

TRAFFIC OPERATIONS—Continued.

TABLE 8.—FREIGHT MOVEMENT IN GENERAL, BY PRINCIPAL PORTS—Continued.

B.—PRODUCTS OF MINES AND QUARRIES—Continued.

PORTS.	IRON ORE.								
	Total movement.			Receipts.			Shipments.		
	Amount in tons.	Per cent of total iron ore traffic.	Per cent of total port traffic.	Amount in tons.	Per cent of total iron ore traffic.	Per cent of total port traffic.	Amount in tons.	Per cent of total iron ore traffic.	Per cent of total port traffic.
Total.....	15,303,180	100.00	29.89	7,626,073	100.00	29.40	7,677,107	100.00	30.38
Chicago (a).....	731,188	4.78	9.16	731,188	9.59	14.42			
Buffalo.....	333,827	2.18	4.96	333,827	4.38	8.25			
Escanaba.....	3,364,067	21.98	92.77				3,364,067	43.82	98.06
Cleveland.....	1,978,208	12.93	54.62	1,951,564	25.59	71.28	26,644	0.34	3.02
Ashtabula.....	2,199,109	14.37	81.59	2,199,109	28.84	99.71			
Ashland.....	1,663,021	10.87	74.00				1,663,021	21.66	94.50
Milwaukee.....	124,312	0.81	6.42	124,312	1.63	7.85			
Marquette.....	1,541,495	10.07	90.10				1,541,495	20.08	98.84
Toledo.....	97,476	0.64	6.78	97,476	1.28	10.25			
Erie.....	418,426	2.73	32.89	418,426	5.49	54.12			
Superior.....									
Duluth.....	10,691	0.07	0.96	10,691	0.14	1.57			
Tonawanda.....	17,166	0.11	1.64	17,166	0.22	1.64			
Muskegon.....									
Fairport.....	928,616	6.07	93.01	928,616	12.18	98.89			
Two Harbors.....	936,541	6.12	100.00				936,541	12.20	100.00
Detroit.....	119,403	0.78	15.62	117,247	1.54	19.04	2,156	0.03	1.45
Oswego.....									
Ogdensburg.....	2,587	0.02	0.39	2,587	0.03	0.55			
Manistee.....									
Ludington.....									
Lorain.....	335,162	2.19	54.00	335,162	4.39	96.62			
Sandusky.....	208,411	1.36	34.60	208,411	2.73	68.33			
Bay city.....									
Oscoda.....	28		0.01				28		0.01
Alpena.....									
Charlotte.....									
Marinette.....									
Gladstone.....	82,880	0.54	28.82				82,880	1.08	53.39
Houghton.....									
Menominee.....									
All other ports.....	210,566	1.38	5.17	150,291	1.97	9.41	60,275	0.79	2.43

PORTS.	STONE (ALL KINDS).								
	Total movement.			Receipts.			Shipments.		
	Amount in tons.	Per cent of total stone traffic.	Per cent of total port traffic.	Amount in tons.	Per cent of total stone traffic.	Per cent of total port traffic.	Amount in tons.	Per cent of total stone traffic.	Per cent of total port traffic.
Total.....	517,229	100.00	1.07	311,015	100.00	1.20	236,214	100.00	0.93
Chicago (a).....	18,176	3.52	0.23	18,176	5.85	0.96			
Buffalo.....	9,060	1.66	0.13	9,060	2.91	0.22			
Escanaba.....	288	0.05		288	0.09	0.15			
Cleveland.....	138,327	25.28	3.82	130,777	42.05	4.78	7,550	3.20	0.86
Ashtabula.....	2,250	0.41	0.08	2,250	0.72	0.10			
Ashland.....									
Milwaukee.....	3,262	0.60	0.17	3,262	1.05	0.20			
Marquette.....	11,951	2.18	0.70	11,951	3.84	8.34			
Toledo.....	12,822	2.34	0.89	12,822	4.12	2.53			
Erie.....									
Superior.....									
Duluth.....	35,374	6.46	3.17	35,374	11.37	5.18			
Tonawanda.....									
Muskegon.....	12,113	2.21	1.21	12,113	3.90	8.01			
Fairport.....	2,070	0.38	0.21	2,070	0.67	0.22			
Two Harbors.....									
Detroit.....									
Oswego.....									
Ogdensburg.....									
Manistee.....									
Ludington.....									
Lorain.....	4,800	0.88	0.77	4,800	1.54	1.38			
Sandusky.....	13,926	2.55	2.31				13,926	5.89	4.69
Bay city.....	11,000	2.01	1.99	11,000	3.54	16.61			
Oscoda.....									
Alpena.....	600	0.11	0.15	600	0.19	5.01			
Charlotte.....									
Marinette.....									
Gladstone.....									
Houghton.....	39,951	7.30	13.96	22,262	7.16	10.70	17,689	7.49	22.04
Menominee.....									
All other ports.....	231,259	42.26	5.68	34,210	11.00	2.14	197,049	83.42	7.96

a Including South Chicago.

STATISTICS OF TRANSPORTATION.

TRAFFIC OPERATIONS—Continued.

TABLE 8.—FREIGHT MOVEMENT IN GENERAL, BY PRINCIPAL PORTS—Continued.

B.—PRODUCTS OF MINES AND QUARRIES—Continued.

PORTS.	SALT.								
	Total movement.			Receipts.			Shipments.		
	Amount in tons.	Per cent of total salt traffic.	Per cent of total port traffic.	Amount in tons.	Per cent of total salt traffic.	Per cent of total port traffic.	Amount in tons.	Per cent of total salt traffic.	Per cent of total port traffic.
Total.....	549,350	100.00	1.07	296,513	100.00	1.14	252,837	100.00	1.00
Chicago (a).....	128,956	23.47	1.61	128,948	43.49	2.55	8		
Buffalo.....	25,299	4.61	0.38				25,299	10.01	0.94
Escanaba.....	65	0.01		34	0.01	0.02	32	0.01	
Cleveland.....	8,674	1.58	0.24	8,646	2.92	0.32	28	0.01	
Ashtabula.....									
Ashland.....	3,450	0.63	0.15	3,450	1.16	0.71			
Milwaukee.....	71,944	13.10	3.72	71,944	24.26	4.54			
Marquette.....	224	0.04	0.01	224	0.08	0.16			
Toledo.....	9,729	1.77	0.68	9,729	3.28	1.92			
Erie.....									
Superior.....	6,537	1.19	0.56	6,537	2.20	0.75			
Duluth.....	7,851	1.43	0.71	7,851	2.65	1.15			
Tonawanda.....									
Muskegon.....									
Fairport.....									
Two Harbors.....									
Detroit.....	22,410	4.08	2.93	21,528	7.26	3.50	882	0.35	0.59
Oswego.....	50	0.01	0.01				50	0.02	0.02
Ogdensburg.....									
Manistee.....	105,001	19.11	16.67				105,001	41.53	17.45
Ludington.....	57,221	10.42	9.12						
Lorain.....	71	0.01	0.01	71	0.02	0.02	57,221	22.63	16.28
Sandusky.....	4,905	0.89	0.81	4,905	1.65	1.60			
Bay city.....	5,377	0.98	0.97				5,377	2.13	1.10
Oscoda.....	294	0.05	0.06				294	0.11	0.06
Alpena.....									
Charlotte.....									
Marinette.....	129	0.02	0.04	87	0.03	2.05	42	0.02	0.01
Gladstone.....	4,060	0.74	1.41	4,060	1.37	3.07			
Houghton.....									
Menominee.....	196	0.04	0.07	196	0.07	2.64			
All other ports.....	86,906	15.82	2.13	28,303	9.55	1.77	58,603	23.18	2.37

PORTS.	OTHER PRODUCTS OF MINES AND QUARRIES.								
	Total movement.			Receipts.			Shipments.		
	Amount in tons.	Per cent of total other product traffic.	Per cent of total port traffic.	Amount in tons.	Per cent of total other product traffic.	Per cent of total port traffic.	Amount in tons.	Per cent of total other product traffic.	Per cent of total port traffic.
Total.....	95,149	100.00	0.18	58,117	100.00	0.23	37,032	100.00	0.15
Chicago (a).....	1,600	1.68	0.02	1,600	2.75	0.03			
Buffalo.....	43,179	45.38	0.64	43,179	74.30	1.07			
Escanaba.....									
Cleveland.....									
Ashtabula.....									
Ashland.....									
Milwaukee.....	282	0.30	0.01	282	0.48	0.02			
Marquette.....									
Toledo.....	92	0.10	0.01	92	0.16	0.02			
Erie.....	7,081	7.44	0.56	7,081	12.18	0.92			
Superior.....	6,969	7.32	0.59				6,969	18.82	2.20
Duluth.....									
Tonawanda.....									
Muskegon.....									
Fairport.....									
Two Harbors.....									
Detroit.....									
Oswego.....									
Ogdensburg.....	2,580	2.71	0.39	2,580	4.44	0.55			
Manistee.....									
Ludington.....									
Lorain.....									
Sandusky.....									
Bay city.....	46	0.05	0.01	46	0.08	0.07			
Oscoda.....									
Alpena.....	225	0.24	0.06	225	0.39	1.88			
Charlotte.....									
Marinette.....									
Gladstone.....									
Houghton.....	25,900	27.22	9.05				25,900	69.94	33.14
Menominee.....									
All other ports.....	7,195	7.56	0.18	3,032	5.22	0.19	4,163	11.24	0.17

a Including South Chicago.

TRANSPORTATION ON THE GREAT LAKES.

TRAFFIC OPERATIONS—Continued.

TABLE 8.—FREIGHT MOVEMENT IN GENERAL, BY PRINCIPAL PORTS—Continued.

C.—OTHER PRODUCTS.

PORTS.	AGGREGATE.								
	Total movement.			Receipts.			Shipments.		
	Amount in tons.	Per cent of total other product traffic.	Per cent of total port traffic.	Amount in tons.	Per cent of total other product traffic.	Per cent of total port traffic.	Amount in tons.	Per cent of total other product traffic.	Per cent of total port traffic.
Total.....	14,990,122	100.00	29.28	8,440,205	100.00	32.54	6,549,917	100.00	25.92
Chicago (a).....	2,944,859	19.65	36.88	2,849,843	33.77	56.21	95,016	1.45	3.26
Buffalo.....	1,029,669	6.87	15.30	527,645	6.25	13.04	502,024	7.67	18.70
Escanaba.....	63,227	0.42	1.74	1,002	0.01	0.51	62,225	0.95	1.81
Cleveland.....	644,691	4.30	17.80	620,872	7.36	22.68	23,819	0.36	2.69
Ashtabula.....	4,236	0.03	0.16	4,236	0.05	0.19			
Ashland.....	379,530	2.53	16.89	282,667	3.35	58.00	96,863	1.48	5.50
Milwaukee.....	479,483	3.20	24.77	476,591	5.65	30.08	2,892	0.04	0.82
Marquette.....	30,786	0.20	1.80	4,742	0.06	3.31	26,044	0.40	1.66
Toledo.....	297,971	1.99	20.74	292,863	3.47	57.84	5,108	0.08	0.55
Erie.....	142,437	0.95	11.20	53,882	0.64	6.97	88,555	1.35	17.75
Superior.....	154,381	1.03	13.08	149,155	1.77	17.03	5,226	0.08	1.71
Duluth.....	212,243	1.42	19.05	144,246	1.71	21.11	67,997	1.04	15.78
Tonawanda.....	1,029,729	6.87	98.36	1,029,729	12.20	98.36			
Muskegon.....	981,683	6.55	97.90	130,243	1.54	86.08	851,440	13.00	100.00
Fairport.....	8,335	0.05	0.83	8,335	0.10	0.89			
Two Harbors.....									
Detroit.....	355,444	2.37	46.49	327,927	3.89	53.26	27,517	0.42	18.49
Oswego.....	292,902	1.95	42.38	286,779	3.40	71.19	6,123	0.09	2.12
Ogdensburg.....	283,694	1.89	42.80	161,314	1.91	34.32	122,380	1.87	63.45
Manistee.....	509,514	3.40	80.89	12,713	0.15	45.25	496,801	7.59	82.55
Ludington.....	504,535	3.37	80.39	210,358	2.49	76.15	294,177	4.49	83.72
Lorain.....	7,069	0.05	1.14	6,866	0.08	1.98	203		0.07
Sandusky.....	90,152	0.60	14.96	90,152	1.07	29.56			
Bay city.....	485,796	3.24	87.81	4,200	0.05	6.34	481,596	7.35	88.90
Oscoda.....	489,997	3.27	99.91				489,997	7.48	99.91
Alpena.....	374,899	2.50	96.91				374,899	5.72	100.00
Charlotte.....	12,955	0.09	3.52	12,912	0.15	70.49	43		0.01
Marinette.....	343,231	2.29	99.13	1,271	0.01	29.95	341,960	5.22	99.99
Gladstone.....	6,296	0.04	2.19	6,296	0.07	4.76			
Houghton.....	51,004	0.34	17.82	41,524	0.49	19.96	9,480	0.15	12.13
Menominee.....	271,103	1.81	99.48	6,000	0.07	80.80	265,103	4.05	100.00
All other ports.....	2,508,271	16.73	61.68	695,842	8.24	43.57	1,812,429	27.67	73.20

PORTS.	ANIMAL PRODUCTS.								
	Total movement.			Receipts.			Shipments.		
	Amount in tons.	Per cent of total animal product traffic.	Per cent of total port traffic.	Amount in tons.	Per cent of total animal product traffic.	Per cent of total port traffic.	Amount in tons.	Per cent of total animal product traffic.	Per cent of total port traffic.
Total.....	125,581	100.00	0.25	64,728	100.00	0.25	60,853	100.00	0.24
Chicago (a).....	56,181	44.70	0.70	146	0.22		55,985	92.00	1.92
Buffalo.....	59,820	47.63	0.89	59,820	92.42	1.48			
Escanaba.....	34	0.03					34	0.06	
Cleveland.....									
Ashtabula.....									
Ashland.....									
Milwaukee.....	2,366	1.88	0.12	72	0.11		2,294	3.77	0.65
Marquette.....									
Toledo.....									
Erie.....									
Superior.....	1,321	1.05	0.11				1,321	2.17	0.43
Duluth.....									
Tonawanda.....									
Muskegon.....	963	0.77	0.10	963	1.49	0.64			
Fairport.....									
Two Harbors.....									
Detroit.....									
Oswego.....									
Ogdensburg.....	426	0.34	0.07	426	0.66	0.09			
Manistee.....	427	0.34	0.07	419	0.65	1.49	8	0.01	
Ludington.....									
Lorain.....									
Sandusky.....									
Bay city.....									
Oscoda.....									
Alpena.....									
Charlotte.....									
Marinette.....									
Gladstone.....									
Houghton.....									
Menominee.....									
All other ports.....	4,093	3.26	0.10	2,882	4.45	0.18	1,211	1.99	0.05

a Including South Chicago.

STATISTICS OF TRANSPORTATION.

TRAFFIC OPERATIONS—Continued.

TABLE 8.—FREIGHT MOVEMENT IN GENERAL, BY PRINCIPAL PORTS—Continued.

C.—OTHER PRODUCTS—Continued.

PORTS.	LUMBER.								
	Total movement.			Receipts.			Shipments.		
	Amount in tons.	Per cent of total lumber traffic.	Per cent of total port traffic.	Amount in tons.	Per cent of total lumber traffic.	Per cent of total port traffic.	Amount in tons.	Per cent of total lumber traffic.	Per cent of total port traffic.
Total.....	12,205,655	100.00	23.84	6,857,257	100.00	26.44	5,348,398	100.00	21.17
Chicago (a).....	2,590,110	21.22	32.44	2,588,004	37.74	51.05	2,106	0.04	0.07
Buffalo.....	403,951	3.31	6.00	403,951	5.89	9.98			
Escanaba.....	54,041	0.44	1.49				54,041	1.01	1.57
Cleveland.....	566,718	4.64	15.05	565,626	8.25	20.66	1,092	0.02	0.12
Ashtabula.....	4,236	0.03	0.16	4,236	0.06	0.19			
Ashland.....	80,119	0.66	3.57				80,119	1.50	4.55
Milwaukee.....	412,479	3.38	21.31	412,479	6.02	26.04			
Marquette.....	16,179	0.13	0.95	175	0.12	0.12	16,004	0.30	1.02
Toledo.....	287,507	2.36	20.01	282,399	4.12	55.77	5,108	0.10	0.55
Erie.....	17,850	0.15	1.40	17,850	0.26	2.31			
Superior.....	3,905	0.03	0.33				3,905	0.07	1.28
Duluth.....	13,110	0.11	1.18				13,110	0.25	3.04
Tonawanda.....	1,029,729	8.44	98.36	1,029,729	15.02	98.36			
Muskegon.....	966,145	7.92	96.35	119,530	1.74	79.00	846,615	15.83	99.43
Fairport.....	878	0.01	0.09	878	0.01	0.09			
Two Harbors.....									
Detroit.....	325,250	2.66	42.54	314,995	4.59	51.16	10,261	0.19	6.80
Oswego.....	283,058	2.32	40.96	283,058	4.13	70.27			
Ogdensburg.....	136,773	1.12	20.03	135,273	1.97	28.78	1,500	0.03	0.78
Manistee.....	477,785	3.91	75.85				477,785	8.93	70.39
Ludington.....	258,520	2.12	41.19				258,520	4.83	73.57
Lorain.....	6,866	0.06	1.11	6,866	0.10	1.98			
Sandusky.....	87,040	0.71	14.45	87,040	1.27	28.54			
Bay city.....	485,706	3.98	87.81	4,200	0.06	6.34	481,506	9.00	98.90
Oscoda.....	489,962	4.01	99.90				489,962	9.16	99.01
Alpena.....	373,204	3.06	96.47				373,204	6.98	99.55
Charlotte.....	12,912	0.10	3.51	12,912	0.19	70.49			
Marinette.....	341,723	2.80	98.70	278	0.01	6.55	341,445	6.38	99.84
Gladstone.....									
Houghton.....	10,704	0.09	3.74	1,224	0.02	0.59	9,480	0.18	12.13
Menominee.....	265,103	2.17	97.28				265,103	4.96	100.00
All other ports.....	2,203,996	18.06	54.11	586,554	8.55	36.73	1,617,442	30.24	65.32

MANUFACTURES, MISCELLANEOUS MERCHANDISE, AND OTHER COMMODITIES.

PORTS.	MANUFACTURES, MISCELLANEOUS MERCHANDISE, AND OTHER COMMODITIES.								
	Total movement.			Receipts.			Shipments.		
	Amount in tons.	Per cent of total manufactures, etc., traffic.	Per cent of total port traffic.	Amount in tons.	Per cent of total manufactures, etc., traffic.	Per cent of total port traffic.	Amount in tons.	Per cent of total manufactures, etc., traffic.	Per cent of total port traffic.
Total.....	2,658,886	100.00	5.19	1,518,220	100.00	5.85	1,140,666	100.00	4.51
Chicago (a).....	298,618	11.23	3.74	261,693	17.24	5.16	36,925	3.24	1.27
Buffalo.....	565,898	21.28	8.41	63,874	4.21	1.58	502,024	44.01	18.70
Escanaba.....	9,152	0.34	0.25	1,002	0.06	0.51	8,150	0.71	0.24
Cleveland.....	77,973	2.93	2.15	55,246	3.64	2.02	22,727	1.99	2.57
Ashtabula.....									
Ashland.....	299,411	11.26	13.32	282,667	18.62	58.00	16,744	1.47	0.65
Milwaukee.....	64,693	2.43	3.34	64,040	4.22	4.04	598	0.05	0.17
Marquette.....	14,607	0.55	0.85	4,567	0.30	3.19	10,040	0.88	0.44
Toledo.....	10,464	0.39	0.73	10,464	0.69	2.07			
Erie.....	124,587	4.69	9.80	36,032	2.37	4.66	88,555	7.76	17.75
Superior.....	149,155	5.61	12.64	149,155	9.82	17.03			
Duluth.....	199,133	7.49	17.87	144,246	9.50	21.11	54,887	4.81	12.74
Tonawanda.....									
Muskegon.....	14,575	0.55	1.45	9,750	0.64	6.44	4,825	0.42	0.57
Fairport.....	7,457	0.28	0.74	7,457	0.49	0.80			
Two Harbors.....									
Detroit.....	30,188	1.14	3.95	12,932	0.85	2.10	17,256	1.51	11.60
Oswego.....	9,844	0.37	1.42	3,721	0.25	0.92	6,123	0.54	2.12
Ogdensburg.....	146,495	5.51	22.10	25,615	1.69	5.45	120,880	10.60	62.07
Manistee.....	31,302	1.18	4.97	12,294	0.81	43.76	19,008	1.67	3.16
Ludington.....	246,015	9.25	39.20	210,358	13.86	76.15	35,657	3.13	10.15
Lorain.....	203	0.01	0.03				203	0.02	0.07
Sandusky.....	3,112	0.12	0.51	3,112	0.20	1.02			
Bay city.....									
Oscoda.....	35		0.01				35		
Alpena.....	1,695	0.06	0.44				1,695	0.15	0.45
Charlotte.....	43		0.01				43		0.01
Marinette.....	1,508	0.06	0.43	993	0.07	23.40	515	0.05	0.15
Gladstone.....	6,296	0.24	2.19	6,296	0.41	4.76			
Houghton.....	40,300	1.52	14.08	40,300	2.65	19.37			
Menominee.....	6,000	0.22	2.20	6,000	0.40	80.80			
All other ports.....	300,182	11.29	7.37	106,406	7.01	6.66	193,776	16.99	7.83

a Including South Chicago.

TRANSPORTATION ON THE GREAT LAKES.

TRAFFIC OPERATIONS—Continued.

TABLE 9.—FREIGHT MOVEMENT IN GENERAL SUMMARIZED—RECEIPTS, SHIPMENTS AND TOTAL MOVEMENT OF THE LAKE FREIGHT, UNCLASSIFIED AS TO COMMODITIES, AND ALLOTTED TO ALL THE TRADING POINTS OF THE GREAT LAKES AND ST. LAWRENCE RIVER.

PORTS.	Total tonnage.	Receipts.	Shipments.	PORTS.	Total tonnage.	Receipts.	Shipments.
Total	51,203,106	25,936,192	25,266,974	Charlevoix, Michigan.....	62,824	8,915	53,909
Chicago (a), Illinois.....	7,984,038	5,069,973	2,914,065	Marine city, Michigan.....	61,001	45,575	15,426
Buffalo, New York.....	6,730,137	4,046,144	2,683,993	Traverse city, Michigan.....	60,766	6,566	54,200
Escanaba, Michigan.....	3,626,390	195,558	3,430,832	Baraga, Michigan.....	59,278	.....	59,278
Cleveland, Ohio.....	3,621,570	2,737,708	883,862	Pequaung, Michigan.....	54,193	.....	54,193
Ashtabula, Ohio.....	2,696,180	2,205,595	489,585	Fruitport, Michigan.....	54,126	47,854	6,272
Ashland, Wisconsin.....	2,247,242	487,358	1,759,884	Morristown, New York.....	48,369	7,178	41,191
Milwaukee, Wisconsin.....	1,935,808	1,584,254	351,554	St. Clair, Michigan.....	41,553	14,030	27,523
Marquette, Michigan.....	1,710,885	143,346	1,567,539	Kenosha, Wisconsin.....	41,532	35,808	5,724
Toledo, Ohio.....	1,436,991	506,351	930,640	Ontonagon, Michigan.....	40,700	.....	40,700
Erie, Pennsylvania.....	1,271,988	773,030	498,958	Benton Harbor, Michigan.....	37,573	34,614	2,959
Superior, Wisconsin.....	1,180,297	875,692	304,605	Fayette, Michigan.....	37,389	23,557	13,832
Duluth, Minnesota.....	1,114,048	683,162	430,886	Pentwater, Michigan.....	33,111	469	32,642
Tonawanda, New York.....	1,046,895	1,046,895	.....	Kewaunee, Wisconsin.....	32,627	9,273	23,354
Muskegon, Michigan.....	1,002,743	151,303	851,440	Port Washington, Wisconsin.....	32,304	21,197	11,107
Fairport, Ohio.....	998,459	939,021	59,438	Bay Mills, Michigan.....	32,037	1,389	30,648
Two Harbors, Minnesota.....	936,541	.....	936,541	Sodus Point, New York.....	24,846	11,911	12,935
Detroit, Michigan.....	764,553	615,750	148,803	Cape Vincent, New York.....	22,819	22,398	421
Oswego, New York.....	691,118	402,847	288,271	Rogers city, Michigan.....	22,504	491	22,013
Ogdensburg, New York.....	662,904	470,044	192,860	Black River, Michigan.....	22,293	2,043	20,250
Manistee, Michigan.....	629,910	28,096	601,814	Algonac, Michigan.....	17,586	9,654	7,932
Ludington, Michigan.....	627,627	276,229	351,398	Dunkirk, New York.....	17,146	17,146	.....
Lorain, Ohio.....	620,773	346,899	273,874	Marysville, Michigan.....	13,466	.....	13,466
Sandusky, Ohio.....	602,403	305,029	297,374	Sand Beach, Michigan.....	11,867	10,646	1,221
Bay city, Michigan.....	554,219	66,246	486,973	Waukegan, Illinois.....	10,959	10,959	.....
Oscoda, Michigan.....	490,413	.....	490,413	South Haven, Michigan.....	10,727	2,234	8,493
Alpena, Michigan.....	386,868	11,969	374,899	Leland, Michigan.....	10,325	.....	10,325
Charlotte, New York.....	368,361	18,318	350,043	Clayton, New York.....	6,828	6,519	309
Marinette, Wisconsin.....	346,246	4,244	342,002	Sacketts Harbor, New York.....	6,508	6,401	107
Gladstone, Michigan.....	287,690	132,356	155,334	Sebawaing, Michigan.....	6,204	835	5,369
Houghton, Michigan.....	286,191	208,047	78,144	Alexandria Bay, New York.....	6,104	5,951	153
Menominee, Michigan.....	272,529	7,426	265,103	Two Rivers, Michigan.....	5,863	5,693	170
East Saginaw, Michigan.....	248,538	48,686	199,852	Petoskey, Michigan.....	5,631	1,701	3,930
Kelleys Island, Ohio.....	232,153	10,971	212,182	Glen Arbor, Michigan.....	4,741	.....	4,741
East Tawas, Michigan.....	230,516	1,172	229,344	Grindstone Island, New York.....	4,008	158	4,460
Cheboygan, Michigan.....	218,940	24,523	194,417	Port Sanilac, Michigan.....	4,501	590	3,911
Washburn, Wisconsin.....	188,393	55,092	133,301	De Pere, Wisconsin.....	4,434	1,181	3,253
Port Huron, Michigan.....	170,073	152,073	18,000	Cross Village, Michigan.....	2,670	11	2,659
Grand Haven, Michigan.....	169,546	101,150	68,396	Dexter, New York.....	2,169	2,169	.....
Racine, Wisconsin.....	160,537	159,312	1,225	Henderson, New York.....	1,968	1,537	431
Green Bay, Wisconsin.....	156,810	101,369	55,441	Oconto, Wisconsin.....	1,842	342	1,500
Michigan city, Indiana.....	148,029	147,897	132	Forestville, Michigan.....	1,817	1,005	812
Manistique, Michigan.....	144,011	3,690	140,321	Massena, New York.....	1,702	1,514	188
Fair Haven, New York.....	134,799	15,482	119,317	Wilson, New York.....	1,593	1,479	114
Sheboygan, Wisconsin.....	124,387	115,995	8,392	Pultneyville, New York.....	815	.....	.....
Manitowoc, Wisconsin.....	113,377	88,354	25,023	Oak Orchard, New York.....	650	650	.....
St. Ignace, Michigan.....	107,895	24,068	83,827	Sandy Creek, New York.....	622	622	.....
St. Joseph, Michigan.....	85,017	60,516	24,501	Waddington, New York.....	575	523	52
Ford River, Michigan.....	82,080	512	81,568	Chaumont, New York.....	270	235	35
Peshigo, Wisconsin.....	80,683	.....	80,683	Olcott, New York.....	215	162	53
Sault Ste. Marie, Michigan.....	76,125	37,063	39,062	Millins Bay, New York.....	119	119	.....
Montague, Michigan.....	72,848	1,264	71,084	Thousand Island Park, New York.....	115	115	.....
Elk Rapids, Michigan.....	72,108	41,020	31,088	Chippewa Bay, New York.....	84	30	54
Huron, Ohio.....	70,180	13,694	56,486	Youngstown, New York.....	75	75	.....

^a Including South Chicago.

TRAFFIC OPERA

TABLE 10.—FREIGHT RECEIPTS BY EXTENDED

	PORTS.	Total.	PRODUCTS OF AGRICULTURE.							PRODUCTS OF MINES AND QUARRIES.			
			Wheat.	Corn.	Other grain.	Mill products.	Fruit.	Hay.	Potatoes.	Other.	Coal and coke.	Iron ore.	Other ore.
1	Lake Erie.....	12,957,483	837,821	1,418,617	331,124	814,410	140	446	.....	48,165	97,865	6,490,518	39,510
2	Ashtabula, Ohio.....	2,205,595										2,199,109	
3	Buffalo, New York.....	4,046,144	781,548	1,319,500	316,987	666,651	140	446		47,101		333,827	39,540
4	Cleveland, Ohio.....	2,737,708	22,494	434	685	232				784	1,200	1,951,564	
5	Dunkirk, New York.....	17,140											
6	Erie, Pennsylvania.....	773,030	33,779	98,623	13,452	147,507				280		418,426	
7	Fairport, Ohio.....	939,021										928,616	
8	Huron, Ohio.....	13,694									235	761	
9	Kelleys Island, Ohio.....	19,971									1,500		
10	Lorain, Ohio.....	346,899										335,162	
11	Sandusky, Ohio.....	305,029										208,411	
12	Toledo, Ohio.....	506,351									1,561	97,476	
13	Tonawanda, New York.....	1,046,895									93,369	17,166	
14	Lake Ontario.....	485,220	20,483	16,438	89,178	7	5	351	510	3,274	7,218		
15	Cape Vincent, New York.....	22,398	1,185	3	782			350	4	1,780	1,030		
16	Charlotte, New York.....	18,318			5,406								
17	Chaumont, New York.....	235									100		
18	Dexter, New York.....	2,169									1,480		
19	Henderson, New York.....	1,537									610		
20	Millins Bay, New York.....	119			1			1		2	110		
21	Oak Orchard, New York.....	950											
22	Oleott, New York.....	162											
23	Oswego, New York.....	402,847	19,297	16,434	78,340				506	1,491			
24	Pultneyville, New York.....	815											
25	Sacketts Harbor, New York.....	6,401	1	1			5				3,406		
26	Sandy Creek, New York.....	622									482		
27	Sodus Point, New York.....	11,911			4,049								
28	Wilson, New York.....	1,479											
29	Youngstown, New York.....	75											
30	Fair Haven, New York.....	15,482				7					1		
31	St. Lawrence river.....	492,032	27,059	131,927	29,731	46,770	23	1,042	666	319	74,945	2,595	2,580
32	Alexandria Bay, New York.....	5,951					23		6	1	2,933		
33	Chippewa Bay, New York.....	30											
34	Clayton, New York.....	6,519	1	6	5						3,549	8	
35	Massena, New York.....	1,514		14							1,500		
36	Grindstone Island, New York.....	158			1			2			122		
37	Morristown, New York.....	7,178			144								
38	Ogdensburg, New York.....	470,044	27,058	131,907	29,581	46,770		1,040	660	316	66,231	2,587	2,580
39	Thousand Island Park, New York.....	115									110		
40	Waddington, New York.....	523									500		

TABLE 11.—FREIGHT SHIPMENTS BY EXTENDED LIST OF COMMODITIES—SHIPMENTS FROM ALL THE LAKE AND UNDER THE 4 COMPREHENSIVE CLASSES.

