

The american Merchant Marine: Its History and Prospects

A Thesis presented to the Academic Reculty of the University of Virginia in candidacy for the degree of Baster of Science.

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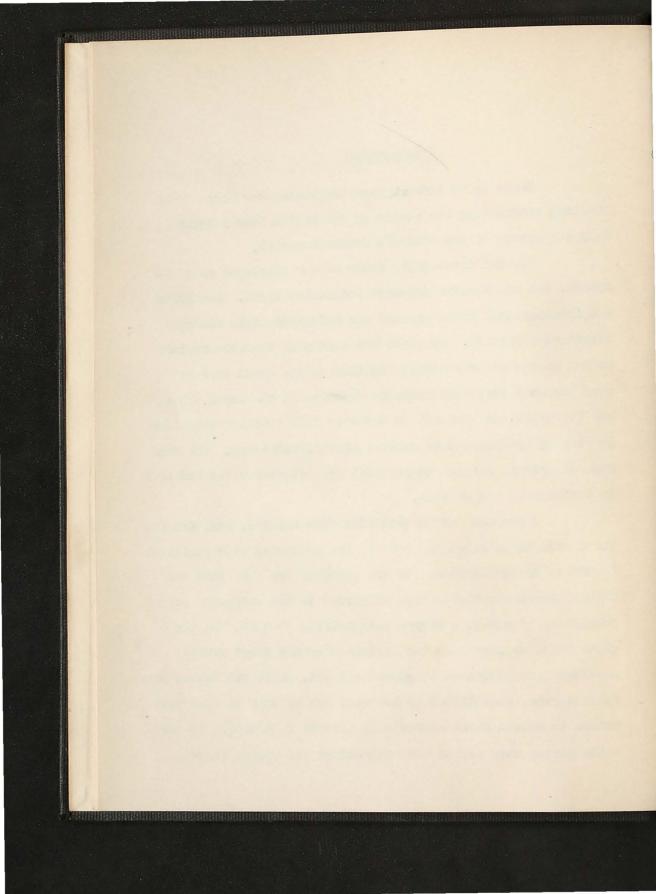
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Introduction

There is no problem more perplexing nor more baffling confronting the people of the United States today than the future of the nation's merchant marine.

For the first fifty years of our existence as a nation, the sea was our greatest industrial field. Seafaring and international trade engaged our brightest minds and most adventurous spirits. By about the middle of the 19th Century we had gained so pre-eminent position on the ocean that we were the most important commerce carriers of the world. But sad to relate, we were not to maintain this position long, due to some of the reasons of which I shall speak below. The process of gradual decline began until our overseas fleet had sunk to contempible proportions.

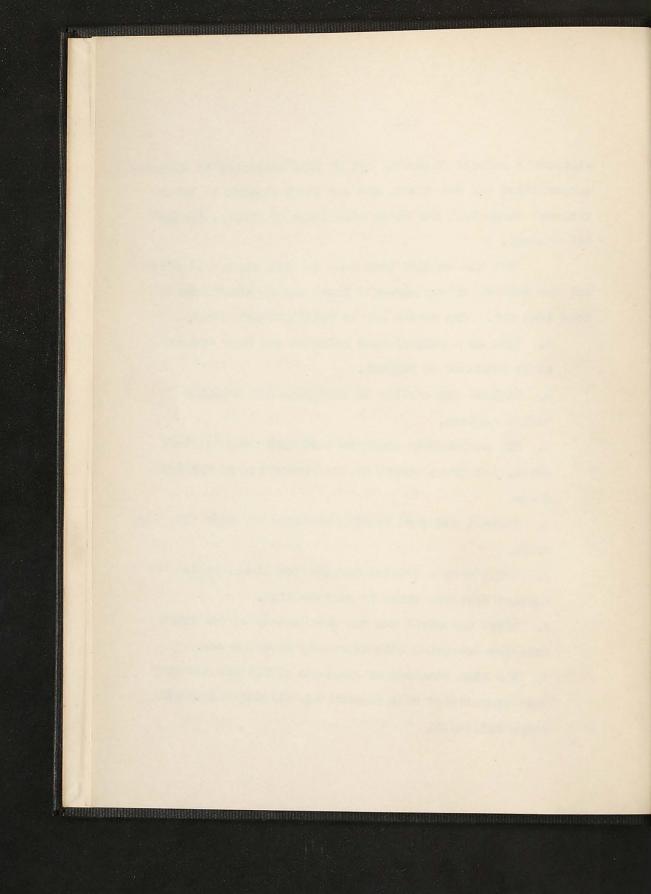
There are many reasons for this decline, and, despite the clamor of politicians, not all are connected with political doctrines or legislation. We are aware of the fact that the United States has always been niggardly in the matter of ship subsidies, if not to a degree antagonistic to them. On the other hand, we have seen the British merchant fleet greatly developed and increased by government aid, while the German merchant marine, annihilated by the war, may be said to have been raised to second place entirely by liberal subsidies. It was while during this period the Congress of the United States



stubbornly refused financial aid of this character to shipping corporations and our fleet, and our fleet engaged in international trade fell far below even those of France, Norway and Germany.

But the subsidy idea came in with steam navigation and the decline of our merchant fleet was apparent even before that era. The causes may be briefly stated here.

- l. Iron as a shipbuilding material was more economically produced in England.
- 2. England was earlier in designing and building marine engines.
- 3. The confederate cruisers destroyed many American ships, and drove others to the protection of foreign flags.
- 4. England had good coaling stations all over the world.
- 5. Lloyd's as a British Corporation discriminated against American ships in registration.
- 6. After the civil war the development of our great interior attracted attention away from the sea.
- 7. The high standard of American living has always made competition with England in building and manning ships difficult.

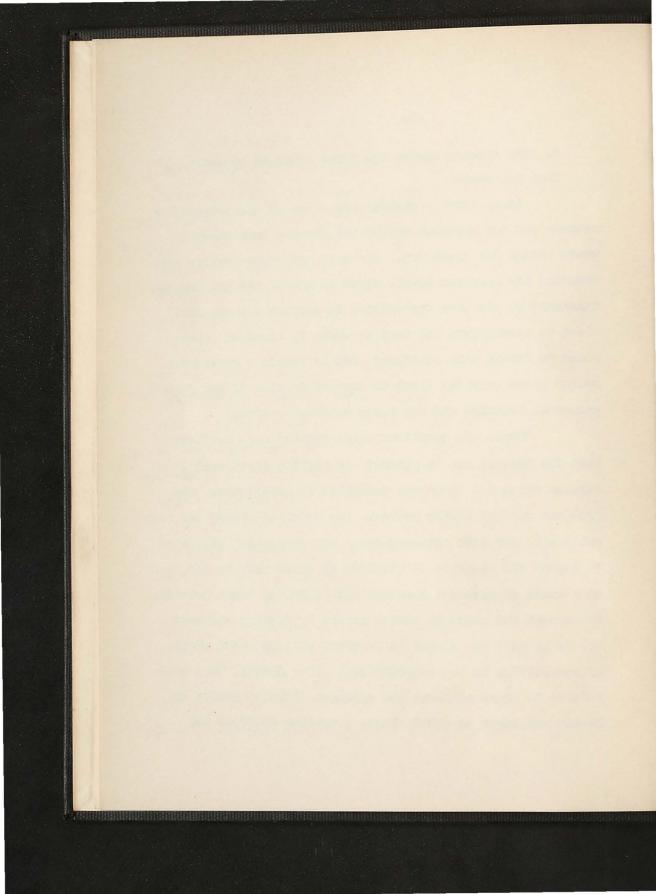


8. The subsidy system has never appealed to American lawmakers.

Such, briefly stated, are a few of the outstanding reasons why our merchant marine had reached that ignoble state before the greet war. The most momentous problem confronting the American people today is how to use the impetus furnished by war time necessities to advance our merchant fleet to preeminence and keep it there in times of peace.

Could we retain this position? Can we retain a creditable second place granting first to England in view of her geographical location and far flung colonial empires?

tion and thought and at present are calling forth much discussion among our lawrakers assembled in Washington. The problems are not easily solved. Our merchant marine has been built with war time entravagance. Our government will have to charge off hundreds of millions of their cost to put them on a basis of economic equality with those of Great Britain. Do we want our merchant marine manned by foreign sailors? Or, do we want one manned by American sailors whose wages, by competition in the internation halabor market, have been reduced to those at which the Jupanese, Chinese coolie or Dascar are eager to work? These questions confront the



United States today, as a new chapter in her history of achievements, and require a definite answer immediately if we are to hold our own as an International carrier of Trade.

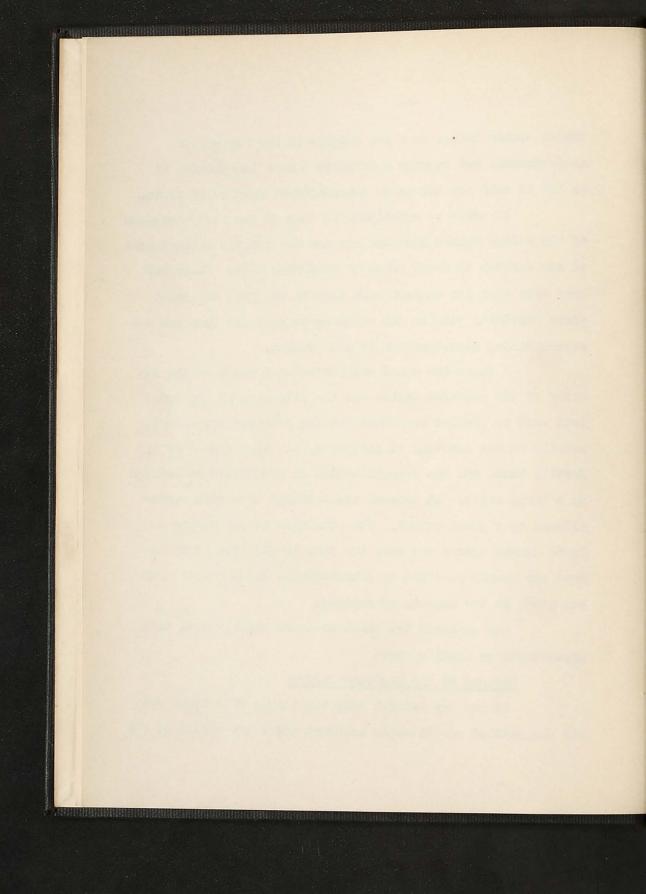
It would be repetition to tell of the early triumphs of the United States upon the sea and the romatic achievements of our sailors in every phase of seafaring life. Those who know best what our sailors have done in the past will most whole heartedly join in the endeavor to open for them new and corresponding opportunities in the present.

I think the chief and predominant cause of the decline of our merchant marine was the diversion of the Averican mind to greater opportunities for constructive effort, notably in the building of railroads, the development of the fertile west, and the reorganization of productive industries on a large scale. At present these things have been accomplished to a great extent. The attention of our people is again turned toward the sea, the time is ripe for us to assume our proper position in international trade and to take our place in the society of nations.

Our question is, Shall we avail ourselves of this opportunity or shall we not?

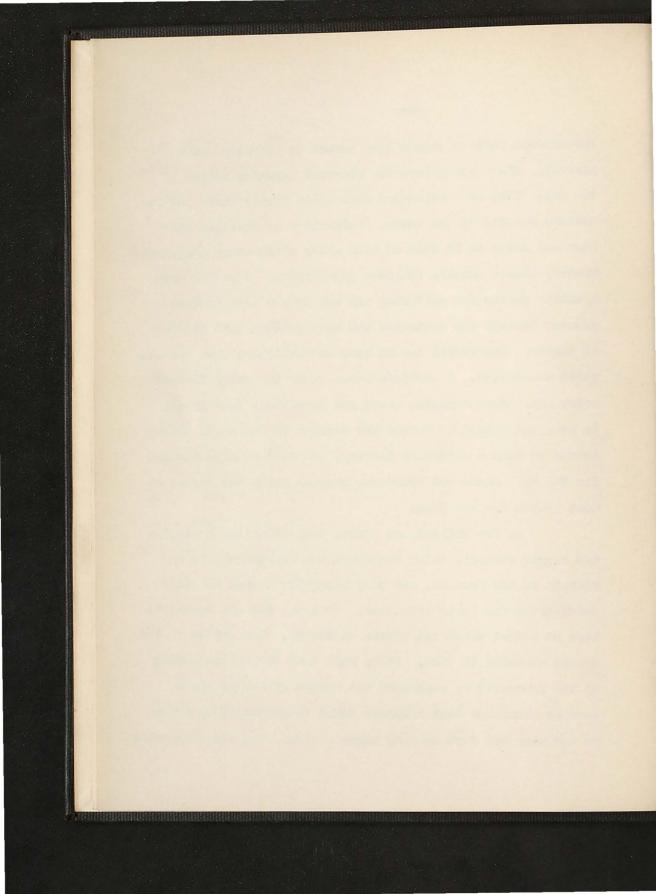
History of the Merchant Marine.

It was but natural that the reopie of British origin was settled our Atlantic seaboard after the middle of the



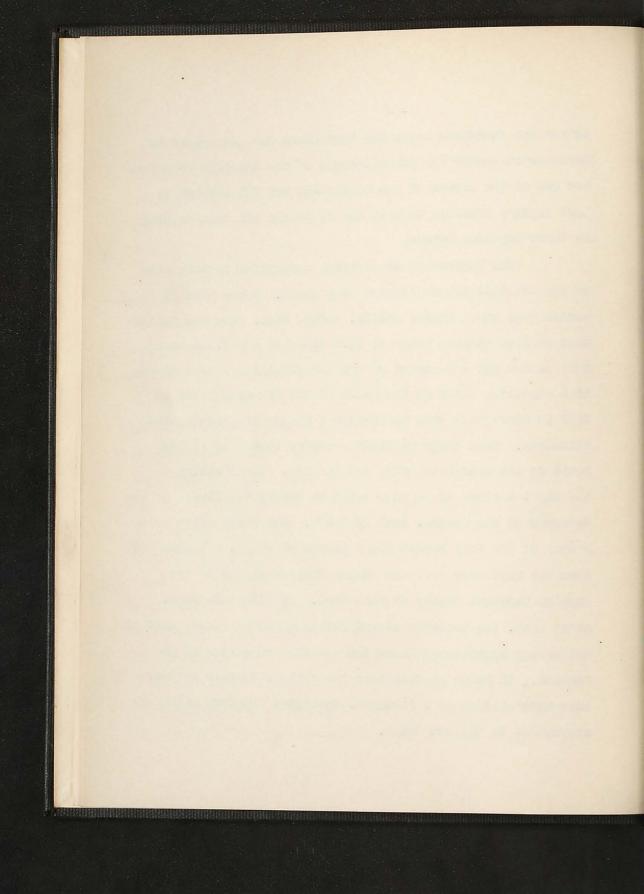
Seventeenth Contury should have turned to seafaring as a pursuit. They sprung from the greatest maritime nation of the day. They were separated from their former homes and immediate markets by the ocean. This story of American sailors and ships is an epic of blue water which seems singularly remote, almost unreal, to later generations. A people with a native genius for seafaring won and held a brilliant supremacy through two centuries and then forsook this heritage of theirs. The period was no more extraordinary than was its swift declension. A maritime race, whose top sails flecked every sea, whose captains brace and couragious from father to son, had fought to defend the freedom of the seas, turned inland to seek a different destiny, and took no more thought for the tall masts and bounteous cargoes which had carned so much renown for our flag.

In New England, at least, they inhabited a sterile and rugged country, which responded but reductantly to the efforts of the farmers, and they naturally looked to other occupations for their livlihood. In a way the sea opened to them an almost valueless source of income. The waters on the coasts abounded in fish. It is said that the salmon coming up the Connecticut, Penobscot and Thames rivers to spawn, were so plentiful that laborers found it necessary to refuse to eat them but just so many times a week. The rich fisheries

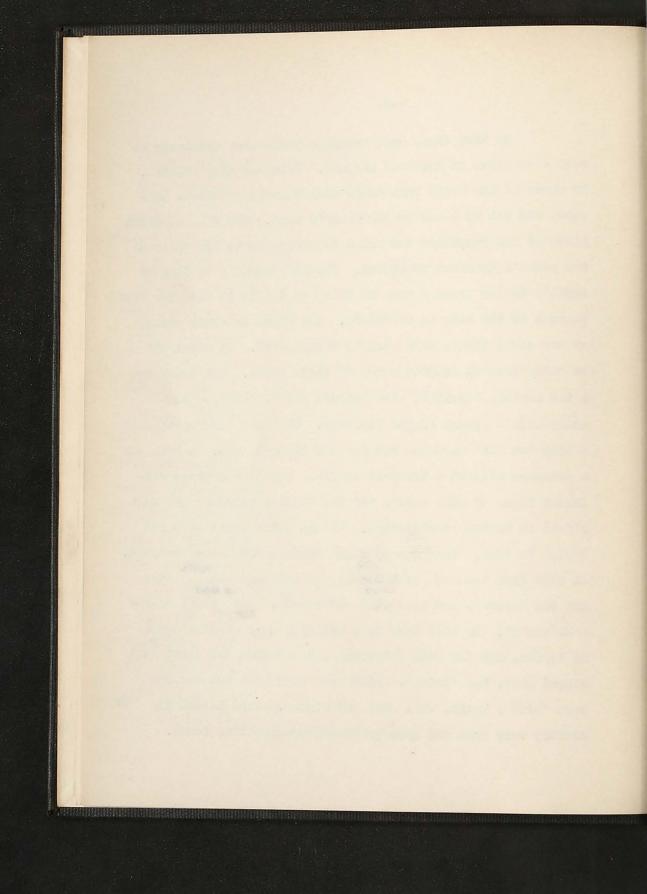


on the New Poundland banks had been known for many years in Europe even before the establishment of the American colonies, and one of the causes of the revolution was the attempt by Lord North's Ministry to shut the coloniats off from fishing in these populous maters.

The beginnings of maritime enterprise on this side of the Atlantic naturally were only small. There were of course many small craft, skiffs, refts, etc., used for navigating shallow streams prior to this time, but the first boat that we can get any record of was the Virginia, a boat of 30 tons caracity, built at the mouth of the Kennebee River in 1608 to carry back home to England a number of discontented colonists. Then there followed a decked vessel of 16 tons built on the Hudson in 1615, and in 1631, "The Blessing of the Bay", a sloop of 60 tons built on the Mystic River, by the Governor of the Colony, John Winthrop. Ten years after this a ship of 300 tons burden was launched at Salem, a larger boat than the Mayflower and much larger than about 90% of the English Merchant Marine at that time. So with this year, about 1640, the business of shipbuilding may be locked upon as definitely established among the leading industries of New England. It might be said that the virtual founder of American shipbuilding as a distinct, continued industry might be attributed to William Thin.

