

THE UNITED STATES SHIPPING BOARD

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A summary of the accomplishments
of the Board.

Submitted as a partial fulfillment
of the requirements for the degree of
Master of Arts
from the
University of Alabama

by
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1919.

When the world war began in 1914, the merchant marine of the United States was almost non-existent. Until the middle of the nineteenth century, American ships were known on every sea in the world, but the passing of the famous clipper ship marked the passing of the United States as a shipping power. When power driven vessels forced our clipper ships off the seas, we seemed content to allow other nations to take the lead in building the new kind of ships. The United States, therefore, became and remained insignificant as a factor in the world of shipping.

When the ships of other nations, upon which we were dependent for carrying our freight, were pressed into the service of their own countries to meet war needs, and the world's available tonnage was being materially decreased by the German submarines, the United States awoke to a realization that a merchant marine flying the American flag must be provided, or America would find herself without shipping facilities. We had few ships, and were possessed of poor and inadequate facilities for building them, and yet we had built up a large import and export trade, using ships of other nations. This business must now suffer unless we ourselves provided ships for carrying it on.

In 1916 the matter was brought up in Congress for serious discussion. The Democrats proposed means of enlarging and improving our shipbuilding facilities, and the Republicans opposed the idea, scoffing at it and calling attention to alleged failure of all previous Democratic measures for bettering our position on the sea. The chief argument advanced by the Republicans was that American labor is too well paid; that because labor is the largest item of

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cost in shipbuilding and ship operation, we could not hope to build and operate ships ~~more~~ cheaply enough to compete with those of other nations. Against this, however, was the argument, of undeniable force, that we must have ships to carry on our necessary import and export trade; and in the event of our entering the war, which was beginning to appear inevitable, we would be able to render little effective aid to our allies without ships.

After much debate a bill was passed which provided for the creation of a Shipping Board, to be composed of five commissioners appointed by the President by and with the advice and consent of the Senate. This Board was authorized to form "one or more corporations, with a capital stock not to exceed fifty million dollars, for the purchase, construction, equipment, lease, charter, maintenance and operation of merchant vessels in the commerce of the United States."

The act creating the Board was a peace time measure, intended primarily to secure regulation of American shipping, and to provide for the construction of new vessels through the agency of the corporation which the Board was authorized to form. It was not in the contemplation of the framers of the bill that the Board, or the corporation it had power to form, should operate the vessels built by the Board, unless it was impracticable to secure private individuals or corporations to undertake the task. In fact, it was expressly stated in the bill that except under these circumstances neither the board nor its subsidiary corporation should have power to operate vessels.

Under the provisions of the bill, President Wilson on December 22, 1916, made the following appointments, which in due time were approved by the Senate: Wm. Denman, of California; F.N. Baker, of Maryland; John A. Donald, of New York; John B. White, of Missouri; Theodore Brent, of Louisiana.

Soon after the Board began its work, unfortunate differences of opinion arose between Mr. Denman, chairman of the Board, and General Goethals, general manager of the Emergency Fleet Corporation. Instead of proceeding with the work of acquiring and building ships, they quarrelled over the policy the Board should adopt, and accomplished nothing. It is likely that the principal changes in the Board's personnel resulted from this lack of unity. All the members of the Board as originally appointed resigned, with the exception of Mr. Donald, during the summer of 1917, and were replaced by new appointees. So, when the Board really began its work it was made up as follows:

Edward M. Hurley, of Illinois, Chairman; Raymond E. Stevens, of New Hampshire, Vice-Chairman; John A. Donald, of New York; E. Tolby, of New York; Chas. K. Page, of California. Admiral W.L. Capps succeeded General Goethals as general manager of the Emergency Fleet Corporation. Charles Piez, engineer and successful business man of Chicago, was made vice-president of the Emergency Fleet Corporation.

As pointed out above, the act creating the Shipping Board was essentially a peace time measure for the promotion of our shipping interests. Soon after the creation of the Board, however, and before it had made much headway with its work, the United States entered the war -- in April, 1917. This necessitated radical

changes in the functions of the Board; instead of needing regulation and a more or less leisurely increase of available tonnage, a program of swift construction and efficient operation of a merchant marine became of paramount importance. Congress, on June 15, 1917, approved an urgent deficiencies act which conferred upon the President extensive authority to requisition, construct, and operate ships, without limitation except such as resulted from the limits of appropriations, with power to exercise this authority through whatever agency or agencies he might think best suited for the purpose. The natural agency for the President and the nation to look to in this emergency was the recently created Shipping Board. To the Emergency Fleet Corporation the President delegated all his authority to construct new vessels, and to the shipping Board he delegated the power of acquiring vessels already constructed, and of operating such vessels, as well as those to be constructed by the Emergency Fleet Corporation.

