

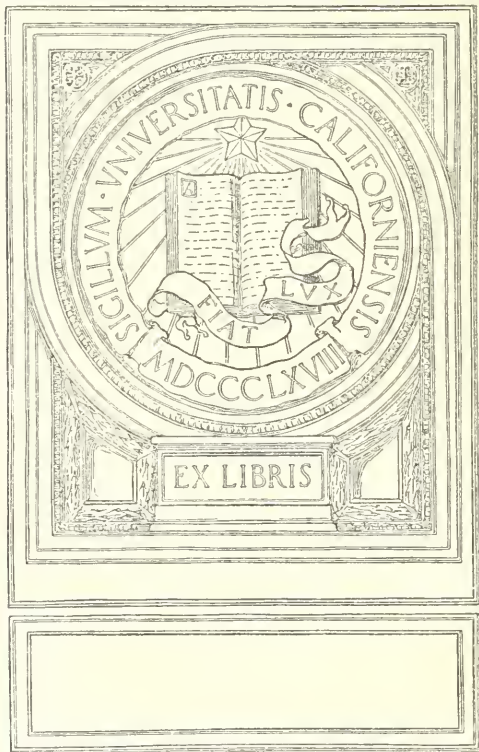
H69
12 F2 S3

DEBATERS' HANDBOOK SERIES

THE ENLARGEMENT OF THE
UNITED STATES NAVY



UNIVERSITY OF CALIFORNIA
AT LOS ANGELES



CHOOI.

STATE NORMAL SCHOOL
LOS ANGELES, CALIFORNIA

DEBATERS' HANDBOOK SERIES

THE ENLARGEMENT OF THE
UNITED STATES NAVY

DEBATERS'
HANDBOOK SERIES

Direct Primaries
Commission Plan of Municipal Govern-
ment
Capital Punishment
Initiative and Referendum
Election of United States Senators
Income Tax
Central Bank of the United States
Woman Suffrage
Enlargement of the United States Navy
(3d ed. rev. and enl.)

Other volumes in preparation

Each volume, one dollar net

Debaters' Handbook Series

SELECTED ARTICLES

ON

THE ENLARGEMENT OF
THE UNITED STATES NAVY

Third and Enlarged Edition

2 3 3 2 1

COMPILED BY
C. E. FANNING

MINNEAPOLIS
THE H. W. WILSON COMPANY
1910

INTERNET ARCHIVE

Digitized for Microsoft Corporation
by the Internet Archive in 2008.

From University of California Libraries.

May be used for non-commercial, personal, research,
or educational purposes, or any fair use.

May not be indexed in a commercial service.



H65
NR F 2.3

EXPLANATORY NOTE

This handbook of reprints contains material on both sides of the question concerning the policy of substantially enlarging the American navy. While the first edition was compiled for the aid of the High School Debating League, the extensive use made of it by libraries and clubs has warranted two additional editions. The present enlarged volume contains nearly all of the articles included in the previous editions, the parts omitted being those that give statistics now out of date, for which there have been substituted selections from recent periodical and document sources.

CONTENTS

Thirty Reasons Why Our Navy Should Not Be Enlarged	Advocate of Peace 1
Melville, George W. Important Elements in Naval Conflicts	Annals of the American Academy 8
Beehler, William H. Needs of the Navy.....	Annals of the American Academy 12
Bartholdt, Richard	Congressional Record 19
Tawney, James A.	Congressional Record 25
Padgett, Lemuel P.	Congressional Record 26
Hobson, Richmond Pearson	Congressional Record 27
Bartholdt, Richard	Congressional Record 30
Gallinger, Jacob H.	Congressional Record 32
Lodge, Henry Cabot	Congressional Record 34
Perkins, George C.	Congressional Record 36
Rucker, Atterson W.	Congressional Record 38
Chandler, William E. Our Navy Fifty Years from Now	Cosmopolitan 39
Hobson, Richmond Pearson. If War Should Come....	Cosmopolitan 45
Seymour, Sir Edward Hobart. No Peace for the Warring World	Cosmopolitan 46
Four and Two Battleships	Current Literature 47
End of the Battleship Cruise	Current Literature 49
Herbert, Hilary A. A Plea for the Navy.....	Forum 50
Mahan, Captain A. T. The Future in Relation to American Naval Power	Harper's Monthly 56
Meriwether, Walter Scott. Why We Need a Bigger Navy	Harper's Weekly 74
Jefferson, Charles E. The New Navy	Independent 77

