AN ECONOMIC HISTORY OF SHIPBUILDING AND MARINE ENGINEERING

BY

WILLIAM S. CORMACK.

VOLUME 2

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GRAPHS A.1. & A.2.
(from Tables A2 & A3.)

GRAPH. A.1.

Exports
Imports
Imports re-exported
Home produced exports

Showing value in £s. of Scottish imports and exports

£'00,000.

30
25
20
15
10
5

1755 1765 1775 1785 1795

GRAPH. A.2.

Total tonnage
Tonnage engaged in foreign trade
Tonnage engaged in coastal trade
Tonnage engaged in fishing
Average of Imports + Exports

Showing net tonnage of ships on the register in Scotland; also value in £s of average of Scottish imports and exports ($\frac{\text{imports} + \text{exports}}{2}$)

'000 tons

175
150
125
100
75
50
25

1755 1765 1775 1785 1795

GRAPH . C.1.
(from Table . C.1.)

GRAPH . C.1.

Total
Steam
Sail
Motor
Total for foreigners

Showing net tonnage of ships built in the United Kingdom

'00,000 net tons

'00,000 net tons

1 2 3 4 5 6 7 8 9 10 11 12 13

1800 1810 1820 1830 1840 1850 1850 1860 1870 1880 1890 1900 1910 1920 1930

GRAPH. C.2.
(from Table C.2.)

GRAPH. C. 2.

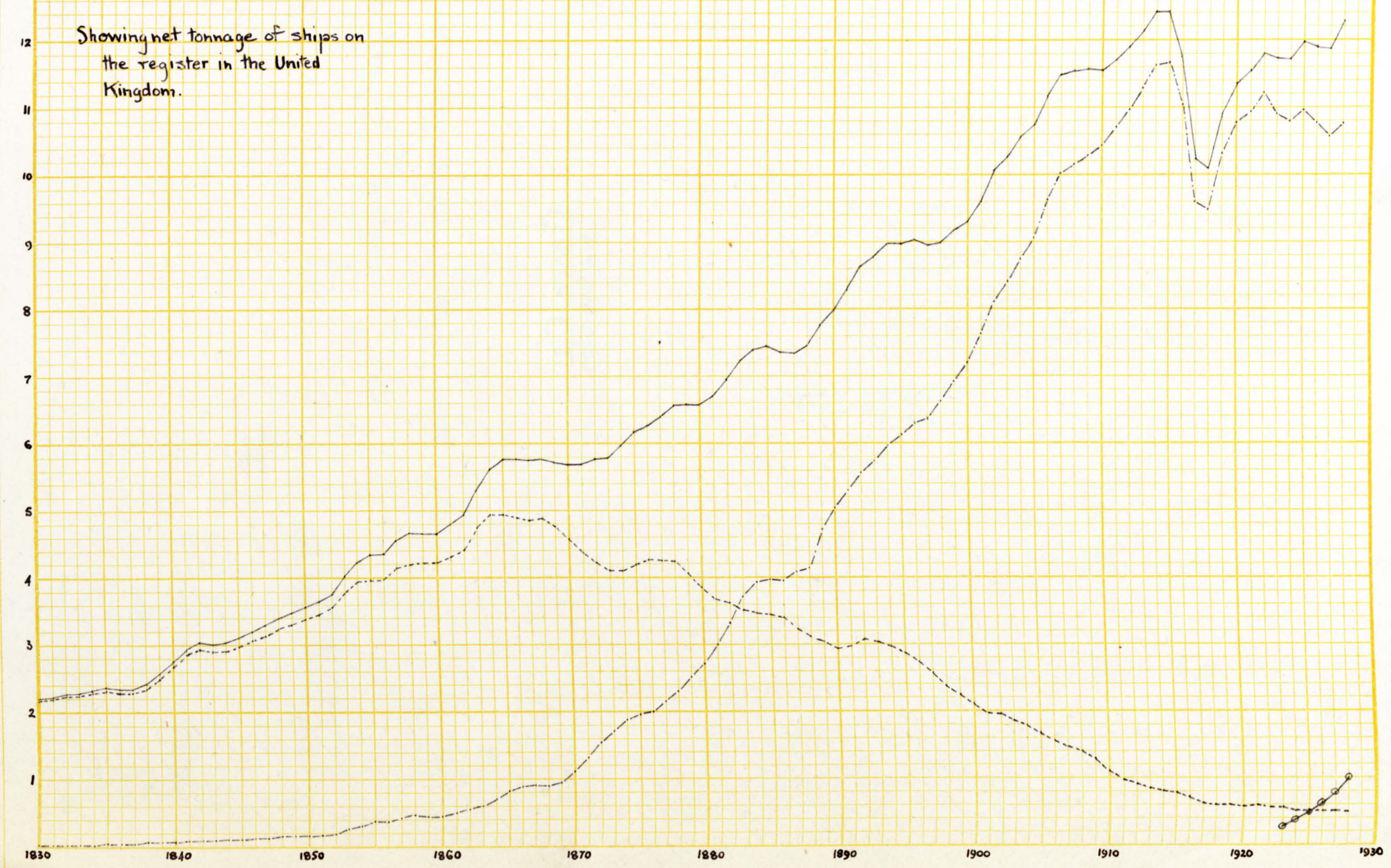
Showing net tonnage of ships on the register in the United Kingdom.

Total
Steam
Sail
Motor

m. net tons



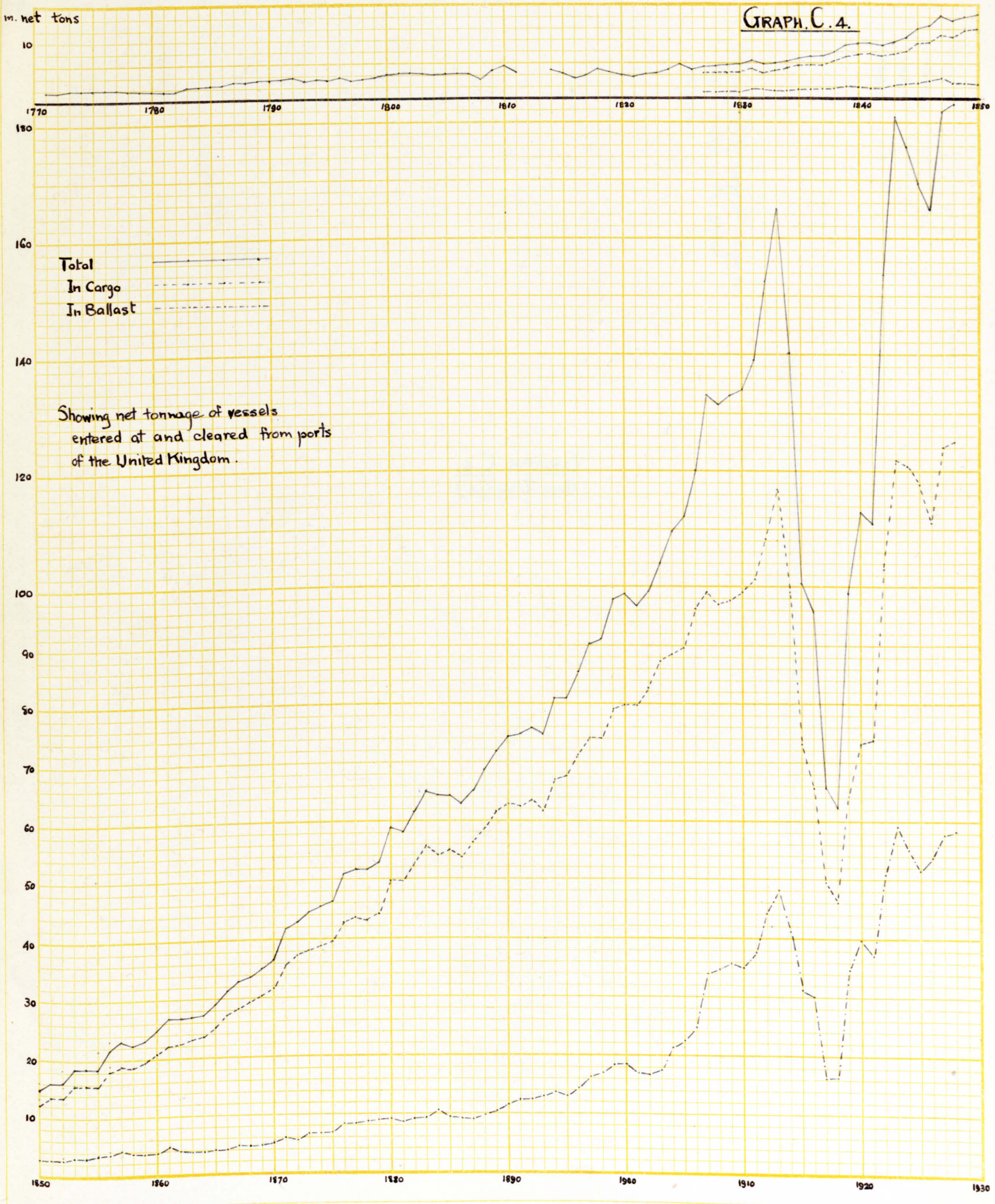
m. net tons



GRAPH. C.4.
(from Table C.4.)

GRAPH. C. 4.

Showing net tonnage of vessels entered at and cleared from ports of the United Kingdom.



GRAPH E.1.
(from Tables E.1. & E.3.)

GRAPH. E. 1.

Removed from register :

1. steel
2. iron
3. wood and composite
4. total steel, iron, and wood & composite

by wrecking, etc

by sale abroad, etc.

by all causes

Added to register :

5. gross additions
6. gross removals
7. net additions

total all types

steel

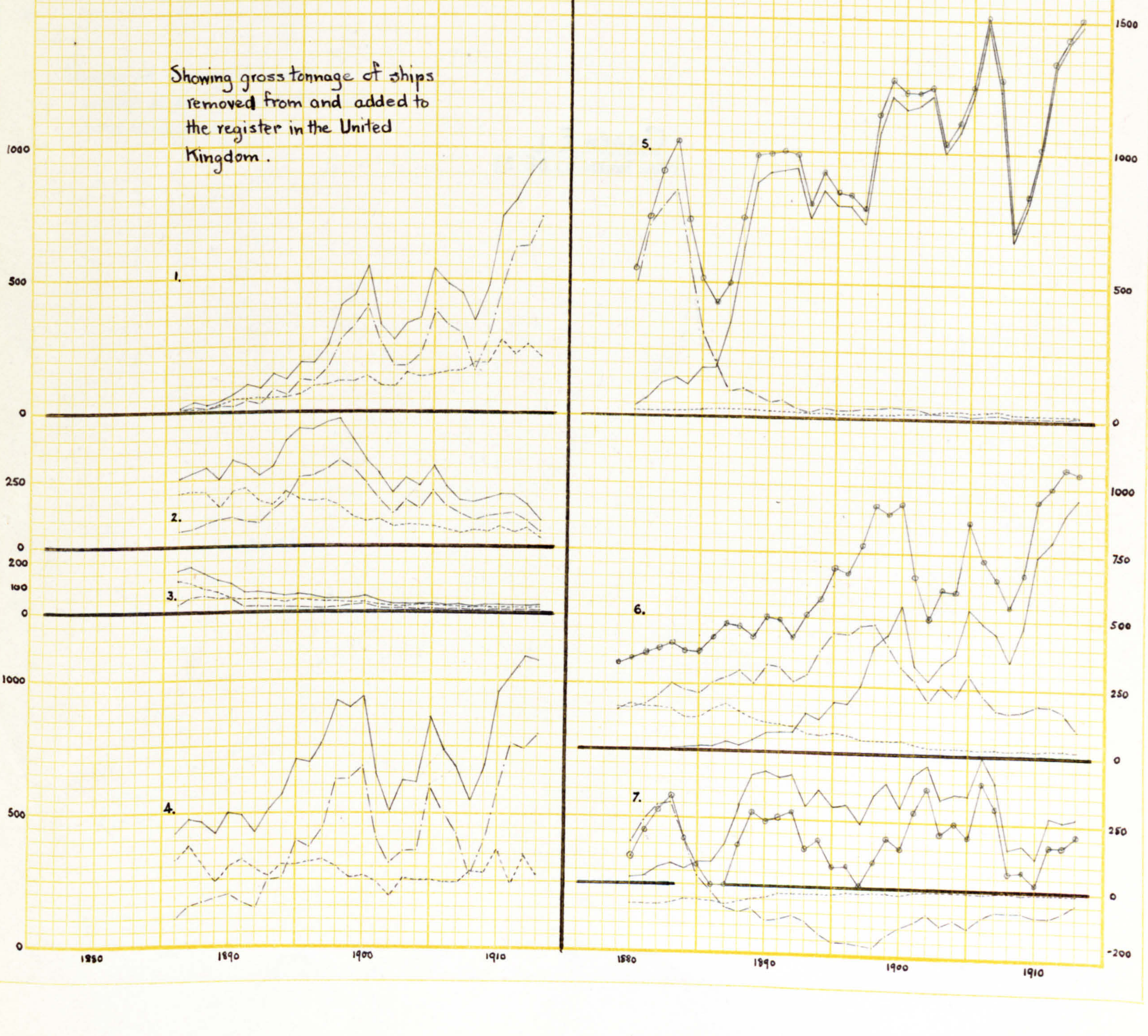
iron

wood and composite

'000 gross tons

'000 gross tons

Showing gross tonnage of ships removed from and added to the register in the United Kingdom.



GRAPH. E. 2.
(from Tables E.2 & E.4.)

GRAPH. E. 2.

Removed From register :
1. steam
2. sail
3. total steam and sail
by wrecking, etc.
by sale abroad, etc.
by all causes

Added to register :
4. gross additions
5. gross removals
6. net additions
total steam and sail
steam
sail

'000 gross tons

Showing gross tonnage of ships removed from and added to the register in the United Kingdom.

GRAPH . F. 1.

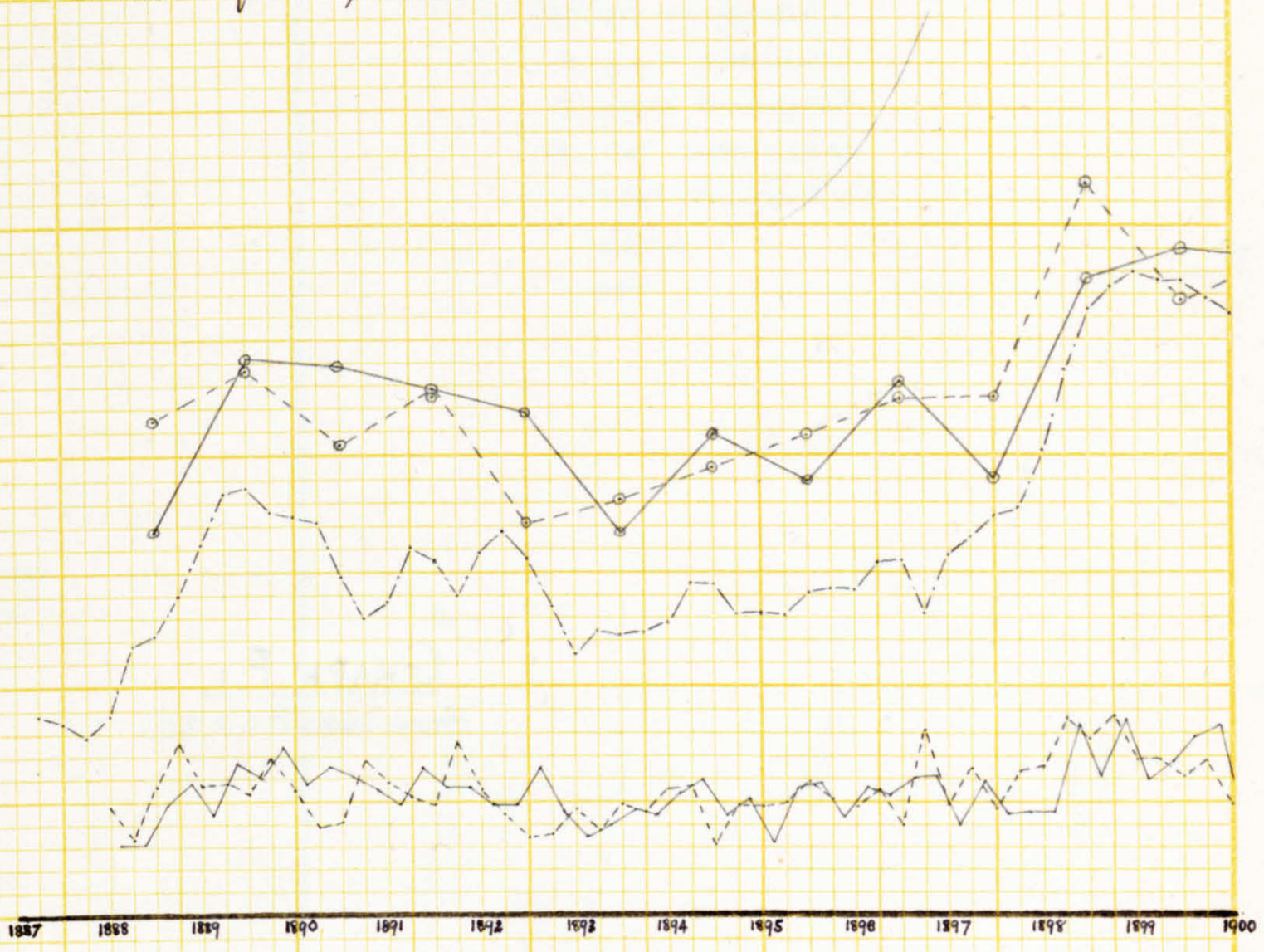
(from Tables F. 1, 2, & 3.)

GRAPH. F.1.

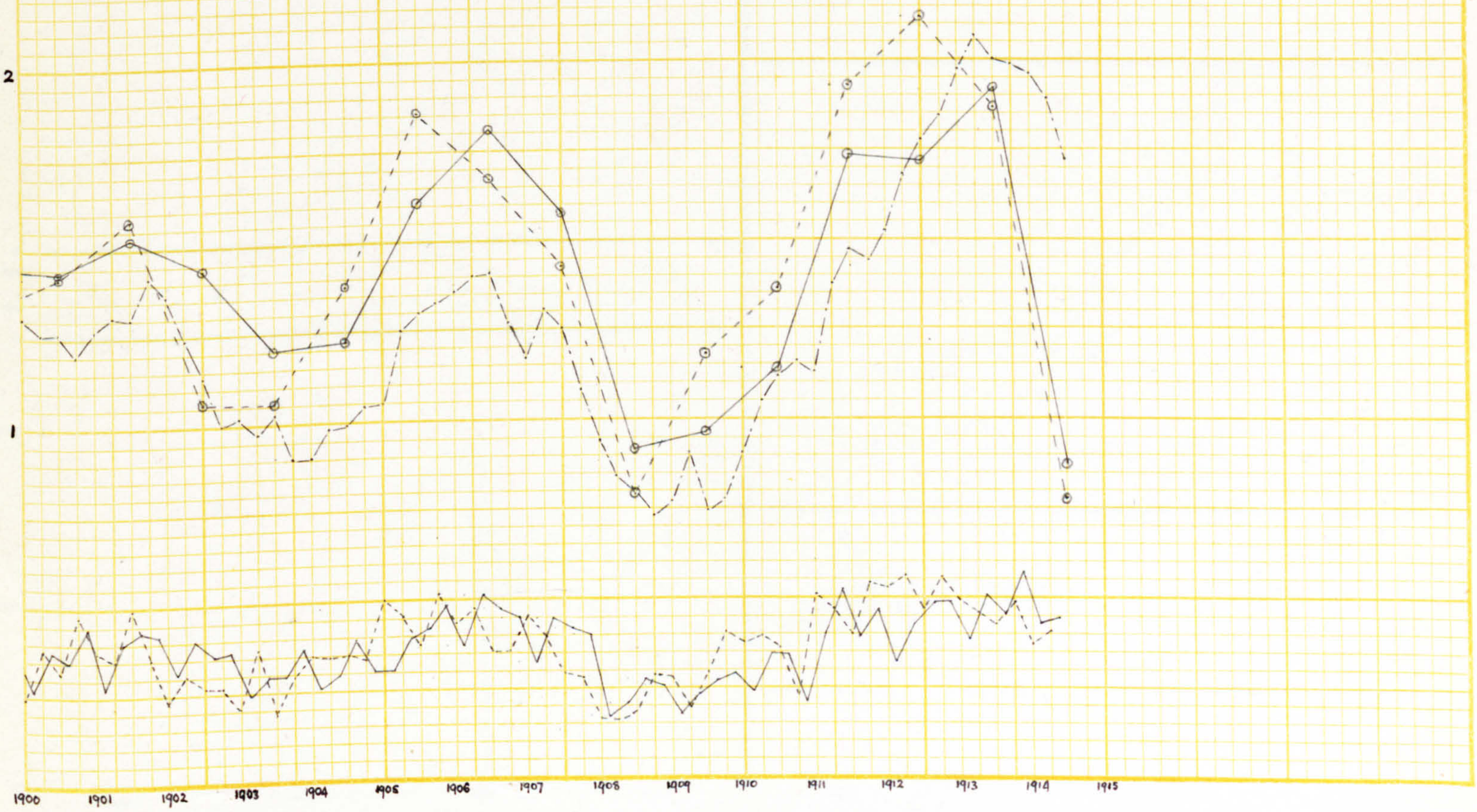
Showing gross tonnage of ships commenced, launched, and "on hand" in the United Kingdom.

m. gross tons

Commenced annually
—— do. —— quarterly
Launched annually
—— do. —— quarterly
"On hand" quarterly