	PORTS.	Total.	PRODUCTS OF AGRICULTURE.							PRODUCTS OF MINES AND QUARRIES.			
			Wheat.	Corn.	Other grain.	Mill products.	Fruit.	Hay.	Pota- toes.	Other.	Coal and coke.	Iron ore.	Other ore.
1	Total	25,266,974	969,150	1,929,614	503,117	894,123	26,184	10,105	2,024	73,751	6,105,799	7,677,107	29,442
2	Lake Superior	5,434,781	399,355	55,112	1,382	205,227	10	65	59	834	26,075	4,141,057	29,442
3	Ashland, Wisconsin	1,759,884										1,663,021	
4	Baraga, Michigan	59,273											
5	Bay Mills, Michigan	30,648			48								
6	Duluth, Minnesota	430,886	207,732	49,901	1,304	103,134				818			
7	Houghton, Michigan	78,144									25,075		25,900
8	Marquette, Michigan	1,567,539										1,541,495	
9	Ontonagon, Michigan	40,700											200
10	Pequaming, Michigan	54,193											
11	St. Marys Falls, Michigan	39,062			30	122	10	65	59	16	1,000		
12	Superior, Wisconsin	304,605	191,623	5,211		95,576							3,342
13	Two Harbors, Minnesota	936,541										936,541	
14	Washburn, Wisconsin	133,301				6,395							
15	Lakes Huron and St. Clair	2,344,451	81,417	27,760	6,204	4,829	2,390	2,530	108	1,828	13,574	62,451	
16	Algonac, Michigan	7,932											
17	Alpena, Michigan	374,899											
18	Bay City, Michigan	486,973											
19	Black River, Michigan	20,250											
20	Cheboygan, Michigan	194,417							48				
21	Detroit, Michigan	148,803	80,757	27,536	1,910	990	1,865			1,617	3,564	2,156	
22	East Saginaw, Michigan	199,852									10		
23	East Tawas, Michigan	229,344											
24	Forestville, Michigan	812	60		597				30	125			
25	Marino city, Michigan	15,426											
26	Marysville, Michigan	13,466			40								
27	Oscoda, Michigan	490,413			64			30				28	
28	Port Huron, Michigan	18,000									10,000		
29	Port Sanilac, Michigan	3,911	600		1,636			1,500					
30	Rogers city, Michigan	22,013											
31	St. Clair, Michigan	27,523			32			1,000					
32	St. Ignace, Michigan	83,827							30			60,267	
33	Sand Beach, Michigan	1,221			1,221								
34	Sebawaing, Michigan	5,369		224	704	3,830	525			86			
35	Lake Michigan	10,090,366	347,466	1,772,109	489,971	620,410	23,258	7,056	1,857	65,297	257	3,446,947	
36	Benton Harbor, Michigan	2,959					2,959						
37	Charlevoix, Michigan	53,909					43						
38	Chicago (a), Illinois	2,914,065	312,203	1,769,621	457,095	228,138		927	1,235	49,822			
39	Gross Village, Michigan	2,659	9						120				
40	De Pere, Wisconsin	3,253	6	38	162	1,043				4			
41	Elk Rapids, Michigan	31,088											
42	Escanaba, Michigan	3,430,832				4,508						3,364,067	
43	Payette, Michigan	13,832	27										
44	Ford River, Michigan	81,568											
45	Fruitport, Michigan	6,272											
46	Gladstone, Michigan	155,234	1,500			70,854						82,880	
47	Glen Arbor, Michigan	4,741											
48	Grand Haven, Michigan	68,396				21							
49	Green Bay, Wisconsin	55,441	1,650	29	1,784	21,474	1	7	17	7	12		
50	Kenosha, Wisconsin	5,724			3						5		
51	Kewannee, Wisconsin	23,354	1,500		205			800	30	3,258			
52	Leland, Michigan	10,325											
53	Ludington, Michigan	351,398								12			
54	Manistee, Michigan	601,814											
55	Manistique, Michigan	140,321											
56	Maitowoc, Wisconsin	25,023	1,200	42	824	2,940		5,250	150	6,706			
57	Marinette, Wisconsin	342,002											
58	Menominee, Michigan	265,103											
59	Michigan city, Indiana	1,132			82			60				40	
60	Milwaukee, Wisconsin	351,554	29,191	1,434	28,847	289,174							
61	Montagne, Michigan	71,084											
62	Muskegon, Michigan	851,440						57					
63	Oconto, Wisconsin	1,500											
64	Pentwater, Michigan	32,642											
65	Peshtigo Harbor, Wisconsin	80,683											
66	Petoskey, Michigan	3,930				297			45				
67	Port Washington, Wisconsin	11,107	180	238	299	600							
68	Racine, Wisconsin	1,225			80								
69	St. Joseph, Michigan	24,501				1,341	15,400			5,000			
70	Sheboygan, Wisconsin	8,392		707	640						200		
71	South Haven, Michigan	8,493											
72	Traverse, Michigan	54,200					4,448		151	484			
73	Two Rivers, Michigan	170				20							
74	Waukegan, Illinois												

a Including South Chicago.

STATISTICS OF TRANSPORTATION.

TRAFFIC OPERA

TABLE 11.—FREIGHT SHIPMENTS BY EXTENDED

	PORTS.	Total.	PRODUCTS OF AGRICULTURE.							PRODUCTS OF MINES AND QUARRIES.			
			Wheat.	Corn.	Other grain.	Mill products.	Fruit.	Hay.	Pota- toes.	Other.	Coal and coke.	Iron ore.	Other ore.
1	Lake Erie	6,386,392	140,912	74,528	5,560	63,657	250			215	5,196,182	26,644	
2	Ashtabula, Ohio	489,585									489,585		
3	Buffalo, New York	2,683,993								215	2,156,670	26,644	
4	Cleveland, Ohio	883,862		576							825,030		
5	Dunkirk, New York												
6	Erie, Pennsylvania	498,958									410,403		
7	Fairport, Ohio	59,438									59,438		
8	Huron, Ohio	56,486	486								56,000		
9	Kelleys Island, Ohio	212,182					250						
10	Lorain, Ohio	273,874									273,671		
11	Sandusky, Ohio	297,374	8,063								275,385		
12	Toledo, Ohio	930,640	132,363	73,952	5,560	63,657					650,000		
13	Tonawanda, New York												
14	Lake Ontario	771,727		1			276	454		69	764,355		
15	Cape Vincent, New York	421					176			9			
16	Charlotte, New York	350,043									350,000		
17	Chaumont, New York	35						35					
18	Dexter, New York								419				
19	Henderson, New York	431											
20	Millins Bay, New York												
21	Oak Orchard, New York												
22	Olcott, New York	53		1			47				5		
23	Oswego, New York	288,271									282,088		
24	Pultneyville, New York												
25	Sacketts Harbor, New York	107											
26	Sandy Creek, New York												
27	Sodus Point, New York	12,935									12,935		
28	Wilson, New York	114								60			
29	Youngstown, New York												
30	Fairhaven, New York	119,317									119,317		
31	St. Lawrence river	239,257		104						5,508	105,356	8	
32	Alexandria Bay, New York	153		104									
33	Chippewa Bay, New York	54								54			
34	Clayton, New York	309								90		8	
35	Massena, New York	188								188			
36	Grindstone Island, New York	4,450											
37	Morristown, New York	41,191									40,000		
38	Ogdensburg, New York	192,860								5,124	65,556		
39	Thousand Island Park, New York												
40	Waddington, New York	52								52			

STATISTICS OF TRANSPORTATION.

TRAFFIC OPERA

TABLE 12.—FREIGHT MOVEMENT OF COMBINED RECEIPTS AND

	PORTS.	Total.	PRODUCTS OF AGRICULTURE.							PRODUCTS OF MINES AND QUARRIES.			
			Wheat.	Corn.	Other grain.	Mill products.	Fruit.	Hay.	Potatoes.	Other.	Coal and coke.	Iron ore.	Other ore.
1	Lake Erie	19,343,875	978,733	1,493,145	336,684	878,067	390	446	.....	48,380	5,294,047	6,517,162	39,540
2	Ashtabula, Ohio	2,095,180	.....	.....	.....	.....	.....	.....	.....	.....	489,585	2,199,109	.....
3	Buffalo, New York	6,730,137	781,548	1,319,560	316,987	666,651	140	446	.....	47,101	2,156,670	333,827	39,540
4	Cleveland, Ohio	3,021,570	22,494	1,010	685	252	.....	.....	.....	999	826,230	1,978,208	.....
5	Dunkirk, New York	17,146	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
6	Erie, Pennsylvania	1,271,988	33,779	98,623	13,452	147,507	.....	.....	.....	280	410,403	418,426	.....
7	Fairport, Ohio	998,459	.....	.....	.....	.....	.....	.....	.....	.....	59,438	928,616	.....
8	Huron, Ohio	70,180	486	.....	.....	.....	.....	.....	.....	.....	56,235	761	.....
9	Kelleys Island, Ohio	232,153	.....	.....	.....	.....	250	.....	.....	.....	1,500	.....	.....
10	Lorain, Ohio	620,773	.....	.....	.....	.....	.....	.....	.....	.....	273,671	335,162	.....
11	Sandusky, Ohio	602,403	8,063	.....	.....	.....	.....	.....	.....	.....	278,946	208,411	.....
12	Toledo, Ohio	1,436,991	132,363	73,952	5,560	63,657	.....	.....	.....	.....	743,369	97,476	.....
13	Tonawanda, New York	1,046,895	.....	.....	.....	.....	.....	.....	.....	.....	.....	17,166	.....
14	Lake Ontario	1,256,947	20,483	16,439	89,178	7	281	805	510	3,343	771,573	.....	.....
15	Cape Vincent, New York	22,819	1,185	3	782	.....	176	350	4	1,739	1,030	.....	.....
16	Charlotte, New York	368,361	.....	.....	5,406	.....	.....	.....	.....	.....	350,000	.....	.....
17	Chaumont, New York	270	.....	.....	.....	.....	.....	35	.....	.....	100	.....	.....
18	Dexter, New York	2,169	.....	.....	.....	.....	.....	.....	.....	.....	1,480	.....	.....
19	Henderson, New York	1,908	.....	.....	.....	.....	.....	419	.....	.....	610	.....	.....
20	Millins Bay, New York	119	.....	.....	1	.....	.....	.....	.....	.....	110	.....	.....
21	Oak Orchard, New York	650	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
22	Olcott, New York	215	.....	1	.....	.....	47	.....	.....	.....	5	.....	.....
23	Oswego, New York	691,118	19,297	16,434	78,340	.....	.....	.....	506	1,491	282,098	.....	.....
24	Pultneyville, New York	815	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
25	Sacketts Harbor, New York	6,508	1	1	.....	.....	5	.....	.....	.....	3,406	.....	.....
26	Sandy creek, New York	622	.....	.....	.....	.....	.....	.....	.....	.....	482	.....	.....
27	Sodus Point, New York	24,846	.....	.....	4,649	.....	.....	.....	.....	.....	12,935	.....	.....
28	Wilson, New York	1,593	.....	.....	.....	.....	53	.....	.....	60	.....	.....	.....
29	Youngstown, New York	75	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
30	Fair Haven, New York	134,799	.....	.....	.....	7	.....	.....	.....	.....	119,317	.....	.....
31	St. Lawrence river	731,289	27,059	132,031	29,731	46,770	23	1,042	666	5,827	180,301	2,603	2,580
32	Alexandria Bay, New York	6,104	.....	104	.....	.....	23	.....	6	1	2,933	.....	.....
33	Chippewa Bay, New York	84	.....	.....	.....	.....	.....	.....	.....	54	.....	.....	.....
34	Clayton, New York	6,828	1	6	5	.....	.....	.....	.....	90	3,549	16	.....
35	Massena, New York	1,702	.....	14	.....	.....	.....	.....	.....	188	1,500	.....	.....
36	Grindstone Island, New York	4,608	.....	.....	1	.....	.....	2	.....	.....	122	.....	.....
37	Morristown, New York	48,369	.....	.....	144	.....	.....	.....	.....	.....	40,000	.....	.....
38	Ogdensburg, New York	662,904	27,058	131,907	29,581	46,770	.....	1,040	660	5,440	131,587	2,587	2,580
39	Thousand Island Park, New York	115	.....	.....	.....	.....	.....	.....	.....	2	110	.....	.....
40	Waddington, New York	575	.....	.....	.....	.....	.....	.....	.....	52	500	.....	.....

TABLE 13.—TOTAL FREIGHT MOVEMENT BY EXTENDED LIST OF COMMODITIES—TOTAL SHIPMENT AND RECEIPTS—GIVEN ONLY BY LAKE

LAKES AND RIVER.	Total.	PRODUCTS OF AGRICULTURE.								PRODUCTS OF MINES AND QUARRIES.		
		Wheat.	Corn.	Other grain.	Mill products.	Fruit.	Hay.	Pota-toes.	Other.	Coal and coke.	Iron ore.	Other ore.
1 Receipts and shipments	51,203,106	1,888,312	3,513,515	980,514	1,886,189	26,984	18,077	3,698	132,517	11,268,270	15,303,180	71,562
2 Lake Superior	7,925,930	399,355	55,134	1,846	205,720	186	298	426	965	1,780,750	4,151,748	29,442
3 Lakes Huron and St. Clair	3,373,807	110,663	38,448	22,479	16,792	2,537	2,764	108	1,828	376,321	180,090	.....
4 Lake Michigan	18,571,258	352,019	1,778,318	500,596	738,833	23,567	12,722	1,988	72,174	2,865,278	4,451,577	.....
5 Lake Erie	19,343,875	978,733	1,493,145	336,684	878,087	390	446	.....	48,380	5,294,047	6,517,162	39,540
6 Lake Ontario	1,256,947	20,483	16,439	89,178	7	281	805	510	3,343	771,573	.....	.....
7 St. Lawrence river	791,289	27,059	132,031	29,781	46,770	23	1,042	666	5,827	180,301	2,603	2,580
8 Receipts	25,936,132	919,162	1,583,901	477,397	992,066	800	7,972	1,674	58,766	5,162,471	7,626,073	42,120
9 Lake Superior	2,491,149	.....	22	464	493	176	233	367	181	1,754,675	10,691	.....
10 Lakes Huron and St. Clair	1,020,356	29,246	10,688	16,275	11,963	147	234	.....	362,747	362,747	117,639	.....
11 Lake Michigan	8,480,892	4,553	6,209	10,625	118,423	309	5,666	131	6,877	2,865,021	1,004,630	.....
12 Lake Erie	12,957,463	837,821	1,418,617	331,124	814,410	140	446	.....	48,165	97,865	6,490,518	39,540
13 Lake Ontario	485,220	20,483	16,438	89,178	7	5	351	510	3,274	7,218	.....	.....
14 St. Lawrence river	492,032	27,059	131,927	29,781	46,770	23	1,042	666	319	74,945	2,595	2,580
15 Shipments	25,266,974	969,150	1,929,614	503,117	894,123	26,184	10,105	2,024	73,751	6,105,799	7,677,107	29,442
16 Lake Superior	5,434,781	399,355	55,112	1,382	205,227	10	65	59	834	26,075	4,141,057	29,442
17 Lakes Huron and St. Clair	2,344,451	81,417	27,760	6,204	4,829	2,390	2,530	108	1,828	13,574	62,451	.....
18 Lake Michigan	10,090,366	347,466	1,772,109	489,971	629,410	23,258	7,056	1,857	65,297	257	3,446,947	.....
19 Lake Erie	6,386,392	140,912	74,528	5,560	63,657	250	.....	.....	215	5,196,182	26,644	.....
20 Lake Ontario	771,727	.....	1	.....	.....	276	454	.....	69	764,355	.....	.....
21 St. Lawrence river	239,257	.....	104	.....	.....	.....	.....	.....	5,508	105,356	8	.....

TRANSPORTATION ON THE GREAT LAKES.

TIONS—Continued.

OF ALL THE COMMODITIES EMBRACED WITHIN THE 4 COMPREHENSIVE CLASSES TREATED OF IN TABLE 7, BUT AND RIVER TOTALS.

PRODUCTS OF MINES AND QUARRIES—continued.			OTHER PRODUCTS.				MANUFACTURES.						Miscellaneous merchandise and other commodities.		
Stone (all kinds).	Salt.	Other.	Animal products.	Live stock.	Lumber.	Ice.	Petroleum.	Sugar.	Iron, pig and bloom.	Other iron manufactures.	Liquors.	Cement, brick, and lime.	Other.		
547,229	549,350	23,587	123,495	2,086	12,205,655	18,912	52,582	103,317	310,224	320,303	14,236	181,462	28,735	1,623,115	1
87,276	20,142	3,627	1,808	106	476,067		20,322	2,048	48,287	182,333	324	20,580		437,140	2
25,975	78,523	4,674		175	2,426,485		690		32,723	6,479	54	19,584		26,415	3
63,410	399,539	4,262	61,146	1,137	6,385,159		6,852	101,260	147,190	110,024	11,908	18,572	16,734	446,984	4
364,380	50,988	10,812	59,820		2,450,780		334		88,002	2,422	1,750	122,520	11,666	576,807	5
1,738	120	212	9	592	320,242	18,912	142		22	30		188	312	11,800	6
4,450	29		712	76	146,922		24,242			2,015	200	18	23	123,909	7
311,015	296,513	15,997	63,513	1,215	6,857,257	18,912	28,120	100,434	162,248	300,039	9,650	58,256	16,750	822,911	8
69,587	20,119		301	70	7,910		20,249	2,032	21,023	182,329	310	20,116		379,251	9
25,975	25,043	771			390,434		690		11,241	6,302		9,411		10,550	10
51,944	225,582	4,202	2,071	477	3,548,923		6,847	98,402	46,717	109,575	9,140	9,674	4,761	339,533	11
161,779	25,661	10,812	59,820		2,444,580		334		82,667	718		18,872	11,666	61,928	12
1,730	79	212	9	592	320,240	18,912						165	300	5,527	13
	29		712	76	145,180					2,015	200	18	23	26,122	14
236,214	252,837	7,590	59,982	871	5,348,398		24,462	2,883	153,976	19,364	4,586	123,206	11,985	800,204	15
17,689	23	3,627	1,507	36	468,157		73	16	26,664	4	14	464		57,889	16
	53,480	3,903		175	2,036,051				21,482	177	54	10,173		15,865	17
11,466	173,957	60	58,475	660	2,836,236		5	2,867	100,473	449	2,768	8,898	11,073	107,451	18
202,601	25,327				6,200				5,335	18,704	1,750	103,648		514,879	19
8	50				12		142		22	30		23	12	6,273	20
4,450					1,742		24,242							97,847	21

CTIONS—Continued.

THE FOREGOING TABLES, AND GIVEN BY THEIR VARIOUS UNITS OF MEASUREMENT.

FURNITURE (BUNDLES).		EMPTY BARRELS (NUMBER).		JUGS (NUMBER).		TRUNKS (NUMBER).		SASH (PACKAGES).		PIANOS (NUMBER).		PULP (BALES).		
Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	
	29	1,242	6,200		450		8,031		25		1	560		1
														2
														3
														4
														5
														6
	29	1,242	6,200		450		31		25		1	560		7
														8
														9
														10
							8,000							11
														12
														13
														14
														15
CURRANTS (BARRELS).		RAILROAD IRON (BARS).		TOBACCO (CASES).		FISH POLES (NUMBER).		BARLEY (BUSHELS).		SUNDRIES (PACKAGES).		BLACKBERRIES (GALLONS).		
Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	
30		558		159		1,600	1,845	4		110,277	96,189		10	16
														17
														18
														19
														20
	30	558		159		1,600								21
														22
														23
								4						24
														25
							1,845			110,277	96,189			26
														27
													10	28
														29
														30
														31
														32
FAN MILLS (NUMBER).		FEED CUTTERS (NUMBER).		SALT FISH (PACKAGES).		BASKETS (BUNDLES).		ROPE (COILS).		SPIKES (KEGS).				
Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.			
	300		100		4,454		33,660	66	49		5	33		
												34		
												35		
												36		
					4,454							37		
							33,660					38		
								66	49			39		

STATISTICS OF TRANSPORTATION.

TRAFFIC OPERATIONS—Continued.

TABLE 15.—FREIGHT MOVEMENT OF UNCLASSIFIED COMMODITIES—REDUCTION OF THE UNCLASSIFIED COMMODITIES FROM THEIR VARIOUS UNITS OF MEASUREMENT INTO THE UNIFORM UNIT OF TONS.

COMMODITIES.	DESCRIPTION AND NUMBER OF UNITS OF MEASUREMENT.		Estimated weight in pounds per unit.	Estimated result in tons.	COMMODITIES.	DESCRIPTION AND NUMBER OF UNITS OF MEASUREMENT.		Estimated weight in pounds per unit.	Estimated result in tons.
	Number.	Unit.				Number.	Unit.		
Total	9,220,235		α99.95	460,777.23	Jars	260	Cases	150.00	19.50
Merchandise	8,937,402	Packages	100.00	446,870.10	Crockery	239	do	500.00	59.75
Pound poles	4,071	Pound poles	550.00	1,119.53	Currants	30	Barrels	150.00	2.25
White lead	500	Pounds	1.00	0.25	Railroad iron	558	Bars	500.00	139.50
Household goods	42	Packages	100.00	2.10	Tobacco	159	Cases	450.00	35.78
Household goods	13	Lots	100.00	0.65	Fish poles	3,445	Fish poles	5.00	8.61
Vehicles	13	Vehicles	200.00	1.30	Barley	4	Bushels	48.00	0.10
Furniture	29	Bundles	100.00	1.45	Sundries	206,466	Packages	100.00	10,323.30
Empty barrels	7,442	Empty barrels	80.00	297.68	Blackberries	10	Gallons	16.00	0.05
Jugs	450	Jugs	10.00	2.25	Onions	800	Pounds	1.00	0.40
Trunks	8,031	Trunks	50.00	200.78	Chestnuts	100	do	1.00	0.05
Sash	25	Packages	100.00	1.25	Quinces	200	do	1.00	0.10
Piano	1	Piano	800.00	0.40	Paring pins	7,000	Paring pins	1.00	3.50
Pulp	560	Bales	100.00	28.00	Thrashing machines	30	Thrashing machines	6,000.00	90.00
Twine binders	1,000	Twine binders	300.00	150.00	Fan mills	300	Fan mills	500.00	75.00
Toys	25	Cases	100.00	1.25	Feed cutters	100	Feed cutters	500.00	25.00
Cabbages	2,000	Cabbages	10.00	10.00	Salt fish	4,454	Packages	200.00	445.40
Empty cases	696	Empty cases	25.00	8.70	Baskets	33,660	Bundles	50.00	841.50
					Rope	115	Coils	200.00	11.50
					Spikes	5	Kegs	100.00	0.25

α Average weight per unit.

TABLE 16.—FREIGHT MOVEMENT BY CARGO TONNAGE—RESULT IN TONS OF THE LAKE AND RIVER FREIGHTING, GROUPED BY PRINCIPAL COMMODITIES, AND REACHED BY MAKING AN AGGREGATE OF EACH PORT'S LARGER BUSINESS, WHETHER OF RECEIPTS OR SHIPMENTS.

[Canadian coastwise trade excluded.]

COMMODITIES.	Amount in tons.	Per cent of commodities and class to total tonnage.	COMMODITIES.	Amount in tons.	Per cent of commodities and class to total tonnage.
Total	27,394,767	100.00	Class II.—Continued.		
Class I.—Products of agriculture	4,506,011	16.45	Iron ore	7,677,107	28.02
Wheat	969,150	3.54	Stone (all kinds)	311,015	1.14
Corn	1,929,614	7.04	Salt	296,513	1.08
Other grain	503,117	1.84	Other products of mines and quarries	58,117	0.21
Mill products	992,066	3.62	Class III.—Other products	6,921,985	25.27
All other farm products	112,064	0.41	Animal products	64,728	0.24
Class II.—Products of mines and quarries	14,448,551	52.74	Lumber	6,897,257	25.03
Coal	6,105,799	22.29	Class IV.—Manufactures, miscellaneous merchandise, and other commodities.	1,518,220	5.54

TRAFFIC OPERATIONS—Continued.

TABLE 17.—PASSENGER TRAFFIC—PASSENGER MOVEMENT ON ALL THE LAKES AND ST. LAWRENCE RIVER, THE ENTRIES ACCREDITED TO THE PRINCIPAL PORTS AND DIVIDED INTO THE CLASSES OF REGULAR, EXCURSION, AND FERRY PASSENGERS.

LAKES AND RIVER.	Total.	Regular.	Excursion.	Ferry.	LAKES AND RIVER.	Total.	Regular.	Excursion.	Ferry.
Total.....	2,235,993	775,871	836,648	623,474	Lake Erie.....	598,885	114,768	369,924	114,193
Lake Superior.....	155,609	78,131	8,407	69,071	Buffalo.....	122,419	35,399	46,738	40,282
Duluth.....	7,010		7,010		Erie.....	43,815	21,355	22,460	
Marquette.....	148,599	78,131	1,397	69,071	Sandusky.....	173,696	57,260	43,530	72,906
Lake Huron.....	755,516	315,120	189,468	250,928	Suspension Bridge.....	1,909	754	150	1,005
Detroit.....	406,317	233,196	173,121		Toledo.....	237,046		257,046	
Port Huron.....	349,199	81,924	16,347	250,928	Lake Ontario.....	129,296	66,840	62,456	
Lake Michigan.....	506,696	197,453	123,230	186,008	Cape Vincent.....	50,467	45,422	5,045	
Chicago.....	110,093	11,182	56,511	42,400	Oswego.....	31,540	2,000	29,540	
Grand Haven.....	329,870	177,302	8,960	143,608	Rochester.....	47,289	19,418	27,871	
Milwaukee.....	66,733	8,974	57,759		St. Lawrence river.....	89,991	3,554	83,163	3,274
					Alexandria Bay.....	12,600		12,600	
					Clayton.....	446		446	
					Ogdensburg.....	76,945	3,554	70,117	3,274

TABLE 18.—FREIGHT VALUES—STATEMENT SHOWING ESTIMATED VALUE OF THE LAKE FREIGHT COMPUTED ON THE BASIS OF CARGO TONNAGE IN TABLE 16.

COMMODITIES.	Number of tons.	Estimated value per ton.	Estimated value of total tons.	COMMODITIES.	Number of tons.	Estimated value per ton.	Estimated value of total tons.
Total.....	27,394,767	\$13.12	\$359,482,437	Stone.....	311,015	\$10.00	\$3,110,150
Wheat.....	969,150	32.67	31,662,131	Salt.....	296,513	10.00	2,965,130
Corn.....	1,929,614	15.00	28,944,210	Other products of mines and quarries.....	58,117	155.38	9,030,140
Other grain.....	593,117	39.22	19,732,249	Animal products.....	64,728	100.00	6,472,800
Mill products.....	992,066	50.00	49,603,300	Lumber.....	6,857,257	10.30	70,629,747
All other farm products.....	112,064	89.79	10,062,215	Manufactures, miscellaneous merchandise, and other commodities. (a)	1,518,220	54.33	82,484,892
Coal.....	6,105,799	3.50	21,370,297				
Iron ore.....	7,677,107	3.05	23,415,176				

a Not including the unclassified merchandise given in Table 15.

STATISTICS OF TRANSPORTATION.

EARNINGS AND EXPENSE ACCOUNTS.

TABLE 19.—FINANCIAL ACCOUNT IN GENERAL—GROSS EARNINGS, EXPENSES, AND NET EARNINGS OF 1,841 REPORTING (a) CRAFT GIVEN SEPARATELY BY STEAMERS, SAILING VESSELS, AND UNRIGGED, AND ENTERED FOR EACH PORT AND EACH LAKE.

ALL CRAFT.				STEAMERS—Continued.			
PORTS.	Gross earnings.	Expenses.	Net earnings.	PORTS.	Gross earnings.	Expenses.	Net earnings.
Total	\$24,369,895	\$19,443,241	\$4,926,654	Lake Ontario	\$140,339	\$129,829	\$10,510
Lake Superior	1,197,586	1,029,151	168,435	Cape Vincent	56,843	50,310	6,533
Duluth	92,181	77,585	14,596	Oswego	35,235	33,703	1,532
Marquette	1,105,405	951,566	153,839	Rochester	48,261	45,816	2,445
Lake Huron	6,955,133	5,349,465	1,605,668	St. Lawrence river	335,250	234,673	100,577
Detroit	3,792,600	2,812,931	979,669	Alexandria Bay	12,197	8,612	3,585
Port Huron	3,162,533	2,536,534	625,999	Clayton	1,100	634	466
Lake Michigan	5,826,148	4,843,150	982,999	Ogdensburg	321,953	225,427	96,526
Chicago	2,111,312	1,844,654	266,658	SAILING VESSELS.			
Grand Haven	1,316,530	1,127,890	188,631	Total	6,480,424	5,513,536	966,888
Milwaukee	2,398,306	1,870,606	527,700	Lake Superior	216,729	189,636	27,093
Lake Erie	9,649,090	7,021,541	2,627,549	Duluth	216,729	189,636	27,093
Buffalo	2,785,853	2,194,577	591,276	Marquette	216,729	189,636	27,093
Cleveland	4,344,697	3,441,929	902,768	Lake Huron	2,168,585	1,786,731	381,854
Erie	886,634	719,305	166,729	Detroit	847,471	683,159	164,312
Sandusky	808,840	683,054	125,786	Port Huron	1,321,114	1,103,572	217,542
Suspension Bridge	200,321	166,026	34,295	Lake Michigan	1,703,669	1,467,024	236,645
Toledo	562,745	416,050	146,695	Chicago	729,614	630,888	98,726
Lake Ontario	335,483	302,658	32,825	Grand Haven	352,229	317,381	34,848
Cape Vincent	104,713	88,069	16,644	Milwaukee	621,826	518,755	103,071
Oswego	133,255	127,157	6,098	Lake Erie	2,179,345	1,881,899	297,446
Rochester	97,515	87,432	10,083	Buffalo	409,487	352,903	56,584
St. Lawrence river	406,455	297,267	109,188	Cleveland	1,128,342	992,019	136,323
Alexandria Bay	12,197	8,612	3,585	Erie	13,980	13,980	4,938
Clayton	1,100	634	466	Sandusky	346,525	284,759	61,767
Ogdensburg	393,158	288,021	105,137	Suspension Bridge	84,191	72,861	11,330
STEAMERS.				Toledo	191,381	165,377	26,004
Total	17,808,329	13,861,485	3,946,844	Lake Ontario	195,144	172,829	22,315
Lake Superior	962,150	825,088	136,462	Cape Vincent	47,870	37,759	10,111
Duluth	92,181	77,585	14,596	Oswego	98,020	93,454	4,566
Marquette	869,969	748,103	121,866	Rochester	49,254	41,616	7,638
Lake Huron	4,786,548	3,562,734	1,223,814	St. Lawrence river	16,952	15,417	1,535
Detroit	2,945,129	2,129,772	815,357	Alexandria Bay	12,197	8,612	3,585
Port Huron	1,841,419	1,432,962	408,457	Clayton	1,100	634	466
Lake Michigan	4,122,479	3,376,135	746,344	Ogdensburg	321,953	225,427	96,526
Chicago	1,381,698	1,213,766	167,932	UNRIGGED.			
Grand Haven	964,301	810,518	153,783	Total	81,142	68,220	12,922
Milwaukee	1,776,480	1,351,851	424,629	Lake Superior:			
Lake Erie	7,401,563	5,732,426	1,729,137	Marquette	18,707	13,827	4,880
Buffalo	2,368,184	1,834,458	533,726	Lake Erie:			
Cleveland	3,215,855	2,442,910	765,945	Buffalo	8,182	7,216	966
Erie	867,716	705,925	161,791	St. Lawrence river:			
Sandusky	522,314	398,295	124,019	Ogdensburg	54,253	47,177	7,076
Suspension Bridge	116,130	93,165	22,965				
Toledo	371,364	250,673	120,691				

a Steamers, 1,072; sailing vessels, 758; unriggered, 11. See supplementary table below.

SUPPLEMENTARY—ESTIMATED GROSS EARNINGS, EXPENSES, AND NET EARNINGS OF 896 CRAFT NOT REPORTING THESE ITEMS, THE ESTIMATE BEING BASED ON THE FIGURES ACTUALLY REPORTED FOR 1,841 CRAFT.

CLASS OF VESSELS.	Number of vessels.	Gross earnings.	Expenses.	Net earnings.	CLASS OF VESSELS.	Number of vessels.	Gross earnings.	Expenses.	Net earnings.
Total	896	\$11,093,957	\$8,448,811	\$2,645,146	Sailing vessels	204	\$1,760,221	\$1,497,593	\$262,628
Steamers	395	7,140,938	5,107,627	2,033,311	Unriggered	297	2,192,798	1,843,591	349,207

TRANSPORTATION ON THE GREAT LAKES.

EARNINGS AND EXPENSE ACCOUNTS—Continued.

TABLE 20.—EXPENSE ACCOUNT IN DETAIL—ITEMIZED EXPENSE ACCOUNT OF 1,841 REPORTING (a) CRAFT, GIVEN SEPARATELY, FOR STEAMERS, SAILING VESSELS, AND UNRIGGED, SUBDIVIDED INTO THE VARIOUS ITEMS CONSTITUTING THE RUNNING AND SHORE EXPENSES.

ALL CRAFT.

