Massachusetts.....	16,250	7,483,163	6,367,033	15,693	557	933	61,260.65	3,147,017
23 Michigan.....	3,100	1,030,248	1,030,581	3,113	47	48	735.62	151,750
24 Minnesota.....	474	47,630	98,796	474		2	26.20	5,500
25 Mississippi.....	1,014	133,951	220,387	811	203	148	1,467.30	50,580
26 Missouri.....	504	30,294	128,008	504				
27 Montana.....	43	1,270	7,980	43				
28 Nebraska.....	90	3,101	20,410	90				
29 Nevada.....	211	2,265	21,856	211				
30 New Hampshire.....	324	69,254	148,576	314	10	15	450.30	20,300
31 New Jersey.....	10,834	3,083,360	3,130,893	9,933	851	690	8,229.59	692,549
32 New Mexico.....	8	418	2,783	8				
33 New York.....	9,321	5,125,361	8,798,815	7,162	2,159	809	9,770.64	1,052,192
34 North Carolina.....	8,930	715,760	1,351,944	8,012	318	132	1,277.19	93,475
35 North Dakota.....	9	243	800	9				
36 Ohio.....	2,012	1,323,423	740,396	1,833	180	27	439.70	110,600
37 Oregon.....	2,011	914,299	1,186,188	2,011		12	521.20	63,100
38 Pennsylvania.....	2,631	735,035	903,095	2,060	565	154	1,098.08	231,850
39 Rhode Island.....	2,214	1,042,072	1,160,454	1,745	469	110	2,260.63	291,415
40 South Carolina.....	1,776	145,586	295,845	1,740	36	14	225.00	26,724
41 South Dakota.....	62	2,142	10,866	62				
42 Tennessee.....	369	16,113	58,337	369				
43 Texas.....	814	222,905	364,017	684	130	170	1,691.77	60,895
44 Utah.....	18	888	5,167	18				
45 Vermont.....	117	3,796	12,825	117				
46 Virginia.....	25,809	3,420,469	4,816,225	18,892	6,917	1,225	16,220.67	822,009
47 Washington.....	2,971	743,618	1,107,847	2,971		22	430.93	34,100
48 West Virginia.....	45	2,466	4,098	45				
49 Wisconsin.....	1,484	926,744	455,930	1,456	28	16	227.20	51,500
50 Wyoming.....	7	83	287	7				

a The returns are for the year 1889, except those for the oyster fishery, closing with May, 1890; the shad and alewife fishery, closing with July, 1890, and the scal fisheries of Alaska, for the season of 1890.

GENERAL FISHERIES.

BY STATES AND TERRITORIES. (a)

APPARATUS AND CAPITAL INVESTED—continued.				VALUE OF PRODUCTS BY FISHERIES.						
Boats.		Minor apparatus. (Value.)	Other capital, including shore property.	General fish- eries.	Whale fish- eries.	Seal fisheries.	Menhaden fisheries.	Oyster fisheries.	Spongo fish- eries.	
Number.	Value.									
80,261	\$4,826,150	\$8,363,462	\$19,279,246	\$26,747,440	\$1,697,875	\$438,228	\$1,817,878	\$13,294,339	\$281,754	1
614	9,436	16,688	21,841	80,599				83,828		2
722	91,818	112,580		1,053,865			314,925			3
812	5,410	12,420		74,620						4
2,312	313,898	343,644	452,325	1,343,610	688,416		85,194			5
10	248	425		4,564						6
2,127	128,414	155,577	4,201,323	491,546	12,074	8,610	120,460	1,115,017		7
811	42,131	54,896	143,807	222,046			16,000	71,235		8
29	931	16,352		26,028						9
1,935	95,757	131,445	293,369	1,093,044				54,530	281,754	10
243	3,207	7,807	85,865	21,138				10,463		11
129	2,141	2,749		58,065						12
857	20,643	50,437	12,700	248,527						13
349	6,946	24,062	615	60,441						14
10	61	682		1,097						15
401	6,373	21,527		155,079						16
104	2,132	5,555		27,653						17
509	9,888	17,796		86,144						18
706	66,884	17,314	72,063	36,371				243,313		19
9,307	295,320	597,344	1,078,525	3,024,686			14,653	8,250		20
10,069	1,122,388	886,105	1,818,063	1,142,339			44,360	4,467,325		21
8,623	394,178	1,548,946	2,393,052	5,234,968	988,637	5,669	10,030	127,720		22
1,576	82,262	506,659	298,584	1,090,581						23
600	11,885	28,658	1,596	98,796						24
313	14,531	74,385	34,455	91,065				120,322		25
661	10,080	20,214		128,008						26
41	716	554		7,080						27
106	1,134	1,987		20,410						28
81	1,725	540		21,850						29
955	8,808	29,563	7,583	148,576						30
5,339	931,435	377,313	1,682,063	1,628,320			111,234	1,301,339		31
8	146	272		2,783						32
5,289	403,226	527,961	3,141,979	1,366,767	8,748		628,212	1,765,088		33
4,132	160,271	282,905	170,109	1,186,061			13,980	151,063		34
9	113	130		890						35
1,078	90,550	552,373	674,896	746,396						36
1,538	160,857	410,222	262,120	1,186,188						37
1,046	58,735	153,883	290,567	477,985				425,020		38
1,320	99,810	238,955	411,892	395,412			598,342	259,700		39
1,114	22,394	20,984	76,384	178,816				27,029		40
52	935	1,207		10,866						41
498	5,207	10,906		58,337						42
319	21,188	48,054	86,218	174,592				189,515		43
10	150	238		5,187						44
96	1,714	2,022		12,825						45
11,706	548,733	535,432	1,402,365	1,688,315			351,177	2,770,733		46
1,789	120,130	835,060	247,419	1,084,017		23,830				47
40	713	1,783		4,698						48
940	36,430	200,305	98,500	455,030						49
		83		287						50

STATISTICS OF FISHERIES.

TABLE 3.—SUMMARY OF FISHERIES, BY INDUSTRIES. (a)

INDUSTRIES.	PERSONS EMPLOYED.				APPARATUS AND CAPITAL INVESTED.							Value of products.
	Total.	Fisher-men.	Shores-men.	Total invest-ment.	Vessels.			Boats.		Minor apparatus. (Value.)	Other capital, including shoro property.	
					Num-ber.	Net tonnage.	Value.	Num-ber.	Value.			
Total	163,348	136,665	26,683	\$43,602,123	7,257	174,020.74	\$11,133,205	80,261	\$4,826,750	\$8,363,462	\$19,279,246	\$44,277,514
Atlantic and Gulf boat.....	10,886	16,886	.....	1,648,714	307	3,864.35	324,445	13,505	630,267	947,055	46,947	5,404,621
Cod and ground.....	10,113	9,753	354	5,690,283	855	44,589.00	2,443,022	5,529	105,723	1,164,909	1,975,723	4,262,334
Great Lakes.....	6,896	6,958	298	3,080,785	111	1,654.83	366,450	3,472	257,816	1,463,880	1,052,640	2,615,784
Gulf.....	849	815	34	268,503	64	1,269.93	102,000	225	31,347	26,908	105,248	466,036
Inland.....	7,711	7,711	.....	393,635	.....	.....	.....	8,058	131,376	262,250	.....	1,534,359
Lobster.....	3,944	3,944	.....	533,659	.....	.....	.....	4,853	241,723	221,745	75,221	870,322
Mackarel.....	3,734	3,701	33	1,177,065	373	14,380.89	749,778	1,007	81,570	242,250	103,407	685,947
Pacific coast, including Alaska.....	10,340	10,245	95	3,351,564	181	18,484.33	933,786	5,937	675,254	1,155,240	586,284	4,933,412
Sea herring.....	2,340	779	1,561	897,177	75	1,478.58	48,765	531	26,414	102,381	689,617	1,188,652
Shad and alewife.....	27,497	27,497	.....	2,758,411	144	2,338.71	187,255	13,034	539,405	1,262,531	769,220	5,071,898
Whale.....	3,513	3,513	.....	2,081,636	121	23,611.87	1,079,500	566	59,220	111,208	831,708	1,821,178
Menhaden.....	3,560	1,994	1,566	2,433,207	169	6,071.21	763,285	436	64,828	468,657	1,136,497	1,817,878
Oyster.....	65,328	43,586	22,742	19,173,418	4,805	655,430.00	4,060,829	22,077	1,900,174	1,259,203	11,902,212	13,294,339
Spongo.....	637	637	.....	139,037	62	747.04	72,250	341	21,034	41,236	4,517	281,754

a The returns are for the year 1889, except those for the oyster fishery, closing with May, 1890; the shad and alewife fishery, closing with July, 1890, and the seal fisheries of Alaska for the season of 1890.
 b Partly estimated.