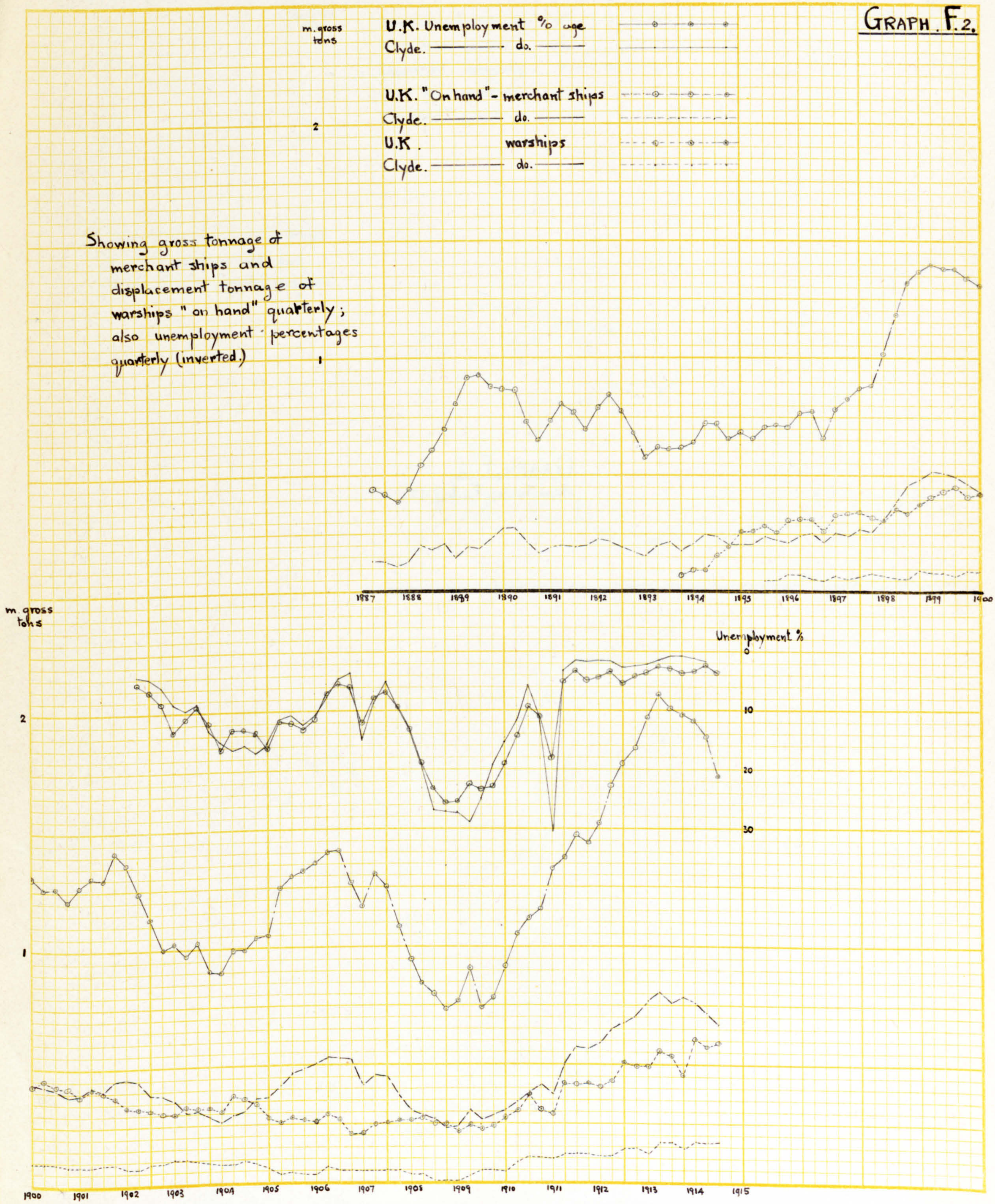
m. gross tons



GRAPH. F. 2.
(from Tables F.4. & G.9.)

GRAPH. F.2.

Showing gross tonnage of merchant ships and displacement tonnage of warships "on hand" quarterly; also unemployment percentages quarterly (inverted.)



GRAPH H.1.
(from Table H.1.)

GRAPH. H.1.

World
United Kingdom
Clyde

m. gross tons

Showing gross tonnage of ships built.

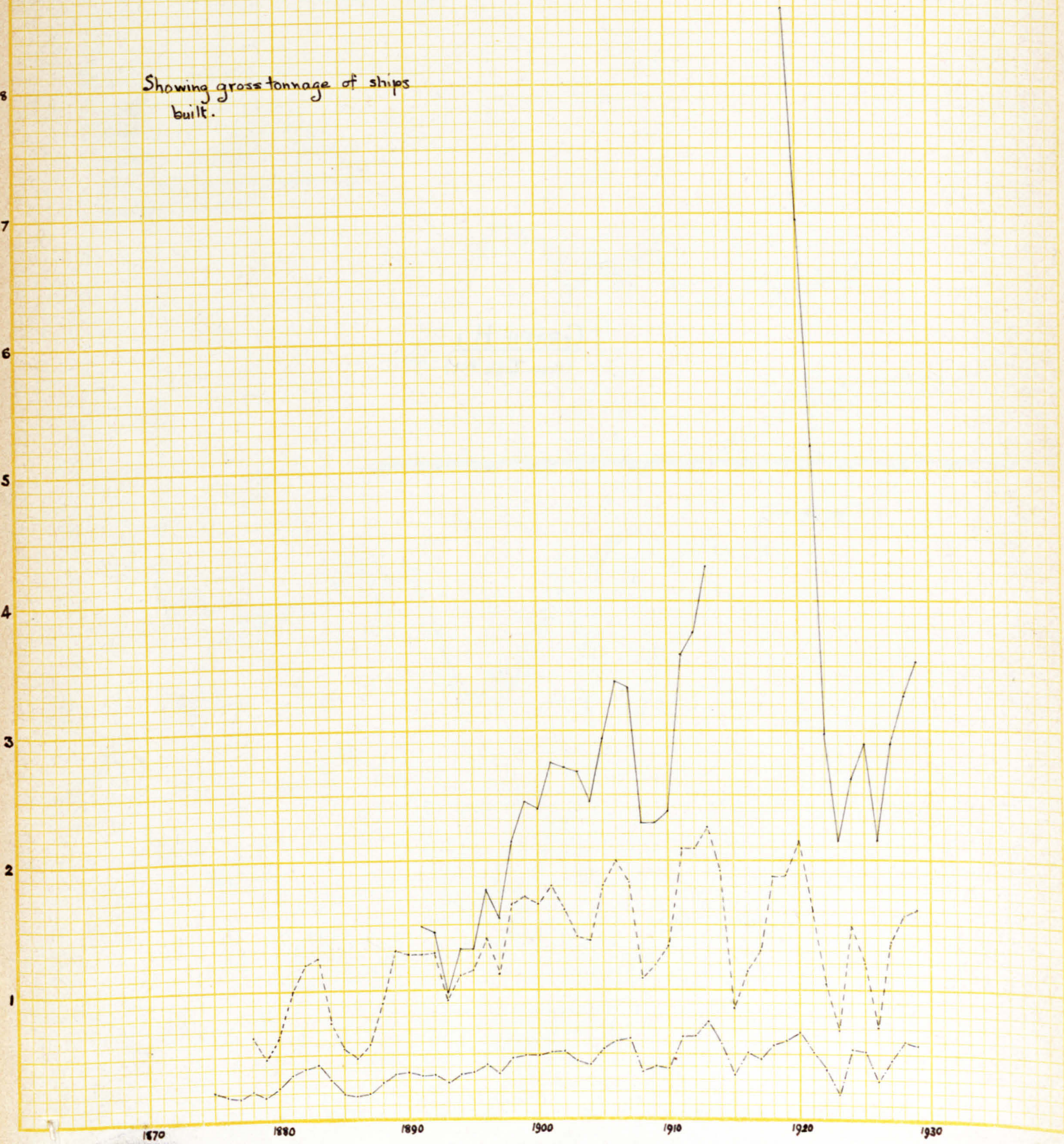


TABLE A 1

Source of information :

Treasury Accounts for Scotland $T\frac{36}{13}$
Manuscript at Public Record Office, London.

A1

Showing Scottish imports and exports of tobacco, sugar, and rum, annually from 1722 to 1784.

Year	IMPORTS					EXPORTS					
	Tobacco (lbs.)			Sugar (cwts.)	Rum (gals.)	Tobacco (lbs.)			Sugar (cwts.)		Rum (gals.)
	Unmanufd.	Manufd.	Total			Unmanufd.	Manufd.	Total	Refined	Raw	Total	
May 1722 to Mid-Summer 1725			16678331					12674730				
1724			4192576					3053570				
25			3857584					3013036				
26			6971667					5448315				
27			7233653					6434863				
28			7192025					7167850				
29			5526016					5214085				
30			4096142					4920477				
1730-31			3982773					3467143				
31-32			5530084					2467622				
1738				19623							-	
39				20522							-	
1740				27725							468	
41				11686							-	
42				15648							-	
43				17135							3378	
44				13444							-	
45				18790							3587	
46				6994							1797	
47				17979							-	
48				17960							2446	
49				26895							47	
1750				11545							4366	
51			20902796	13190							77	
52			24284220	15182							30	
53			20452762	15764							1231	
54			14687187	24130							4363	
55			14347440	24426							11648	
56				25200							11426	
57				26389							14482	

Year	IMPORTS					EXPORTS					
	Tobacco (lbs.)			Sugar (cwts.)	Rum (gals.)	Tobacco (lbs.)			Sugar (cwts.)		Rum (gals.)
	Unmanufd.	Manufd.	Total			Unmanufd.	Manufd.	Total	Refined	Raw	Total	
1763			26347407	43077		240304 53	5386	24036139				
64				52928	188601	31156466	9497	31165963			33351	159400
65				29964		28642935	13652	28656587				
66				39928		30000658	22764	30023422				
67				38621		26329571	22403	26351974				
68				58788		35942928	26604	35969532				
69			36303067	59491	696562	35025190	14845	35040035				641111
1770			38708809	64166	844428	39510948	17779	39528727				780284
71			47268873	60125	826741	45553327	35393	45588720				764558
72			45259675	63299	193239	44423412	72039	44495451				98207
73			44543050	70288	143655	46347735	41783	46389518	1235	55438	56673	72338
74	41348295	30	41348325	66157	183602	33794322	62742	33857064	1576	38912	40488	507 45
75	45863154	-	45863154	81001	188153	30228949	95352	30324301	1355	46178	47533	151041
76	7423363	100	7423463	57136	268058	23467162	234216	23701378	1743	30088	31831	48575
77	294896	267	295163	80254	200084	540668	109009	649677	4343	34900	39243	130296
78	2884374	-	2884374	114286	511820	2296622	77986	2374608	2488	63057	65545	186598
79	3138464	-	3138464	97481	194852	2339649	128923	2468572	1456	48634	50090	409133
1780	5125638	-	5125638	77042	145625	3024867	102304	3127171	2654	27045	29699	56951
81	1952243	100	1952343	58379	144521	1574735	213322	1788057	1309	37719	39028	63243
82	2624807	175	2624982	57488	150743	700837	233458	934295	819	8060	8939	138438
83	2250958		2250958	85613	125977	1784910	115509	1900419				
84	4180111		4180111			2276192		2276192				

TABLE A2

Source of information:

Trading Accounts of Scotland (1755 - 1801)
Manuscript at Public Record Office, London.

See also: Graphs A1 and A2

A 2

Showing total value in £s of Scottish imports and exports, the latter subdivided into re-exports and home-produced exports, from 1755 to 1801.

For Graph A2

Year	Imports £	Re-exports £	Home prod. exports £	Total Exports £	Average Imp. Exp. £
1755	465411	250876	284701	535577	500494
56	480425	339081	286968	626049	553237
57	619836	472709	355868	828577	724207
58	659165	448931	382326	831257	745211
59	605888	527917	412887	940804	773346
1760	850793	648968	437237	1086205	968499
61	748640	741335	324387	1165722	957181
62	708925	650346	347819	998165	853545
63	903891	618537	472899	1091436	997664
64	886353	817170	426757	1243927	1065140
65	922401	779930	400938	1180868	1051635
66	980990	808077	355627	1163704	1072347
67	1023197	793192	452298	1245490	1134344
68	1236648	1047392	454758	1502150	1369399
69	1225530	1080429	482624	1563053	1394297
1770	1213360	1217341	510577	1727918	1470639
71	1386329	1353861	503473	1857334	1621832
72	1210264	1088526	472230	1560756	1385510
73	1115802	1169205	442973	1612178	1363990
74	1202277	862302	509841	1372143	1287210
75	1267388	771514	352484	1123998	1195693
76	746680	586743	439230	1025973	886327
77	802254	282178	555465	837643	819949
78	682289	252183	450637	702820	692555
79	774772	303438	533835	837273	806023
1780	902727	234627	767412	1002039	952383
81	803870	182772	580337	763109	783490
82	809021	157631	496078	653709	731365
83	1007591	216225	613599	829824	918708
84	1153507	171747	758156	929901	1041704
85	1379476	348089	659547	1007636	1193556
86	1175910	275422	439317	914739	1045325
87	1468928	370410	744725	1115135	1292032
88	1476116	401406	787683	1189089	1332603
89	1413063	360149	809927	1170076	1291570
1790	1688337	370574	864831	1235405	1461871
91	1941631	382328	914207	1296535	1619083
92	1761657	344646	886238	1230884	1496271
93	1433443			1024752	1229098
94	1443895			1084811	1264353
95	1268520			976992	1122756
96	1724610			1322723	1523667
97	1490084			1217121	1353603
98	1893728			1669197	1781463
99	2353591			1916631	2135111
1800	2412790			2346303	2379547
01	2579944			2844502	2712223

TABLE A3

Source of information:

"Caledonia", by George Chalmers, F.R.S.
(being a history of Scotland from earliest times).
Published 1807 to 1824. 6 vols.

See also: Graph A 2

A3

Showing ships on the register in Scotland from 1760 to 1800, subdivided into three classes of vessels; also figures for various other dates.

Year	Foreign Trade		Coastal Trade		Fishing		Total	
	No. of Ships	Tonnage (net)	No. of Ships	Tonnage (net)	No. of Ships	Tonnage (net)	No. of Ships	Tonnage (net)
1760	454	35067	432	15004	113	3842	999	53913
61	412	33584	510	18232	121	4005	1043	55821
62	405	32860	498	17384	126	4522	1029	54766
63	469	36308	464	16706	187	7239	1120	60253
64	504	37776	557	21128	185	8101	1246	67005
65	531	42540	569	23286	232	9924	1332	75750
66	506	39140	550	21532	242	12665	1298	73337
67	535	43674	569	22694	281	12007	1385	78375
68	591	47644	588	24098	299	13324	1478	85066
69	591	48479	594	24615	290	13275	1475	86369
1770	665	57293	622	26167	222	11385	1509	88845
71	604	48844	677	28623	222	10985	1503	88452
72	643	51484	661	28334	253	11652	1557	91470
73	684	52931	632	26515	262	12275	1578	91721
74	692	52181	648	26214	306	14902	1646	93297
75	635	51448	606	23979	318	15903	2559	91330
76	603	48598	660	25131	377	17764	1640	91493
77	623	50553	613	23529	309	14947	1545	89029
78	636	52352	633	25587	348	16976	1617	94915
79	609	48929	646	26613	266	12781	1521	88323
1780	542	44277	705	28683	244	11455	1491	84415
81	526	42113	697	28430	241	10535	1464	81078
82	524	40530	690	27585	217	9882	1431	77997
83	556	42138	647	27523	262	10473	1465	80134
84	643	50386	709	32042	297	12421	1649	94849
85	756	60078	786	36371	258	11252	1800	107701
86	762	70991	853	40163	321	18159	1936	129318
87	801	85893	878	42963	338	20468	2017	149324
88	766	80796	951	48035	341	22006	2061	150838
89	793	84206	958	47901	381	22798	2132	154905
1790	794	86823	950	47688	361	19898	2105	154409
91	776	85468	1058	51998	388	19632	2222	157098
92	718	81027	1022	50940	371	19890	2116	154857
93	698	80024	1143	57318	393	17973	2234	155315
94	612	66864	1047	55311	418	19547	2104	141722
95	553	63168	1061	56187	382	16526	1996	135882
96	599	66386	1032	52790	447	19112	2078	138289
97	508	61629	1072	56695	430	18364	2010	136688
98	597	67538	1172	63267	467	19886	2236	150691
99	674	76594	1116	59997	381	14099	2171	150690
1800	687	81907	1169	66133	559	23688	2415	171728
1656							93	2724
1706							215	14485
1802		94276						
1805							2518	210295
1810					271	12910		
1818	1016	140429	1676	104162	337	18010	3029	262601
1819					337	18010		

TABLE A4

Source of information :

"Caledonia", by George Chalmers, F.R.S.
(see Table A. 3)

A4

Showing total ships, number and tonnage, on the register at the various ports of Scotland in the years 1760, 1780, 1800, and 1820; also figures for four leading ports in 1823.

Ports	1760		1780		1800		1820		1823	
	No.	Tons (net)	No.	Tons (net)	No.	Tons (net)	No.	Tons (net)	No.	Tons (net)
Aberdeen	45	2453	128	6613	270	21215	374	51852	335	46606
Ayr	13	560	15	614	46	3184	57	5701		
Alloa	57	1500	88	3588	102	6179	142	13817		
Anstruther	11	1059	20	468	47	2232	74	4534		
Banff	–	–	–	–	–	–	160	7093		
Borrowstouness	55	3543	140	8965	141	9039	128	8558		
Campbeltown	55	1436	154	7105	66	3240	65	2663		
Dumfries	15	421	14	431	27	1111	75	4951		
Dunbar	8	1135	19	1919	15	1462	36	2450		
Dundee	52	2505	65	3504	121	8016	170	17029	169	17416
Fort William	9	455	3	40	10	321	39	2083		
Glasgow	–	–	5	104	10	431	84	6384		
Grangemouth	–	–	–	–	–	–	58	8186		
Port Glasgow	327	21274	99	7239	66	9371	114	18255		
Greenock			235	15048	475	35735	341	46171	300	39239
Inverness	6	325	14	850	35	1851	65	3704		
Irvine	77	3686	70	4013	108	6907	121	10487		
Ullapool	–	–	–	—	10	384	11	310		
Kirkcaldy	70	3333	64	3330	114	9629	94	9982		
Kirkcudbright	17	603	24	848	32	1406	46	2112		
Kirkwall	7	225	13	474	18	1102	45	2657		
Lerwick	–	–	–	–	5	229	41	1723		
Leith	79	6194	89	8918	117	12127	213	24874	214	25022
Montrose	48	1717	79	3623	112	6417	146	12578		
Oban	–	–	21	922	12	559	33	1027		
Perth	11	368	23	1130	34	2723	52	4161		
Portpatrick	4	48	9	144	8	372	4	177		
Prestonpans	12	590	3	48	1	47	9	384		
Rothesay	–	–	38	1761	94	4259	101	4601		
Stornoway	–	–	15	639	44	1666	74	2906		
Stranraer	5	192	15	498	35	1178	51	2478		
Thurso	3	120	17	732	6	309	34	1821		
Tobermory	–	–	–	–	2	42	30	721		
Wigtown	13	181	14	375	38	1436	42	2052		
Wick	–	–	–	–	–	–	4	288		
TOTALS	999	53913	1493	84343	2412	171728	3133	288770		

TABLE A 5.

Source of information:

"Caledonia" by George Chalmers, F.R.S.
(see Table A 3)

Showing ships on the register at the various ports of Scotland in 1800, sub-divided into three classes.

Ports	Foreign Trade		Coastal Trade		Fishing		Total	
	No.	Tons (net)	No.	Tons (net)	No.	Tons (net)	No.	Tons (net)
Aberdeen	46	5597	240	18484	8	189	296	24270
Ayr	20	2115	14	609	16	764	50	3488
Alloa	26	3042	65	3010	7	289	98	6341
Anstruther	9	823	41	1620	–	–	50	2443
Borrowstouness	23	2330	111	6415	–	–	134	8745
Campbeltown	8	733	22	600	57	2743	87	4076
Dumfries	1	60	19	747	10	439	30	1246
Dunbar	2	223	11	589	3	770	16	1582
Dundee	47	4707	88	4407	2	488	137	9602
Fort William	–	–	7	247	–	–	7	247
Inverness	–	–	35	1830	–	–	35	1830
Irvine	67	4713	23	1238	18	708	108	6659
Ullapool	3	168	2	76	8	239	13	483
Kirkcaldy	56	8527	31	1274	44	173	131	9974
Kirkcudbright	–	–	21	866	8	432	29	1298
Kirkwall	1	56	14	836	2	145	17	1037
Leith	56	8180	52	2996	2	575	110	11753
Lerwick	6	257	2	141	–	–	8	398
Montrose	38	2967	68	3105	–	–	106	6072
Oban	1	39	13	722	7	199	21	960
Perth	9	1329	27	1525	–	–	36	2854
Port Glasgow	56	9039	33	2292	9	254	98	11585
Port of Greenock	204	26707	165	9546	187	7953	556	44206
Portpatrick	3	103	3	159	–	–	6	262
Prestonpans	–	–	1	47	–	–	1	47
Rothesay	–	–	11	594	79	3849	90	4443
Stornoway	–	–	–	–	51	1982	51	1982
Stranraer	–	–	8	124	40	1480	43	1604
Tobermory	1	25	2	42	1	45	4	82
Thurso	2	167	17	946	–	–	19	1113
Wigtown	–	–	28	1046	–	–	28	1046
TOTALS	687	81907	1169	66133	559	23688	2415	171728

TABLES B1, B2, B3, B4.