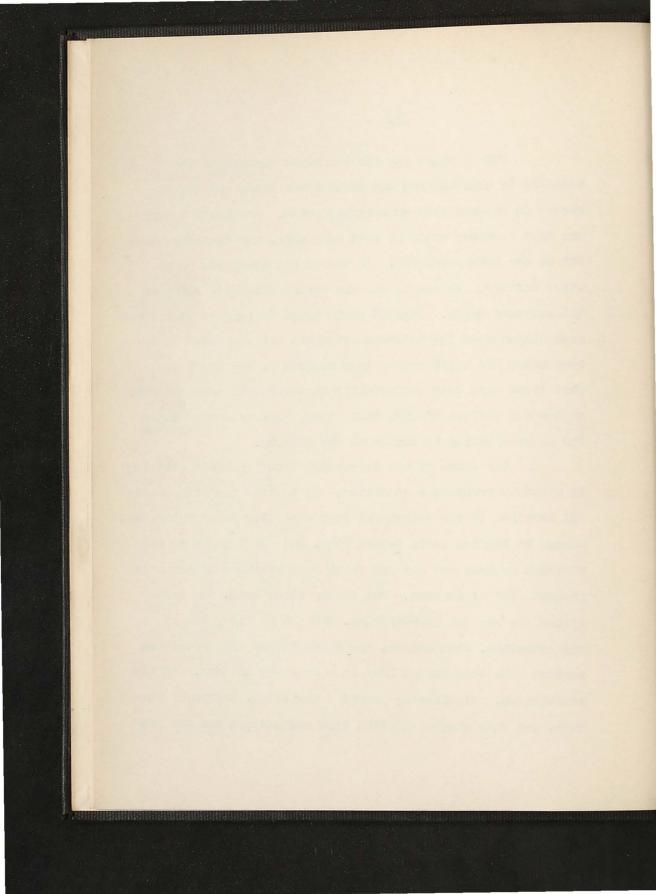


By this time, most European ports were beginning to show clearances of American vessels. This was only natural. No where in the world were there such forests of lines, hemlock, and alk so close to the water's edge. The tall straight pinel of Lew Hampshire and Maine furnished masts for ships of the World's greatest explorers. Not infrequently in days of loyalty to the crown a spar of 33 or 35 inches in diameter would be sent to the king as a present. The types of craft making up our early fleets have largely disappeared. It might not be amiss here to mention a few of their names. The Ketch was a two master, sometimes with lanteen sails, but more commonly with a square rigged foremast. The Bnow was practically a brig but with fore and aft sail on the mainmast. A Puik was a schooler without a bowstrit or jib. But of all these different types of ship craft, the New England schooner had nost effect on marine architecture. It was built first at Gloucester in 1715. Then one of these vessels was being Launched. it slid down the ways so smoothly, in onlooker shouted "See how she scoons", and the proud owner said, "let her be called a schooner". By 1645 they were building good sized vessels at Boston, and the year following was launched the first full rigged ship, the "Trial", which went to Malaga and brought back "wine . fruit, oil, wool and linen", which helped the country very much and gave great encouragement to trade.



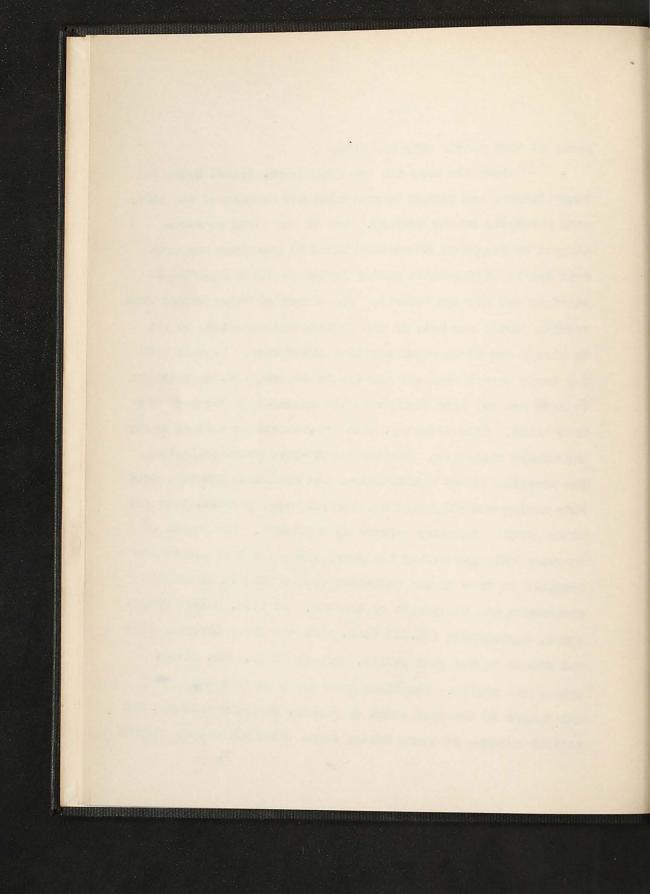
Fore I might say the the rapid advance of the colonies in shipbuilding and in maritime trade was not regarded in England with unqualified pride. England's theory was that a colony could be used as a mine, for the sole benefit of the mother country. It was to buy its goods in no other country. It was to use the mother country's ships in its overseas trade. England early tried to impress such trade regulations upon the American colonists and succeeded in embarrassing and handicapping them seriously, but these restrictions were only sufficiently burdensome to make the ship owners and sailors of 1772 among those most ready and eager for an opportunity to strike at His Majesty.

The close of the Revolution found American shipping in a fairly prosperous condition. It is true that the peace-ful vocation of the seamen had been violently interrupted, all access to British ports denied them, and the voyages to continental markets had for six years been attended by the ever present risk of capture. But on the other hand, the war opened the way for privateering, and out of the ports of lassachusetts, Connecticut, and Rhode Island the privateers swarmed like bees from a hive on a warm day in June. To the adventurous, privateering proved a thrilling, congenial pursuit, but this always entailed risk and hazzard and the jeo-

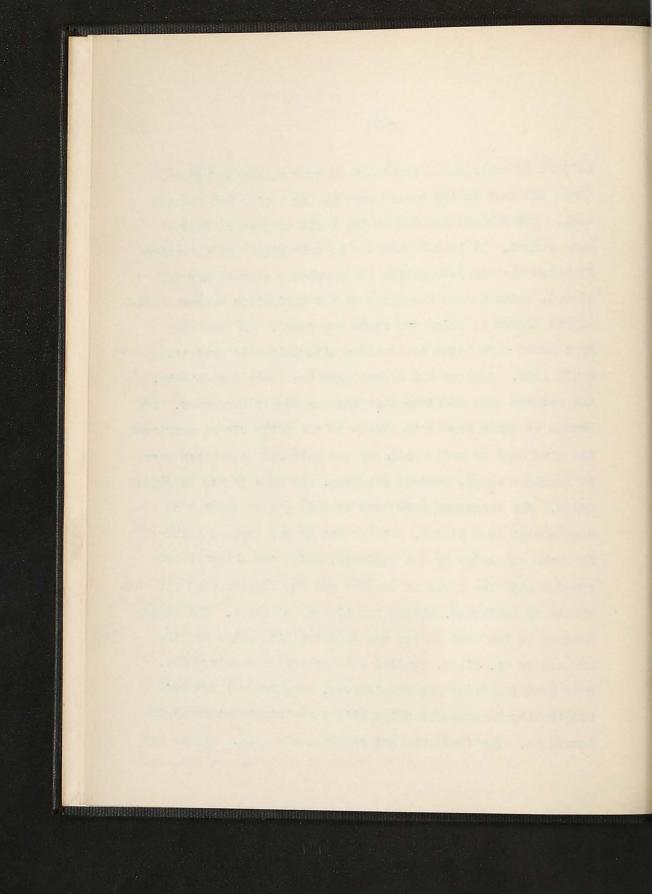


pardy of ones cargo, ship and life.

After the war, the new government, formed under the Constitution, was prompt to recognize the demands of the shipping interests of the country. One of the first measures adopted by Congress, stells were taken to encourage American shipping by differential duties levied on goods imported in merican and foreign vessels. The effect of being barred from British ports, was not, as the British had expected, to put an abrupt end to American maritime enterprise. It only made our hardy seamen seek out new fields of conquest, take longer voyages and get into touch with the cornerce of the most distant lands. This industry, like men, sometimes thrives upon overcoming obstacles. For the twenty-five years following the adoption of the Constitution, the maritime interest, both ship owning and shipbuilding, thrived more, perhaps, than any other gainful industry pursued by Americans. The growth of American shipping during the years 1794 - 1810 is almost incredible in face or the obstacles confronting it by hostile enactments and the perils of the war. In 1794, United States ships, aggregating 458,865 tons, rode the waves carrying fish and staves to the West Indies, bringing back, rum, cocoa, spices and confee. Sometimes they would so to the Canaries and thence to the west coast of Africe, for very valuable and ritiful cargoes of human beings whose black skins were thought

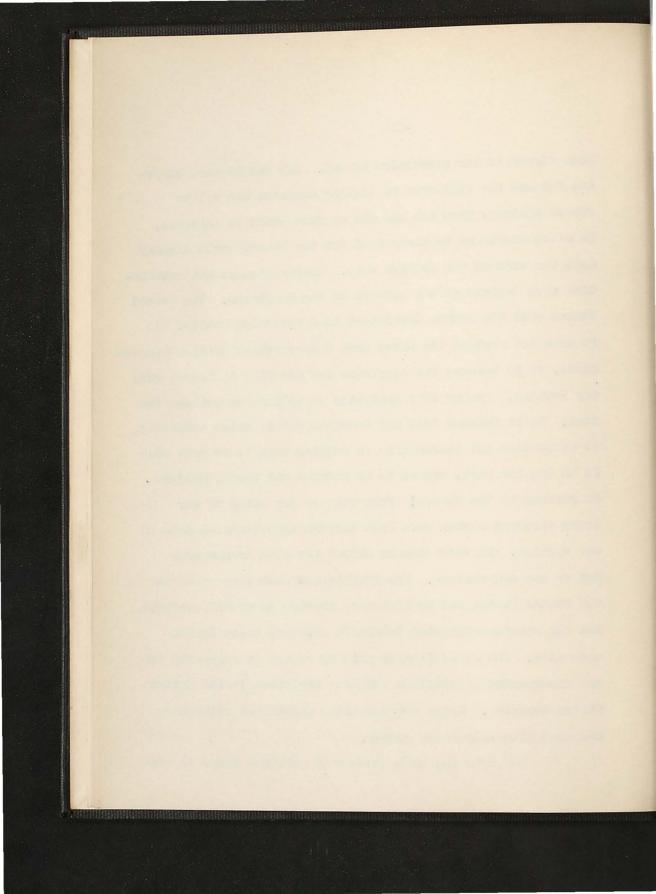


to justify their harsh treatment as dumb beasts of burden. again the Rast Indies opened markets for buying and seiling both. But Ingland and almost the whole of western purope Were closed. It is not ressible to understand the situation in thich the American sailor and shipowher of that day was placed, without some knowledge of the navigation laws and pelligent orders by which the trade was vexed. In 1790 the Napoleonic wars began to continue with alight interruptions until 1815. England and France were the chief contestants, and between them American shipping was sorely harrassed. The French at first seemed to extend to the enterprising Americans the glad hand of fellowship, for the National Convention gave to American ships, neutral shipping, the same rights as French ships. The Americans overjoyed by this sudden opening of a rich market long closed, slipped out of New England harbors in barks and brigs by the hundreds, while the shippards resounded with the blows of harmers and the forests rung with the shouts of lumbermen getting out timbers of ships. The ocean pathway to the west Indies was speckeed with sails and the harbors of St. Kitts, Jamuica and martinique were crowded. This hustling trade was short-lived. Ingland met France's hospitality to American ships with a new stroke at American interests. The trade was not neutral, she said. France had

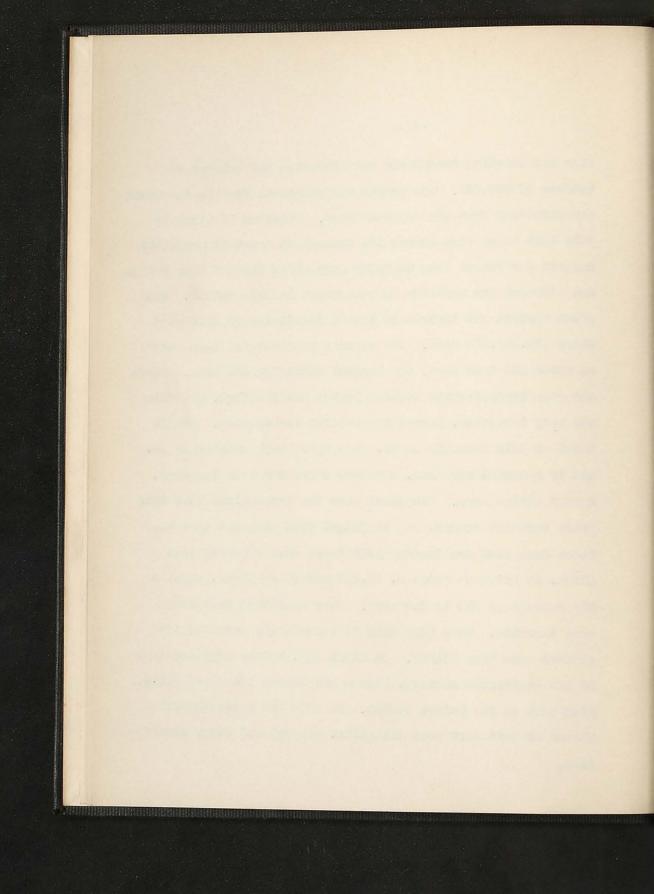


been forced to her concession by war. Her people were starying because the vigilance of English cruisers had driven French cruisers from the sea and no rood could be imported. To allow Americans to carry food for the French tould clearly undo the work of the British navy. France also sought retaliation upon England at the expense of the Americans. The United States said the Franch Covernment is a sovereign nation. If it does not protect its ships from unwarrentable British aggressions, it is because the Americans are secretly in league with the British. Prance will recognize no difference between its foes. So it ordered that any American vessel which submitted to visitation and search from an English vessel, or raid dues in an English port, ceased to be neutral and became subject. to capture by the French! Thus many of our ships of our young merchant marine were lost through the piratical acts of our enimies. At this time no actual war with France grow out of her aggressions. The Republicans came into power in the United States and by diplomacy averted an actual conflict. But the American shipping interests suffered bedly in the mean time. The money finally paid by France as indemnity for her unwarrented appliations lag long undivided in the United States Treasury. After the descoiled seamen and shipowners had gone down into their graves.

In 1800 the whole number of American ships in for-

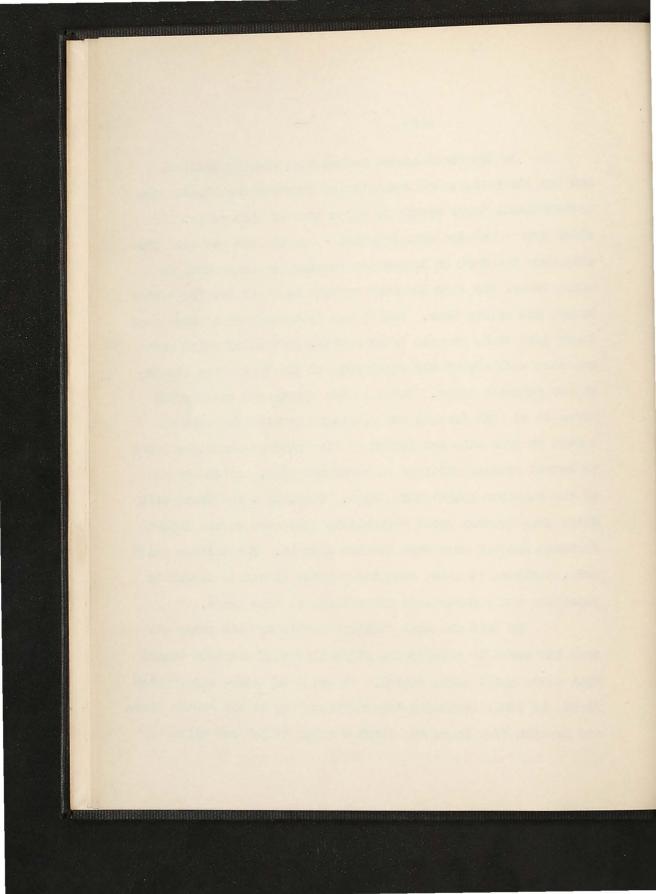


eign and coasting trades and the fisheries had reached a tonnage of 977,49%. The growth was constant, despite the handicap resulting from the European wars. Possibly it might be said that these wars helped it, because at least it prevented England and France from building more ships for the time being. and hindered the maritime encouragement to this extent. The gross exports and imports of the United States in 1800 were about 175,000,000 each. The vessels that cerried them were of about 250 tons each, the largest attaining 400 tons. There was some communication between Boston and New York, but this was very irregular, passengers waiting for cargoes. But as small as this industry seems, more money was invested in it, and it occupied more men, than any other American industry, except agriculture. How great were the proportions that this trede speedily assumed may be judged from the fact that between June 1800 and January 1805 there were imported into China, in American vessels, 34,557 sea-otter skins, worth on the average of 16 to \$20 each. Over a million seal skins were imported. More than half of these ships carrying the exports were from Boston. We might say, by the last decade of the eighteenth century, Boston had become the chief shipping port of the United States. In 1790 the Presides from abroad at that nort were 455 ships, all told of every description.