Thus, though the Board was created for the purpose of promoting the development of our merchant marine in peace time and regulating American shipping, the declaration of war by the United States and the subsequent delegation to the Board of emergency powers have forced it to devote its time to the task of meeting the nation's war time needs by the exercise of these emergency powers.

In 1916, our best shipbuilding year to that time, we built 300,000 tons of new ships. To be able to handle our import and export trade, and to be of material assistance to our allies, we needed facilities for building millions of tons per year. We had in 1916 2,412,581 tons of shipping flying the American flag. 80% of this was engaged in coastwise and Great Lakes trade. We had, therefore, only about 500,000 tons of

shipping engaged in trans-oceanic traffic, which was grossly inadequate to meet our war needs. The task of the Shipping Board was to provide, by some means, enough ships to meet these needs.

On April 18, 1917, the United States Shipping Board Emergency Fleet Corporation was organized and incorporated, to become the agency through which the Shipping Board could handle the construction and operation of ships. As its name implies, it was subsidiary to the Shipping Board, and was always under its direct control. In form, it is a private corporation with a capital stock of \$50,000,000.00, but except for qualifying shares held by directors, the United States is the sole stockholder. The majority of the directors of the Corporation are members of the Shipping Board. Practically all of the Board's business dealings, in the way of purchasing and contracting for ships, and building shipyards, have been done through this Corporation.

To supply the needs of the United States for ships, several means were available. There were many ships already under construction, being built for private corporations, some American and some foreign, in American shipyards. There were ships on the seas, and some on the Great Lakes. All these might be taken over by the Corporation. There were interned enemy vessels that might be repaired and used. There were foreign vessels trading between the ports of America and the rest of the world, that might be chartered. There was the possibility of building new yards. The Corporation determined to adopt all these means.

On August 3, 1917, all steel cargo vessels under con-

struction in American yards of more than 2500 tons dead weight carrying capacity were requisitioned. The object of this move was three-fold: it would secure to the United States tonnage much of which would otherwise have gone to foreign owners; the Emergency Fleet Corporation would acquire almost complete control over the American shipbuilding industry; and as the most important object, the Corporation expected to expedite the construction of the vessels and render them available for use at an earlier date than the builders had in view. 414 vessels, of about 3,000,000 tons capacity, were thus secured. Up to October 1, 1918, 255 of these had been completed, about 1,500,000 tons. As evidence that the object last named above was accomplished by the Corporation, the work of the New York Shipbuilding Corporation is an example. This corporation in 1917 built 5 ships, a total of 38,424 tons. Between January 1 and October 1, 1918, under the direction of the Shipping Board, they had built 13 vessels, of 97,400 tons capacity. This is an exceptional case, but other yards have done almost as well.

The problem which the Corporation faced in carrying out this program was: What shall we do with these vessels when they are completed? The United States wanted the use of the vessels rather than the title to them, and had seized the latter only to insure the former. It was determined that the Corporation should retain the title to all vessels which were building for foreign account, in order to insure their being available for our use. Title to vessels which had been building for American account would be returned to the former owners, provided: first,

that the Board should have the use of them for the period of the war and six months thereafter, at a rate to be established by the Board; second, that the owners pay the Board for the expense incurred in completing the construction, including the cost of speeding up construction; and third, that the owners relinquish all claims for damages occasioned by the commandeering.

Thus, ships under construction, as they were completed, were made available for the use of the Emergency Fleet Corporation. The operation of the ships to which the Corporation retained title was delegated to the Division of Operations; the operation of the vessels whose title was returned to the former owners was controlled by agreement between the owner and the Corporation.

In an act of June 15, 1917, the President was given power to requisition ships on the seas on payment of just compensation. This power he delegated to the Shipping Board, to be exercised through the Emergency Fleet Corporation. The result hoped for through the exercise of this power was the vesting in the Board of control over all American shipping, enabling it to regulate freight rates. Rates had become so exorbitant that regulation was essential; scarcity of ships and dangers of war had raised rates until they were almost prohibitive. In 1914, time charter rates on cargo steamers averaged \$1.00 per dead weight ton per month. In 1917, this had advanced to \$13.88 per ton per month for vessels going to ports not in the war zone, and \$20.00 and upwards for vessels going to the war zone. Rates for tankers under charter advanced from \$1.70 as a minimum and \$2.40 as a maximum in 1914 to \$12.50 as a minimum in 1917.