Sources of information:

B1 : "Progress of the Nation" (1851 edn.) by G. R. Porter, F.R.S.

B2 : "Social and Economic Statistics of Glasgow" (1855)
by John Strang, LL.D.

B3 : 1846 - 1852 Paper to Statistical Section of the British Association at Belfast, 7th September, 1852, by John Strang, LL.D.

1853 - 1862 Evidence of John Scott (Greenock) given April 1886 before the Royal Commission on the Depression of Trade and Industry (1886).

B4 : Paper to Statistical Section of the British Association at Belfast, 7th. September, 1852, by John Strang, LL.D.

B1

Showing number and tonnage of ships on the U.K. register, (distinguishing prizes), at 30th. September, annually from 1801 to 1812.

Year	Total on Register		Prize Ships on Register		On Register excluding Prizes	
	No.	Tons (net)	No.	Tons (net)	No.	Tons (net)
1801		1786000	2779	369563		1416437
02		1901000	2827	358577		1542423
03	18068	1986076	2286	307370	15782	1678706
04	18870	2077061	2533	337443	16337	1739618
05	19027	2092489	2520	339763	16507	1725726
06	19315	2079914	2564	342248	16751	1737666
07	19373	2096827	2764	377519	16609	1719308
08	19580	2130396	3222	448758	16358	1681638
09	19882	2167221	3547	493327	16335	1673894
1810	20253	2210661	3903	534346	16350	1676315
11	20478	2247322	4023	536240	16455	1711082
12		2263000	3899	513044		1749956

B2

Showing number and tonnage of steam vessels built on Clyde; annually from 1812 to 1853

Year	No.	Tons	Year	No.	Tons	Year	No.	Tons
1812	2	55	1829	4	595	1846	17	7125
13	2	118	1830	4	540	47	26	16999
14	9	about 550	31	2	194	48	34	12409
15	6	529	32	6	728	49	23	11798
16	7	509	33	3	306	1850	32	18604
17	2	105	34	10	1837	51	42	27724
18	4	286	35	20	3528	52	78	52945
19	7	892	36	13	2078	53	86	61044
1820	3	187	37	8	2023	54		
21	6	792	38	11	2010	55		
22	4	337	39	10	1845	56		
23	-	-	1840	11	3074	57		
24	3	175	41	9	7768	58		
25	3	305	42	7	1973	59		
26	11	1332	43	5	1157	1860		
27	-	-	44	12	3038	61		
28	3	124	45	2	576	62		

B3.

Showing number and tonnage of all iron vessels built on Clyde; annually from 1846 to 1862.

Year	No.	Tons	Year	No.	Tons	Year	No.	Tons
1846	17	7125	1852	69	49716	1858	60	40522
47	23	11514	53	79	54750	59	78	35705
48	32	10292	54	129	70530	1860	88	47833
49	22	11513	55	107	84750	61	88	66801
1850	29	13791	56	102	58530	62		69987
51	41	25322	57	98	57416			

B4

Showing number and tonnage of steam vessels launched at Clyde ports, and H.P. of engines constructed; annually from 1846 to 1852.

GLASGOW

Year	Wood		Iron		Total		Paddle	Screw	Total	Horse Power of Engines				Average Tons	
	No.	Tons	No.	Tons	No.	Tons				Wood Hull	Iron Hull	Total	For Vessels not built on Clyde	Wood	Iron
1846	-	-	11	5417	11	5717	11	-	11	-	2490	2490	300	-	519
47	-	-	11	6152	11	6152	11	-	11	-	2650	2650	-	-	560
48	-	-	13	4464	13	4464	10	3	13	2810	2081	4891	580	-	344
49	-	-	16	9799	16	9799	13	3	16	-	2756	2756	120	-	606
1850	-	-	16	7255	16	7255	9	7	16	1660	2237	3897	180	-	453
51	-	-	20	14321	20	14321	11	9	20	-	4299	4299	140	-	716
52	1	200	35	22733	36	22933	15	21	36	2140	6026	8166	3400	200	649
Totals	1	200	122	70441	123	70641	80	43	123	6610	22539	29149	4720	200	576

DUMBARTON

1846	-	-	5	1080	5	1080	2	3	5	-	-	-	-	-	216
47	-	-	7	1439	7	1439	2	5	7	-	-	-	-	-	206
48	-	-	5	650	5	650	2	3	5	-	-	-	-	-	130
49	-	-	4	1264	4	1264	2	2	4	-	-	-	-	-	316
1850	-	-	8	3136	8	3136	2	6	8	-	400	400	-	-	392
51	-	-	9	3908	9	3908	5	4	9	-	610	610	-	-	434
52	-	-	20	18284	20	18284	5	15	20	-	2605	2605	200	-	914
Totals	-	-	58	29761	58	29761	20	38	58	-	3615	3615	200	-	512

GREENOCK AND PORT GLASGOW

1846	-	-	1	328	1	328	1	-	1	-	-	-	-	-	328
47	3	5485	5	3923	8	9408	8	-	8	-	1120	1120	410	1828	785
48	2	2117	14	5178	16	7295	11	5	16	-	640	640	354	1059	370
49	1	285	2	450	3	735	2	1	3	-	150	150	260	285	225
1850	3	4813	5	3400	8	8213	3	5	8	65	845	910	440	1604	680
51	1	2402	12	7093	13	9495	6	7	13	-	1260	1260	800	2402	591
52	3	3029	14	8699	17	11728	10	7	17	64	1424	1488	2250	1010	621
Totals	13	18131	53	29071	66	47202	41	25	66	129	5439	5568	4514	1393	548

ALL PORTS ON CLYDE

1846	-	-	17	7125	17	7125	14	3	17	-	2490	2490	300	-	418
47	3	5485	23	11514	26	16999	21	5	26	-	3770	3770	410	1828	500
48	2	2117	32	10292	34	12409	23	11	34	2810	2721	5531	934	1059	327
49	1	285	22	11513	23	11798	17	6	23	-	2906	2906	380	285	524
1850	3	4813	29	13791	32	18604	14	18	32	1725	3482	5207	620	1604	475
51	1	2402	41	25322	42	27724	22	20	42	-	6169	6169	940	2402	618
52	4	3229	69	49716	73	52945	30	43	73	2204	10055	12259	5850	807	720
Totals	14	18331	233	129273	247	147604	141	106	247	6739	31593	38332	9434	1309	555

TABLE C 1

Sources of information:

1801 to 1821 "Progress of the Nation" (1851 edn.) by G.R. Porter, F.R.S.
1822 to 1839 House of Commons Papers 1852-53 session vol. 57.
1840 to 1928 Statistical Abstracts of United Kingdom
v.d. 1862 onwards.

See also Graph C1.

Note: Figures exclude Channel Isles and Isle of Man.

2. Up to and including 1811 figures are for British Empire.
3. Up to and including 1871 figures give vessels built and first registered in United Kingdom.
4. After 1922 Irish Free State is excluded.
5. Home and Colonial is merchant vessels only.
6. Foreign includes merchant and war vessels.

Showing net tonnage of ships built in the U.K., annually from 1801 to 1928.

Year	For Home & Colonial			For Foreign			Total		
	Sail	Steam	Total	Sail	Steam	Total	Sail	Steam	Total
1801							122593	-	122593
02							137508	-	137508
03							135692	-	135692
04							95979	-	95979
05							89584	-	89584
06							69198	-	69198
07							68000	-	68000
08							57140	-	57140
09							61396	-	61396
1810							84891	-	84891
11							115638	-	115638
12							Records destroyed	55	Records destroyed
13								118	
14							85525	about 550	86075
15							102157	786	102943
16							84108	568	84676
17							80842	421	81263
18							85408	1340	86748
19							88749	342	89091
1820							66036	655	66691
21							55068	3008	58076
22							48479	2449	50928
23							60682	2469	63151
24							88849	2234	91083
25							119476	3003	122479
26							109728	8638	118366
27							89768	3376	93144
28							86624	2039	88663
29							74884	1751	76635
1830							73787	1745	75532
31							54103	2749	56852
32							87329	2851	90180
33							86284	2928	89212
34							95239	5128	100367
35							105711	10924	116635
36							77751	8758	86509
37							119502	11669	131171
38							147706	9549	157255
39							175162	6139	181301
1840							201111	10178	211289
41							148215	11363	159578
42							116213	13716	129929
43							76968	6129	83097
44							88882	6113	94995

Year	For Home & Colonial			For Foreign			Total		
	Sail	Steam	Total	Sail	Steam	Total	Sail	Steam	Total
1845							112336	10894	123230
46							109394	15956	125350
47							129664	16170	145834
48							107218	15334	122552
49							105445	12498	117953
1850							119111	14584	133695
51							126914	22723	149637
52							136749	30742	167491
53							154956	48215	203171
54							132687	64255	196942
55	242182	81018	323200	505	25854	26359	242687	106872	349559
56	187005	57573	244578	1085	32976	34061	188090	90549	278639
57	197554	52918	250472	1626	34676	36302	199180	87594	286774
58	154930	53150	208080	1518	26956	28474	156448	80106	236554
59	147967	38003	185970	3402	23372	26774	151369	61375	212744
1860	158172	53796	211968	-	13903	13903	158172	67699	225871
61	129970	70869	200839	232	7255	7487	130202	78124	208326
62	164061	77338	241399	-	20533	20533	164061	97871	261932
63	253036	104951	360987	1084	16236	17320	254120	124187	378307
64	272499	159374	431873	2279	26681	28960	274778	186055	460833
65	235555	179649	415204	949	32016	32965	236504	211665	448169
66	207678	133511	341189	3641	34709	38350	211319	168220	379539
67	174507	94573	269080	4994	31905	36899	179501	126478	305979
68	237687	78510	316197	8671	37460	46131	246358	115970	362328
69	230962	123525	354287	11800	22005	33805	242562	145530	388092
1870	117032	225674	342706	9429	42222	51651	126461	267896	394357
71	565545	297810	863355	3715	32988	36703	60260	330798	391058
72	54967	338004	392971	3790	77957	81747	58757	415961	474718
73	88532	282134	370666	1094	81783	82877	89626	363917	453543
74	187313	333890	521203	1781	80883	82664	189094	414773	603867
75	241646	178905	420551	3711	47796	51507	245357	226701	472058
76	236890	123475	360365	4198	13457	17655	241088	136932	378020
77	212320	221330	433650	2194	15075	17269	214514	236405	450919
78	141165	287080	428245	4108	35366	42474	148273	322446	470719
79	59115	297720	356835	2464	46692	49156	61579	344412	405991
1880	57480	346361	403841	585	68470	69055	58065	414813	472896
81	92420	408764	501184	1348	106346	107694	93768	515110	608878
82	145700	521575	667275	2139	113637	115776	147839	635212	783051
83	146818	621758	768578	1272	122368	123640	148090	744126	892216
84	162234	335208	497442	10945	79887	90832	173179	415095	588274
85	208411	196975	405386	10683	24943	35626	219094	221918	441012
86	138362	154638	293000	6887	31641	38528	145249	186279	331528
87	81279	225440	306719	5848	64631	70479	87127	290071	377198
88	45696	407445	483141	20697	70109	90806	96393	477554	573947

TABLE C1 (continued)

Year	For Home & Colonial			For Foreign			Total		
	Sail	Steam	Total	Sail	Steam	Total	Sail	Steam	Total
1889	117481	554024	671505	19666	163558	183224	137147	717582	854729
1890	123224	528489	652013	25468	135157	160625	148692	663946	812638
91	191917	448682	640599	34693	101201	138894	229610	549883	809493
92	258700	434091	692491	28372	80385	108757	287072	514476	801548
93	114895	380393	495288	8979	80407	89386	123874	460800	584674
94	89156	485460	574616	10472	84404	94876	99628	569864	669492
95	54155	465467	519622	10562	117450	128012	64717	582917	647634
96	57467	462503	519970	15824	201020	216844	73291	663523	736814
97	66429	415538	482267	22941	139459	162430	89400	554997	644697
98	41839	654158	695997	3051	171560	174611	44890	825718	870608
99	45510	703904	749414	4943	194623	199596	50483	898527	949010
1900	38576	698330	736906	4546	199815	204361	46122	898145	944267
01	54967	720714	775681	6696	200756	207452	61663	921470	983133
02	64811	735563	800374	16253	133798	150051	81064	869613	950425
03	42311	586758	629069	14097	115211	129308	56408	701969	758377
04	33749	701635	735384	17979	130896	148875	51728	832531	884259
05	30374	821059	851433	7716	189299	197015	38090	1010358	1048448
06	31902	890280	922182	14181	217408	234589	49083	1107688	1156771
07	24274	716538	740812	15516	281051	296567	39790	997589	1037379
08	26621	386431	413052	10771	177878	188649	37392	564309	601701
09	26600	484290	510890	7315	113330	120645	33915	597620	631535
1910	20477	580495	600972	7773	89962	97735	28250	670457	698707
11	26929	884733	911662	11115	185843	196958	38044	1073576	1111620
12	43080	857177	900257	9736	196136	205872	52816	1053313	1106129
13	25164	950010	975174	5218	251529	256747	30382	1201539	1231921
14	26257	812351	838608	2850	193414	196564	29107	1006065	1035172
15	12522	361924	374446	420	35288	35708	12942	397212	410154
16	14294	372021	386315	40	37537	37577	14334	409558	423892
17	6606	745514	752120	623	19084	19707	7229	764598	771827
18	5663	815221	820884	—	5608	5608	5663	820829	826492
19	44413	892119	936532	—	82693	82693	44413	974812	1019225
1920	33513	772997	806510	101	471343	471444	33614	1244340	1277954
21	19605	658644	678249	4912	270695	275607	24517	929339	953856
22	15761	486475	502236	717	128410	129127	16478	614885	631363

	Sail	Steam	Motor	Total	Sail	Steam	Motor	Total	Sail	Steam	Motor	Total
23	26073	322027	53676	401776	496	5917	515	6928	26569	327944	54191	408704
24	22845	642788	117600	783233	1460	68718	23333	93511	24305	711506	140933	876744
25	36400	429425	134302	600127	353	51155	27826	79334	36753	480580	162128	679461
26	18351	235312	102340	356003	2804	19211	18280	40295	21155	254523	120620	396298
27	17293	472763	174455	664511	3702	56051	37204	96957	20995	528814	211659	761468
28	14430	553921	212903	781254	2211	45465	40802	88478	16641	599386	253705	869732

TABLE C 2 (continued)
and
TABLE C 2^{A}.

Source of information:

C 2^{A}: "Annals of Commerce, etc", 4 vols. (1805),
by David Macpherson.

Year	Sailing			Steam			Total		
	No.	Net Tons	Gross Tons	No.	Net Tons	Gross Tons	No.	Net Tons	Gross Tons
1898	11566	2387942	2550819	8838	6613917	10829811	20404	9001860	13380630
99	11167	2246850	2404594	9029	6917492	11341622	20196	9164342	13746216
1900	10773	2096498	2247228	9209	7207610	11816924	19982	9304108	14064152
01	10572	1990627	2135265	9484	7617793	12472584	20056	9608420	14607849
02	10455	1950675	2093187	9803	8104095	13263865	20258	10054770	15357052
03	10330	1868936	2007353	10122	8399668	13770709	20452	10268604	15778062
04	10210	1802667	1936665	10370	8751853	14358823	20580	10554520	16295488
05	10059	1670466	1796826	10522	9064816	14883594	20581	10735582	16680420
06	9857	1555319	1675212	10907	9612013	15783724	20764	11167332	17458936
07	9648	1461376	1575860	11394	10023423	16513782	21042	11485099	18089642
08	9542	1402781	1515493	11626	10138613	16735722	21168	11541394	18251515
09	9392	1301060	1407469	11797	10284818	16994732	21189	11585878	18402201
1910	9090	1112944	1205062	12000	10442719	17263833	21090	11555663	18468895
11	8830	980997	1064713	12242	10717511	17743746	21072	11698508	18808459
12	8510	902718	982060	12382	10992073	18197117	20892	11894791	19179177
13	8336	846504	921861	12602	11273387	18683039	20938	12119891	19604900
14	8203	793567		12862	11621635		21065	12415202	
15	8019	776761		12771	11650349		20790	12427110	
16	7669	714830		12405	11036788		20074	11751618	
17	7186	625428		11534	9606671		18720	10232099	
18	6856	603916		11334	9496970		18190	10100886	
19	6555	592933		11491	10334986		18346	10927919	
1920	6309	584046		12307	10777038		18616	11361084	
21	6272	609761		12660	10932369		18932	11542130	
22	6184	574189		12787	11223036		18971	11797225	

	Sailing		Steam		Motor		Total	
	No.	Net Tons	No.	Net Tons	No.	Net Tons	No.	Net Tons
23	5962	550423	10813	10894138	1624	263205	18399	11711066
24	5842	521987	10690	10809608	1823	384840	18355	11716435
25	5785	519821	10526	10964526	1965	498731	18276	11983078
26	5678	516999	10262	10760098	2170	629431	18110	11906528
27	5609	506490	10032	10576800	2340	770039	17981	11853329
28	5408	496011	9959	10754561	2681	1008631	18048	12259203
29								

C2[A]

Statistics from another source showing number and tonnage of ships on the register, annually from 1760 to 1799.

Year	Scotland		England		Total	
	No.	Net tons	No.	Net tons	No.	Net tons
1760	976	52818	6105	433922	7081	486740
61	956	51523	6119	405793	7075	457316
62	964	53046	5915	402740	6879	455786
63	1062	59862	6571	496093	7633	555955
64	1244	64345	6918	523128	8162	590473
65	1308	75136	7076	542566	8348	617702
66	1295	73293	7412	561982	8707	635275
67	1546	84481	7339	556905	8885	641386
68	1498	85898	7511	549191	9009	635089
69	1508	80928	7939	573987	9447	654915
1770	1509	88849	7898	593962	9407	682811
71	1503	88452	7645	577176	9148	665628
72	1567	91890	7635	582563	9202	674453
73	1578	91721	7568	581801	9146	673522
74	1646	93342	7559	588620	9205	681962
75	1559	91330	7549	605974	9108	697304
76	1640	91502	7784	604071	9424	695573
77	1521	88729	7575	610201	9096	698930
78	1617	94915	7368	606150	8985	701065
79	1521	88321	6955	574620	8476	662941
1780	1493	84341	6689	534512	8182	618853
81	1489	85537	6567	540909	8056	626446
82	1441	78024	6495	537257	7936	615281
83	1465	80134	6877	589668	8342	669802
84	1649	92349	7462	700789	9111	793147
85	1827	107980	7926	751626	9753	859606
86	1917	127913	8465	804105	10382	932018
87	1700	133045	8711	954829	10411	1087874
88	1864	149185	9358	1055299	11222	1204484
89	1938	151270	9558	1078374	10596	1229644
1790	2007	152584	10053	1134531	12060	1287115
91	2104	161490	10422	1168478	12526	1329968
92	2143	162274	10633	1186610	12776	1348884
93	2122	160642	10779	1206778	12901	1367420
94	2069	151465	10957	1221579	13026	1373044
95	2013	142624	10827	1207898	12840	1350522
96	2025	145421	10961	1141085	12986	1286506
97	1950	134206	11045	1248046	12995	1385252
98	1976	141472	11275	1287384	13251	1428856
99	2031	148110	11487	1337181	13518	1485291

Note: According to author, only vessels which entered or cleared at their port of registry during the year are counted. Hence, to obtain real tonnage, add 50% to figures.

TABLE C 2

Sources of information:

1442 to 1486	MSS. Public Record Office, ref. nos. Customs 17/1 to 17/9.
1763 to 1771	"History of British Commerce" (1872), by Leone Levi.
1787 to 1802	
1803 to 1849	"Progress of the Nation" (1851 edn.) by G. R. Porter, F.R.S.
1850 to 1928	Statistical Abstracts of United Kingdom for v.d. 1862 onwards.

See also Graph C 2.

Note: Figures include Channel Isles and Isle of Man.

2. Sail 1814 to 1844 obtained by subtracting steam figures.
3. Owing to the coming into full force in 1914 of the Merchant Shipping Act of 1907, the tonnage on the register was increased that year by 74,000 net tons.
4. After 1922 the Irish Free State is excluded.
5. River steamers are included.
6. The U.K. register shows merchant vessels only.

Showing number and tonnage of ships on U.K. register, annually from 1763 to 1928.