LAKES AND RIVER.	Class.	Total expenses.	Port charges.	Wages.	Provisions.	Current repairs.	Fuel for the steamers.
Total.....	All classes.....	\$19,443,241	\$895,140	\$5,076,802	\$1,322,925	\$1,681,694	\$2,975,915
Great Lakes and St. Lawrence river.....	Steam.....	13,861,485	412,193	4,235,980	990,678	1,158,494	2,975,915
	Sail.....	5,513,536	465,248	1,422,957	328,207	522,557	.....
	Unrigged.....	68,220	17,699	17,865	4,040	643	.....
Lake Superior.....	All classes.....	1,029,151	67,771	322,173	80,209	76,515	200,405
	Steam.....	825,688	40,450	279,093	66,671	57,364	200,405
	Sail.....	189,636	24,189	40,307	12,678	18,849	.....
Duluth.....	Unrigged.....	13,827	3,132	2,773	860	302	.....
	Steam.....	77,585	2	32,149	6,537	7,995	15,061
	All classes.....	951,506	67,769	290,024	73,672	68,520	185,344
Marquette.....	Steam.....	748,103	40,448	246,944	60,134	49,369	185,344
	Sail.....	189,636	24,189	40,307	12,678	18,849	.....
	Unrigged.....	13,827	3,132	2,773	860	302	.....
Lake Huron.....	All classes.....	5,349,465	346,364	1,475,828	363,117	527,793	745,130
	Steam.....	3,562,734	124,394	1,105,881	271,668	348,815	745,130
	Sail.....	1,786,731	221,970	369,947	91,449	178,978	.....
Detroit.....	All classes.....	2,812,931	67,949	766,335	201,964	307,339	411,078
	Steam.....	2,129,772	38,001	626,589	169,535	248,556	411,078
	Sail.....	683,159	29,858	139,746	32,429	58,783	.....
Port Huron.....	All classes.....	2,536,534	278,415	709,493	161,153	220,454	334,052
	Steam.....	1,432,902	86,303	479,292	102,133	100,259	334,052
	Sail.....	1,103,572	192,112	230,201	59,020	120,195	.....
Lake Michigan.....	All classes.....	4,843,159	312,993	1,666,268	366,462	426,488	625,071
	Steam.....	3,376,135	169,067	1,140,815	256,676	253,580	625,071
	Sail.....	1,467,024	143,926	525,453	109,786	172,908	.....
Chicago.....	All classes.....	1,844,654	87,047	667,549	140,394	162,602	227,702
	Steam.....	1,213,766	31,262	446,404	94,397	82,289	227,702
	Sail.....	630,888	55,785	221,145	45,997	80,313	.....
Grand Haven.....	All classes.....	1,127,899	60,315	424,532	92,245	95,430	148,405
	Steam.....	810,518	21,875	305,414	65,822	66,611	148,405
	Sail.....	317,381	38,440	119,118	26,423	28,819	.....
Milwaukee.....	All classes.....	1,870,606	165,631	574,187	133,823	168,456	248,964
	Steam.....	1,351,851	115,930	388,997	96,457	104,680	248,964
	Sail.....	518,755	49,701	185,190	37,366	63,776	.....
Lake Erie.....	All classes.....	7,621,541	125,324	2,021,736	461,289	621,563	1,333,833
	Steam.....	5,732,426	59,450	1,591,422	368,247	478,706	1,333,833
	Sail.....	1,881,899	65,874	430,314	93,042	142,807	.....
Buffalo.....	Unrigged.....	7,216	.....	7,166	.....	50	.....
	All classes.....	2,194,577	29,766	611,058	142,982	166,848	528,315
	Steam.....	1,834,458	20,292	533,468	127,336	148,119	528,315
Cleveland.....	Sail.....	352,903	9,474	70,424	15,646	18,679	.....
	Unrigged.....	7,216	.....	7,166	.....	50	.....
	All classes.....	3,441,929	38,919	875,722	179,694	298,118	498,948
Erie.....	Steam.....	2,449,910	14,960	652,146	131,313	218,854	498,948
	Sail.....	992,019	23,959	223,576	48,381	79,264	.....
	All classes.....	719,905	2,941	176,716	49,445	67,877	145,258
Sandusky.....	Steam.....	705,925	4	174,087	48,821	67,103	145,258
	Sail.....	13,980	2,937	2,629	624	774	.....
	All classes.....	683,054	40,608	196,222	49,689	42,306	90,652
Suspension Bridge.....	Steam.....	398,295	20,132	127,533	38,528	19,006	90,652
	Sail.....	284,759	20,476	68,689	16,161	23,300	.....
	All classes.....	166,026	21	37,905	10,743	15,581	23,612
Toledo.....	Steam.....	93,165	5	26,355	7,415	11,199	23,612
	Sail.....	72,861	16	11,550	3,328	4,382	.....
	All classes.....	416,050	13,069	124,113	28,736	30,833	47,048
.....	Steam.....	250,673	4,057	77,833	19,834	14,425	47,048
	Sail.....	165,377	9,012	46,280	8,902	16,408	.....

a Steamers, 1,072; sailing vessels, 758; unriggered, 11. See supplementary table, page 105.

STATISTICS OF TRANSPORTATION.

EARNINGS AND EXPENSE ACCOUNTS—Continued.

TABLE 20.—EXPENSE ACCOUNT IN DETAIL, ETC.—Continued.

ALL CRAFT—Continued.

LAKES AND RIVER.	Class.	Total expenses.	Port charges.	Wages.	Provisions.	Current repairs.	Fuel for the steamers.
Lake Ontario	All classes....	\$902,658	\$10,071	\$122,204	\$82,931	\$19,019	\$24,818
	Steam	129,829	800	61,991	13,599	10,704	24,818
	Sail	172,829	9,271	60,213	19,332	8,315	.....
Cape Vincent.....	All classes....	88,060	3,203	37,421	17,065	5,147	11,724
	Steam	50,310	290	21,485	7,624	3,812	11,724
	Sail	37,759	2,913	15,936	9,441	1,335	.....
Oswego.....	All classes....	127,157	6,308	46,012	9,550	8,383	6,083
	Steam	33,703	.....	16,726	2,979	2,207	6,083
	Sail	93,454	6,308	29,286	6,571	6,176	.....
Rochester	All classes....	87,432	560	38,771	6,316	5,489	7,011
	Steam	45,816	510	23,780	2,996	4,685	7,011
	Sail	41,616	50	14,991	3,320	804	.....
St. Lawrence river	All classes....	297,267	32,617	68,593	18,917	10,316	46,658
	Steam	234,678	18,032	56,778	13,817	9,325	46,658
	Sail	15,417	18	3,889	1,920	700	.....
	Unrigged....	47,177	14,567	7,926	3,180	291	.....
Alexandria Bay	Steam	8,612	206	3,466	300	450	2,242
Clayton.....	Steam	634	.....	540	.....	.....	75
Ogdensburg	All classes....	288,021	32,411	64,587	18,617	9,866	44,341
	Steam	225,427	17,826	52,772	13,517	8,875	44,341
	Sail	15,417	18	3,889	1,920	700	.....
	Unrigged....	47,177	14,567	7,926	3,180	291	.....

TRANSPORTATION ON THE GREAT LAKES.

EARNINGS AND EXPENSE ACCOUNTS—Continued.

TABLE 20.—EXPENSE ACCOUNT IN DETAIL, ETC.—Continued.

ALL CRAFT—Continued.

LAKES AND RIVER.	Class.	Other running expenses.	Commission.	Insurance.	Taxes.	Office expenses.	Other shore expenses.
Total.....	All classes.....	\$4,353,323	\$158,863	\$885,303	\$138,773	\$235,085	\$1,110,418
Great Lakes and St. Lawrence river.....	Steam.....	2,266,582	105,079	679,453	108,733	235,085	693,293
	Sail.....	2,062,546	53,274	203,632	29,990		425,125
	Unrigged.....	24,195	510	2,218	50		1,000
Lake Superior.....	All classes.....	216,176	1,125	33,066	4,653	7,993	10,065
	Steam.....	131,829	896	27,852	3,946	7,993	9,189
	Sail.....	77,667	199	5,214	657		9,876
	Unrigged.....	6,680	30		50		
Duluth.....	Steam.....	9,583		1,660	649	3,939	10
Marquette.....	All classes.....	206,593	1,125	31,406	4,004	4,054	19,055
	Steam.....	122,246	896	26,192	3,297	4,054	9,179
	Sail.....	77,667	199	5,214	657		9,876
	Unrigged.....	6,680	30		50		
Lake Huron.....	All classes.....	1,184,879	30,439	267,757	42,139	74,911	291,108
	Steam.....	460,967	16,581	197,838	33,914	74,911	182,635
	Sail.....	723,912	13,858	69,919	8,225		108,473
Detroit.....	All classes.....	572,104	15,873	162,817	25,713	59,079	222,680
	Steam.....	276,308	7,002	126,847	21,749	59,079	144,038
	Sail.....	295,796	7,971	35,970	3,964		78,642
Port Huron.....	All classes.....	612,775	14,560	104,940	16,426	15,832	68,428
	Steam.....	184,659	8,079	70,991	12,165	15,832	38,597
	Sail.....	428,116	5,887	33,949	4,261		29,831
Lake Michigan.....	All classes.....	888,508	69,743	181,787	33,500	80,828	191,511
	Steam.....	501,236	61,652	154,086	27,840	80,828	105,284
	Sail.....	387,272	8,091	27,701	5,660		86,227
Chicago.....	All classes.....	337,904	49,272	61,793	5,566	22,563	82,292
	Steam.....	180,794	43,943	38,793	3,845	22,563	41,774
	Sail.....	157,110	5,329	23,000	1,721		40,488
Grand Haven.....	All classes.....	201,737	3,048	32,357	8,990	17,140	43,700
	Steam.....	113,850	1,710	32,267	7,371	17,140	30,053
	Sail.....	87,887	1,338	90	1,619		13,647
Milwaukee.....	All classes.....	348,867	17,423	87,637	18,944	41,125	65,549
	Steam.....	206,592	15,999	83,026	16,624	41,125	33,457
	Sail.....	142,275	1,424	4,611	2,320		32,092
Lake Erie.....	All classes.....	1,917,147	49,181	369,298	57,239	67,408	597,523
	Steam.....	1,103,575	19,962	277,325	41,831	67,408	390,667
	Sail.....	813,572	29,219	91,973	15,408		206,856
Buffalo.....	All classes.....	495,959	7,936	74,452	1,005	8,495	127,761
	Steam.....	329,542	4,185	53,966	580	8,495	80,100
	Sail.....	166,417	3,751	20,486	425		47,661
Cleveland.....	All classes.....	904,218	30,086	239,467	45,364	43,176	288,217
	Steam.....	521,452	11,685	182,141	34,383	43,176	140,852
	Sail.....	382,766	18,401	57,326	10,981		147,365
Erie.....	All classes.....	114,313	211	3,099			160,045
	Steam.....	107,297	211	3,099			160,045
	Sail.....	7,016					
Sandusky.....	All classes.....	207,647	6,885	31,753	6,993	3,508	6,841
	Steam.....	71,419	2,563	21,915	4,503	3,508	3,536
	Sail.....	136,228	4,272	9,838	2,490		3,305
Suspension Bridge.....	All classes.....	71,394	410	1,600	25	805	3,930
	Steam.....	19,239	160	1,600	25	805	2,750
	Sail.....	52,155	250				1,180
Toledo.....	All classes.....	123,616	3,703	18,927	3,852	11,424	10,729
	Steam.....	54,626	1,158	14,604	2,340	11,424	3,324
	Sail.....	68,990	2,545	4,323	1,512		7,405

STATISTICS OF TRANSPORTATION.

EARNINGS AND EXPENSE ACCOUNTS—Continued.

TABLE 20.—EXPENSE ACCOUNT IN DETAIL, ETC.—Continued.

ALL CRAFT—Continued.

LAKES AND RIVER.	Class.	Other running expenses.	Commission.	Insurance.	Taxes.	Office expenses.	Other shore expenses.
Lake Ontario.....	All classes.....	\$60,235	\$3,543	\$11,681	\$694	\$933	\$16,529
	Steam.....	8,302	1,636	3,556	654	933	2,836
	Sail.....	51,933	1,907	8,125	40		13,693
Cape Vincent.....	All classes.....	9,481	873	1,905	215	583	452
	Steam.....	2,935	518	937	200	583	202
	Sail.....	6,546	355	968	15		250
Oswego.....	All classes.....	30,202	2,403	7,460	33		10,723
	Steam.....	1,581	1,115	1,420	8		1,584
	Sail.....	28,621	1,288	6,040	25		9,139
Rochester.....	All classes.....	20,552	267	2,316	446	350	5,354
	Steam.....	3,786	3	1,199	446	350	1,050
	Sail.....	16,766	264	1,117			4,304
St. Lawrence river.....	All classes.....	86,378	4,832	21,714	548	3,012	3,682
	Steam.....	60,673	4,352	18,796	548	3,012	2,682
	Sail.....	8,190		700			
	Unrigged.....	17,515	480	2,218			1,000
Alexandria Bay.....	Steam.....	1,948					
Clayton.....	Steam.....	19					
Ogdensburg.....	All classes.....	84,411	4,832	21,714	548	3,012	3,682
	Steam.....	58,706	4,352	18,796	548	3,012	2,682
	Sail.....	8,190		700			
	Unrigged.....	17,515	480	2,218			1,000

TRANSPORTATION ON THE GREAT LAKES.

EARNINGS AND EXPENSE ACCOUNTS—Continued.

TABLE 20.—EXPENSE ACCOUNT IN DETAIL, ETC.—Continued.

STEAMERS.

LAKES AND RIVER.	Total expenses.	Port charges.	Wages.	Provisions.	Current repairs.	Fuel.
Total.....	\$13,861,485	\$412,193	\$4,235,980	\$990,678	\$1,158,494	\$2,975,915
Lake Superior.....	825,688	40,450	279,093	66,671	57,364	200,405
Duluth.....	77,585	2	32,149	6,537	7,995	15,061
Marquette.....	748,103	40,448	246,944	60,134	49,369	185,344
Lake Huron.....	3,562,734	124,394	1,105,881	271,668	348,815	745,130
Detroit.....	2,129,772	38,091	626,589	169,535	248,556	411,078
Port Huron.....	1,432,962	86,303	479,292	102,133	100,259	334,052
Lake Michigan.....	3,376,135	169,067	1,140,815	256,676	253,580	625,071
Chicago.....	1,213,766	31,262	446,404	94,397	82,289	227,702
Grand Haven.....	810,518	21,875	305,414	65,822	66,611	148,405
Milwaukee.....	1,351,851	115,930	388,997	96,457	104,680	248,964
Lake Erie.....	5,732,426	59,450	1,591,422	368,247	478,706	1,333,833
Buffalo.....	1,834,458	20,292	533,468	127,336	148,119	528,315
Cleveland.....	2,449,910	14,960	652,146	131,313	218,854	498,948
Erie.....	705,925	4	174,087	48,821	67,103	145,258
Sandusky.....	398,295	20,132	127,533	33,528	19,006	90,652
Suspension Bridge.....	98,165	5	26,355	7,415	11,199	23,612
Toledo.....	250,673	4,057	77,833	19,834	14,425	47,048
Lake Ontario.....	129,829	800	61,991	13,599	10,704	24,818
Cape Vincent.....	50,310	290	21,485	7,624	3,812	11,724
Oswego.....	33,703	.....	16,726	2,979	2,207	6,083
Rochester.....	45,816	510	23,780	2,996	4,685	7,011
St. Lawrence river.....	234,673	18,032	56,778	13,817	9,325	46,658
Alexandria Bay.....	8,612	206	3,466	300	450	2,242
Clayton.....	634	.....	540	.....	.....	75
Ogdensburg.....	225,427	17,826	52,772	13,517	8,875	44,341

LAKES AND RIVER.	Other running expenses.	Commission.	Insurance.	Taxes.	Office expenses.	Other shore expenses.
Total.....	\$2,266,582	\$105,079	\$679,453	\$108,733	\$235,085	\$693,293
Lake Superior.....	131,829	896	27,852	3,946	7,993	9,189
Duluth.....	9,583	.....	1,660	649	3,939	10
Marquette.....	122,246	896	26,192	3,297	4,054	9,179
Lake Huron.....	460,967	16,581	197,838	33,914	74,911	182,635
Detroit.....	276,308	7,902	126,847	21,749	59,079	144,088
Port Huron.....	184,659	8,679	70,991	12,165	15,832	38,597
Lake Michigan.....	501,236	61,652	154,086	27,840	80,828	105,284
Chicago.....	180,794	43,943	38,793	3,845	22,563	41,774
Grand Haven.....	113,850	1,710	32,267	7,371	17,140	30,053
Milwaukee.....	206,592	15,999	83,026	16,624	41,125	33,457
Lake Erie.....	1,103,573	19,962	277,325	41,831	67,408	390,667
Buffalo.....	329,542	4,185	53,966	580	8,495	80,160
Cleveland.....	521,452	11,685	182,141	34,383	43,170	140,832
Erie.....	107,297	211	3,099	.....	.....	160,045
Sandusky.....	71,419	2,563	21,915	4,503	3,508	3,536
Suspension Bridge.....	19,239	160	1,600	25	805	2,750
Toledo.....	54,626	1,158	14,604	2,340	11,424	3,324
Lake Ontario.....	8,302	1,636	3,556	654	933	2,836
Cape Vincent.....	2,935	518	937	200	583	202
Oswego.....	1,581	1,115	1,420	8	.....	1,584
Rochester.....	3,786	3	1,199	446	350	1,050
St. Lawrence river.....	60,673	4,352	18,796	548	3,012	2,682
Alexandria Bay.....	1,948	.....	.....	.....	.....	.....
Clayton.....	19	.....	.....	.....	.....	.....
Ogdensburg.....	58,706	4,352	18,796	548	3,012	2,682

STATISTICS OF TRANSPORTATION.

EARNINGS AND EXPENSE ACCOUNTS—Continued.

TABLE 20.—EXPENSE ACCOUNT IN DETAIL, ETC.—Continued.

SAILING VESSELS.

LAKES AND RIVER.	Total expenses.	Port charges.	Wages.	Provisions.	Current repairs.	Fuel.
Total	\$5,518,536	\$465,248	\$1,422,957	\$328,207	\$522,557	
Lake Superior	189,636	24,189	40,307	12,078	18,849	
Duluth						
Marquette	189,636	24,189	40,307	12,078	18,849	
Lake Huron	1,788,731	221,970	309,947	91,449	178,978	
Detroit	683,159	29,858	139,746	32,429	58,783	
Port Huron	1,103,572	192,112	230,201	59,020	120,195	
Lake Michigan	1,467,024	143,926	525,453	109,786	172,908	
Chicago	630,388	55,785	221,145	45,997	80,313	
Grand Haven	317,381	38,440	119,118	26,423	28,819	
Milwaukee	518,755	49,701	185,190	37,366	63,776	
Lake Erie	1,881,899	65,874	423,143	93,042	142,807	
Buffalo	352,903	9,474	70,424	15,646	18,679	
Cleveland	992,019	23,959	223,576	48,381	79,264	
Erie	13,980	2,937	2,629	824	774	
Sandusky	284,759	20,476	68,689	16,161	23,300	
Suspension Bridge	72,861	16	11,550	3,328	4,382	
Toledo	165,377	9,012	46,280	8,902	16,408	
Lake Ontario	172,829	9,271	60,213	19,332	8,315	
Cape Vincent	37,759	2,913	15,933	9,441	1,335	
Oswego	93,454	6,308	29,286	6,571	6,176	
Rochester	41,616	50	14,991	3,320	804	
St. Lawrence river	15,417	18	3,889	1,920	700	
Alexandria Bay						
Clayton						
Ogdensburg	15,417	18	3,889	1,920	700	

LAKES AND RIVER.	Other running expenses.	Commission.	Insurance.	Taxes.	Office expenses.	Other shore expenses.
Total	\$2,062,546	\$53,274	\$203,632	\$29,990		\$425,125
Lake Superior	77,667	190	5,214	657		9,876
Duluth						
Marquette	77,667	190	5,214	657		9,876
Lake Huron	723,912	13,858	69,919	8,225		108,473
Detroit	295,796	7,971	35,970	3,904		78,642
Port Huron	428,116	5,887	33,949	4,261		29,831
Lake Michigan	387,272	8,091	27,701	5,660		86,227
Chicago	157,110	5,329	23,000	1,721		40,488
Grand Haven	87,887	1,338	90	1,619		13,647
Milwaukee	142,275	1,424	4,611	2,320		32,092
Lake Erie	813,572	29,219	91,973	15,408		206,856
Buffalo	166,417	3,751	20,486	425		47,001
Cleveland	382,766	18,401	57,326	10,981		147,365
Erie	7,016					
Sandusky	136,228	4,272	9,838	2,490		3,305
Suspension Bridge	52,155	250				1,180
Toledo	68,990	2,545	4,323	1,512		7,405
Lake Ontario	51,933	1,907	8,125	40		13,693
Cape Vincent	6,546	355	968	15		250
Oswego	28,621	1,288	6,040	25		9,139
Rochester	16,766	264	1,117			4,304
St. Lawrence river	8,190		700			
Alexandria Bay						
Clayton						
Ogdensburg	8,190		700			

TRANSPORTATION ON THE GREAT LAKES.

EARNINGS AND EXPENSE ACCOUNTS—Continued.

TABLE 20.—EXPENSE ACCOUNT IN DETAIL, ETC.—Continued.

UNRIGGED.

LAKES AND RIVER.	Total expenses.	Port charges.	Wages.	Provisions.	Current repairs.	Fuel.
Total	\$68,220	\$17,699	\$17,865	\$4,040	\$643	
Lake Superior: Marquette	13,827	3,132	2,773	860	302	
Lake Erie: Buffalo	7,216		7,166		50	
St. Lawrence river: Ogdensburg	47,177	14,567	7,926	3,180	291	

LAKES AND RIVER.	Other running expenses.	Commission.	Insurance.	Taxes.	Office expenses.	Other shore expenses.
Total	\$24,195	\$510	\$2,218	\$50		\$1,000
Lake Superior: Marquette	6,680	30		50		
Lake Erie: Buffalo						
St. Lawrence river: Ogdensburg	17,515	480	2,218			1,000

SUPPLEMENTARY—ESTIMATED ITEMIZED EXPENSE ACCOUNT OF 896 CRAFT NOT REPORTING THESE DETAILS, THE ESTIMATE BEING BASED ON THE FIGURES ACTUALLY REPORTED FOR 1,841 CRAFT.

CLASS OF VESSELS.	Number of vessels.	Total expenses.	Port charges.	Wages.	Provisions.	Current repairs.	Fuel.
Total	896	\$8,448,811	\$755,952	\$2,421,389	\$562,378	\$584,233	\$1,096,536
Steamers	395	5,107,627	151,881	1,560,915	365,035	426,869	1,096,536
Sailing vessels	204	1,497,593	124,589	381,046	87,597	139,946	
Unrigged	297	1,843,591	479,482	479,428	109,446	17,418	

CLASS OF VESSELS.	Other running expenses.	Commission.	Insurance.	Taxes.	Office expenses.	Other shore expenses.
Total	\$2,043,005	\$66,800	\$364,982	\$70,511	\$86,623	\$396,402
Steamers	835,168	38,718	250,359	40,065	86,623	255,478
Sailing vessels	552,371	14,267	54,534	29,090		113,853
Unrigged	655,466	13,815	60,089	1,356		27,091

STATISTICS OF TRANSPORTATION.

EARNINGS AND EXPENSE ACCOUNTS—Continued.

TABLE 21.—EMPLOYÉS AND WAGES BY PORTS—MONTHLY WAGES PAID TO ALL EMPLOYÉS OF 1,841 REPORTING (a) CRAFT, WITH SEPARATE ENTRIES FOR STEAMERS, SAILING VESSELS, AND UNRIGGED, GIVEN IN DETAIL.

STEAMERS.

PORTS.	CAPTAINS.		FIRST MATES.		SECOND MATES.		CLERKS.		FIRST ENGINEERS.		SECOND ENGINEERS.		WHEELMEN.		LOOKOUTS.	
	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.
Total.....	1,069	\$116,678	577	\$41,289	339	\$19,663	117	\$7,751	1,067	\$93,193	597	\$37,159	1,040	\$37,452	565	\$19,078
Superior.....	90	9,156	33	2,178	12	722	6	310	94	7,976	39	2,350	51	1,800	18	577
Duluth.....	20	1,020	1	50	.....	.....	.....	.....	24	1,810	1	40	1	50	.....	.....
Marquette.....	70	7,536	32	2,128	12	722	6	310	70	6,166	38	2,310	50	1,750	18	577
Huron.....	250	27,607	180	12,468	82	4,591	40	2,644	249	22,402	178	11,277	323	10,841	155	5,215
Detroit.....	113	13,551	91	6,409	49	2,861	30	2,049	113	10,947	88	5,749	163	5,619	93	3,229
Port Huron.....	137	14,056	89	6,059	33	1,730	10	595	136	11,455	90	5,528	160	5,222	62	1,986
Michigan.....	323	33,067	141	9,575	68	3,869	42	2,800	327	27,010	156	9,193	239	8,842	85	2,823
Chicago.....	112	13,184	39	2,858	21	1,195	10	990	114	10,353	51	3,010	69	2,741	27	891
Grand Haven.....	115	9,430	42	2,570	14	720	23	1,210	116	8,395	43	2,253	75	2,555	15	486
Milwaukee.....	96	10,453	60	4,147	33	1,954	9	690	97	8,262	62	3,930	95	3,546	43	1,448
Erie.....	338	41,347	205	15,988	170	10,086	19	1,411	330	31,023	204	13,248	394	14,070	291	9,968
Buffalo.....	126	14,203	69	5,581	53	3,539	5	461	120	11,060	66	3,952	129	4,690	114	3,663
Cleveland.....	119	17,138	81	6,296	73	4,242	.....	.....	119	11,889	83	5,661	164	6,499	101	3,874
Erie.....	24	3,238	18	1,468	17	1,052	4	300	24	2,415	17	1,195	35	1,215	34	1,020
Sandusky.....	38	3,659	21	1,465	13	736	7	495	36	3,086	22	1,440	40	1,392	19	672
Suspension Bridge.....	6	738	4	300	3	160	2	80	6	528	4	265	8	240	8	240
Toledo.....	25	2,371	12	878	6	357	1	75	25	2,045	12	735	18	634	15	499
Ontario.....	46	3,471	8	390	1	35	8	406	46	3,182	11	526	18	775	6	185
Cape Vincent.....	19	1,505	5	210	1	35	4	165	20	1,436	4	190	6	220	2	60
Oswego.....	14	976	.....	.....	.....	.....	1	45	13	886	3	136	2	125	1	30
Rochester.....	13	990	3	180	.....	.....	3	196	13	860	4	200	10	430	3	95
St. Lawrence river.....	22	2,030	10	690	6	360	2	90	21	1,600	9	565	15	524	10	310
Alexandria Bay.....	3	240	.....	.....	.....	.....	1	60	3	240	.....	.....	1	35	.....	.....
Clayton.....	1	60	.....	.....	.....	.....	.....	.....	1	60	.....	.....	.....	.....	.....	.....
Ogdensburg.....	18	1,730	10	690	6	360	1	30	17	1,300	9	565	14	489	10	310

(a) 1,072 steamers; 758 sailing vessels; 11 unriggered. See supplementary table, page 110.

TRANSPORTATION ON THE GREAT LAKES.

EARNINGS AND EXPENSE ACCOUNTS—Continued.

TABLE 21.—EMPLOYÉS AND WAGES BY PORTS, ETC.—Continued

STEAMERS—Continued.

PORTS.	WATCHMEN.		COOKS.		ASSISTANT COOKS.		SEAMEN.		DECK HANDS.		FIREMEN.		STEWARDS.		WAITERS.	
	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.
Total.....	503	\$16,583	720	\$37,106	306	\$6,419	52	\$1,870	2,278	\$53,902	1,463	\$53,411	75	\$4,457	215	\$4,395
Superior.....	25	783	55	2,552	17	385	-----	-----	133	3,600	102	3,702	2	100	7	120
Duluth.....	-----	-----	11	340	-----	-----	-----	-----	19	835	8	295	-----	-----	-----	-----
Marquette.....	25	783	44	2,212	17	385	-----	-----	114	2,765	94	3,407	2	100	7	120
Huron.....	160	5,277	204	9,902	82	1,482	15	450	569	13,263	381	13,392	17	1,037	83	1,794
Detroit.....	90	3,085	107	5,215	46	861	15	450	349	8,573	206	7,606	14	842	75	1,634
Port Huron.....	70	2,192	97	4,687	36	621	-----	-----	220	4,690	175	5,786	3	195	8	160
Michigan.....	113	3,797	217	12,429	63	1,351	19	640	574	16,897	352	13,520	16	975	44	813
Chicago.....	39	1,280	82	5,841	24	615	10	315	216	6,906	133	5,608	8	530	26	514
Grand Haven.....	25	751	55	2,621	15	300	2	30	130	3,452	119	4,064	6	310	15	246
Milwaukee.....	49	1,766	80	3,967	24	436	7	295	228	6,539	100	3,857	2	135	3	54
Erie.....	191	6,343	217	11,228	136	3,019	13	635	904	17,806	588	21,479	37	2,205	74	1,564
Buffalo.....	68	2,082	56	3,057	33	808	-----	-----	325	5,584	247	8,724	26	1,600	54	1,175
Cleveland.....	05	2,475	90	4,846	67	1,321	6	360	301	6,736	197	7,765	-----	-----	-----	-----
Erie.....	33	990	17	1,663	17	585	4	200	117	1,870	71	2,505	5	350	13	260
Sandusky.....	14	474	33	1,352	11	165	-----	-----	96	2,256	37	1,331	-----	-----	1	15
Suspension Bridge.....	-----	-----	4	240	3	60	-----	-----	12	340	10	323	-----	-----	-----	-----
Toledo.....	11	322	17	670	5	80	3	75	53	1,020	26	831	6	105	6	114
Ontario.....	7	178	14	467	2	42	-----	-----	62	1,740	22	693	3	140	7	104
Cape Vincent.....	5	108	8	312	2	42	-----	-----	30	790	14	393	3	140	6	84
Oswego.....	1	40	4	110	-----	-----	-----	-----	12	370	4	130	-----	-----	-----	-----
Rochester.....	1	30	2	45	-----	-----	-----	-----	20	580	4	170	-----	-----	1	20
St. Lawrence river.....	7	205	13	528	6	140	5	145	36	686	18	616	-----	-----	-----	-----
Alexandria Bay.....	1	25	-----	-----	-----	-----	-----	-----	3	90	1	40	-----	-----	-----	-----
Clayton.....	-----	-----	-----	-----	-----	-----	-----	-----	1	15	-----	-----	-----	-----	-----	-----
Ogdensburg.....	6	180	15	528	6	140	5	145	32	581	17	576	-----	-----	-----	-----

STATISTICS OF TRANSPORTATION.

EARNINGS AND EXPENSE ACCOUNTS—Continued.

TABLE 21.—EMPLOYÉS AND WAGES BY PORTS, ETC.—Continued.

STEAMERS—Continued.

PORTS.	BOYS.		CHAMBERMAIDS.		PORTERS.		MUSICIANS.		Number persons making ordinary crew.	Number persons given employment during year.	Total wages paid per month.	Average rate of wages per month.
	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.				
Total	30	\$549	40	\$1,097	89	\$2,245	8	\$520	11,150	19,444	\$554,907	\$49.73
Superior			1	18	6	150			691	1,078	36,479	52.79
Duluth									85	98	5,040	59.29
Marquette			1	18	6	150			606	980	31,439	51.88
Huron	7	120	20	420	17	417			3,012	4,650	144,608	48.01
Detroit	5	99	19	400	10	397			1,682	2,617	79,576	47.31
Port Huron	2	30	1	20	1	20			1,330	2,033	65,032	48.90
Michigan	14	215	15	361	5	121			2,813	5,612	148,397	52.75
Chicago	1	15	8	188	1	20			991	2,101	57,054	57.57
Grand Haven	11	170	2	50	4	101			827	1,603	39,713	48.02
Milwaukee	2	30	5	123					995	1,908	51,680	51.89
Erie	8	195	10	240	61	1,557	8	520	4,198	7,372	204,532	48.72
Buffalo	7	175	5	120	36	917			1,544	1,828	71,451	46.28
Cleveland					20	500			1,466	3,728	79,102	53.96
Erie			4	100					474	524	20,326	42.88
Sandusky	1	20			2	65			391	699	18,623	47.63
Suspension Bridge									70	137	3,514	50.20
Toledo			1	20	3	75	8	520	253	456	11,516	45.52
Ontario	1	10	3	58					265	321	12,402	46.80
Cape Vincent			2	38					131	163	5,728	43.73
Oswego									55	72	2,848	51.78
Rochester	1	10	1	20					79	86	3,826	48.43
St. Lawrence river									180	411	8,489	47.16
Alexandria Bay									13	13	730	56.15
Clayton									3	3	135	45.00
Ogdensburg									164	395	7,624	46.49

TRANSPORTATION ON THE GREAT LAKES.

EARNINGS AND EXPENSE ACCOUNTS—Continued.

TABLE 21.—EMPLOYÉES AND WAGES BY PORTS, ETC.—Continued.

SAILING VESSELS.