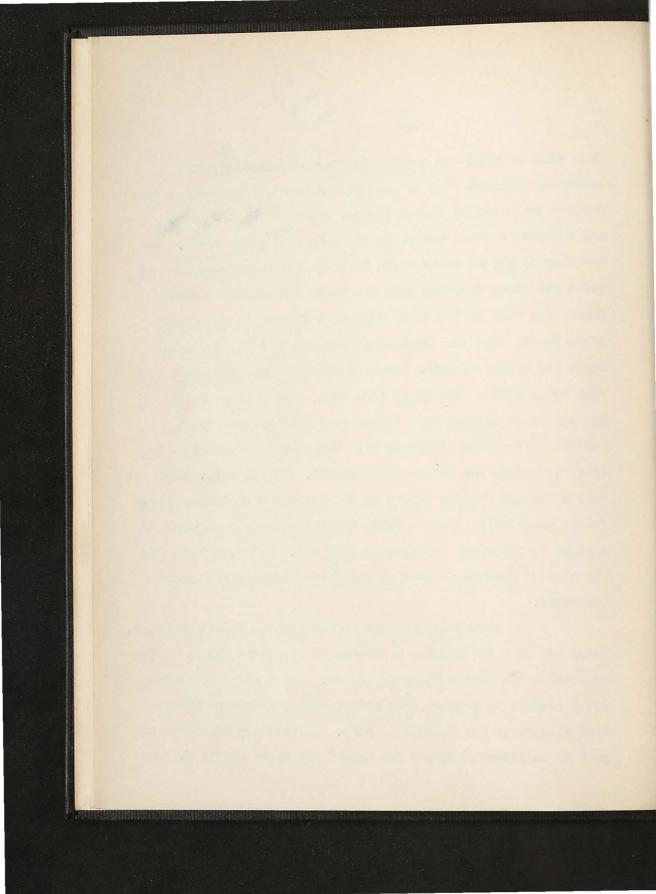
As the ocean routes became more clearly defined. and the limitations and character of international trade more systematized, there sprung up a new type of shipmaster. The older type - and the more romantic - was the men who took his ship from New York or Boston not knowing how many ports he might enter, nor into how many markets he might have to barter before his return home. But it was just a matter of time when there came to be regular trade routes, over which ships went and came with almost the regularity of the ferry like liners on the Atlantic today. Burly in the mineteenth century the movement of both freight and lan enger between New York ob Boston on this side and London or Liverpool on the other began to demand regular sailings on amounced days, and so the era of the American pocket ship began. Then, too, the trade with China grew to such great proportions that some of the finest fortunes America knew were founded upon it. The clipper built ship, designed to bring home the cargoes of tes in season to catch the early nurmet, was the outcome of this trade.

By 1815 the name "Baltimore clipper" was taken all over the world to signify the highest type of merchant vessel that man's skill could design. It was a Baltimore ship, which first, in 1785, displayed the American flag in the Canton river and brought from there the first cargoes of tea and silks.



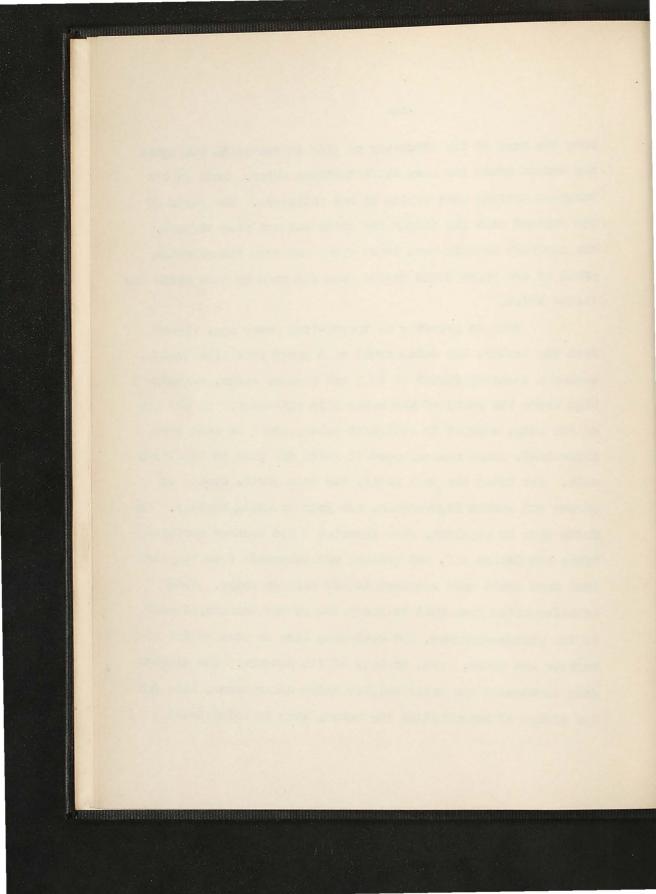
From theh on until the decline in american shipping, the Baltimore clippers lead in the Chinese trade. These ships were modeled to be swift, inconspicuous, quick in maneuvering and to offer a small target to the guns of hostile craft. The building of sacket ships began in 1823, when some semblance of peace and order ameared upon the ocean and continued until almost the time of the Civil Mar, when steamships had a ready begun to cut away the business of the old packets. In 1841, Clark and Sevall of Bath, Maine, built the "Repalannock", 179 feet long, with a tormage of 1132 tons. For a time she was thought to be as much of a "white elephant" as the "Great Fastern" afterwards proved to be. The people were unclose to study her lines and to see her launched. It was said, that only a Rothchild could afford to own her and when she appeared in the Wississippi River - being built for the cotton trade freight to Liverpool immediately fell off. But from there on the size of packets as well as clippers, steadily and rapidly increased.

The United States then was in truth a maritime nation. Every boy know the sizes and records of the great ships. Poreign trade was active as never before. Herchants were making great profits on cargoes from China, and speed was an essential element in the value of a ship. In 1840 the discovery of gold in California added a new decand for ocean shipping. Then



came the news of the discovery of gold in Australia and again the demand arose for more swift American ships. Many of the European nations were buying of our shipyards. The yards of New England sent far inland for white oak and pine timbers. The southern forests were drawn upon, and even the gigantic pines of the Puret Sound rogion were cut down to make masts for Yankee ships.

Even as recently as twenty-five years ago, viewed from the harbor, the water front of a great port like Boston, showed a towering forest of tall and slender masts, reaching high above the roofs of the water side buildings. On the bow of the ship, nestled in confident pride, could be seen the figurehead, which was supposed to guide the ship in tunultous seas. But today the tall masts, the trim yards, sheets of canvas and quaint figureheads, are gone or going rapidly. The docks once so populous, seem deserted - not because maritime trade has fallen off, but because one steamship does the work that once would have required twenty clipper ships. This transformation from sail to steam has robbed the sea of much of its picturesqueness, and seafaring life of much of its adventure and charm, also, of lany of its dangers. The greater size of vessels and their swifter trips under steam, have had the effect of depopulating the ocean, even in established



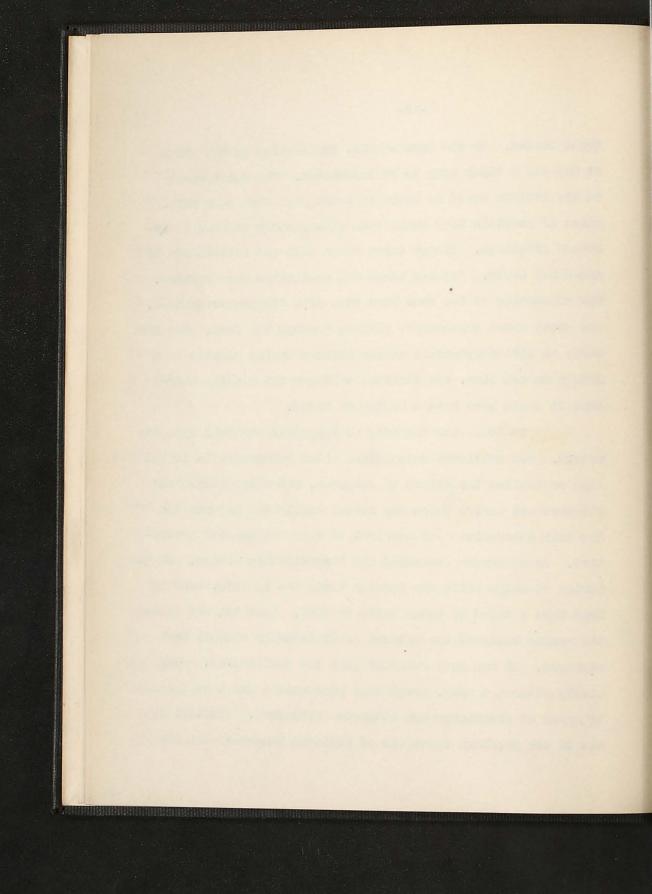
trade routes. In the days of old, the meeting of two ships at sea was a thing long to be remembered. The faint speck on the horizon would be hours in taking the form of a ship.

Often if possible they would come close enough to each to exchange greetings. Always there was a hail and interchange of names and ports. But now times and conditions have changed.

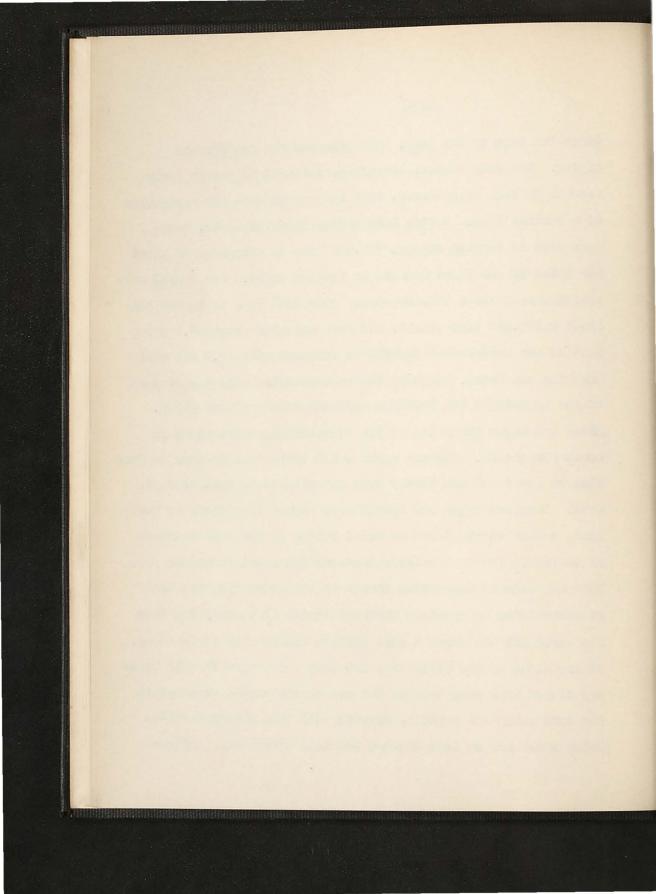
The courtesies of the seas have gone with its picturequeness.

Our great ocean greyhounds, rushing through the deep, give each other as little attention as two railway trains passing on a double traced line, the incident taking a few minutes where once it would have been a matter of hours.

In 1861, the calamity of the Civil war fell upon the n tion. The sectional antagonisms which culminated in it had long controlled the action of Congress, and shipbuilding and the merchant marine which was almost wholly New England and New York enterprises was deprived of all governmental protection. We no longer possessed any transatlantic liners, and the number of ships built for foreign trade had in 1860, sunk to less than a third of those built in 1855. When the war came, it menace hastened the process of distruction already for advanced. It was soon realized that the Confederacy, being wholly without a navy, could only prosecute a war upon the sea by nears of privateers and commerce destroyers. Practically all of our merchant fleet was of northern ownership and was

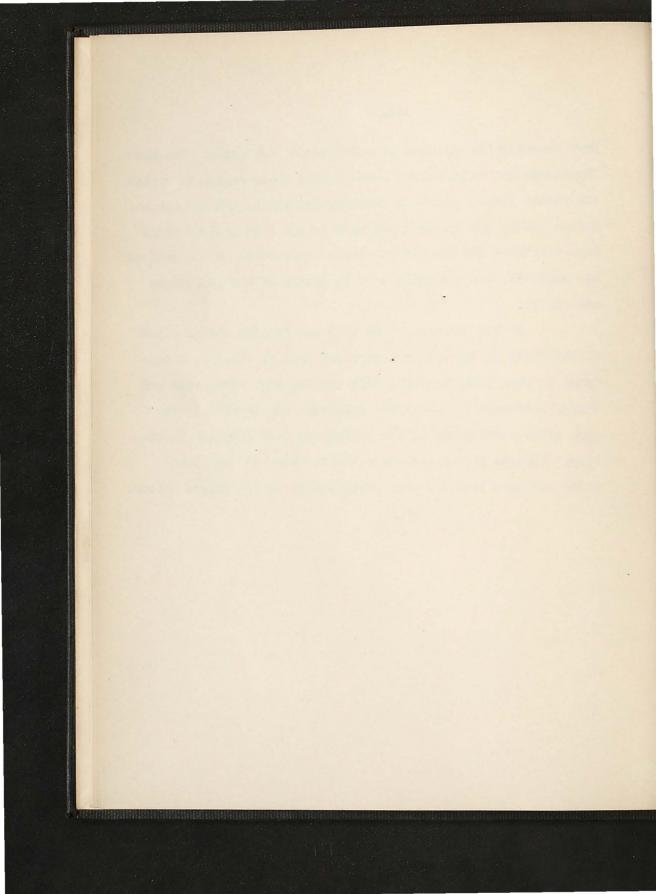


under the laws of war then, fair mane for the Confederate armies. The ship owners, therefore, hastened to lay up their vessels or sell them abroad, that they might have the protection of a neutral flag. During this panie, from 1861-1865, there were wold to foreign buyers, 751,598 tons of shipping, or about one third of our fleet eng red in foreign trade. The Confederate cruisers sunk about 110,000 more. Then 1866 came in we had but about 1,278,865 tons afloat, and were carrying about 25.1 per cent of our exports and imports as commared with 70.8 per cent when the war began. Intural causes cooperated with the ravages of war to cripple the American merchant marine at this time. Steam had taken its place as the controlling motive power in ocean navigation. England could build better and cheaper engines then we could and was vastly more experienced in that kind of work. American wages had always been higher than those of England, a fact which placed an added burden on the ship builders of America. American sailors demanded and received higher pay. This has been an increasing factor in the perplexing problem of maintaining an American merchant marine in competition with the world and was never a more serious factor than it is today. At the close of the Civil Mar, not only were wages in this country higher than ever before, but new opportunities were opened for both labor and capital, drawing both from maritime enterprise which had so long engaged American attention. Railroads



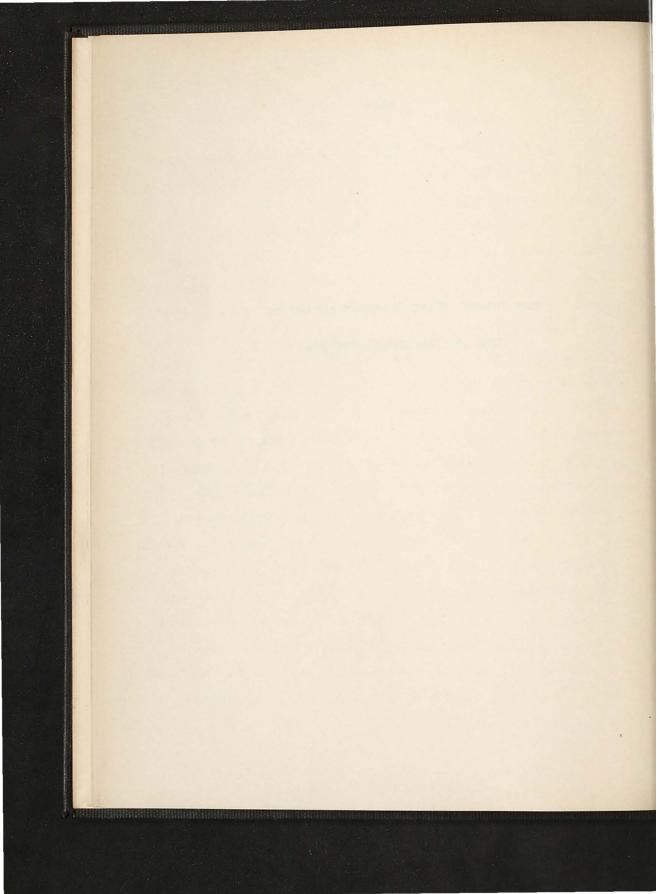
were becoming the greatest of all national interests. The New Englanders who before would have devoted their brains to building packet lines, turned to building railroads, and our adventurous youth, who in the first part of the 19th Century would have cherished the idea of walking a quarterdeck as the goal of his ambition, was now going west in search of new adventures and wealth.

In the general regret over the decline and practical obliteration of the American merchant marine, there is a tendency to over look the fact, that the ability, enterprise and energy withdrawn from maritime adventure was devoted to the more vital undertaking of developing our west interior territory. Perhaps in the end the division from the one to the other may have been the more advantageous to the United States.



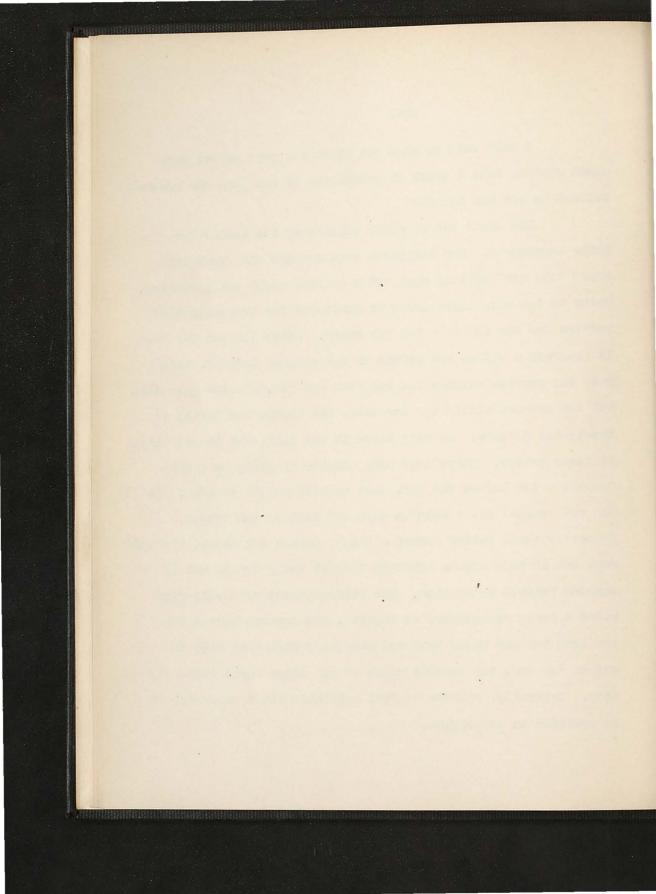
The Buture of Our Merchant Marine -

How the War Stimulated It.