TABLE 4.—STATISTICS OF FISHERIES, BY INDUSTRIES. (a)

INDUSTRIES.	GRAND TOTALS.			PERSONS EMPLOYED.		APPARATUS AND CAPITAL INVESTED.						
	Persons employed.	Capital invested.	Value of products.	Fisher-men.	Shores-men.	Vessels.			Boats.		Minor apparatus. (Value.)	Other capital, including shoro property.
						Num-ber.	Net tonnage.	Value.	Num-ber.	Value.		
The United States.....	163,348	\$43,602,123	\$44,277,514	136,665	26,683	7,257	174,020.74	\$11,133,205	80,261	\$4,826,750	\$8,363,462	\$19,279,246
Alabama.....	848	82,621	164,427	667	181	103	1,050.42	34,756	614	9,336	16,688	21,841
Oyster.....	336	60,126	83,828	155	181	102	1,029.00	32,956	136	2,640	2,680	21,841
Atlantic and Gulf boat.....	207	9,392	36,521	297	.....	1	30.42	1,800	187	3,585	4,007	.....
Inland.....	215	13,163	44,078	215	.....	.....	.....	.....	201	3,102	10,001	.....
Alaska.....	1,837	994,898	1,873,790	1,742	95	49	16,812.18	790,500	722	91,818	112,580	.....
Pacific coast.....	1,837	994,898	1,873,790	1,742	95	49	16,812.18	790,500	722	91,818	112,580	.....
Arkansas.....	207	17,830	74,026	207	.....	.....	.....	.....	512	5,410	12,420	.....
Inland.....	207	17,830	74,026	207	.....	.....	.....	.....	312	5,410	12,420	.....
California.....	4,697	1,634,153	2,117,250	4,697	.....	144	9,030.58	524,286	2,312	913,898	343,044	452,825
Whale.....	1,295	898,464	773,610	1,295	.....	39	8,034.80	460,600	184	19,120	45,480	373,255
Pacific coast.....	3,181	720,460	1,318,402	3,181	.....	105	995.78	63,680	1,994	201,183	292,527	79,070
Inland.....	221	9,223	25,238	221	.....	.....	.....	.....	134	3,595	5,628	.....
Colorado.....	27	673	4,564	27	.....	.....	.....	.....	10	248	425	.....
Inland.....	27	673	4,564	27	.....	.....	.....	.....	10	248	425	.....
Connecticut.....	3,252	5,072,274	1,687,737	2,376	876	305	4,954.26	586,960	2,127	128,414	155,577	4,201,323
Whale.....	69	28,310	20,684	69	.....	4	402.33	15,000	10	600	3,073	9,337
Cod and ground.....	69	33,855	34,832	69	2	14	848.77	22,150	51	1,200	4,408	6,000
Mackarel.....	75	24,292	30,791	75	.....	15	361.60	19,525	64	2,341	1,426	1,000
Menhaden.....	188	191,365	120,400	98	90	6	273.35	45,500	28	2,137	17,218	120,500
Lobster.....	166	52,018	58,757	166	.....	.....	.....	.....	207	36,078	14,382	958
Oyster.....	1,789	4,578,088	1,115,017	1,005	784	212	2,554.00	403,300	945	50,396	70,324	4,054,668
Atlantic and Gulf boat.....	842	160,156	297,323	842	.....	54	1,098.21	81,485	772	33,173	42,638	2,800
Inland.....	54	3,600	9,793	54	.....	.....	.....	.....	50	1,490	2,110	.....
Delaware.....	1,081	315,109	310,181	1,050	325	71	996.67	74,275	811	42,131	54,806	143,807
Menhaden.....	66	53,180	16,000	36	30	1	59.67	11,000	0	680	7,200	34,300
Shad and alewife.....	1,118	78,938	174,847	1,118	.....	5	167.00	5,550	595	28,558	41,413	3,417
Lobster.....	2	59	248	2	.....	.....	.....	.....	1	20	39	.....
Oyster.....	520	177,693	71,235	225	295	65	780.00	67,725	98	10,131	3,747	106,090
Atlantic and Gulf boat.....	275	5,239	47,851	275	.....	.....	.....	.....	201	2,742	2,407	.....

a The returns are for the year 1889, except those for the oyster fishery, closing with May, 1890; the shad and alewife fishery, closing with July, 1890, and the seal fisheries of Alaska for the season of 1890.

GENERAL FISHERIES.

TABLE 4.—STATISTICS OF FISHERIES, BY INDUSTRIES—Continued.

INDUSTRIES.	GRAND TOTALS.			PERSONS EMPLOYED.		APPARATUS AND CAPITAL INVESTED.						
	Persons employed.	Capital invested.	Value of products.	Fisher-men.	Shoremen.	Vessels.			Boats.		Minor apparatus. (Value.)	Other capital, including shore property.
						Number.	Net tonnage.	Value.	Number.	Value.		
District of Columbia.....	102	\$23,663	\$20,028	102		4	56.83	\$6,400	20	\$931	\$10,332	
Shad and alewife.....	102	23,663	20,028	102		4	56.83	6,400	20	931	10,332	
Florida.....	3,537	631,277	1,420,328	3,370	158	170	2,067.04	200,715	1,035	65,757	131,445	\$203,360
Shad and alewife.....	1,430	194,487	612,104	1,430		20	225.57	24,000	805	30,005	56,434	83,445
Oyster.....	295	32,373	54,530	167	128	44	523.00	15,765	199	4,911	3,697	8,000
Sponge.....	637	130,037	281,764	637		62	747.04	72,250	341	21,034	41,230	4,617
Alligator.....												
Atlantic and Gulf boat.....	680	63,398	103,310	680		7	111.05	10,100	470	32,836	18,312	2,150
Gulf.....	411	109,213	278,215	381	30	37	1,055.38	78,000	53	5,020	10,345	103,248
Inland.....	78	2,769	9,349	78					67	1,348	1,421	
Georgia.....	448	111,319	34,601	212	236	13	130.51	14,440	243	3,207	7,807	85,805
Shad and alewife.....	130	5,465	16,270	130		1	10.51	890	105	1,030	2,045	600
Oyster.....	249	103,691	10,463	13	236	12	120.00	13,550	57	981	3,895	85,295
Inland.....	69	2,163	7,850	69					81	1,106	667	
Idaho.....	115	4,890	58,065	115					120	2,141	2,740	
Inland.....	115	4,890	58,065	115					120	2,141	2,740	
Illinois.....	700	90,780	248,527	700		1	20.00	7,000	857	20,643	50,437	12,700
Great Lakes.....	120	37,605	24,097	120		1	20.00	7,000	100	4,204	13,011	12,700
Inland.....	679	59,175	224,430	679					757	16,349	42,826	
Indiana.....	292	39,523	60,441	292		2	16.62	7,000	340	6,040	24,062	615
Great Lakes.....	20	22,750	16,000	20		2	16.62	7,000	14	872	14,272	615
Inland.....	263	16,764	43,636	263					335	6,074	10,600	
Indian territory.....	13	743	1,007	13					10	61	682	
Inland.....	13	743	1,007	13					10	61	682	
Iowa.....	348	27,000	155,070	348					401	6,373	21,527	
Inland.....	348	27,000	155,070	348					401	6,373	21,527	
Kansas.....	175	7,687	27,653	175					104	2,132	5,555	
Inland.....	175	7,687	27,653	175					104	2,132	5,555	
Kentucky.....	374	20,884	80,144	374					500	9,088	17,796	
Inland.....	374	20,884	80,144	374					500	9,088	17,796	
Louisiana.....	911	183,876	280,684	742	169	44	505.48	27,015	706	66,884	17,814	72,063
Oysters.....	700	162,278	243,313	540	169	34	340.00	18,115	573	60,320	11,780	72,063
Alligator.....												
Atlantic and Gulf boat.....	37	1,949	5,000	37					32	1,341	608	
Gulf.....	93	13,717	24,018	93		10	105.48	9,500	12	2,205	1,952	
Inland.....	72	5,932	17,363	72					89	2,958	2,974	
Maine.....	12,537	2,562,700	3,046,089	10,944	1,593	422	18,502.41	501,620	6,367	205,320	597,344	1,078,525
Cod and ground.....	2,257	831,077	505,207	2,230	21	253	9,202.10	407,160	1,604	27,655	147,827	248,435
Mackereel.....	695	215,058	112,071	680	9	65	2,322.71	113,725	260	15,047	53,000	33,100
Menhaden.....	70	37,497	14,053	75	4	7	247.24	15,600	30	1,706	7,501	12,510
Sea herring.....	2,301	861,252	1,133,076	740	1,555	70	1,354.11	44,065	517	25,636	101,334	680,617
Shad and alewife.....	1,196	75,306	120,171	1,196		10	159.20	2,240	535	8,200	46,791	17,976
Lobster.....	2,759	328,336	621,644	2,750					3,404	123,185	137,185	67,955
Oyster.....	13	9,548	3,250	9	4	1	15.00	5,000	5	208	1,000	3,340
Atlantic and Gulf boat.....	3,164	200,330	513,499	3,164		10	141.96	3,130	2,796	92,904	98,763	5,501
Inland.....	73	4,395	3,925	73					117	683	3,712	
Maryland.....	36,436	5,118,843	5,651,021	25,850	10,580	1,308	17,083.20	1,292,342	10,009	1,122,388	880,105	1,818,008
Menhaden.....	75	49,920	44,360	40	85	2	138.96	14,000	5	620	5,000	30,300
Shad and alewife.....	5,100	523,224	755,013	5,100		16	381.24	16,415	2,738	116,961	251,165	135,683
Oyster.....	30,609	4,518,758	4,467,325	20,064	10,545	1,880	10,560.00	1,261,927	6,759	987,194	617,612	1,652,025
Atlantic and Gulf boat.....	550	26,602	386,380	550					485	17,355	9,247	
Inland.....	12	339	946	12					22	258	81	