Year	Sailing		Year	Sailing		Steam		Total	
	No.	Net Tons		No.	Net Tons	No.	Net Tons	No.	Net Tons
1763		556000	1808	19580	2130396			19580	2130396
64		590000	09	19882	2167221			19882	2167221
65		618000	1810	20253	2210661			20253	2210661
66		635000	11	20478	2247322			20478	2247322
67		641000	12			1	55		2263000
68		635000	13			3	173		2349000
69		655000	14	21546	2413928	4	242	21550	2414170
1770		683000	15	21858	2446951	11	880	21869	2447831
71		666000	16	22011	2503237	15	1053	22026	2504290
72	9192	674033	17	21758	2420142	17	1212	21775	2421354
73	9146	673522	18	22002	2450276	22	2232	22024	2452608
74	9154	680180	19	21973	2449049	24	2548	21997	2451597
75	9108	697304	1820	21935	2436011	34	3018	21969	2439029
76	9424	695537	21	21593	2349802	59	6051	21652	2355853
77	9120	698930	22	21153	2306946	85	8457	21238	2315403
78	8985	701065	23	20941	2292506	101	10361	21042	2302867
79	8476	662941	24	21166	2336581	114	11733	21280	2348314
1780	8182	618853	25	20550	2313043	151	15764	20701	2328807
81	8056	626446	26	20740	2387275	228	24186	20968	2411461
82	7936	615281	27	19271	2153820	253	27318	19524	2181138
83	8342	669212	28	19374	2165290	272	28010	19646	2193300
84	9111	793147	29	18823	2170458	287	29501	19110	2199959
85	9753	859606	1830	18879	2141592	295	30000	19174	2201592
86	10331	929604	31	19130	2192094	320	32262	19450	2224356
87		1088000	32	19316	2226622	348	35238	19664	2261860
88		1275000	33	19307	2233179	382	38122	19689	2271301
89		1303000	34	19551	2268926	424	43429	19975	2312355
1790		1376000	35	19903	2307536	497	52767	20300	2360303
91		1415000	36	19834	2290387	554	59362	20388	2349749
92		1437000	37	19918	2264476	618	69045	20536	2333521
93		1453000	38	20239	2346075	673	74684	20912	2420759
94		1456000	39	20950	2491395	720	79240	21670	2570635
95		1426000	1840	21886	2680723	768	87539	22654	2768262
96		1460000	41	22671	2839721	790	95678	23461	2935399
97		1454000	42	23125	2933493	829	107927	23954	3041420
98		1494000	43	23043	2898293	855	109288	23898	3007581
99		1551000	44	23119	2931160	897	113232	24016	3044392
1800		1698000	45	23471	3004398	917	118782	24388	3123180
01		1786000	46	23808	3068479	963	131306	24771	3199785
02		1901000	47	24167	3166913	1033	141008	25200	3307921
03	18068	1986076	48	24520	3249380	1118	151429	25638	3400809
04	18870	2077061	49	24753	3326274	1149	159684	25902	3485958
05	19027	2092489	1850	24797	3396652	1187	168474	25984	3565133
06	19315	2099914	51	24816	3475657	1227	186687	26043	3662344
07	19373	2096827	52	24814	3549968	1272	209310	26086	3759278

Year	Sailing			Steam			Total		
	No.	Net Tons	Gross Tons	No.	Net Tons	Gross Tons	No.	Net Tons	Gross Tons
1853	25224	3780092		1385	250112		26609	4030204	
54	25335	3942513		1524	306237		26859	4248750	
55	24274	3968699		1674	380635		25948	4349334	
56	24480	3980494		1697	386462		26177	4366956	
57	25273	4141273		1824	417466		27097	4558740	
58	25615	4205270		1926	452468		27541	4657738	
59	25784	4226355		1918	436836		27702	4663191	
1860	25663	4205270		2000	454327		27663	4658687	
61	25905	4300518		2133	506308		28038	4806826	
62	26212	4396509		2228	537891		28440	4934400	
63	26339	4731217		2298	596856		28637	5328073	
64	26142	4930219		2490	697281		28632	5627500	
65	26069	4936776		2718	823533		28787	5760309	
66	26140	4903652		2831	875685		28971	5779337	
67	25842	4852911		2931	901062		28773	5753973	
68	25500	4878233		2944	902279		28444	5780530	
69	24187	4765304		2972	948367		27159	5713671	
1870	23189	4577855		3178	1112934		26367	5690789	
71	22510	4374511		3382	1319612		25892	5694123	
72	22103	4213295		3673	1538032		25776	5751327	
73	21698	4091379		3863	1713783		25561	5805162	
74	21464	4108220		4033	1870611		25497	5978831	
75	21291	4206897		4170	1945570		25461	6152467	
76	21144	4257986		4335	2005347		25479	6263333	
77	21169	4260699		4564	2139170		25733	6399869	
78	21058	4238692		4826	2316472		25884	6555164	
79	20538	4068742		5027	2511233		25565	6579975	
1880	19938	3851045		5247	2723468		25185	6574513	
81	19325	3688008		5505	3003988		24830	6691996	
82	18892	3621650		5814	3335215		24706	6956865	
83	18415	3513948		6260	3728268		24675	7242216	
84	18053	3464978		6601	3944273		24654	7409251	
85	17018	3456562		6644	3973483		23662	7430045	
86	16179	3397197	3512783	6653	3965302	6321504	22832	7362499	9834287
87	15473	3249907	3362724	6663	4085275	6523626	22136	7335182	9886350
88	15025	3114509	3224059	6871	4349658	6950967	21896	7464167	10175026
89	14640	3041278	3152202	7139	4717730	7555424	21779	7759008	10707626
1890	14181	2936021	3055136	7410	5042517	8095370	21591	7987538	11150506
91	13823	2972093	3108379	7720	5307204	8545252	21543	8279297	11653631
92	13578	3080272	3233058	7950	5564482	8975452	21528	8644754	12208510
93	13239	3038260	3201617	8088	5740243	9277865	21327	8778503	12479482
94	12943	2987161	3158973	8263	5969020	9671063	21206	8956181	12830036
95	12617	2866895	3040194	8386	6121555	9952211	21003	8988450	12992405
96	12274	2735976	2909296	8522	6284306	10237703	20796	9020282	13146999
97	11911	2589570	2758358	8590	6363601	10401202	20501	8953171	13159560

TABLE C3

Source of information:

Calculated from data of C1 and C2.

C3

Showing percentage sail to total built, and on the register in U.K. each year.

Year	Built in U.K.		On Register in U.K.	
	% Sail / Total	% Steam / Total	% Sail / Total	% Steam / Total
1812				
13				
14	99.4	0.6		
15	99.5	0.5		
16	99.4	0.6		
17	99.5	0.5		
18	98.4	1.6		
19	99.5	0.5	99.9	0.1
1820	99.0	1.0	99.9	0.1
21	94.9	5.1	99.7	0.3
22	95.3	4.7	99.6	0.4
23	96.1	3.9	99.5	0.5
24	97.5	2.5	99.5	0.5
25	97.6	2.4	99.3	0.7
26	92.6	7.4	99.0	1.0
27	96.4	3.6	98.7	1.3
28	97.7	2.3	98.7	1.3
29	98.3	1.7	98.7	1.3
1830	97.7	2.3	98.6	1.4
31	95.3	4.7	98.5	1.5
32	97.8	2.2	98.4	1.6
33	96.7	3.3	98.4	1.6
34	96.0	4.0	98.1	1.9
35	90.7	9.3	97.8	2.2
36	89.9	10.1	97.5	2.5
37	91.0	9.0	97.0	3.0
38	93.8	6.2	96.9	3.1
39	96.7	3.3	969	3.1
1840	95.3	4.7	96.9	3.1
41	93.0	7.0	96.7	3.3
42	89.7	10.3	96.4	3.6
43	92.5	7.5	96.4	3.6
44	93.4	6.6	96.2	3.8
45	91.2	8.8	96.2	3.8
46	87.3	12.7	95.7	4.3
47	89.1	10.9	95.7	4.3
48	87.0	13.0	95.6	4.4
49	89.0	11.0	95.5	4.5
1850	88.8	11.2	95.3	4.7
51	84.7	15.3	95.0	5.0
52	82.0	18.0	94.5	5.5
53	76.4	23.6	93.9	6.1
54	67.5	32.5	92.7	7.3
55	69.5	30.5	91.3	8.7
56	67.4	32.6	91.2	8.8
57	69.4	30.6	91.0	9.0
58	65.8	34.2	90.4	9.6
59	71.0	29.0	90.6	9.4
1860	70.0	30.0	90.4	9.6
61	62.6	37.4	89.4	10.6
62	62.6	37.4	89.2	10.8
63	67.3	32.7	88.8	11.2

Year	Built in U.K.		On Register in U.K.	
	% Sail / Total	% Steam / Total	% Sail / Total	% Steam / Total
1864	59.7	40.3	87.7	12.3
65	50.7	49.3	85.7	14.3
66	55.5	44.5	84.7	15.3
67	58.9	41.1	84.3	15.7
68	68.0	32.0	84.5	15.5
69	62.7	37.3	83.6	16.4
1870	32.0	68.0	80.6	19.4
71	15.3	84.7	76.9	23.1
72	12.2	87.8	73.3	26.7
73	19.8	80.2	70.4	29.6
74	31.3	68.7	67.0	33.0
75	52.0	48.0	67.3	32.7
76	63.8	36.2	66.6	33.4
77	47.5	52.5	65.0	35.0
78	31.4	68.6	64.5	35.5
79	15.3	84.7	62.0	38.0
1880	12.3	87.7	57.6	42.4
81	15.4	84.6	53.0	47.0
82	18.9	81.1	50.0	50.0
83	16.6	83.4	47.4	52.6
84	29.4	70.6	46.7	53.3
85	47.4	52.6	46.5	53.5
86	43.7	56.3	46.2	53.8
87	23.0	77.0	44.3	55.7
88	16.7	83.3	41.7	58.3
89	16.0	84.0	39.7	60.3
1890	18.2	81.8	36.8	63.2
91	28.4	71.6	35.9	64.1
92	34.6	65.4	35.7	64.3
93	21.2	78.8	34.7	65.3
94	15.0	85.0	33.4	66.6
95	10.0	90.0	32.0	68.0
96	9.9	90.1	30.4	69.6
97	13.9	86.1	29.0	71.0
98	5.7	94.3	26.6	73.4
99	5.3	94.7	24.6	75.4
1900	4.9	95.1	22.6	77.4
01	6.3	93.7	20.7	79.3
02	8.5	91.5	19.4	80.6
03	7.4	92.6	18.2	81.8
04	5.9	94.1	17.1	82.9
05	3.6	96.4	15.6	84.4
06	4.2	95.8	13.9	86.1
07	3.9	96.1	12.7	87.3
08	6.2	93.8	12.2	87.8
09	5.4	94.6	11.3	88.7
1910	4.0	96.0	9.7	90.3
11	3.4	96.6	8.4	91.6
12	4.8	95.2	7.6	92.4
13	2.4	97.6	7.0	93.0
14				

Table No. C 4

shewing

Net Tonnage entered at, and cleared from British ports,

from 1771 to 1928.

See also Graph C4.

Notes:
1. Prior to 1827 tonnage in cargo and in ballast was not distinguished.
2. Records of figures for 1812 and 13 were lost by fire.
3. From 1899 to 1902 (inclusive) the vessels employed by the government for the conveyance of troops and stores to South Africa are excluded.
4. In 1912 and 1913 a large part of the increase is due to a change in the mode of recording vessels calling at foreign ports, in course of a voyage fro one part of U.K. to another.
5. Since the beginning of 1912 vessels loading or discharging mails or bullion only, at British ports, are recorded as "with cargo." Previously such vessels were recorded as "in ballast."
6. From 1914 to 1920 vessels employed by the Government for war purposes are excluded.
7. The figures for 1914 are increased to an unknown extent in consequence of the remeasurement of certain steam vessels by provision of the Merchant Shipping Act of 1907, which came into full force at the beginning of 1914.
8. From 1st. April, 1923 the Irish Free State is considered as a foreign country.
9. Figures throughout refer to merchant vessels only.

Sources of data: 1771 to 1801, MSS. Public Record Office reference numbers. – Customs 17/1 to 17/30, and Board of Trade 6/185
1802 to 1928, Reports by Registrar General concerning shipping and navigation of U.K.

Tonnage (in thousands) of vessels (including non-British) entered at, and cleared from British ports (foreign trade only).

Year	Total	Year	Cargoes	Ballast	Total	Year	Cargoes	Ballast	Total
1741	1812	1824	4414	1080	5494	1878	42900	8695	51595
42	1891	28	4332	1011	5343	79	43949	8766	52715
43	1843	29	4515	1173	5688	1880	49679	9057	58736
44	1926	1830	4657	1142	5799	81	49561	8388	57949
45	2036	31	5037	1402	6439	82	52514	8977	61491
46	1904	32	4398	1308	5706	83	55684	9278	64962
47	2001	33	4710	1238	5948	84	53940	10302	64272
48	1727	34	5025	1256	6281	85	54982	9300	64282
49	1616	35	5323	1312	6635	86	53791	9050	62841
1750	1689	36	5628	1433	7061	87	56171	8991	65162
51	1546	37	5794	1413	7207	88	58741	9778	68519
52	1518	38	6422	1674	8096	89	61567	10323	71890
53	2165	39	7043	1885	8928	1890	62836	11448	74284
54	2266	1840	7498	1942	9430	91	62314	12499	74813
55	2432	41	7526	1893	9419	92	63473	12394	75867
56	2501	42	7347	1780	9127	93	61748	12885	74633
57	2937	43	7679	2146	9825	94	66919	13617	80536
58	3099	44	7912	2435	10347	95	67630	12909	80539
59	3203	45	9333	2744	12077	96	71183	14279	85462
1760	3294	46	9500	2916	12416	97	73944	16255	90199
61	3496	47	10810	3469	14279	98	73978	16986	90964
62	3610	48	10631	2676	13307	99	79214	18569	97783
63	3102	49	11501	2503	14004	1900	79858	18666	98524
64	3387	1850	12021	2484	14505	01	79656	17024	96680
65	3153	51	13471	2509	15980	02	82706	16585	99291
66	3728	52	13603	2527	16130	03	87303	17490	104773
67	3040	53	15381	3009	18390	04	88408	21243	109651
68	3394	54	15770	2899	18669	05	89620	22421	112041
69	3569	55	15367	3122	18489	06	96258	24532	120790
1770	4273	56	17903	3686	21589	07	99247	34024	133271
71	4309	57	19071	4108	23179	08	96799	34647	131446
72	4363	58	18760	3550	22310	09	97510	35758	133268
73	4286	59	19334	3570	22904	1910	98946	35084	134030
74	4054	1860	20838	3851	24689	11	101210	37699	138909
75	4287	61	21925	4671	26596	12	108385	44072	152457
76	4150	62	22450	4085	26535	13	116884	47926	164810
77	4173	63	23025	3714	26739	14	99029	41060	140089
78	3250	64	23475	3730	27205	15	73253	31245	104498
79	4530	65	24986	3911	28897	16	65656	30123	95779
1780	5548	66	27287	3975	31262	17	49304	16242	65546
81	4413	67	28189	4567	32756	18	45971	16474	62445
82	-	68	29325	4356	33681	19	64133	34620	98753
83	-	69	30404	4506	34910	1920	73219	39842	113061
84	4764	1870	31625	5015	36640	21	73521	37295	110816
85	4269	71	35503	6045	41548	22	103077	50665	153742
86	3535	72	37154	5347	42501	23	121783	59116	180899
87	4069	73	37934	6506	44440	24	120668	55168	175836
88	5099	74	38835	6594	45429	25	117824	51484	169308
89	4471	75	39454	6823	46277	26	111142	53744	164886
1790	4099	76	42537	8248	50785	27	124090	57649	181739
91	3868	77	43327	8204	51531	28	124781	58497	183278
92	4130								
93	4434								
94	4971								
95	5802								

TABLE D1

Source of information:

"Glasgow Herald Shipbuilding and Engineering Supplement", annually from 1863 to 1914.
Percentages were calculated from figures given.

Note: 1. War vessels for the Royal Navy and for foreign governments are included.
2. Displacement tonnage of war vessels has been added to gross tonnage of merchant vessels, and the total designated "gross tonnage".

D1

Showing ships launched each year on Clyde.

year	Sail		Steam		Total		% Sail of Total	% Steam of Total
	No.	Gr. Tons	No.	Gr. Tons	No.	Gr. Tons		
1863					-	123262		
64					-	184000		
65					-	161180		
66	124	88004	47	32499	171	120503	73.0	24.0
67	89	62377	68	46111	157	108488	57.5	42.5
68	108	79346	124	106278	232	185624	42.6	57.4
69	113	90030	127	103970	240	194000	46.4	53.6
1870	83	42595	151	147205	234	189800	22.5	77.5
71	40	15870	191	180330	231	196200	8.5	91.5
72	38	15100	189	208900	227	224000	6.5	93.5
73	24	21692	135	230154	159	251846	8.5	91.5
74	66	77056	131	189782	197	266838	29.0	71.0
75	88	94173	139	127681	227	221854	42.5	57.5
76		79323		109000	229	188323	42.1	57.9
77		76110		93600	219	169710	44.8	55.2
78		59953		162400	236	222353	27.0	73.0
79		16150		158600	171	174750	9.2	90.8
1880		14879		221700	209	236579	6.4	93.6
81		20022		321000	261	341022	10.8	89.2
82		69934		322000	291	391934	17.8	82.2
83		64264		355400	329	419664	15.3	84.7
84		68654		228200	319	296854	23.1	76.9
85		103958		89500	241	193458	53.7	46.3
86		56275		116165	166	172440	32.5	67.5
87	123	37525	203	147537	326	185362	20.5	79.5
88	127	51187	175	228850	302	280037	17.4	82.6
89		80946		253374	249	335201	24.4	75.6
1890		95668		266500	302	362168	25.5	74.5
91	123	104377	218	221100	341	325477	32.0	68.0
92	186	161452	164	174962	350	336414	48.0	52.0
93	101	99545	152	180615	253	280160	35.5	64.5
94	75	72130	182	268775	257	340885	21.0	79.0
95	95	37954	225	322198	320	360152	10.5	89.5
96	97	46814	280	374027	377	420841	11.1	88.9
97	89	40657	229	299380	318	340037	12.1	87.9
98	44	8745	284	458087	328	466832	2.0	98.0
99	41	14618	243	476456	284	491074	3.0	97.0
1900		6937		479400	318	486337	1.5	98.5
01					297	511990		
02					312	516977		
03					277	446869		
04					329	417870		
05					319	539850		
06					372	598841		
07					526	619919		
08					569	355586		
09					354	403187		
1910					358	392392		
11					413	630583		
12					389	640529		
13					353	756976		
14					307	460258		

Tables Nos D2, D3, D4

shewing

D2 : Names and output of firms taking first and second place in Clyde production from 1876 to 1914

D3 : Names and output of the six leading marine engineering firms of the Clyde from 1887 to 1914

D4 : Total I.H.P. of the above six firms, and its percentage to the Clyde total from 1884 to 1914.

Note: In tables D2, D3, D4 war vessels for the Royal Navy and for foreign governments are included.

D2 Displacement tonnage of war vessels has been added to gross tonnage of merchant vessels and the total designated "gross tonnage."

Source of data: Compiled from the annual shipbuilding reports of the "Glasgow Herald".

D2

Year	Order	Firm	No.	Sail Grtons	No	Steam Grtons
1876	1	Stephen & Sons	12	12513	3	4982
	2	London & Glasgow Co.	3	2476	7	11946
	3	Elder & Co.	3	2405	14	11128
1877	1	A. McMillan & Son	9	11535	–	–
	2	Barclay, Curle & Co	6	7314	3	3938
	3	Aitken & Mansel, Ltd.	–	–	7	11172
1878	1	Denny Bros.	–	–	18	22048
	2	Barclay, Curle & Co.	7	11959	4	8748
1879	1	Elder & Co.	–	–	6	16895
	2	Stephen & Sons	1	215	11	16090
	3	Denny Bros.	–	–	13	16236
1880	1	Elder & Co.	–	–	17	33262
	2	Stephen & Sons	–	–	9	19005
1881	1	J. & G. Thomson, Ltd.	–	–	7	27100
	2	Elder & Co.	–	–	9	26575
82	1	Elder & Co.	–	–	14	31686
	2	Denny Bros.	–	–	13	22034
83	1	Elder & Co.	–	–	13	40115
	2	Russell & Co.	28	30610	–	–
	3	Napier & Co.	–	–	6	23877
884	1	Elder & Co.	–	–	6	32250
	2	Russell & Co.	26	32120	–	–
	3	Denny Bros.	–	–	21	24016
85	1	Russell & Co.	28	40866	–	–
	2	Denny Bros.	–	–	11	16423
	3	A. McMillan & Son	9	13228	–	–
	4	Stephen & Sons	4	6278	4	5271
1	1	Russell & Co.	17	29843	–	–
	2	Fairfield S. & E. Co	–	–	10	23434
	3	Scott & Sons	2	2616	5	10582
		Denny Bros.	3	477	9	12447
1	1	Russell & Co.	9	17452	6	9583
	2	Stephen & Sons	2	4031	8	18884
	3	D. & W. Henderson	2	117	5	14299
4	1	Russell & Co.	12	22957	11	22538
	2	Denny Bros.	16	8024	22	22119
	3	J. & G. Thomson	–	–	2	21000
	1	Russell & Co.	14	29847	7	16653
	2	Denny Bros.	–	–	20	25230
	3	Fairfield S. & E. Co.	–	–	8	23830
0	1	Russell & Co.	26	50634	8	19736
	2	Fairfield S. & E. Co.	–	–	8	33705
9	1	Russell & Co.	28	51920	6	4747
	2	Connell & Co.	12	21170	–	–
	3	Scott & Sons	3	4489	14	16470
		Denny Bros.	7	3744	12	14292

years 1890 and 1904, Russell & Co. were first
ited Kingdom. This is the only Scottish
hich attained that position between
and 1914.