Long, John D. Shall the Navy Be Increased?.....	Independent	81
Morton, Paul. An Anglo-American Navy	Independent	85
Benjamin, Park. The Shout for Big Ships	Independent	89
Mead, Lucia Ames. The Demand for More Battleships	Independent	96
Jefferson, Charles E. Some Fallacies of Militarism....	Independent	96
President Roosevelt and the Navy	Independent	97
Naval Folly	Nation	97
Hobson, Richmond Pearson. America Mistress of the Seas	North American Review	100
President Pritchett's Plea for a Strong Navy..	Outlook	115
Mead, C. M. Dr. Pritchett's Argument for a Strong Navy	Outlook	117
For the Preservation of Peace	Outlook	119
Melville, Rear-Admiral George W. Naval Development during the Next Decade	Scientific American Supplement	123
Proposed Increase of Our Navy....	Scientific American	132
Zafra, Carlos de. The Needed Increase of Our Navy..	Scientific American	134
Our Rank as Second Naval Power ..	Scientific American	136

SELECTED ARTICLES
ON THE ENLARGEMENT OF THE
UNITED STATES NAVY

0163

23321

Advocate of Peace. 71: 32-5. February, 1909.

Thirty Reasons Why Our Navy Should Not Be Enlarged.

The following statement of reasons why our navy should not be enlarged is issued with the indorsement of a large body of the leading men of the country, including Charles Francis Adams, Jane Addams, Samuel Bowles, John Graham Brooks, Andrew Carnegie, James Duncan, President Faunce, of Brown University, A. B. Farquhar, Edwin Ginn, Washington Gladden, Edward Everett Hale, William D. Howells, Chester Holcombe, Prof. William James, Rev. Charles E. Jefferson, President Jordan, of Leland Stanford University, Bishop William N. McVickar, Marcus Marks, N. O. Nelson, Gen. William J. Palmer, Rev. Charles H. Parkhurst, George Foster Peabody, Bliss Perry, Dean Henry Wade Rogers, of the Yale Law School, Prof. William G. Sumner, Lincoln Steffens, Ida M. Tarbell, President Thwing, of Western Reserve University, President Thompson, of the State University of Ohio, Booker T. Washington, Rabbi Stephen S. Wise, President Mary E. Woolley, of Mount Holyoke College, and others:

1. Because we have fought foreign foes, English, Spanish, and Mexican, only six years in the one hundred and twenty-five years since the Revolution. In every foreign war we made the first attack. With less danger from attack than any other nation, we are now spending more for past war and preparation for future war than any other nation in the world.

2. Because our extent of coast line has little relation to danger from attack. The Second Hague Conference has provided for immunity from bombardment of all unfortified towns and from levying contributions by threat of bombardment. * * *

3. Because the Hague Conference also provided for arbitration of disputes over contractual debts, thereby removing excuse for our keeping a navy to prevent forcible collection of such debts of South America to Europe.

4. Because a navy is less needed than ever to protect South America, as it is now perfectly capable of a defensive alliance among its nations to repel any wanton attack from outside. Reasons which made the Monroe doctrine necessary when there was a "Holy Alliance" and the weak South American republics were unconnected by telegraphs or railroads have no application when modern communications, soon to include the Panama canal, and enormously increased population, wealth, and mutual friendship make them now far from eager to continue our overlordship. With the price of a few torpedo boats we might secure by education and diplomacy a federation of South American states.

5. Because there is no danger from China, a peace-loving nation friendly to us. Our return of the indemnity has done more to promote peace with her than anything else could do. According to the testimony of Ambassador Luke Wright, of Hon. John W. Foster, of Secretary Taft, and of over 100 missionaries to Japan, familiar with her language, customs, and politics, there is not the slightest foundation for the violent and frothy talk which is emanating from a few Americans against Japan and is poisoning the minds of millions of our uninformed citizens. Said Ambassador Wright: "The talk of war between this country and Japan isn't even respectable nonsense." The 100 missionaries say: "We desire to place on record our profound appreciation of the kind treatment which we experience at the hands of both Government and people. Our belief is that the alleged belligerent attitude of the Japanese does not represent the real sentiments of the people. We wish to bear testimony to the sobriety, sense of international justice, and freedom from aggressive designs exhibited by the great majority of the Japanese people." Nothing could do more to develop the opposite

feeling than the baseless assumption and insulting statements published by certain irresponsible newspapers and military men.

