

Board operates at least half of the U.S. Merchant Marine, the remainder is certain to be largely affected, and on routes where both are operating in common the Shipping Board's rates are certain to obtain. Whether or not the new revision will stand for any length of time is a moot question, but in U.S. shipowning circles the prevailing opinion seems to be that an approximate minimum has been reached and that the present scale of rates is not likely to go lower, although it may in some cases be increased; in the cases, however, of a number of shippers and exporters whose opinions were solicited by the New York Journal of Commerce, the majority favored a further and more general reduction. The tendency will be to restore and extend export business, and to lower the prices of commodities generally; the trades chiefly affected are cotton, steel, copper, hides, textiles, lumber, and groceries and foodstuffs; the profits of merchant ships, whether under private or government control, will of course, be curtailed. The comparison between the old and new rates per measurement ton was thus given by the New York Journal of Commerce, the new rates going into force on Feb. 1, 1919:—

America to United Kingdom.....	\$66.00 cut to \$20
America to French Atlantic ports..	66.00 cut to \$26
America to French Mediterranean ports	71.50 cut to \$34

	Per 100 lb.	
	New	Old
From U.S. Atlantic ports to—		
United Kingdom main ports.....	\$1.25	\$4.50
France main Atlantic ports.....	1.00	4.75
Main Mediterranean ports.....	2.00	5.25
Holland, Rotterdam	1.50	4.75
Belgium, Antwerp	1.50	4.75
Portugal, main ports.....	1.50	4.75
Spain, Barcelona	2.00	5.75
Italy, main ports	2.25	5.50

Merchant Marine.

In Aug., 1917, there were in the U.S., 61 shipyards, of which 37 were steel yards, with 162 ways. In Sept., 1918, there were 203 yards, with 1,020 ways; of these yards, 77 were steel, 117 wood, 2 composite, and 7 concrete. In 1916 the U.S. yards employed 50,000 men; they now employ 386,000. At the time of the entry of the U.S. into the war her merchant marine comprised 2,750,000 d.w. tons of seagoing ships over 1,500 tons burden; in Sept., 1918 (not including vessels of 1,500 tons), it consisted of:—

	No.	D.w. tons.
Requisitioned U.S. ships	449	2,900,525
Ex-German and ex-Austrian ships taken over	100	644,713
New ships owned by Shipping Board	256	1,465,963
Old lake steamships transferred..	31	117,800
U.S. ships not yet requisitioned (over 1,500 tons d.w.).....	377	980,459
Dutch steamers requisitioned.....	81	486,945
Foreign ships chartered to Shipping Board	291	1,208,411
Foreign ships chartered to U.S. citizens	600	1,707,099

Total

Of this fleet, 1,294 ships, total tonnage 6,596,405, fly the U.S. flag, 891 foreign vessels, total tonnage 2,915,510, are under charter, either to the Shipping Board or to private companies.

Australian Shipbuilding.

Following are the numbers and tonnage of ships built and registered in Australia from 1914 to 1917:

	No.	Gross tons
1914	55	3,817
1915	14	1,278
1916	7	146
1917	6	333
Total	82	5,574

Australia's output for 1918-19 was expected to be about 40,000 tons. The importance attached by Australia to the building of ships may be judged by the fact that her programme for 1918-19 is seven times her total output for the four preceding years.

Shipping in the Future.

Sea transport after the war will, in all likelihood, be chiefly controlled by Great Britain and the dominions, the United States, Japan, and possibly Germany and Austria-Hungary. In 1914 the merchant steam tonnage of these countries, according to Lloyd's Register, was in gross tons:—

Great Britain and dominions	20,523,706	
Germany	5,134,720	
Austria-Hungary	1,052,280	6,187,000
United States		*1,813,775
Japan		1,078,386

*This is sea going tonnage only. The U.S. had besides, 3,040,973 in lake tonnage.

The total steam tonnage of the world at that time was 45,403,877, Great Britain and the dominions owning 40% of it; post war conditions, however, may tend to somewhat modify this position.

The recent shipbuilding activities of the United States and Japan, coupled with their comparative immunity from submarine losses, will have a very considerable effect on the shipping situation of the future.