Freight rates advanced in about the same proportion; in 1914, freight on cotton from Savannah to Liverpool was 35¢ per hundred-weight; from Savannah to Genoa, 55¢ per cwt. In 1917, from Savannah to Liverpool, the rate had advanced to \$6.00 per cwt., and to \$10.00 per cwt. from Savannah to Genoa. On petroleum, from New York to Liverpool the freight was \$4.00 per ton in 1914, \$50.00 per ton in 1917. The high cost of operation and the war risk involved in crossing the ocean were not sufficient to justify such enormous increases in rates. As the value of ships depends upon their earning capacity, the price of ships advanced steadily with the advance of rates. Ships which would have been sold in 1914 at from \$60.00 to \$80.00 per dead weight ton, were sold in 1917 for \$300.00 per ton and upwards.

With a view to regulating these excessive rates, the Corporation on October 12, 1917 requisitioned all power driven steel cargo vessels of over 2500 tons capacity, and passenger vessels of 2500 tons gross register and over. The "just compensation" which the act authorizing this seizure provided was left in the hands of a committee to be adjusted, but it was understood that the compensation allowed would be less than the price at which vessels were selling in 1917.

As in the case of vessels under construction which had been commandeered, the United States wanted not the title but the use of the vessels. Agreements were therefore made, wherever possible, under which the owners operated the vessels subject to the orders and direction of the Board. Two kinds of charters were adopted: the time-form charter, under which the

owner manned and supplied the vessel; and a "bare-boat" charter, under which the owner was relieved of all operating duties, receiving a fee in the nature of a rental for the use of his boat. Rates on cargo vessels were fixed at so much per ton per month; on passenger vessels, the rate depended upon the number of passengers accommodated, the gross tonnage, and the speed of the vessel. Rates were different under the two forms of charter, of course. On Nov. 12, 1918, 444 vessels, of about 3,000,000 tons capacity were under charter of one kind or the other.

Because of the urgent need for ocean-going vessels, twenty-one steel ships were taken from the Great Lakes to the ocean. They were carried down the St. Lawrence, through the locks on that river. Sixteen of these ships were too large to go through the locks, and had to be cut in half in order to pass through. This feat caused much comment in the world of science as an unusual "stunt" of engineering. Almost as much comment followed when twelve of these vessels were put together afloat, through the use of coffer dams. Compensation for these vessels, as for the others commandeered, was left in the hands of a committee to settle equitably.

It will be recalled that a number of German vessels were interned in American ports when the war began, and that much of the machinery in them was damaged by their crews. The Shipping Board, by spending \$11,000,000.00 in repairing and refitting these vessels, placed 91 of them, of 594,696 tons capacity, in condition for trans-oceanic traffic. These were fitted out,

manned and operated by the Board through the Division of Operations. Besides the vessels interned in this country, many of those interned in ports of our allies were purchased and repaired, and operated by the Board.

As a final source of acquiring vessels already built, the Board chartered vessels from foreign countries. On Sept. 1, 1918, the Board had under control by charter 220 foreign owned steamers, of 944,258 dead weight tons capacity, and 111 sailing vessels, of 140,748 tons capacity. Some of these were engaged in coastwise trade, some in trade with South America, others with the West Indies, with Australia, and Hawaii.

An agreement was made with the Dutch government in January, 1918, by the terms of which 460,000 tons of shipping was to be chartered to the United States. After about 300,000 tons were chartered, Holland declared herself unable to complete the agreement, a declaration which Germany doubtless influenced her to make. On March 20, 1918, President Wilson authorized the seizure by right of angary of all Dutch ships needed for the prosecution of the war by the United States. On this authority, 87 vessels were seized, 533,746 tons. Many of these needed repairing, and all had to be manned by the United States. Those used in trans-Atlantic ~~xxxx~~ traffic were manned by the Navy, and those used in coastwise trade were manned by the Shipping Board. The Dutch crews were removed and at the first opportunity were returned to Holland; until they were landed in Holland, they were supported and paid by the United States. Cargoes which

were found on the vessels when seized were forwarded to their destinations wherever convenient. Here it was inconvenient, or where there was likely to be delay and the goods were perishable, the goods were sold, and the owners reimbursed for them. Compensation to ship-owners was adjusted on much the same basis as in the case of vessels requisitioned from American owners.

Aside from these Dutch vessels, from Norway were chartered 614,000 dead weight tons of steamers, and 275,000 tons of sailing vessels. An agreement was made with Japan, under which the Board purchased or contracted to be built in Japanese yards 375,000 tons of steamers at a cost of \$73,000,000. In addition to this cash price, the United States permitted the exportation to Japan of 250,000 tons of steel. It will be noted that the cost of these vessels amounts to about \$196.00 per ton. We also contracted for about 40,000 dead weight tons to be built in Chinese yards.

