

COST OF SHIPBUILDING IN UNITED STATES AND ABROAD.

In his discussion of cost of American, as compared with British shipbuilding, Mr. Chamberlain, the commissioner of navigation, insists that British labor and machinery is more effective, from the fact that it is conducted on a wholesale, as distinguished from the retail scale, upon which American shipyards are conducted; and at page 25 of his last annual report he gives a table showing that in 1899 Great Britain produced, 1,341,000 tons of steel shipping, and the United States 103,000 tons.

The force of his argument is broken by the fact, shown by his table at page 15, that, of the 30 largest shipyards in the world, the Cramps' is second in the list, and larger than any in Great Britain—that the Newport News Company's yard is sixth, and surpassed by but one in Ireland and one in England; while the Union Iron Works of San Francisco, and the American Shipbuilding Company of Cleveland, are included in the first twelve; America has already one-third of the largest shipyards in existence, and is so adding to them that in shipyards which may be truly considered "wholesale"—within two years she will lead the world.

Indeed, a year ago Senator Frye himself admitted (Senate Hearings, p. 2) that C. P. Huntington's yards at Newport News were probably the "finest shipyards in the world." And Mr. Chamberlain, himself, selects the fourth in size of American shipyards for the following explanation:

"In point of cost, promptitude of delivery, and adaptability to the special trade, steel steamship building on the Great Lakes at the present time is not surpassed by shipbuilding in any other part of the world. It does not, however, come into competition with the shipping of foreign nations, and while a source of strength to the United States, it is not yet a factor in any effort we may make for a share of the ocean-carrying trade."

After Mr. Chamberlain had written the words thus quoted, but before they had been printed for congress, he had himself passed favorably upon the status for American registry of a class of 7,000 ton vessels which the American Shipbuilding Company, familiarly known as the "Great Lakes Shipbuilding Trust," had already arranged to build on the lakes for the ocean trade. Its organ, "The Marine Review" of Cleveland, is naturally "booming" the subsidy bill.

Opinion of Shipbuilder.

The force of Mr. Chamberlain's repeated suggestion as to successful lines, that they have been built under subsidy, is most decidedly broken by his admission at page 28 of his annual report:

"Two steamships, each of 20,000 gross

tons, larger than any steamships now in existence, have been contracted for by the Great Northern Railroad to be launched during the fiscal year 1902, designed for direct trade between Puget Sound, China and Japan. These vessels, of 13 knots, will not be eligible for mail subsidy under the act of 1891. They are the first ocean steel steamships ordered in the United States exclusively for direct competition without subsidy with foreign vessels."

Especially when, from Mr. Hill, the president of the Great Northern Railroad, we learn why these ships—the most important venture ever undertaken for our export trade—were ordered in America instead of abroad.

"We can build ships in this country," says Mr. Hill, "as well and as cheaply as they can be built anywhere in the world. Now I had figures within the last year furnished from the best builders on the Clyde, and figures from as good builders as there are in this country, and to my utter amazement the American figures on a single ship were £80,000 to £100,000 under the best Clyde builders, and when we get the ship subsidy that is promised, see how happy we shall be." (Laughter.)

"* * * They have set apart 30 per cent of the subsidy appropriation for the Pacific Ocean. No doubt some of my friends thought they were serving me, and in a money sense perhaps they were, but I would much rather see them take the duty off the plates that are to go into the ships when they are built."

But it is Mr. Chamberlain, himself, who, on this point, finally stops his own mouth. For at page 12 and elsewhere in his report he mentions the Hamburg-American Steamship Company as first in the world in importance and enterprise, with its 515,000 tonnage of shipping, averaging 5,500 tons to the vessel; which has been built up without subsidies and is recorded by Mr. Chamberlain as paying better dividends than its great subsidized rival.

Comparative Cost.

Most amusing is Mr. Chamberlain's offhand demonstration that ship construction is more expensive here than in Great Britain. It is as follows (p. 32 of his report):

"The price in July, at the beginning of the current fiscal year, of a steel cargo steamship of 3,750 gross tons, 9 $\frac{3}{4}$ knots speed, carrying 5,300 tons of cargo, including bunker coals (Pleiades or Hyades) was \$275,000 in the United States and \$214,000 in Great Britain."

And referring to the instance thus noted:

"As illustrating the relationship of the cost of steel plates to the total cost of an ocean steamship, it may be noted that in July, when plates were selling here at \$28 per ton, and in Great Britain at \$40.86, the owners of the two vessels

just named invited bids for the construction of a new vessel identical with the Hyades. The American bid was \$275,000 and the British £44,000 (\$214,000). The cost of the material entering into the hull of the American vessel would have been \$63,000, and of the British vessel \$80,000, leaving for labor, machinery, profit, etc., \$212,000 in the case of the American and \$134,000 in the case of the British vessel, or an excess cost of the American vessel, excluding hull material, of \$78,000."

But at the late meeting of the American Society of Naval Architects and Marine Engineers, all parties agreed that the labor on the steel work construction cost about the same in Great Britain as in this country; and Mr. Babcock proved, from the figures of Mr. Dickie, the other expert, that the labor cost of a bulk freighter could not be over 3 to 4 per cent more in Great Britain than in America. Mr. Chamberlain's figures evidently need examination.

In the first place he compares the bids of American with British shipyards, at a time when the latter were only doing their normal work, and the former were so filled with orders here as practically to be unable to contract for more.

Again, the coincidence is most unfortunate that Mr. Chamberlain selected for his comparison just that sort of ship—a 9 $\frac{3}{4}$ knot tramp steamer just below the tonnage (4,000 tons) that he himself uses as the dividing line between large and small ships—that ten years ago Great Britain built in job lots; that was then the standard for the carrying trade; that every year in the future will do less of it; and that—with all their tenderness for old and slow ships—Mr. Hanna and Mr. Frye considered were far too slow to be worth encouraging by speed subsidy.

Of course British shipyards can build such ships on practically no margin so long as people want them. Of course American shipyards—which are practically all new ones—are not specially equipped to build such vessels; do not propose to become so; and, so long as they are busy with the better sort of work that they are fitted for, do not care to build them at any price.

Mr. Chamberlain, himself, informs us (p. 13) that the increase in size of vessels stands for a fact in industrial organization quite as important as the progress in the mechanical arts to which they testify; that in 1900 there were 980 vessels of over 4,000 tons as compared with 218 such in 1890; that (pp. 27-28) of those building in the United States ten years ago for foreign trade, there were but three, of which the largest was only 4,115 tons; but that today there are building ten such, of which six are of more than 10,000 tons each, and two of 20,000 tons each.

Nine years since, in the "North American Review," Mr. Cramp both stated