Britain, during the entire course of the war, despite her heavy losses, placed her merchant tonnage unreservedly at the service of the allies; in doing so she abandoned to a greater or lesser extent some of her former trade routes; this holds true in particular of the Pacific trade, of which she controlled 40% before the war, Japan's share being 30%. British tonnage on this route has now dropped by 10%, while the Japanese has doubled, but owing to the astonishing increase of U.S. shipbuilding during the war, Japan's most formidable rival there in the future will probably be the U.S.

In 1913 the value of Britain's imports was \$3,736,050,381, of her exports \$3,085,200,784; the adverse balance of trade of \$650,849,597 was offset in part by interest on foreign investments, but chiefly by the earnings of her merchant marine. Britain's merchant marine is literally her life-line, and its standing after the war in relation to that of other maritime nations will be of the utmost importance.

Mercantile shipbuilding in Britain since 1914 has been heavily handicapped; there has been a shortage of steel due to the pressing demand for guns and munitions, the drain on her man power stripped her plants, and men were put into the ranks who might better have served the allied cause in the yards. It was not until the spring of 1918, when the tonnage situation became acute, that 20,000 shipwrights were released from the army. She had to consider the imperative needs of her navy, and to maintain constantly at sea an immense fleet of first line battleships and cruisers, besides destroyers, trawlers, drifters, and all manner of anti-submarine craft.

Addressing visiting U.S. journalists in London in Oct., 1918, Admiral Sims, commanding the U.S. fleet in European waters, said that there were then about 5,000 anti-submarine craft operating day and night in the North Sea and vicinity; of this flotilla, 160, or 3% were U.S. vessels, the remainder being British; he stated that about the same proportion obtained in the Mediterranean. This is a striking tribute to the pre-eminence of Britain's navy, and of her merchant marine as well, for no small share of the

battle against German mine and submarine has been borne by the latter. During four years of war the displacement tonnage of the navy, including auxiliaries, increased from 2,500,000 to 6,500,000, and the personnel from 146,000 to 406,000. British yards of late have carried on an extensive work in the repairing and refitting of merchant ships damaged by mine or torpedo, hampering greatly the output of new shipping. Between June, 1917, and Oct., 1918, 10,000 British ships, besides a number of allied and neutral vessels, were repaired and made serviceable. In any estimate of Britain's capacity to build merchant ships under post war conditions, all these factors must be taken into account.

The Central Powers' Shipping.

In considering the merchant shipping output of the Central Powers during the war period, it must be borne in mind that they were largely free from the disabilities under which Britain has labored. Early in the war they gave up any attempt to keep the sea, confining themselves almost entirely to the use of submarines, thereby curtailing the building of the larger battleships. The repairing and refitting operations of their merchant shipyards were confined to their Baltic fleet, a mere trifle; they were thus able to devote the greater part of their building activity to the production of new merchant ships, and that they did this to a very considerable extent may be taken for granted from information that has leaked out from Germany. On the authority of the late Herr Ballin, there are at present building in German yards one ship of 56,000 gross tons, one of 35,000, two of 30,000, and a number ranging from 9,000 to 22,000 tons; Germany, as heretofore, evidently pinning her faith to the big freighters. The system of heavy subsidies started before the war is to be continued, especially to merchant ships completed within three years after the declaration of peace.

Of the merchant shipping of the Central Powers, 2,700,000 tons were interned in German or Austrian ports at the outbreak of war, the remaining 3,487,000 being in neutral ports; of the latter 2,392,675 tons were confiscated; irrespective of new output the Central Powers have at present 3,794,325 gross tons of merchant shipping. As their output of shipping in 1914 was roughly 600,000 gross tons, it may be assumed that they have at present at the least between four and five million tons for post war trade.

Canadian Shipbuilding Policy.

Owing to the drain on merchant tonnage generally and on British tonnage in particular, due to the war, the possession of ships has become of capital importance to the dominions, first to carry their own products overseas, and second to partake in the sea-carrying trade, and obtain the advantage of the high freight rates which are likely to obtain for a considerable post war period; it has already been shown how Australia has increased her shipbuilding activities.

The Canadian Government, recognizing how much the possession of a merchant marine, solely under Canadian control, either governmental or private, will mean to the future trade prosperity of Canada, has launched an extensive plan for the building of a Canadian merchant marine in Canadian shipyards.

In this connection it may be noted that rolling mills for the output of steel plates and steel shapes for ships have been es-