Year	Order	Firm	No.	Sail Grtons	No	Steam Grtons
1892	1	Russell & Co.	26	54240	–	–
	2	Caird & Co.	–	–	6	28962
	3	Connell & Co.	12	23753	–	–
	4	Scott & Sons	5	6757	5	14456
1893	1	Russell & Co.	27	47093	–	–
	2	Stephen & Sons	–	–	7	26230
	3	Denny Bros.	1	217	14	23993
1894	1	Russell & Co.	19	34995	6	21970
	2	Connell & Co.	5	10099	5	20457
	3	Stephen & Sons	–	–	8	27186
	4	Caird & Co.	–	–	4	22998
1895	1	Denny Bros.	8	1613	16	33415
	2	J. & G. Thomson	–	–	12	32197
1896	1	Connell & Co.	–	–	12	40864
	2	Denny Bros.	–	–	9	35185
1897	1	Russell & Co.	1	1637	20	41276
	2	Connell & Co.	–	–	5	27483
1898	1	Russell & Co.	1	1634	12	42917
	2	Denny Bros.	6	900	15	34900
	3	Fairfield S. & E. Co.	–	–	7	35108
1899	1	Russell & Co.	–	–	16	52465
	2	Brown & Co.	–	–	4	41400
1900	1	Russell & Co.			17	60339
	2	Stephen & Sons			6	34555
1901	1	Russell & Co.			14	50847
	2	Brown & Co.			4	49800
1902	1	Russell & Co.			15	55585
	2	Connell & Co.			9	41052
1903	1	Brown & Co.			6	55152
	2	Russell & Co.			13	45810
1904	1	Russell & Co.			18	73689
	2	Connell & Co.			10	40956
1905	1	Russell & Co.			18	71540
	2	Connell & Co.			10	39429
1906	1	Russell & Co.			14	63338
	2	Brown & Co.			7	46387
1907	1	Russell & Co			14	71705
	2	Fairfield S. & E. Co.			6	48020
1908	1	Russell & Co.			13	48619
	2	Barclay, Curle, & Co.			6	38810
1909	1	Russell & Co.			14	55519
	2	Denny Bros.			31	33394
1910	1	Russell & Co.			12	66462
	2	Barclay, Curle, & Co.			6	33544
1911	1	Russell & Co.			14	72230
	2	Brown & Co.			8	65613
1912	1	Russell & Co			13	71224
	2	Scott & Sons			6	56998
1913	1	Russell & Co.			16	83876
	2	Brown & Co.			5	82722
1914	1	Russell & Co.			15	78016
	2	Barclay, Curle, & Co.			5	40267

D3

Year	Order	Firm	I.H.P.
1887	1	Fairfield	40640
	2.	J. & G. Thomson	26600
	3	Caird	14000
	4	Napier	13450
	5	Stephen	10750
	6	J. & J. Thomson	10200
1888	1	Denny	36980
	2	J. & G. Thomson	36000
	3	Fairfield	15720
	4	London & Glasgow Co	12000
	5	A. & J. Inglis	10481
	6	J. & J. Thomson	10200
1889	1	Fairfield	29750
	2	Scott	23200
	3	Denny	22730
	4	J. & G. Thomson	20000
	5	J. & J. Thomson	17350
	6	Dunsmuir & Jackson	16431
1890	1	J. & G. Thomson	44300
	2	Fairfield	41950
	3	Howden	41010
	4	Denny	37850
	5	Muir & Houston	18975
	6	Dunsmuir & Jackson	17450
1891	1	Fairfield	45900
	2	London & Glasgow Co	30600
	3	Muir & Houston	22250
	4	Scott	21700
	5	D. & W. Henderson	21500
	6	Napier	19220
1892	1	Scott	34300
	2	Fairfield	31551
	3	Caird	31000
	4	Denny	20000
	5	Napier	15500
	6	Muir & Houston	13150
1893	1	Fairfield	48300
	2	J. & G. Thomson	42100
	3	Denny	30060
	4	Stephen	16950
	5	Muir & Houston	14500
	6	Dunsmuir & Jackson	10130

Year	Order	Firm	I.H.P.
1894	1	J. & G. Thomson	30330
	2	Fairfield	30100
	3	Denny	26400
	4	Caird	19800
	5	Muir & Houston	18400
	6	Stephen	14900
1895	1	J. & G. Thomson	50720
	2	Fairfield	35200
	3	Denny	30400
	4	D. & W. Henderson	23000
	5	Dunsmuir & Jackson	19955
	6	Scott	18350
1896	1	J. & G. Thomson	50850
	2	Denny	44000
	3	Fairfield	35650
	4	London & Glasgow Co.	28150
	5	Stephen	25380
	6	Caird	22500
1897	1	Clydebank Co.	55300
	2	Denny	40500
	3	Fairfield	39200
	4	Dunsmuir & Jackson	22050
	5	Muir & Houston	20200
	6	Caird	20000
1898	1	Fairfield	74300
	2	Clydebank Co.	72300
	3	Denny	30120
	4	Scott	27500
	5	Muir & Houston	22800
	6	Caird	21400
1899	1	Brown	53480
	2	Fairfield	51650
	3	Denny	35700
	4	Rowan	29600
	5	Muir & Houston	24708
	6	Dunsmuir & Jackson	22000
1900	1	Brown	70300
	2	Fairfield	37180
	3	Denny	31700
	4	Stephen	29260
	5	Dunsmuir & Jackson	28863
	6	Rowan	27000

Year	Order	Firm	I.H.P.
1901	1	Brown	61000
	2	Fairfield	57000
	3	Denny	30650
	4	London & Glasgow Co	28300
	5	Dunsmuir & Jackson	24700
	6	Rowan	19280
1902	1	Fairfield	45750
	2	Denny	41920
	3	D. & W. Henderson	35300
	4	Rowan	31500
	5	Scott	31100
	6	Beardmore	27900
1903	1	Brown	61000
	2	Fairfield	53300
	3	Denny	47780
	4	Rowan	31000
	5	Stephen	25650
	6	Caird	24000
1904	1	Denny	48800
	2	Fairfield	36485
	3	Dunsmuir & Jackson	30800
	4	Rowan	29720
	5	Brown	28900
	6	Scott	28875
1905	1	Fairfield	56500
	2	Denny	54300
	3	Brown	45000
	4	Rowan	43160
	5	Caird	30000
	6	Scott	28800
1906	1	Brown	108900
	2	Scott	50160
	3	Rowan	45850
	4	Denny	44200
	5	Dunsmuir & Jackson	41325
	6	Fairfield	29380
1907	1	Fairfield	112000
	2	Brown	73000
	3	Denny	63200
	4	Rowan	50220
	5	Barclay, Curle	40532
	6	Stephen	35930

Year	Order	Firm	I.H.P.
1908	1	Denny	57100
	2	Rowan	43890
	3	Brown	41750
	4	Yarrow	32830
	5	Barclay, Curle	33150
	6	Caird	23500
1909	1	Fairfield	93500
	2	Brown	89200
	3	Denny	71750
	4	Yarrow	51550
	5	Rowan	41820
	6	Beardmore	23500
1910	1	Fairfield	100200
	2	Brown	77700
	3	Denny	65900
	4	Rowan	44030
	5	Stephen	31460
	6	Rankin & Blackmore	30850
1911	1	Brown	104550
	2	Denny	7265
	3	Fairfield	6725
	4	Rowan	5905
	5	Beardmore	4900
	6	Dunsmuir & Jackson	4050
1912	1	Brown	17850
	2	Beardmore	6000
	3	Denny	5846
	4	Fairfield	552
	5	Rowan	527
	6	Scott	515
1913	1	Brown	239
	2	Fairfield	20
	3	Yarrow	9
	4	Denny	
	5	Beardmore	
	6	Rowan	5
1914	1	Denny	9
	2	Rowan	7
	3	Barclay, Curle	
	4	Scott	
	5	Stephen	
	6	Caird	

D4

Year	Total 1st Six Firms	Total Clyde	%
1887	115640	198920	58·8
88	121381	258465	47·0
89	129461	301907	42·9
1890	201535	377957	53·3
91	161170	308886	52·0
92	145501	279564	52·1
93	162040	256545	63·2
1894	139930	295620	47·4
95	177625	333490	53·3
96	206530	426759	48·4
97	197250	373195	53·0
98	248420	510815	48·7
99	205712	478503	43·1
1900	224303	459138	48·8
1901	220930	440125	50·2
02	213470	458870	46·5
03	242730	455221	53·3
04	203580	432815	47·1
05	257760	518547	49·7
06	319815	606600	52·7
07	374882	668527	56·2
1908	232220	474870	
09	371320	610985	
1910	350140	593840	
11	392000	786889	
12	456350		
13	742325		
14	280350		

Table No. E1

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Additions to and Removals from ~~and not additions to~~ the register of the United Kingdom, classified as steel, iron, woodand composite,

from 1879 to 1913.

See also Graph E1.

Source of data: Compiled from statistical section of Lloyd's Register of Shipping, issued annually.

E1

ADDITIONS

Year	STEEL						IRON						WOOD & COMPOSITE						TOTAL	
	New Vessels		Bought Foreign etc.		Total		New Vessels		Bought Foreign etc.		Total		New Vessels		Bought Foreign etc.		Total			
	No.	Gross tons	No	Gross tons	No	Gross tons	No.	Gross tons	No.	Gross tons	No.	Gross tons	No.	Gross tons	No.	Gross tons	No.	Gross tons	No.	Gross tons
1879																				
1880	30	38164					401	487404					293	19938					724	545506
81	37	71533					461	659153					289	18107					787	748793
82	73	127927					529	785592					276	14850					878	928369
83	103	155745					620	856990					259	15202					982	1027937
84	76	122338					506	586999					315	19506					897	728843
85	149	184818					321	308542					303	20592					773	513952
86	155	191561	2	310	157	191871	174	179914	38	28107	212	208021	256	15733	95	11534	351	27267	720	427159
87	225	352524	1	1326	226	353850	93	85049	31	21786	124	106835	194	9879	114	17587	308	27466	658	488151
88	354	614103	13	9450	367	623553	100	50579	66	57688	166	108267	200	11056	103	6712	303	17768	836	749588
89	458	873662	3	1719	461	875381	108	58787	39	25254	147	84041	182	9624	113	12762	295	22386	903	981808
1890	491	913384	11	2905	502	916289	116	46055	31	11387	147	57442	168	9030	95	8244	263	17874	912	991605
91	481	908644	10	12563	491	921207	170	32925	25	28914	195	61839	181	9753	70	6193	251	15946	937	998992
92	493	921721	7	5916	500	927637	92	24058	22	16300	114	40358	170	9468	88	7277	258	16745	872	984740
93	394	735196	8	11799	402	746995	68	12876	19	14517	87	27393	181	9131	87	12497	268	21628	757	796016
94	456	834835	15	26253	471	861088	68	12607	34	27463	102	40070	181	8753	79	11832	260	20585	833	921743
95	411	777725	14	15837	425	793562	75	10679	27	21053	102	31732	185	9108	128	13380	313	22488	840	847782
96	434	787815	13	9196	447	797011	84	12385	28	16276	112	28661	178	8110	69	7665	247	15775	806	841447
97	400	687127	22	43092	422	730219	65	10206	23	28692	88	38898	216	9898	80	6956	296	16854	806	785971
98	586	1005270	44	76066	630	1081336	86	14452	32	25990	118	40442	216	9578	115	9465	331	19043	1079	1140821
99	594	1164756	34	45430	628	1210186	66	12366	51	33956	117	46322	194	8839	98	10353	292	19192	1037	1275700
1900	522	1111488	39	51325	561	1162813	91	16795	42	21632	133	38427	223	12527	110	7766	333	20293	1027	1221533
01	523	1137345	52	33169	575	1170514	16	2648	35	24417	51	27065	229	13305	89	7709	318	21014	944	1218593
02	539	1135496	85	73824	624	1209320	32	5870	32	15269	64	21139	213	11577	87	7473	300	19050	988	1249509
03	598	958410	67	45310	665	1003720	3	537	15	16941	18	17478	207	11671	98	10482	305	22153	988	1043351
04	570	1031490	53	55074	623	1086564	5	827	15	8545	20	9372	213	11587	94	6880	307	18467	950	1114403
05	603	1211418	49	15446	652	1226864	2	147	21	7160	23	7307	175	9802	116	6042	291	15844	966	1250015
06	702	1431282	56	58114	758	1489396	3	409	30	10654	33	11063	214	11973	87	4092	301	16065	1092	1516524
07	674	1190794	57	44489	731	1235283	–	–	34	13229	34	13229	317	22167	123	7516	440	29683	1205	1278114
08	473	609766	50	55714	523	665480	2	580	22	5147	24	5727	250	13987	102	3958	352	17945	899	689152
09	427	763444	75	42605	502	806049	–	–	39	6918	39	6918	167	7242	122	5773	289	13015	830	825982
1910	472	933479	75	61387	547	994866	–	–	31	6096	31	6096	198	9214	86	6643	284	15857	862	1016819
11	553	1238918	88	94721	641	1333639	1	436	9	5392	10	5828	214	11456	140	5328	354	16784	1005	1356251
12	560	1372055	66	41751	626	1413806	–	–	14	5580	14	5580	188	8392	128	5731	316	14123	956	1433509
13	550	1394731	85	92935	635	1487666	–	–	14	10440	14	10440	211	5618	115	5269	326	10887	975	1508993

REMOVALS

Year	STEEL						IRON						WOOD & COMPOSITE						TOTAL	
	Lost, Broken up		Sold Foreign, etc		Total		Lost, Broken up		Sold Foreign, etc		Total		Lost, Broken up		Sold Foreign etc		Total			
	No.	Gross tons	No.	Gross tons	No.	Gross tons	No.	Gross tons	No.	Gross tons	No.	Gross tons	No.	Gross tons	No.	Gross tons	No.	Gross tons	No.	Gross tons
1879	–	–	–	–	–	–	185	170025					789	149828					972	319853
1880	–	–	–	–	–	–	168	164423					839	173065					1007	337488
81	1	1536					191	182306					839	170283					1031	354125
82	–	–					203	206896					793	166809					996	373705
83	1	1582					233	248221					705	144138					939	393941
84	1	4021					222	231344					711	130539					934	365904
85	6	8380					225	220304					1277	131842					1508	360526
86	4	5812	6	4254	10	10066	205	196165	64	59946	269	256111	990	123539	98	34381	1088	157920	1367	424097
87	7	11541	14	21506	21	33047	217	210809	77	66010	294	276819	760	115418	134	59177	894	174595	1209	484461
88	7	7610	17	11462	24	19072	215	204679	107	89363	322	294042	577	84707	140	66071	717	150778	1063	463892
89	12	23243	18	22774	30	46017	161	152149	145	103869	306	256018	493	68664	156	55117	649	123781	985	425816
1890	31	51307	19	19869	50	71176	194	203873	153	114892	347	318765	476	56049	195	55571	671	111620	1068	501561
91	32	55900	40	46649	72	102549	160	216837	105	93986	265	310823	448	55095	170	20938	618	76033	955	489405
92	32	61243	33	32566	65	93809	165	179060	81	84995	246	264055	439	52574	123	24102	562	76676	873	434540
93	34	58903	61	88950	95	147853	147	159945	120	135501	267	295446	443	47972	139	23217	582	71189	944	514488
94	34	62473	48	66205	82	128678	177	206084	145	173701	322	379785	402	39414	136	22127	538	61541	942	570004
95	44	68920	85	125067	129	193987	162	184181	196	260470	358	444651	443	52351	112	18083	555	70434	1042	709072
96	59	100803	73	88635	132	189438	153	172692	198	267092	351	439784	406	43358	115	17059	521	60417	1004	689639
97	63	109661	90	143693	153	253354	152	180286	220	291806	372	472092	430	37258	141	14640	571	51898	1096	777344
98	60	119797	140	278413	200	398210	136	146235	243	334864	379	481099	447	36414	152	15805	599	52219	1178	931538
99	53	118502	202	324754	255	443256	115	113470	227	287820	403	401290	403	29984	232	21305	635	51289	1232	895835
1900	72	138879	235	409371	307	548250	108	90667	175	240740	283	331407	421	36391	226	19007	647	55398	1237	935055
01	64	111644	137	221413	201	333057	96	99518	129	175746	225	275264	308	27114	133	12113	441	39227	867	647548
02	49	98965	107	179124	156	278089	87	70092	114	128124	201	198216	319	20583	111	9267	430	29850	787	506155
03	80	153724	97	181681	177	335405	99	85884	121	174505	220	260389	306	22258	79	8370	385	30628	782	626422
04	67	141804	138	221578	205	363382	102	82585	124	136334	226	218919	312	23463	79	4886	391	28349	822	610652
05	89	148515	213	388994	302	537509	120	79742	171	218375	291	298117	261	20213	100	8679	361	28892	954	864518
06	83	154516	205	332139	288	486655	102	65161	148	154899	250	220060	289	21227	84	5026	373	26253	911	732968
07	81	159819	192	293139	273	452958	66	54872	131	121336	197	176208	323	23079	116	7999	439	31078	909	660244
08	104	196028	129	159945	233	355973	94	65529	92	101693	186	167222	271	18354	79	3835	350	22189	769	545384
09	86	193115	184	287553	270	480668	60	54651	91	114721	151	169372	281	20176	97	4556	378	24732	799	674772
1910	133	278089	239	462641	372	740730	82	72758	91	122242	173	195000	255	14404	131	7516	386	21920	931	957650
11	91	173799	316	626133	407	799932	67	56088	138	137400	205	193488	249	17015	154	7599	403	24614	1015	1018034
12	107	263694	368	638406	475	902100	86	71836	109	93808	195	165644	277	16664	203	10668	480	27332	1150	1095076
13	104	215412	349	742412	453	957824	60	42479	75	58448	135	100927	197	12134	114	5961	311	18095	899	1076846

Table No. E 2

shewing

Additions to and Removals from ~~and net additions to~~ the register of the United Kingdom, classified steam and sail.

from 1880 to 1913.

See also Graph E 2.

Source of data : Compiled from statistical section of Lloyd's Register of Shipping, issued annually.

E 2

ADDITIONS

Year	STEAM						SAIL						TOTAL	
	New Vessels		Bought Abroad etc.		Total		New Vessels		Bought Abroad etc		Total			
	No.	Gross tons	No.	Gross tons	No.	Gross tons	No.	Gross tons	No.	Gross tons	No.	Gross tons	No.	Gross tons
1879														
80	408	485661					316	59845					724	545506
81	475	660528					312	88265					787	748793
82	541	789973					337	138396					878	928369
83	670	885495					312	142442					982	1027937
84	518	568324					379	160519					897	728843
85	336	305508					437	208444					773	513952
86	273	244641	46	28929	319	273570	312	142567	89	11022	401	153589	720	427159
87	286	367697	43	22548	329	390245	226	79755	103	18151	329	97906	658	488151
88	431	605504	79	59995	510	665499	223	70234	103	13855	326	84089	836	749588
89	533	830963	49	21981	582	852944	215	111110	106	17754	321	128864	903	981808
1890	568	858480	47	12206	615	870686	207	109989	90	10930	297	120919	912	991605
91	580	762644	46	40027	626	802671	252	188678	59	7643	311	196321	937	998992
92	470	680880	34	18549	504	699429	285	274367	83	10944	368	285311	872	984740
93	419	635708	33	24232	452	659940	224	121495	81	14581	305	136076	757	796016
94	480	765251	49	46608	529	811859	225	90944	79	18940	304	109884	833	921743
95	480	747888	46	35511	526	783399	191	49624	123	14759	314	64383	840	847782
96	494	762290	40	17957	534	780247	202	46020	70	15180	272	61200	806	841447
97	462	670201	43	66073	505	736274	219	37030	82	12667	301	49697	806	785971
98	646	1011233	83	100535	729	1111768	242	18067	108	10986	350	29053	1079	1140821
99	627	1166680	85	75912	712	1242592	227	19281	98	13827	325	33108	1037	1275700
1900	626	1123074	77	63556	703	1186630	210	17736	114	17167	324	34903	1027	1221533
01	573	1126263	77	50210	643	1173390	217	31310	99	15085	301	45203	944	1218593
02	588	1121013	84	72910	663	1192389	214	34628	120	23656	325	57120	988	1249509
03	617	951185	64	60852	673	1008756	219	24832	116	11881	315	34595	988	1043351
04	585	1023333	67	60036	643	1080148	221	25142	95	10463	307	34255	950	1114403
05	624	1209665	66	20584	680	1226864	170	15414	120	8064	286	23151	966	1250015
06	778	1428793	89	64327	860	1493120	148	14871	84	8533	232	23404	1092	1516524
07	838	1197662	93	51880	918	1249542	168	15299	121	13354	287	28653	1205	1278114
08	568	603000	74	55416	632	656253	167	23496	100	9403	267	32899	899	689152
09	482	758772	80	35321	555	791625	127	15662	156	19975	275	34357	830	825982
1910	582	935761	114	62064	686	995342	99	9500	78	12062	176	21477	862	1016819
11	689	1243897	140	96045	810	1334387	102	13672	97	9396	195	21864	1005	1356251
12	655	1373860	141	46527	785	1416549	104	10425	67	6535	171	16960	956	1433509
13	661	1391745	152	97337	813	1489082	100	8604	62	11307	162	19911	975	1508993

REMOVALS

Year	STEAM						SAIL						TOTAL	
	Lost, Broken up		Sold Abroad etc.		Total		Lost, Broken up		Sold Abroad etc.		Total			
	No.	Gross tons	No.	Gross tons	No.	Gross tons	No.	Gross tons	No.	Gross tons	No.	Gross tons	No.	Gross tons
1879	151	130500					821	189353					972	319853
80	137	117592					870	219896					1007	337488
81	158	141610					873	212515					1031	354125
82	182	163259					814	210446					996	373705
83	197	199447					742	194494					939	393941
84	204	191587					730	174317					934	365904
85	240	184936					1268	175590					1508	360526
86	210	161158	69	59042	279	220200	989	164358	99	39539	1088	203897	1367	424097
87	219	170255	81	73282	300	243537	765	167513	144	73411	909	240924	1209	484461
88	194	151828	99	77535	293	229363	605	145168	165	89361	770	234529	1063	463892
89	158	128361	134	88831	292	217192	508	115695	185	92929	693	208624	985	425816
1890	204	194749	116	91259	320	286008	497	116480	251	99073	748	215553	1068	501561
91	172	227052	130	125659	302	352711	468	100780	185	35914	653	136694	955	489405
92	163	165997	101	98411	264	264408	473	126880	136	43252	609	170132	873	434540
93	157	159358	154	190486	311	349844	467	107462	166	57182	633	164644	944	514488
94	193	223253	150	193132	343	416385	420	84718	179	68901	599	153619	942	570004
95	183	199997	227	331913	410	531910	466	105455	166	71707	632	177162	1042	709072
96	173	198378	217	291888	390	490266	445	118475	169	80898	614	199373	1004	689639
97	193	234049	244	343168	437	577217	452	93156	207	106971	659	200127	1096	777344
98	195	227142	289	469518	484	696660	448	75304	246	159564	694	234868	1178	931538
99	158	196690	360	525500	518	722190	413	65266	301	108379	714	173645	1232	895835
1900	188	191822	336	550038	524	741860	413	74115	300	119080	713	193195	1237	935055
01	143	154261	221	334168	364	488429	325	84015	178	75104	503	159119	867	647548
02	133	134400	206	270241	339	404641	322	55240	126	46274	448	101514	787	506155
03	167	198397	187	310251	354	508648	318	63469	110	54305	428	117774	782	626422
04	163	192786	231	311442	394	504228	318	55066	110	51356	428	106422	822	610652
05	201	178769	316	521738	517	700507	269	69701	168	94310	437	164011	954	864518
06	178	181013	299	407600	477	588613	296	59891	138	84464	434	144355	911	732968
07	148	180983	277	350929	425	531812	322	56887	162	71545	484	128432	909	660244
08	198	234643	196	210080	394	444723	271	45268	104	55393	375	100661	769	545384
09	154	219562	230	316245	384	535807	273	48380	142	90585	415	138965	799	674772
1910	216	307729	260	427181	476	734910	254	57522	201	165218	455	222740	931	957650
11	166	203638	400	650845	566	854483	241	43264	208	120287	449	163551	1015	1018034
12	202	315463	454	679614	656	995077	268	36731	226	63268	494	99999	1150	1095076
13	157	234685	418	762406	575	997091	204	35340	120	44415	324	79755	899	1076846

TABLE E 3

shewing

Summary of net additions (number and gross tonnage) of ships
to the register of the United Kingdom, classified steel, iron, wood and composite.

from 1880 to 1913.