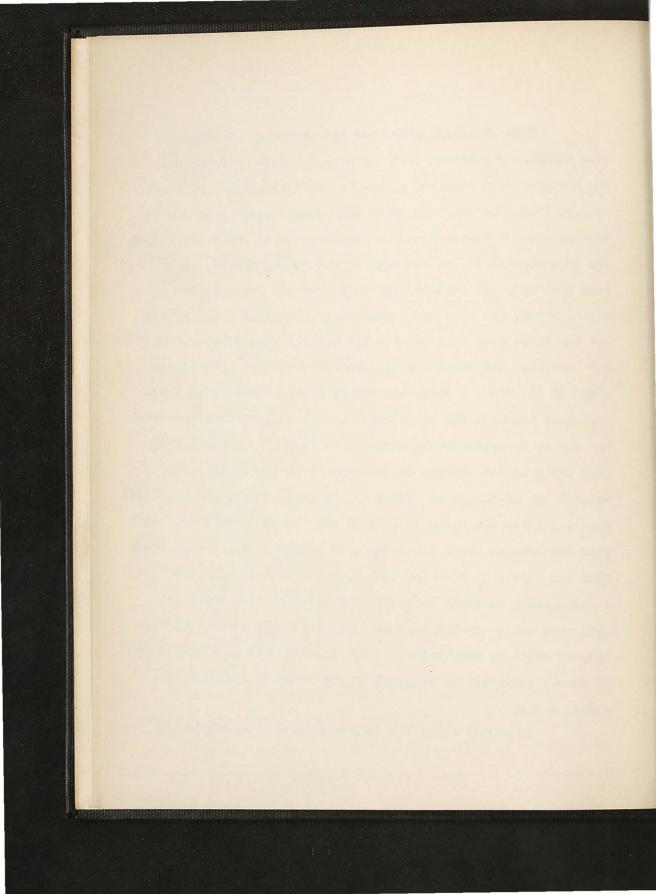
I have said so much now about the post of our merchant marine, that I think it prophtious to see what the present outlook is for the future?

The reat ar at first stigulated the demand for ships enormously. Our shipyards were crowded with work and every "old tub" as they were often called, could get a charter. Prior to the war, ships could be chartered for transatlantic service for one dollar a ton per month. After the war had been in progress a while, and before we had entered into it, this rate for service outside the war some was \$12.67 a tun per month and for service within the war zone, the charge was twenty to twenty-two dollars. In many cases it was difficult to set ships at these prices. Ships that were salable at sigty to eighty dollars a ton before the war, were easerly sought at \$500. It was not unusual for a ship to earn her cost on one voyage. Haturally these prices caused a lively demand for ships, old and new, but it soon became apparent that it could not be met by unaided private enterprise. The establishment of & ship Fard meant a heavy extenditure of capital, and besides no one knew how long the var would last and every ody knew that with the end of the war, the charter value of the ships yould instally drop. Naturally, private capital hesitated about entrity of so perilous an enterprise.

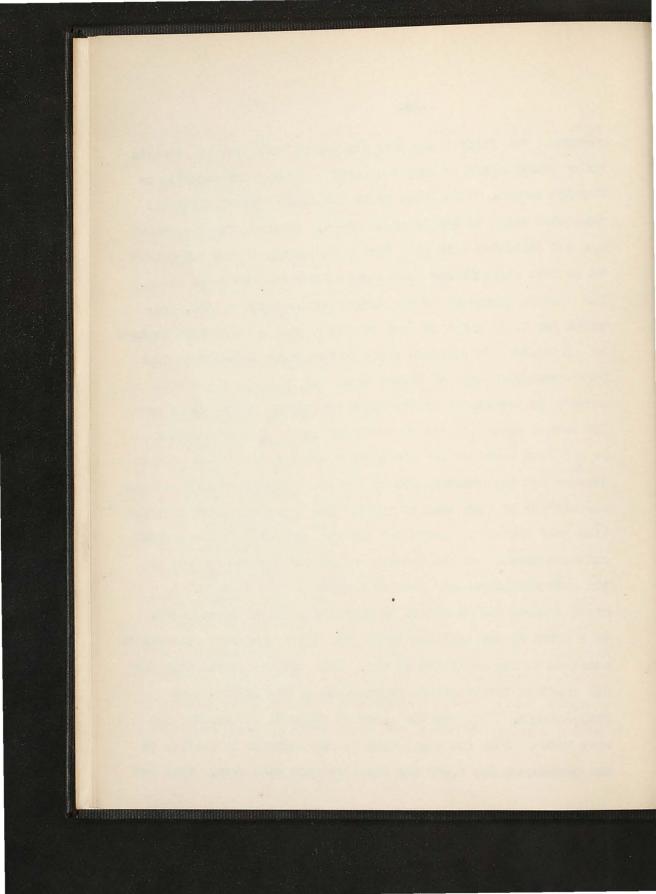


This situation attracted the attention of Congress even before our entrance into the war, but won entoring it, the creation of a merchant marine became imperative, and about October 1916, the Shipping Board was created with authority to crosto, develop and encourage a nerchant marine which would meet the requirements of the commerce of the United States. As we look back upon the work of this board, we sen grave faults in organization, and many mistakes, which could have been avoided had the board been able to give the subject more deliberation and thought. But under the circumstances and pressing conditions of the time, I think the board, partly composed of inexperionced members, did remarkable well in putting into operation the wheels of emipoulding industry on such a gigantic scale. Very early in the history of the beard came the controversy between the advocates of wooden and of steel ships, and upon this smoul, I think the whole bard came near to being weeked. In this controversy great interests were arrayed against each other. This was surely no time for squabbling, the question was to get a serviceable merchant marine in the quickest time possible. Like most notly contested public questions this controversy was finally ended by compromise. While the chief townage was to be of steel, considerable recognition was given to builders of wooden snips.

In August 1917, the Shipping Board made public its

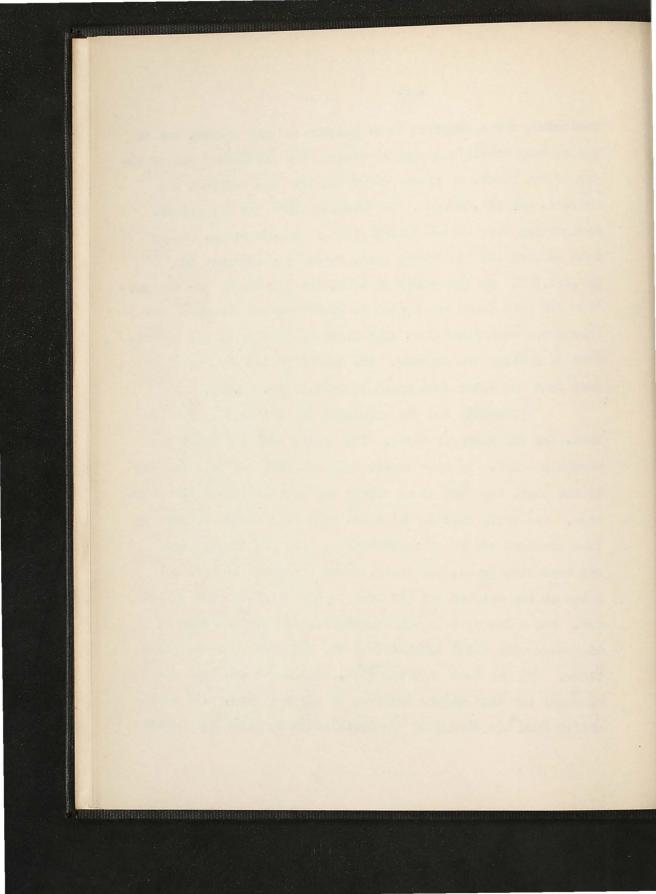


program. The first thing they did was to take over all vessels under construction in American yards - whether for domestic or foreign owners. This added about 1,500,000 tens of partially completed ships to the American fleet. However, the government was not satisfied with this feeble beginning, it was determined to go into shipbuilding on its own accord on a colossal scale. The program announced by the dowernment in October 1918, provided for 2,237 ships of wood or steel, with a doedwright tonnage of 13,218,890; 32 concrete ships (which never amounted to much in a commercial way) of 52,460 tons, and of ships which were already in process of construction in private yards, there were 399 with a gross tonnage of 2,826,000 tons. If for a moment we may look back and see the steps which the Government took to prepare for the construction of the great fleet, we will see the expenditure of vast suns of money. The Emergency Flect Corporation gave financial assistence for the expansion of the already existing yards, and established entirely new yards in many of the most advantageously located harbors of the country. I might go into slight detail in describing one of these yards. as I think it was destined to be one of the greatest achievements ascribed to the handiwork of man. This notable corporation was the American International Corporation at Hog Island, near Philadelphia. This was the greatest shippord the country has ever known. Upon its completion it was equipped to deliver to the Government two 7,500 ton steel ressals each week. This was



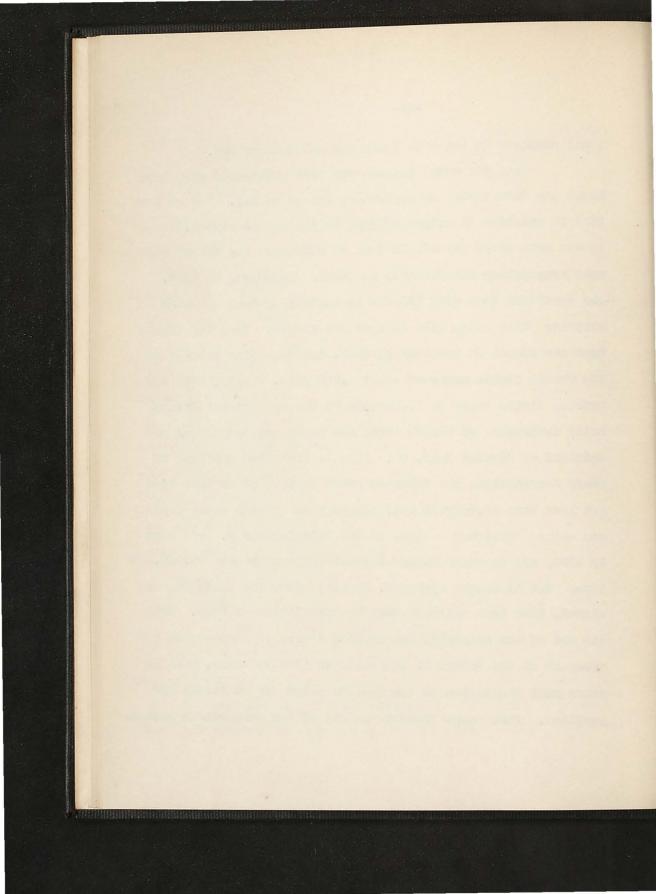
wonderful, for a shipport to be capable of such output, but it was costing prodigious same of money. The estimated cost of the Mog Island plant, as presented at the time the contract was awarded, was \$21,000,000. In November 1917, the Government, recognizing that at the moment speed in construction, rather than economy was the crying need, raised the estimate to \$27,000,000. By the summer of 1918, the demands of the corporation for more funds had become so insistent, and rumors of extravagance were spreading, that an investigation by the Department of Justice was ordered. The investigation drew out the fact that the total cost would be nearly \$65,000,000.

Land, the war suddenly ended. The crying need for ships was abruptly ended. At this moment only one ship had left the Hog Island ways, but this is an unfair way of considering the situation. The fifty ways in the yard, each held a ship in more or less advanced stages of construction. The preliminary cost had been vary great, but the yard was now ready to turn out ships at the rate of two per week as the original plan called for. The ships on the ways approaching completion could be dispensed with until completed at the leisurely race of peace times. And now that we have peace, whether we can find employment for this mighty business of shipbuilding, will depend wholly upon the wisdom of the legislation by which the nation



shall endoavor to build up again its merchant marine.

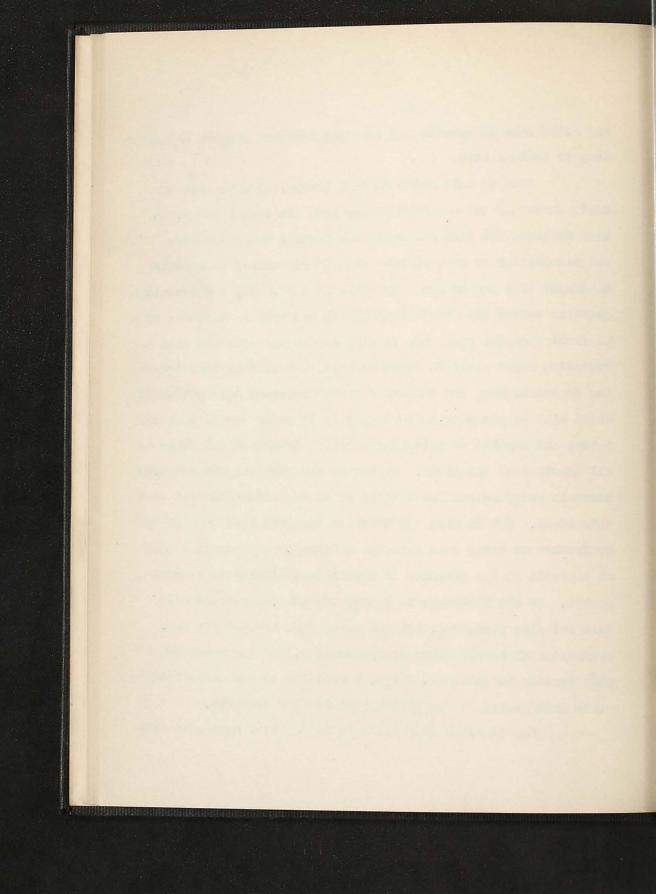
What the total tonnage was that eventually came from these war time yards, is impossible for me to say. But we know that in addition to ships building in the United States, contracts were given for 40,000 tons in China and for thirty veesels aggregating 246.763 tons in Japan. Moreover. in 1918. the President took over 700,000 approximately tons of Dutch shipping, then lying idle in American waters. When the Armistice was signed in November of 1918, the sea-going townage of the United States numbered about 1,500 ship, ranging from the humble, little trame of 1.500 tons to the magnificent German built Leviathan, of 54,000 tons, now being overhauled and remodelled at Newport News, Va. In all, including shipping of every description, the Shipping Board controlled at this time not less than 10,000,000 dead weight tons of high class deepsea ships. Chairman Jurley, of the Shipping Board, said that by 1920, the American Merchant Meet would aggregate 25,000,000 tons. But it became apparent, shortly after the Armistice was signed, that this estimate must be materially cut down. With the end of the necessity for sending troops to Europe came the prospect of the return of the soldiers already there, and the consequent slackening of the need of ships for munitions and supplies. Also peace brought the end of the submarine compaign,



and ships once in service had only the ordinary dangers of the deep to contend with.

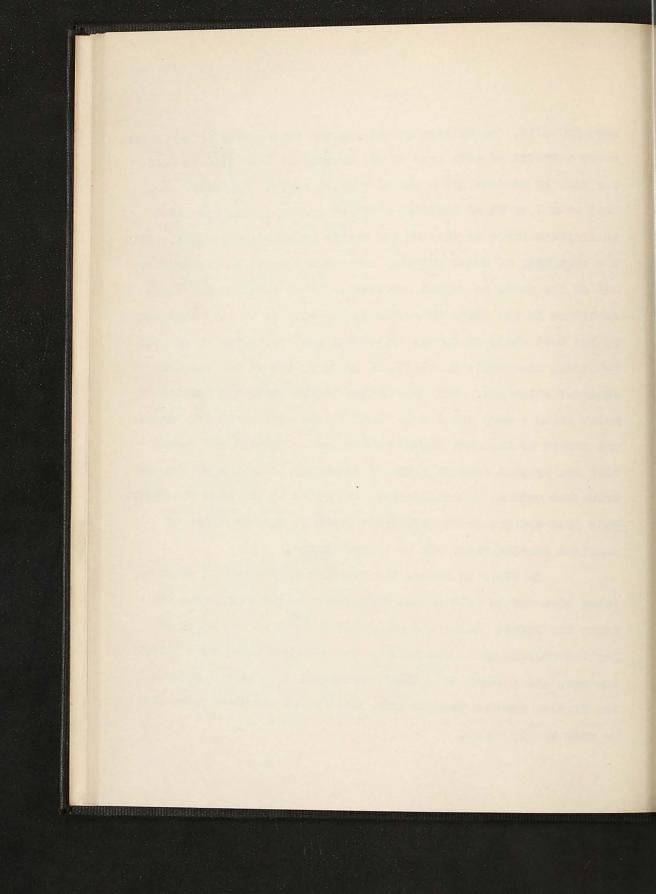
Down to this point in this thesis, we have made a hasty survey of the merchant marine from its very infancy, we have followed its rise and fall, and through the enigencies and necessities of war, we have seen it rise again to heights unthought of a decade ago. So well, so good, but, the momentous question before the American reople is not whether they are to be first upon the ses, no, we will say second upon the sea, conceding first place to Great Britain, but whether they are going to build, man, and operate a purely American merchant marine, which will be adequate to our needs in times of war as well as peace, and capable of extending American trade and influence to all quarters of the globe. So far as the building program goes there is every reason for confidence in the accomplishment of this ideal. But we must not overlook the fact that we will be confronted on every side with the difficulty of operating them at a profit in the presence of foreign competition in a world market. We are fortunate in having our coastwise trade and lake shipping protected, but the seven seas are open to all, regardless of creed, color or nationality, and the American ship trading to Yokahama, Natal, Harseilles or any other trading ports must compete in an open m rket for its freights.