STATISTICS OF FISHERIES.

TABLE A.—STATISTICS OF FISHERIES, BY INDUSTRIES—Continued.

INDUSTRIES.	GRAND TOTALS.			PERSONS EMPLOYED.		APPARATUS AND CAPITAL INVESTED.						
	Persons employed.	Capital invested.	Value of products.	Fisher-men.	Shores-men.	Vessels.			Boats.		Minor apparatus (Value.)	Other capital, including shore property.
						Num-ber.	Net ton-nage.	Value.	Num-ber.	Value.		
Massachusetts.....	16,250	\$7,483,193	\$6,367,033	15,693	557	933	61,200.05	\$3,147,017	8,623	\$394,178	\$1,548,940	\$2,893,052
Whale.....	1,930	1,131,427	994,306	1,930	.....	71	14,698.92	587,300	311	86,220	61,116	446,781
Cod and ground.....	7,505	4,704,063	3,498,812	7,185	320	543	34,001.50	1,937,337	3,628	73,343	982,665	1,710,718
Mackerel.....	2,772	8,882,253	499,720	2,748	24	252	11,211.15	573,678	709	61,832	179,815	66,927
Menhaden.....	56	20,162	10,030	30	26	5	90.13	13,200	5	390	2,172	4,400
Sea herring.....	39	5,925	5,573	33	6	5	124.47	4,100	14	778	1,017	.....
Shad and alewife.....	843	154,121	174,569	843	.....	10	213.83	7,650	428	14,077	91,436	40,958
Lobster.....	735	113,561	216,797	735	.....	.....	.....	.....	928	54,593	55,409	3,490
Oyster.....	301	140,291	127,729	120	181	39	585.00	15,752	340	11,900	4,035	108,604
Atlantic and Gulf boat.....	2,040	830,319	835,816	2,040	.....	8	75.65	8,000	2,246	140,887	170,777	11,155
Inland.....	20	1,132	3,651	20	.....	.....	.....	.....	14	658	474	.....
Michigan.....	8,160	1,030,248	1,000,531	8,113	47	48	735.62	151,750	1,570	82,262	506,050	298,586
Great Lakes.....	8,050	1,031,223	1,006,249	8,003	47	48	735.62	151,750	1,448	79,916	500,071	298,586
Inland.....	110	8,025	24,282	110	.....	.....	.....	.....	122	2,346	5,679	.....
Minnesota.....	474	47,630	98,796	474	.....	2	26.29	5,500	500	11,685	28,658	1,596
Great Lakes.....	162	34,585	41,051	162	.....	2	26.29	5,500	112	6,565	29,924	1,596
Inland.....	312	13,054	57,745	312	.....	.....	.....	.....	388	5,320	7,734	.....
Mississippi.....	1,014	133,951	220,387	811	203	148	1,467.30	50,680	313	14,531	34,385	84,455
Shad and alewife.....	52	2,097	8,074	52	.....	.....	.....	.....	17	515	1,002	580
Oyster.....	615	104,880	129,322	416	193	139	1,390.00	44,380	62	4,307	22,318	93,876
Atlantic and Gulf boat.....	48	2,560	13,191	48	.....	.....	.....	.....	23	1,272	1,288	.....
Gulf.....	136	16,573	21,245	132	4	0	77.30	6,200	35	5,878	4,495	.....
Inland.....	163	7,841	48,555	163	.....	.....	.....	.....	176	2,550	5,282	.....
Missouri.....	504	30,294	128,008	504	.....	.....	.....	.....	661	10,080	20,214	.....
Inland.....	504	30,294	128,008	504	.....	.....	.....	.....	661	10,080	20,214	.....
Montana.....	43	1,270	7,980	43	.....	.....	.....	.....	41	716	554	.....
Inland.....	43	1,270	7,980	43	.....	.....	.....	.....	41	716	554	.....
Nebraska.....	90	3,101	20,410	90	.....	.....	.....	.....	106	1,134	1,067	.....
Inland.....	90	3,101	20,410	90	.....	.....	.....	.....	106	1,134	1,067	.....
Nevada.....	211	2,265	21,856	211	.....	.....	.....	.....	81	1,725	540	.....
Inland.....	211	2,265	21,856	211	.....	.....	.....	.....	81	1,725	540	.....
New Hampshire.....	324	60,254	148,576	314	10	13	456.30	23,300	355	8,808	29,563	7,583
Cod and ground.....	130	56,398	69,300	120	10	13	456.30	23,300	109	2,015	23,598	7,576
Shad and alewife.....	11	932	2,374	11	.....	.....	.....	.....	17	246	680	.....
Lobster.....	62	4,169	15,361	62	.....	.....	.....	.....	66	1,474	2,087	8
Atlantic and Gulf boat.....	94	6,008	35,358	94	.....	.....	.....	.....	140	4,774	2,134	.....
Inland.....	27	847	2,183	27	.....	.....	.....	.....	23	299	518	.....
New Jersey.....	10,834	3,083,800	3,130,893	9,983	851	606	8,220.59	602,540	5,339	331,435	377,913	1,682,063
Cod and ground.....	28	12,327	4,815	26	.....	7	112.93	8,000	9	177	1,150	8,000
Menhaden.....	277	128,103	111,234	214	63	14	266.40	23,200	41	8,100	40,153	56,050
Shad and alewife.....	3,497	494,100	597,059	3,497	.....	0	103.27	7,800	1,498	104,130	153,449	228,827
Lobster.....	20	5,190	5,160	20	.....	.....	.....	.....	11	1,475	1,615	2,100
Oyster.....	3,620	2,172,100	1,391,339	2,832	788	590	7,080.00	608,004	1,479	86,836	95,655	1,381,614
Atlantic and Gulf boat.....	3,342	271,180	1,019,508	3,342	.....	79	666.90	45,545	2,201	130,581	80,188	14,872
Inland.....	52	339	1,778	52	.....	.....	.....	.....	10	136	203	.....
New Mexico.....	8	418	2,783	8	.....	.....	.....	.....	8	146	272	.....
Inland.....	8	418	2,783	8	.....	.....	.....	.....	8	146	272	.....
New York.....	9,321	5,125,361	3,798,815	7,162	2,159	800	9,770.04	1,052,192	5,289	403,226	527,964	3,141,070
Whale.....	28	660	8,748	28	.....	.....	.....	.....	4	400	260	.....
Cod and ground.....	29	21,605	51,050	29	.....	3	127.73	19,000	23	590	2,015	.....
Menhaden.....	1,036	1,019,836	628,212	516	520	25	1,381.44	274,606	98	14,510	170,190	560,536
Shad and alewife.....	1,190	116,145	133,403	1,100	.....	4	65.55	7,000	636	27,557	76,566	5,022
Lobster.....	67	7,335	15,331	67	.....	.....	.....	.....	39	3,360	3,475	500
Oyster.....	4,124	3,467,741	1,765,088	2,501	1,623	633	6,330.00	568,407	2,053	239,726	102,722	2,556,886
Atlantic and Gulf boat.....	1,626	309,607	949,455	1,626	.....	189	1,797.56	172,085	1,398	81,595	112,262	2,705
Great Lakes.....	634	96,103	165,116	634	16	5	68.36	10,200	377	20,703	48,930	16,270
Inland.....	587	26,329	82,412	587	.....	.....	.....	.....	661	14,785	11,544	.....