6. Because of an excessive unhealthy reliance on force in our country in recent years, which calls attention away from the real foes at home to suppositious foreign enemies. Its spirit fills the newspapers with reckless, unfounded suspicions and accusations, distorting historic statements, promotes constant talk about war and preparation for war, of maneuvers, promotions, and technical details, and makes us blind to the real sources of our greatest loss of life and property.

7. Because our three foreign wars since 1781, which lasted only six years, cost in life, all told, in battle, nothing comparable with our reckless slaughter by accidents every year in time of peace. The \$60,000,000 increase of the navy asked for last year, if spent in fighting disease, ignorance, waste, and wickedness at home, probably could save as much life and property as all our foreign and civil wars have cost. In five years we have lost alone by fire, largely preventable, \$1,200,000,000. In four years we have killed, by accident, largely preventable, 80,000 more than were killed on both sides in the four years of civil war.

8. Because we are already spending over 65 per cent. of the nation's revenue in payment for past war and in preparation for future war and have but one-third of our national revenue left for judicial and executive departments, coast guard, light-houses, quarantine, custom-houses, post-offices, census, waterways, forestry, consular and diplomatic service, and all other constructive work.

9. Because we have increased our expenditure for defense 200 times during a period when our population has increased only 22 times, our coast line perhaps 3 times, and our danger from attack not at all.

10. Because we are protected by nature as is no other country and have not the excuse for a great navy which England has nor for a strong army which Germany has. Our wealth is as great a protection as our geographical position. We supply our own necessities and are not dependent, as many nations are. General Sheridan said that no nation on the continent of Europe had sufficient ships to spare to bring over

enough soldiers to carry on one campaign so far from its base of supplies.

11. Because we shall need no navy to protect the Philippines if we but ask the nations to pledge preservation of their autonomy when we grant them their independence. No nation could refuse or would dare wantonly break such a pledge made to the world. The neutralization, in this manner, of exposed places is one of the most successful methods of preventing war which we can further use. The pledge between the United States and Great Britain to remove battleships and forts from our Canadian border has, since 1817, secured peace at no expense on over 3,000 miles of frontier. Without this pledge we should probably have had war. So long as this line is unguarded we shall never fight Great Britain.

12. Because all the great nations in one place or another, are securing safety from territorial aggrandizement by pledging territorial inviolability. All the nations on the Baltic and North seas signed treaties in April, 1908, to respect each other's territory on those waters. Turbulent Central America has secured peace by similar methods. It is the method of the future.

13. Because, in spite of our strategic position and the fact that Europe largely depends on us for food, we are spending for defense more than France and only \$36,000,000 less than Germany and only \$66,000,000 less than Great Britain, which has possessions to protect around the globe and is unable to feed herself except by imports.

14. Because labor put into the construction of armaments could be better employed to increase our insufficient railroad capacity, and as many men could be employed in making rails and engines, of which we have too few to move our crops, as in making armor plate and instruments of destruction.

15. Because the recent arbitration treaties signed with Great Britain, France, Norway, Spain, Portugal, Switzerland, Japan, and Germany minimize the possibility of war with those countries, and we have no fear of any others.

16. Because, as was unanimously agreed at the arbitration conference in 1904, in Washington, attended by a great body of our most eminent public men, there is no question of "honor"

or "vital interest" which can not be arbitrated, except, of course, that of autonomy, which can be secured by international pledge, and in our case is beyond menace. Some of the smaller nations have already agreed to arbitrate every question. There is no excuse for increased armaments until we have at least tried to get the great powers to pledge themselves to arbitrate every question with us.

17. Because we can secure far greater safety by expending on a peace budget a small amount every year—say one dollar out of every thousand voted for armaments. * * * This method was recommended by the Interparliamentary Union and is worth more even than the ounce of prevention, which is worth a pound of cure. Courtesy and good will are more powerful than explosives in preventing war.