Our American shir will, to begin with, have cost much



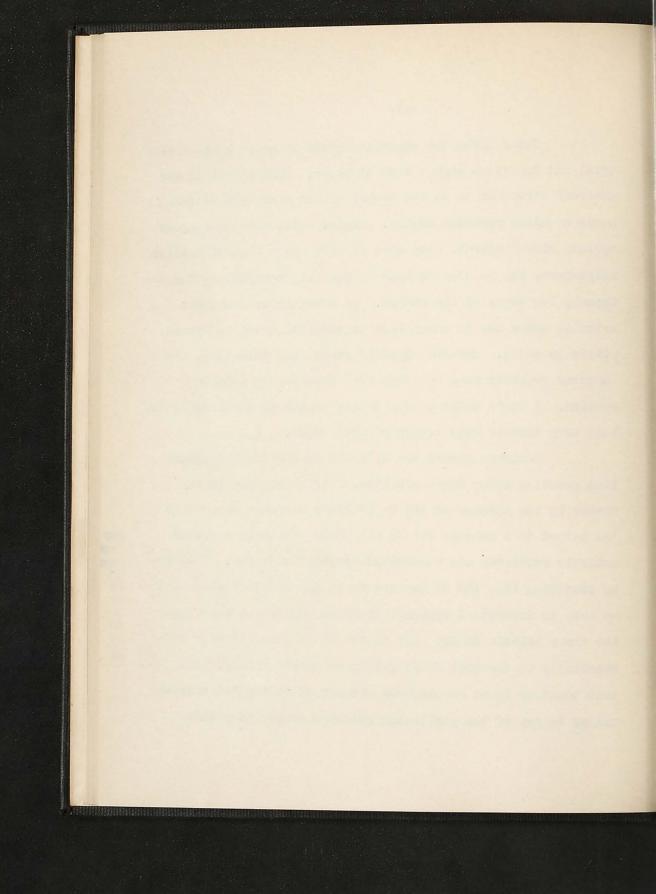
more to build. As matters now stand, the ships built in our yards, under pressure of war, cost on the average of from \$200 to \$246 per ton, as against 373 a ton in English yards. Remember, not, that when I speak of American mercuant marine I mean one built in American yards as well as one manned by American sailors. With the exception of Great Britain, and Germany which is termorarily out of the race, no nation has ever insisted upon both of these qualities in the ships under its registery. It is said that many of the best ships of Norway and Japan, only being two of our comretitors, were built on the Clyde or Pane, two of the world's cheapest shipyards. Only the United States force the problem of maintaining a deep sea fleet, built in the most expensive yards, and manned by the most highly paid seamen. We must not forget that the present cost of ships is based any largely upon the extravagant methods of construction compelled by war time necessity. This fact applies to En lish built ships as well as those of American construction, but to a less degree.

In times of peace, the superior efficiency of American labor goes far to make up the difference in the wage scale between the United states and England. I doubt if the wages of English workers will ever full to the standard maintained before the war, and I think it entirely probable, that in the future. the initial cost of wessels from British and American yards will be more nearly equal.



Chief among the operating costs of ships comes a very vital and important item - that of wages. Here is one of the greatest obstacles to be surmounted by the promoters of our neally acquired merchant marine. Japan, which alone among our serious rivals afloat, pays more for its ships than do British shipowners, but is able to make up for this handicap by the extremely low wages of its seamen. As a matter of fact, all oriental wages are in comparison to those of American seamen, pitifully small. England shrewdly recognizes this fact, and wherever possible mans her ship with Japanese or Chinese coolies. I don't think we can justly demand of American labor, that they compete with seamen of this grade.

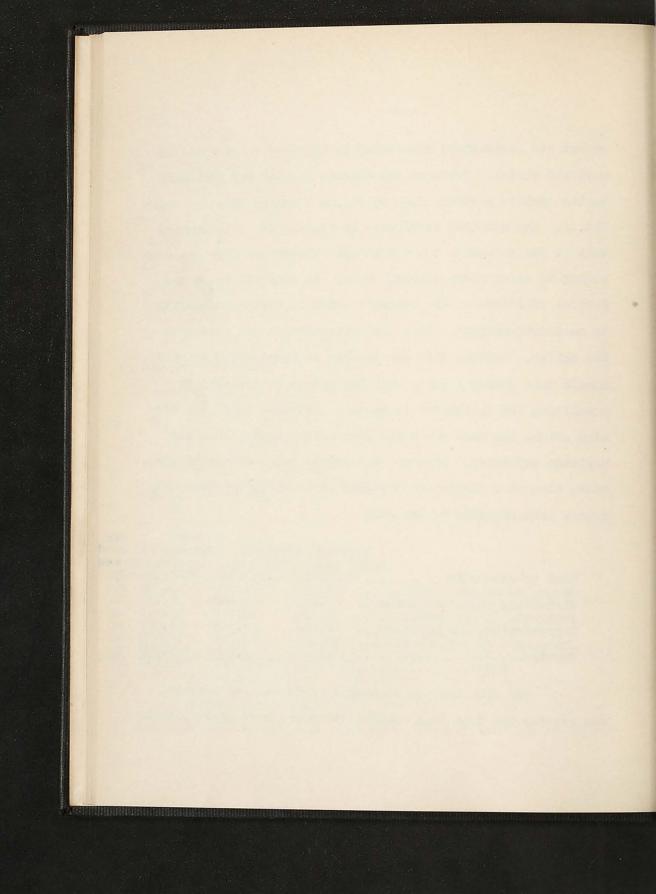
Congress seeing the ultimate outcome of the situation existing under these conditions, tried to come to the rescue by the passage of the La Follette Semman's Law. This law helped in a measure but is not large enough in scope to entirely eradicate the subject of competitive labor. This law by providing that 75% of the seamen on any American ship must be able to understand commands given in English bars 2t once the cheap static labor. But on the other hand, it adds substantially to the cost of operating an American ship. How this handicap is to be overcome without degrading the American sailor is one of the perplexing problems confronting ship-



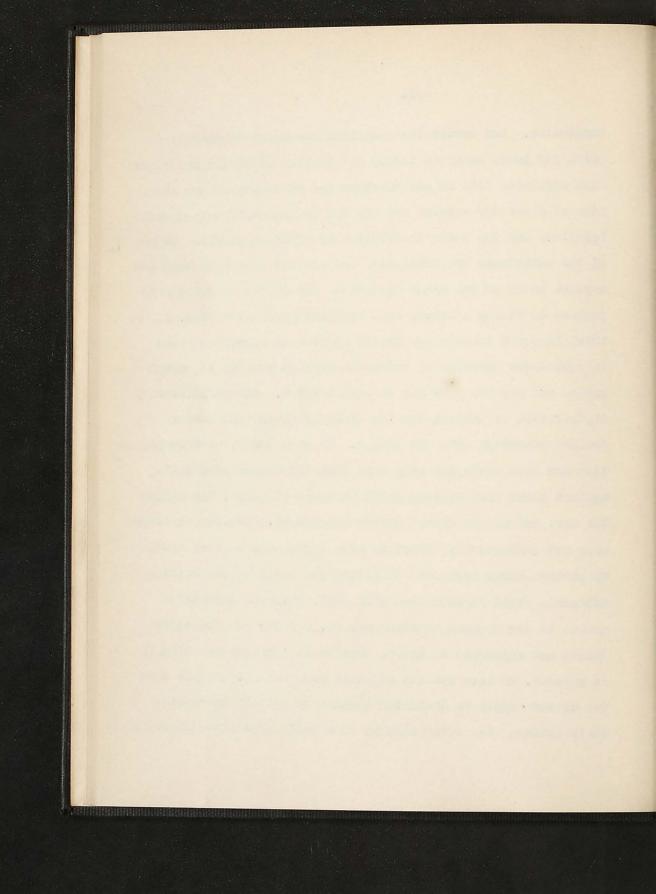
merchant Marine. Japanese and Chinese firemen and deckhands on the Pacific receive 8.00 to 011.00 a month; American about 44.00. How can this difference be equalized? I understand that on the Atlantic, the magnificent liners are more and more coming to carry cheap Adiatic crews. At present, there are several officials of the seamen's union in Europe endeavoring to make international rules for anclioriating the condition of the sailor. Whether this can be done is exceedingly doubtful. Should this endeavor fail, only the action of Congress in equalizing the difference in wages on American chips and forcign ships, can save our ships from defeat in the race for maritime supremacy. Here we will notice are a few statistics, which show at a glance the handicap under which American ship owners labored prior to the war:

British American. Expense of	Fer
	cesi
Cost of stermship	56
lates, crew, yer annum 20,421 37,410 16,989	83
Victualing crew, per annum 9,490 11,862 2,378	25
Interest. 55 per annum. 38,858 60,608 21,750	56
Depreciation, 5, per mnum 32,382 50,507 18,125	56
Insurance, 3, per annum 19,429 30,304 10,875	56
Repairs 12,000 14,400 2,400	20
Total	54.

One with only an elementary knowledge of business can readily the fact that competition under such conditions is



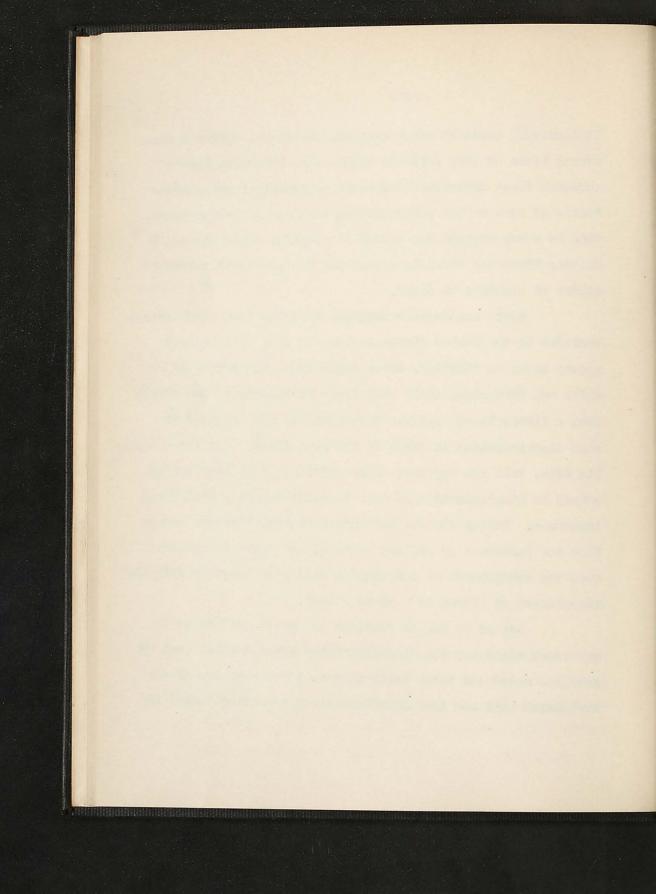
impossible. And beside the immediate advantage of cheaper ships and lower seamon's wages, the Inglish shipowner had other Post effective aids in his struggle for supremey of the seas. Some of these are natural and are due to Ingland's geographical location, and can never be overcome by aspiring rivals. Other of the auvantages are artificial and are the result of long and car ful study of the trade situation, and of the advantages to England in having a large, well equipped merchant marine. I think it would behave any nation seeking an honorable place in world-wide commerce to study the English methods of organization and see how they can be best adopted. The world wide distribution of British coaling stations gives that country a decided advantage over all rivals. In some cases, discrimnation has been shown. Not only were discriminations practiced against other than British ships in times of peace, but during the war, before the United States entered it, American captains were not infrequently forced to sign agreements against trading to certain ports suspected of aiding the enemy before British officials would furnish them with coal. This is certainly a menace to our present merchant marine, and for our continued growth and expansion in trade, must be in some way remedied. At present, we have but few colonial possessions, and the temper of our people is decidedly aminst materially increasing their number. The establishment of a chain of coaling stations



in territory owned by other nations, obviously, offers perils during times of war, while to create them before we have a merchant fleet demanding them vould be foresight not charactistic of some of the Congressional sessions of recent years. This in a way reminds one of the old saying, "when it wasn't raining there was nouse in fixing the roof, when it rained of course it couldn't be done".

There was another obstacle that wan to a large extent overcome by the United States during the war. The English agency known as "Lloyds", which establishes the rating of ships and determines their worthiness of insurance, has always been a distinctively British organization, not supposed to show discrimination in favor of the home fleet. But from authentic data, from the earliest days, American ships have had to submit to discriminative rulings in order to get a rating and insurance. During the war the United States, however, undertook the insurance of its own vessels, and there is no doubt that the continuance of this system will make American shipping independent of Lloyds to a great extent.

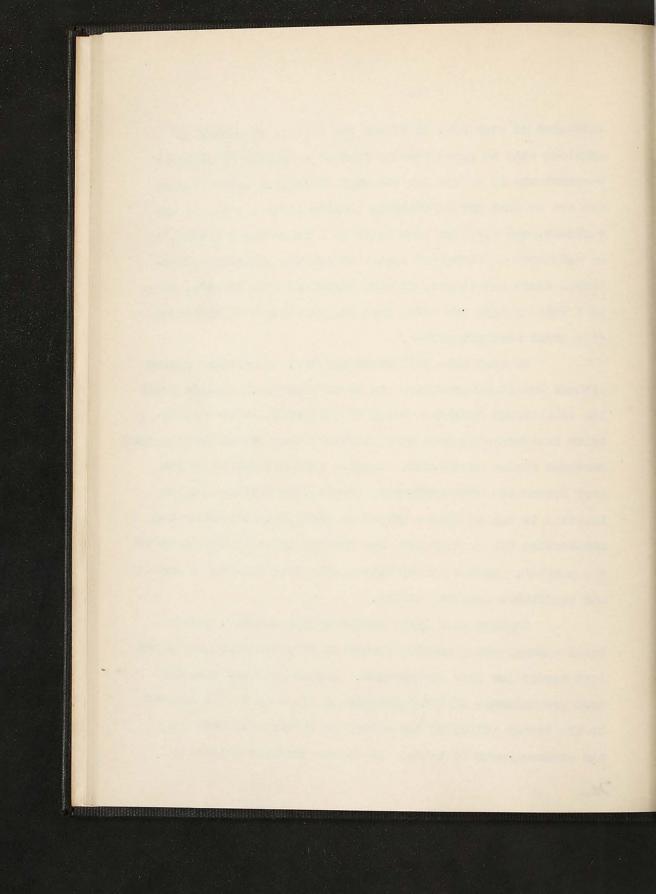
But if we are to overcome by government aid or in any conceivable way the disparity between the initial cost of American ships and those built abroad, if by revision of our navigation laws and the establichment of subsidies, which is



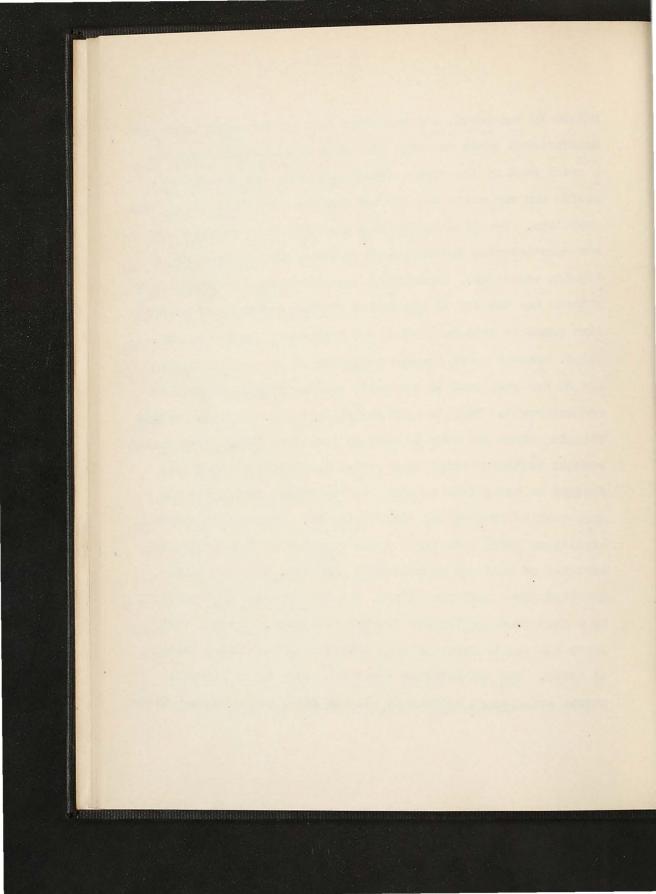
discussed so much now, we reduce the cost of operating an american ship to approximately that of a British or Japanese merchantman; if we can get the mind of America turned toward the sea so that our capitalists look to it as a place of investment, and our boys look to it as a place for a career, if we establish an elaborate system of coaling stations as mentioned above and thereby freeing ourselves from bloyd's, there will still remain one vital need for the proper maintainence of a great merchant marine.

We must have sufficient cargoes. A merchant marine without loaded bottoms each way is unthinkable. At this point the established American Policy of protection to home industries intervenes to make more difficult the wourkof keeping our merchant marine prosperous. Despite such mitigation as the last Democratic administration affected, the national policy is still to buy as little abroad as possible; to produce and manufacture all we need for home consumption and then to export the surplus. Such a policy will hardly ever make for a healthy and profitable merchant marine.

England is a great manufacturing country, a free trade country and a country forced to import nearly all of the food needed for home consumption. Beyond question the cormous predominance of Great Britain on the seas is due as much to the fiscal policy of the nation as to specific acts for the encouragement of trade. It is the groatest exporting

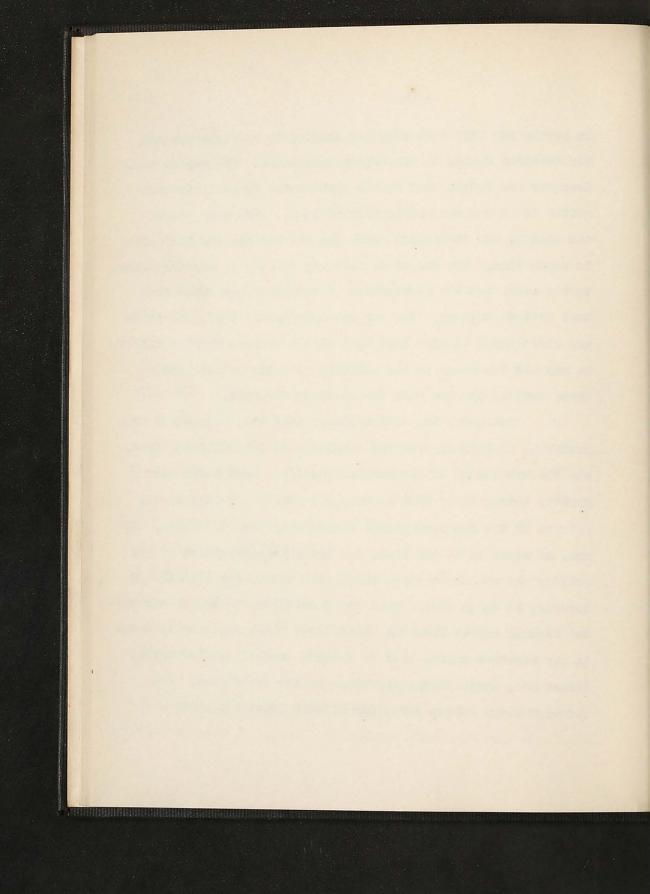


n tion in the ord, and the ships that go out neavy laden with manufactured goods and with coal with which Britain supplies a creat part of the world, bring back great cargoes of foodstuffs and raw materials for the English people and the English factories. Our financial policy has endeavored to build up our manufacturing industries by shutting out the products of foreign countries. Accordingly during the half centurey which witness the ecline of the United States merchant marine, maritime commerce with our nation was a somewhat juggled affair. Thirs, usually under foreign flags for we had ceased to have any of our own, came to our ports seeking cargoes of food or raw materials. They brought in little to us. Indeed, foreign shipping firms had come to rely so little on income from western voyages that many ships came across in ballast or took such freight as you d find a market in the United States for the mere coat of loading and discharging it. Ingland by natural conditions make her a great importer of foodstuffs and exporter of coal and manufactured products, held the ideal location for a maritime nation, and strengthened that position by a tree trade policy and liberal subsidies. Gomen's forty years ago was in much the same position as the United States of today. But nor merchant floot was built up by liberal, almost extravagant government aid and developed an export trade



for reaching system of Government assistance. The German manufacturer was tability that it was worth while to sell his goods abroad for a smaller profit than at home. When this lesson was heeded, the Government found him the markets and the ship to reach them. The result of this was the second merchant fleet on the seas, and the development of German export trade that kept England nervous. The war has changed all that, and if we are vise enough to give some heed to the lessons Germany taught, we may win the place in the commerce of mations which she threw away in the mad race for military compact.