GENERAL FISHERIES.

TABLE 4.—STATISTICS OF FISHERIES, BY INDUSTRIES—Continued.

INDUSTRIES.	GRAND TOTALS.			PERSONS EMPLOYED.		APPARATUS AND CAPITAL INVESTED						
	Persons employed.	Capital invested.	Value of products.	Fisher-men.	Shores-men.	Vessels.			Boats.		Minor apparatus. (Value.)	Other capital, including shore property.
						Num-ber.	Net ton-nage.	Value.	Num-ber.	Value.		
North Carolina.....	8,030	\$715,760	\$1,351,044	8,612	318	132	1,277.19	\$93,475	4,132	\$100,271	\$282,905	\$170,100
Menhaden.....	40	10,800	13,980	40	.....	4	60.47	8,035	9	1,240	925	.....
Shad and alewife.....	5,445	515,514	751,390	5,445	.....	29	217.72	40,250	2,357	90,439	238,500	137,325
Oyster.....	1,507	130,750	151,903	1,189	318	98	980.00	43,790	864	30,103	10,523	40,250
Atlantic and Gulf boat.....	1,827	55,914	425,761	1,827	.....	1	10.00	800	726	21,885	31,035	1,534
Inland.....	111	2,776	8,001	111	.....	.....	.....	.....	176	1,514	1,262	.....
North Dakota.....	9	243	890	9	.....	.....	.....	.....	9	113	130	.....
Inland.....	9	243	890	9	.....	.....	.....	.....	9	113	130	.....
Ohio.....	2,012	1,328,428	740,396	1,832	180	27	430.70	110,600	1,078	90,559	562,373	574,806
Great Lakes.....	1,577	1,314,697	681,590	1,397	180	27	430.70	110,600	613	87,854	541,847	574,806
Inland.....	435	13,731	62,806	435	.....	.....	.....	.....	405	3,205	10,526	.....
Oregon.....	2,911	914,299	1,180,188	2,911	.....	12	521.26	63,100	1,538	160,857	410,222	262,120
Pacific coast.....	2,832	913,427	1,176,936	2,832	.....	12	521.26	63,100	1,517	160,572	418,635	262,120
Inland.....	79	872	9,252	79	.....	.....	.....	.....	21	285	587	.....
Pennsylvania.....	2,631	735,035	903,005	2,006	565	154	1,098.08	231,850	1,646	58,735	153,883	300,507
Shad and alewife.....	1,240	128,533	174,847	1,240	.....	15	335.10	24,000	550	21,127	27,750	55,650
Oyster.....	717	347,896	425,020	179	538	129	1,518.00	184,050	2	3,000	34,500	125,440
Atlantic and Gulf boat.....	35	1,732	10,089	35	.....	.....	.....	.....	20	951	781	.....
Great Lakes.....	304	249,564	255,719	277	27	10	114.98	22,900	294	31,280	85,907	109,477
Inland.....	326	7,316	31,330	326	.....	.....	.....	.....	180	2,377	4,930	.....
Rhode Island.....	2,214	1,042,072	1,160,454	1,745	469	110	2,260.63	201,415	1,320	99,810	238,055	411,802
Cod and ground.....	97	30,957	14,178	90	1	22	270.07	26,075	45	644	3,338	.....
Mackerel.....	192	55,463	43,365	192	.....	41	485.43	42,850	55	2,350	7,013	2,360
Menhaden.....	715	487,815	508,342	345	370	24	1,170.27	176,300	86	11,880	140,735	140,900
Shad and alewife.....	205	57,185	83,999	205	.....	7	120.26	13,700	164	8,222	80,828	4,035
Lobster.....	133	28,081	40,024	133	.....	.....	.....	.....	137	20,018	6,043	200
Oyster.....	234	208,020	250,700	130	98	15	180.00	28,100	208	13,858	4,790	251,732
Atlantic and Gulf boat.....	578	83,951	207,840	578	.....	1	10.00	400	625	41,018	35,908	5,725
South Carolina.....	1,770	145,580	205,845	1,740	80	14	225.00	26,724	1,114	22,304	20,084	76,384
Shad and alewife.....	1,930	55,181	101,051	1,330	.....	9	165.06	15,300	714	15,110	15,700	9,050
Oyster.....	190	87,277	27,020	154	36	5	60.00	11,424	160	5,433	3,105	67,325
Atlantic and Gulf boat.....	227	2,588	16,202	227	.....	.....	.....	.....	211	1,049	130	.....
Inland.....	20	540	1,593	20	.....	.....	.....	.....	29	206	334	.....
South Dakota.....	62	2,142	10,806	62	.....	.....	.....	.....	62	935	1,207	.....
Inland.....	62	2,142	10,806	62	.....	.....	.....	.....	62	935	1,207	.....
Tennessee.....	300	16,113	58,337	300	.....	.....	.....	.....	408	5,207	10,900	.....
Inland.....	369	16,113	58,337	300	.....	.....	.....	.....	498	5,207	10,900	.....
Texas.....	814	222,905	364,017	634	130	170	1,601.77	66,895	319	21,138	48,654	86,218
Oyster.....	430	177,641	189,515	300	130	162	1,620.00	58,595	11	1,685	31,243	86,218
Alligator.....	200	89,000	142,558	200	.....	8	71.77	8,300	125	17,584	13,116	.....
Gulf.....	175	6,264	31,944	175	.....	.....	.....	.....	183	1,900	4,295	.....
Inland.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Utah.....	18	388	5,107	18	.....	.....	.....	.....	10	150	238	.....
Inland.....	18	388	5,107	18	.....	.....	.....	.....	10	150	238	.....
Vermont.....	117	8,706	12,825	117	.....	.....	.....	.....	96	1,714	2,022	.....
Shad and alewife.....	21	533	1,801	21	.....	.....	.....	.....	10	208	325	.....
Atlantic and Gulf boat.....	96	3,203	11,024	96	.....	.....	.....	.....	86	1,506	1,697	.....
Inland.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Virginia.....	25,809	3,420,469	4,816,225	18,892	6,917	1,225	16,220.67	382,900	11,706	548,738	535,432	1,462,395
Menhaden.....	1,028	434,629	351,177	600	428	71	2,300.19	178,250	128	23,565	68,473	164,341
Shad and alewife.....	4,422	332,981	1,278,820	4,422	.....	8	118.48	15,460	1,028	62,984	203,794	50,743
Oyster.....	19,070	2,603,058	2,776,733	12,581	6,489	1,145	13,740.00	683,099	8,726	440,556	226,577	1,240,026
Atlantic and Gulf boat.....	1,215	56,883	405,475	1,215	.....	1	11.00	200	882	21,319	34,979	885
Inland.....	74	1,018	4,020	74	.....	.....	.....	.....	44	309	1,609	.....

* Includes 2 undocumented steamers.

STATISTICS OF FISHERIES.