Because of the high freight rates existing in European traffic, many American shipowners transferred their vessels to foreign registry, in order to be in better position to handle European freight. This, of course, reduced the shipping available for American use by just that much, and the matter of making these transfers was placed under the control of the Board, which practically stopped them. Transfers from one American citizen to another were also put under control of the Board, permission being required before the transfer was made. All

such transactions were carefully examined to make sure that no foreign citizens obtained control over the ship so transferred. American citizens were encouraged and urged to buy foreign vessels. For the year ending June 30, 1918, 75 vessels, of 545,995 tons capacity, were purchased and placed under American registry, thereby coming under the control of the Shipping Board.

By the use of all the means above referred to -- the commandeering of vessels under construction and on the sea, transfer from the Great Lakes, using interned enemy vessels, chartering vessels from foreign nations, seizure of the Dutch vessels, and purchase^{of} vessels by American citizens -- the American merchant marine was materially increased.

The acquisition of vessels, however, was only the first half of the work to be accomplished by the Board. The question of operating them so as to most efficiently serve the needs of the nation had to be solved. In order to better handle the operation, and to keep operating costs separate from construction costs, a separate department, known as the Division of Operations, was created. This Division exercised its control over all ships which had been acquired by the Shipping Board; on Nov. 21, 1918, there were 1326 such vessels, of 7,498,075 dead weight tons capacity, more than three times as much tonnage as we had at the time the United States entered the war.

A Director of Operations was placed in charge of the Division, under whom there were numerous administrative officers and departments. An Assistant Director of Operations was ap-

pointed, who looked after matters on the West Coast, while the Director himself gave most of his attention to the Eastern and Southern ports. An Assignments Department was created, to which fell the task of distributing and assigning the vessels to the best advantage; a Comptroller looked after the finances of the Division, keeping account of the cost of equipment, supplying, and operating the vessels controlled by the Division. A Contracts and Charters Department drew up all contracts and charters with ship owners, embodying the terms mentioned above. A Forest Products Department, and a Great Lakes Department, and others were appointed, each with its own part of the program to look after.

Branch offices were established in all ports, which were placed in charge of agents of the Division. The Assistant Director was assigned to San Francisco, and the agencies on the West Coast reported to him. In other ports managing agents, general agents, agents and sub-agents were placed, depending upon the importance of the port. These agencies represent the Division in all matters relating to the financing and management of ships, including the manning, supplying, upkeep and repairing of all vessels. Reports are made to the Director showing in detail how the work is going ahead. The reports made by the New York agency are typical; this agency reports daily the name, tonnage, speed, date of arrival and prospective trade of every ship in port, and the estimated date of arrival of all ships at sea; it reports monthly a summary of the work of each vessel

which enters and leaves New York; keeps "voyage records" for each vessel; and reports from time to time the cost of feeding officers and crews on each ship.

Thus the Division keeps in touch at all times with each vessel under its control. By keeping comparative records of vessels of the same type, inefficiency in the handling of one will appear on the record against it, and steps are taken to correct the defect.

In order to keep the work of operating the ships off the shoulders of the government as far as possible, vessels are assigned to private enterprises for management subject to the orders of the Assignments Department as to where to go, what cargo to carry, etc. Assignments of this kind are made to "managers" or to "operators". A manager engages officers and crew, purchases stores and supplies, and operates the vessel as if he were the shipowner. An operator loads and discharges the vessel, which is manned and operated by the Board, as if he were a time-charterer of the vessel. In all these assignments, the Division reserves the right to terminate the agreement on twenty-four hours notice, and permits the assignee to terminate it on thirty days notice.

In assigning vessels to their routes, due regard is taken to the nature of the vessel, and it is assigned the kind of voyage it can best make. On October 10, 1917, all sailing vessels were ordered not to enter the war zone, because of the

danger of being sunk by submarines. On February 20, 1918, the Board excluded all steamers of less than 2500 tons capacity from trans-Atlantic voyages. Thus, all except large power-driven cargo-vessels were excluded from the war zone, they being the most likely to escape the submarine.

On February 11, 1918, a Shipping Control Committee, composed of three men, was organized, to whom was assigned the duty of allotting vessels to routes so as to secure maximum efficiency, and the duty of transporting military materials to the army abroad. Its primary duty is to so assign tonnage that our necessary imports and exports will be taken care of.