PORTS	CAPTAINS.		FIRST MATES.		SECOND MATES.		WATCHMEN.		COOKS.		SEAMEN.		BOYS.		Number of persons making ordinary crew.	Number of persons given employment during year.	Total wages paid per month.	Average rate of wages per month.
	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.				
Total.....	757	\$58,426	632	\$32,952	132	\$6,041	2	\$50	660	\$23,547	2,354	\$90,369	4	\$73	4,541	8,700	\$212,058	\$46.70
Superior:																		
Marquette	25	1,917	15	900	7	380			18	720	69	2,752			134	363	6,660	49.77
Huron	215	15,116	177	8,048	14	645			188	5,729	672	21,748			1,266	2,203	51,286	40.51
Detroit.....	70	5,187	56	2,892	7	313			62	1,894	232	8,185			427	629	18,411	43.12
Port Huron	145	9,929	121	5,216	7	332			126	3,835	440	13,563			839	1,574	32,875	39.18
Michigan	309	23,427	257	13,606	36	1,939	2	50	269	10,774	817	35,437			1,690	2,862	85,233	50.43
Chicago	99	8,828	90	5,223	22	1,208	1	30	95	4,296	365	16,955			672	1,269	36,540	54.38
Grand Haven	86	5,608	62	3,070	5	244	1	20	70	2,487	172	7,054			396	684	18,483	46.67
Milwaukee.....	124	8,991	105	5,313	9	487			104	3,991	280	11,428			622	909	30,210	48.57
Erie.....	165	15,235	154	8,877	70	3,395			154	5,471	671	25,825	4	73	1,218	2,912	58,876	48.34
Buffalo	28	2,458	28	1,439	4	203			27	961	118	4,592			205	398	9,653	47.09
Cleveland.....	76	7,629	73	4,494	51	2,384			73	2,732	320	12,509	4	73	597	1,584	29,921	50.12
Erie	1	100	1	60	1	51			1	30	4	120			8	8	361	45.13
Sandusky	31	2,600	24	1,417	12	664			25	819	109	4,454			201	571	9,954	49.52
Suspension Bridge	8	555	7	280					7	210	36	1,070			58	90	2,115	36.47
Toledo	21	1,893	21	1,187	2	93			21	719	84	2,980			149	261	6,872	46.12
Ontario	40	2,546	28	1,471	5	282			28	811	110	4,337			211	294	9,447	44.77
Cape Vincent	20	943	10	415					10	270	40	1,341			80	93	2,969	37.11
Oswego	12	993	11	662	4	237			11	343	43	1,836			81	133	4,071	50.26
Rochester.....	8	610	7	394	1	45			7	198	27	1,160			50	68	2,407	48.14
St. Lawrence river:																		
Ogdensburg.....	3	185	1	50					3	42	15	270			22	66	547	24.86

STATISTICS OF TRANSPORTATION.

EARNINGS AND EXPENSE ACCOUNTS—Continued.

TABLE 21.—EMPLOYÉS AND WAGES BY PORTS, ETC.—Continued.

UNRIGGED.

PORTS.	CAPTAINS.		FIRST MATES.		COOKS.		SEAMEN.		Number of persons making ordinary crew.	Number of persons given employment during year.	Total wages paid per month.	Average rate of wages per month.
	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.				
Total	11	\$695	5	\$230	7	\$141	38	\$1,016	61	151	\$2,082	\$34.13
Superior: Marquette	1	100	1	60	1	50	4	156	7	28	366	52.29
Erie: Buffalo	3	230	1	60			10	385	14	14	675	48.21
St. Lawrence river: Ogdensburg	7	365	3	110	6	91	24	475	40	109	1,041	26.03

SUPPLEMENTARY—ESTIMATED NUMBER OF EMPLOYÉS AND MONTHLY WAGES PAID ON 896 CRAFT NOT REPORTING THESE DETAILS, THE ESTIMATE BEING BASED ON THE FIGURES ACTUALLY REPORTED FOR 1,841 CRAFT.

CLASS OF VESSELS.	Number of vessels.	CAPTAINS.		FIRST MATES.		SECOND MATES.		CLERKS.		FIRST ENGINEERS.		SECOND ENGINEERS.		WHEELMEN.		LOOKOUTS.	
		No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.
Total	896	895	\$77,501	512	\$30,035	160	\$9,011	43	\$2,849	393	\$34,325	220	\$13,781	385	\$13,864	213	\$7,199
Steamers	395	394	43,005	213	15,242	125	7,250	43	2,849	393	34,325	220	13,781	385	13,864	213	7,199
Sailing vessels	204	204	15,731	169	8,813	35	1,761										
Unrigged	297	297	18,765	130	5,980												

CLASS OF VESSELS.	WATCHMEN.		COOKS.		ASSISTANT COOKS.		SEAMEN.		DECK HANDS.		FIREMEN.		STEWARDS.		WAITERS.	
	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.
Total	152	\$5,004	639	\$24,128	118	\$2,476	1,667	\$52,088	850	\$20,145	547	\$19,971	28	\$1,674	79	\$1,615
Steamers	151	4,979	271	13,967	118	2,476	19	683	850	20,145	547	19,971	28	1,674	79	1,615
Sailing vessels	1	25	177	6,315			630	24,186								
Unrigged			191	3,846			1,018	27,219								

CLASS OF VESSELS.	BOYS.		CHAMBERMAIDS.		PORTERS.		Number of persons making ordinary crew.	Number of persons given employment during year.	Total wages paid per month.	Average rate of wages per month.
	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.				
Total	12	\$219	19	\$421	33	\$832	6,965	13,586	\$317,138	\$45.53
Steamers	11	201	19	421	33	832	4,112	7,165	204,479	49.73
Sailing vessels	1	18					1,217	2,330	56,849	46.71
Unrigged							1,636	4,091	55,810	34.11

TRANSPORTATION ON THE GREAT LAKES.

EARNINGS AND EXPENSE ACCOUNTS—Continued.

TABLE 22.—EMPLOYÉS AND WAGES BY LAKE TOTALS—MONTHLY WAGES PAID TO ALL EMPLOYÉS OF 1,841 REPORTING (a) CRAFT, WITH SEPARATE ENTRIES FOR STEAMERS, SAILING VESSELS, AND UNRIGGED, BUT GIVEN ONLY IN TOTALS FOR EACH LAKE AND ST. LAWRENCE RIVER.

ALL CRAFT.

LAKES AND RIVER.	CAPTAINS.		FIRST MATES.		SECOND MATES.		CLERKS.		FIRST ENGI-NEERS.		SECOND ENGI-NEERS.		WHEELMEN.		LOOKOUTS.	
	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.
Total	1,837	\$175,799	1,214	\$74,471	471	\$26,304	117	\$7,751	1,067	\$93,193	597	\$37,159	1,040	\$37,452	565	\$19,078
Superior	116	11,173	49	3,138	10	1,102	6	310	94	7,976	39	2,350	51	1,800	18	577
Huron	465	42,725	357	20,516	96	5,236	40	2,644	249	22,402	178	11,277	323	10,841	155	5,215
Michigan	632	56,494	398	23,181	104	5,808	42	2,890	327	27,010	156	9,193	239	8,842	85	2,823
Erie	506	56,812	360	24,925	240	13,481	10	1,411	330	31,023	204	13,248	304	14,670	291	9,968
Ontario	86	6,017	36	1,801	6	317	8	406	46	3,182	11	526	18	775	6	185
St. Lawrence river	32	2,580	14	850	6	360	2	90	21	1,600	9	565	15	524	10	310

LAKES AND RIVER.	WATCHMEN.		COOKS.		ASSISTANT COOKS.		SEAMEN.		DECK HANDS.		FIREMEN.		STEWARDS.		WAITERS.	
	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.
Total	505	\$16,633	1,387	\$60,794	306	\$6,419	2,444	\$93,255	2,278	\$53,992	1,463	\$53,411	75	\$4,457	215	\$4,395
Superior	25	783	74	3,322	17	385	73	2,908	133	3,600	102	3,702	2	100	7	120
Huron	160	5,277	392	15,631	82	1,482	687	22,198	569	13,263	381	13,392	17	1,037	83	1,794
Michigan	115	3,847	486	23,203	63	1,351	836	36,077	574	16,897	352	13,529	16	975	44	813
Erie	191	6,343	371	16,699	136	3,019	694	26,815	904	17,806	588	21,479	37	2,205	74	1,564
Ontario	7	178	42	1,278	2	42	110	4,337	62	1,740	22	693	3	140	7	104
St. Lawrence river	7	205	22	661	6	140	44	890	36	686	18	616				

LAKES AND RIVER.	BOYS.		CHAMBERMAIDS.		PORTERS.		MUSICIANS.		Number persons making ordinary crew.	Number persons given employment during year.	Total wages paid per month.	Average rate of wages per month.
	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.				
Total	34	\$622	49	\$1,097	89	\$2,245	8	\$520	15,701	28,295	\$769,047	\$48.79
Superior			1	18	6	150			892	1,469	43,514	52.30
Huron	7	129	20	420	17	417			4,278	6,853	195,894	45.70
Michigan	14	215	15	361	5	121			4,508	8,474	233,630	51.88
Erie	12	268	10	240	61	1,557	8	520	5,430	10,298	264,083	48.63
Ontario	1	10	3	58					476	615	21,849	45.90
St. Lawrence river									242	586	10,077	41.64

STEAMERS.

LAKES AND RIVER.	CAPTAINS.		FIRST MATES.		SECOND MATES.		CLERKS.		FIRST ENGI-NEERS.		SECOND ENGI-NEERS.		WHEELMEN.		LOOKOUTS.	
	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.
Total	1,069	\$116,678	577	\$41,289	339	\$19,663	117	\$7,751	1,067	\$93,193	597	\$37,159	1,040	\$37,452	565	\$19,078
Superior	90	9,156	33	2,178	12	722	6	310	94	7,976	39	2,350	51	1,800	18	577
Huron	250	27,607	180	12,468	82	4,591	40	2,644	249	22,402	178	11,277	323	10,841	155	5,215
Michigan	323	33,067	141	9,575	68	3,869	42	2,890	327	27,010	156	9,193	239	8,842	85	2,823
Erie	338	41,347	205	15,988	170	10,086	19	1,411	330	31,023	204	13,248	304	14,670	291	9,968
Ontario	46	3,471	8	390	1	35	8	406	46	3,182	11	526	18	775	6	185
St. Lawrence river	22	2,030	10	690	6	360	2	90	21	1,600	9	565	15	524	10	310

LAKES AND RIVER.	WATCHMEN.		COOKS.		ASSISTANT COOKS.		SEAMEN.		DECK HANDS.		FIREMEN.		STEWARDS.		WAITERS.	
	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.
Total	503	\$16,583	720	\$37,106	306	\$6,419	52	\$1,870	2,278	\$53,992	1,463	\$53,411	75	\$4,457	215	\$4,395
Superior	25	783	55	2,552	17	385			133	3,600	102	3,702	2	100	7	120
Huron	160	5,277	204	9,902	82	1,482	15	450	569	13,263	381	13,392	17	1,037	83	1,794
Michigan	113	3,797	217	12,429	63	1,351	19	640	574	16,897	352	13,529	16	975	44	813
Erie	191	6,343	217	11,228	136	3,019	13	635	904	17,806	588	21,479	37	2,205	74	1,564
Ontario	7	178	14	467	2	42			62	1,740	22	693	3	140	7	104
St. Lawrence river	7	205	13	528	6	140	5	145	36	686	18	616				

a 1,072 steamers; 758 sailing vessels; 11 unrigged. See supplementary table, page 110.

STATISTICS OF TRANSPORTATION.

EARNINGS AND EXPENSE ACCOUNTS—Continued.

TABLE 22.—EMPLOYÉES AND WAGES BY LAKE TOTALS, ETC.—Continued.

STEAMERS—Continued.

LAKES AND RIVER.	BOYS.		CHAMBERMAIDS.		PORTERS.		MUSICIANS.		Number persons making ordinary crew.	Number persons given employment during year.	Total wages paid per month.	Average rate of wages per month.
	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.				
Total	30	\$549	49	\$1,097	89	\$2,245	8	\$520	11,159	19,444	\$554,907	\$49.73
Superior			1	18	6	150			691	1,078	36,479	52.79
Huron	7	129	20	420	17	417			3,012	4,650	144,608	48.01
Michigan	14	225	15	361	5	121			2,813	5,612	148,397	52.75
Erie	8	195	10	240	61	1,557	8	520	4,198	7,372	204,532	48.72
Ontario	1	10	3	58					265	321	12,402	46.80
St. Lawrence river									180	411	8,489	47.16

SAILING VESSELS.

LAKES AND RIVER.	CAPTAINS.		FIRST MATES.		SECOND MATES.		CLERKS.		FIRST ENGINEERS.		SECOND ENGINEERS.		WHEELMEN.		LOOKOUTS.	
	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.
Total	757	\$58,426	632	\$32,952	132	\$6,641										
Superior	25	1,917	15	900	7	380										
Huron	215	15,116	177	8,048	14	645										
Michigan	309	23,427	257	13,606	36	1,939										
Erie	165	15,235	154	8,877	70	3,395										
Ontario	40	2,546	28	1,471	5	282										
St. Lawrence river	3	185	1	50												

LAKES AND RIVER.	WATCHMEN.		COOKS.		ASSISTANT COOKS.		SEAMEN.		DECK HANDS.		FIREMEN.		STEWARDS.		WAITERS.	
	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.
Total	2	\$50	660	\$23,547			2,354	\$90,369								
Superior			18	720			69	2,752								
Huron			188	5,729			672	21,748								
Michigan	2	50	269	10,774			817	35,437								
Erie			154	5,471			671	25,825								
Ontario			28	811			110	4,337								
St. Lawrence river			3	42			15	270								

LAKES AND RIVER.	BOYS.		CHAMBERMAIDS.		PORTERS.		MUSICIANS.		Number persons making ordinary crew.	Number persons given employment during year.	Total wages paid per month.	Average rate of wages per month.
	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.				
Total	4	\$73							4,541	8,700	\$212,058	\$46.70
Superior									134	363	6,669	49.77
Huron									1,266	2,203	51,286	40.51
Michigan									1,690	2,862	85,233	50.43
Erie	4	73							1,218	2,912	58,876	48.34
Ontario									211	294	9,447	44.77
St. Lawrence river									22	66	547	24.86

TRANSPORTATION ON THE GREAT LAKES.

EARNINGS AND EXPENSE ACCOUNTS—Continued.

TABLE 22.—EMPLOYÉS AND WAGES BY LAKE TOTALS, ETC.—Continued.

UNRIGGED.

LAKES AND RIVER.	CAPTAINS.		FIRST MATES.		SECOND MATES.		CLERKS.		FIRST ENGI-NEERS.		SECOND ENGI-NEERS.		WHEELMEN.		LOOKOUTS.	
	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.
Total	11	\$695	5	\$230												
Superior.....	1	100	1	60												
Erie.....	3	230	1	60												
St. Lawrence river.....	7	365	3	110												

LAKES AND RIVER.	WATCHMEN.		COOKS.		ASSISTANT COOKS		SEAMEN.		DECK HANDS.		FIREMEN.		STEWARDS.		WAITERS.	
	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.
Total			7	\$141			38	\$1,016								
Superior.....			1	50			4	156								
Erie.....							10	385								
St. Lawrence river.....			6	91			24	475								

LAKES AND RIVER.	BOYS.		CHAMBERMAIDS.		PORTERS.		MUSICIANS.		Number persons making ordinary crew.	Number persons given employment during year.	Total wages paid per month.	Average rate of wages per month.
	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.				
Total									61	151	\$2,082	\$34.13
Superior.....									7	28	366	52.29
Erie.....									14	14	675	48.21
St. Lawrence river.....									40	109	1,041	26.03

STATISTICS OF TRANSPORTATION.

EARNINGS AND EXPENSE ACCOUNTS—Continued.

TABLE 23.—FUEL ACCOUNT—AMOUNTS AND VALUE OF THE COAL AND WOOD USED AS FUEL ON 1,072 REPORTING STEAMERS, WITH SEPARATE ENTRIES UNDER THE HEADS OF CLASSIFIED OCCUPATIONS. (a)

LAKES AND RIVER.	Tons of coal.	Cords of wood.	Cost of fuel.	PASSENGER, PASSENGER AND FREIGHT, AND FREIGHT.			FERRY.			TOWBOATS.			MISCELLANEOUS.		
				Coal in tons.	Wood in cords.	Value.	Coal in tons.	Wood in cords.	Value.	Coal in tons.	Wood in cords.	Value.	Coal in tons.	Wood in cords.	Value.
Total.....	1, 118, 677	62, 319	\$2, 975, 915	922, 826	31, 227	\$2, 392, 310	4, 828	2, 096	\$15, 595	160, 007	26, 036	\$475, 002	31, 016	2, 960	\$93, 008
Lake Superior.....	67, 994	1, 100	200, 405	48, 001	.....	138, 851	1, 127	.....	3, 546	17, 066	1, 100	54, 020	1, 800	.....	3, 988
Duluth.....	4, 065	800	15, 061	150	.....	488	.....	.....	.....	4, 515	800	14, 573	.....	.....	.....
Marquette.....	63, 329	300	185, 344	47, 851	.....	138, 363	1, 127	.....	3, 546	12, 551	300	39, 447	1, 800	.....	3, 988
Lake Huron.....	324, 209	.....	745, 130	252, 066	.....	590, 833	439	.....	1, 325	54, 509	.....	107, 731	16, 595	.....	45, 241
Detroit.....	191, 118	.....	411, 078	157, 305	.....	346, 014	.....	.....	.....	23, 348	.....	35, 827	10, 465	.....	29, 237
Port Huron.....	133, 091	.....	334, 052	95, 361	.....	244, 819	439	.....	1, 325	31, 161	.....	71, 904	6, 130	.....	16, 004
Lake Michigan.....	205, 591	60, 843	625, 071	150, 347	30, 851	399, 437	1, 920	2, 096	6, 790	44, 678	24, 936	189, 726	8, 646	2, 960	29, 118
Chicago.....	68, 898	8, 678	227, 792	35, 025	7, 067	110, 012	640	.....	228	27, 336	1, 611	98, 812	5, 897	.....	18, 650
Grand Haven.....	58, 877	29, 048	148, 495	47, 212	16, 761	95, 742	1, 000	2, 096	5, 722	10, 563	7, 231	44, 176	102	2, 960	2, 765
Milwaukee.....	77, 816	23, 117	248, 964	68, 110	7, 023	193, 683	280	.....	840	6, 779	16, 094	46, 738	2, 647	.....	7, 703
Lake Erie.....	497, 268	.....	1, 333, 833	455, 216	.....	1, 213, 339	1, 039	.....	2, 692	37, 713	.....	105, 571	3, 300	.....	12, 231
Buffalo.....	185, 154	.....	528, 315	167, 061	.....	476, 043	889	.....	2, 392	16, 404	.....	46, 824	800	.....	3, 656
Cleveland.....	208, 301	.....	498, 948	186, 474	.....	451, 314	.....	.....	.....	15, 577	.....	42, 459	1, 250	.....	5, 175
Erie.....	44, 138	.....	145, 258	43, 838	.....	144, 258	.....	.....	.....	.....	.....	.....	300	.....	1, 009
Sandusky.....	37, 217	.....	90, 652	35, 237	.....	85, 974	150	.....	300	1, 780	.....	4, 175	50	.....	200
Suspension Bridge.....	8, 300	.....	23, 612	7, 531	.....	20, 732	.....	.....	.....	749	.....	2, 880	.....	.....	.....
Toledo.....	19, 158	.....	47, 048	15, 055	.....	35, 018	.....	.....	.....	3, 203	.....	9, 230	900	.....	2, 800
Lake Ontario.....	6, 281	.....	24, 818	4, 117	.....	17, 051	.....	.....	.....	1, 769	.....	6, 197	395	.....	1, 570
Cape Vincent.....	2, 735	.....	11, 724	2, 395	.....	10, 124	.....	.....	.....	150	.....	500	250	.....	1, 100
Oswego.....	1, 644	.....	6, 083	240	.....	1, 016	.....	.....	.....	1, 259	.....	4, 597	145	.....	470
Rochester.....	1, 842	.....	7, 011	1, 482	.....	5, 911	.....	.....	.....	360	.....	1, 100	.....	.....	.....
St. Lawrence river.....	17, 334	376	46, 658	12, 479	376	32, 799	303	.....	1, 242	4, 272	.....	11, 757	280	.....	860
Alexandria Bay.....	718	.....	2, 242	638	.....	1, 982	.....	.....	.....	.....	.....	.....	80	.....	260
Clayton.....	4	.....	75	14	.....	75	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ogdensburg.....	16, 092	376	44, 341	11, 827	376	30, 742	303	.....	1, 242	4, 272	.....	11, 757	200	.....	600

a Not including estimated amount and value of the coal and wood used as fuel on 395 steamers not reporting these items. See supplementary table below.

SUPPLEMENTARY—ESTIMATED AMOUNT AND VALUE OF THE COAL AND WOOD USED AS FUEL ON 395 STEAMERS NOT REPORTING THESE ITEMS, THE ESTIMATE BEING BASED ON THE FIGURES ACTUALLY REPORTED FOR 1,072 STEAMERS.

GREAT LAKES AND ST. LAWRENCE RIVER.				Number of vessels.	Tons of coal.	Cords of wood.	Cost of fuel.
Total.....				395	412, 320	22, 969	\$1, 096, 536

COMPARATIVE STATISTICS.

TABLE 24.—STEAMERS BY CLASSES IN 1880 AND 1889—NUMBER, TONNAGE, AND VALUE OF STEAMERS IN 1880 AND 1889, AS REPORTED BY THE TENTH AND ELEVENTH CENSUSES, AND GIVEN BY CLASSES OF OCCUPATION.

CLASSES.	Year.		Tonnage.	Value.
	1880	1889		
Total	947	1,497	222,290 595,813	\$13,918,925 40,868,824
Passenger and freight	343	798	195,625 560,144	11,253,800 37,010,324
Ferry	28	40	3,624 4,702	340,500 498,000
Towing and harbor	426	520	20,275 26,200	1,978,800 2,837,800
Miscellaneous	150	109	2,766 4,767	345,825 522,700

TABLE 25.—EXPENSE ACCOUNTS IN 1880 AND 1889—GROSS EARNINGS OF STEAMERS OPERATING IN 1880 AND 1889, AS REPORTED BY THE TENTH AND ELEVENTH CENSUSES, TOGETHER WITH THE AMOUNTS PAID OUT IN WAGES DURING THOSE YEARS.

GREAT LAKES AND ST. LAWRENCE RIVER.	Year.		Gross earnings.	Paid in wages.
	1880	1889		
Total	\$12,136,228	\$3,293,964	24,949,267	5,794,895

TABLE 26.—CREWS AND WAGES IN 1880 AND 1889—NUMBER OF MEN CONSTITUTING THE ORDINARY CREWS EMPLOYED ON ALL OPERATING STEAMERS IN 1880 AND 1889, AS REPORTED BY THE TENTH AND ELEVENTH CENSUSES, TOGETHER WITH WAGES PAID, AVERAGES OF ANNUAL PAY, AND INCREASE PER MAN.

GREAT LAKES AND ST. LAWRENCE RIVER.	Year.	Total number men making ordinary crews.	Total wages paid.	Average annual wages per man.	Average annual increase in wages per man.

TABLE 27.—TRAFFIC IN 1880 AND 1889—FREIGHT MOVED AND PASSENGERS CARRIED BY STEAMERS OPERATING ON THE GREAT LAKES AND ST. LAWRENCE RIVER IN 1880 AND 1889, AS REPORTED BY THE TENTH AND ELEVENTH CENSUSES.

GREAT LAKES AND ST. LAWRENCE RIVER.	Year.	Freight in tons.	PASSENGERS.		
			Total.	Regular and excursion.	Ferry.
Total	4,368,171 20,143,483	1,356,010 2,235,993	926,250 1,612,519	429,767 623,474	

STATISTICS OF TRANSPORTATION.

COMPARATIVE STATISTICS—Continued.

TABLE 28.—FLEETS FOR THE 10 YEARS, 1880-1889—NUMBER AND TONNAGE OF ALL STEAMERS, SAILING VESSELS, AND BARGES REGISTERED IN THE CUSTOMS DISTRICTS OF THE GREAT LAKES AND ST. LAWRENCE RIVER.

1880

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		BARGES.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total.....	2,487	552,341.59	912	200,465.06	1,415	302,264.70	160	40,611.83
Oswegatchie, New York.....	24	2,366.34	12	765.10	5	357.60	7	1,243.64
Cape Vincent, New York.....	54	5,280.77	19	647.24	35	4,633.53		
Oswego, New York.....	88	17,064.80	22	956.57	66	16,108.23		
Genesee, New York.....	22	3,116.82	12	1,977.15	10	1,139.67		
Niagara, New York.....	12	3,458.04	4	1,785.71	8	1,672.33		
Buffalo Creek, New York.....	219	101,256.76	115	57,958.44	77	36,876.68	27	6,421.64
Dunkirk, New York.....	4	643.92	2	36.81	2	607.11		
Erie, Pennsylvania.....	35	23,464.14	23	18,353.07	12	5,111.07		
Cuyahoga, Ohio.....	175	64,286.58	55	21,313.27	119	42,421.97	1	551.34
Sandusky, Ohio.....	83	14,164.74	28	4,743.25	53	9,008.15	2	413.34
Miami, Ohio.....	53	10,505.78	23	3,416.75	24	4,845.20	6	2,243.83
Detroit, Michigan.....	313	70,814.88	113	34,738.37	166	29,912.52	34	6,163.95
Huron, Michigan.....	303	51,613.36	104	18,362.99	130	12,875.37	69	20,375.00
Superior, Michigan.....	67	5,462.03	47	2,180.30	20	3,281.73		
Michigan, Michigan.....	296	34,305.51	120	15,144.51	154	16,035.53	13	3,125.47
Chicago, Illinois.....	384	76,478.02	100	9,949.75	275	66,528.27		
Milwaukee, Wisconsin.....	348	67,854.92	89	16,931.23	258	50,800.11	1	73.58
Duluth, Minnesota.....	7	204.18	6	154.55	1	49.63		

1881

Total.....	2,494	601,291.10	970	257,250.65	1,368	303,271.86	156	40,768.59
Oswegatchie, New York.....	27	2,799.91	12	823.73	7	620.27	8	1,355.91
Cape Vincent, New York.....	50	5,035.42	13	706.90	26	4,328.52		
Oswego, New York.....	76	14,266.37	25	1,035.66	51	13,230.71		
Genesee, New York.....	22	3,692.43	14	2,299.68	8	1,392.75		
Niagara, New York.....	11	3,323.63	4	1,510.96	7	1,812.07		
Buffalo Creek, New York.....	215	100,756.95	125	63,410.02	65	30,909.86	25	6,437.07
Dunkirk, New York.....	2	47.13	1	22.97	1	24.16		
Erie, Pennsylvania.....	39	28,326.50	27	23,624.27	12	4,702.23		
Cuyahoga, Ohio.....	181	75,548.27	65	33,019.16	112	40,961.71	4	1,567.40
Sandusky, Ohio.....	80	15,546.45	28	5,883.70	50	9,301.15	2	361.60
Miami, Ohio.....	49	15,337.65	26	7,329.58	18	6,104.61	5	1,903.46
Detroit, Michigan.....	303	77,690.11	121	39,608.63	159	33,574.14	23	4,516.34
Huron, Michigan.....	337	63,031.34	118	24,396.16	144	17,207.42	75	21,427.76
Superior, Michigan.....	79	9,136.86	50	3,632.01	29	5,504.85		
Michigan, Michigan.....	305	34,978.84	138	15,429.97	154	16,423.40	13	3,125.47
Chicago, Illinois.....	367	75,595.47	107	11,916.42	260	63,679.05		
Milwaukee, Wisconsin.....	353	75,919.65	89	22,430.43	263	53,415.64	1	73.58
Duluth, Minnesota.....	9	240.12	7	170.40	2	78.72		

1882

Total.....	2,610	642,127.88	1,082	288,967.60	1,371	311,111.26	157	42,049.02
Oswegatchie, New York.....	31	3,057.16	15	878.64	7	702.61	9	1,475.91
Cape Vincent, New York.....	55	4,378.51	20	745.95	34	3,596.16	1	35.40
Oswego, New York.....	70	13,213.00	24	1,030.00	46	12,183.00		
Genesee, New York.....	23	3,822.99	16	2,485.00	7	1,337.99		
Niagara, New York.....	16	4,130.77	8	2,306.00	8	1,824.77		
Buffalo Creek, New York.....	210	109,574.60	128	70,996.15	61	30,092.54	30	8,485.91
Dunkirk, New York.....	2	47.13	1	22.97	1	24.16		
Erie, Pennsylvania.....	43	29,609.38	31	24,793.73	12	4,815.65		
Cuyahoga, Ohio.....	187	81,328.89	70	36,621.45	112	42,841.38	5	1,866.06
Sandusky, Ohio.....	87	16,581.25	29	7,201.87	56	9,017.78	2	361.60
Miami, Ohio.....	47	15,012.59	28	7,503.25	15	5,829.94	4	1,679.40
Detroit, Michigan.....	312	82,933.86	136	43,600.49	155	34,949.05	21	4,383.72
Huron, Michigan.....	343	69,113.96	118	24,466.24	154	24,085.75	71	20,561.97
Superior, Michigan.....	89	12,799.40	58	6,975.33	31	5,823.57		
Michigan, Michigan.....	345	37,610.93	174	17,479.33	158	17,006.13	13	3,125.47
Chicago, Illinois.....	368	73,179.21	117	12,534.43	251	60,644.78		
Milwaukee, Wisconsin.....	362	85,447.11	100	29,116.85	261	56,256.68	1	73.58
Duluth, Minnesota.....	11	287.05	9	208.33	2	78.72		

TRANSPORTATION ON THE GREAT LAKES.

COMPARATIVE STATISTICS—Continued.

TABLE 28.—FLEETS FOR THE 10 YEARS, 1880-1889, ETC.—Continued.