TABLE 4.—STATISTICS OF FISHERIES, BY INDUSTRIES—Continued.

INDUSTRIES.	GRAND TOTALS.			PERSONS EMPLOYED		APPARATUS AND CAPITAL INVESTED.						
	Persons employed.	Capital invested.	Value of products.	Fisher-men.	Shores-men.	Vessels.			Boats.		Minor apparatus. (Value.)	Other capital, including shore property.
						Num-ber.	Net ton-nage.	Value.	Num-ber.	Value.		
Washington.....	2,971	\$743,618	\$1,107,847	2,971	.....	22	430.93	\$34,100	1,789	\$126,130	\$335,969	\$247,419
Whale.....	191	22,775	23,830	191	.....	7	275.82	16,600	57	2,580	1,270	2,325
Pacific coast.....	2,490	716,773	1,064,281	2,490	.....	15	155.11	17,500	1,704	122,681	331,498	245,094
Inland.....	290	4,070	19,733	290	.....				28	869	3,201	.....
West Virginia.....	45	2,400	4,698	45	.....				49	713	1,783	.....
Inland.....	45	2,400	4,698	45	.....				40	713	1,783	.....
Wisconsin.....	1,484	326,744	455,030	1,456	28	16	227.26	51,500	940	86,430	200,305	38,500
Great Lakes.....	1,020	294,249	363,026	992	28	16	227.26	51,500	514	26,831	177,418	38,500
Inland.....	464	32,495	92,004	464	.....				426	9,608	22,887	.....
Wyoming.....	7	83	287	7	.....						83	.....
Inland.....	7	83	287	7	.....						83	.....

CARP CULTURE.

The culture of carp was made a distinct subject of census inquiry, and the results are separately shown in three tables herewith, and are not included in the tables for general fisheries. The first of these tables shows the number who planted carp in the decade 1880-1889 by states and territories. The second table shows the planting by years, separated so as to distinguish original planting from subsequent planting by the same individuals. No attempt has been made to trace carp culture back of the decade preceding the Eleventh Census year. Ponds stocked prior to 1880 and maintained without additional planting do not enter into this report.

The 10 highest states in total number of carp planted in the decade are as follows: Pennsylvania, Indiana, Ohio, Illinois, North Carolina, Virginia, Georgia, Missouri, Kansas, and Tennessee.

If we take the original planting alone, the 10 highest will rank thus: Pennsylvania, Indiana, Ohio, Virginia, Illinois, North Carolina, Missouri, Colorado, Georgia, and Tennessee.

In regard to the number of culturists, the 10 leading states rank as follows: Ohio, Pennsylvania, Indiana, Virginia, Illinois, North Carolina, Missouri, Georgia, Kansas, and Tennessee.

It will be seen that 4 states, Pennsylvania, Ohio, Indiana, and Illinois, forming a continuous body of country, are among the first 5 carp planting states, whether ranked by total plant or by total of original planting. It will be seen that Missouri and Kansas, also prominent in carp culture, lie so as to form an unbroken group with those just named.

A continuous group of secondary rank is formed of Virginia, North Carolina, Tennessee, and Georgia.

Colorado is the only state in the western half of the United States that has a prominent record for planting carp.

An examination of the table will show a greatly increased attention to carp planting in the last half of the decade in the country, as a whole, though the changes from year to year are fluctuating and in some states, Texas, for example, in which carp planting does not seem to have attained great prominence at any time, there was an evident decline in the latter part of the decade.

Rated according to reported successes (Table 1) the 10 leading states rank thus: Ohio, Indiana, Pennsylvania, Virginia, North Carolina, Missouri, Illinois, Tennessee, Georgia, and Kansas.

Rated according to expenses incurred, the 10 leading states are as follows: Pennsylvania, Ohio, Indiana, Georgia, Illinois, Kansas, North Carolina, Missouri, Virginia, and Texas.

Rated according to carp furnished for food (Table 3), the 10 leading states rank thus: Ohio, Georgia, Indiana, Pennsylvania, North Carolina, Illinois, Virginia, Kansas, Missouri, and Nebraska.

It appears that in Indiana and Ohio, states prominent for carp culture, the public streams and lakes, especially those with muddy bottoms, are thoroughly stocked with carp, by reason of their escape from ponds in which they are planted. Carp are very prolific under favorable circumstances. Results indicate that carp do not propagate to any great extent in extremely cold water.

The principal reported objections to carp as food are that they are very bony and taste of mud. There is complaint in some localities of their flesh as soft; but culturists in other localities report that ponds fed by springs furnish carp of the best edible properties, and that in general, carp taken from rivers and lakes are better than those taken from ponds. Some report that the edible qualities of the carp are improved by keeping them in clear springs a few days before killing. From Kentucky and Indiana reports state that skinning carp is an advantageous step in their preparation for food. It is urged by some that they be packed in salt for a few hours before cooking. The poor quality sometimes found is said to be due to the character of the ponds. They are reported as better in winter than in summer. The reports in their favor slightly exceed those against their value for food.

In certain portions of the country it is customary to prepare pools on favorable grounds to receive rain water for use of stock in times of drought. In the southwest such reservoirs have the local name of tanks. In Texas alone 114 ponds are reported under the name of tanks, averaging about two-thirds of an acre in area, the largest reaching an area of 6 acres. These small receptacles for water are liable to become low or even to become dry altogether in the extremity of rainless weather, and in 1889 a drought seems to have destroyed many plantings of carp in such pools in Utah.

Success and failure (Table 1) are not very fully reported. The causes of failure have been grouped as: nature, accident, predaceous animals, carp culturists, other persons, party supplying plant or transportation, unknown. Reported failures exceed reported successes by about 11 per cent. Some of the causes of failure have been grouped under these general terms:

1. Nature: flood, causing overflow of pond, or breaking of dam, when, so far as known, the dam was previously secure; climate; storm; ice, causing fish to smother, or to be actually frozen.

2. Accident: breaking of dam, independent of action of flood or storm, or of neglect, as by gradual decay or undermining; leaking of dam.

3. Predaceous animals: mincks; muskrats eating fish, destroying pond, smothering fish in holes; turtles and terrapins; frogs; snakes; other fish.

4. Carp culturist: fish allowed to escape; kept or deposited fish in small receptacles with insufficient water; allowed wasteway to get stopped up, permitting pond to overflow; culturist sick or dead, and no attention given to fish; ponds made by springs; pond improperly constructed, or stream or lake not suitable for fish culture, because of open outlet, cold water, current, deficient natural food, etc.

5. Other persons: poaching or theft; malicious destruction of dam or pond; poisoning.

6. Party supplying plant or transportation: fish dead or nearly dead when received; fish diseased when received and not able to live even when planted under favorable conditions; where fish are covered with fungus.

7. Unknown: fish deposited in large bodies of water, never attended to, and never seen or heard of afterwards; fish received late in fall, after freezing of pond and kept in small tank during winter; fish dying before planting; unknown.

The number of successes and the number of failures when taken together will not equal the number of persons reported as being engaged in carp culture. The difference will be the number of reports where it was impossible to determine whether carp culture had been a success or failure with the party making the report, and all reports where carp were first planted in 1889. The causes of failure when taken together will not necessarily equal the number of failures reported, as in some cases failure is due to more than one cause.

Footnotes *a* and *b*, Table 1, show that the result includes ponds where the area was not reported.

TABLE 1.—NUMBER OF CARP CULTURISTS, NUMBER AND SIZE OF PONDS BUILT EXPRESSLY FOR CARP, NUMBER AND SIZE OF PONDS NOT BUILT EXPRESSLY FOR CARP, NUMBER OF OTHER BODIES OF WATER IN WHICH CARP HAVE BEEN PLANTED, REPORTED NUMBER OF SUCCESSES, REPORTED NUMBER OF FAILURES, CAUSES OF FAILURE, AND REPORTS ON EDIBLE QUALITIES, BY STATES AND TERRITORIES: 1880-1889.