18. Because a national * * * arrogance is growing in our country; and bumptious talk about our being "master of the Pacific," though there are ten other nations bordering on it, is leading a part of our press and people to insult and irritate other people with the sense of impunity in our impudence which a huge navy lends. We, as well as other nations, have found easy euphemisms to ease our consciences when using our military power to further our own ends. We shall be far less likely to be hotheaded and rash and to rush into needless war if we do not increase our navy. It is naïve conceit to say that we are so peaceful and just that we can never be tempted to wage a needless war. * * * Said Secretary of State Sherman concerning the Spanish war: "We could have adjusted our difficulties without the loss of blood and treasure." Said Congressman Boutelle: "President McKinley, if Congress had left the matter to him, would have secured everything we wanted in Cuba without the sacrifice of one drop of American or Spanish blood."

19. Because our navy is already so large as to incite other nations to increase theirs. Our naval increase was quoted last year in the French Assembly as an argument for a French increase. This senseless rivalry is driving certain would-be customers of ours toward bankruptcy.

20. Because increase of our navy does not increase respect of foreigners for us. Respect can be given only to moral

qualities. Our indifference to lawlessness and our civic corruption are well known abroad. We have no more moral influence than we had thirty years ago, when every monarchy in Europe was being sapped by our democracy. Plutocracy and militarism make us talked of and dreaded, but not respected. Many, perhaps, are glad that we are being hampered in our race for commercial supremacy by saddling ourselves with the Old World's military burdens.

21. Because our dignity no more depends on battleships than upon light-houses or fire engines. We should feel pride if we are safe enough to dispense with a few. A European city built of stone rejoices that it does not need our costly fire apparatus. A large navy is a confession of conscious weakness or timidity.

22. Because increase of the navy is an implication that new dangers are in sight and old friends are to be suspected. It arouses rivalry and irritation with other nations. The two nations to-day who are the most armed are in the most danger of fighting. Just as Germany's and England's increase of naval power mutually irritates each other, so Japan's military skill has stirred the emulation of our jingoes, masking themselves under the conceited plea that we are par excellence the peaceful people of the world and can do no wrong with our navy.

23. Because "a decent respect for the opinion of mankind" ought to be more and more the controlling motive of nations as of individuals. A navy is but a small element in our defense even from foreign foes, to say nothing of defense from our far greater domestic dangers to life and property. We have been secure from attack with our fleet at the antipodes.

24. Because the demand for it comes chiefly from those who ignore the new substitutes for war and whose military training fits them only to kill enemies, but not to prevent friends becoming enemies. They understand explosives, but not human nature or politics or diplomacy or the methods which have produced the astounding bloodless revolution in Turkey; or the demand comes from the class which supplies implements of war and surreptitiously keeps up war scares which the gullible voters make profitable to them.

25. Because declaration of nonintercourse embodied in treaties is a feasible and far more powerful force. We would better spend our energy in studying this new agent, advocated by Justice Brewer, of the Supreme Court, and other able men, now made possible by modern conditions of communication and politics. If one tithe of the \$60,000,000 asked for were spent on an educational campaign for a pledge of nonintercourse from England, France, and the United States against any nation which attacked one of them and refused to arbitrate, it would do more to keep the world's peace than all their navies. Were two of these strong nations previously to make public their signed agreements to withdraw diplomats and stop commerce upon wanton attack on the third power, no nation would ever attack the third. The declaration would suffice. This is a totally different thing from the old-fashioned embargo declared by one nation on another after war began. Even the unorganized Chinese boycotts, not backed by the Chinese Government, made us remove injustices and more recently coerced Japan. If in fifteen years 400,000,000 organized Chinese refuse to buy goods if they are ill treated, the greatest navies will avail nothing to get their markets.

26. Because new inventions in all probability will make existing armaments useless before Japan, even if she wanted to attack us, could recuperate from her financial drain sufficiently to do so. Airships may make battleships useless.

27. Because an increase of the navy argues infidelity to the great achievements of The Hague conventions. It is childish inconsistent to create more force when better methods are being substituted for it.

28. Because every enlargement of the navy draws men from constructive work. It keeps them always on the outlook for the trouble which alone could give them the sense of being of real service and importance and getting promotions and honors. Advocates of large navies are notably skeptical about other methods than force for promoting peace and draw the attention of the public away from the quiet and effective to the old-fashioned methods which tickle eye and ear with noisy and spectacular effects.

29. Because by lowering excessive tariffs and thus promoting commercial fraternity we could do more for peace than through intimidation by armaments.