1883

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		BARGES.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total.....	2, 612	651, 792. 75	1, 130	301, 256. 87	1, 332	307, 734. 46	150	42, 801. 42
Oswegatchie, New York.....	23	2, 492. 99	13	814. 02	3	346. 06	7	1, 332. 91
Cape Vincent, New York.....	49	3, 465. 25	16	566. 36	32	2, 863. 49	1	35. 40
Oswego, New York.....	69	13, 312. 97	24	1, 123. 96	45	12, 189. 01		
Genesee, New York.....	24	3, 809. 71	17	2, 500. 60	7	1, 309. 11		
Niagara, New York.....	17	3, 676. 71	8	1, 511. 22	9	2, 165. 49		
Buffalo Creek, New York.....	215	116, 483. 40	127	77, 832. 61	59	30, 069. 50	29	8, 581. 29
Dunkirk, New York.....	1	24. 16			1	24. 16		
Erie, Pennsylvania.....	37	28, 513. 65	27	24, 737. 58	10	3, 776. 07		
Cuyahoga, Ohio.....	133	78, 251. 25	74	36, 197. 64	105	41, 033. 77	4	1, 019. 84
Sandusky, Ohio.....	83	18, 187. 99	33	7, 305. 69	48	10, 520. 70	2	361. 60
Miami, Ohio.....	48	15, 947. 55	27	7, 997. 65	17	6, 270. 50	4	1, 679. 40
Detroit, Michigan.....	309	88, 702. 02	145	49, 427. 40	153	36, 275. 85	11	2, 998. 77
Huron, Michigan.....	366	72, 304. 18	134	25, 802. 57	154	22, 908. 45	78	23, 593. 16
Superior, Michigan.....	90	16, 100. 82	58	7, 024. 66	32	9, 076. 16		
Michigan, Michigan.....	351	36, 763. 82	180	17, 289. 62	158	16, 348. 73	13	3, 125. 47
Chicago, Illinois.....	372	70, 979. 22	130	13, 433. 40	242	57, 545. 82		
Milwaukee, Wisconsin.....	365	82, 402. 25	107	27, 317. 08	257	55, 011. 59	1	73. 58
Duluth, Minnesota.....	10	374. 81	10	374. 81				

1884

Total.....	2, 558	657, 507. 36	1, 144	318, 062. 32	1, 294	305, 219. 52	120	33, 325. 52
Oswegatchie, New York.....	29	2, 688. 85	13	909. 82	7	394. 05	9	1, 384. 98
Cape Vincent, New York.....	50	3, 292. 91	19	690. 92	30	2, 566. 59	1	35. 40
Oswego, New York.....	66	12, 754. 83	21	1, 092. 64	45	11, 662. 19		
Genesee, New York.....	21	2, 533. 31	15	1, 241. 61	6	1, 291. 70		
Niagara, New York.....	16	3, 756. 96	7	1, 591. 47	8	1, 909. 23	1	256. 26
Buffalo Creek, New York.....	200	108, 199. 29	134	79, 918. 59	40	20, 659. 90	26	7, 620. 80
Dunkirk, New York.....	1	24. 16			1	24. 16		
Erie, Pennsylvania.....	36	28, 373. 37	27	24, 737. 58	9	3, 635. 79		
Cuyahoga, Ohio.....	184	87, 010. 15	78	43, 086. 39	104	43, 344. 18	2	579. 58
Sandusky, Ohio.....	83	22, 086. 58	34	7, 280. 01	47	14, 444. 97	2	361. 60
Miami, Ohio.....	52	17, 426. 56	28	8, 150. 85	20	7, 596. 31	4	1, 679. 40
Detroit, Michigan.....	309	93, 546. 94	144	54, 291. 00	154	36, 257. 17	11	2, 998. 77
Huron, Michigan.....	366	79, 210. 45	143	30, 220. 62	163	31, 361. 72	60	17, 628. 11
Superior, Michigan.....	93	16, 490. 50	61	7, 843. 65	32	8, 646. 85		
Michigan, Michigan.....	320	34, 039. 09	173	18, 673. 10	143	14, 585. 28	4	780. 62
Chicago, Illinois.....	366	68, 821. 93	129	13, 970. 78	237	54, 851. 15		
Milwaukee, Wisconsin.....	347	76, 403. 31	100	24, 503. 06	247	51, 900. 25		
Duluth, Minnesota.....	19	848. 17	18	760. 14	1	88. 03		

1885

Total.....	2, 540	672, 631. 47	1, 154	332, 365. 33	1, 282	310, 383. 47	104	29, 882. 97
Oswegatchie, New York.....	31	3, 497. 74	15	933. 60	4	538. 52	12	2, 025. 62
Cape Vincent, New York.....	52	4, 075. 85	21	1, 443. 57	31	2, 632. 28		
Oswego, New York.....	59	12, 952. 17	20	2, 286. 33	38	10, 464. 79	1	201. 05
Genesee, New York.....	18	2, 311. 54	12	1, 019. 84	6	1, 291. 70		
Niagara, New York.....	18	4, 440. 30	7	1, 591. 47	11	2, 348. 83		
Buffalo Creek, New York.....	199	110, 761. 44	132	82, 100. 94	39	19, 809. 92	28	8, 850. 58
Dunkirk, New York.....	1	24. 16			1	24. 16		
Erie, Pennsylvania.....	39	28, 491. 04	29	24, 714. 97	10	3, 776. 07		
Cuyahoga, Ohio.....	133	92, 640. 52	81	43, 900. 43	101	43, 537. 04	1	203. 05
Sandusky, Ohio.....	77	21, 842. 07	31	7, 310. 29	45	14, 242. 38	1	289. 40
Miami, Ohio.....	54	17, 405. 17	30	7, 684. 54	20	8, 041. 23	4	1, 679. 40
Detroit, Michigan.....	302	93, 718. 70	138	52, 744. 83	154	38, 198. 34	10	2, 775. 53
Huron, Michigan.....	362	83, 742. 69	141	32, 531. 20	179	37, 943. 77	42	12, 967. 72
Superior, Michigan.....	91	16, 246. 60	63	8, 033. 86	28	8, 212. 74		
Michigan, Michigan.....	316	32, 683. 25	169	17, 249. 26	143	14, 653. 37	4	780. 62
Chicago, Illinois.....	361	67, 486. 98	135	15, 040. 76	226	52, 446. 22		
Milwaukee, Wisconsin.....	355	79, 358. 84	110	27, 724. 76	245	51, 634. 08		
Duluth, Minnesota.....	22	952. 41	20	754. 68	1	88. 03	1	109. 70

STATISTICS OF TRANSPORTATION.

COMPARATIVE STATISTICS—Continued.

TABLE 28.—FLEETS FOR THE 10 YEARS, 1880-1889, ETC.—Continued.

1886

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		BARGES.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total.....	2,547	683,154.43	1,258	378,376.16	1,195	279,573.84	94	25,204.43
Oswegatchie, New York.....	41	5,150.92	17	1,058.73	9	939.77	15	3,152.42
Cape Vincent, New York.....	51	4,040.56	20	1,410.71	31	2,629.85	.....	.....
Oswego, New York.....	54	11,421.61	19	1,897.57	34	9,322.99	1	201.05
Genesee, New York.....	17	2,022.82	12	1,034.63	5	988.19	.....	.....
Niagara, New York.....	18	4,505.58	7	1,469.99	11	3,035.59	.....	.....
Buffalo Creek, New York.....	193	108,745.43	132	78,954.00	36	18,312.87	25	6,478.56
Dunkirk, New York.....	1	24.16	.....	.....	1	24.16	.....	.....
Erie, Pennsylvania.....	37	28,141.97	29	24,720.63	8	3,421.34	.....	.....
Cuyahoga, Ohio.....	194	101,492.56	85	54,792.13	108	46,327.55	1	372.88
Sandusky, Ohio.....	82	24,019.61	36	9,319.60	45	14,410.11	1	289.90
Miami, Ohio.....	57	17,862.90	30	6,710.48	23	9,473.02	4	1,679.40
Detroit, Michigan.....	305	100,146.84	140	55,879.98	154	41,407.48	11	2,858.88
Huron, Michigan.....	357	86,292.25	138	34,273.37	188	42,737.86	31	9,281.02
Superior, Michigan.....	102	15,807.16	76	9,537.84	26	6,269.32	.....	.....
Michigan, Michigan.....	312	31,875.68	171	17,157.75	137	13,937.31	4	780.62
Chicago, Illinois.....	352	66,730.22	216	51,010.77	136	15,719.45	.....	.....
Milwaukee, Wisconsin.....	352	79,052.32	110	28,523.37	242	50,528.95	.....	.....
Duluth, Minnesota.....	22	822.34	20	624.61	1	88.03	1	109.70

1887

Total.....	2,541	721,307.70	1,207	387,209.01	1,252	312,667.22	82	21,431.47
Oswegatchie, New York.....	44	10,069.70	20	6,235.71	8	659.22	16	3,174.77
Cape Vincent, New York.....	52	4,081.67	20	1,414.26	32	2,667.41	.....	.....
Oswego, New York.....	44	9,625.82	18	1,839.07	26	7,786.75	.....	.....
Genesee, New York.....	21	2,469.32	16	1,481.13	5	988.19	.....	.....
Niagara, New York.....	14	3,978.16	5	1,694.14	9	2,284.02	.....	.....
Buffalo Creek, New York.....	192	93,112.41	139	72,919.14	28	13,845.44	25	6,347.83
Dunkirk, New York.....	2	47.66	1	23.50	1	24.16	.....	.....
Erie, Pennsylvania.....	35	30,482.92	29	27,678.98	6	2,803.94	.....	.....
Cuyahoga, Ohio.....	205	123,888.58	93	70,720.70	111	52,795.00	1	372.88
Sandusky, Ohio.....	76	24,023.70	37	10,415.42	38	13,318.88	1	289.40
Miami, Ohio.....	68	17,900.27	32	7,877.68	27	8,343.19	4	1,679.40
Detroit, Michigan.....	285	103,032.26	137	58,893.89	140	42,012.43	8	2,125.94
Huron, Michigan.....	377	102,072.44	145	44,594.32	209	50,718.56	23	6,759.56
Superior, Michigan.....	105	17,091.61	78	10,287.61	27	6,804.00	.....	.....
Michigan, Michigan.....	300	29,761.36	168	16,628.74	129	12,560.63	3	571.99
Chicago, Illinois.....	356	72,420.05	137	22,605.98	219	49,814.07	.....	.....
Milwaukee, Wisconsin.....	350	76,515.28	114	31,361.98	236	45,153.30	.....	.....
Duluth, Minnesota.....	20	734.49	18	536.76	1	88.03	1	109.79

1888

Total.....	2,641	806,189.10	1,323	476,035.74	1,242	312,285.94	76	17,867.42
Oswegatchie, New York.....	47	11,225.71	21	6,683.49	9	1,328.08	17	3,214.14
Cape Vincent, New York.....	58	4,581.85	24	1,567.30	34	3,014.55	.....	.....
Oswego, New York.....	41	7,481.47	19	1,842.40	22	5,639.07	.....	.....
Genesee, New York.....	20	2,717.03	15	1,571.73	4	755.49	1	389.81
Niagara, New York.....	18	4,554.60	9	2,270.58	9	2,284.02	.....	.....
Buffalo Creek, New York.....	211	114,405.77	164	95,968.36	25	13,248.27	22	5,189.14
Dunkirk, New York.....	1	24.16	.....	.....	1	24.16	.....	.....
Erie, Pennsylvania.....	34	27,749.22	30	25,989.47	4	1,759.75	.....	.....
Cuyahoga, Ohio.....	221	147,589.39	117	95,527.66	103	51,688.85	1	372.88
Sandusky, Ohio.....	79	27,443.61	44	14,933.09	34	12,221.12	1	289.40
Miami, Ohio.....	64	18,755.39	34	7,959.87	28	10,482.97	2	312.55
Detroit, Michigan.....	292	113,920.50	146	70,963.84	140	42,285.88	6	670.78
Huron, Michigan.....	393	113,413.54	153	49,377.62	219	57,717.19	21	6,318.73
Superior, Michigan.....	120	21,668.43	84	12,951.08	36	8,717.35	.....	.....
Michigan, Michigan.....	295	27,747.62	169	15,756.66	123	11,418.97	3	571.99
Chicago, Illinois.....	345	74,226.75	144	28,453.90	201	45,772.85	.....	.....
Milwaukee, Wisconsin.....	374	86,851.99	125	43,012.65	249	43,839.34	.....	.....
Duluth, Minnesota.....	28	1,832.07	25	1,206.04	1	88.03	2	538.00

TRANSPORTATION ON THE GREAT LAKES.

COMPARATIVE STATISTICS—Continued.

TABLE 28.—FLEETS FOR THE 10 YEARS, 1880-1889, ETC.—Continued.

1889

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		BARGES.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	2,737	900,846.75	1,436	571,204.78	1,251	322,694.29	50	6,947.68
Oswegatchie, New York.....	53	13,251.25	21	7,767.11	9	2,538.04	23	2,945.50
Cape Vincent, New York.....	59	4,451.67	24	1,683.96	34	2,694.35	1	73.36
Oswego, New York.....	36	8,420.30	19	3,582.18	17	4,838.12		
Genesee, New York.....	24	3,779.69	16	1,769.31	8	2,010.38		
Niagara, New York.....	17	5,724.32	8	3,440.30	9	2,284.02		
Buffalo Creek, New York.....	227	127,379.04	183	109,439.62	34	17,024.34	10	915.08
Dunkirk, New York.....	4	508.30	3	484.14	1	24.16		
Erie, Pennsylvania.....	38	29,374.58	34	28,063.24	4	1,311.34		
Cuyahoga, Ohio.....	241	176,804.22	132	119,293.27	106	56,785.99	3	724.96
Sandusky, Ohio.....	82	30,579.75	49	16,691.69	33	13,888.06		
Miami, Ohio.....	59	16,563.90	36	9,497.00	23	7,066.90		
Detroit, Michigan.....	281	127,430.66	149	87,003.48	125	39,338.72	7	1,088.46
Huron, Michigan.....	450	131,632.10	186	60,109.41	263	71,432.36	1	90.33
Superior, Michigan.....	122	30,345.42	90	22,850.82	32	7,494.60		
Michigan, Michigan.....	304	30,381.58	178	18,157.52	123	11,052.07	3	571.99
Chicago, Illinois.....	342	73,528.81	151	28,897.39	191	44,631.42		
Milwaukee, Wisconsin.....	369	88,753.12	131	51,162.33	238	37,590.79		
Duluth, Minnesota.....	29	1,938.04	26	1,312.01	1	88.03	2	538.00

RECAPITULATION.

YEARS.	TOTAL.		STEAMERS.		SAILING VESSELS.		BARGES.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total for 10 years.....	25,797	6,889,190.13	11,616	3,521,093.52	13,002	3,067,206.56	1,149	300,890.05
1880.....	2,487	552,341.59	912	209,465.06	1,415	302,264.70	160	40,611.82
1881.....	2,494	601,291.10	970	257,250.65	1,368	303,271.86	156	40,768.59
1882.....	2,610	642,127.88	1,082	288,967.60	1,371	311,111.26	157	42,049.02
1883.....	2,612	651,782.75	1,130	301,256.87	1,332	307,734.46	150	42,801.42
1884.....	2,558	637,507.36	1,144	318,962.32	1,294	305,219.52	120	33,325.52
1885.....	2,540	672,631.47	1,154	332,365.33	1,282	310,383.47	104	29,882.67
1886.....	2,547	683,154.43	1,258	378,376.16	1,195	279,573.84	94	25,204.43
1887.....	2,541	721,307.70	1,207	387,209.01	1,252	312,667.22	82	21,431.47
1888.....	2,641	806,189.10	1,323	476,035.74	1,242	312,285.94	76	17,867.42
1889.....	2,737	900,846.75	1,436	571,204.78	1,251	322,694.29	50	6,947.68

STATISTICS OF TRANSPORTATION.

COMPARATIVE STATISTICS—Continued.

TABLE 29.—TONNAGES FOR THE 10 YEARS, 1880-1889—NUMBER, AGGREGATE, AND AVERAGE TONNAGE OF ALL CRAFT REGISTERED AT THE CUSTOMS DISTRICTS OF THE GREAT LAKES AND ST. LAWRENCE RIVER.

STEAMERS.

CUSTOMS DISTRICTS.	1880			1881			1882			1883			1884		
	Num-ber.	Tonnage.	Aver- age.	Num-ber.	Tonnage.	Aver- age.	Num-ber.	Tonnage.	Aver- age.	Num-ber.	Tonnage.	Aver- age.	Num-ber.	Tonnage.	Aver- age.
Oswegatchie, New York.....	12	765	64	12	824	69	15	879	59	13	814	63	13	910	70
Cape Vincent, New York.....	19	647	34	13	707	54	20	747	37	16	566	35	19	691	36
Oswego, New York.....	22	957	44	25	1,056	41	24	1,030	43	24	1,124	47	21	1,093	52
Genesee, New York.....	12	1,977	165	14	2,300	164	16	2,485	155	17	2,501	147	15	1,242	83
Niagara, New York.....	4	1,736	447	4	1,511	378	8	2,306	288	8	1,511	189	7	1,591	227
Buffalo Creek, New York.....	115	57,958	504	125	63,410	507	128	70,996	555	127	77,833	613	134	79,919	596
Dunkirk, New York.....	2	37	19	1	23	23	1	23	23	27	24,738	916	27	24,738	916
Erie, Pennsylvania.....	23	18,353	798	27	23,624	875	31	24,794	800	74	36,198	489	78	43,086	552
Cuyahoga, Ohio.....	55	21,313	388	65	33,019	508	70	36,621	523	74	36,198	489	78	43,086	552
Sandusky, Ohio.....	28	4,743	169	28	5,884	210	29	7,202	248	33	7,306	221	34	7,280	214
Miami, Ohio.....	23	3,417	149	26	7,330	282	28	7,503	268	27	7,998	296	28	8,151	291
Detroit, Michigan.....	113	34,738	307	121	39,609	327	136	45,600	321	145	49,427	341	144	54,291	377
Huron, Michigan.....	104	18,363	177	118	24,396	207	118	24,466	207	134	25,803	193	143	30,221	211
Superior, Michigan.....	47	2,180	46	50	3,632	73	58	6,976	120	58	7,025	121	61	7,844	129
Michigan, Michigan.....	129	15,145	117	138	15,430	112	174	17,479	100	180	17,290	96	173	18,673	108
Chicago, Illinois.....	109	9,950	91	107	11,916	111	117	12,534	107	130	13,433	103	129	13,971	108
Milwaukee, Wisconsin.....	89	16,981	191	89	22,430	252	100	29,117	291	107	27,317	255	100	24,503	245
Duluth, Minnesota.....	6	155	26	7	170	24	9	208	23	10	375	38	18	760	42

CUSTOMS DISTRICTS.	1885			1886			1887			1888			1889		
	Num-ber.	Tonnage.	Aver- age.	Num-ber.	Tonnage.	Aver- age.	Num-ber.	Tonnage.	Aver- age.	Num-ber.	Tonnage.	Aver- age.	Num-ber.	Tonnage.	Aver- age.
Oswegatchie, New York.....	15	934	62	17	1,059	62	20	6,236	312	21	6,683	318	21	7,767	370
Cape Vincent, New York.....	21	1,444	69	20	1,411	71	20	1,414	71	24	1,567	65	24	1,684	70
Oswego, New York.....	20	2,286	114	19	1,898	100	18	1,839	102	19	1,842	97	19	3,582	189
Genesee, New York.....	12	1,020	85	12	1,035	86	16	1,481	93	15	1,572	105	16	1,760	111
Niagara, New York.....	7	1,591	227	7	1,470	210	5	1,694	339	9	2,271	252	8	3,440	430
Buffalo Creek, New York.....	132	82,101	622	132	73,954	598	139	72,919	525	164	95,968	585	183	109,440	598
Dunkirk, New York.....	2	37	19	1	23	23	1	24	24	3	484	161	3	484	161
Erie, Pennsylvania.....	29	24,715	852	29	24,721	852	29	27,679	954	30	25,989	866	34	28,063	825
Cuyahoga, Ohio.....	81	48,900	604	85	54,792	645	93	70,721	760	117	95,528	816	132	119,293	904
Sandusky, Ohio.....	31	7,310	236	36	9,320	259	37	10,415	281	44	14,933	339	49	16,692	341
Miami, Ohio.....	30	7,685	256	30	6,710	224	32	7,878	246	34	7,960	234	36	9,497	264
Detroit, Michigan.....	138	52,745	382	140	55,880	399	137	58,894	430	146	70,964	486	149	87,003	584
Huron, Michigan.....	141	32,831	233	138	34,273	248	145	44,594	308	153	49,378	323	186	60,109	323
Superior, Michigan.....	63	8,034	128	76	9,538	126	78	10,288	132	84	12,951	154	90	22,851	254
Michigan, Michigan.....	169	17,249	102	171	17,158	100	168	16,629	99	169	15,757	93	178	18,158	102
Chicago, Illinois.....	135	15,041	111	216	51,011	236	137	22,606	165	144	28,454	198	151	28,897	191
Milwaukee, Wisconsin.....	110	27,725	252	110	28,522	259	114	31,362	275	125	43,013	344	131	51,162	391
Duluth, Minnesota.....	20	755	38	20	625	31	18	537	30	25	1,206	48	26	1,312	50

SAILING VESSELS.

CUSTOMS DISTRICTS.	1880			1881			1882			1883			1884		
	Num-ber.	Tonnage.	Aver- age.	Num-ber.	Tonnage.	Aver- age.	Num-ber.	Tonnage.	Aver- age.	Num-ber.	Tonnage.	Aver- age.	Num-ber.	Tonnage.	Aver- age.
Oswegatchie, New York.....	5	358	72	7	620	89	7	703	100	3	346	115	7	394	56
Cape Vincent, New York.....	35	4,634	132	26	4,329	167	34	3,596	106	32	2,863	89	30	2,567	86
Oswego, New York.....	66	16,108	244	51	13,231	259	46	12,183	265	45	12,189	271	45	11,662	259
Genesee, New York.....	10	1,140	114	8	1,393	174	7	1,338	191	7	1,309	187	6	1,292	215
Niagara, New York.....	8	1,672	209	7	1,813	259	8	1,825	228	9	2,165	241	8	1,909	239
Buffalo Creek, New York.....	77	36,877	479	65	30,910	476	61	30,093	493	59	30,070	510	40	20,660	517
Dunkirk, New York.....	2	607	304	1	24	24	1	24	24	1	24	24	40	20,660	517
Erie, Pennsylvania.....	17	5,111	426	12	4,702	392	12	4,816	401	10	3,776	378	9	3,636	404
Cuyahoga, Ohio.....	119	42,422	356	112	40,962	366	112	42,841	383	105	41,034	391	104	43,344	417
Sandusky, Ohio.....	53	9,008	170	50	9,301	186	56	9,018	161	48	10,521	219	47	14,445	307
Miami, Ohio.....	24	4,845	202	18	6,105	339	15	5,830	389	17	6,271	369	20	7,596	380
Detroit, Michigan.....	166	29,913	180	159	33,574	211	155	34,950	225	153	36,276	237	154	36,257	235
Huron, Michigan.....	130	12,875	99	144	17,207	119	154	24,086	156	154	22,908	149	163	31,362	192
Superior, Michigan.....	20	3,282	164	29	5,505	190	31	5,824	188	32	9,076	284	32	8,647	270
Michigan, Michigan.....	154	16,036	104	154	16,423	107	158	17,006	108	158	16,349	103	143	14,585	102
Chicago, Illinois.....	275	66,528	242	260	63,679	245	251	60,645	242	242	57,546	238	237	54,851	231
Milwaukee, Wisconsin.....	258	50,800	197	233	53,416	203	261	56,257	216	257	55,012	214	247	51,900	210
Duluth, Minnesota.....	1	50	50	2	79	40	2	79	40	1	50	50	1	50	50

COMPARATIVE STATISTICS—Continued.

TABLE 29.—TONNAGES FOR THE 10 YEARS, 1880-1889—Continued.

SAILING VESSELS—Continued.

CUSTOMS DISTRICTS.	1885			1886			1887			1888			1889		
	Num-ber.	Tonnage.	Aver- age.	Num-ber.	Tonnage.	Aver- age.	Num-ber.	Tonnage.	Aver- age.	Num-ber.	Tonnage.	Aver- age.	Num-ber.	Tonnage.	Aver- age.
Oswegatchie, New York.....	4	539	135	9	940	104	8	659	82	9	1,328	148	9	2,539	282
Cape Vincent, New York.....	31	2,632	85	31	2,630	85	32	2,667	83	34	3,015	89	34	2,694	79
Oswego, New York.....	38	10,465	275	34	9,323	274	26	7,787	300	22	5,639	256	17	4,838	285
Genesee, New York.....	6	1,292	215	5	988	198	5	988	198	4	755	189	8	2,010	251
Niagara, New York.....	11	2,849	259	11	3,036	276	9	2,284	254	9	2,284	254	9	2,284	254
Buffalo Creek, New York.....	39	19,810	508.	36	18,313	509	28	13,845	494	25	13,248	530	34	17,024	501
Dunkirk, New York.....	1	24	24	1	24	24	1	24	24	1	24	24	1	24	24
Erie, Pennsylvania.....	10	3,776	378	8	3,421	428	6	2,804	467	4	1,760	440	4	1,311	323
Cuyahoga, Ohio.....	101	43,537	431	108	46,328	429	111	52,795	476	103	51,689	502	106	56,786	536
Sandusky, Ohio.....	45	14,242	316	45	14,410	320	38	13,319	351	34	12,221	359	33	13,888	421
Miami, Ohio.....	20	8,041	402	23	9,473	412	27	8,343	309	28	10,483	374	23	7,067	307
Detroit, Michigan.....	154	38,198	248	154	41,407	269	140	42,012	300	140	42,286	302	125	39,339	315
Huron, Michigan.....	179	37,944	212	188	42,738	227	209	50,719	243	219	57,717	264	263	71,432	272
Superior, Michigan.....	28	8,213	293	26	6,269	241	27	6,804	252	36	8,717	242	32	7,495	234
Michigan, Michigan.....	143	14,653	102	137	13,937	102	120	12,561	97	123	11,419	93	123	11,652	95
Chicago, Illinois.....	226	52,446	232	136	15,719	116	219	49,814	227	201	45,773	228	191	44,631	234
Milwaukee, Wisconsin.....	245	51,634	211	242	50,529	209	236	45,153	191	249	43,839	176	238	37,591	158
Duluth, Minnesota.....	1	88	88	1	88	88	1	88	88	1	88	88	1	88	88

BARGES.

CUSTOMS DISTRICTS.	1880			1881			1882			1883			1884		
	Num-ber.	Tonnage.	Aver- age.	Num-ber.	Tonnage.	Aver- age.	Num-ber.	Tonnage.	Aver- age.	Num-ber.	Tonnage.	Aver- age.	Num-ber.	Tonnage.	Aver- age.
Oswegatchie, New York.....	7	1,244	178	8	1,356	170	9	1,476	164	7	1,333	190	9	1,385	154
Cape Vincent, New York.....							1	35	35	1	35	35	1	35	35
Oswego, New York.....															
Genesee, New York.....													1	256	256
Niagara, New York.....															
Buffalo Creek, New York.....	27	6,422	238	25	6,437	257	30	8,486	283	29	8,581	296	26	7,621	293
Dunkirk, New York.....															
Erie, Pennsylvania.....															
Cuyahoga, Ohio.....	1	551	551	4	1,567	392	5	1,866	373	4	1,020	255	2	580	290
Sandusky, Ohio.....	2	413	207	2	362	181	2	362	181	2	362	181	2	362	181
Miami, Ohio.....	6	2,244	374	5	1,903	381	4	1,679	420	4	1,679	420	4	1,679	420
Detroit, Michigan.....	34	6,164	181	23	4,516	196	21	4,384	209	11	2,999	273	11	2,999	273
Huron, Michigan.....	60	20,375	295	75	21,428	286	71	20,562	290	78	23,593	302	60	17,628	294
Superior, Michigan.....															
Michigan, Michigan.....	13	3,125	240	13	3,125	240	13	3,125	240	13	3,125	240	4	781	195
Chicago, Illinois.....															
Milwaukee, Wisconsin.....	1	74	74	1	74	74	1	74	74	1	74	74			
Duluth, Minnesota.....															

CUSTOMS DISTRICTS.	1885			1886			1887			1888			1889		
	Num-ber.	Tonnage.	Aver- age.	Num-ber.	Tonnage.	Aver- age.	Num-ber.	Tonnage.	Aver- age.	Num-ber.	Tonnage.	Aver- age.	Num-ber.	Tonnage.	Aver- age.
Oswegatchie, New York.....	12	2,026	169	15	3,152	210	16	3,175	198	17	3,214	189	23	2,946	128
Cape Vincent, New York.....													1	73	73
Oswego, New York.....	1	201	201	1	201	201									
Genesee, New York.....										1	390	390			
Niagara, New York.....															
Buffalo Creek, New York.....	28	8,851	316	25	6,479	259	25	6,348	254	22	5,189	236	10	915	92
Dunkirk, New York.....															
Erie, Pennsylvania.....															
Cuyahoga, Ohio.....	1	203	203	1	373	373	1	373	373	1	373	373	3	725	242
Sandusky, Ohio.....	1	289	289	1	290	290	1	289	289	1	289	289			
Miami, Ohio.....	4	1,679	420	4	1,679	420	4	1,679	420	2	313	157			
Detroit, Michigan.....	10	2,776	278	11	2,859	260	8	2,126	266	6	671	112	7	1,088	155
Huron, Michigan.....	42	12,968	309	31	9,281	299	23	6,760	294	21	6,319	301	1	90	90
Superior, Michigan.....															
Michigan, Michigan.....	4	781	195	4	781	195	3	572	191	3	572	191	3	572	191
Chicago, Illinois.....															
Milwaukee, Wisconsin.....															
Duluth, Minnesota.....	1	110	110	1	110	110	1	110	110	2	533	260	2	533	260

STATISTICS OF TRANSPORTATION.

COMPARATIVE STATISTICS—Continued.

TABLE 29.—TONNAGES FOR THE 10 YEARS, 1880-1889—Continued.

ALL CRAFT.

CUSTOMS DISTRICTS.	1880			1881			1882			1883			1884		
	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.
Oswegatchie, New York	24	2,367	99	27	2,800	104	31	3,053	99	23	2,493	108	29	2,689	93
Cape Vincent, New York	54	5,281	98	39	5,036	129	55	4,375	80	49	3,464	71	50	3,293	66
Oswego, New York	88	17,065	194	76	14,267	188	70	13,213	189	69	13,313	193	66	12,755	193
Genesee, New York	22	3,117	142	22	3,693	168	23	3,823	166	24	3,810	159	21	2,534	121
Niagara, New York	12	3,458	288	11	3,324	302	16	4,131	258	17	3,676	216	16	3,756	235
Buffalo Creek, New York	219	101,257	462	215	100,757	469	219	109,575	500	215	116,484	542	200	108,200	541
Dunkirk, New York	4	644	161	2	47	24	2	47	24	1	24	24	1	24	24
Erie, Pennsylvania	35	23,464	670	39	28,326	726	43	29,610	689	37	28,514	771	36	28,374	738
Cuyahoga, Ohio	175	64,286	367	181	75,548	417	187	81,328	435	183	78,252	428	184	87,010	473
Sandusky, Ohio	83	14,164	171	80	15,547	194	87	16,582	191	83	18,189	219	83	22,087	266
Miami, Ohio	53	10,506	198	49	15,338	313	47	15,012	319	48	15,948	332	52	17,426	335
Detroit, Michigan	313	70,815	226	303	77,698	256	312	82,934	266	309	88,702	287	309	93,547	303
Huron, Michigan	303	51,613	170	337	63,031	187	343	69,114	201	366	72,304	198	366	79,211	216
Superior, Michigan	67	5,462	82	79	9,137	116	89	12,890	144	90	16,101	179	93	16,491	177
Michigan, Michigan	296	34,306	116	305	34,978	115	345	37,610	109	351	36,764	105	320	34,039	106
Chicago, Illinois	384	76,478	199	367	75,595	206	368	73,179	199	372	70,979	191	366	68,822	188
Milwaukee, Wisconsin	348	67,855	195	353	75,920	215	362	85,448	236	365	82,403	226	347	76,403	220
Duluth, Minnesota	7	205	29	9	249	28	11	287	26	10	375	38	19	848	45

CUSTOMS DISTRICTS.	1885			1886			1887			1888			1889		
	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.
Oswegatchie, New York	31	3,499	113	41	5,151	126	44	10,070	229	47	11,225	239	53	13,252	259
Cape Vincent, New York	52	4,076	78	51	4,041	79	52	4,081	78	58	4,582	79	59	4,451	75
Oswego, New York	59	12,952	220	54	11,422	212	44	9,626	219	41	7,481	182	36	8,420	234
Genesee, New York	18	2,312	128	17	2,023	119	21	2,469	118	20	2,717	136	24	3,779	157
Niagara, New York	18	4,440	247	18	4,596	250	14	3,978	284	18	4,555	253	17	5,724	337
Buffalo Creek, New York	199	110,762	557	193	103,746	538	192	93,112	485	211	114,405	542	227	127,379	561
Dunkirk, New York	1	24	24	1	24	24	1	48	24	1	24	24	4	508	127
Erie, Pennsylvania	39	28,491	731	37	28,142	761	35	30,483	871	34	27,749	816	38	29,374	773
Cuyahoga, Ohio	183	92,640	506	194	101,493	523	205	123,889	604	221	147,590	668	241	176,804	734
Sandusky, Ohio	77	21,841	284	82	24,020	293	76	24,023	316	79	27,443	347	82	30,580	373
Miami, Ohio	54	17,405	322	57	17,862	313	63	17,900	284	64	18,756	293	59	16,564	281
Detroit, Michigan	302	93,719	310	305	100,146	328	285	103,032	362	292	113,921	390	281	127,430	453
Huron, Michigan	362	83,743	231	357	86,292	242	377	102,073	271	393	113,414	289	450	131,631	293
Superior, Michigan	91	16,247	179	102	15,897	155	105	17,092	163	120	21,668	181	122	30,346	249
Michigan, Michigan	316	32,683	103	312	31,876	102	300	29,762	99	295	27,748	94	304	30,382	106
Chicago, Illinois	361	67,487	187	352	66,730	190	356	72,420	203	345	74,227	215	342	73,528	215
Milwaukee, Wisconsin	355	79,359	224	352	79,052	225	350	76,515	219	374	86,852	232	369	88,753	241
Duluth, Minnesota	22	953	43	22	823	37	20	785	37	28	1,832	65	29	1,938	67

TRANSPORTATION ON THE GREAT LAKES.

COMPARATIVE STATISTICS—Continued.

TABLE 30.—TONNAGE FLUCTUATIONS FOR THE 10 YEARS, 1880-1889—AVERAGE ANNUAL NUMBER AND TONNAGE OF ALL CRAFT REGISTERED AT THE CUSTOMS DISTRICTS OF THE GREAT LAKES AND ST. LAWRENCE RIVER, TOGETHER WITH THE INDICATED YEARS OF HIGHEST, LOWEST, AND MEAN REGISTRATION.

STEAMERS.