STATES AND TERRITORIES.	Number of carp culturists.	PONDS BUILT EXPRESSLY FOR CARP. (a)		PONDS NOT BUILT EXPRESSLY FOR CARP. (b)		Number of other bodies of water into which carp have been planted.	Number of successes reported.	Number of failures reported.	CAUSES OF FAILURE. (c)							REPORTS ON EDIBLE QUALITIES.				
		Number.	Size. (Acres.)	Number.	Size. (Acres.)				Nature.	Accident.	Predacious animals.	Carp culturists.	Other persons.	Party supplying plant.	Unknown.	Excellent.	Good.	Fair.	Poor.	Worthless.
The United States.	20,456	22,551	11,914.06	13,420	41,627.55	587	12,712	14,142	5,275	953	2,022	1,983	700	288	2,809	259	848	181	761	867
Alabama.....	431	327	151.94	174	258.22	2	168	236	80	36	40	23	12	11	40	1	16	3	8	1
Arizona.....	44	33	84.12	22	97.97	2	22	18	8	3	1	2	1	1	3					
Arkansas.....	155	107	52.09	65	64.79	2	60	81	29	6	17	4	4	7	17	1	5		3	
California.....	199	202	90.73	86	81.04	8	128	62	10	6	8	12	4	1	20	3	5	5	16	6
Colorado.....	116	65	108.82	101	2,497.40	15	68	26	13		7		2	1	5	1	3		6	1
Connecticut.....	196	50	90.79	164	3,972.28	6	57	132	24	15	07	8	4	2	15	5	3		8	3
Delaware.....	57	31	12.21	42	444.76	4	11	42	19		18	2	5		2				1	1
Dist. of Columbia..	14	11	3.31	7	2.33		1	12	3		6	3								
Florida.....	92	29	41.42	76	330.53	5	23	67	17	2	31	4	3	7	5		1		2	
Georgia.....	1,524	1,465	1,154.96	505	3,202.71	13	593	838	190	98	142	173	41	8	211	12	40	10	28	21
Idaho.....	39	43	42.20	18	76.42	1	19	12	10			1	1							
Illinois.....	1,763	1,155	644.40	910	1,115.38	25	658	935	399	74	142	85	49	13	217	10	40	3	26	10
Indiana.....	2,191	2,274	992.14	683	557.88	10	1,276	628	292	45	104	155	54	8	166	23	94	32	112	33
Indian territory....	10	2	0.60	8	37.01		8	5	5			1			2					
Iowa.....	700	374	250.10	439	664.23	20	240	409	218	10	57	23	8	24	80	3	10		3	
Kansas.....	1,164	925	670.42	549	595.44	16	434	567	317	96	81	63	19	11	69	4	25	3	9	2
Kentucky.....	972	196	78.54	1,085	895.82	12	490	468	141	19	56	79	23	6	151	14	35	10	71	63
Louisiana.....	68	36	90.95	36	135.18	3	13	51	14	7	10	2	1	4	15	1			3	1
Maine.....	65	20	11.55	88	466.95	12	12	53	16	3	0	15		8	4					
Maryland.....	353	206	86.13	216	1,102.38	5	134	203	98	8	48	30	11	2	20	2	6	1	8	4
Massachusetts.....	177	29	38.37	109	1,583.43	11	41	121	81	2	54	10	6	2	15	3				
Michigan.....	432	275	111.28	184	653.52	46	100	160	79	10	43	12	11	2	48	8	15		4	2
Minnesota.....	155	27	26.54	64	244.97	70	16	107	52	1	16	2		5	34	1				
Mississippi.....	500	273	153.93	325	264.06	5	136	337	87	30	73	43	11	7	94	3	15	8	27	10
Missouri.....	1,554	793	434.73	1,208	1,088.27	10	659	735	324	57	106	63	30	7	152	11	40	6	42	13
Montana.....	37	18	22.43	21	60.40	2	3	27	13		4	1		9						
Nebraska.....	403	348	350.72	144	314.04	9	142	177	96	14	31	11	4	5	23	3	10		9	
Nevada.....	39	23	58.96	26	27.92	7	21	13	8	2	1	2		2				1	1	
New Hampshire.....	37	6	3.14	32	942.55	3	7	30	5	3	11	2	2	2	5		1		1	
New Jersey.....	258	110	75.06	132	399.10	8	104	149	49	13	34	20	10	5	24	3	10	1	6	4
New Mexico.....	38	28	41.12	22	101.27	5	21	13	10	1	1			1						
New York.....	854	370	207.30	600	3,159.57	21	289	508	164	15	152	59	27	11	96	14	19	8	15	12
North Carolina.....	1,751	1,883	905.03	303	1,449.14	11	894	817	214	94	126	182	54	16	173	10	54	3	25	11
North Dakota.....	15	4	5.84	9	114.98	3	1	10	4		2			4						
Ohio.....	3,268	3,164	1,115.09	985	773.85	19	1,832	1,187	347	53	167	272	67	13	330	27	105	45	100	198
Oregon.....	148	115	59.01	57	145.95	6	39	93	40	5	21	9	7		16	4	7	2	6	4
Pennsylvania.....	3,267	2,902	785.35	933	1,951.17	60	1,521	1,616	683	23	347	135	91	40	223	41	48	9	56	16
Rhode Island.....	29	3	0.80	20	149.95		5	10	5		8	1		2						
South Carolina.....	733	830	403.18	168	897.14	10	230	520	102	64	93	108	29	4	135	2	21	2	13	8
South Dakota.....	47	31	36.70	10	522.35	7	6	32	23	3		1		2						
Tennessee.....	1,115	856	350.23	527	358.05	5	613	392	118	13	89	75	18	10	90	15	58	15	83	14
Texas.....	881	403	350.88	664	943.60	6	227	620	305	76	57	55	20	19	105	4	15	5	89	11
Utah.....	492	339	253.06	203	604.59	9	185	218	105	23	37	11	7	2	40	3	6		1	
Vermont.....	79	25	20.30	63	4,226.63	8	16	55	13	5	22	6	1	5	5					
Virginia.....	1,835	1,415	583.27	800	1,567.03	15	834	840	394	59	183	121	48	2	83	22	46	6	24	8
Washington.....	88	60	18.59	25	126.87	18	39	41	10	1	12	1	2		16	1			2	
West Virginia.....	463	421	66.12	145	83.74	4	240	203	82	9	66	37	17	2	16	1	3	2	3	
Wisconsin.....	437	241	166.41	281	2,816.87	39	136	237	91	8	46	15	5	5	72	3	6	1	1	
Wyoming.....	11	2	0.75	7	57.23	1	1	9	4			1			4					

a Includes 570 ponds for which no areas were reported, distributed as follows: Alabama, 7; Arkansas, 1; California, 6; Connecticut, 3; Delaware, 1; District of Columbia, 1; Florida, 4; Georgia, 28; Idaho, 1; Illinois, 17; Indiana, 44; Iowa, 6; Kansas, 19; Kentucky, 11; Maryland, 16; Massachusetts, 2; Michigan, 10; Minnesota, 2; Mississippi, 8; Missouri, 15; Nebraska, 4; Nevada, 2; New Jersey, 2; New York, 9; North Carolina, 60; Ohio, 79; Oregon, 1; Pennsylvania, 60; South Carolina, 9; South Dakota, 1; Tennessee, 20; Texas, 6; Utah, 10; Vermont, 2; Virginia, 50; Washington, 3; West Virginia, 34; Wisconsin, 10.
 b Includes 490 ponds for which no areas were reported, distributed as follows: Alabama, 6; Arkansas, 4; California, 2; Connecticut, 18; Delaware, 6; Florida, 3; Georgia, 22; Idaho, 6; Illinois, 8; Indiana, 12; Iowa, 4; Kansas, 13; Kentucky, 53; Louisiana, 1; Maine, 3; Maryland, 4; Massachusetts, 16; Michigan, 6; Mississippi, 2; Missouri, 32; Nebraska, 1; New Hampshire, 6; New York, 37; North Carolina, 14; Ohio, 85; Oregon, 2; Pennsylvania, 61; South Carolina, 3; Tennessee, 22; Texas, 13; Utah, 9; Vermont, 11; Virginia, 35; West Virginia, 11; Wisconsin, 9.
 c More than one cause is sometimes given for one failure.

STATISTICS OF FISHERIES.

TABLE 2.—NUMBER OF CARP ORIGINALLY PLANTED, NUMBER OF CARP PLANTED SUBSEQUENT TO ORIGINAL PLANTING, AND THE YEAR IN WHICH PLANTED, BY STATES AND TERRITORIES: 1880-1889.