See also Graph E1.

Source of data: Compiled from Lloyd's Register of Shipping,
statistical section, issued annually.

E 3

year	STEEL		IRON		WOOD & COMPOSITE		TOTAL	
	No.	Gross tons	No.	Gross tons	No.	Gross tons	No.	Gross tons
1879								
1880	+ 30	+ 38164	+ 233	+ 322981	- 546	- 153127	- 283	+ 208018
81	+ 36	+ 69997	+ 270	+ 476847	- 550	- 152176	- 244	+ 394668
82	+ 73	+ 127927	+ 326	+ 578696	- 517	- 151959	- 118	+ 554664
83	+ 102	+ 154163	+ 387	+ 608769	- 446	- 128936	+ 43	+ 633996
84	+ 75	+ 118317	+ 284	+ 355655	- 396	- 111033	- 37	+ 362939
85	+ 143	+ 176438	+ 96	+ 88238	- 974	- 111250	- 735	+ 153426
86	+ 147	+ 181805	- 57	- 48090	- 737	- 130653	- 647	+ 3062
87	+ 205	+ 320803	- 170	- 169984	- 586	- 147129	- 551	+ 3690
88	+ 343	+ 604481	- 156	- 185775	- 414	- 133010	- 227	+ 285696
89	+ 431	+ 829364	- 159	- 171977	- 354	- 101395	- 82	+ 555992
1890	+ 452	+ 845113	- 200	- 261323	- 408	- 93746	- 156	+ 490044
91	+ 419	+ 818658	- 70	- 248984	- 367	- 60087	- 18	+ 509587
92	+ 435	+ 833828	- 132	- 223697	- 304	- 59931	- 1	+ 550200
93	+ 307	+ 599142	- 180	- 268053	- 314	- 49561	- 187	+ 281528
94	+ 389	+ 732410	- 220	- 339715	- 278	- 40956	- 109	+ 351739
95	+ 296	+ 599575	- 256	- 412919	- 242	- 47946	- 202	+ 138710
96	+ 315	+ 607573	- 239	- 411123	- 274	- 44642	- 198	+ 151808
97	+ 269	+ 476865	- 284	- 433194	- 275	- 35044	- 290	+ 8627
98	+ 430	+ 683126	- 261	- 440657	- 268	- 33176	- 99	+ 209293
99	+ 373	+ 766930	- 225	- 354968	- 343	- 32097	- 195	+ 379865
1900	+ 254	+ 614563	- 150	- 292980	- 314	- 35105	- 210	+ 286478
01	+ 374	+ 837457	- 174	- 248199	- 123	- 18213	+ 77	+ 571045
02	+ 468	+ 931231	- 137	- 177077	- 130	- 10800	+ 201	+ 743354
03	+ 488	+ 668315	- 202	- 242911	- 80	- 8475	+ 206	+ 416929
04	+ 418	+ 723182	- 206	- 209547	- 84	- 9882	+ 128	+ 503753
05	+ 350	+ 689355	- 268	- 290810	- 70	- 13048	+ 12	+ 385497
06	+ 470	+ 1002741	- 217	- 208997	- 72	- 10188	+ 181	+ 783556
07	+ 458	+ 782325	- 163	- 162979	+ 1	- 1395	+ 296	+ 617951
08	+ 290	+ 309507	- 162	- 161495	+ 2	- 4244	+ 130	+ 143768
09	+ 232	+ 325381	- 112	- 162454	- 89	- 11717	+ 31	+ 151210
1910	+ 175	+ 254136	- 142	- 188904	- 102	- 6063	- 69	+ 59169
11	+ 234	+ 533707	- 195	- 187660	- 49	- 7830	- 10	+ 338217
12	+ 151	+ 511706	- 181	- 160064	- 164	- 13209	- 194	+ 338433
13	+ 182	+ 529842	- 121	- 90487	+ 15	- 7208	+ 76	+ 432147

TABLE E4

shewing

Summary of net additions (number and gross tonnage) of ships to the register of the United Kingdom, classified steam and sail

from 1880 to 1913.

See also Graph E 2.

Source of data: Compiled from the statistical section of Lloyd's Register of Shipping, issued annually.

E4

Year	STEAM		SAIL		TOTAL	
	No.	Gross tons	No.	Gross tons	No.	Gross tons
1879						
1880	+271	+ 368069	-554	- 160051	-283	+ 208018
81	+317	+ 518918	-561	- 124250	-244	+ 394668
82	+359	+ 626714	-477	- 72050	-118	+ 554664
83	+473	+ 686048	-430	- 52052	+ 43	+ 633996
84	+314	+ 376737	-351	- 13798	- 37	+ 362939
85	+ 96	+ 120572	-831	+ 32854	-735	+ 153426
86	+ 40	+ 53370	-687	- 50308	-647	+ 3062
87	+ 29	+ 146708	-580	- 143018	-551	+ 3690
88	+217	+ 436136	-444	- 150440	-227	+ 285696
89	+290	+ 635752	-372	- 79760	- 82	+ 555992
1890	+295	+ 584678	-451	- 94634	-156	+ 490044
91	+324	+ 44960	-342	+ 59627	- 18	+ 509587
92	+240	+ 435021	-241	+ 115179	- 1	+ 550200
93	+141	+ 310096	-328	- 28568	-187	+ 281528
94	+186	+ 395474	-295	- 43736	-109	+ 351739
95	+116	+ 251489	-318	- 112779	-202	+ 138710
96	+144	+ 289981	-342	- 138173	-198	+ 151808
97	+ 68	+ 159057	-358	- 150430	-290	+ 8627
98	+245	+ 415108	-344	- 205815	- 99	+ 209293
99	+194	+ 520402	-389	- 140537	-195	+ 379865
1900	+179	+ 444770	-389	- 158292	-210	+ 286478
01	+279	+ 684961	-202	- 113916	+ 77	+ 571045
02	+324	+ 787748	-123	- 44394	+201	+ 743354
03	+319	+ 500108	-113	- 83179	+206	+ 416929
04	+249	+ 575920	-121	- 72167	+128	+ 503753
05	+163	+ 526357	-151	- 140860	+ 12	+ 385497
06	+383	+ 904507	-202	- 120951	+181	+ 783556
07	+493	+ 717730	-197	- 99779	+296	+ 617951
08	+238	+ 211530	-108	- 67762	+130	+ 143768
09	+171	+ 255818	-140	- 104608	+ 31	+ 151210
1910	+210	+ 260432	-279	- 201263	- 69	+ 59169
11	+244	+ 479904	-254	- 141687	- 10	+ 338217
12	+129	+ 421472	-323	- 83039	-194	+ 338433
13	+238	+ 491991	-162	- 59844	+ 76	+ 432147

Table No. F 1

shewing

Number and gross tonnage of ships commenced and of ships launched in the United Kingdom, at quarterly intervals from 1888 to 1914.

See also Graph F 1.

Note: Figures are for quarters ending 31st March; 30th June; 30th September; and 31st December respectively in each year, and show merchant vessels only of 100 tons and over.

Source of data: Lloyd's (quarterly) Register
Shipbuilding Returns.

Year	Qr.	Commenced in United Kingdom No.	Sail: gr. tns.	No.	Steam: gr. tns.	Total no.	Total gr. tns.	Launched in United Kingdom No.	Sail: gr. tns.	No	Steam: gr. tns.	Total no.	Total gr. tns.
1887	1												
	2												
	3												
	4												
1888	1	16	20733	135	222769	151	243502	14	15031	81	142136	95	157167
	2	31	23062	91	143825	122	166887	22	17236	105	137256	127	154492
	3	20	21504	141	266078	161	287582	28	29583	139	212805	167	242388
	4	31	50062	178	326413	209	376475	17	19109	133	264884	150	283993
1889	1	22	25844	159	257875	181	283719	21	21985	108	199798	129	221783
	2	29	31684	156	259525	185	291209	32	41362	163	292756	195	334118
	3	15	20505	154	246338	169	266843	24	27633	156	273286	180	300919
	4	33	41600	182	303333	215	344933	18	34588	168	317953	186	352541
1890	1	31	28734	149	249124	180	277838	18	29193	159	254842	177	284035
	2	21	18839	117	175104	138	193943	34	35296	183	291071	217	326367
	3	22	34710	123	173156	145	207866	18	32389	162	274188	180	306577
	4	41	58372	181	282896	222	341268	22	36208	147	241518	169	277726
1891	1	45	56849	161	198114	206	254963	27	40106	127	203316	154	243422
	2	57	90000	144	173046	201	263046	42	53811	185	271173	227	324984
	3	52	66648	139	180192	191	246840	58	66622	178	215029	236	281651
	4	52	91250	166	291753	212	383003	54	91924	151	188835	205	280759
1892	1	40	65138	122	213548	162	278686	47	76796	106	168654	153	245450
	2	40	44465	117	175695	157	220160	51	82267	123	164409	174	246676
	3	24	25873	90	148330	114	174203	39	67986	141	252281	180	320267
	4	23	19553	74	161053	97	180606	27	34879	127	246523	154	281402
1893	1	28	43137	112	191453	140	234590	17	13995	84	161210	101	177205
	2	31	37173	113	151853	144	189026	29	34427	120	164376	149	198803
	3	14	19304	126	227109	140	246413	32	35047	122	198867	154	233914
	4	12	21729	107	212182	119	233911	17	32489	101	193752	118	226241
1894	1	18	17270	167	265969	185	283239	18	26364	134	238878	152	265242
	2	19	22960	150	265056	169	288016	21	26248	176	273032	197	299280
	3	5	2320	82	155322	87	157642	15	18412	125	203580	140	221992
	4	10	6616	117	239942	127	246558	8	10190	118	249476	126	259666
1895	1	17	10049	131	230143	148	240192	5	6858	91	151537	96	158395
	2	17	16330	123	235925	140	252255	13	12724	157	268916	170	281640
	3	13	8122	158	287271	171	295393	13	11412	146	278918	159	290330
	4	32	18901	135	235282	167	254183	15	13583	124	202075	139	215658
1896	1	12	8977	145	233334	157	242311	13	12366	143	270020	156	282386
	2	17	13114	159	256812	176	269926	16	8432	158	254917	174	263349
	3	11	7571	136	191753	147	199324	24	14763	152	283414	176	298177
	4	15	13553	196	391536	211	405089	12	10469	162	297489	174	307958
1897	1	4	263	149	248025	153	248288	9	9857	123	189912	132	199769
	2	10	3646	182	316530	192	320176	15	10747	187	286463	202	297210
	3	11	1693	158	234216	169	235909	7	2531	116	220773	123	223304
	4	6	683	168	316590	174	317273	14	5403	115	227053	129	232456
1898	1	5	490	187	328450	192	328940	5	692	160	229587	165	230279
	2	2	270	186	433686	188	433956	5	2428	225	412269	230	414697
	3	10	1087	221	389866	231	390953	5	645	168	305763	173	306408
	4	3	575	187	435898	190	436473	1	28	202	432125	203	432153
1899	1	4	512	175	347013	179	347525	3	286	162	300250	165	300536
	2	7	730	168	345719	175	346449	6	933	185	340009	191	340942
	3	9	3560	165	303826	174	307386	4	795	177	392493	181	393288
	4	10	4661	165	335103	175	339764	2	437	195	414225	197	414662
1900	1	12	1165	148	244205	160	245370	5	1049	129	264208	134	265257
	2	5	6880	152	371290	157	378170	10	3957	185	374432	195	378389
	3	10	2878	120	311834	130	314712	6	3337	171	347444	177	350781
	4	8	3519	179	479215	187	482734	6	999	173	437669	179	438668

Year	Qr.	Commenced in United Kingdom No	Sail: gr. tns.	No	Steam: gr. tns.	Total no.	Total gr. tns.	Launched in United Kingdom No.	Sail: gr. tns.	No.	Steam: gr. tns.	Total no.	Total gr. tns.
1901	1	9	1312	144	374662	153	375974	6	5708	110	269717	116	275425
	2	14	8680	148	342251	162	350931	17	5721	160	392864	177	398585
	3	19	12291	178	483797	197	496088	5	2542	154	427883	159	430425
	4	16	12308	150	343713	166	356021	14	8305	168	410609	182	418914
1902	1	12	7045	109	221799	121	228844	10	11048	136	302366	146	313414
	2	12	10005	153	294460	165	304465	12	11747	167	390218	179	401965
	3	13	8204	138	259105	151	267309	9	9494	159	345720	168	355214
	4	10	6639	136	260255	146	266894	13	11189	144	352902	157	364091
1903	1	16	1980	140	204143	156	206123	14	7939	139	238164	153	246103
	2	6	950	196	371517	202	372467	26	6636	164	285735	190	292371
	3	22	15241	120	172011	142	187292	10	1658	166	290353	176	292011
	4	26	11731	136	278532	162	290263	21	9169	158	359759	179	368928
1904	1	18	2925	157	346780	175	349705	26	14585	133	247320	159	261905
	2	15	6922	166	336295	181	343217	19	6697	157	289714	176	296411
	3	20	4592	145	347140	165	351732	17	3403	164	351337	181	354740
	4	8	1350	177	329457	195	330807	17	6548	160	301156	177	307704
1905	1	13	2352	207	499087	220	501439	14	4186	144	305070	158	309256
	2	14	2547	208	456867	222	459414	13	7051	193	388968	206	396019
	3	8	2258	178	373861	186	376119	13	2485	193	419343	206	421828
	4	14	2873	240	514411	254	517284	17	4217	201	476175	218	480392
1906	1	10	3384	199	431535	209	434919	11	1992	172	366459	183	368451
	2	26	9500	222	466093	248	475593	13	2928	232	511537	245	514465
	3	9	1752	169	351543	178	353295	23	7354	193	466216	216	473570
	4	17	10837	183	342346	200	353183	19	5974	212	442907	231	448881
1907	1	37	5657	248	447412	285	453069	15	5507	177	318510	192	324017
	2	32	3350	216	393897	248	397247	35	5578	246	440362	281	445940
	3	12	2338	155	295226	167	297564	32	4513	230	409151	268	413664
	4	28	3034	164	281710	192	284744	19	11182	186	387940	205	399122
1908	1	32	4333	103	161310	135	165643	18	2592	110	168936	128	171528
	2	18	2396	113	159928	131	162324	43	5813	136	202580	179	208393
	3	2	240	109	184174	111	184414	21	5472	136	272363	157	277835
	4	21	2093	155	281950	176	284043	5	839	133	259054	138	259893
1909	1	27	5237	125	277118	152	282355	10	1636	111	176355	121	177991
	2	14	3583	97	192086	111	195669	46	8401	147	226639	193	235040
	3	16	4006	130	293851	146	297857	25	4844	127	264474	152	269318
	4	21	3894	156	402186	177	406080	11	3267	113	280118	124	283385
1910	1	14	1171	158	372663	172	373834	4	750	126	241805	130	242555
	2	14	1596	175	393080	189	394676	24	1419	169	344024	193	345443
	3	17	3336	147	357007	164	360343	18	2451	158	339888	176	342339
	4	22	5167	92	226302	114	231469	8	1290	69	208059	77	209349
1911	1	28	5356	211	505104	239	510460	24	6093	164	395537	188	401630
	2	16	4951	201	466313	217	471264	29	5667	212	515162	241	520829
	3	8	3000	189	395718	197	398718	9	3535	168	389105	177	392640
	4	27	6265	188	536624	215	542889	17	3710	202	466957	219	470667
1912	1	25	3089	210	525843	235	528932	9	1707	154	325952	163	327659
	2	18	4436	184	556620	202	561056	33	5179	171	422596	204	427775
	3	4	1225	165	468161	169	469386	19	5561	182	479186	201	484747
	4	29	7303	199	548474	228	555777	6	1689	207	480933	213	482622
1913	1	21	2638	155	487160	176	489798	11	2453	147	384413	158	386866
	2	13	4693	166	454717	179	459410	27	3659	159	500228	186	503887
	3	7	1120	149	431566	156	432686	18	3775	182	453700	200	457475
	4	17	2615	183	481821	200	484436	10	2738	178	565232	188	567970
1914	1	15	2326	148	370639	163	372965	6	576	142	428549	148	429125
	2	6	1472	162	401911	168	403383	17	5574	177	439303	194	444877
	3												

TABLE F 2.

shewing

Number and gross tonnage of ships commenced and of ships launched in the United Kingdom, annually

from 1888 to 1914.

See also Graph F 1.

Note: Figures show only merchant vessels of 100 tons and over.

Source of data: Compiled from Lloyd's Register Shipbuilding Returns, Quarterly.

F 2

Year	Commenced in United Kingdom						Launched in United Kingdom					
	Sail		Steam		Total		Sail		Steam		Total	
	No.	Gross Tons	No.	Gross Tons	No.	Gross Tons	No.	Gross Tons	No.	Gross Tons	No.	Gross Tons
1888	98	115361	545	959085	643	1074406	81	80959	458	757081	539	838040
89	99	119633	651	1067071	750	1186704	95	125568	595	1083793	690	1209361
1890	115	140655	570	880280	685	1020935	92	133086	651	1061619	743	1194705
91	206	304747	610	843105	816	1147852	181	252463	641	878353	822	1130816
92	127	155029	403	698626	530	853655	164	261928	497	831867	661	1093795
93	85	121343	458	782597	543	903940	95	115958	427	718205	522	834163
94	52	49166	516	926289	568	975455	62	81214	553	964966	615	1046180
95	79	53402	547	988621	626	1042023	46	44577	518	901446	564	946023
96	55	43215	636	1073435	691	1116650	65	46030	615	1105840	680	1151870
97	31	6285	657	1115361	688	1121646	45	28538	541	924201	586	952739
98	20	2422	781	1587900	801	1590322	16	3793	755	1379744	771	1383537
99	30	9463	673	1331661	703	1341134	15	2451	719	1446977	734	1449428
1900	35	14442	599	1406544	634	1420986	22	9342	658	1423753	680	1433095
01	58	34591	620	1544423	678	1579014	42	22276	592	1501073	634	1523349
02	47	31893	536	1035619	583	1067512	44	43478	606	1391206	650	1434684
03	70	29942	592	1026203	662	1056145	71	25402	627	1174011	698	1199413
04	61	15789	645	1359672	706	1375461	79	31233	614	1189527	693	1220760
05	49	10030	833	1844226	882	1854256	57	17939	731	1589556	788	1607495
06	62	25473	773	1591517	835	1616990	66	18248	809	1787119	875	1805367
07	109	14379	783	1418245	892	1432624	107	26780	839	1555963	946	1582743
08	73	9062	480	787362	563	796424	87	14716	515	902933	602	917649
09	78	16720	508	1165241	586	1181961	92	18148	498	947586	590	965734
1910	67	11270	572	1349052	639	1360322	54	5910	522	1133776	576	1139686
11	79	19572	789	1903759	868	1923331	79	19005	746	1766761	825	1785766
12	76	16053	758	2099098	834	2115151	67	14136	714	1708667	781	1722803
13	58	11066	653	1855264	711	1866330	66	12625	666	1903573	732	1916198
14	21	3798	310	772550	331	776348	23	6150	319	867852	342	874002

TABLE F 3

Shewing

Gross tonnage on hand in the United Kingdom, quarterly

from 1887 to 1914.

See also Graph F 1.

Note: Figures show only merchant vessels of 100 tons and over.

Source of data: Compiled from Lloyd's Register Shipbuilding Returns, Quarterly.