CUSTOMS DISTRICTS.	Annual average number of ves-sels regis-tered.	HIGHEST ABOVE AV-ERAGE.		LOWEST BELOW AV-ERAGE.		CLOSEST TO AVERAGE.		Fluctu-ation.	Annual average regis-tered ton-nage.	HIGHEST ABOVE AVERAGE.		LOWEST BELOW AVERAGE.		CLOSEST TO AVERAGE.		Fluctu-ation.
		Year.	Num-ber.	Year.	Num-ber.	Year.	Num-ber.			Year.	Number of tons.	Year.	Number of tons.	Year.	Number of tons.	
Oswegatchie, New York	16	1889	21	1880	12	1882	15	9	2,687	1889	7,767	1880	765	1886	1,059	7,002
Cape Vincent, New York	20	1889	24	1881	13	1886	20	11	1,088	1889	1,681	1883	566	1886	1,411	1,118
Oswego, New York	21	1881	25	1887	18	1884	21	7	1,069	1889	3,582	1880	957	1887	1,839	2,625
Genesee, New York	15	1883	17	1885	12	1881	14	5	1,738	1883	2,501	1885	1,020	1889	1,769	1,481
Niagara, New York	7	1888	9	1880	4	1884	7	5	1,917	1889	3,440	1886	1,470	1880	1,786	1,979
Buffalo Creek, New York	138	1889	183	1880	115	1887	139	68	78,950	1889	109,440	1880	57,958	1886	78,954	51,482
Dunkirk, New York	2	1889	3	1881	1	1880	2	2	118	1889	484	1881	23	1880	37	461
Erie, Pennsylvania	29	1889	34	1880	23	1885	29	11	24,741	1889	28,063	1880	18,353	1884	24,738	9,710
Cuyahoga, Ohio	85	1889	132	1889	55	1886	85	77	55,947	1889	119,293	1880	21,313	1886	54,792	97,980
Sandusky, Ohio	35	1889	49	1880	28	1884	34	21	9,109	1889	16,692	1880	4,743	1886	9,320	11,949
Miami, Ohio	29	1889	36	1880	23	1882	28	13	7,413	1889	9,497	1880	3,417	1881	7,380	6,080
Detroit, Michigan	137	1889	149	1880	113	1887	137	86	54,715	1889	87,003	1880	34,738	1884	54,291	52,205
Huron, Michigan	138	1889	186	1880	104	1886	138	82	34,443	1889	60,109	1880	18,303	1886	34,273	41,746
Superior, Michigan	67	1889	90	1880	47	1885	63	43	9,132	1889	22,851	1880	2,180	1886	9,538	20,671
Michigan, Michigan	165	1883	180	1880	129	1887	168	51	16,897	1884	18,673	1880	15,145	1886	17,158	3,523
Chicago, Illinois	138	1886	216	1881	107	1887	137	109	20,781	1886	51,011	1880	9,950	1887	22,606	41,061
Milwaukee, Wisconsin	108	1889	131	1880	89	1883	107	42	30,213	1889	51,102	1880	16,981	1882	29,117	34,181
Duluth, Minnesota	16	1889	26	1880	6	1887	18	20	610	1889	1,312	1880	155	1886	625	1,157

SAILING VESSELS.

Oswegatchie, New York	7	1889	9	1883	3	1881	7	6	843	1889	2,539	1883	346	1886	940	2,193
Cape Vincent, New York	32	1880	35	1881	26	1883	32	9	3,163	1880	4,634	1884	2,567	1888	3,015	2,067
Oswego, New York	39	1880	66	1889	17	1885	38	49	10,342	1880	16,108	1889	4,838	1885	10,465	11,270
Genesee, New York	7	1880	10	1888	4	1882	7	6	1,251	1889	2,010	1888	756	1884	1,292	1,254
Niagara, New York	9	1886	11	1881	7	1887	9	4	2,212	1886	3,086	1880	1,672	1887	2,284	1,364
Buffalo Creek, New York	46	1880	77	1888	25	1884	40	52	23,085	1880	36,877	1888	13,248	1884	20,660	23,629
Dunkirk, New York	1	1880	2	1889	1	1885	1	1	82	1880	607	1889	24	1885	24	583
Erie, Pennsylvania	9	1880	12	1889	4	1884	9	8	3,511	1880	5,111	1889	1,311	1886	3,421	3,800
Cuyahoga, Ohio	108	1880	119	1885	101	1886	108	18	46,174	1889	56,786	1881	40,962	1880	46,323	15,824
Sandusky, Ohio	45	1882	56	1889	33	1885	45	23	12,037	1884	14,445	1880	9,008	1888	12,221	5,437
Miami, Ohio	21	1888	28	1882	15	1884	20	13	7,405	1888	10,483	1880	4,845	1884	7,596	5,638
Detroit, Michigan	150	1880	166	1889	125	1883	153	41	37,421	1888	42,286	1880	29,912	1885	38,198	12,374
Huron, Michigan	180	1889	263	1880	130	1885	179	133	36,899	1889	71,432	1880	12,875	1885	37,944	58,557
Superior, Michigan	29	1888	36	1880	20	1881	29	16	6,983	1888	8,717	1880	3,282	1887	6,804	5,435
Michigan, Michigan	142	1882	158	1888	123	1884	143	35	14,462	1882	17,006	1888	11,410	1884	14,585	5,587
Chicago, Illinois	224	1880	275	1886	136	1885	226	139	51,163	1880	66,528	1886	15,719	1885	52,446	50,809
Milwaukee, Wisconsin	250	1881	263	1887	236	1888	249	27	49,613	1882	56,256	1889	37,591	1880	50,800	18,665
Duluth, Minnesota	1	1881	2	1880	1	1886	1	1	82	1889	88	1880	50	1882	79	38

BARGES.

Oswegatchie, New York	12	1889	23	1880	7	1885	12	16	2,131	1888	3,214	1880	1,241	1885	2,026	1,970
Cape Vincent, New York	1	1889	1	1880	1	1885	1	1	45	1889	73	1880	35	1884	35	38
Oswego, New York	1	1889	1	1880	1	1885	1	1	201	1889	201	1880	201	1885	201	201
Genesee, New York	1	1889	1	1880	1	1885	1	1	390	1889	390	1880	390	1885	390	390
Niagara, New York	1	1889	1	1880	1	1885	1	1	256	1889	256	1880	256	1885	256	256
Buffalo Creek, New York	25	1882	30	1889	10	1886	25	20	6,533	1885	8,851	1889	915	1886	6,479	7,936
Dunkirk, New York	1	1889	1	1880	1	1885	1	1	1	1889	1	1880	1	1885	1	1
Erie, Pennsylvania	1	1889	1	1880	1	1885	1	1	1	1889	1	1880	1	1885	1	1
Cuyahoga, Ohio	2	1882	5	1880	1	1884	2	4	763	1882	1,866	1885	203	1889	725	1,663
Sandusky, Ohio	2	1882	5	1880	1	1884	2	4	835	1880	413	1888	289	1883	362	124
Miami, Ohio	4	1880	6	1888	2	1884	4	4	1,615	1880	2,244	1888	313	1884	1,679	1,931
Detroit, Michigan	14	1880	34	1888	6	1884	11	28	3,058	1880	6,164	1888	671	1884	2,999	5,493
Huron, Michigan	47	1883	78	1889	1	1885	42	77	13,900	1883	23,593	1889	90	1885	12,968	23,503
Superior, Michigan	1	1889	1	1880	1	1885	1	1	1	1889	1	1880	1	1885	1	1
Michigan, Michigan	7	1880	13	1889	3	1885	4	10	1,656	1880	3,125	1889	572	1885	781	2,553
Chicago, Illinois	1	1889	1	1880	1	1885	1	1	74	1889	74	1880	74	1885	74	74
Milwaukee, Wisconsin	1	1889	1	1880	1	1885	1	1	281	1889	538	1885	110	1887	110	428
Duluth, Minnesota	1	1889	2	1880	1	1887	1	2	281	1889	538	1885	110	1887	110	428

ALL CRAFT.

Oswegatchie, New York	35	1888	47	1883	23	1882	31	24	5,660	1889	13,252	1880	2,367	1886	5,151	10,885
Cape Vincent, New York	52	1889	59	1881	39	1885	52	20	4,268	1880	5,281	1884	3,293	1882	4,378	1,988
Oswego, New York	60	1880	88	1889	36	1885	59	52	12,051	1880	17,065	1888	7,481	1886	11,422	9,584
Genesee, New York	21	1883	24	1886	17	1884	21	7	3,028	1882	3,823	1886	2,023	1880	3,117	1,800
Niagara, New York	16	1885	18	1881	11	1882	16	7	4,155	1889	5,724	1881	3,324	1882	4,131	2,400
Buffalo Creek, New York	209	1889	227	1887	192	1888	211	85	108,568	1889	127,379	1887	93,112	1884	108,200	34,267
Dunkirk, New York	2	1880	4	1883	1	1887	2	3	148	1880	644	1883	24	1887	48	620
Erie, Pennsylvania	37	1882	43	1888	34	1883	37	9	28,253	1887	30,483	1880	23,464	1881	28,326	7,019
Cuyahoga, Ohio	195	1889	241	1886	175	1886	194	66	102,884	1889	176,804	1886	64,286	1886	101,493	112,518
Sandusky, Ohio	81	1882	87	1887	76	1886	82	11	21,448	1889	30,580	1880	14,164	1885	21,842	16,416
Miami, Ohio	55	1888	64	1882	47	1885	54	17	16,272	1888	18,756	1880	10,506	1889	16,564	8,250
Detroit, Michigan	301	1882	312	1889	281	1885	302	31	95,195	1889	127,490	1880	70,815	1885	93,710	56,615
Huron, Michigan	365	1889	450	1880	303	1883	366	147	85,243	1889	131,631	1880	51,613	1886	86,292	80,013
Superior, Michigan	96	1889	122	1880	67	1884	93	55	16,11							

STATISTICS OF TRANSPORTATION.

COMPARATIVE STATISTICS—Continued.

TABLE 31.—SHIPBUILDING FOR THE 10 YEARS, 1880-1889 (GENERAL)—NUMBER AND TONNAGE OF ALL STEAMERS, SAILING VESSELS, AND BARGES BUILT IN THE LAKE AND RIVER CUSTOMS DISTRICTS FOR THE YEARS 1880 TO 1889, INCLUSIVE.

CUSTOMS DISTRICTS.	1880							
	TOTAL.		STEAMERS.		SAILING VESSELS.		BARGES.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total.....	117	20,856.86	63	14,106.46	47	5,426.76	7	1,323.64
Oswegatchie, New York.....	1	6.93	1	6.93				
Cape Vincent, New York.....	5	308.41	2	113.04	3	195.37		
Oswego, New York.....	3	589.70	1	238.41	2	351.29		
Niagara, New York.....	2	225.06			1	99.06	1	126.00
Genesee, New York.....	1	125.83	1	125.83				
Buffalo Creek, New York.....	9	2,151.94	7	2,121.93	2	30.01		
Cuyahoga, Ohio.....	9	3,310.64	7	3,267.87	2	42.77		
Sandusky, Ohio.....	3	1,370.57	3	1,370.57				
Miami, Ohio.....	2	335.15	1	18.47			1	316.68
Detroit, Michigan.....	21	7,501.74	12	4,933.60	7	2,255.59	2	312.55
Huron, Michigan.....	21	1,502.88	4	142.26	15	1,290.35	2	70.27
Michigan, Michigan.....	23	764.27	12	399.71	11	364.56		
Chicago, Illinois.....	1	37.04	1	37.04				
Milwaukee, Wisconsin.....	16	2,626.70	11	1,330.80	4	797.76	1	498.14
1881								
Total.....	175	65,127.71	109	49,080.21	52	12,936.32	14	3,111.18
Oswegatchie, New York.....	1	112.27					1	112.27
Cape Vincent, New York.....	4	153.86	3	52.89	1	100.97		
Oswego, New York.....	6	377.21	4	157.61			2	219.60
Niagara, New York.....								
Genesee, New York.....	2	265.72	2	265.72				
Buffalo Creek, New York.....	31	6,927.75	25	5,729.61			6	1,198.14
Cuyahoga, Ohio.....	14	14,152.05	12	13,853.56	2	298.49		
Sandusky, Ohio.....	3	254.80	1	161.24	2	21.36	1	72.20
Miami, Ohio.....	3	2,701.08			3	2,701.08		
Detroit, Michigan.....	24	15,633.14	17	12,999.85	7	2,633.29		
Huron, Michigan.....	30	13,256.89	16	9,829.65	10	1,918.27	4	1,508.97
Superior, Michigan.....	5	1,087.28	1	8.50	4	1,078.78		
Michigan, Michigan.....	23	2,838.26	16	2,615.63	7	222.63		
Chicago, Illinois.....	6	1,425.54	4	893.62	2	531.92		
Milwaukee, Wisconsin.....	23	5,941.86	8	2,512.33	15	3,429.53		
1882								
Total.....	199	51,748.66	128	33,596.45	66	16,163.77	5	1,988.44
Oswegatchie, New York.....	1	62.00	1	62.00				
Cape Vincent, New York.....	3	48.53			3	48.53		
Oswego, New York.....	1	10.30	1	10.30				
Genesee, New York.....								
Niagara, New York.....	3	104.16	1	28.06	1	12.10	1	64.00
Buffalo Creek, New York.....	23	3,294.44	20	1,814.71			3	1,479.73
Erie, Pennsylvania.....	4	77.77	4	77.77				
Cuyahoga, Ohio.....	18	12,902.80	13	11,319.94	5	1,582.86		
Sandusky, Ohio.....	5	178.98	3	140.66	2	38.32		
Detroit, Michigan.....	23	13,185.75	15	8,750.07	8	4,435.68		
Huron, Michigan.....	36	11,953.09	13	5,323.14	22	6,185.24	1	444.71
Superior, Michigan.....	4	138.25	4	138.25				
Michigan, Michigan.....	35	3,501.55	26	2,784.61	9	716.94		
Chicago, Illinois.....	15	1,903.61	11	351.95	4	1,551.66		
Milwaukee, Wisconsin.....	28	4,387.43	16	2,794.99	12	1,592.44		
1883								
Total.....	134	24,552.25	100	17,253.42	31	6,140.46	3	1,158.37
Oswegatchie, New York.....	1	15.88	1	15.88				
Cape Vincent, New York.....	3	57.60	1	12.56	2	45.04		
Oswego, New York.....	5	48.84	2	35.64	1	13.20		
Genesee, New York.....								
Buffalo Creek, New York.....	22	4,493.49	21	4,169.24			1	324.25
Cuyahoga, Ohio.....	8	5,097.71	5	1,234.46	3	3,863.25		
Sandusky, Ohio.....	1	5.86			1	5.86		
Miami, Ohio.....	4	77.36	4	77.36				
Detroit, Michigan.....	11	2,504.92	10	2,454.54	1	50.38		
Huron, Michigan.....	24	7,418.94	15	5,650.50	7	934.32	2	834.13
Superior, Michigan.....	3	65.88	1	22.36	2	43.52		
Michigan, Michigan.....	20	1,301.03	15	1,205.56	5	95.47		
Chicago, Illinois.....	12	582.72	9	344.77	3	237.95		
Milwaukee, Wisconsin.....	21	2,847.64	15	1,996.17	6	851.47		
Duluth, Minnesota.....	1	34.38	1	34.38				

TRANSPORTATION ON THE GREAT LAKES.

COMPARATIVE STATISTICS—Continued.

TABLE 31.—SHIPBUILDING FOR THE 10 YEARS, 1880-1889 (GENERAL)—Continued.

1884

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		BARGES.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total.....	110	27,882.99	86	20,205.69	29	7,667.30	1	10.00
Oswegatchie, New York.....	4	191.19	2	152.12	1	29.07	1	10.00
Cape Vincent, New York.....	2	37.88	2	37.88				
Oswego, New York.....	1	54.09	1	54.09				
Genesee, New York.....	1	20.39	1	20.39				
Niagara, New York.....	1	187.43	1	187.43				
Buffalo Creek, New York.....	20	4,279.33	20	4,279.33				
Cuyahoga, Ohio.....	7	3,032.70	5	1,924.77	2	1,107.93		
Sandusky, Ohio.....	2	1,958.42	1	111.46	1	1,846.96		
Miami, Ohio.....	2	74.56	2	74.56				
Detroit, Michigan.....	15	9,561.23	10	8,505.58	5	1,055.65		
Huron, Michigan.....	19	6,373.32	10	3,519.29	9	2,854.03		
Superior, Michigan.....	3	182.83	2	131.72	1	51.11		
Michigan, Michigan.....	18	770.16	14	632.64	4	137.52		
Chicago, Illinois.....	5	382.54	5	382.54				
Milwaukee, Wisconsin.....	8	770.25	3	200.89	5	569.36		
Duluth, Minnesota.....	2	56.67	1	41.00	1	15.67		

1885

Total.....	95	24,508.79	64	20,228.52	28	3,729.74	3	550.53
Oswegatchie, New York.....	5	408.41	4	99.35			1	309.06
Cape Vincent, New York.....	10	915.73	6	791.20	4	124.53		
Oswego, New York.....								
Genesee, New York.....								
Niagara, New York.....	1	111.33			1	111.33		
Buffalo Creek, New York.....	8	2,307.30	8	2,307.30				
Erie, Pennsylvania.....	3	73.35	3	73.35				
Cuyahoga, Ohio.....	4	4,620.18	4	4,620.18				
Sandusky, Ohio.....	3	109.46	2	55.31	1	54.15		
Miami, Ohio.....	1	97.89	1	97.89				
Detroit, Michigan.....	9	6,082.32	5	5,077.23	3	973.32	1	131.77
Huron, Michigan.....	14	6,018.92	5	4,641.84	9	1,377.08		
Superior, Michigan.....	1	6.44			1	6.44		
Michigan, Michigan.....	11	1,359.14	7	976.94	4	382.20		
Chicago, Illinois.....	8	188.02	8	188.02				
Milwaukee, Wisconsin.....	15	2,063.39	10	1,262.70	5	800.69		
Duluth, Minnesota.....	2	146.91	1	37.21			1	109.70

1886

Total.....	66	18,254.85	46	12,610.73	15	5,232.34	5	411.78
Oswegatchie, New York.....	3	148.44	2	50.07			1	98.37
Cape Vincent, New York.....	2	40.54	1	6.61	1	33.93		
Oswego, New York.....	1	13.51	1	13.51				
Genesee, New York.....	2	23.16	1	14.46	1	8.70		
Niagara, New York.....								
Buffalo Creek, New York.....	10	585.22	7	355.16			3	230.06
Erie, Pennsylvania.....	1	13.78	1	13.78				
Cuyahoga, Ohio.....	5	5,666.21	5	5,666.21				
Sandusky, Ohio.....	5	219.64	5	219.64				
Detroit, Michigan.....	3	2,998.64	1	1,923.95	1	991.34	1	83.35
Huron, Michigan.....	9	6,650.82	5	3,000.57	4	3,650.25		
Superior, Michigan.....	2	308.35	1	17.38	1	290.97		
Michigan, Michigan.....	13	462.12	7	216.59	6	245.53		
Chicago, Illinois.....	3	89.37	3	89.37				
Milwaukee, Wisconsin.....	6	1,023.43	6	1,023.43				
Duluth, Minnesota.....	1	11.62			1	11.62		

1887

Total.....	117	52,454.42	75	47,183.46	34	4,892.52	8	373.44
Cape Vincent, New York.....	2	51.45			2	51.45		
Oswego, New York.....	4	124.74			1	7.09		
Genesee, New York.....	5	69.61	3	117.65				
Niagara, New York.....	6	857.95	7	69.61				
Buffalo Creek, New York.....	14	5,160.91	12	4,961.88			1	20.59
Dunkirk, New York.....	2	58.88	2	58.88			2	199.03
Erie, Pennsylvania.....	1	13.40	1	13.40				
Cuyahoga, Ohio.....	12	16,351.31	10	15,256.31	2	1,085.00		
Detroit, Michigan.....	11	10,554.08	8	8,055.89	3	1,898.19		
Huron, Michigan.....	22	13,690.34	11	12,131.93	6	1,399.59	5	158.82
Superior, Michigan.....	2	72.94			2	72.94		
Michigan, Michigan.....	18	1,605.29	11	1,470.85	7	134.44		
Chicago, Illinois.....	9	830.48	1	694.94	8	185.54		
Milwaukee, Wisconsin.....	7	2,963.04	4	2,914.76	3	48.28		

STATISTICS OF TRANSPORTATION.

COMPARATIVE STATISTICS—Continued.

TABLE 31.—SHIPBUILDING FOR THE 10 YEARS, 1880-1889 (GENERAL)—Continued.

1888

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		BARGES.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	183	96,314.73	139	86,715.98	42	9,130.98	2	467.77
Oswegatchie, New York	3	112.50	2	73.03			1	39.47
Cape Vincent, New York	6	130.28	5	115.26	1	15.02		
Oswego, New York	5	346.59	4	338.19	1	8.40		
Niagara, New York	7	864.91	7	864.91				
Buffalo Creek, New York	23	8,049.95	23	8,049.95				
Erie, Pennsylvania	3	127.84	3	127.84				
Cuyahoga, Ohio	23	29,786.13	22	28,527.51	1	1,258.62		
Sandusky, Ohio	5	396.86	3	156.95	2	239.91		
Miami, Ohio	2	144.12	2	144.12				
Detroit, Michigan	19	20,534.68	17	18,628.35	2	1,906.33		
Huron, Michigan	31	22,275.08	19	17,825.58	12	4,449.50		
Superior, Michigan	5	856.95	2	27.60	3	829.35		
Michigan, Michigan	17	2,579.85	12	2,523.31	5	56.54		
Chicago, Illinois	3	98.41	2	86.79	1	11.62		
Milwaukee, Wisconsin	30	9,582.28	16	9,226.59	14	355.69		
Duluth, Minnesota	1	428.30					1	428.30

1889

Total	179	102,051.75	145	93,706.73	32	8,097.76	2	247.26
Oswegatchie, New York	1	13.37	1	13.37				
Cape Vincent, New York	4	135.33	1	12.67	2	49.30	1	73.36
Oswego, New York	1	51.47	1	51.47				
Genesee, New York								
Niagara, New York	1	141.45	1	141.45				
Buffalo Creek, New York	20	5,239.78	20	5,239.78				
Erie, Pennsylvania	2	29.41	2	29.41				
Cuyahoga, Ohio	23	31,205.32	22	31,144.00	1	61.32		
Sandusky, Ohio	2	49.97	2	49.97				
Miami, Ohio	5	872.18	4	859.24	1	12.94		
Detroit, Michigan	20	22,425.51	15	20,128.46	5	2,297.05		
Huron, Michigan	39	25,459.33	29	20,979.00	9	4,305.53	1	173.90
Superior, Michigan	3	80.36	2	69.61	1	10.75		
Michigan, Michigan	28	5,188.59	21	4,382.90	7	805.69		
Chicago, Illinois	2	28.58	2	28.58				
Milwaukee, Wisconsin	28	11,131.10	22	10,575.92	6	555.18		

RECAPITULATION.

YEARS.	TOTAL.		STEAMERS.		SAILING VESSELS.		BARGES.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total for 10 years	1,375	483,753.01	949	394,687.65	376	79,417.95	50	9,647.41
1880	117	20,856.86	63	14,106.46	47	5,426.76	7	1,323.04
1881	175	65,127.71	109	49,080.21	52	12,936.32	14	3,111.18
1882	199	51,748.06	128	33,596.45	66	16,163.77	5	1,988.44
1883	134	24,552.25	100	17,253.42	31	6,140.46	3	1,158.37
1884	110	27,882.09	80	20,205.69	29	7,607.30	1	10.00
1885	95	24,508.79	64	20,228.52	28	3,729.74	3	550.53
1886	66	18,254.85	46	12,610.79	15	5,232.34	5	411.76
1887	117	52,454.42	75	47,183.46	34	4,892.52	8	378.44
1888	183	96,314.73	139	86,715.98	42	9,130.98	2	467.77
1889	179	102,051.75	145	93,706.73	32	8,097.76	2	247.26

TRANSPORTATION ON THE GREAT LAKES.

COMPARATIVE STATISTICS—Continued.

TABLE 32.—SHIPBUILDING FOR THE 10 YEARS, 1880-1889 (STEAMERS)—NUMBER AND TONNAGE OF ALL STEAMERS BUILT IN THE LAKE AND RIVER CUSTOMS DISTRICTS FOR THE DECADE 1880-1889, TOGETHER WITH DATE SHOWING THE NUMBER AND TONNAGE OF PROPELLER, SIDE-WHEEL, AND STERN-WHEEL STEAMERS BUILT EACH YEAR IN EACH DISTRICT.

CUSTOMS DISTRICTS.	ALL STEAMERS.		PROPELLER.		SIDE-WHEEL.		STERN-WHEEL.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
1880								
Total.....	63	14,106.46	55	12,014.71	3	1,929.53	5	162.22
Oswegatchie, New York.....	1	6.93	1	6.93				
Cape Vincent, New York.....	2	113.04	2	113.04				
Oswego, New York.....	1	238.41	1	238.41				
Genesee, New York.....	1	125.83			1	125.83		
Buffalo Creek, New York.....	7	2,121.93	7	2,121.93				
Cuyahoga, Ohio.....	7	3,267.87	7	3,267.87				
Sandusky, Ohio.....	3	1,370.57	3	1,370.57				
Miami, Ohio.....	1	18.47					1	18.47
Detroit, Michigan.....	12	4,938.60	11	3,388.67	1	1,594.93		
Huron, Michigan.....	4	142.26	4	142.26				
Michigan, Michigan.....	12	399.71	8	255.06			4	143.75
Chicago, Illinois.....	1	37.04	1	37.04				
Milwaukee, Wisconsin.....	11	1,330.80	10	1,122.03	1	208.77		
1881								
Total.....	109	49,080.21	106	47,846.79	2	1,197.38	1	36.04
Cape Vincent, New York.....	3	52.89	3	52.89				
Oswego, New York.....	4	157.61	4	157.61				
Genesee, New York.....	2	265.72	1	217.06	1	48.66		
Buffalo Creek, New York.....	25	5,729.61	25	5,729.61				
Cuyahoga, Ohio.....	12	13,853.56	11	13,817.52			1	36.04
Sandusky, Ohio.....	1	161.24	1	161.24				
Detroit, Michigan.....	17	12,999.85	16	11,851.13	1	1,148.72		
Huron, Michigan.....	16	9,829.65	16	9,829.65				
Superior, Michigan.....	1	8.50	1	8.50				
Michigan, Michigan.....	16	2,615.63	16	2,615.63				
Chicago, Illinois.....	4	893.62	4	893.62				
Milwaukee, Wisconsin.....	8	2,512.33	8	2,512.33				
1882								
Total.....	128	33,596.45	108	20,858.94	18	10,846.81	2	1,890.70
Oswegatchie, New York.....	1	62.00	1	62.00				
Oswego, New York.....	1	10.30	1	10.30				
Niagara, New York.....	1	28.06	1	28.06				
Buffalo Creek, New York.....	20	1,814.71	19	704.45	1	1,110.26		
Erle, Pennsylvania.....	4	77.77	3	31.67	1	46.10		
Cuyahoga, Ohio.....	13	11,319.94			11	9,429.24	2	1,890.70
Sandusky, Ohio.....	3	140.66			3	140.66		
Detroit, Michigan.....	15	8,750.07	15	8,750.07				
Huron, Michigan.....	13	5,323.14	13	5,323.14				
Superior, Michigan.....	4	138.25	4	138.25				
Michigan, Michigan.....	26	2,784.61	26	2,784.61				
Chicago, Illinois.....	11	351.95	11	351.95				
Milwaukee, Wisconsin.....	16	2,794.99	14	2,674.44	2	120.55		
1883								
Total.....	100	17,253.42	96	17,032.07	4	221.35		
Oswegatchie, New York.....	1	15.88	1	15.88				
Cape Vincent, New York.....	1	12.56	1	12.56				
Oswego, New York.....	2	35.04	2	35.04				
Buffalo Creek, New York.....	21	4,169.24	21	4,169.24				
Cuyahoga, Ohio.....	5	1,234.46	5	1,234.46				
Miami, Ohio.....	4	77.36	4	77.36				
Detroit, Michigan.....	10	2,454.54	10	2,454.54				
Huron, Michigan.....	15	5,650.50	15	5,650.50				
Superior, Michigan.....	1	22.36	1	22.36				
Michigan, Michigan.....	15	1,205.56	15	1,205.56				
Chicago, Illinois.....	9	344.77	9	344.77				
Milwaukee, Wisconsin.....	15	1,996.17	11	1,774.82	4	221.35		
Duluth, Minnesota.....	1	34.38	1	34.38				

STATISTICS OF TRANSPORTATION.

COMPARATIVE STATISTICS—Continued.

TABLE 32.—SHIPBUILDING FOR THE 10 YEARS, 1880-1889 (STEAMERS)—Continued.

1884

CUSTOMS DISTRICTS.	ALL STEAMERS.		PROPELLER.		SIDE-WHEEL.		STERN-WHEEL.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total.....	80	20,205.69	73	17,206.94	3	2,742.56	4	256.10
Oswegatchie, New York.....	2	152.12	2	152.12				
Cape Vincent, New York.....	2	37.88	2	37.88				
Oswego, New York.....	1	54.09	1	54.09				
Genesee, New York.....	1	20.39	1	20.39				
Niagara, New York.....	1	137.43	1	137.43				
Buffalo Creek, New York.....	20	4,270.33	19	3,866.66	1	412.67		
Cuyahoga, Ohio.....	5	1,924.77	5	1,924.77				
Sandusky, Ohio.....	1	111.46	1	111.46				
Miami, Ohio.....	2	74.56	2	74.56				
Detroit, Michigan.....	10	8,505.58	8	6,175.69	2	2,329.89		
Huron, Michigan.....	10	3,519.29	10	3,519.29				
Superior, Michigan.....	2	131.72	2	131.72				
Michigan, Michigan.....	14	632.64	11	527.11			3	105.53
Chicago, Illinois.....	5	382.54	5	382.54				
Milwaukee, Wisconsin.....	3	200.89	2	50.23			1	150.66
Duluth, Minnesota.....	1	41.00	1	41.00				

1885

Total.....	64	20,228.52	60	19,371.66	4	856.86		
Oswegatchie, New York.....	4	90.35	4	99.35				
Cape Vincent, New York.....	6	791.20	4	33.47	2	757.73		
Buffalo Creek, New York.....	8	2,307.30	8	2,307.30				
Erie, Pennsylvania.....	3	73.35	3	73.35				
Cuyahoga, Ohio.....	4	4,620.18	4	4,620.18				
Sandusky, Ohio.....	2	55.31	2	55.31				
Miami, Ohio.....	1	97.89	1	97.89				
Detroit, Michigan.....	5	5,077.23	5	5,077.23				
Huron, Michigan.....	5	4,641.84	5	4,641.84				
Michigan, Michigan.....	7	976.94	7	976.94				
Chicago, Illinois.....	8	188.02	8	188.02				
Milwaukee, Wisconsin.....	10	1,262.70	9	1,200.78	1	61.92		
Duluth, Minnesota.....	1	37.21			1	37.21		

1886

Total.....	46	12,610.73	43	10,024.40	2	2,462.15	1	124.18
Oswegatchie, New York.....	2	50.07	2	50.07				
Cape Vincent, New York.....	1	6.61	1	6.61				
Oswego, New York.....	1	13.51	1	13.51				
Genesee, New York.....	1	14.46	1	14.46				
Buffalo Creek, New York.....	7	355.16	7	355.16				
Erie, Pennsylvania.....	1	13.78	1	13.78				
Cuyahoga, Ohio.....	5	5,666.21	4	5,128.01	1	538.20		
Sandusky, Ohio.....	5	219.64	4	95.46			1	124.18
Detroit, Michigan.....	1	1,923.95			1	1,923.95		
Huron, Michigan.....	5	3,000.57	5	3,000.57				
Superior, Michigan.....	1	17.38	1	17.38				
Michigan, Michigan.....	7	216.59	7	216.59				
Chicago, Illinois.....	3	89.37	3	89.37				
Milwaukee, Wisconsin.....	6	1,023.43	6	1,023.43				

1887

Total.....	76	47,183.46	74	47,166.07	1	17.39		
Oswego, New York.....	3	117.65	3	117.65				
Genesee, New York.....	5	69.61	5	69.61				
Niagara, New York.....	7	837.36	7	837.36				
Buffalo Creek, New York.....	12	4,901.88	11	4,944.49	1	17.39		
Dunkirk, New York.....	2	58.88	2	58.88				
Erie, Pennsylvania.....	1	13.40	1	13.40				
Cuyahoga, Ohio.....	10	15,256.31	10	15,256.31				
Detroit, Michigan.....	8	8,655.89	8	8,655.89				
Huron, Michigan.....	11	12,131.93	11	12,131.93				
Michigan, Michigan.....	11	1,470.85	11	1,470.85				
Chicago, Illinois.....	1	694.94	1	694.94				
Milwaukee, Wisconsin.....	4	2,914.76	4	2,914.76				

TRANSPORTATION ON THE GREAT LAKES.

COMPARATIVE STATISTICS—Continued.

TABLE 32.—SHIPBUILDING FOR THE 10 YEARS, 1880-1889 (STEAMERS)—Continued.