A Chartering Committee was organized in September, 1917, composed of three men. All steam vessels of 2500 tons and over were already under direct control of the Shipping Board, having been commandeered as explained above. To this committee was assigned the duty of looking after the smaller vessels, both steamers and sailing vessels, under American registry, and neutral vessels engaged in American trade not under the control of the Board already. Its purpose was to induce neutrals to undertake trans-Atlantic trade as far as possible, to reduce charter rates, and to secure tonnage for necessary trades. All charters not under direct supervision of the Board must be submitted to this committee for approval. Charter rates and freight rates on merchandise shipments must meet the approval of the committee. The chartering of neutral steam tonnage centralizes in

this committee, because it can get much better ~~rates~~ charter rates than individuals can. The committee does not operate the vessels which it charters, but assigns them to American companies or private citizens to operate for a commission. It succeeded in materially reducing charter rates from the exorbitant figure they had reached in 1917. For example, as stated above, time charter rates between the United States and South America were \$13.88 per ton per month in 1917. By November, 1918, this had been reduced to \$8.33.

The matter of regulation of rates, although of prime importance among the duties of the Shipping Board as at first outlined, came to be subordinated to construction and operation of vessels to meet the war needs of the nation. Having control over all vessels under American registry, it controlled rates as a matter of course, and was able to devote most of its time to supplying the need for new ships.

After commandeering and speeding up construction of ships already begun in American yards, and securing ships already completed, from various sources, it was found that we still had not enough vessels. Men in authority stated that we needed 6,000,000 tons per year of new ships.

Commandeering and chartering can add nothing to the total available tonnage on the seas, being merely transfers of ownership and right of operation of ships already plying the sea. To overcome the damage done to world shipping by the

submarine, the only dependable means consisted in the construction of new ships. After securing by requisition and charter all available vessels and finding them inadequate, the Emergency Fleet Corporation was forced to expand existing shipyards and build new ones, where new ships could be built to offset the losses occasioned by the Germans.

When the Corporation contracted with existing shipyards for new vessels, it had made a part payment of the purchase price of the vessels, authorizing the expenditure of the funds so paid in increasing the size of the plant. Thus extensions were made in almost every privately owned shipyard in the United States, increasing its possible production. When the United States entered the war, there were 37 yards building steel vessels, which together had 142 ways. 70% of the construction on these ways was for the Navy. There were 24 yards building wooden vessels, with 73 ways, many of which were antiquated and unfit for modern use. After the extensions made with government funds, there were 398 ways available to the Emergency Fleet Corporation for building steel ships, and 418 for wooden ships.

In addition to these, four great fabricated steel yards were built by the government, with a total of 94 ways. These four yards alone are expected to produce more tonnage than any country in the world produced prior to 1918. The largest of these yards is located at Hog Island, Pa., a

marshy strip of land which the government bought, drained and turned into the greatest shipyard in the world in six months. The other three yards of this type are located at Bristol, Pa., Newark, N.J., and Wilmington, N.C. They are all of the same type as the Hog Island yard, but are smaller.

Aside from the yards for constructing steel and wooden ships there are five government owned yards for building concrete vessels, with four shipways each. These are at San Diego, Cal., Oakland, Cal., Wilmington, N.C., Mobile, Alabama, and Jacksonville, Fla.

On November 1, 1918, 198 yards were under contract with the Emergency Fleet Corporation. These have a total of 1,083 ways, of which 939 were building vessels for the Corporation, and 144 for the Navy. The Corporation had invested or contracted to invest in shipyard plants \$150,000,000.00. Investment interests were made or authorized in 41 plants, under the plan mentioned above, the Corporation contracting for ships, paying part of the purchase price in advance, and authorizing the expenditure of this part in extending the plant.

The four great fabricated steel yards were depended upon to a greater extent than all the others to supply steel cargo vessels. Through standardization of design and application of large scale methods of production, these yards are expected to turn out a great number of vessels at a comparatively small cost and in a short time per vessel.

- These yards apply to shipbuilding the method which has been used successfully by American steel bridge builders. Ships are planned "life-size" on paper, the size of all plates being noted with extreme accuracy. Light wooden templates are made from the paper patterns, of exactly the size and shape that the steel plates are to be. Then with these templates as patterns, the steel plates are cut and punched. Plates for dozens of ships can be cut from one pattern and in one operation. All this takes place in the steel mills, sometimes a thousand miles from the shipyard. Then shipped to the yards, nothing remains to be done but to assemble and rivet the plates together. Due to the extreme accuracy with which they are cut, they fit exactly when assembled.

By this application of large scale production methods to the industry, material saving in time and money is confidently expected. Mr. Hurley, Chairman of the Shipping Board, expresses the opinion that ships can be built for \$40.00 per dead weight ton when normal conditions again prevail. This is undoubtedly a more optimistic view than present circumstances warrant, but it at least gives us the idea that the plan will prove effective. It should be noted in this connection that contracts made with these yards as soon as they were ready for operation are as follows:

With the Hog Island yard, the largest of the four, 180 vessels, to be of 1,385,000 tons capacity, to cost approximately \$270,000,000,

or about \$196.00 per ton.