30. Because we have not the faintest ground to suspect there will ever be a war again with England so long as our northern frontier is free from her fortifications; nor with Spain, whose interests hereafter can not cross ours; nor with any of the other nations with whom we have always been at peace and who could fight us only at a range of thousands of miles from their base of supplies. We are especially secure, as Europe is dependent on us for a large share of her food supply, and the Orient has everything to lose and nothing to gain by attacking us. "The Yellow Peril" is a psychological obsession of a few scaremongers who do not read Oriental languages or respect people who have not white skins, but who translate their suspicions into statements which are not facts, and help create the very hostility that would excuse their cry for an increased navy.

Annals of the American Academy. 26: 123-36. July, 1905.

The Important Elements in Naval Conflicts.

Rear-Admiral George W. Melville.

If anything, the navy is a more expensive institution than the army. Dividing the total naval expenditure by the number of men in the organization, we find that it is now costing the government about two thousand dollars annually per sailor employed. The navy is insatiable in its call for supplies, and the demand for repairs and new construction never ceases. The cost of maintaining naval establishments has increased to such an extent, that, at the present time, all but six nations have ceased struggling for even a place in the race for supremacy. Our annual expenditure for the past eight years has averaged seventy-three million dollars, and our Naval Board of Construction has officially reported, that, from henceforth, the cost of maintenance alone will be about seventy-six million dollars. Including all warships authorized the cost of our

fighting fleet will approximate three hundred and twenty million dollars. It will require an expenditure of sixteen million dollars to overcome depreciation, and that this estimate of 5 per cent. for depreciation is an exceedingly conservative one, is shown by the fact that the British admiralty now regard over one hundred warships of various kinds, some of them only a dozen years old, and completed at a cost of over one hundred and twenty-five million dollars, as practically un-serviceable, from a military standpoint, for modern naval requirements. It will thus be seen that when the warships now authorized are in commission, an annual naval expenditure of one hundred million dollars will be required to overcome unavoidable depreciation, and so as to secure a net increase of strength equivalent to the fighting value of a single battleship.

The Important Elements of Naval Strength Applicable to Our Present Condition.

The lessons of the Russo-Japanese war are plain and simple and should be taken to heart by our people. It is the concomitant features of both military and naval organizations that have been neglected by the Russians. For the next few years, therefore, it might well be in the special direction of developing the auxiliaries to a fleet and not to augmenting greatly the number of fighting ships to which we should direct our best energies. It would be a conservative policy which would provide for a progressive increase in actual fighting strength equivalent to the net gain of at least one battleship per year. The bulk of the expenditures, outside of providing for depreciation and maintenance, might well, however, be applied as follows:

1. Improvement of the channels leading to all shipbuilding plants, naval stations and maritime cities. These channels should be straightened, broadened and deepened for military as well as for commercial reasons. All impeding bars near the entrance should be removed, and the channels should likewise be so well buoyed and lighted that it would be possible at all hours and at all stages of the tide for the

largest of merchant vessels and the most formidable of battleships to enter or leave port without danger of striking bottom or imperiling coast-wise and harbor navigation.

2. The building of a fleet of large, fast colliers, so that in time of war the greater part of the coal required for distant naval operations would be available for shipment to the place most needed. But little reliance should be placed upon fixed coaling stations, since in time of war most of these stations might prove as much a menace as an aid to a naval fleet. By keeping the coal afloat there would always be fuel available for immediate transportation.

3. The rehabilitation of all the navy yards to a condition whereby, in case of necessity, it would be possible to build any type of warship at any one of the first-class stations. While it is by no means particularly advisable that such construction should be undertaken by the government, the leading naval repair station should be kept in readiness for doing any kind of emergency work.

4. The enactment of a statute providing that those graduates of technological institutions, who have successfully undertaken a course of instruction satisfactory to the navy department and who have passed a required physical examination, shall be appointed as acting midshipmen. Such graduates after two years' service at sea in naval vessels shall have the opportunity of competing with graduates of the Naval Academy for commission in the naval service.

5. The establishment of a naval reserve, and the appropriation of an amount sufficient to send all members of such organization to sea in naval vessels for at least one month every year, and who while performing this service, to receive the same pay and emolument as officers and men of corresponding rank and grade in the navy.

6. The restoration of our merchant marine. It would be easier to write several thousand words in advocacy of subsidizing our merchant marine than to attempt to show in a brief paragraph the necessity of extending such help. I have no hesitation in asserting, that in view of our existing relative naval strength, it would subserve military, commercial and

national interests to stop building battleships for a time, and devote all or a portion of the money thus saved to placing upon the ocean a merchant marine that would help us to secure a greater portion of the trade of the world, and which, in case of war, would prove a military auxiliary only one step less removed in importance than the warship itself.

