

## Standard Ships

Extension of the standardization system in ship construction is recommended to the British Government by the Shipping and Shipbuilding Industries Committee, one of the after-war trade committees appointed by the Board of Trade.

The committee, which was appointed in the summer of 1916, consisted of Sir Alfred Booth (chairman); W. S. Abell, chief surveyor of Lloyd's Register of Shipping; James Brown, shipbuilder, Greenock; Sir George S. Clark, shipbuilder, Belfast; Sir Archibald Denny, engineer, Dumbarton; Captain Hooper, London; Summers Hunter, engineer, Wallsend-on-Tyne; James Readhead and Oswald Sanderson, northeast coast shipbuilders, and John A. Roxburgh, shipowner, Glasgow.

In its recommendation the committee says:

"We view any movement toward standardization with satisfaction, and we are of opinion that further effort should be made to secure progressive standardization in all directions. We are aware of the very valuable work which has been done by the Engineering Standards Committee for the benefit of shipbuilding, and marine engineering, in which work shipbuilders and engineers have taken a large part, and we therefore recommend that the Government suggest to shipowners, shipbuilders and marine engineers the desirability of forming a joint committee under the Engineering Standards Committee to consider these proposals.

"Shipbuilders and marine engineers who gave evidence before us considered that the question of increased standardization of production depended largely upon shipowners and their marine superintendents, and that it had not hitherto been practicable to carry it so far as it could have been had shipowners and their technical advisers been prepared to foreign insistence on their own ideas in general design and details. It is for this reason that we recommend that shipowners (or their representatives) be joined with shipbuilders and marine engineers on the above Standards Committee.

"We recognize, however, that even so far as cargo carrying vessels are concerned the extent of standardization as to dimensions and general design must necessarily be limited in ordinary peace times by difference of the draft of water at various ports, variations in the methods of loading and discharging cargo, the nature of the cargo itself, speed requirements, etc."

The committee's view on the subject of the standardization of ships and marine engines is:

"Standard vessels and standard engines have been designed and are being built by a large number of firms, and the experience gained so far indicates that under normal conditions successful results might be achieved on similar lines. It should, however, be borne in mind that after the war efforts at increased standardization will rest with individual builders and not with the Government. Standardization had been carried to considerable lengths before the war in details of outfit and even to the extent of building complete standard designed vessels.

"Generally, however, standardization had been carried out works by works, and naturally in ordinary cargo boats alone. As in the case of the hulls of cargo vessels, so with marine engines, a considerable amount of standardization has been effected within the works of individual firms building marine engines, and we learn from the evidence of one of the witnesses that an effort is being made further to standardize marine engines of the reciprocating type for cargo vessels.

"This standardization has taken the form of a guidance specification and is being drawn up under the auspices of the Northeast Coast Institution of Engineers and Shipbuilders. In any type of engine such as is adopted for the plain cargo boat, where the general design is similar, differences being chiefly of detail, the universal use of such a specification should tend to an increase and cheapening of production. In the case of turbines and oil engines, where design is still in the early stages of development, standardization is more difficult but should be attempted."

The Engineering Trades Committee, of which Sir Clarendon Hyde was chairman, also dealt with the question of standardization in its report. This committee expresses the opinion that "while over-standardization of patterns has a tendency to the stagnation of improvement, there is no doubt that a number of products in this country could and ought to

## BRITISH SHIPPING AMALGAMATIONS.

Interest grows in the shipping amalgamations effected since the war, as the list now forms very considerable proportions. A fairly full list of mergers in British shipping up to last January has recently appeared in the British press, and it represents a formidable table of transactions. The total tonnage changing hands during the war period reaches the large total of 2,500,000 tons, having a value of \$170,000,000.

The largest single tonnage merger was the taking over of the New Zealand Shipping & Federal Steamship Company by the Peninsular & Oriental.

This amalgamation increased the latter company's fleet by 324,532 tons, valued at \$14,960,000. The second largest tonnage transaction was of a similar nature, the 252,146-ton fleet of the Union Steamship Company of New Zealand being taken over by the Peninsular & Oriental at a figure of \$15,000,000.

In value the largest merger in British shipping since the war was the absorption of the Wilson Line by Sir John Ellerman's interests at a figure of \$25,000,000, the tonnage taken over being 217,524.

The following are the chief amalgamations which have taken place since the war. Other amalgamations have been carried through, but by private owners, and no public announcement has been made:

1915.	Company.	Purchaser.	Price.	Fleet, tons
Nov.—Dewgate Steamship	.....	Brys & Gylsen	£ 300,000	21,000
1916.				
May—Commonwealth & Dominion	.....	Cunard	3,820,000	189,000
June—New Zealand Shipping & Federal	.....	P. & O.	2,992,176	224,532
July—London & Northern Steamship	.....	Lymen, Watkin & Co.	2,000,000	55,000
Oct.—Thomas Wilson, Sons & Co. (Wilson Line)	.....	Sir John Ellerman	5,000,000	217,524
Oct.—Donaldson Line (Glasgow-Canada Service)	.....	Anchor Line	250,000	34,405
Oct.—Orpheus Shipping	.....	W. & C. T. Jones Steamship	300,000	22,060
Nov.—Kestell Steamship	.....	Percy Samuel & Co.	64,000	10,800
Nov.—Pyman, Watson & Co. (four steamers)	.....	Hansen Bros.	200,000	14,000
Nov.—Gulf Transport Line (Enemy Interests)	.....	J. H. Welsford & Co.	350,000	12,734
Nov.—Ariadne Steamship	.....	Percy Samuel & Co.	400,000	12,500
1917.				
Jan.—Occidental & Oriental Steam Navigation	.....	Percy Samuel & Co.	300,000	14,070
May—Great City Steamship & Bradford Steamship	.....	St. Just Steamship	297,000	56,910
May—Penarth Shipping	.....	A. Munro Sutherland	250,000	11,500
May—Cardiff Hall Line	.....	Hansen Shipping	600,000	31,900
May—Evan, Thomas, Ratcliffe & Co.	.....	Furness, Withy & Co.	555,000	23,500
May—Liverpool Steamship	.....	Moss Steamship	297,000	7,436
June—Union Steamship of New Zealand	.....	P. & O.	3,000,000	252,146
July—Knight Steamship	.....	Alfred Holt & Co.	700,000	27,746
Aug.—Red "R" Shipping	.....	Stephens, Sutton & Stephens	312,500	12,500
Sept.—James Gardiner & Co. (Glen Line)	.....	Furness, Withy & Co.	2,100,000	63,355
Oct.—International Line	.....	A. Munro Sutherland	440,000	22,185
Oct.—Bordendale Shipping	.....	Ellerman Lines	250,000	12,485
Oct.—Hain Steamship	.....	P. & O. and British India	3,996,600	108,787
Nov.—London Line	.....	J. C. Gould & Co.	1,000,000	60,000
Nov.—Pyman, Watson & Co. (London & Northern)	.....	W. R. Smith & Sons	850,000	41,300
Nov.—Fargrove Steam Navigation	.....	J. C. Gould & Co.	900,000	32,088
Dec.—International Mercantile Marine	.....	Dutch Interests	700,000	.....
(Part of Holland-American holding)				
1918.				
Jan.—Eskside Steam Shipping	.....	Not disclosed	468,000	9,000
Jan.—Scarlsbrick Steamship	.....	C. D. Clay & Co.	225,000	6,000
Jan.—Mercantile Steamship	.....	P. & O. & British India	1,408,000	36,695
A large number of transactions have taken place in which the purchase price has not been disclosed. Some of these are as follows:				
1915.	Company.	Purchaser.		Fleet, tons.
Sept.—T. B. Boyden & Co. (Indra Line)	.....	Alfred Holt & Co.	.....	38,272
1916.				
Jan.—Johnstone Line (remaining interest)	.....	Furness, Withy & Co.	.....	100,000
May—Canadian Northern Steamship	.....	Cunard Steamship	.....	16,335
Aug.—Prince Line	.....	Furness, Withy & Co.	.....	181,211
Oct.—Reid Steamship	.....	Stath Steamship	.....	10,950
Oct.—Hazelwood Shipping (Hopkins, Jones & Co.)	.....	Globe Shipping (Humphries, Cardiff)	.....	32,000
Nov.—Moss Steamship	.....	Royal Mail Steam Packet Group	.....	35,000
Nov.—Calliope Steamship & London Marine S. S.	.....	Peterson & Co.	.....	21,200
1917.				
Jan.—Volana Shipping	.....	Royal Mail Steam Packet Group	.....	3,069
Feb.—Powell, Beacon & Hough Lines (Coast Line)	.....	Royal Mail Steam Packet Group	.....	8,398
Mar.—Griffiths Lewis Steam Navigation	.....	J. C. Gold & Co.	.....	34,500
Mar.—Robert MacAndrew & Co.	.....	Royal Mail Steam Packet Group	.....	6,881
May—Petroleum Steamship	.....	Anglo-Persian Oil	.....	33,152
June—Underwood Shipping	.....	James C. Gould & Co.	.....	4,475
June—Stath Steamship & Reid Steamship	.....	T. H. Griffiths & Co. (depots)	.....	6,099
June—Goole & West Riding Steam Shipping	.....	Yorkshire Coal & Steam Shipping	.....	3,267
Oct.—Argentine Navigation	.....	Royal Mail Steam Packet Group	.....	115,000
Nov.—James Nourse (Nourse Line)	.....	British India	.....	23,496
Dec.—Stag Line	.....	Houlder, Middleton & Co.	.....	4,022
1918.				
Jan.—Rankin, Gilmour & Co.	.....	Thomas & James Harrison	.....	65,770

Two and a half million tons of shipping have thus changed hands during the war, and the prices disclosed—which do not include all that has been paid—amount in the total to over £34,000,000.

be reduced to a common standard, so that a needless variety of patterns should be as far as possible reduced. India's "inestimable boon" of the standardized locomotive is contrasted with the system in this country, where each great railway has its own locomotive works, and where "no two railways produce the same locomotive."

The committee suggests as reasonable and economical that the railway companies should themselves agree upon a limited number of types of locomotives for their own use and produce them to a limited quantity in their own workshops, giving to the manufacturers in this country a reasonable share at competitive prices of the types required, and thus obtaining a reliable check on cost of production.

## SHIPPING LOSSES.

LONDON, March 20.

The Admiralty reports the loss by mine or submarine of seventeen British merchantmen last week. Of these eleven were of 1,600 tons or over, and six under that tonnage. Two fishing vessels were lost. Eleven merchantmen were unsuccessfully attacked.

The arrivals of ships at British ports during last week were 2,098, and the sailings 2,317.

The losses of British merchantmen in the last week are slightly under the losses of the three preceding weeks, when during each of these period 18 vessels were sunk by mine or submarine.