With the Bristol yard, 60 vessels, 540,000 tons, to cost \$82,000,000, or \$152.00 per ton.

With the Newark yard, 150 vessels, 750,000 tons, to cost \$144,900,000 or \$193.00 per ton.

Figures are not at hand showing the contract with the yard at Wilmington.

These prices of course reflect war conditions and are hardly indicative of what they will be in normal times.

One of the most serious problems which the Board had to meet in its program of construction was that of securing competent labor in these new shipyards. At the outbreak of war only 45,000 men were employed in shipyards. As new construction progressed, an ever increasing number of skilled shipbuilders was needed. To meet this need, training schools were established. To an instructor training center at Newport News a picked group of skilled mechanics was sent for special training which would fit them to help in the training of about 75,000 new workers in the yards. As these men completed the course of instruction, they began the work of training new men, while others were sent to Newport News to be given the same special training. We now have over 300,000 men employed in the shipyards, most of whom have acquired efficiency and skill in their work.

In accomplishing the work above outlined, the Shipping

Board may well feel that it has capably and efficiently fulfilled the purpose for which it was created. It has not escaped criticism from the public, through the press and otherwise, but it has come in for a fair share of praise. Attention has been called to the fact that at a time when the Navy was setting new records in building war vessels, munitions workers were expanding their plants, and millions of soldiers were being drafted for active war service, all taking men and materials necessary to the shipbuilding industry, the Shipping Board was called upon to surpass the world in building a merchant marine. It was demanded of the Board that it build in a year, or less, a shipping machine which would serve to defeat the German military machine of forty years' growth. In spite of the fact that the Germans destroyed 12,000,000 tons of shipping by the use of mines and submarines, the allies have kept building ships at such a rate that the losses, though appalling, were not sufficient to paralyze allied shipping. To the United States, and that means to the United States Shipping Board, must go the credit for having increased the shipbuilding capacity of the allied world to replace the ships sunk by the Hun submarines. Figures show that though the tonnage sunk increased each year, and was more than the new tonnage built to replace it, the shipyards were constantly gaining on the submarine; that is, the excess of lost tonnage over new tonnage was becoming less and less as the war progressed.

As the new shipyards of the allies, particularly of the United States, were completed and began their task of turning out new ships, it became apparent that the submarine would eventually be left behind in the race. There is little doubt but that the knowledge of this fact disheartened the Germans and influenced them to recognize defeat.

On the other hand, adverse criticism of the Board has not been lacking. The high cost of the vessels built in American yards was severely criticized, and charges of criminal graft were made. Investigating committees were demanded to look into the affairs of the Board; in the Fall of 1918, such a committee was appointed to investigate the expenditures made at Hog Island, following a charge that the cost of the fabricated steel yard there was more than twice the amount it had been estimated to cost. The board of investigation reported on September 21, and its report was made public December 20, 1918. They found that there were no secret profits, no graft nor underhand dealings, but there had doubtless been great extravagance. They reported that the estimates, made before work on the yard was begun, were mere guesses which engineers stated could not be made accurately because of the nature of the work involved in draining the site and building a shipyard upon it. Many prominent newspapers defended the Board for the apparent extravagance in the building of the yard; it is worthy of note that many of these were Republican papers. It is true that the

shipyard cost more than it would have cost had there been time to to carefully plan and build it, and for the same reason, our new ships have cost more than they should have cost. But the cry of the allies, almost from the beginning of the war, was for ships -- more ships -- and still more ships, and it was imperative that they get them quickly; a delay in getting them would have been almost as bad as not getting them at all. Thus, where a few thousand dollars were wasted in the haste in which the yards were built, the lives of men and the value of property saved by that same haste must have much more than justified the waste.

The matter of the cost of the ships which we shall build hereafter, though, will prove a material factor in our ability to maintain the new place we have taken in the world's shipping. If other nations can build and operate ships more cheaply than we can, it stands to reason that they can carry freight more cheaply than we can. Mr. Hurley, the Chairman of the Board, feels that we need have no fear of not being able to build and operate ships cheaply enough to compete with the rest of the world for ocean freight. He admits that American wages are high, our shipyard workers being the most highly paid in the world. In fact, the extra cost of the ships we built in the emergency just passed, due to increased wages alone, amounts to over \$300,000,000. He states that though our labor is highly paid, it is also highly efficient, and that each man gives his

best services in return for the high wage that is paid him. He is depending upon the fabricated steel yards to turn out ships in such a short time per ship that the cost will necessarily be low; the shorter the time required for each ship, the less will be the overhead cost chargeable to that ship, and the cost of the vessel lessened accordingly.