STATES AND TERRITORIES.	Grand total.	NUMBER OF CARP ORIGINALLY PLANTED.										
		Total.	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889
The United States.....	4,574,588	3,554,417	72,344	38,070	105,121	119,700	203,068	544,815	608,451	607,544	586,021	547,783
Alabama.....	26,324	22,364	398	604	1,190	1,451	2,277	2,021	6,096	2,381	3,322	2,624
Arizona.....	10,269	6,062	400	400	17	223	23	3,115	1,411	103	970	400
Arkansas.....	8,360	6,176	73	125	192	341	940	614	475	1,126	2,027	263
California.....	18,813	15,730	703	752	4,454	3,765	2,925	905	599	523	420	504
Colorado.....	140,978	130,763	0	120	289	90	6,032	59,946	11,598	14,401	22,998	21,181
Connecticut.....	14,330	8,920	531	272	503	414	955	505	3,130	435	1,675	500
Delaware.....	23,128	22,545	20,260	472	73	449	188	605	263	49	12	84
District of Columbia.....	394	308	12	12	10	135	57	32	37			73
Florida.....	4,008	3,663	70	23	111	112	251	91	948	317	297	1,434
Georgia.....	187,043	134,135	11,064	2,615	9,661	9,107	10,528	25,511	13,065	28,365	10,385	4,234
Idaho.....	7,558	5,020	14			33	50	94	397	3,736	457	839
Illinois.....	202,831	147,500	810	923	1,855	4,091	8,174	18,685	28,932	38,387	24,062	21,587
Indiana.....	756,719	593,745	2,139	2,005	11,992	24,824	44,420	105,376	134,412	143,729	85,268	39,874
Indian territory.....	170	170			20			12		38	100	
Iowa.....	72,768	54,450	313	177	437	1,003	2,305	4,701	8,830	8,304	7,680	20,514
Kansas.....	169,632	123,150	306	315	1,298	2,354	14,202	6,045	16,110	25,572	32,893	23,905
Kentucky.....	59,084	41,808	3,117	4,200	3,725	3,970	8,064	4,152	4,067	5,813	2,727	1,413
Louisiana.....	3,998	3,461	64	89	203	55	2,343	209	132	263	33	20
Maine.....	1,110	1,013	62		35	70	70	107	412	161	64	26
Maryland.....	51,741	41,800	6,958	2,852	7,931	2,356	5,268	4,206	5,050	2,355	2,409	2,355
Massachusetts.....	28,826	16,985	385	144	388	240	301	975	3,454	3,690	268	7,050
Michigan.....	50,786	35,557	80	142	300	352	1,039	3,879	8,969	8,759	4,520	7,448
Minnesota.....	9,263	7,921	64	158	115	360	1,358	2,437	356	1,850	557	560
Mississippi.....	21,640	16,008	1,508	1,491	3,931	1,491	2,440	2,222	1,214	750	726	205
Missouri.....	175,211	143,321	1,170	1,609	3,805	5,099	10,760	11,059	16,277	10,003	22,798	51,081
Montana.....	1,524	1,240					59	280	277	205	348	20
Nebraska.....	86,840	62,108	64	20	484	205	648	3,025	0,041	12,392	24,725	14,414
Nevada.....	3,506	1,681	209	25	145	595	229	106	21	55	14	282
New Hampshire.....	1,188	1,005		51	173	206	206	117	90	132		
New Jersey.....	23,368	10,893	884	230	950	400	714	9,993	3,974	1,262	871	909
New Mexico.....	16,713	13,050		150	30		450	186	5,444	5,403	1,867	30
New York.....	102,901	71,579	1,383	617	1,658	1,980	1,788	5,533	5,222	7,157	9,109	37,126
North Carolina.....	201,293	140,303	2,279	1,681	4,040	6,125	13,111	20,467	25,151	25,490	21,450	25,090
North Dakota.....	350	324				20		115		131	68	
Ohio.....	656,064	510,266	2,059	4,947	12,071	14,811	40,344	101,429	95,512	125,092	91,842	22,189
Oregon.....	27,913	23,325	312	54	178	1,417	5,116	750	1,325	1,197	6,406	6,570
Pennsylvania.....	765,919	617,078	2,465	2,155	7,492	10,784	27,341	70,605	105,465	90,479	119,357	180,935
Rhode Island.....	708	678	162	22	160	50	137	53	62	27		15
South Carolina.....	70,195	51,198	2,494	1,241	4,895	4,762	7,380	9,259	5,911	10,252	4,972	632
South Dakota.....	27,751	27,545			25	214	247	58	25,079	610	138	1,165
Tennessee.....	151,968	118,066	2,097	1,054	4,109	3,383	7,164	23,974	23,487	23,278	20,284	8,881
Texas.....	53,588	32,720	2,373	1,731	5,155	3,026	8,248	5,197	5,185	2,461	1,018	1,026
Utah.....	39,846	31,768	111	37	293	303	1,789	1,969	4,058	7,044	8,002	7,407
Vermont.....	3,053	2,534	26	500	40	201	864	525	195	149	121	416
Virginia.....	194,089	157,110	4,049	3,029	9,144	5,852	16,033	21,295	21,979	28,391	24,050	23,845
Washington.....	3,981	2,481	46		36	217	801	512	451	467	283	118
West Virginia.....	29,924	21,451	379	396	647	711	1,590	5,322	2,890	8,647	3,597	2,352
Wisconsin.....	65,619	40,854	56	220	232	746	1,394	6,811	8,883	10,676	21,069	4,297
Wyoming.....	1,160	731			20	100		50	525	30		

TABLE 2.—NUMBER OF CARP ORIGINALLY PLANTED, NUMBER OF CARP PLANTED SUBSEQUENT TO ORIGINAL PLANTING, AND THE YEAR IN WHICH PLANTED, BY STATES AND TERRITORIES: 1880-1889—Continued.

STATES AND TERRITORIES.	NUMBER OF CARP PLANTED SUBSEQUENT TO ORIGINAL PLANTING.										
	Total.	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889
The United States	1,020,171	3,078	7,011	13,578	20,736	49,450	100,720	137,354	100,730	283,420	198,470
Alabama.....	3,960	15	138	100	272	87	607	1,071	407	853	404
Arizona.....	3,607								18	2,850	730
Arkansas.....	2,184		50	50	68	127	730	177	255	449	272
California.....	3,083			130	30	334	377	362	307	500	1,034
Colorado.....	4,210					120	30	2,100	1,036	278	646
Connecticut.....	5,410		50	35	120	00	42	250	750	3,070	1,018
Delaware.....	583	25		95		00	218	65	00		60
District of Columbia.....	86		30					25	22		
Florida.....	345						2	40	107	24	56
Georgia.....	52,908	1,028	1,036	3,024	5,201	7,403	0,154	10,026	0,550	4,019	3,817
Idaho.....	1,938								504	913	431
Illinois.....	55,325	75	05	175	702	1,907	3,100	0,838	10,793	16,757	8,883
Indiana.....	102,074	57	1,523	457	2,503	5,953	15,326	33,847	20,004	53,055	23,640
Indian territory.....											
Iowa.....	18,308	11	93	40	95	272	1,151	2,240	0,152	4,474	3,780
Kansas.....	40,532	143	70	184	103	383	1,740	2,027	7,138	19,108	14,586
Kentucky.....	17,776		2,212	317	066	2,530	983	0,407	1,151	830	2,080
Louisiana.....	537			20	30	47	144	151	05	52	19
Maine.....	106						12		34	00	
Maryland.....	9,041	70		640	170	1,179	1,097	2,113	1,044	2,112	016
Massachusetts.....	11,841	40	20		20	20	330	83	10,024	190	1,114
Michigan.....	15,220			6	80	255	130	864	5,307	3,575	5,012
Minnesota.....	1,442				85	8	22	006	217	250	164
Mississippi.....	5,572	24	185	304	447	412	429	1,021	1,212	470	150
Missouri.....	31,800	07	02	490	1,019	1,303	3,153	5,724	3,000	0,057	0,980
Montana.....	275								73		202
Nebraska.....	24,732			34		220	283	893	3,508	8,270	11,404
Nevada.....	1,823			45		50	608	1,030	13		171
New Hampshire.....	123			20	15		20	20		48	
New Jersey.....	8,535			170	104	907	444	438	483	327	512
New Mexico.....	3,054			100	145	25	75	124	50	8	2,527
New York.....	31,322	0	20	101	93	450	484	1,208	2,123	20,409	0,368
North Carolina.....	54,030	52	60	575	995	3,214	3,670	9,048	13,314	14,262	9,740
North Dakota.....	20									11	15
Ohio.....	145,798	135	775	1,300	2,720	0,200	25,028	21,258	28,089	29,085	34,006
Oregon.....	4,588			36	200	50	270	318	652	1,241	1,815
Pennsylvania.....	148,841	30	280	1,432	807	7,151	15,772	13,090	80,504	40,733	20,033
Rhode Island.....	120		100							20	
South Carolina.....	18,097	222	320	981	708	4,481	1,886	2,413	4,730	2,817	920
South Dakota.....	200						100			25	81
Tennessee.....	33,302	10	98	04	806	761	2,288	3,330	5,420	15,391	5,125
Texas.....	20,868	19	24	318	632	545	16,718	1,253	873	430	150
Utah.....	8,078				132	100	424	740	2,895	3,097	1,181
Vermont.....	510					156	25	81	87	270	
Virginia.....	80,079	120	352	900	1,215	1,240	2,360	2,880	5,240	12,983	10,215
Washington.....	1,550						201	04	70	40	1,145
West Virginia.....	8,493	20	10	70	217	600	378	710	750	5,034	584
Wisconsin.....	15,785		20	1,820	70	855	50	160	2,046	7,457	3,407
Wyoming.....	420								320	100	