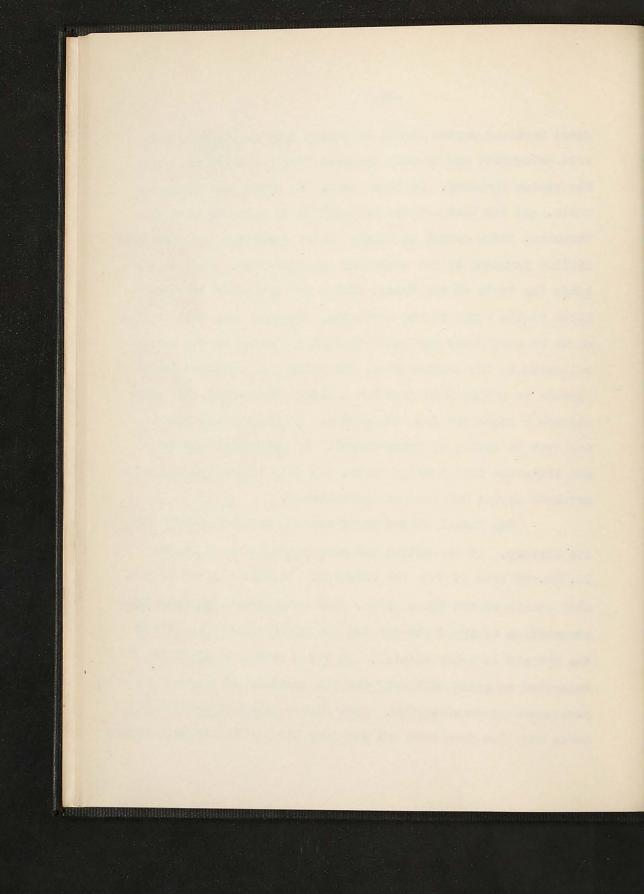
Primarily the nation itself must be convinced of the profit to be derived from the extension of international trade, and the upbuilding of our merchant marine. When there were greater things to be done ashore, the active and adventurous spirits of the American people turned away from the ocean. If now, as soons to be the case, the internal avalogment of our country has reached a stage which will enable our captains of industry to again look abroad for profitable fields, we may hope and rightly expect that the limitations which now seem to hedge in our merchant marine will be wrought asunder and the United States will again resume its place on the seven seas. One



great merchant merine should be looked upon as purely a private enterprise and as such debarred from receiving aid from the public trasury. To begin with, the ships will carry the mails, and for that service is entitled to payments from the treasury, which cannot be justly called subsidies any more than similar payments to the railroads are subsidies. Also it extends the trade of the United States and opens far off sections of the world to our merchants. In some way, this service might be considered analogous to that performed by our racific railroads in the earlier days, for which they received large grants of public land from the National Covernment, and considerable donations from the states. No progressive nation can ever be wholly self-sufficient. It must carry its trade and influence into foreign parts, and only through an adequate merchant marine can this be accomplished.

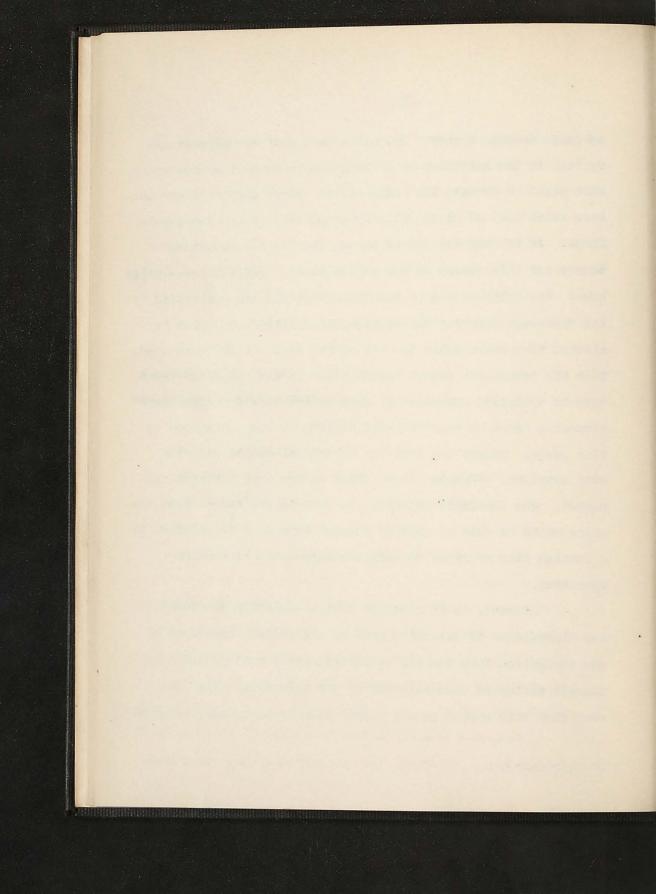
The United States today faces a critical moment in its history. It has afloat and nearly complete at least 20,000,000 tons of deep sea shipping. We have a great body of able seamen to man these ships. Our country has the industrial communities equipped for turning out goods of every sort for the merkets of every country. In other words, we might be described as being "all set" for the creation of a great and prosperous merchant marine. What are we going to do with it?

Scrap it? Let them rust and rot away tied up in the back waters



of some secluded harbor? Or, shall we use it to the best advantage in the maintainance of American power on the high seas? What shall We do With the ships built? Their initial coat has been trice that of ships built by competitors under foreign flags. It is easy and proper enough for the Government to charge off this excess of war expenditures. But then what do we have? The ships belong to the Covernment and are controlled by the Emergency Shipping Corporation, the existence of which terminated five years after the end of the war. It has been arged that the Government should retain title to the ships and lease them to operating companies at such moderate prices that these companies would be able to purchase them at the expiration of five years. Others say that the dovernment should sell the ship outright, at prices to be fixed in the open international merket. The immediate objection to this is the danger that the ships might be sold at once to foreign buyers or translared to a foreign flag in order to gain the advantages of charger operation.

Indeed, it is probable that a condition precedent to any disposition of our ships must be the radical aroundment of our nevigation laws and threestablishment of a fixed and continuous policy of encouragement to ar shipping. Now, just what form this encouragement should take is the Pazzle Congress

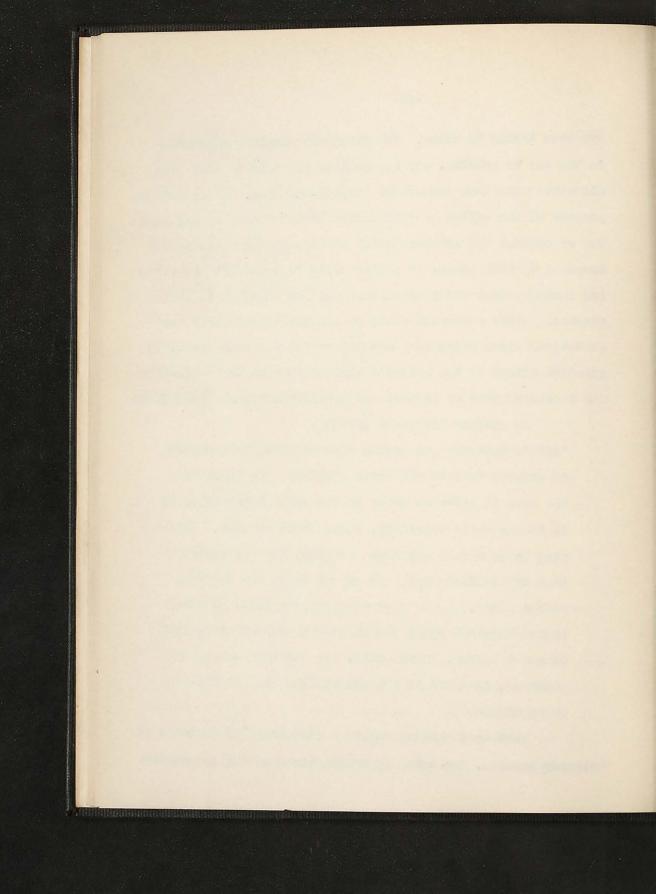


has been trying to solve. The plan most commonly advocated is the one of subsidy, and it seems in the main to have been effective with both German and English shipping. It is not the purpose of the writer of this thesis to make of it an argument for or against the subsidy system of encouraging maritime enterprise by this means, he merely tries to bring out the striking facts as they exist unpolished and non partisan in every respect. After a careful study of the situation and of the conditions under which our merchant marine has come about, the question arises in the writer's mind whether it is practicable and necessary that we support our merchant marine by subsidies?

In quoting Tresident Harding:

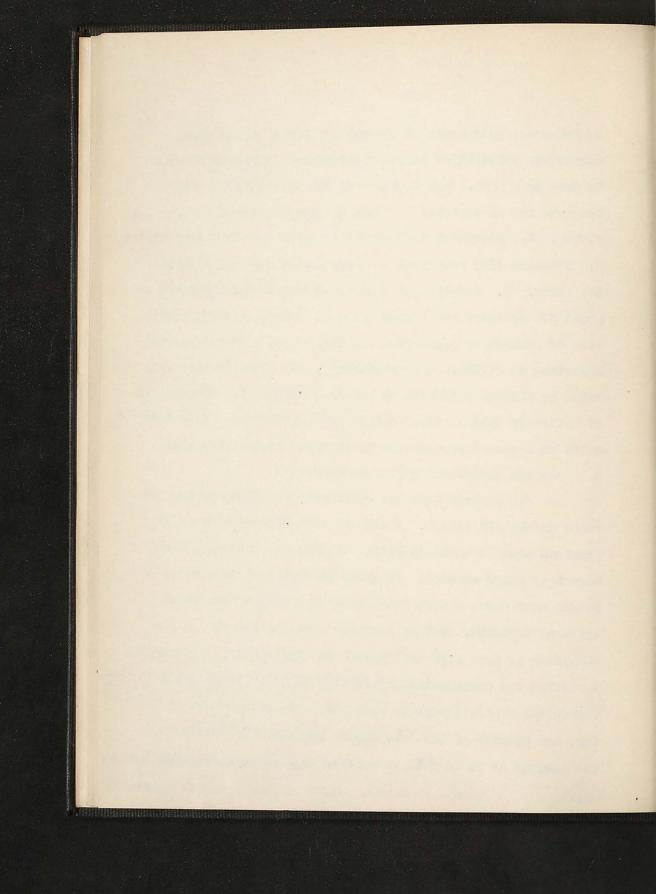
"Nobody pretends any longer that shipping is a matter of concern only to the ports involved. Commerce on the seas is quite as vital to the great interior as it is to our coast territory, east, south or west. Shipping is no more a sectional interest than is agriculture or manufacturing. No one of those can be prosperous alone.... We need a favoring spirit, an anakening of American price and an avowed determination that we should become, in the main, the carriers of our own commerce, in spite of all competition and all discouragements."

President Harding called a conference of a number of shipping experts, including representatives of the Department



of Companies, professors of Boonomy Officials of Steamship
Companies, authorities on shipbuilding and admiralty lawyers
to draw up a plan. The features of the bill offered before
Congress are as follows: 1. Sale of Shipping Board vessels and
plants. 2. Amendment of Mavigations lanes of the United States.
5. Creation of a loan fund of \$125,000,000 for building of
new ships. 4. Creation of a merchant marine nevel reserve of
about 500 officers and 20,000 men. 5. Compulsory transportation of government passengers and freight on American vessels
amounting to \$7,384,000 approximately. 6. Preferential rull
rates on through shipments in American ships. 7. Cooperation
of railroads with American ships, and a preference in freight
retes on merchandise exported or imported in American ships.
8. American control of marine insurance.

pa ed direct aid are: 1. A kind of differential payment to
American vessels based on speed, mileage gross tonnage and
amount of cargo carried. In order to receive this subsidy a
vessel must carry a crew two-thirds of which, exclusive of
licensed officers, must be american citizens and the entire
remainder of crew must be eligible to citizenship. All vessels
receiving the compensation or subsidy must have been built in
the United States except in case where the ship was built before the passage of the law, and is now owned by Americans.
The subsidy is to be paid to vessels engaged in furthering the

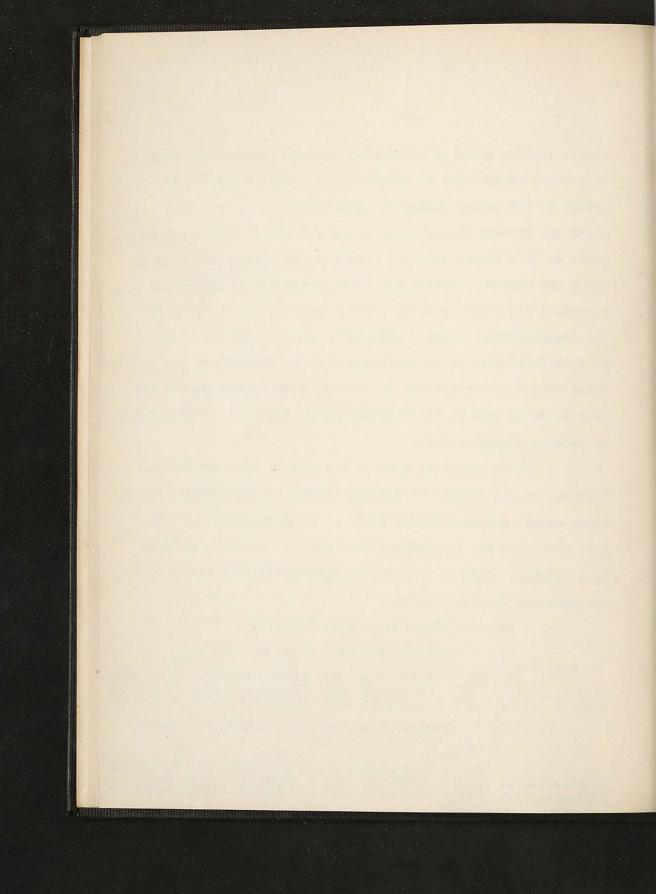


direct foreign trade of the United States. Vessels engaged in "triangular trade" will be allowed compensation provided they return to the United States at least once a year. The bill makes the payment of communation conditional on such requirements as will insure that all direct sid is paid to the vessels which are directly helping the trade of the United States and promoting its future safety. Also if any ship shall not need the compensation, it shall return it. The construction fund of \$125,000,000 is to be created out of the receipts of the board except appropriations and profits from operation, and the fund is to be used in the building of new ships or reconditioning of vessels already built.

It is suggested that 10 per cent of the cuntoms collections on all imports be diverted into a special fund to be known as the Merchant Marine Fund, to be administered by the Shipping Board for the purpose of paying compensation to American vessels. This is to apply to merchandise imported in both American and foreign vessels.

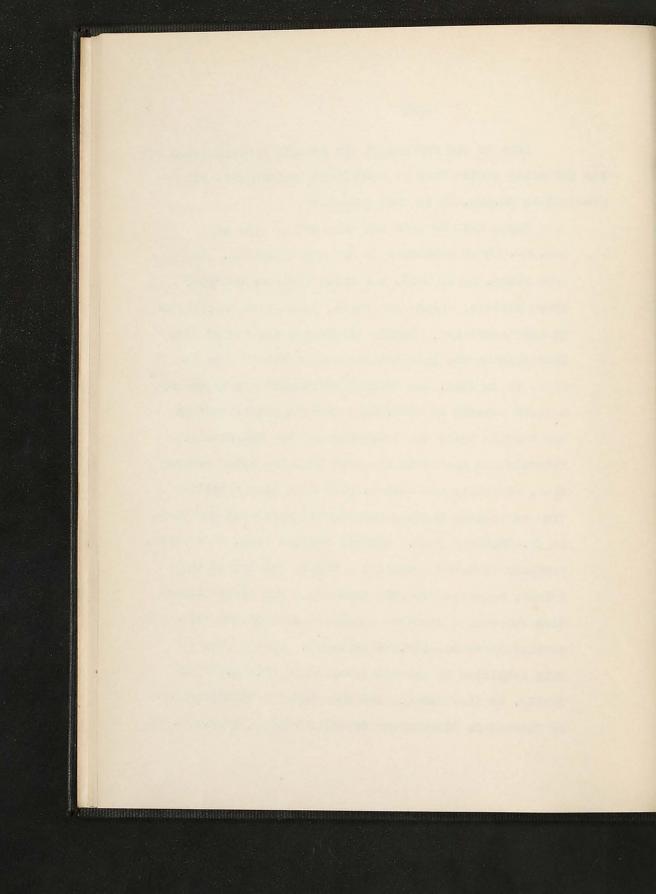
American Shipping on June 30, 1982.

auly 1 -	Private ownership (500 tons and over).
	Ho. Gross tons. No. Gross tons. No. Gross tons 1.032 4.195,206 893 1.045,424 1.925 5.240.630 1.075 4.640.345 858 1.023,978 1.933 5.664.322
	United States shipping Board (1,000 gross tons and over).



fome of the friends of the subsidy measure bring out the following facts: that in 1890 Great Britain raid out approximately 4,405,000 in ship subsidies.