1888

CUSTOMS DISTRICTS.	ALL STEAMERS.		PROPELLER.		SIDE-WHEEL.		STERN-WHEEL.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total.....	139	86,715.98	136	86,564.69	2	114.97	1	36.32
Oswegatchie, New York.....	2	73.03	2	73.03				
Cape Vincent, New York.....	5	115.26	5	115.26				
Oswego, New York.....	4	338.19	4	338.19				
Niagara, New York.....	7	864.91	7	864.91				
Buffalo Creek, New York.....	23	8,049.95	23	8,049.95				
Erie, Pennsylvania.....	3	127.84	3	127.84				
Cuyahoga, Ohio.....	22	28,527.51	22	28,527.51				
Sandusky, Ohio.....	3	156.95	2	120.63			1	36.32
Miami, Ohio.....	2	144.12	2	144.12				
Detroit, Michigan.....	17	18,628.35	17	18,628.35				
Huron, Michigan.....	19	17,825.58	19	17,825.58				
Superior, Michigan.....	2	27.60	2	27.60				
Michigan, Michigan.....	12	2,523.31	11	2,435.03	1	88.28		
Chicago, Illinois.....	2	86.79	1	60.10	1	26.60		
Milwaukee, Wisconsin.....	16	9,226.59	16	9,226.59				

1889

Total.....	145	93,706.73	138	89,188.68	6	4,328.09	1	189.96
Oswegatchie, New York.....	1	13.37	1	13.37				
Cape Vincent, New York.....	1	12.67	1	12.67				
Oswego, New York.....	1	51.47	1	51.47				
Niagara, New York.....	1	141.45	1	141.45				
Buffalo Creek, New York.....	20	5,239.78	20	5,239.78				
Erie, Pennsylvania.....	2	29.41	2	29.41				
Cuyahoga, Ohio.....	22	31,144.00	21	29,632.88	1	1,511.12		
Sandusky, Ohio.....	2	49.97	2	49.97				
Miami, Ohio.....	4	859.24	3	300.65	1	558.59		
Detroit, Michigan.....	15	20,128.46	13	18,036.56	2	2,091.90		
Huron, Michigan.....	29	20,979.90	28	20,908.95	1	70.95		
Superior, Michigan.....	2	69.61	2	69.61				
Michigan, Michigan.....	21	4,382.90	21	4,382.90				
Chicago, Illinois.....	2	28.58	2	28.58				
Milwaukee, Wisconsin.....	22	10,575.92	20	10,290.43	1	95.53	1	189.96

RECAPITULATION.

YEARS.	ALL STEAMERS.		PROPELLER.		SIDE-WHEEL.		STERN-WHEEL.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total for the 10 years.....	940	394,687.65	889	367,274.95	45	24,717.09	15	2,695.61
1880.....	63	14,106.46	55	12,014.71	3	1,929.53	5	162.22
1881.....	109	49,080.21	106	47,846.79	2	1,197.38	1	36.04
1882.....	128	33,596.45	108	20,858.94	18	10,846.81	2	1,890.70
1883.....	100	17,253.42	96	17,032.07	4	221.95		
1884.....	80	20,205.69	73	17,206.94	3	2,742.56	4	256.19
1885.....	64	20,228.52	60	19,371.66	4	856.86		
1886.....	46	12,610.73	43	10,024.40	2	2,462.15	1	124.18
1887.....	75	47,183.46	74	47,166.07	1	17.39		
1888.....	139	86,715.98	136	86,564.69	2	114.97	1	36.32
1889.....	145	93,706.73	138	89,188.68	6	4,328.09	1	189.96

CONGRESSIONAL APPROPRIATIONS.

TABLE 33.—APPROPRIATIONS BY DETAILED LOCALITIES—CONGRESSIONAL APPROPRIATIONS FOR THE SURVEY, IMPROVEMENT, AND MAINTENANCE OF THE HARBORS OF THE GREAT LAKES, AND OF THE RIVERS FLOWING INTO THEM, FROM THE EARLIEST DATE OF APPROPRIATION TO 1890, INCLUSIVE, GIVEN BY DETAILS OF LOCALITY AND TIME.

LOCALITIES.	Date of earliest appropriations.	Appropriations up to and including 1879.	Appropriations from 1880 to 1889, inclusive.	Appropriations by act of Congress, September, 1890.	Total appropriations up to date.
Total.....	1823	\$23, 700, 565	\$12, 999, 165	\$4, 213, 245	\$40, 912, 975
Lake Superior.....	1858	3, 467, 555	3, 738, 500	2, 027, 245	9, 233, 300
A gate bay, Minnesota.....	1886	.....	37, 500	25, 000	62, 500
Ashland harbor, Wisconsin.....	1886	.....	82, 500	60, 000	142, 500
Duluth harbor, Minnesota.....	1871	261, 050	291, 250	100, 000	652, 300
Eagle harbor, Michigan.....	1866	97, 000	.....	.....	97, 000
Grand Marais harbor, Minnesota.....	1879	10, 000	85, 000	22, 350	117, 350
Grand Marais harbor of refuge, Michigan.....	1879	10, 000	291, 250	50, 000	351, 250
Marquette harbor, Michigan.....	1860	297, 230	48, 000	40, 000	385, 230
Ontonagon harbor, Michigan.....	1867	202, 600	95, 500	10, 000	308, 100
Portage Lake ship canal, Michigan.....	1886	.....	10, 000	350, 000	360, 000
St. Marys river and canal, Michigan.....	1858	2, 215, 692	2, 625, 000	1, 300, 000	6, 140, 692
Superior and St. Louis bays, Wisconsin.....	1873	373, 983	172, 500	69, 895	616, 378
Lakes Huron and St. Clair.....	1852	1, 034, 310	1, 511, 850	245, 500	3, 691, 700
Alpena harbor (Thunder bay), Michigan.....	1876	4, 500	15, 000	15, 500	35, 000
Au Sable river and harbor, Michigan.....	1867	95, 750	18, 000	.....	113, 750
Belle river, Michigan.....	1881	.....	14, 000	.....	14, 000
Black river, Michigan.....	1888	.....	10, 000	35, 000	45, 000
Cheboygan harbor, Michigan.....	1871	91, 000	57, 000	.....	148, 000
Clinton river, Michigan.....	1852	11, 500	30, 000	10, 000	51, 500
Clinton harbor, Michigan.....	1882	.....	3, 000	.....	3, 000
Detroit river, Michigan.....	1874	175, 000	528, 000	.....	703, 000
Harbor of refuge at Sand Beach, Michigan.....	1871	700, 000	420, 000	30, 000	1, 150, 000
St. Clair river, flats, and canal.....	1852	653, 560	111, 140	80, 000	844, 700
Saginaw river, Michigan.....	1866	195, 000	298, 750	75, 000	568, 750
Sebawaing harbor, Michigan.....	1875	8, 000	7, 000	.....	15, 000
Lake Michigan.....	1826	6, 440, 843	3, 917, 400	893, 000	11, 251, 243
Alnapee harbor, Wisconsin.....	1871	103, 000	62, 000	6, 000	171, 000
Black Lake harbor, Michigan.....	1852	217, 615	47, 000	10, 000	274, 615
Calumet harbor and river, Illinois.....	1870	277, 000	135, 400	70, 000	482, 400
Cedar river (Green Bay), Michigan.....	1882	.....	30, 000	.....	30, 000
Charlevoix harbor, Michigan.....	1876	31, 000	62, 500	9, 000	102, 500
Chicago harbor, Illinois.....	1833	1, 134, 005	870, 000	100, 000	2, 104, 005
Fox river (mouth of), Wisconsin.....	1867	40, 000	.....	.....	40, 000
Frankfort harbor, Michigan.....	1866	213, 660	59, 000	10, 000	273, 660
Grand Haven harbor, Michigan.....	1852	303, 866	245, 000	75, 000	623, 866
Grand river, Michigan.....	1881	.....	50, 000	.....	50, 000
Green Bay harbor, Wisconsin.....	1866	229, 550	58, 000	10, 000	297, 550
Kenosha harbor, Wisconsin.....	1844	194, 307	33, 500	17, 000	244, 807
Kewannee harbor, Wisconsin.....	1881	.....	55, 000	20, 000	75, 000
Lake Winnebago, Wisconsin.....	1839	500	.....	.....	500
La Plaisance bay, Michigan.....	1826	19, 803	.....	.....	19, 803
Ludington harbor, Michigan.....	1867	196, 185	156, 250	.....	352, 435
Manistee harbor, Michigan.....	1867	183, 000	65, 000	50, 000	298, 000
Manistique harbor, Michigan.....	1880	.....	6, 000	.....	6, 000
Manitowoc harbor, Wisconsin.....	1852	240, 820	59, 000	8, 000	307, 820
Menominee harbor, Wisconsin.....	1871	153, 000	59, 000	54, 000	266, 000
Michigan city (outer harbor), Indiana.....	1836	679, 880	304, 375	50, 000	1, 034, 264
Michigan city (inner harbor), Indiana.....	1880	.....	76, 875	7, 500	84, 375
Milwaukee bay, Wisconsin.....	1881	.....	415, 000	86, 000	501, 000
Milwaukee harbor, Wisconsin.....	1836	335, 987	38, 000	.....	373, 987
Muskegon harbor, Michigan.....	1867	140, 000	130, 000	50, 000	320, 000
Neenah river, Wisconsin.....	1839	2, 500	.....	100, 000	102, 500
New Buffalo harbor, Michigan.....	1852	78, 000	5, 000	.....	83, 000
Oconto harbor, Wisconsin.....	1881	.....	68, 000	.....	68, 000
Pensaukee harbor, Wisconsin.....	1882	.....	15, 000	.....	15, 000
Pentwater harbor, Michigan.....	1867	168, 820	57, 000	8, 000	233, 820
Petoskey harbor, Michigan.....	1890	.....	.....	15, 000	15, 000
Port Wash. Lighton, Wisconsin.....	1870	100, 500	84, 000	3, 000	187, 500
Portage Lake harbor of refuge, Michigan.....	1879	10, 000	82, 500	8, 000	100, 500
Racine harbor, Wisconsin.....	1844	201, 285	46, 000	17, 500	264, 785
St. Josephs harbor, Michigan.....	1836	280, 113	67, 000	20, 000	367, 113
St. Josephs river (survey), Michigan.....	1888	.....	2, 500	1, 000	3, 500
Saugatuck harbor, Michigan.....	1868	105, 439	35, 000	.....	140, 439
Sheboygan harbor, Wisconsin.....	1852	183, 449	120, 000	15, 000	318, 449
South Haven harbor, Michigan.....	1867	149, 500	42, 500	15, 000	207, 000
Sturgeon bay, Wisconsin.....	1873	110, 000	55, 000	3, 000	168, 000
Two Rivers harbor, Wisconsin.....	1871	140, 000	60, 500	3, 000	203, 500
Waukegan harbor, Illinois.....	1852	15, 000	115, 000	35, 000	165, 000
White River harbor, Michigan.....	1867	203, 050	54, 500	17, 000	274, 550

CONGRESSIONAL APPROPRIATIONS—Continued.

TABLE 33.—APPROPRIATIONS BY DETAILED LOCALITIES—Continued.

LOCALITIES.	Date of earliest appropriations.	Appropriations up to and including 1870.	Appropriations from 1880 to 1889, inclusive.	Appropriations by act of Congress, September, 1890.	Total appropriations up to date.
Lake Erie.....	1823	\$5,362,336	\$2,712,500	\$804,500	\$8,879,336
Ashtabula harbor, Ohio.....	1826	290,711	137,500	40,000	468,211
Black River harbor, Ohio.....	1879	175,205	45,000	12,000	232,205
Buffalo harbor, New York.....	1826	1,410,495	742,500	300,000	2,452,995
Cattaraugus creek, New York.....	1836	57,410	.....	.....	57,410
Cleveland harbor, Ohio.....	1825	654,882	793,750	75,000	1,523,632
Conneaut harbor, Ohio.....	1829	106,629	6,000	.....	112,629
Cunningham creek, Ohio.....	1826	19,781	.....	.....	19,781
Dunkirk harbor, New York.....	1827	430,946	55,000	20,000	505,946
Erie harbor, Pennsylvania.....	1823	616,367	235,500	40,000	891,867
Grand River harbor (Fairport), Ohio.....	1825	229,124	61,750	30,000	320,874
Huron river and harbor, Ohio.....	1826	98,274	25,000	16,000	139,274
Monroe harbor, Michigan.....	1835	209,515	11,000	5,000	225,515
Port Clinton harbor, Ohio.....	1872	40,000	23,000	3,000	66,000
Portland harbor, New York.....	1836	56,616	.....	.....	56,616
Rocky River harbor, Ohio.....	1872	35,000	4,000	.....	39,000
Rouge River, Michigan.....	1888	.....	10,000	10,000	20,000
Sandusky City harbor, Ohio.....	1826	222,980	97,500	45,000	365,480
Sandusky river, Ohio.....	1867	30,000	21,500	1,500	53,000
Toledo harbor, Ohio.....	1866	564,700	492,500	205,000	1,262,200
Vermilion river, Ohio.....	1836	113,701	11,000	2,000	126,701
Lake Ontario.....	1826	2,581,855	895,875	115,000	3,592,730
Black river (Sacketts harbor), New York.....	1836	42,400	.....	.....	42,400
Charlotte harbor, New York.....	1828	310,578	133,750	25,000	469,328
Great Sodus bay, New York.....	1829	343,772	83,875	10,000	437,647
Little Sodus bay, New York.....	1852	194,442	103,500	13,000	310,942
Oak Orchard harbor, New York.....	1836	173,000	27,000	5,000	205,000
Olcott harbor, New York.....	1867	115,000	18,000	30,000	163,000
Oswego harbor, New York.....	1826	1,264,363	471,250	30,000	1,765,613
Port Ontario harbor, New York.....	1836	50,000	.....	.....	50,000
Pultneyville harbor, New York.....	1870	62,000	9,000	2,000	73,000
Sacketts harbor, New York.....	1826	6,000	9,000	.....	15,000
Sandy creek, New York.....	1828	300	.....	.....	300
Wilson harbor, New York.....	1875	20,000	40,500	.....	60,500
St. Lawrence river.....	1852	140,006	58,500	53,000	251,506
Grass river, New York.....	1882	.....	3,000	6,000	9,000
Ogdensburg harbor, New York.....	1852	110,006	50,000	42,000	202,006
Sister islands, New York.....	1890	.....	.....	5,000	5,000
Waddington harbor, New York.....	1873	30,000	5,500	.....	35,500
Niagara river.....	1829	52,098	106,500	75,000	233,598
Black Rock harbor, New York.....	1829	52,098	.....	.....	52,098
Tonawanda harbor, New York.....	1881	.....	106,500	75,000	181,500
General appropriations.....	1836	3,721,562	58,000	.....	3,779,562
General repairs of harbor.....	1844	270,000	.....	.....	270,000
Surveys.....	1866	175,000	.....	.....	175,000
Survey steamer.....	1854	50,000	.....	.....	50,000
Chart-making.....	1849	130,000	.....	.....	130,000
Hydrographic surveys.....	1841	2,973,879	58,000	.....	3,031,879
Construction of dredging machines.....	1836	122,683	.....	.....	122,683

TRANSPORTATION ON LAKE CHAMPLAIN.

The statistics of transportation on Lake Champlain were but partially given in the fourth volume of the Tenth Census, and to have included the statistics of this sheet of water in the report on the Great Lakes and St. Lawrence river for the Eleventh Census would have stood in the way of preparing any comparative statistics for 1880 and 1890. It was therefore decided to make a separate report for Lake Champlain. No record was made either of early commercial operations on Lake Champlain except the statement that 1 of the first 4 steamers built on all the northern lakes was a craft of 298.57 tons, which was constructed on Lake Champlain about the year 1818.

All that it is necessary to say concerning Lake Champlain in the way of physical geography is that it forms the boundary line for its whole length between the states of New York and Vermont, and is 100 miles long from its head of navigation at Whitehall, in Washington county, New York, to its farthest northward extension where it joins the boundary line between Quebec and the states of New York and Vermont. Its area, however, is not as great as its length would seem to indicate, for while its northern part incloses several small islands and is nearly 14 miles wide, more than half of its entire length is not more than 5 miles wide and in some places is less than 1 mile wide. Its greatest ascertained depth is 600 feet, and its surface is 93 feet higher than the level of the sea. Its surplus waters are discharged into the St. Lawrence by the river Richelieu, while on the east it receives the waters of the Missisquoi, the Lamoille, and the Winooski rivers, and Otter creek; from the south those of the Poultney; the contributing streams on the west being the Chazy, the Saranac, and the Au Sable rivers.

It may be added that besides being an important channel of navigation in itself it is connected with the Hudson river by the Champlain canal, which extends from Whitehall to Albany.

PLAN OF THE TABLES.

The plan adopted for the presentation of the statistical results of the investigation by the Eleventh Census into the industry of transportation on Lake Champlain, with some necessary modifications, is the same that was followed in considering the Great Lakes and St. Lawrence river, the numbers and the titles of the 17 tables which have been prepared in this instance being as follows:

Equipment, occupation, and construction:

- Table 1—Equipment in general.
- Table 2—Equipment of fleets, by classes.
- Table 3—Percentages of tonnage and valuation.
- Table 4—Construction, by localities.
- Table 5—Construction, by materials.

Traffic operations:

- Table 6—Freight movement in general.
- Table 7—Freight movement, by ports and commodities.

Earnings and expense accounts:

- Table 8—Financial account in general.
- Table 9—Expense account in detail.
- Table 10—Employés and wages.
- Table 11—Fuel account.

Comparative statistics:

- Table 12—Fleets for the 10 years 1880-1889.
- Table 13—Vessel tonnage for the 10 years 1880-1889.
- Table 14—Tonnage fluctuations for the 10 years 1880-1889.
- Table 15—Shipbuilding for the 10 years 1880-1889 (general).
- Table 16—Shipbuilding for the 10 years 1880-1889 (steamers).

Congressional appropriations:

- Table 17—Appropriations, by localities.

The preceding list shows clearly the scheme on which the tabulation of the Lake Champlain statistics has been carried out, while the following synopsis will more explicitly show what the tables contain:

EQUIPMENT.

Table 1, "Equipment in general", shows the number, tonnage, and value of all the steamers and sailing vessels of over 5 tons burden owned on Lake Champlain in 1889, entered by ports.

Table 2, entitled "Equipment of fleets, by classes", divides the entries of Table 1, separating the total number, tonnage, and value of all steamers and sailing vessels into classes, retaining the separate entries by ports. The steamers are divided into 4 classes, namely, side-wheel passenger steamers, propellers carrying both passengers and freight, tugs, and all other classes, while the sailing vessels are divided into 2 classes, schooners and sloops.

Table 3, entitled "Percentages of tonnage and valuation", gives the number, gross and net tonnage, estimated carrying capacity, valuation, and value per gross ton of all vessels owned on Lake Champlain, the entire lake fleet being divided into 8 classes of occupation, and the percentages of both the tonnage and valuation of each of these classes to the lake totals being given.

CONSTRUCTION.

Table 4, "Construction, by localities", gives the number, tonnage, value, average value per ton, and the average tonnage of all vessels owned on Lake Champlain per material of construction, given by separate entries for each port.

Table 5, entitled "Construction, by materials", gives the number, tonnage, value, average value per ton, and average tonnage of the same craft, but grouped according to material of construction, in contradistinction to the preceding table, in which the grouping is done by ports.

TRAFFIC.

Table 6, "Freight movement in general", contains the receipts, shipments, and excess of one movement over the other, and the total movement of the freight moved on Lake Champlain with the commodities divided into the same comprehensive classes used in the report on the Great Lakes and St. Lawrence river, that is:

Class I—Products of agriculture.

Class II—Products of mines and quarries.

Class III—Other products (such as animal products and lumber).

Class IV—Manufactures, miscellaneous merchandise, and other commodities.

There has been worked out for this table also the percentage of each commodity to the total traffic, whether of receipts, shipments, or combined movements.

Table 7, "Freight movements, by ports and commodities", presents the figures of commodity movement given in the preceding table, allotted to the 8 principal trading points of Lake Champlain.

EARNINGS AND EXPENSE ACCOUNTS.

Table 8, entitled "Financial account in general", is really a balance sheet of the industry of transportation on Lake Champlain, showing as it does the gross earnings, expenses, and net earnings of the operating lake fleet of steamers and sailing vessels, entered for each port of registration.

Table 9, "Expense account in detail", itemizes the sum of gross expenses given in the preceding table under the various heads of port charges, wages, provisions, current repairs, fuel (for the steamers), commissions, insurance, taxes, and office expenses, with two columns for such other running and shore expenses as have not been specified.

Table 10, "Employés and wages", is an analysis of the monthly wages paid on the operating vessels belonging to each port, to all grades of employés from captains to captains' boys, and from first mates to chambermaids, together with the number of persons making up the ordinary crews required as the complement of all operating craft, the number of persons receiving whole or partial employment in the operation of these vessels, the total wages paid out each month, and the average rate of wages paid.

Table 11, entitled "Fuel account" applies, of course, only to operating steamers. These steamers are grouped under the heads of (1) passenger, passenger and freight, and freight steamers, (2) towboats, and (3) miscellaneous. For each of these classes and for each port the number of tons of coal consumed is set down, together with the cost of material.

COMPARATIVE STATISTICS.

Table 12, "Fleets for the 10 years 1880-1889", gives the number and tonnage of all steamers and sailing vessels registered in the customs districts of Lake Champlain for the decade in question; this table as well as the 4 succeeding having been compiled from information furnished this office by the Commissioner of Navigation.

In Table 13 these figures of number and tonnage are made the base for a calculation of averages which are worked out and given for steamers and sailing vessels for the 10 years, while Table 14 gives the fluctuations from the annual average number and the annual average tonnage of all steamers and sailing vessels registered in the customs districts.

Tables 15 and 16 are records of shipbuilding for the decennial period in question, the first giving the number and tonnage of all steamers and sailing vessels built during the 7 years of activity in the decade, and the second furnishing the data for the 4 years in which steamers were built, to show the number and tonnage of all vessels of this kind so built, arranged according to their methods of propulsion—that is, whether propellers or side-wheel steamers.

CONGRESSIONAL APPROPRIATIONS.

Table 17, which concludes the series, gives the amounts appropriated by Congress for the survey, improvement, and maintenance of the harbors of Lake Champlain and of the rivers flowing into it, from the earliest date of appropriation down to and including that of the act of Congress of September, 1890. These sums, so far as the grouping of periods is concerned, are given, first, up to and including 1879; second, from 1880 to 1889, inclusive; third, the appropriations of 1890, and fourth, the total appropriations from first to last.

LOCALITIES.

Before taking up the consideration of what the tables show it will be necessary to explain the various localities mentioned in the different statements. The two places entered on Tables 1, 2, 4, 5, 8, 9, 10, and 11, Burlington, Vermont, and Plattsburg, New York, are the ports of register of the two customs districts of Vermont and Champlain, which latter localities are given in Tables 12, 13, 14, 15, and 16, the former term having been used by the Census agents in collecting their information, and the latter being the term employed in the reports of the Commissioner of Navigation, the two being practically the same. In Table 7 the list of the principal trading points on the lake is given, the traffic returns being a matter entirely outside of custom-house registration, and the list being as follows:

Rouses Point, New York.
Plattsburg, New York.
Ticonderoga, New York.
Whitehall, New York.

Gordons Landing, Vermont.
Burlington, Vermont.
Otter Creek, Vermont.
Swanton, Vermont.

WHAT THE TABLES SHOW.

In the text of the Great Lakes and St. Lawrence river the next step taken after the consideration of "the plan of the tables" was to inquire what the tables show, and no better plan could be adopted for the present article.

VALUES AND TONNAGE.

The information given in Table 1 shows that in the year ended December 31, 1889, the floating equipment of Lake Champlain, exclusive of barges and all other unrigged craft, numbered 47 vessels, having a tonnage of 6,061 tons and a value of \$361,300. So far as numbers go the shipping was about equally distributed both between steamers and sailing vessels, and between the 2 ports of registration of Burlington and Plattsburg, the steamers numbering 22 and the sailing vessels 25. The figures of values and tonnage, however, are quite different, for while the tonnage of the steamers was 4,136 tons, that of the sailing vessels was 1,925; and while the value of the 25 sailing vessels was \$36,800, that of the steamers amounted to \$324,500.

From Tables 2 and 3, which divide the lake fleet into classes indicative of occupation or rig, it is seen that of the 22 steamers 5 were employed as side-wheel passenger carriers, having a gross tonnage of 3,011 tons and a value of \$215,000; 4 were propellers carrying both passengers and freight and had a tonnage of 76 tons and a value of \$10,000; 6 were tugs, with a gross tonnage of 652 tons and a value of \$61,000; there was 1 ferryboat of 5 tons and a value of \$1,500, and 3 pleasure yachts with a tonnage of 74 tons and a value of \$19,000; leaving 3 unclassified steamers of 318 tons aggregate tonnage and \$18,000 value. Of the 25 sailing vessels 22 are seen to be schooners and 3 sloops, the tonnage and value of the schooners being 1,747 tons and \$32,700, and the tonnage and value of the sloops being 178 tons and \$4,100.

The percentages given in Table 3 furnish several items of interest, the principal one, and the only one that need be noted here, being the preponderance in proportionate tonnage and value of the side-wheel passenger steamers, the 5 steamers so employed representing 49.68 or nearly 50 per cent of the total tonnage on the lake, both sailing vessels and steamers, and 59.51 per cent, or more than one-half of the value, of the Lake Champlain fleet.

MATERIALS OF CONSTRUCTION.

Looking at Tables 4 and 5, which show the relative use of iron and wood as materials of construction, it is seen that of the 47 craft reported on only 6 were of iron, their tonnage being 1,404 tons and their value \$109,000, leaving 41 wooden vessels with a tonnage of 4,657 tons and a value of \$252,300. When it comes to a question of averages, however, it is found that the average value per ton of the iron vessels was \$78 as against \$54 per ton of wooden vessels; while the average tonnage of the iron vessels was 234, and that of the wooden vessels 114.

The statistics of freight traffic which are found in Tables 6 and 7 show that during 1889 the total movement by the vessels employed in such operations was 1,760,549 tons; this amount, it should be understood, being the aggregate of the receipts and shipments at the various trading points on the lake—those trading points which were listed in a preceding paragraph.

PORT TRAFFIC AND CARGO TONNAGE.

In considering the traffic on the Great Lakes and St. Lawrence river it was stated to be "a problem in accurate statistics whether the aggregate of receipts and shipments does not show a larger movement than the actual returns of cargo tonnage would do", and a table was prepared (Table 16 in that report) in which there was set down the result of each commodity movement, either receipts or shipments, whichever happened to be the larger, and using this single amount to represent the cargo tonnage. By applying the same rule to the commerce of Lake Champlain it is found that the cargo tonnage amounted to 1,065,368 tons.

PORTS AND COMMODITIES.

In Table 7, which illustrates the freight movement by ports and commodities, the relative importance of these ports is fairly shown. Both as a shipping and receiving point, Whitehall, New York, easily leads, its shipments amounting to 540,000 tons and its receipts to 600,000 tons, a total movement of 1,140,000 tons. Rouses Point, New York, comes next, its receipts being 207,500 tons and its shipments 113,843 tons, making a total of 321,343 tons. The port of third importance is Otter Creek, Vermont, with shipments of 23,000 tons and receipts of 74,000 tons, a total of 97,000 tons. Other than the 3 ports mentioned, Plattsburg, New York, is the only port for which any returns for shipments were made. Table 7 also shows in a fair degree the principal commodities in whose traffic the different ports were engaged, although the reports showed far too much willingness on the part of those making them out to lump the traffic figures under the head of "Unclassified". Taking the 4 principal specified items of coal, iron ore, iron (pig and bloom), and lumber it is found that Plattsburg received the bulk of the coal, 7,875 tons, and that it also shipped iron ore to the amount of 27,135 tons. The business of Rouses Point seems to have principally consisted in the receipts of lumber, its figures standing at 197,500 tons out of a total of 277,223 tons of lumber received at all ports on the lake. Swanton, Vermont, is the only port making returns for the receipt of iron, the amount being 2,125 tons.

The returns of passenger traffic on Lake Champlain were quite unsatisfactory, the alleged reason being that nearly all the passengers were of the excursion class, of whom no record was kept, and indeed the only reports of passenger traffic received were those of 87,139 regular passengers, made by the steamer owners of Burlington, Vermont.

EARNINGS AND EXPENSES.

In Table 8 are given the figures which show how the business of transportation by water paid on Lake Champlain during 1889. The total figures indicate that the gross earnings of the operating mercantile fleet amounted to \$172,311, the expenses to \$141,599, leaving the net earnings at \$30,712. Out of these amounts the steamers made as gross earnings \$160,830 and paid out \$132,380, leaving a balance of \$28,450; while the sailing vessels made as gross earnings \$11,481 and paid out \$9,219, leaving the net earnings at \$2,262.

In Table 9 the total amount of expenses, \$141,599 given in Table 8, is reduced to the principal items making it up. The largest item was wages, that expense amounting to \$42,239; next to which came fuel (for the steamers), \$40,827. Provisions amounted to \$16,028; the current repairs to \$13,465; the office expenses to \$13,445; taxes to \$2,475; insurance to \$2,094; port charges to \$921; commissions to \$60; the balance of \$10,045 being set down to unspecified running and shore expenses.

In much the same way that the grand total of expenses given in Table 8 was divided into a number of items in Table 9, so the total of wages which formed one of the leading items in Table 9 is analyzed in Table 10, which treats of the monthly wages paid to the employés of those vessels which were in operation during 1889. The apparent contradiction between the statements made in Table 1, which sets the floating equipment of Lake Champlain at 47 vessels, and that made in Table 10, which sets the number of chief officers at 30, is due to the fact that in the one case the fleet referred to includes all registered craft whether in operation or not, while in the other case the report was only made for those vessels which were engaged in commercial operations.

Of these employés the steamer list embraces captains, first and second mates, clerks, first and second engineers, wheelmen, lookouts, watchmen, cooks and assistant cooks, seamen, deck hands, firemen, stewards, waiters, boys, and chambermaids; while the sailing vessel list includes captains, first mates, seamen, and cooks.

TRANSPORTATION ON LAKE CHAMPLAIN.

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The number of each class of employés for the lake fleet is given for both steamers and sailing vessels in a comprehensive total, from which the subjoined summaries, with their calculated averages, are drawn:

STATEMENT SHOWING THE NUMBER OF ALL EMPLOYÉS CONSTITUTING THE ORDINARY CREWS OF THE OPERATING STEAMERS AND SAILING VESSELS ON LAKE CHAMPLAIN, TOGETHER WITH THEIR AGGREGATE AND AVERAGE MONTHLY WAGES.

STEAMERS.				STEAMERS—Continued.			
EMPLOYÉS.	Number employed.	Aggregate of wages for 1 month.	Average monthly wages.	EMPLOYÉS.	Number employed.	Aggregate of wages for 1 month.	Average monthly wages.
Total	173	\$6,769	\$39.13	Firemen	28	873	31.18
Captains	17	1,003	94.29	Stewards	4	248	62.00
First mates	12	555	46.25	Waiters	16	240	15.00
Second mates	3	75	25.00	Boys	1	15	15.00
Clerks	2	110	55.00	Chambermaids	4	60	15.00
First engineers	17	1,030	60.59	SAILING VESSELS.			
Second engineers	12	478	39.83	Total	35	1,002	28.63
Wheelmen	6	253	42.17	Captains	13	580	44.62
Lookouts	1	16	16.00	First mates	5	120	24.00
Watchmen	3	60	20.00	Seamen	11	210	19.09
Cooks	15	439	29.27	Cooks	6	92	15.33
Assistant cooks	2	36	18.00				
Seamen	6	156	26.00				
Deck hands	24	522	21.75				

Should a comparison be made between the wages paid on Lake Champlain and those paid on the Great Lakes and St. Lawrence river it will be seen that the average in every case is considerably lower on the smaller sheet of water, the general average being \$48.79 in the other locality against \$37.36 on Lake Champlain, the detailed averages being as follows:

STATEMENT SHOWING THE AVERAGE MONTHLY WAGES PAID TO ALL CLASSES OF EMPLOYÉS ON THE OPERATING STEAMERS AND SAILING VESSELS ON LAKE CHAMPLAIN, COMPARED WITH THOSE PAID ON THE GREAT LAKES AND ST. LAWRENCE RIVER.

STEAMERS.			STEAMERS—Continued.		
EMPLOYÉS.	Average monthly wages on Lake Champlain.	Average monthly wages on the Great Lakes and St. Lawrence river.	EMPLOYÉS.	Average monthly wages on Lake Champlain.	Average monthly wages on the Great Lakes and St. Lawrence river.
Average monthly wages of all steamer employés.	\$39.13	\$49.73	Firemen	31.18	36.51
Captains	94.20	109.15	Stewards	62.00	59.43
First mates	46.25	71.56	Waiters	15.00	20.44
Second mates	25.00	58.00	Boys	15.00	18.30
Clerks	55.00	60.25	Chambermaids	15.00	22.39
First engineers	60.59	87.34	SAILING VESSELS.		
Second engineers	39.83	62.24	Average monthly wages of all sailing vessel employés.	\$28.63	\$46.70
Wheelmen	42.17	36.01	Captains	44.62	75.18
Lookouts	16.00	33.77	First mates	24.00	52.14
Watchmen	20.00	32.97	Seamen	19.09	38.39
Cooks	29.27	51.54	Cooks	15.33	35.68
Assistant cooks	18.00	20.98			
Seamen	26.00	35.96			
Deck hands	21.75	23.70			

Another interesting total of Table 10 shows that while the number of persons making up the ordinary crews of the operating vessels on Lake Champlain in 1889 was 208, there were 269 persons to whom whole or partial employment was given during the same year, and that the total wages paid per working month was \$7,771.