Year	Qr.	Work on Hand (Gross tons) U.K.	Foreign & For sale	Total
1887	1			440579
	2			418645
	3			394340
	4			439335
1888	1			594426
	2			608118
	3	483022	215973	698995
	4	585833	225635	811468
1889	1	684508	236481	920989
	2	655300	274311	929611
	3	588689	294060	882749
	4	611331	261626	872957
1890	1	585418	278260	863678
	2	469224	270690	739914
	3	427086	225162	652248
	4	524472	209538	734010
1891	1	629400	175446	804846
	2	584398	184902	769300
	3	535474	166640	702114
	4	601558	192355	793913
1892	1	666841	176237	843078
	2	613279	165183	778462
	3	544306	134474	678780
	4	444187	126554	570741
1893	1	479010	142658	621668
	2	464582	144538	609120
	3	477579	138981	616560
	4	518195	123786	641981
1894	1	574167	151041	725208
	2	584746	133458	718204
	3	510282	143049	653331
	4	530669	127617	658286
1895	1	483768	172550	656318
	2	510344	196735	707079
	3	557061	159514	716575
	4	503803	207759	711562
1896	1	515554	253710	769264
	2	495216	278796	774012
	3	425720	233921	659641
	4	543928	240783	784711
1897	1	614330	214151	828481
	2	639113	232548	871661
	3	665921	218415	884336
	4	778178	235141	1013319
1898	1	920976	264145	1185121
	2	1074591	247477	1322068
	3	1115900	248350	1364250
	4	1134262	266825	1401087
1899	1	1140361	245354	1385715
	2	1163397	222970	1386367
	3	1095944	251605	1347549
	4	1033720	273031	1306751
1900	1	967077	293345	1260422
	2	949871	315442	1265313
	3	909585	294423	1204008
	4	956597	313322	1269919

Year	Qr	Work on Hand (Gross tons) U.K.	Foreign & For sale	Total
1901	1	1014442	288674	1303116
	2	1051342	248837	1300179
	3	1131784	282336	1414120
	4	1088350	270855	1359205
1902	1	1000774	239570	1240344
	2	944137	185445	1129582
	3	819168	181546	1000714
	4	796174	227893	1024067
1903	1	768726	205960	974686
	2	857342	170757	1028099
	3	743650	162958	906608
	4	698630	199848	898478
1904	1	755439	233225	988664
	2	782528	210560	993088
	3	832811	213497	1046308
	4	821138	228722	1049860
1905	1	1020541	230802	1251343
	2	1049576	251881	1301457
	3	1106011	219317	1325328
	4	1129525	226231	1355756
1906	1	1122142	279740	1401882
	2	1168771	240685	1409456
	3	985394	279373	1264767
	4	775128	391861	1166989
1907	1	850147	455940	1306087
	2	803991	446327	1250318
	3	700580	379507	1080087
	4	583967	364863	948830
1908	1	509231	338270	847501
	2	513451	285727	799178
	3	454508	278870	733378
	4	531688	232832	764520
1909	1	701884	210388	912272
	2	549165	196540	745705
	3	618151	159885	778036
	4	751283	162091	913374
1910	1	842561	215075	1057636
	2	901274	217313	1118587
	3	900880	253317	1154197
	4	854330	277173	1131503
1911	1	1076642	298322	1374964
	2	1202378	274016	1476394
	3	1189109	257208	1446317
	4	1236439	282613	1519052
1912	1	1334839	352059	1686898
	2	1291347	482693	1774040
	3	1355548	491281	1846829
	4	1383529	586536	1970065
1913	1	1565633	498061	2063694
	2	1533970	469271	2003241
	3	1551972	435282	1987254
	4	1483209	473397	1956606
1914	1	1413802	477054	1890856
	2	1243936	478188	1722124
	3			

Table No. F4

shewing

Tonnage (gross and displacement respectively) of merchant vessels and warships under construction on Clyde and in United Kingdom, at quarterly intervals.

from 1884 to 1914.

See also Graph F 2.

Note: 1. Figures include Warships built at Royal Dockyards.
2. Figures are for end of quarters ending 31st. March; 30th June; 30th September; and 31st. December respectively in each year.
3 Gross tonnage has been added to displacement tonnage and designated "tons."

Source of data: Monthly issues of Board of Trade Labour Gazette, and Lloyd's (quarterly) Register Shipbuilding Returns.

F4

Year	Qr.	Clyde Merchant (gr. tns.)	Clyde War (disp. tns.)	Clyde Total (tns.)	United Kingdom Merchant (gr. tns.)	United Kingdom War (disp. tns.)	United Kingdom Total (tns.)
1887	1	135772			440579		
	2	131925			418645		
	3	105673			394340		
	4	131329			439335		
1888	1	198169			594426		
	2	179244			608118		
	3	205997			698995		
	4	247526			811468		
1889	1	297659			920989		
	2	283133			929611		
	3	229959			882749		
	4	274232			872957		
1890	1	273932			863678		
	2	217345			739914		
	3	165286			652248		
	4	189447			734010		
1891	1	201459			804846		
	2	193338			769300		
	3	200781			702114		
	4	229632			793913		
1892	1	221204			843078		
	2	196732			778462		
	3	168106			678780		
	4	156929			570741		
1893	1	201349			621668		
	2	213502			609120		
	3	182567			616560	75109	691669
	4	203227			641981	95475	737456
1894	1	252448			725208	95475	820683
	2	239196			718204	205278	923482
	3	204909			653331	246465	899796
	4	209992			658286	260985	919271
1895	1	205444			656318	263625	919943
	2	247397	52900	300297	707079	286350	993429
	3	230030	52620	282650	716575	261585	978160
	4	217178	75800	292978	711562	306580	1018142
1896	1	244391	76260	320651	769264	312375	1081639
	2	255287	56610	311897	774012	309435	1083447
	3	213224	51690	264914	659641	268030	927671
	4	257460	68160	325620	784911	330005	1114716
1897	1	246529	54445	300974	828481	335455	1163936
	2	268735	65005	333740	871661	347195	1218856
	3	259339	81600	340939	884336	318612	1202948
	4	315660	70530	386190	1013319	312920	1326239
1898	1	394642	69370	467042	1185121	355934	1541055
	2	462431	57380	519811	1322068	338285	1660353
	3	483256	93400	576656	1364250	376435	1740685
	4	520900	83000	603900	1401087	410985	1812072
1899	1	505530	83325	588855	1385715	434065	1819780
	2	495424	71420	566844	1386364	452075	1838442
	3	466656	95310	561966	1345549	412980	1760529
	4	433988	93180	527164	1306451	423755	1730506
1900	1	425642	97485	523457	1260422	454110	1714532
	2	409884	95925	505609	1265313	432075	1697388
	3	383543	87900	471473	1204088	424885	1631973
	4	394353	84440	481793	1269919	390145	1660064

Year	Qr.	Clyde Merchant (gr. tns.)	Clyde War (disp. tns.)	Clyde Total (tns.)	United Kingdom Merchant (gr. tns.)	United Kingdom War (disp. tns.)	United Kingdom Total (tns.)
1901	1	429944	99400	507344	1303116	423702	1726818
	2	406920	89550	496470	1300179	403225	1703404
	3	448540	89525	538065	1414120	375045	1789165
	4	451830	63425	515255	1359205	333325	1692530
1902	1	442769	63475	506244	1240344	329245	1569589
	2	387634	88035	475669	1129582	327140	1456722
	3	356462	88935	445397	1000714	303202	1303916
	4	354831	104900	459731	1024064	300690	1324757
1903	1	307857	104900	412757	974686	326950	1301636
	2	312167	94100	406267	1028099	319700	1347799
	3	287497	84300	371797	906608	327540	1234178
	4	259250	81000	340250	898478	309510	1207988
1904	1	294104	81700	375804	988664	377115	1365779
	2	304208	95250	399458	993088	361335	1354423
	3	362281	79180	441461	1046308	342930	1389238
	4	365935	62830	428765	1049860	282810	1332670
1905	1	414131	38190	455321	1251343	262670	1514013
	2	468817	43840	512657	1301457	278220	1579677
	3	486970	30050	517020	1325328	264310	1589638
	4	503335	30050	533385	1355756	262025	1617781
1906	1	528836	64050	592886	1401882	297895	1699777
	2	529930	50500	578430	1409456	269615	1679071
	3	515241	50500	565741	1264767	203345	1468112
	4	410240	51000	461240	1166989	205858	1372847
1907	1	455278	51000	506278	1306084	248520	1554607
	2	451443	51523	502966	1250318	255192	1505510
	3	366356	52523	418879	1080084	264554	1344624
	4	311154	37935	349092	948830	268717	1217547
1908	1	295824	37699	333524	847501	282023	1129524
	2	270665	6011	276676	799148	250552	1049730
	3	228046	6966	235012	733348	251138	984516
	4	245753	5751	251504	764520	219271	983791
1909	1	306431	23111	329842	912272	247765	1160037
	2	263141	48479	311620	745705	223950	969655
	3	284627	48608	333235	748036	239125	1017161
	4	306454	46951	353405	913344	273210	1186584
1910	1	341366	85773	427139	1057636	303685	1361321
	2	384831	111379	499210	1113587	378523	1497110
	3	417377	106526	523903	1154197	312515	1466712
	4	374960	102591	477551	1131503	289481	1420984
1911	1	506040	120156	626196	1374964	419556	1794520
	2	574662	118980	693642	1476394	415549	1891943
	3	568213	115849	684062	1446314	418550	1864864
	4	589884	112836	702723	1519052	403755	1922807
1912	1	649572	109145	758717	1686898	429440	2116338
	2	673545	139739	813284	1744040	503003	2247043
	3	708424	146396	855120	1846829	494538	2341367
	4	767406	118952	886358	1970065	496875	2466940
1913	1	808420	163277	971997	2063694	556311	2620005
	2	761050	166639	927689	2003241	534639	2537880
	3	783705	144816	928521	1987254	462458	2449712
	4	762685	169881	932566	1956606	604801	2561407
1914	1	716738	167206	883944	1890856	573313	2464169
	2	663285	163373	826658	1722124	592545	2314669
	3						

TABLES G1, G2

Source of information :

Paper by Prof. Bowley and George H. Wood from Royal Statistical Society Journal, March 1905, on Rates of Wages in United Kingdom during the nineteenth century.

Showing time rates of wages in shipbuilding and engineering on Clyde.

Year	Clyde			Glasgow		
	Ship-wrights	Ship-wrights	Ship-joiners	Mechanics Fitters Turners	Pattern-makers	Smiths
1793	–	–	–	12·0	–	–
1810	–	–	–	19·0	–	14·0
1811–14	–	–	–	19·0	–	15·0
1815–16	–	–	–	19·0	–	16·0
1817–19	–	–	–	19·0	–	17·0
1820	–	–	–	19·0	–	17·0
1821–23	–	–	–	–	–	–
1824	–	–	–	24·0–25·0	–	–
1825–27	–	–	–	–	–	–
1828–29	21·0	–	–	–	–	–
1830	21·0	–	–	–23·6	21·6	18·0
1831	21·0	–	–	19·0–23·6	21·6	18·0
1832–35	21·0	–	–	–23·6	21·6	18·0
1836	21·0	–	–	22·0–	–	–
1837	21·0	–	–	–	–	–
1838	21·0	–	–	20·0–30·0	21·6	18·0
1841	21·0	–	–	–	–	–
1844	–	–	–	22·0–28·0	–	–
1847	21·0	–	–	–	–	–
1850	–	–	24·0	–	–	–
1851	25·6	21·0	24·0	20·7	–	–
1852	–	21·0	24·0	21·1	–	–
1853	34·6	30·0	24·0	23·0	–	–
1854	–	30·0	24·0	23·6	–	–
1855–56	–	30·0	27·0	24·0	–	–
1857	–	23·4	27·0	23·11	–	–
1858	–	24·0	26·0	23·6	–	–
1859	–	24·0	26·0	–	–	–
1860–61	–	24·0	–	–	–	–
1862	–	27·0	26·0	–	–	–
1863	–	30·0	26·0	–	–	–
1864	–	36·0	27·0	–	–	–
1865	36·0	30·0	28·0	–	–	–
1866	–	30·0	28·0	–	–	–
1867	25·8	25·8	26·1½	–	–	–
1868–69	–	25·8	26·1½	–	–	–
1870	–	25·8	27·0	–	–	27·0
1871	27·1	28·6	27·6	–	–	27·0
1872	28·6	30·4	30·0	–	–	27·0
1873	30·4	31·10	30·0	–	–	28·0
1874	34·0	34·0	32·0	27·0	–	29·0

Year	Clyde			Glasgow		
	Ship-wrights	Ship-wrights	Ship-joiners	Mechanics Fitters Turners	Pattern-makers	Smiths
1875	31·10	31·10	30·0	27·0	–	29·0
1876	29·9	29·9	29·0	27·0	–	29·0
1877	–	29·9	29·0	27·0	–	28·0
1878	28·7½		29·0	27·0	–	27·0
1879	29·3		27·0	27·10	–	27·0
1880	–		29·3	27·10	–	30·0
1881	31·6		31·6	28·1½	–	29·0
1882	33·9		31·6	28·1½	–	30·0
1883	36·0		32·7½	28·1½	–	30·0
1884	33·9		29·3	28·1½	–	30·0
1885	30·4½		28·1½	28·1½	30·0	30·0
1886	30·4½		28·1½	29·3	29·0	29·0
1887	30·4½		28·1½	29·3	30·0	29·0
1888	31·6		29·3	29·3	31·6	30·0
1889	36·0		32·7½	30·4½	36·0	31·0
1890	36·0		33·9	30·4½	36·0	31·0
1891	36·0		33·9	30·4½	35·0	32·0
1892	34·10½		32·7½	30·4½	34·6	33·0
1893	33·9		33·9	30·4½	34·0	34·6
1894	33·9		33·9	30·4½	34·0	33·6
1895	33·9		33·9	30·4½	34·0	35·6
1896	36·0		36·0	33·9	36·0	35·6
1897	37·1½		37·1½	34·10½	37·1½	36·6
1898	38·3		38·3	36·0	38·3	37·6
1899	38·3		38·3	36·0	38·3	37·6
1900	38·3		38·3	36·0	38·3	37·6
1901	38·3		38·3	36·0	38·3	37·6
1902	38·3		38·3	36·0	38·3	37·6
1903	37·1½		37·1½	35·0	37·1½	36·6
1904	37·1½		37·1½	35·0	37·1½	36·6
1905		37·1½	37·1½	35·0	37·1½	36·6
1906		37·1½	37·1½	36·0	38·1½	36·6
1907		37·1½	37·1½	36·0	38·8½	36·6
1908		36·0	36·0	34·10½	38·0	36·0
1909		36·0	36·0	34·10½	37·11	36·0
1910		36·0	36·0	34·10½	38·1	37·1½
1911		37·0	37·0	36·7½	39·0	38·7½
1912		38·7½	38·9	38·3	39·0	39·1½
1913		38·7½	38·9	38·3	39·8½	39·1½
1914						

Note: The second column of figures (shipwrights) is a complete set given by Mr. John Scott, Greenock, in his evidence to the Royal Commission on The Trade Depression, April 1886.

In a few cases maxima and minima are shown.

Showing wages for an ordinary week's work in shipbuilding and engineering on Clyde.

Year	Engineering					Shipbuilding						
	Fitters	Turners	Pattern-makers	Smiths	Labourers	Platers	Riveters	Caulkers	Ship-wrights	Ship-smiths	Ship-joiners	Labourers
1856	25·0	27·0	–	26·0	15·0	22·0–27·0	21·0–22·0	21·0–22·0	30·0	22·6–26·0	24·0–25·0	–
1857	24·0	26·0	–	26·0	14·0	22·0–27·0	20·0–22·0	20·0–22·0	30·0	24·0–27·0	24·0–27·0	–
1858	24·0	25·0	–	25·0	14·0	23·0–24·0	18·0	18·0	24·0	21·6–24·0	23·0–24·0	–
1859	21·6	23·0	23·0	21·6	13·0	23·0	17·0	17·0	24·0	22·0	22·6	–
1860	22·0	24·6	23·0	24·0	13·0	23·0	17·0	17·0	24·0	24·6	23·0	–
1861	21·0–23·0	23·0–24·0	23·0	24·0	13·6–14·0	26·0–27·0	21·0–23·0	22·0–23·0	24·0–27·0	23·0–28·0	23·0	–
1863	22·0–22·6	23·0–24·0	23·0	24·0–25·0	13·0–14·0	27·0	23·0–26·0	23·0–26·0	30·0	25·0	25·0	–
	25·0	25·0	25·0	25·0	15·0							
1866	23·0	23·0	23·0	24·0	15·0	28·0–30·0	26·0	–	30·0	20·0–32·0	24·0–29·0	12·0–16·0
1870–71	24·3	25·0	26·6	27·0	14·3	24·0–29·0	21·0–22·0	22·0	27·0	25·0	27·0	–
1872	26·2¼	28·11¾	26·9	27·10½	–	–	26·6	26·6	28·8	25·8	26·6	–
1873	28·2¼	28·8¾	26·6¾	28·8¾	–	–	–	–	31·10½	29·9	30·9¾	–
1874	28·8¾	29·9	29·9	30·9¾	–	–	27·6	27·6	33·0	27·6	33·0	17·0
1875	29·9	29·9	29·9	29·9	–	–	–	–	31·10½	28·2	30·9¾	–
1876	27·7½	28·8¾	28·8¾	28·8¾	–	–	–	–	29·9	27·7½	29·9	–
1877	27·1¼	28·2¼	26·6¾	28·8¾	–	–	24·5¼	24·5¼	29·9	26·6¾	26·6¾	–
1878	27·1¼	27·7½	27·7½	28·8¾	–	–	–	–	29·9	27·1	29·2½	–
1879	26·10½	26·10½	25·9	28·0	–	–	–	–	29·3	27·0	29·3	–
1880	27·0	28·1½	27·0	29·3	–	27·0	23·6	23·4	30·0	28·0	28·3	16·6
1881	30·4½	30·4½	31·6	30·4½	–	–	–	–	31·6	29·3	30·4½	–
1882	30·4½	31·6	31·6	30·4½	–	–	–	–	33·9	31·6	30·4½	–
1883	32·7½	32·7½	33·2¼	33·9	–	–	–	–	36·0	31·6	33·9	–
1884	31·6	32·7½	32·7½	32·7½	–	–	–	–	33·9	29·3	29·9¾	–
1885	29·3	30·4½	31·6	31·6	–	–	–	–	30·4½	27·0	28·8¼	–
1886	28·1½	29·3	27·0	30·4½	–	–	24·9	24·9	30·5	27·0	30·11	15·9–16·11
	30·5	–	31·6	30·11	–							
1888	28·0	29·0	34·10	30·0	–							
1890	34·11	–	38·3	36·0	–	–	33·2	33·2	36·0	32·1	34·4	18·1–19·2
1893	30·4½	32·7½	34·10½	–	–	29·3	29·3	29·3	33·9	27·0–34·10½	33·9	19·0–29·3
1896	30·4½	31·6	34·10½	36·0	–	31·6	31·6	31·6	36·0	29·3–37·1½	36·0	–
	33·9	33·9	37·1½	37·1½	–							
1897	34·10½	34·10½	38·3	38·3	–	31·6	31·6	31·6	37·1½	30·4½–38·3	37·1½	–
1898	36·0	36·0	39·4½	39·4½	–	33·9	33·9	33·9	38·3	31·6–39·4½	38·3	–
1899–1902	36·0	36·0	39·4½	39·4½	–	33·9	33·9	33·9	38·3	31·6–39·4½	38·3	–
1903–04	34·10½	34·10½	38·3	38·3	–	33·9	33·9	33·9	37·1½	30·4½–38·3	37·1½	–

Note: In a few cases maxima and minima are shown.

TABLES G3, G4, G5, G6.

Sources of information :

G3 : Paper by Prof. Bowley and George H. Wood in Royal Statistical Society Journal, March 1906.

G4 : 1782-1860 Paper by W. Stanley Jevons M.A. in Royal Statistical Society Journal for 1865.
1860-1914 Papers by Augustus Sauerbeck in Royal Statistical Society Journal, v.d. from 1886.

G5 : W. T. Layton : Introduction to the Study of Prices (1920).

G6 : British and Foreign Trade and Industry
2nd series Cd. 2337
17th Abstract of Labour Statistics

Note: The index number in table G4 is derived as follows:
Sauerbeck's number (to base 1867-77) is taken as 100 for the year 1900. This gives 132 as the number for 1860, for which year Jevons' number is 79. This is taken as equivalent to 132 and the series calculated back to 1782.

G3

Showing index numbers of average rates in various districts, in engineering and ship building industries.

Year	Clyde	Dundee	Tyne	Mersey	Belfast	Average Maritime	Average Inland	Average All Districts	Aver. all Districts 1900=100
1850	–	82	89	–	–	87	95	91	66
51	89	86	92	–	–	90	–	93	67
52	91	86	95	–	–	92	–	94	68
53	101	92	95	–	–	96	–	97	70
54	102	98	104	103	–	102	–	102	74
55	105	104	104	103	96	103	99	102	74
56	106	106	104	103	98	103	100	102	74
57	104	105	104	104	100	103	100	102	74
58	100	103	100	99	–	100	100	100	72
59	98	100	100	99	–	100	100	100	72
1860	100	100	100	100	100	100	100	100	72
61	103	102	102	100	100	101	101	101	73
62	106	–	103	99	–	102	102	102	74
63	110	106	104	100	–	104	102	102	74
64	116	–	106	101	–	106	102	104	75
65	116	–	108	102	–	108	103	106	77
66	115	115	110	106	106	109	106	107	78
67	108	110	103	107	–	105	106	105	76
68	108	110	101	104	–	103	106	105	76
69	108	–	101	102	–	103	106	105	76
1870	111	–	104	–	–	106	106	106	77
71	118	117	111	106	111	112	107	109	79
72	126	–	119	111	119	119	111	115	83
73	130	–	122	116	125	123	114	118	86
74	131	135	128	116	123	125	115	120	87
75	128	–	127	116	123	124	117	120	87
76	126	–	125	116	123	124	117	120	87
77	126	137	125	116	123	124	117	121	88
78	124	–	123	116	122	123	117	120	87
79	121	–	120	109	117	115	113	115	83
1880	125	134	122	–	–	118	113	116	84
81	131	–	125	–	–	124	114	118	86
82	135	–	129	–	136	128	115	121	88
83	141	149	130	–	136	131	116	122	88
84	135	–	125	113	129	125	117	120	87
85	130	–	125	112	124	122	117	119	86
86	124	132	121	102	121	118	114	116	84
87	124	137	121	102	125	119	114	117	85
88	136	144	127	114	134	127	117	122	88
89	147	150	135	121	145	135	118	126	91
1890	151	155	138	126	145	138	120	128	93
91	150	155	138	126	145	138	121	128	93
92	145	152	135	123	141	134	122	127	92
93	144	150	128	120	137	131	122	126	91
94	144	150	128	120	137	131	122	126	91
95	144	150	128	120	137	131	122	126	91
96	154	156	135	124	146	138	125	130	94
97	156	160	140	126	150	142	125	133	96
98	164	164	145	131	156	147	127	136	98
99	164	165	145	131	158	147	131	138	100
1900	164	165	145	131	158	147	131	138	100
01	164	165	145	131	158	147	131	138	100
02	164	165	143	131	158	147	131	138	100
03	160	162	140	131	156	144	131	137	99
04	160	162	140	131	156	144	131	137	99

Note: The figures in italics thus *100* are based on incomplete data.