STATISTICS OF FISHERIES.

TABLE 3.—EXPENSE, NUMBER, AND VALUE OF CARP SOLD FOR BAIT OR STOCKING, AND AMOUNT AND VALUE OF CARP SOLD OR USED FOR FOOD, BY STATES AND TERRITORIES: 1880-1889.

STATES AND TERRITORIES.	Amount of expense.	Total value of carp sold or used.	CARP SOLD FOR BAIT OR STOCKING.		CARP SOLD OR USED FOR FOOD.	
			Number.	Value.	Pounds.	Value.
The United States.....	\$1,043,841	\$284,050	4,159,244	\$152,034	1,313,799	\$132,016
Alabama.....	13,359	3,052	7,593	1,190	16,063	1,862
Arizona.....	9,197	1,370	1,047	235	7,477	1,135
Arkansas.....	5,051	521	1,192	83	5,005	438
California.....	24,053	9,121	89,892	6,085	28,762	3,036
Colorado.....	13,728	23,156	55,618	2,266	146,770	20,890
Connecticut.....	4,053	457	3,868	247	2,145	210
Delaware.....	584	61	607	32	506	29
District of Columbia.....	75	2	22	2		
Florida.....	1,116	72	681	36	351	36
Georgia.....	67,327	20,902	262,267	8,168	127,483	12,734
Idaho.....	2,932	742	671	165	3,965	577
Illinois.....	63,071	12,384	154,153	7,033	62,688	5,301
Indiana.....	101,517	33,548	1,302,107	25,730	146,079	12,818
Indian territory.....	70					
Iowa.....	29,798	4,357	41,009	2,820	18,764	1,537
Kansas.....	53,037	12,183	248,490	7,226	42,496	4,957
Kentucky.....	7,273	4,449	30,366	1,500	44,592	2,949
Louisiana.....	2,153	95			1,058	95
Maine.....	308	100	300	100		
Maryland.....	8,832	1,114	8,207	519	4,599	505
Massachusetts.....	1,700	568	225	129	3,774	474
Michigan.....	12,548	1,756	37,557	1,238	6,134	468
Minnesota.....	3,423	7	10	5	15	2
Mississippi.....	11,642	1,769	13,185	769	11,228	1,000
Missouri.....	48,455	7,083	59,093	2,855	40,424	4,228
Montana.....	870	4	1		10	4
Nebraska.....	31,385	5,647	29,935	3,081	29,339	2,566
Nevada.....	4,945	237	120	35	1,676	202
New Hampshire.....	322	14	100	9	50	5
New Jersey.....	5,020	1,269	32,457	544	7,196	725
New Mexico.....	5,184	5,617	8,445	1,026	36,125	4,591
New York.....	15,710	3,258	47,146	2,076	9,967	1,182
North Carolina.....	51,572	15,008	146,579	8,622	53,595	6,386
North Dakota.....	360	3	20	3		
Ohio.....	119,620	36,895	711,068	22,241	171,055	14,654
Oregon.....	7,673	880	7,535	193	6,602	687
Pennsylvania.....	127,161	28,616	412,110	20,926	69,138	7,684
Rhode Island.....	30					
South Carolina.....	23,708	3,058	25,078	1,362	14,832	1,696
South Dakota.....	8,389	89	68	57	500	32
Tennessee.....	27,079	12,613	142,928	6,319	100,060	6,294
Texas.....	36,214	3,465	35,301	1,789	27,309	1,715
Utah.....	20,180	3,644	38,554	2,151	16,855	1,490
Vermont.....	315	442	4,140	164	4,597	278
Virginia.....	40,897	15,939	101,903	10,756	50,987	5,183
Washington.....	2,277	700	1,320	600	842	61
West Virginia.....	11,492	1,590	22,515	837	9,934	753
Wisconsin.....	17,365	1,773	40,201	1,310	4,330	463
Wyoming.....	1	1			4	1

ALLIGATOR AND BIRD HUNTING.

The hunting of alligators has assumed importance in recent years, and the statistics have been separately collected in connection with the statistics of fisheries. They are not included in the general tables. The skins form the principal product, but the teeth and claws and living animals are articles of commerce. The hunters of alligators are also hunters of birds of beautiful plumage, especially those frequenting the water. The great reptiles and the stately birds are alike diminishing under the persistent pursuit so rapidly that it is doubtful whether any future year will find material enough for an increased product.

Alligator hunting is limited to the swampy regions of the southern states, and is of greater importance in Florida than in all other states.

The largest number of birds reported under one name was that of white cranes.

The details regarding persons employed, apparatus and capital, and products appear in the following table:

ALLIGATOR INDUSTRY: 1889.

DESIGNATION.	Total.		Florida.		Louisiana.		Texas.	
	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.
Persons employed.....	1,510		1,207		169		140	
United States, white.....	1,108		803		150		05	
United States, colored.....	18		11		1		6	
United States, Indian.....	115		115					
Foreign born.....	17		7		6		4	
Unknown.....	258		211		12		85	
Apparatus and capital.....		\$40,540		\$29,548		\$5,017		\$14,084
Boats.....	787	10,023	643	0,211	74	2,405	70	1,017
Guns.....	1,175	10,200	930	14,107	133	1,650	112	8,530
Ammunition.....		7,043		5,762		605		1,676
Other investments.....		11,087		3,468		1,158		7,061
Products.....		250,300		153,105		85,130		68,050
Alligator.....		100,503		110,880		18,248		34,450
Eggs.....	5,645	000	5,045	008				
Ivory..... pounds.....	2,210	8,308	1,054	3,120	465	178	100	100
Oil..... gallons.....	1,007	1,603	557	1,220	438	315	102	128
Skins.....	108,122	150,073	84,038	107,201	40,008	17,551	42,570	84,231
Sold alive.....	10,025	4,512	10,174	4,308	751	204		
Other products.....		341		341				
Birds.....	345,791	80,707	52,217	30,210	78,328	10,888	215,180	88,000
Bittern.....	430	238	361	210	75	22		
Crane, sandhill.....	7,711	2,084	204	127	7,017	1,757	400	200
Crane, white.....	20,453	10,128	15,202	11,050	12,220	6,105	2,031	1,004
Egret.....	8,842	0,105	8,819	0,084			23	21
Flamingo.....	500	573	50	40	510	527		
Heron.....	21,051	17,780	10,738	18,051	52	16	4,801	4,713
Ibis.....	502	404	62	64	200	100	240	240
Osprey.....	125	30			125	30		
Other.....	270,442	87,805	10,001	2,572	58,120	8,931	207,081	26,402