FUEL ACCOUNT.

In Table 11 there will be found set down the amounts of coal burned by all the operating mercantile steamers during 1889, together with the cost of the fuel. As was seen when considering Table 9 the cost of coal figures as an item of the expense account to the extent of \$40,827, and in the present table it will be found that the amount burned was 10,910 tons; that the passenger and freight steamers burned 5,787 tons, costing \$20,831; that the towboats burned 3,400 tons, costing \$13,922, and that the miscellaneous steam craft consumed 1,723 tons of coal, costing \$6,074.

COMPARATIVE STATISTICS.

As was stated when considering the "Plan of the tables", the comparative statistics found in Tables 12 to 16, inclusive, have been gathered from the reports of the Bureau of Navigation, and before proceeding to consider them it will be well to point out that the difference between the fleet of 1889 reported by the Census Office and that reported by the Commissioner of Navigation, is due to the fact that in the Commissioner's figures there are included certain unrigged craft which have not been given a place in the census report, and to a somewhat different method of classification. The totals of the Commissioner's report are 53 craft, with a tonnage of 6,490.85 tons, made up of 19 steamers, with a tonnage of 4,102.38 tons, and 34 sailing vessels, with a tonnage of 2,388.47 tons, while the total of Table 1 places the Champlain fleet at 47 craft, with a tonnage of 6,061 tons, made up of 22 steamers, with a tonnage of 4,136 tons, and 25 sailing vessels, with a tonnage of 1,925 tons. The yearly details of Table 12 form an interesting record, but the pith of the subject is presented in the recapitulation for the 10 years. No clearer presentation of the gradual change in the class of the craft in use on the lake can be made than is found in this recapitulation, for while the number of the vessels composing the fleet has dropped from 63 in 1880 to 53 in 1889, the tonnage has increased from 5,247.86 to 6,490.85 tons. The explanation of the increased tonnage is found in the statistics of the two columns treating respectively of steamers and sailing vessels, for here it is seen that while the sailing vessels have dropped from 44, with a tonnage of 2,667.62 tons, in 1880 to 34, with a tonnage of 2,388.47 tons, in 1889, the steamers of 1880, which numbered 19, had a tonnage of 2,580.24 tons, while the steamers in 1889, with the same number, 19, had a tonnage of 4,102.38 tons.

CHANGES IN EQUIPMENT.

In Table 13 these changes in number and tonnage are further treated of, the statement showing that in 1880 the average tonnage of the steamers of the Vermont district was 219 tons, while in 1889 it had risen to 345 tons and that the tonnage of the steamers of the Champlain district had risen from 87 tons in 1880 to 100 tons in 1889. Further, that while the average tonnage of the sailing vessels of the Champlain district remained stationary at 64 tons, that of the sailing vessels of the Vermont district had risen from 55 tons to 85 tons; the average tonnage of the combined fleet rising from 71 tons for the Champlain district in 1880 to 75 tons in 1889, and from 103 tons for the Vermont district in 1880 to 208 tons in 1889.

Table 14 is but a continuation, or rather an elaboration of Table 13; presenting as it does the years in which the number and tonnage of the lake fleet ran the highest above and the lowest below the average standard. The great changes, as has been said, are observable in the district of Vermont. Here the annual average number of vessels registered was 23, while the annual average tonnage was 3,416 tons; the year of highest registered number was 1881, when the number was 30, while the year of highest registered tonnage was 1888, when the tonnage was 4,169 tons. Conversely it is seen that the year of lowest registered number was 1889 with 19 registered vessels, while the year of lowest registered tonnage was 1880, when the tonnage was 2,469 tons. The year in which the number of registrations was closest to the average was 1883, when the number was 23, and the year in which the registered tonnage was closest to the average was 1882, when it was 3,402 tons. The fluctuation of number, by the by, was 11 and that of tonnage was 1,700 tons. The annual average number of registrations for the district of Champlain was 36, the fluctuation being 9; while the annual average registered tonnage was 2,645 tons, with a fluctuation of 614 tons.

SHIPBUILDING.

In Table 15, which gives the Commissioner's report of the shipbuilding in the two districts of Champlain and Vermont for the 10 years 1880-1889, additional facts are found explaining the extensive fluctuations in the registration of the Vermont district. From this table the following summary can be collated:

STATEMENT SHOWING THE NUMBER AND TONNAGE OF STEAMERS AND SAILING VESSELS BUILT IN THE TWO DISTRICTS OF CHAMPLAIN AND VERMONT DURING THE 10 YEARS 1880-1889.

DISTRICTS.	STEAMERS.		SAILING VESSELS.		TOTAL.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Both districts.....	6	1,484.20	7	546.66	13	2,030.86
Champlain.....	2	199.93	5	415.30	7	615.23
Vermont.....	4	1,284.27	2	131.36	6	1,415.63

Table 16 is devoted to an analysis of steamer building, with especial reference to the methods of propulsion adopted. The whole number of steamers built in the 10 years was 6, with a tonnage of 1,484.20, and of these, as the recapitulation shows, 4 were propellers, with a tonnage of 243.12 tons, and 2 were side-wheel steamers, with a tonnage of 1,241.08 tons. No stern-wheel steamers were built.

CONGRESSIONAL APPROPRIATIONS.

The earliest appropriation made by the government for the improvement of Lake Champlain was in 1836, when improvements were effected at Burlington, Plattsburg, and Whitehall harbors, and when a general survey of the lake was made, the appropriations for that year amounting to \$620,352. Since that time other localities have been improved and other amounts have been appropriated, the total amount up to and including the act of Congress of September, 1890, being \$1,123,352, as is shown in Table 17, while the subjoined descriptive list shows what has been done under the appropriations:

BURLINGTON HARBOR.—The first project for the improvement of this harbor was probably adopted in 1836. Modifications of the original plan have been made from time to time so as to afford adequate protection to the increasing commercial and shipping interests of the harbor. The improvements now embrace a breakwater of good dimensions and a well protected entrance.

GORDONS LANDING.—The object of the improvement here has been the construction of a breakwater out to the 16-foot curve for the protection of the landing.

GREAT CHAZY RIVER.—The appropriation made by the Congressional act of 1890 was for the purpose of improving this river from the mouth, on Lake Champlain, to Champlain village.

OTTER CREEK.—The project of this improvement adopted in 1872 has been the formation of a channel from Vergennes to Lake Champlain of good navigable width, and with 8 feet of water.

PLATTSBURG HARBOR.—The improvements here consisted of a breakwater running out some 1,200 feet, built for the protection of the steamboat docks.

ROUSES POINT.—Like nearly all the improvements on Lake Champlain, that at this place has consisted of the erection of a curved breakwater 2,000 feet long.

SURVEY.—This survey was made in 1836 and 1838, the principal localities being the Narrows and the channel between North and South Hero islands.

SWANTON HARBOR.—Swanton harbor has been really formed by the construction of protecting breakwaters inclosing a portion of the lake.

TICONDEROGA RIVER.—The project of this improvement, adopted in 1881, was the formation of a channel of navigable width and a least depth of 8 feet at low water between the falls of Ticonderoga village and Lake Champlain, a distance of 2 miles.

WHITEHALL HARBOR.—Little has been done in this vicinity except a survey.

EQUIPMENT, OCCUPATION, AND CONSTRUCTION.

TABLE 1.—EQUIPMENT OF FLEETS IN GENERAL—NUMBER, TONNAGE, AND VALUE OF ALL STEAMERS AND SAILING VESSELS FORMING THE LAKE FLEET, AND CREDITED TO THEIR PORTS OF REGISTRATION.

PORTS.	TOTAL OF ALL CRAFT.			STEAMERS.			SAILING VESSELS.		
	Number.	Gross tonnage.	Valuation.	Number.	Gross tonnage.	Valuation.	Number.	Gross tonnage.	Valuation.
Total for lake	47	6,061	\$361,300	22	4,136	\$324,500	25	1,925	\$36,800
Burlington, Vermont	21	3,880	254,100	12	3,128	240,500	9	752	13,600
Plattsburg, New York	26	2,181	107,200	10	1,008	84,000	16	1,173	23,200

TABLE 2.—EQUIPMENT OF FLEETS BY CLASSES—NUMBER, TONNAGE, AND VALUE OF THE LAKE STEAMERS AND SAILING VESSELS REPORTED ON IN THE PRECEDING TABLE, BUT DIVIDED INTO CLASSES INDICATIVE OF OCCUPATION AND RIG.

PORTS.	TOTAL EQUIPMENT.			STEAMERS.										SAILING VESSELS.							
				Side-wheel passenger.			Propellers carrying both passengers and freight.			Tugs.			All other classes.			Schooners.			Sloops.		
	No.	Gross tonnage.	Valuation.	No.	Gross tonnage.	Valuation.	No.	Gross tonnage.	Valuation.	No.	Gross tonnage.	Valuation.	No.	Gross tonnage.	Valuation.	No.	Gross tonnage.	Valuation.	No.	Gross tonnage.	Valuation.
Total	47	6,061	\$361,300	5	3,011	\$215,000	4	76	\$10,000	6	632	\$61,000	7	397	\$38,500	22	1,747	\$32,700	3	178	\$4,100
Burlington, Vermont	21	3,880	254,100	5	3,011	215,000	3	38	5,000				4	79	20,500	8	709	12,900	1	43	700
Plattsburg, New York	26	2,181	107,200				1	38	5,000	6	632	61,000	3	318	18,000	14	1,038	19,800	2	135	3,400

TABLE 3.—PERCENTAGES OF TONNAGE AND VALUATION—NUMBER, GROSS AND NET TONNAGE, ESTIMATED CARRYING CAPACITY, VALUATION, AND VALUE PER GROSS TON OF ALL STEAMERS AND SAILING VESSELS, ARRANGED BY PERCENTAGES OF TONNAGE AND VALUATION APPLIED TO ALL CRAFT, GROUPED BY OCCUPATIONS.

CLASSES OF VESSELS.	Number.	TONNAGE.				VALUATION.		
		Gross.	Percentage of total tonnage on lake.	Net.	Estimated carrying capacity.	Commercial.	Percentage of valuation on lake.	Per ton gross.
All classes	47	6,061	100.00	4,724	7,475	\$361,300	100.00	\$60
Steamers:								
Side-wheel passenger	5	3,011	49.68	2,344	3,449	215,000	59.51	71
Propellers carrying both passengers and freight	4	76	1.25	39	19	10,000	2.77	132
Tugs	6	632	10.76	325	358	61,000	16.88	94
Ferry	1	5	0.08	5	2	1,500	0.42	300
Pleasure yachts	3	74	1.22	46	24	19,000	5.26	257
Unclassified steam vessels	3	318	5.25	179	86	18,000	4.98	57
Sailing vessels:								
Schooners	22	1,747	28.82	1,616	3,220	32,700	9.05	19
Sloops	3	178	2.94	170	323	4,100	1.13	23

TABLE 4.—CONSTRUCTION BY LOCALITIES—MATERIAL, NUMBER, TONNAGE, VALUE IN GENERAL, VALUE PER TON, AND AVERAGE TONNAGE OF ALL THE LAKE FLEET ENTERED FOR EACH PORT.

LAKES AND PORTS.	Material.	Number.	Gross tonnage.	Valuation.	Average valuation per ton.	Average tonnage.
Lake Champlain		47	6,061	\$361,300	\$60	129
Burlington, Vermont	Iron	1	743	55,000	74	743
	Wood	20	3,137	199,100	63	157
Plattsburg, New York	Iron	5	661	54,000	82	132
	Wood	21	1,520	53,200	35	72

EQUIPMENT, OCCUPATION, AND CONSTRUCTION—Continued.

TABLE 5.—CONSTRUCTION BY MATERIALS—MATERIAL, NUMBER, TONNAGE, GENERAL VALUE AND AVERAGES OF VALUE, AND TONNAGE OF ALL THE LAKE FLEET ENTERED FOR EACH PORT, GROUPED TO SHOW THE TOTALS FOR EACH MATERIAL OF CONSTRUCTION, WHETHER IRON OR WOOD.

LAKES AND PORTS.	Number.	Gross tonnage.	Valuation.	Average valuation per ton.	Average tonnage.
Total Lake Champlain	47	6,061	\$361,300	\$60	129
IRON.					
Lake Champlain	6	1,404	109,000	78	234
Burlington, Vermont.....	1	743	55,000	74	743
Plattsburg, New York.....	5	661	54,000	82	132
WOOD.					
Lake Champlain.....	41	4,657	252,300	54	114
Burlington, Vermont.....	20	3,137	199,100	63	157
Plattsburg, New York.....	21	1,520	53,200	35	72

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STATISTICS OF TRANSPORTATION.

EARNINGS AND EXPENSE ACCOUNTS—Continued.

TABLE 10.—EMPLOYÉS AND WAGES—MONTHLY WAGES PAID TO ALL EMPLOYÉS OF THE OPERATING LAKE CRAFT ENTERED FOR STEAMERS AND SAILING VESSELS, AND ALLOTTED TO EACH PORT OF REGISTER.

STEAMERS AND SAILING VESSELS.

LAKE AND PORTS.	CAPTAINS.		FIRST MATES.		SECOND MATES.		CLERKS.		FIRST ENGINEERS.		SECOND ENGINEERS.		WHEELMEN.		LOOKOUTS.		WATCHMEN.		COOKS.	
	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.
Lake Champlain	30	\$2,183	17	\$675	3	\$75	2	\$110	17	\$1,030	12	\$478	6	\$253	1	\$16	3	\$60	21	\$531
Burlington, Vermont.	16	1,317	10	410	3	75	2	110	12	780	7	278	5	203	1	16	3	60	14	398
Plattsburg, New York.	14	866	7	265	.....	.....	.....	.....	5	250	5	200	1	50	.....	.....	.....	.....	7	133

LAKE AND PORTS.	ASSISTANT COOKS.		SEAMEN.		DECK HANDS.		FIREMEN.		STEWARDS.		WAITERS.		BOYS.		CHAMBER-MAIDS.		Number persons making ordinary crew.	Number persons given employment during year.	Total wages paid per month.	Average rate of wages per month.
	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.				
Lake Champlain	2	\$36	17	\$366	24	\$522	28	\$873	4	\$248	16	\$240	1	\$15	4	\$60	208	269	\$7,771	\$37.36
Burlington, Vermont.	2	36	9	221	10	387	18	569	4	248	16	240	1	15	4	60	146	175	5,423	37.14
Plattsburg, New York.	.....	.....	2	145	5	135	10	304	.....	.....	.....	.....	.....	.....	.....	.....	62	94	2,348	37.87

STEAMERS.

LAKE AND PORTS.	CAPTAINS.		FIRST MATES.		SECOND MATES.		CLERKS.		FIRST ENGINEERS.		SECOND ENGINEERS.		WHEELMEN.		LOOKOUTS.		WATCHMEN.		COOKS.	
	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.
Lake Champlain	17	\$1,603	12	\$555	3	\$75	2	\$110	17	\$1,030	12	\$478	6	\$253	1	\$16	3	\$60	15	\$439
Burlington, Vermont.	12	1,157	8	355	3	75	2	110	12	780	7	278	5	203	1	16	3	60	10	332
Plattsburg, New York.	5	446	4	200	.....	.....	.....	.....	5	250	5	200	1	50	.....	.....	.....	.....	5	107

LAKE AND PORTS.	ASSISTANT COOKS.		SEAMEN.		DECK HANDS.		FIREMEN.		STEWARDS.		WAITERS.		BOYS.		CHAMBER-MAIDS.		Number persons making ordinary crew.	Number persons given employment during year.	Total wages paid per month.	Average rate of wages per month.
	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.				
Lake Champlain	2	\$36	6	\$156	24	\$522	28	\$873	4	\$248	16	\$240	1	\$15	4	\$60	173	216	\$6,769	\$39.13
Burlington, Vermont.	2	36	6	156	19	387	18	569	4	248	16	240	1	15	4	60	133	158	5,077	38.17
Plattsburg, New York.	.....	.....	.....	.....	5	135	10	304	.....	.....	.....	.....	.....	.....	.....	.....	40	58	1,692	42.30

TRANSPORTATION ON LAKE CHAMPLAIN.

EARNINGS AND EXPENSE ACCOUNTS—Continued.

TABLE 10.—EMPLOYEES AND WAGES—Continued.

SAILING VESSELS.

LAKE AND PORTS.	CAPTAINS.		FIRST MATES.		SECOND MATES.		CLERKS.		FIRST ENGINEERS.		SECOND ENGINEERS.		WHEELMEN.		LOOKOUTS.		WATCHMEN.		COOKS.	
	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.
Lake Champlain . . .	13	\$580	5	\$120															6	\$02
Burlington, Vermont.	4	160	2	55															4	66
Plattsburg, New York.	9	420	3	65															2	26

LAKE AND PORTS.	ASSISTANT COOKS.		SEAMEN.		DECK HANDS.		FIREMEN.		STEWARDS.		WAITERS.		BOYS.		CHAMBER-MAIDS.		Number persons making ordinary crew.	Number persons given employment during year.	Total wages paid per month.	Average rate wages per month.
	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.				
Lake Champlain . . .			11	\$210													35	53	\$1,002	\$28.63
Burlington, Vermont.			3	65													13	17	346	26.62
Plattsburg, New York.			8	145													22	36	656	29.82

TABLE 11.—FUEL ACCOUNT—AMOUNT AND VALUE OF THE COAL USED FOR FUEL ON ALL THE OPERATING LAKE STEAMERS, WITH SEPARATE ENTRIES UNDER THE HEADS OF CLASSIFIED OCCUPATIONS.

LAKES AND PORTS.	Tons of coal.	Cost of fuel.	PASSENGER, PASSENGER AND FREIGHT, AND FREIGHT.		TOWBOATS.		MISCELLANEOUS.	
			Coal, in tons.	Value.	Coal, in tons.	Value.	Coal, in tons.	Value.
Lake Champlain	10,910	\$40,827	5,787	\$20,831	3,400	\$13,922	1,723	\$6,074
Burlington, Vermont	5,862	20,313	5,287	18,831			575	1,482
Plattsburg, New York	5,048	20,514	500	2,000	3,400	13,922	1,148	4,592

STATISTICS OF TRANSPORTATION.

COMPARATIVE STATISTICS.

TABLE 12.—FLEETS FOR THE TEN YEARS, 1880-1889—NUMBER AND TONNAGE OF ALL STEAMERS AND SAILING VESSELS REGISTERED IN THE CUSTOMS DISTRICTS OF LAKE CHAMPLAIN FOR THE DECADE 1880-1889.

CUSTOMS DISTRICTS.	1880						1881					
	TOTAL.		STEAMERS.		SAILING VESSELS.		TOTAL.		STEAMERS.		SAILING VESSELS.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total.....	63	5,247.86	19	2,580.24	44	2,667.62	67	6,028.15	18	2,863.85	49	3,164.30
Vermont, Vermont.....	24	2,408.88	7	1,531.02	17	937.86	30	3,333.40	8	1,901.15	22	1,432.25
Champlain, New York.....	39	2,778.98	12	1,049.22	27	1,729.76	37	2,694.75	10	962.70	27	1,732.05

CUSTOMS DISTRICTS.	1882						1883					
	TOTAL.		STEAMERS.		SAILING VESSELS.		TOTAL.		STEAMERS.		SAILING VESSELS.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total.....	60	5,829.52	19	3,289.20	41	2,540.32	60	6,104.64	19	3,384.95	41	2,719.69
Vermont, Vermont.....	28	3,402.04	11	2,422.03	17	980.01	23	3,458.67	7	2,308.30	16	1,150.37
Champlain, New York.....	32	2,427.48	8	867.17	24	1,560.31	37	2,645.97	12	1,076.65	25	1,569.32

CUSTOMS DISTRICTS.	1884						1885					
	TOTAL.		STEAMERS.		SAILING VESSELS.		TOTAL.		STEAMERS.		SAILING VESSELS.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total.....	60	6,206.98	21	3,493.94	39	2,713.04	61	6,239.26	21	3,493.94	40	2,745.32
Vermont, Vermont.....	21	3,393.78	8	2,318.41	13	1,075.37	21	3,380.12	8	2,318.41	13	1,061.71
Champlain, New York.....	39	2,813.20	13	1,175.53	26	1,637.67	40	2,859.14	13	1,175.53	27	1,683.61

CUSTOMS DISTRICTS.	1886						1887					
	TOTAL.		STEAMERS.		SAILING VESSELS.		TOTAL.		STEAMERS.		SAILING VESSELS.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total.....	62	6,276.96	22	3,531.04	40	2,745.32	52	5,600.31	18	3,188.55	34	2,411.76
Vermont, Vermont.....	21	3,329.50	9	2,333.92	12	995.67	20	3,266.57	9	2,333.92	11	932.65
Champlain, New York.....	41	2,947.37	13	1,197.72	28	1,749.65	32	2,333.74	9	854.63	23	1,479.11

CUSTOMS DISTRICTS.	1888						1889					
	TOTAL.		STEAMERS.		SAILING VESSELS.		TOTAL.		STEAMERS.		SAILING VESSELS.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total.....	54	6,581.44	19	4,102.38	35	2,479.06	53	6,490.85	19	4,102.38	34	2,388.47
Vermont, Vermont.....	22	4,169.12	9	3,105.63	13	1,063.49	19	3,958.23	9	3,105.63	10	852.60
Champlain, New York.....	32	2,412.32	10	996.75	22	1,415.57	34	2,532.62	10	996.75	24	1,535.87

RECAPITULATION.

YEARS.	TOTAL.		STEAMERS.		SAILING VESSELS.		YEARS.	TOTAL.		STEAMERS.		SAILING VESSELS.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.		Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
1880.....	63	5,247.86	19	2,580.24	44	2,667.62	1885.....	61	6,239.26	21	3,493.94	40	2,745.32
1881.....	67	6,028.15	18	2,863.85	49	3,164.30	1886.....	62	6,276.96	22	3,531.04	40	2,745.32
1882.....	60	5,829.52	19	3,289.20	41	2,540.32	1887.....	52	5,600.31	18	3,188.55	34	2,411.76
1883.....	60	6,104.64	19	3,384.95	41	2,719.69	1888.....	54	6,581.44	19	4,102.38	35	2,479.06
1884.....	60	6,206.98	21	3,493.94	39	2,713.04	1889.....	53	6,490.85	19	4,102.38	34	2,388.47

TRANSPORTATION ON LAKE CHAMPLAIN.

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COMPARATIVE STATISTICS—Continued.

TABLE 13.—VESSEL TONNAGES FOR THE 10 YEARS, 1880-1889—NUMBER, AGGREGATE AND AVERAGE TONNAGE OF ALL STEAMERS AND SAILING VESSELS REGISTERED AT THE CUSTOMS DISTRICTS OF LAKE CHAMPLAIN FOR THE DECADE 1880-1889.

STEAMERS.

CUSTOMS DISTRICTS.	1880			1881			1882			1883			1884		
	Num-ber.	Ton-nage.	Aver-age.												
Vermont, Vermont.....	7	1,531	219	8	1,901	238	11	2,422	220	7	2,308	330	8	2,319	290
Champlain, New York.....	12	1,049	87	10	963	96	8	867	108	12	1,077	90	13	1,175	90

CUSTOMS DISTRICTS.	1885			1886			1887			1888			1889		
	Num-ber.	Ton-nage.	Aver-age.												
Vermont, Vermont.....	8	2,318	290	9	2,334	259	9	2,334	259	9	3,106	345	9	3,106	345
Champlain, New York.....	13	1,175	90	13	1,188	92	9	854	95	10	997	100	10	997	100

SAILING VESSELS.

CUSTOMS DISTRICTS.	1880			1881			1882			1883			1884		
	Num-ber.	Ton-nage.	Aver-age.												
Vermont, Vermont.....	17	938	55	22	1,432	65	17	980	58	16	1,151	72	13	1,075	83
Champlain, New York.....	27	1,730	64	27	1,732	64	24	1,561	65	25	1,569	63	26	1,638	63

CUSTOMS DISTRICTS.	1885			1886			1887			1888			1889		
	Num-ber.	Ton-nage.	Aver-age.												
Vermont, Vermont.....	13	1,062	82	12	996	83	11	933	85	13	1,063	82	10	852	85
Champlain, New York.....	27	1,684	62	28	1,749	63	23	1,479	64	22	1,415	64	24	1,536	64

STEAMERS AND SAILING VESSELS.

CUSTOMS DISTRICTS.	1880			1881			1882			1883			1884		
	Num-ber.	Ton-nage.	Aver-age.												
Vermont, Vermont.....	24	2,460	103	30	3,333	111	28	3,402	122	23	3,459	150	21	3,304	162
Champlain, New York.....	39	2,779	71	37	2,695	73	32	2,428	76	37	2,646	72	39	2,813	72

CUSTOMS DISTRICTS.	1885			1886			1887			1888			1889		
	Num-ber.	Ton-nage.	Aver-age.												
Vermont, Vermont.....	21	3,380	161	21	3,330	159	20	3,267	163	22	4,169	190	19	3,958	208
Champlain, New York.....	40	2,859	71	41	2,947	72	32	2,333	73	32	2,412	75	34	2,533	75

STATISTICS OF TRANSPORTATION.

COMPARATIVE STATISTICS—Continued.

TABLE 14.—TONNAGE FLUCTUATIONS FOR THE 10 YEARS, 1880-1889—AVERAGE ANNUAL NUMBER AND TONNAGE OF ALL STEAMERS AND SAILING VESSELS REGISTERED AT THE CUSTOMS DISTRICTS OF LAKE CHAMPLAIN FOR THE DECADE 1880-1889, TOGETHER WITH THE INDICATED YEARS OF HIGHEST, LOWEST, AND MEAN REGISTRATION.

STEAMERS.

CUSTOMS DISTRICTS.	Annual average number of vessels registered.	HIGHEST ABOVE AVERAGE.		LOWEST BELOW AVERAGE.		CLOSEST TO AVERAGE.		Fluctuation.	Annual average registered tonnage.	HIGHEST ABOVE AVERAGE.		LOWEST BELOW AVERAGE.		CLOSEST TO AVERAGE.		Fluctuation.
		Year.	Number.	Year.	Number.	Year.	Number.			Year.	Number of tons.	Year.	Number of tons.	Year.	Number of tons.	
Champlain, New York.....	11	1884	13	1882	8	1880	12	5	1,035	1886	1,198	1887	854	1880	1,049	344

SAILING VESSELS.

Vermont, Vermont.....	14	1881	22	1889	10	1884	13	12	1,048	1881	1,432	1889	852	1885	1,062	580
Champlain, New York.....	25	1886	28	1888	22	1883	25	6	1,609	1886	1,740	1888	1,415	1884	1,638	334

STEAMERS AND SAILING VESSELS.

Vermont, Vermont.....	23	1881	30	1889	19	1883	23	11	3,416	1888	4,169	1890	2,469	1882	3,402	1,700
Champlain, New York.....	36	1886	41	1882	32	1881	37	9	2,645	1886	2,947	1887	2,333	1883	2,646	614

TABLE 15.—SHIPBUILDING DURING THE 10 YEARS, 1880-1889 (GENERAL)—NUMBER AND TONNAGE OF ALL STEAMERS AND SAILING VESSELS BUILT IN THE CUSTOMS DISTRICTS OF LAKE CHAMPLAIN FOR THE DECADE 1880-1889.

YEARS.	CUSTOMS DISTRICTS.	STEAMERS.		SAILING VESSELS.		YEARS.	CUSTOMS DISTRICTS.	STEAMERS.		SAILING VESSELS.	
		Number.	Tonnage.	Number.	Tonnage.			Number.	Tonnage.	Number.	Tonnage.
1880.....	Champlain, New York.....	2	199.93	1	20.39	1886.....	Vermont, Vermont.....	1	37.70	.....	.....
1882.....	Vermont, Vermont.....	2	503.82	.....	.....	1887.....	Champlain, New York.....	.....	.....	1	98.71
1883.....	Champlain, New York.....	.....	.....	3	296.20	1888.....	Vermont, Vermont.....	1	742.75	.....	.....
1885.....	Vermont, Vermont.....	.....	.....	2	131.36	.....	.....	.....	.....	.....	.....

RECAPITULATION.

YEARS.	TOTAL.		STEAMERS.		SAILING VESSELS.		YEARS.	TOTAL.		STEAMERS.		SAILING VESSELS.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.		Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total.....	13	2,030.86	6	1,484.20	7	546.66	.....	.....	.....	.....	.....	.....
1880.....	3	220.32	2	199.93	1	20.39	1885.....	2	131.36	.....	.....	2	131.36
1882.....	2	503.82	2	503.82	.....	.....	1886.....	1	37.70	1	37.70	.....	.....
1883.....	3	296.20	.....	.....	3	296.20	1887.....	1	98.71	.....	.....	1	98.71
.....	.....	.....	.....	.....	.....	.....	1888.....	1	742.75	1	742.75	.....	.....

TRANSPORTATION ON LAKE CHAMPLAIN.

COMPARATIVE STATISTICS—Continued.

TABLE 16.—SHIPBUILDING DURING THE 10 YEARS, 1880-1889 (STEAMERS)—NUMBER AND TONNAGE OF ALL STEAMERS BUILT IN THE CUSTOMS DISTRICTS OF LAKE CHAMPLAIN FOR THE DECADE 1880-1889, TOGETHER WITH DATA SHOWING THE NUMBER AND TONNAGE OF PROPELLER, SIDE-WHEEL, AND STERN-WHEEL STEAMERS BUILT EACH YEAR IN EACH DISTRICT.

YEARS.	CUSTOMS DISTRICTS.	PROPELLER.		SIDE-WHEEL.		YEARS.	CUSTOMS DISTRICTS.	PROPELLER.		SIDE-WHEEL.	
		Num-ber.	Ton-nage.	Num-ber.	Ton-nage.			Num-ber.	Ton-nage.	Num-ber.	Ton-nage.
1880.....	Champlain, New York.....	2	199.93	.....	.....	1886.....	Vermont, Vermont.....	1	37.70	.....	.....
1882.....	Vermont, Vermont.....	1	5.49	1	498.33	1888.....	Vermont, Vermont.....	.....	.....	1	742.75

RECAPITULATION.

YEARS.	ALL STEAMERS.		PROPELLER.		SIDE-WHEEL.		YEARS.	ALL STEAMERS.		PROPELLER.		SIDE-WHEEL.	
	Num-ber.	Tonnage.	Num-ber.	Tonnage.	Num-ber.	Tonnage.		Num-ber.	Tonnage.	Num-ber.	Tonnage.	Num-ber.	Tonnage.
Total.....	6	1,484.20	4	243.12	2	1,241.08	1882.....	2	503.82	1	5.49	1	498.33
1880.....	2	199.93	2	199.93	.....	.....	1886.....	1	37.70	1	37.70	.....	.....
							1888.....	1	742.75	.....	.....	1	742.75

CONGRESSIONAL APPROPRIATIONS.

TABLE 17.—APPROPRIATIONS BY LOCALITIES—CONGRESSIONAL APPROPRIATIONS FOR THE SURVEY, IMPROVEMENT, AND MAINTENANCE OF THE HARBORS OF LAKE CHAMPLAIN, AND OF THE RIVERS FLOWING INTO IT, FROM THE EARLIEST DATE OF APPROPRIATION TO 1890, INCLUSIVE, GIVEN BY LOCALITIES AND YEARS.

LOCALITIES.	Date of earliest appropria-tion.	Appropriations up to and includ-ing 1879.	Appropriations from 1880 to 1889, inclusive.	Appropriations by act of Con-gress September, 1890.	Total appropria-tions up to date.
Lake Champlain.....		\$709,352	\$324,000	\$90,000	\$1,123,352
Burlington, Vermont.....	1836	426,172	135,750	20,000	581,922
Great Chazy river, New York.....	1890	.....	.....	10,000	10,000
Gordons landing, Vermont.....	1880	.....	28,750	6,000	34,750
Otter creek, Vermont.....	1872	28,000	8,500	5,000	41,500
Plattsburg, New York.....	1836	140,180	13,000	32,000	185,180
Rouses Point, New York.....	1884	.....	68,500	15,000	83,500
Survey of Lake Champlain, Vermont.....	1836	21,000	55,000	.....	76,000
Swanton harbor, Vermont.....	1873	61,000	9,500	.....	70,500
Ticonderoga river, New York.....	1881	.....	5,000	2,000	7,000
Whitehall harbor, New York.....	1836	33,000	.....	.....	33,000