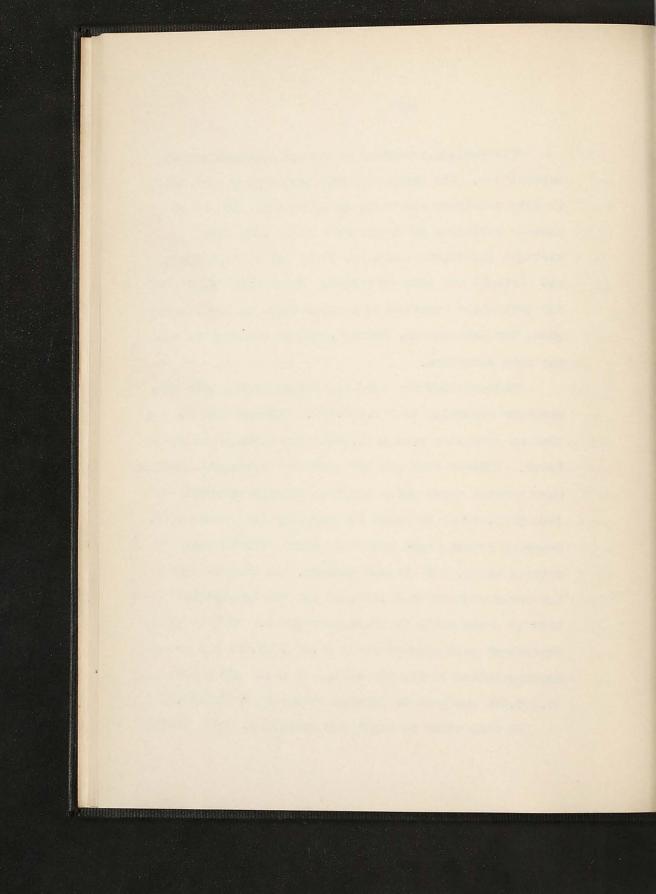
"From 1840 to 1900 the same notion reid out 45,000,000 in subsidies to her scena vessels. In 1909 alone, it is said, the three maritime nations, Great Britain, France and Japan, paid about 147,000,000 to ship subsidios. Partly to or went the Cunard Line from joining the International Mercantile Marine in 1912, it is said, the British Government agreed to pay a fixed subsidy of 3750,000 a year on condition that the company build the Lusitania and the Mauretania. Attention is called to the fact that the total subvention, admiralty and postal, paid to a single British line of vessels sailing between Liverpool and New York, is 2,000,000 a year. Another British line, it is said, receives \$306,000 smually; a third, sailing to the Orient, receives \$720,000 annually. One line of Canadian steemships receives a subsidy of \$225,000 amountly; another receives \$200,000 annually. Canada pays in ship subsidies of various sorts about 92,000,000 annually, it is claimed. The net patal subventions paid by Ingland to its various services amount to 2,500,000.



The various provinces of Australia grant postal subventions. The Union of Bouth Africa pays 3850,000 in ship subsidies amuslly, it is stated. The total postage subsidies of Prance ever since 1869 have averaged \$5,000,000 annually, it is said. Both Spain and Portugal pay ship subsidies. Japan paid \$6,826,000 for navigation bounties of various sorte in 1911. Belgium, the Metherlands, Dermark, Norway and Sweden, all pay ship subsidies.

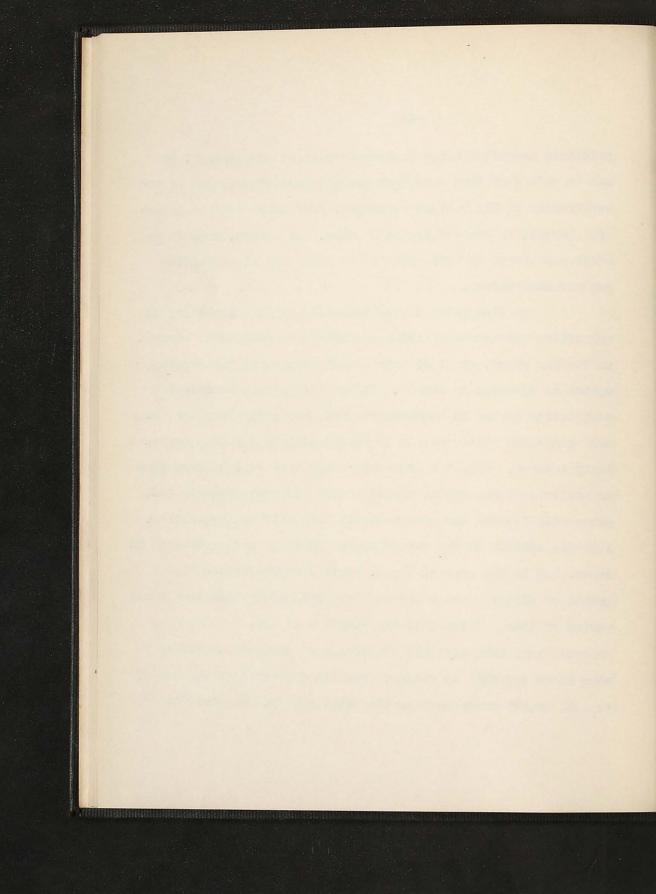
"Between 1847 and 1858 the United States paid subventions amounting to \$14,400,000. Petween 1858 and 1866 no subsidies were paid, only sea postage use altimed. Between 1864 and 1891 various postal aid laws were emacted under which American vessels received from \$250,000 to \$500,000 for carrying the ocean mails. Humarous efforts have been made since 1899 to pass subsidy hills, but without success. In 1915 it cont the Government about \$1,000,000 for the transportation of ocean mails in American vessels. In 1922 the Government paid approximately \$6,000,000 for the transportation of foreign mails, of which sum about \$2,500,000 was paid to foreign steamship companies."

At this point we might ask ourselves, what general



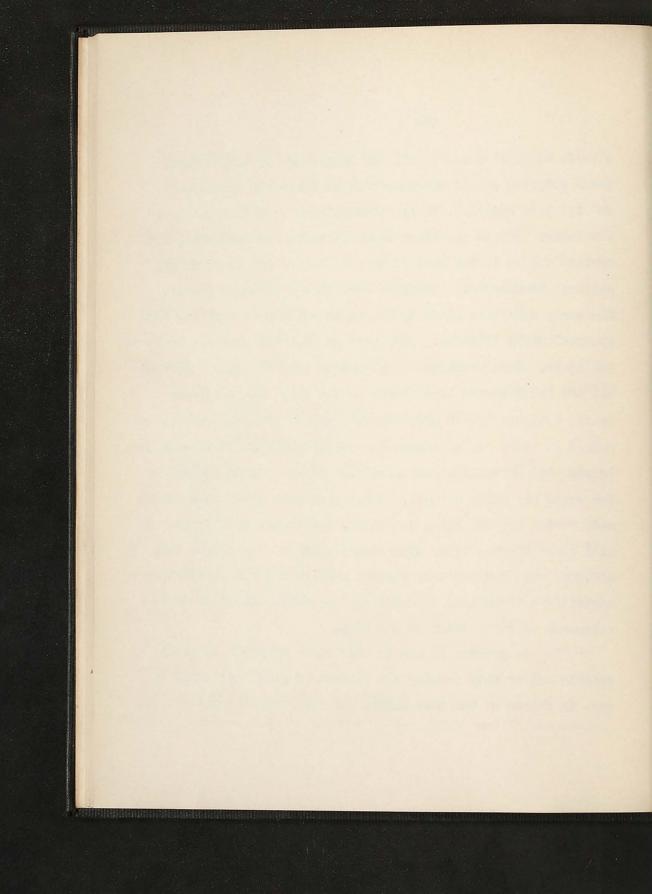
principle underlies these various subsidies? In general, it can be said that they have been granted when it appeared to the Governments of the various countries, that they would be of ceneral benefit to the country as a whole. Of course, this by no means guarantees us that this is the ideal way of perfecting our merchant marine.

In discussing the advisability of immivisability of supporting our merchant marine by guthing an edditional burden on the tax payer, we might make a bacty roview of the aubeidy system as operated in France. It is difficult to discuss the complicated system of construction and navigation boundles and mail contracts which grew up in Evence without becoming exceedingly tedious. But, the greatest lesson that we can learn from an analysis of the Fronch subsidy policy is that economic and geographic factors are more powerful than national treasuries. A policy similar to the one of France produced marked results in Japan, but in the case of Japan, basic factors favored the growth of shipping and a remerkable growth took place in a short period of time. After all, the question is not, Do sabsidies succeed? but, what conditions have caused them to succeed in some cases and feil in others. The big problem in this country is not, Should Congress pass the subsidy bild, but would the



subsidy bill, if racsed, help our ship ingy lif this country needs shipping and if economic factors favor its development, we will have shipping, it is bound to come eventually without a subsidy. If, on the other and, economic considerations are against as, as in the case of France, all of the power of our national treasury will scarcely deflect one economic factor. The early subsidies given by the United States to suipping were unquestionably failures. They were against the economic trend of the times. Hore profitable employments were at hand, and capital and labor turned their backs on the was. The first act really designed to aid shipping with direct financial grants was passed in 1845. It impowered the Postmaster General to make contracts with steamships companies for either a fixed subsidy or for rates per ounce of mail. There were many other such grants made during the following ten years, but it has been estimated that these first subsidy experiments cost the tax payers 344. 500,000, with fer tangible results to show for the expenditure certainly a large sum, considering the wealth and state of development of the country at the time.

Britain and of this country are carried at rates not much, if any, in excess of the open market for such valuable matter. It



is folly then, that Great Britain is heavily subsidizing its shipping today through mail payments, just as it is idle to say that we were subsidizing our shipping in the same manner. On the other hand, it is perfectly plain that this country was subsidizing its war-acquired towage to the extent of \$55,000,000 a year and the tendency was towards an increase.

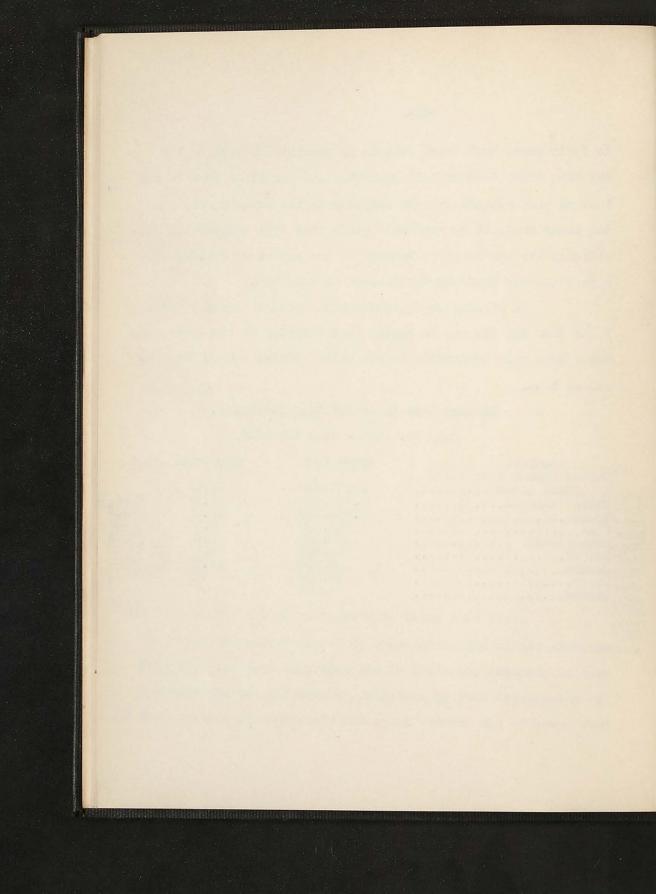
In viewing the question from another angle, I think I can take the liberty of saying that allipping on the whole, has never been very profitable to the United States over a long period of time.

Tonnage Laid up of Maritime Countries.

June 30, 1921 - June 30, 1923.

Country. United States (excluding	moss tons	Per cent.
Great Lakes)	5,762,205	33.9
United Kingdom	1,600,000	7.8
France	1,200,000	31.2
Italy	520,000	12.5
Norway	112,000	4.0
Greece	100,000	14.0
Jan 111	79.000	2,2
Sweden	7,132	*7

There were times of prosperity in the days of the old Merchant marine but these years of plenty fluctuated with the general economic condition of the countries trading. Shipping is an in-en-out sort of business. During the war shipowners made somey by the barroll full, but the ordinary, average year is



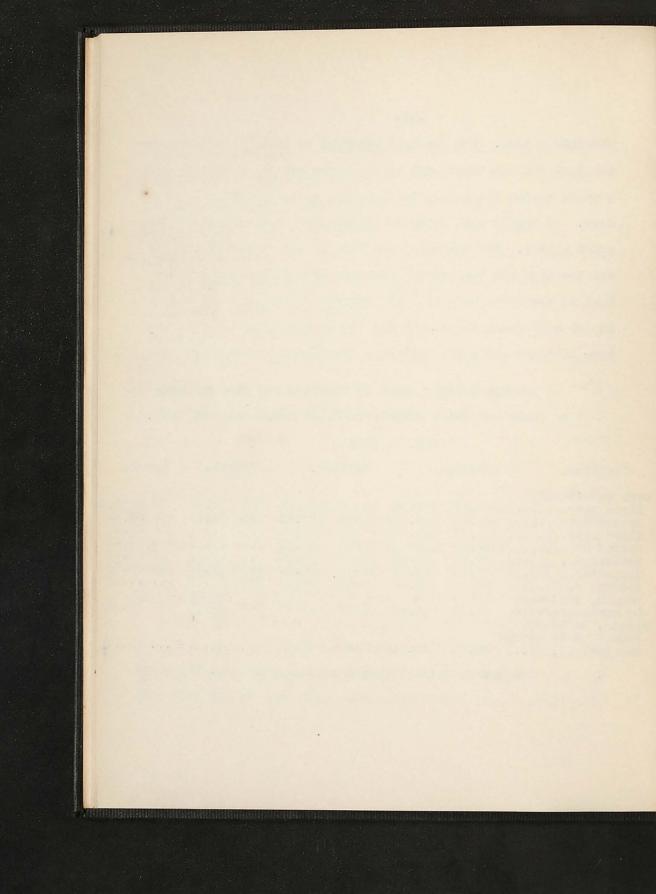
moderately lean. The American standard of living is so high today that few Americans want to be seemen except in time of war;
outside of the fishermen, the boys who go to sea do so in the '
navy. We hardly have officers enough for a moderate sized merchant marine. Our American home life is too attractive, wages
are too high and the general standard of living so much above
that of the foreigner, that the support of the merchant marine
is not sufficient inducement for the American boy to break the
home ties and set sail, seeking a livelihood on the briny deep.

Average Monthly Wages of American and Foreign Seamen on Steam and Motor Vessels of 5,000 Cross Tons and Over.

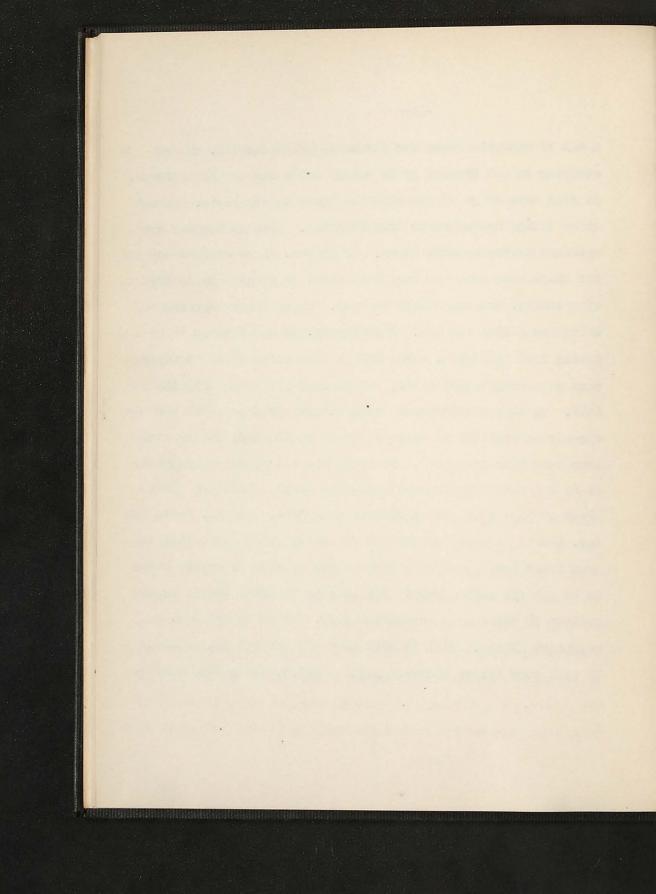
(Jan. 1, 1922)

Position.	America	ın.	Briti	sh.	Fre	nch.	Dut	ch.
Deck department: First mate Second matel Third mate Fourtn mate Boatswain Carpenter Seaman. A. B	163.55 141.25 125.00 67.50 71.88	151.00	21-15	\$121.66 105.84 85.16 82.75 65.70 80.30 58.40	365 370 370 370 330	374.31 71.41 71.41 63.69	216 153 108 145 150	\$115.78 86.83 61.51 43.42 58.29 60.30
Seaman, ordinary, 24 months service.		52.50	8-10	41.87	300	57.90	75	30.15
Seaman, ordinary, less than 24 month service	A C T A	52,50	7-10	36.50	* * *			

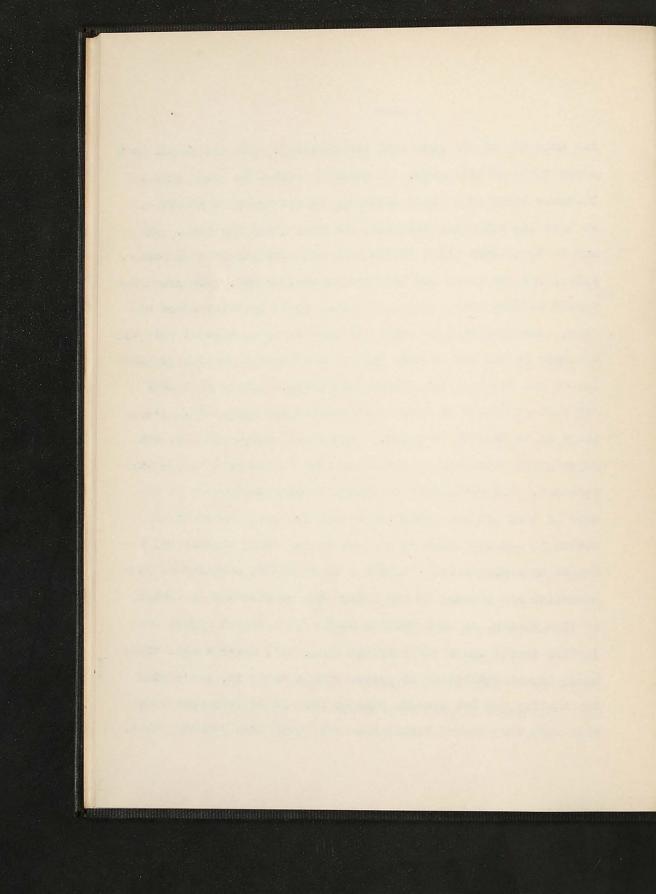
The have a white elephant on our hands now, the Shipping Board Fleat. What can be done with it? We are much like



a man of moderate means who purchases an automobile, seldom stopping to ask himself if he really needs one in his business. He just trys to go on and find the money to buy tires, gas and other things necessary to keep it going. This is the way our merchant marine appears to me. Of course, if we could translate our ships back into the cash they cost, we would jume up the opportunity, but this can't be done. These ships were our salvation during the way. Whenever we had goods going to or coming from countries, there were always ships ready to carry them on a competitive basis. Rates were high when shipping was dull. We were producers of goods and we hired some one else as cheaply as possible to deliver our goods and have in our goods when they were securable. To bring the situation claser home, it is the same problem every prouncer faces. Shall be own a truck or hire one? If we find it onceper to own one, let's own one, but it it costs so much to run an morione ship, that we must break the tax payer's back to pay a bonus to do it, where do we get off with a gain? The subsidy is not a temporary expedient to build up a merchant marine, but if undertaken, a permanent policy. Will it work smoothly and thout scandal? Or will some future Congress catca a shipowner in some trifle.