As for the operation of ships, notwithstanding a prevailing opinion to the contrary, the cost of labor amounts to only ten per cent of the total cost. The cost of operating a vessel includes (1) wages of officers and crew, (2) insurance on hull and machinery, (3) bunkers and stores, (4) harbor charges and fees, and (5) maintenance and repairs. To keep our costs of operation down, Mr. Hurley depends upon our superior methods of loading and unloading vessels, which materially lessen the stay of the vessel in port, and upon efficiency in the handling of the vessel at all times. When asked why other nations will not adopt the methods we use in loading and unloading vessels, if they are time-savers, Mr. Hurley replied by asking why the English persist in hauling coal in a 15-ton car, into which and out of which the coal must be shovelled, while we are using a 50-ton car with an automatic dumping arrangement; it seems they would adopt this plan, but the fact remains that they have not done so.

Comparative cost of hauling freight cannot be reached by comparing the average wage of the American seaman with that

of the English and Dutch and Japanese, nor even by comparing the average complete cost of an American vessel crossing the ocean with that of a vessel of another nation making the same trip. To intelligently make comparisons, one must begin with the freight on shore and include all cost of loading, transporting, and unloading on shore at its destination. When so figured, American costs will compare favorably with those of the other nations of the world. Thus, in spite of our high wages, we may be able to carry freight cheaper than can nations who pay lower wages.

The one thing that remains to be worked out by the Shipping Board is the disposition which should be made of our new merchant marine. When the Shipping Board took over most of the shipbuilding industry of the United States, government ownership of the vessels which they built resulted automatically, and their operation was handled through the Division of Operations. As the power of the Board to operate vessels expires six months after proclamation of peace, by the terms of the bill which created the Board, some action is necessary before that time shall arrive. The United States now owns 555 steel cargo steamers, of 3,385,475 tons capacity, and has under contract 1336 similar vessels, of 9,275,000 tons. (Contracts for building wooden vessels have been cancelled. They were necessary and useful in emergency, but cannot compete with steel ships now that there is no longer the cry for ships of any and every kind.) There will be next year 16,000,000 tons of shipping

under the American flag, seventy per cent of which will be owned by the United States government. This is nearly half the merchant tonnage of the world to-day.

The important question is: Will the government retain control and ownership of these vessels, or sell them to private individuals or corporations? The principal argument against private ownership is the possibility of a monopoly being established to keep ocean freight rates high. So long as the government continues to own and operate this merchant fleet, whatever profit may arise from its operation will inure to the benefit of the people, and the government will have no incentive for keeping rates up. And, too, under government control, better opportunities are afforded for expanding our world trade; ships can be placed on routes which will prove unprofitable at first and develop, in time, a profitable business. This would necessitate operation at a loss for a while, perhaps throughout the lifetime of one or more vessels. It is unlikely that private enterprise will stand for such a loss for the possibility of future profit, which may not materialize. The government, on the other hand, having in mind the benefits that will accrue to American merchants, as well as profit from the carrying of freight, which will result from the development of new markets, would probably continue to operate at a loss until a profitable market was established or it could be seen that it would never prove profitable. Again, under government ownership, in an

emergency such as the one we have just passed through, should another ever arise, the merchant fleet would be immediately convertible to government use.

As against all these arguments, however, there are unquestionable advantages which will result from private ownership. To make a success of the shipping business, energetic, alert and resourceful men must be behind it with all their wits constantly working at full capacity. Mere mechanical efficiency in the operation of vessels is not sufficient. No man will be as much interested in pushing a venture for someone else, though that someone be his nation, as he will be in pushing it for his own interest and profit. Ships must be so maneuvered as to be never idle in port, and never making a long voyage in ballast (without cargo), although to accomplish this it may be necessary to have it pursue an irregular voyage, touching at many ports. For example, a ship may carry a cargo from New York to Australia, where it finds no opportunity to secure a cargo for return to New York. It takes a cargo to Japan; from there a cargo to the Cape Verde Islands, with only the short return trip to New York in ballast. To plan these moves for two thousand ships requires the concentration of the energies of many able men, whose services cannot be secured except through private ownership of the vessels.

On this point, the recommendations made by Mr. Hurley are deserving of close study. He says:

"A careful consideration of the arguments for and against government ownership has led me to the conclusion that the ships should be sold to and operated by American citizens under no restrictions other than the terms of the bill of sale and the fixation of maximum freight rates, either as provided in Section 18 of the Act approved September 7, 1916, or as may be agreed by the Government and the operator in specific instances.