G4

Showing price index numbers, annual averages from 1782 to 1914.

Year	No.	Year	No.	Year	No.	Year	No.	Year	No.	Year	No.	Year	No.	Year	No.
1782	167	1799	217	1816	152	1833	125	1850	107	1867	133	1884	101	1901	93
83	167	1800	235	17	195	34	130	51	110	68	132	85	96	02	92
84	155	01	233	18	220	35	133	52	108	69	131	86	92	03	92
85	150	02	183	19	187	36	143	53	123	1870	128	87	91	04	93
86	142	03	208	1820	172	37	140	54	138	71	133	88	93	05	96
87	145	04	198	21	157	38	140	55	133	72	145	89	96	06	103
88	145	05	220	22	147	39	153	56	137	73	148	1890	96	07	107
89	142	06	217	23	148	1840	145	57	142	74	136	91	96	08	97
1790	145	07	215	24	147	41	142	58	127	75	128	92	91	09	99
91	149	08	242	25	172	42	125	59	128	76	127	93	91	1910	104
92	155	09	262	26	150	43	118	1860	132	77	125	94	84	11	107
93	165	1810	237	27	150	44	115	61	131	78	116	95	83	12	113
94	164	11	227	28	135	45	123	62	135	79	110	96	81	13	113
95	196	12	202	29	132	46	123	63	137	1880	117	97	83	14	113
96	209	13	192	1830	135	47	130	64	140	81	113	98	85		
97	184	14	190	31	137	48	113	65	135	82	112	99	91		
98	197	15	182	32	130	49	107	66	136	83	109	1900	100		

Showing fluctuations in nominal — G5 — wages, prices, and real wages.

Period	Nominal Wages	Prices	Real Wages
1790 – 1810	Rising fast	Rising very fast	Falling slowly
1810 – 1830	Falling	Falling fast	Rising slowly
1830 – 1852	Nearly stationary	Falling slowly	Rising slowly
1852 – 1870	Rising fast	Rising	Rising considerably
1870 – 1873	Rising very fast	Rising fast	Rising fast
1873 – 1879	Falling fast	Falling fast	Nearly stationary
1879 – 1887	Nearly stationary	Falling	Rising
1887 – 1892	Rising	Rising & Falling	Rising
1892 – 1897	Nearly stationary	Falling	Rising
1897 – 1900	Rising fast	Rising	Rising
1900 – 1904	Falling slowly	Falling & Rising	Stationary
1904 – 1907	Rising fast	Rising slowly	Rising fast
1907 – 1910	Falling slowly	Rising slowly	Falling fast
1910 – 1913	Rising fast	Rising fast	Falling slowly

Showing percentage unemployed — G6 — in United Kingdom.

Year	General Percentage	Eng., Ship., & Metal	Year	General Percentage	Eng., Ship., & Metal	Year	General Percentage	Eng., Ship., & Metal	Year	General Percentage	Eng., Ship., & Metal	Year	General Percentage	Eng., Ship., & Metal	Year	General Percentage	Eng., Ship., & Metal
1850	4·0		1861	5·2	5·5	1872	0·9	0·9	1883	2·6	2·7	1894	6·9	11·2	1905	5·0	6·6
51	3·9	3·9	62	8·4	9·0	73	1·2	1·4	84	8·1	10·8	95	5·8	8·2	06	3·6	4·1
52	6·0	6·0	63	6·0	6·7	74	1·7	2·3	85	9·3	12·9	96	3·3	4·2	07	3·7	4·9
53	1·7	1·7	64	2·7	3·0	75	2·4	3·5	86	10·2	13·5	97	3·3	4·8	08	7·8	12·5
54	2·9	2·9	65	2·1	2·4	76	3·7	5·2	87	7·6	10·4	98	2·8	4·0	09	7·7	13·0
55	5·4	5·4	66	3·3	3·9	77	4·7	6·3	88	4·9	6·0	99	2·0	2·4	1910	4·7	6·8
56	4·7	4·9	67	7·4	9·1	78	6·8	9·0	89	2·1	2·3	1900	2·5	2·6	11	3·0	3·4
57	6·0	6·1	68	7·9	10·0	79	11·4	15·3	1890	2·1	2·2	01	3·3	3·8	12	3·2	3·6
58	11·9	12·2	69	6·7	8·9	1880	5·5	6·7	91	3·5	4·1	02	4·0	5·5	13	2·1	2·2
59	3·8	3·9	1870	3·9	4·4	81	3·5	3·8	92	6·3	7·7	03	4·7	6·6	14	3·3	3·3
1860	1·9	1·9	71	1·6	1·3	82	2·3	2·3	93	7·5	11·4	04	6·0	8·4			

Note: Persons on strike or locked-out are excluded.

Tables Nos. G7, G8.

shewing

G7 : Membership of the Scottish United Operative Blacksmiths' Protective and Friendly Society (branches in West of Scotland only.)

G8 : Net annual income and balance of the above society at five-yearly intervals.

from 1858 to 1914

Source of data: Compiled from the annual reports of the above society.

Membership of West of Scotland branches of the United Operative Blacksmiths' Protective and Friendly Society.

Year	Membership	Year	Membership	Year	Membership	Year	Membership	Year	Membership
1857-58	367	1869-70	1160	1881-82	1606	1893-94	1497	1905-06	1813
58-59	458	70-71	1153	82-83	1682	94-95	1546	06-07	1836
59-60	741	71-72	1273	83-84	1572	95-96	1727	07-08	1490
60-61	869	72-73	1449	84-85	1406	96-97	1816	08-09	1781
61-62	857	73-74	1485	85-86	1249	97-98	1820	09-10	1892
62-63	914	74-75	1521	86-87	1058	98-99	1860	10-11	2088
63-64	1184	75-76	1532	87-88	1027	99-1900	1804	11-12	2835
64-65	1304	76-77	1554	88-89	1337	1900-01	1830	12-13	3804
65-66	1602	77-78	1531	89-90	1453	01-02	1830	13-14	3917
66-67	1445	78-79	1451	90-91	1513	02-03	1774		
67-68	1084	79-80	1380	91-92	1453	03-04	1732		
68-69	1108	80-81	1430	92-93	1433	04-05	1762		

Note: The increases in 1911 and 1912 are due to amalgamation of other societies with this one.

Annual Income and Balance at end of year of the General Funds of the Society.

Year	Net Income £	Balance £
1858	522	371
1863	1533	2266
1868	2262	1400
1873	2879	5083
1878	3361	5444
1883	4707	7422
1888	3882	3171
1893	5409	7614
1898	7492	12227
1903	7509	22683
1908	8323	22824
1913	17135	23098

Table No. G9

Shewing

Quarterly Returns of Unemployment in shipbuilding, engineering, etc, for Clyde, East coast of Scotland, and United Kingdom,

from 1902 to 1914.

see also Graph F2.

Source of Data: Board of Trade (monthly) Labour Gazette.

G9

Quarterly Returns of Unemployment. from B.o.T. Labour Gazette.

Figs. are %ages of total T.U. employed.

		Shipbuilding			Engineering			All Industries
Year	Quarter	Clyde	E. Coast of Scotland	United Kingdom	Clyde	E Coast of Scotland	United Kingdom	United Kingdom
1902	1	3·7	2·7	4·7	7·4	8·2	5·2	4·1
	2	3·9	5·4	6·4	6·8	7·8	4·6	4·0
	3	5·6	9·5	8·3	6·5	8·8	4·6	4·5
	4	8·4	6·3	13·2	6·8	9·5	5·7	5·3
1903	1	9·6	4·8	11·0	7·8	9·5	5·1	4·7
	2	8·4	11·1	9·0	5·6	6·0	4·0	4·2
	3	12·7	22·1	11·7	4·7	7·3	4·3	5·4
	4	15·0	31·3	16·3	7·9	9·4	6·3	6·2
1904	1	16·2	19·8	12·9	9·6	10·2	6·5	6·3
	2	15·7	22·0	12·9	9·2	10·9	6·5	6·1
	3	16·6	26·3	13·6	9·2	11·1	7·0	6·4
	4	15·5	23·2	16·4	9·4	11·4	8·1	7·1
1905	1	11·8	14·5	11·7	7·5	10·4	6·5	6·2
	2	10·7	12·4	12·0	8·3	8·2	5·4	5·3
	3	12·2	21·5	12·9	8·1	7·7	4·7	5·3
	4	10·9	14·0	11·3	4·6	7·1	3·8	4·9
1906	1	7·8	8·6	6·8	3·6	5·1	3·0	4·3
	2	4·5	7·3	5·5	3·1	3·2	2·5	3·6
	3	3·5	6·4	5·9	3·9	3·7	2·7	3·7
	4	15·0	11·3	12·0	5·2	4·6	3·6	4·6
1907	1	8·5	8·0	7·8	4·4	4·0	3·0	3·9
	2	5·0	6·1	6·6	3·8	4·2	3·0	3·4
	3	9·8	15·0	9·4	4·9	4·4	3·8	4·1
	4	12·8	11·0	12·9	6·7	6·7	5·2	5·3
1908	1	18·4	11·5	18·9	12·6	11·5	6·3	6·2
	2	26·6	25·4	23·3	18·5	16·3	9·5	7·9
	3	26·8	36·2	25·6	22·0	18·3	11·1	8·2
	4	27·2	40·2	25·4	24·3	22·7	13·2	9·4
1909	1	28·5	22·0	22·6	23·3	25·7	12·8	8·4
	2	24·8	36·3	23·4	20·1	25·3	12·3	8·0
	3	19·5	43·3	23·2	16·3	24·4	11·4	7·7
	4	15·6	37·1	19·3	11·7	20·6	9·8	6·7
1910	1	11·7	21·9	14·6	8·8	14·8	7·6	5·9
	2	5·7	20·6	9·4	5·2	8·5	5·3	4·1
	3	10·8	25·4	10·9	5·1	6·6	4·6	4·0
	4	30·4	35·1	18·1	5·9	8·0	5·5	4·7
1911	1	2·9	6·3	5·0	4·0	6·8	3·5	3·4
	2	1·3	5·5	3·3	3·2	8·3	3·0	2·8
	3	1·5	6·9	4·5	3·4	8·1	3·4	3·0
	4	1·4	5·4	4·2	3·1	7·8	3·0	3·8
1912	1	1·6	3·9	3·3	9·5	8·4	4·7	5·6
	2	2·4	4·4	5·3	5·2	5·2	3·1	2·9
	3	2·3	3·9	4·2	2·7	2·7	2·3	2·3
	4	2·0	5·5	3·8	2·2	2·8	1·9	2·0
1913	1	1·4	3·9	2·7	1·9	1·7	1·5	2·0
	2	0·8	4·4	2·8	1·8	1·3	1·8	1·8
	3	0·8	3·3	3·5	2·6	1·9	2·0	2·1
	4	1·2	6·7	3·3	2·6	3·7	2·3	2·3
1914	1	1·8	3·9	2·3	3·3	3·8	2·4	2·4
	2			3·6			2·7	2·3

Note: All directly affected by strikes and lock-outs are excluded.

Tables Nos. H1, H2, H3, H4

shewing

H1 : Gross tonnage launched on Clyde, in Scotland, United Kingdom, and the World from 1875 to 1929, and the percentage of the Clyde output to the others. See also Graph H1.

H2 : Names and output of firms taking first and second place in Clyde production from 1914 to 1929.

H3 : Names and output of the six leading marine engineering firms of the Clyde from 1914 to 1929.

H4 : Total I. H. P. of the above six firms, and its percentage to the Clyde total, from 1914 to 1929.

Note : Figures for years 1914 to 1918 (inclusive) include war vessels as far as can be ascertained. In other years all war vessels are included.

2. In H1 & H2 displacement tonnage of war vessels has been added to gross tonnage of merchant vessels and the total designated "gross tonnage."

Source of data : Compiled from the annual shipbuilding reports of the "Glasgow Herald."

H1

Gross tonnage of ships launched,

Year	Clyde	Scotland	United Kingdom	World	% Clyde/Scotland	% Clyde/U.K.	% Clyde/World
1875	221854						
76	188323						
77	169710						
78	222353		634302			34·9	
79	174750		469024			37·4	
1880	236579		660000			35·9	
81	341022		1000000 (app)			34·1	
82	391934		1200000 (app.)			32·7	
83	419664		1250000 (app)			33·6	
84	296854		750000 (app)			39·7	
85	193458	215979	540000 (app)		89·5	35·8	
86	172440	185304	473600		93·5	36·4	
87	185362	209267	578600		88·5	32·0	
88	280037	310084	903687		90·3	31·0	
89	335201	395841	1300933		84·6	25·7	
1890	362168	427770	1272263		84·6	28·4	
91	325477	394216	1268470	1489915	82·5	25·6	21·8
92	336414	396759	1280989	1452907	84·9	26·2	23·1
93	280160	302890	917076	988402	92·5	30·7	28·4
94	340885	374566	1106981	1307644	90·8	30·8	26·1
95	360152	390565	1154018	1305824	92·1	31·2	27·8
96	420841	438924	1391249	1766569	96·0	30·2	24·8
97	340037	371745	1122824	1585725	91·4	30·2	21·5
98	466832	515197	1661252	2143923	90·6	28·0	21·8
99	491074	536872	1728650	2445232	91·5	28·4	20·0
1900	486337	534759	1660709	2394433	90·9	29·2	20·3
01	511990	554406	1799088	2763285	94·0	28·9	18·8
02	516977	566553	1616235	2715670	91·3	32·0	19·1
03	446869	484853	1407440	2677965	92·2	31·8	16·7
04	417870	448235	1376130	2452649	93·2	30·2	17·0
05	539850	587932	1805968	2943930	93·5	29·9	18·3
06	598841	658830	2002571	3375558	91·0	29·8	17·7
07	619919	675173	1828295	3301597	91·9	34·0	18·8
08	355586	400194	1076572	2275354	89·0	33·1	15·6
09	403187	427325	1181528	2293522	94·5	34·0	17·6
1910	392392	420250	1339488	2365255	93·3	29·3	16·6
11	630583	671624	2081547	3591069	94·0	30·2	17·6
12	640529	688188	2080171	3765059	93·3	30·8	17·0
13	756976	809711	2263933	4267116	93·5	33·4	17·7
14	583246	641746	1922181		90·9	30·3	
15	325197	352701	859671		92·0	37·9	
16	506922	541527	1143302		93·6	35·9	
17	461589	502875	1301329		91·8	35·5	
18	573294	654909	1881229		87·5	30·4	
19	605757	688290	1886081	8588215	88·2	32·2	7·2
1920	672438	778914	2140928	6947184	86·4	31·4	9·7
21	511185	580216	1596272	5190453	88·2	32·0	9·9
22	388481	446997	1043590	2983635	86·8	37·2	13·0
23	175586	216618	685147	2135950	81·5	25·7	8·3
24	538021	599123	1487848	2620275	90·0	36·2	20·5
25	523322	559338	1195487	2898289	93·7	43·8	18·1
26	286350	310280	724693	2151996	92·4	39·4	13·3
27	463528	519984	1370712	2897114	89·2	33·8	16·0
28	604611	669042	1573582	3270829	90·4	38·4	18·5
29	565798	627458	1623430	3531724	90·3	34·8	16·0

H2

Year	Order	Firm	No.	Steam (gr. tons)	Year	Order	Firm	No.	Steam (gr. tons)
1914	1	Russell & Co.	15	77979	1922	1	Harland & Wolff	9	77379
	2	Scotts' S&E. Co.	8	40116		2	Scotts' S.&E. Co.	6	38742
1915	1	Russell & Co.	9	47894	1923	1	Stephen & Sons	3	24316
	2	Barclay, Curle & Co.	15	29739		2	D. & W. Henderson	3	19287
1916	1	Russell & Co.	11	54481	1924	1	Barclay, Curle & Co.	11	70554
	2	Brown, John & Co.	13	46120		2	Lithgow's Ltd.	16	52046
1917	1	Russell & Co.	10	63251	1925	1	Harland & Wolff	26	81312
	2	Barclay, Curle & Co.	17	54126		2	Stephen & Sons	6	52823
1918	1	Harland & Wolff	18	100122	1926	1	Lithgow's Ltd.	10	63325
	2	Russell & Co.	10	59685		2	Brown, John & Co.	3	33034
1919	1	Harland & Wolff	14	75871	1927	1	Lithgow's Ltd.	13	68016
	2	Lithgow's Ltd.	12	66829		2	Beardmore, Wm. & Co.	4	36434
1920	1	Harland & Wolff	16	69905	1928	1	Lithgow's Ltd.	15	80027
	2	Barclay, Curle & Co.	8	60132		2	Brown, John & Co.	4	78117
1921	1	Beardmore, Wm. & Co.	7	60179	1929	1	Lithgows Ltd.	18	91327
	2	Barclay, Curle & Co.	6	52648		2	Harland & Wolff	7	49274

H3

Year	Order	Firm	I.H.P.	Year	Order	Firm	I.H.P.	Year	Order	Firm	I.H.P.	Year	Order	Firm	I.H.P.
1914	1	Fairfield	220280	1918	1	Brown	313600	1922	1	Kincaid	33550	1926	1	Fairfield	92000
	2	Brown	197500		2	Fairfield	291690		2	Scott	33500		2	Beardmore	82920
	3	Denny	122000		3	Beardmore	187010		3	Denny	33000		3	Yarrow	50000
	4	Yarrow	120250		4	Denny	184000		4	Beardmore	30740		4	Rowan	43200
	5	Beardmore	117435		5	Yarrow	147000		5	Harland & Wolff	26200		5	Kincaid	22100
	6	Rowan	76000		6	Scott	141200		6	Fairfield	20700		6	Brown	21155
1915	1	Brown	319000	1919	1	Brown	295300	1923	1	Rowan	18650	1927	1	Brown	165350
	2	Fairfield	202610		2	Fairfield	198000		2	Stephen	18360		2	Fairfield	132300
	3	Yarrow	123000		3	Beardmore	127670		3	Harland & Wolff	14050		3	Kincaid	63320
	4	Denny	117000		4	Scott	101000		4	Kincaid	13800		4	Rowan	49000
	5	Beardmore	101080		5	Denny	94800		5	Brown	12200		5	Harland & Wolff	37450
	6	Scott	77000		6	Yarrow	92650		6	D. & W. Henderson	10500		6	Beardmore	35310
1916	1	Fairfield	468410	1920	1	Kincaid	98500	1924	1	Brown	56850	1928	1	Fairfield	104850
	2	Brown	349400		2	Rowan	59250		2	Barclay, Curle	48200		2	Beardmore	90800
	3	Scott	186600		3	Denny	43100		3	Kincaid	44700		3	Kincaid	90783
	4	Denny	170000		4	Dunsmuir & Jackson	40500		4	Rowan	40600		4	Rowan	76110
	5	Yarrow	145250		5	Fairfield	38350		5	Harland & Wolff	35900		5	Brown	67850
	6	Stephen	139000		6	Harland & Wolff	33600		6	Beardmore	29880		6	Denny	61500
1917	1	Brown	282400	1921	1	Beardmore	52135	1925	1	Rowan	68280	1929	1	Kincaid	137550
	2	Fairfield	195880		2	Kincaid	46600		2	Stephen	40500		2	Brown	113600
	3	Denny	188000		3	Denny	45200		3	Harland & Wolff	38540		3	Rowan	78200
	4	Stephen	166630		4	Rowan	37200		4	Beardmore	35730		4	Scott	76150
	5	Yarrow	151000		5	Barclay, Curle	33500		5	Kincaid	34100		5	Harland & Wolff	69330
	6	Beardmore	149305		6	Dunsmuir & Jackson	29500		6	Brown	28200		6	Fairfield	63580

H4

Year	Total 1st. Six Firms	Total Clyde	%	Year	Total 1st. Six Firms	Total Clyde	%	Year	Total 1st. Six Firms	Total Clyde	%	Year	Total 1st. Six Firms	Total Clyde	%
1914	853465	1149407	74·4	1918	1264500	2033869	62·3	1922	147690	345729	51·5	1926	311770	433465	72·
15	939690	1204130	78·1	19	909420	1364771	66·5	23	87560	166936	52·5	27	482730	647874	74
16	1458660	1862410	78·2	20	293300	620615	47·2	24	256130	450258	56·9	28	491893	673907	
17	1133215	1588370	71·5	21	244135	478760	51·0	25	245350	433243	56·6	29	538410	750237	