and undo all of the good work accomplished. And all of the good money spent at this risk. No sensible person is going into business based on a bonus which may be withdrawn at any time. Te have the ships and have paid our good money for them. It may be that there still remain some not worth keeping at any price, but the fleet has been pretty well promed. The remainder should be kept until we can sell them to be operated under our flag. Just now this is very difficult for two reasons: shipping business in bad and we have not yet devoloped a sufficient number of men the know the chipping business. The subsidy will not correct either of these difficulties but time will. If there is no freight to carry, a bonus will not create it, and experienced operators of ships can come only as men scutire experience. The plain fact is that the ships are better at anchor if they are not wanted, and when they are wanted it is better to charter those we now own to Americana without any interest or depreciation - taking a share of net earnings as conpensation and leaving to the future the question of new ships. As time passes, it will develop whether a merchant marine can justify itself under the American flag. If, after a fair trial under normal conditions it proves unable to do it. let's hire our hauling and let someone else do it. It is very true that they were very useful during the war, those that were completed,

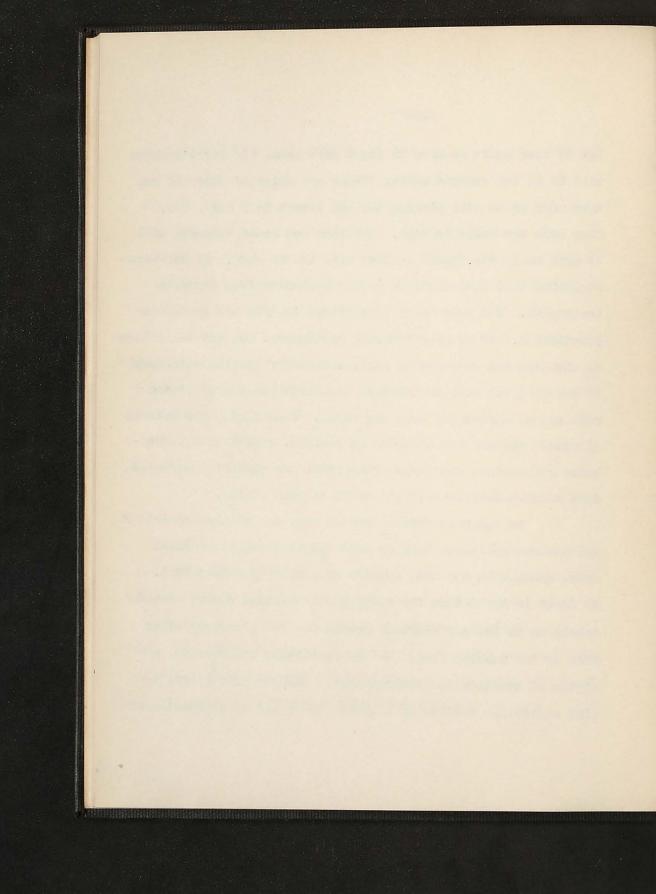


but if ever again we have to fight over seas, the world's ships will be at our command again. These new ships of ours did not have much to do with winning the war except in a moral way.

They were not built in time. Our lake and coast steamers will be with us in the future as they were in the past. It has been suggested that they could be easily converted into commerce destroyers. But this large expenditure in this way is hardly practicable. If we need commerce destroyers, may not build them as warships and our turn as such, instead of fooling ourselves by spending big sums to maintain makeshift vessels of little real use as destroyers when war comes. Then again, the methods of modern warfare are changing so rapidly, that from a commonsense standpoint, any large expenditure for ships of unspecialized construction, appears to me to be very unwine.

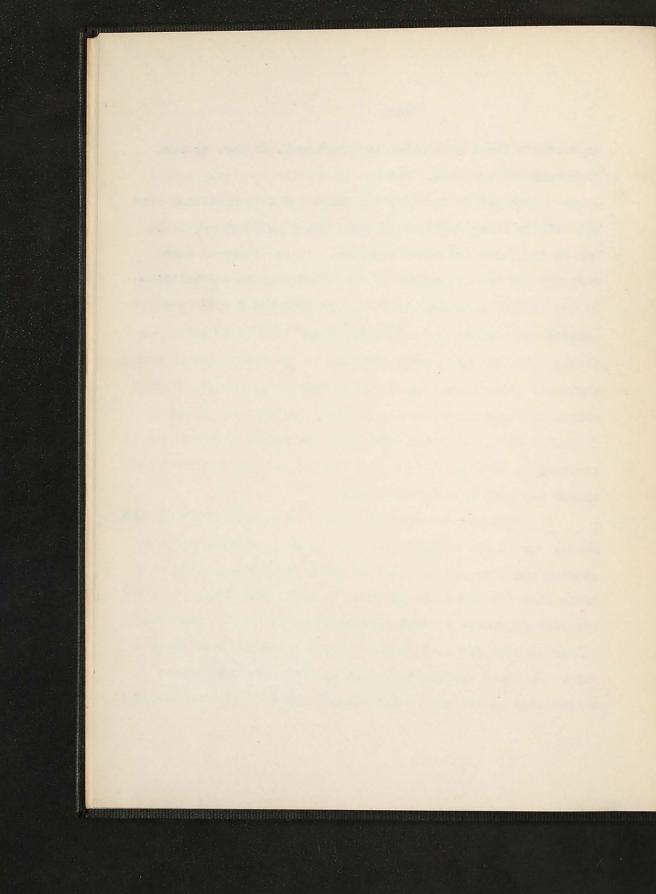
and hottest political battles ever fought under the capital dome, ended when the ship subsidy will went down to defeat.

Ho doubt in the future the country will witness a very heated debate as to how our merchant marine can be maintained other than by the subsidy plan. We are peculiarly unfortunate, a victim of unatoidable circumstances. Because of the artificial conditions created by a great war we are in possession of



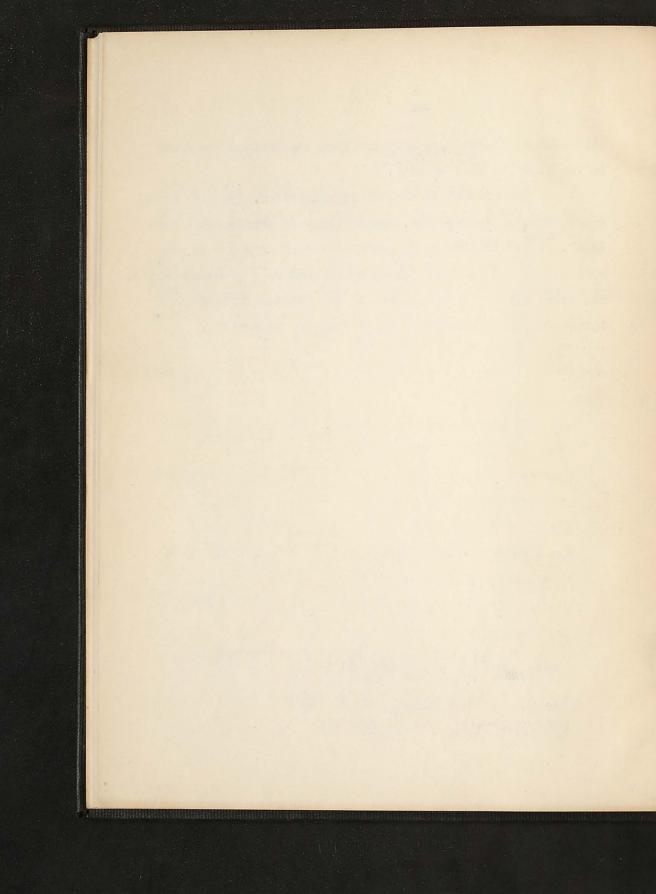
an enormous fleet with which to experiment, so far, to our inconvenience and loss. But how to operate these ships with labor maintained on the American scale and in competition with the Asiatic labor employed in every other merchant marine is one of the chief and vital problems. In our study of ocean shipping and transportation prominent figures in the building of our present merchant fleet declare that new devices for oilburning and combustion engines are going to do away with much costly labor on ship board, but this be granted, I see no reason why these improvements would not be quickly adopted in foreign ships, and then where have we gotten? Unless some of these obstacles to the re-establishment of the merchant marine on be overcome. I have great fear that our large fleet now riding at ancher may pass into foreign hands.

muddle out of the situation as best we can, kny one the has studied shipping and who has the interest of the country as a whole at heart comes, in the end, to admit that perhaps all the economic arguments against subsidies may not apply then ships cannot be sold for what they may bring or cannot even be given away. He has a feeling that what has happened with happen again; that an industry which should depend on its own resources



will come to depend more and more upon the National Treasury to the infinite loss of both.

Our present industrial organizations, founded on the enterprise of individuals, cannot long withstand such a tendency. I remain firm in my conviction that by means of subsiding is not the best method of supporting a merchant marine. The great evil of such a system is the killing of individual initiative and parasitic reliance upon the government.



BIBLIOGRAPHY

This Thesis deals with the history of our merchant marine and of matters connected with it which have become of much public concern.

The person who would really treat the subject, must seek his material enoug dozens of different reports and arguments; many of them very able, but few of them easy of access and still fewer at all complete in themselves. Below are listed some publications which were used as references in the preparation of this Thesis:

The National Geographic Laguzino, Vol. XIXIV - Number III. Wake Up America - Merk Sullivan,

America's Merchant Marino, by The Bankers Trust Company.

American Review of Reviews - Vol. LAVI - Humber 395.

The American Recommic Review - Vol. 41 - Studer 17.

The National Meographic Magazino, Vol. ZII - Number I.

Ocean Shipping - F. S. Li mer an.

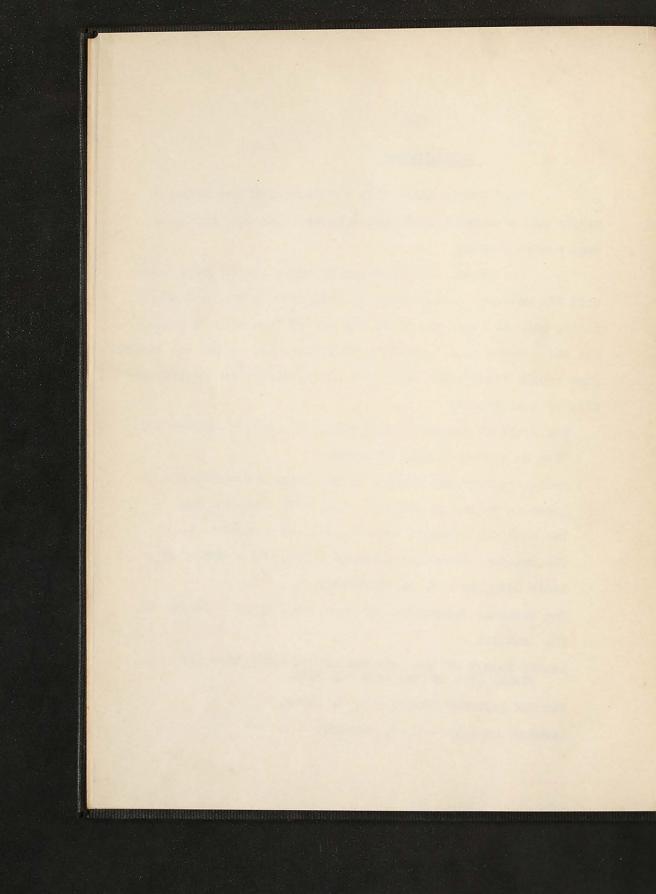
The National Geographic Magazine, Vol. MCCIV - Number V.

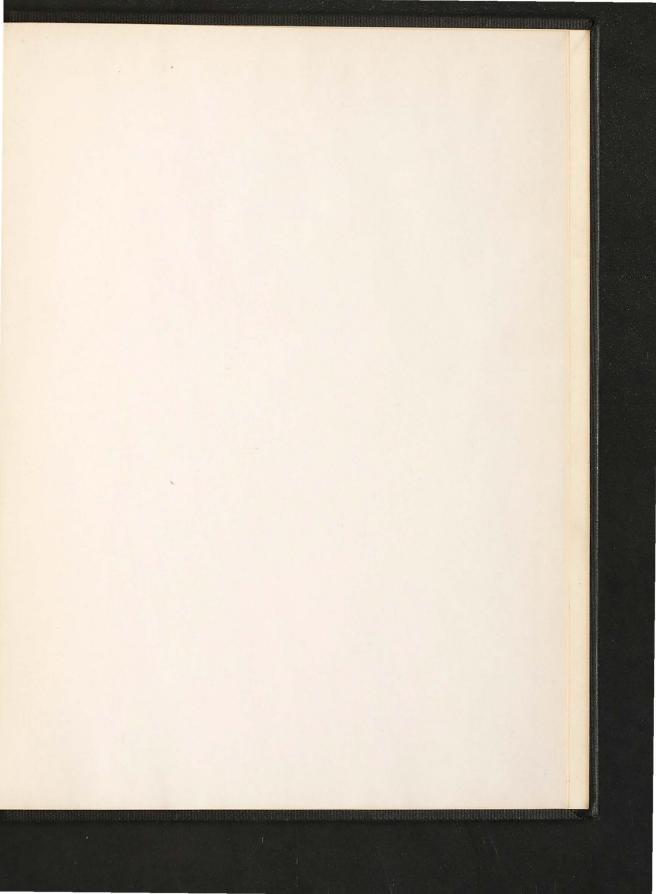
The Annalist -

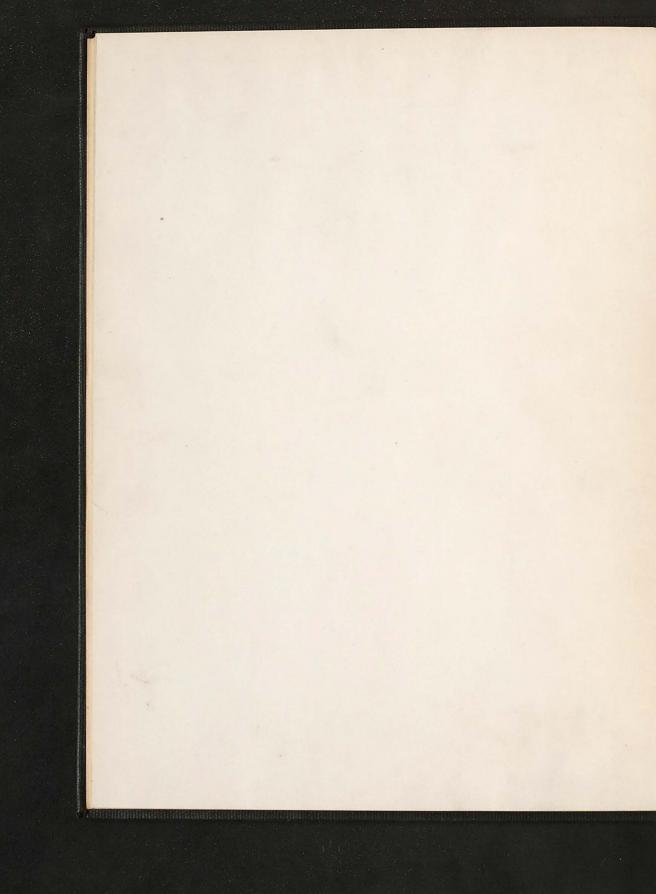
Annual Report of the Commissioner of Mavigation for Fiscal Year Ending June 30, 1922.

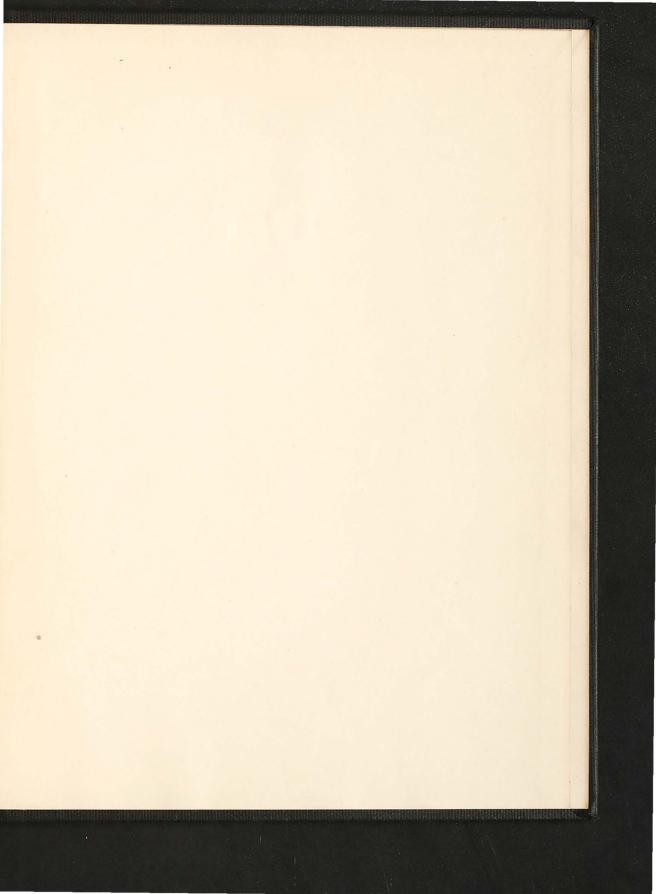
Cur Old Merchant Marine - W. T. Tayne.

Foreign Buchange - B. U. Furniss.









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