"The ships should be sold at a price which fairly reflects the current world market for similar tonnage.

"Twenty-five per cent of the purchase price of each ship should be paid down, the remainder falling due and payable in graded annual instalments over a period not exceeding ten years. The Government should take and hold a mortgage for the unpaid balance, charging interest thereon at the customary commercial rate of five per cent. One-fifth of this interests, representing the difference between the customary Government interest of four per cent and the customary commercial rate, should be paid into a Merchant Marine Development Fund to be described hereafter.

"The purchaser should be required to agree to insure and keep insured with an American Marine Insurance Company, his equity in the vessel, and because the American marine insurance market has not at present sufficient resources to underwrite all the vessels the Government has to sell, the Government should

carry in its own fund, as at present, but for the purchaser's account, hull and machinery insurance covering that part of the vessel for which payment has not been made. Our experience in operation shows that the Government can carry this insurance for at least one percent less than the open market rate.

However, it is proposed that the open market rate be charged, and that the difference be paid into the Merchant Marine Development Fund.

"It is understood that no transfer of a vessel to foreign registry should be permitted without express permission of the Government.

"Each purchaser who wishes to operate in the foreign trade should be obliged to incorporate under Federal charter, the necessary legislation for which should be passed by Congress without delay. Such a charter should provide that no stock shall be issued in excess of the money value actually paid in on vessel property, and that no stock can be issued or transferred to an alien.

"It should also provide that one member of the Board of Directors for each company shall be named by the Government; this director should draw no salary, either from the steamship corporation or from the Government. He should receive only the customary director's fee for each meeting he attends.

"The same legislation should provide for periodical meetings of these Government-named directors, in the City of Washington, where they will constitute an official body which will

confer with and advise the Shipping Board, or other designated Government agency, upon problems arising in or questions affecting the welfare of, the American Merchant Marine, including the administration of the Merchant Marine Development Fund.

"This fund, drawn from the sources previously indicated, should be used to relieve such financial difficulties as may be encountered in the development of an adequate and well-balanced American Merchant Marine. For instance:

"It is foreseen that a number of trade routes important to the immediate or future welfare of American commerce must be established and developed. Some of these routes may not yield steamship operating profits until their existence shall have attracted an increased volume or better balance of trade. Revenue derived from the carriage of mail, and possible fees for the training of seamen and cadet-officers, may partly compensate losses incurred on these routes. Still, in cases where the Government sells a ship upon condition that it be operated in a route which may not prove profitable at once, it will be necessary to provide for the payment of defaulted interest from the Merchant Marine Development Fund, in the discretion of the Shipping Board or other Government agency, upon recommendation of the Board of Government Directors, until such time as the route may begin to yield profit. When the ships in the route earn their annual interest rate and a profit, one-half the profit earned each year should be paid into the Merchant Marine Development Fund until all the moneys drawn from the fund on

account of the vessel in question shall have been replaced. The other half should go annually to the steamship stockholders.

"Such vessels cruising in routes which fail to prove susceptible of profitable development and which do not serve any purpose of the Government of the United States, may be transferred by the Government to other routes. However, should the Government become convinced that any vessel has failed to make expenses solely or chiefly because of incapable management, it may foreclose its mortgage on that vessel.

"On the basis of one billion dollars' worth of ships, the Merchant Marine Development Fund would be fourteen million dollars. This amount, investigation convinces me, would be more than sufficient to care for all deficiencies likely to develop during this period.

"Until sold under the terms just stated, all vessels should remain the property of, and should be operated by, the Government of the United States."**

However much the Shipping Board may have been criticized in performance of its duties, the fact remains that we have on the seas and under contract, now being built, a merchant marine larger than we thought, two years ago, American industry

**Address delivered by E.N. Hurley, Chmn. Shipping Board, before the National Marine League, Commodore Hotel, New York, March 27, 1919.

was capable of producing. Every available means of reducing the cost of shipbuilding and of ship-operation is being used, in the hope that we may be able to support this new fleet on a firm financial basis. Contracts placed before the war closed, providing prices as high as \$350.00 per ton for ships, have been cancelled, and new contracts let, at an average price of \$150.00 per ton. This is still far above the normal price of ships, but is indicative, not of conditions in America, but of world conditions. Contracts let in England at the same time were at an average cost of thirty pounds per ton. Before the war, ships could be built for \$60.00 to \$65.00 per ton in American yards, and about \$10.00 per ton less in English yards. It will be interesting to watch the decline of prices as conditions become normal, to see whether English yards will again underbid those in America, and to see if the new fabricated steel yards meet the predictions and fulfill the hopes of the Shipping Board.

Sources of material:

The material for this thesis was drawn principally from the following sources:

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