7. The recognition of the fact that the modern navy is an engineering one, and that the training of both officers and men should be more technical in character. The time spent by apprentices and landsmen on sailing vessels is practically wasted.

8. The purchase, if possible, and as soon as practicable, from Denmark, France and England, of all their West India possessions, so that none of the fortresses on these islands could be maintained for use against either the Isthmian canal or used as a base for operating against the South Atlantic and Gulf coasts. The regulation of the fiscal arrangements of some of the American republics would be exceedingly simplified if no European power held any possessions of the western continent, for so long as a single island in the Caribbean sea is under the dominion of a foreign power, so long may that power consider that it possesses at least a moral and political equity in concerning itself as to the administration of neighboring islands that are in a chronic state of financial embarrassment and political revolution.

9. With the possession or the dismantling of every West India fortress which might be a menace if in the hands of an enemy, we now have either in commission or in course of construction, a navy strong enough to meet any power in the world either on the North Atlantic coast or in the Caribbean sea. For military operations in Asia or even in certain portions of South America, vast expenditures would have to be incurred before we should be willing to stake our prestige and commercial development in accepting battle in waters so far distant from the home land.

Annals of the American Academy. 26: 163-9. July, 1905.

Needs of the Navy. Captain William H. Beehler.

Captain Mahan has demonstrated the influence of sea power, upon history, and recent events have confirmed his arguments, showing that a thoroughly well-trained naval force is the most important factor in the efficiency of modern warfare.

Surely it is evident that should Russia even now gain command of the sea by destroying the Japanese fleet, Russia would recover all she has lost in the present war. In our last war Spain was conquered by the naval victories of Dewey and the destruction of Cervera's fleet off Santiago. All other operations were secondary and had no effect upon the result of the war.

In these wars, wherein naval supremacy played such an important role a brief comparison of the strength of the belligerent navies will throw light upon the question as to what factors contributed to the superior efficiency of the victors. As regards numbers, the Spanish navy was nearly equal to that of the United States in fighting ships; while the Russian navy in this respect was vastly superior to that of Japan except at the point of contact in the Far East, where the naval forces in actual numbers of ships were about equal at the outbreak of the war. But in these battles the victors were overwhelmingly victorious, much more so than would have been believed to be possible. This superiority was entirely due to the greater ability of the victors in handling their ships and guns. The training and drill in the victorious navies before war was much greater than had been the case with their enemies. My own experience on the United States steamship *Montgomery* illustrates this. In 1896 the drill books required that the *Montgomery* should fire five-inch guns three times a minute. By diligent drills we increased the rate of fire to five times a minute in the first year and then subsequently to seven times a minute. Finally, at the bombardment of Fort Canuelo at San Juan, Porto Rico, the *Montgomery* fired 314 shells from six five-inch guns in exactly five minutes, or 300 seconds of time, or at the rate of 10.4 shots per gun per minute.

This rapidity of fire in modern warfare was one of the

controlling factors in the naval battles of the Spanish war, and as far as we know it has been likewise so in the war between Japan and Russia. This has been due entirely to diligent drill, and too much stress cannot be laid upon the importance of this drill with modern weapons.

But in order to have this drill it is obviously necessary first to have the weapons, and the modern battleship is the most formidable weapon ever built, but it can only be used efficiently by those who have been thoroughly trained. The battleships must be built, armed, equipped and drilled in time of peace, before war, because it will be almost impossible to obtain efficient battleships after war shall have been declared, and useless to begin then to train the personnel to fight them.

The modern battleship is a most wonderful instrument, and represents the highest development of the practical industrial sciences. The latest developments in every department of mechanical industry, chemistry, electricity, steam engineering, hydraulics and pneumatics contribute to the construction which shall have the greatest offensive power by its armament of the largest guns and the greatest possible protection by means of armor.

It takes nearly four years to fully complete a modern battleship and a year or two more before her officers and crew can claim to be able to get the very best results from the ship. But it is not only necessary to have these battleships but also to have squadrons and fleets of battleships in order to be able to command the sea when disputed by any of the other great powers. In handling these squadrons of battleships the United States navy has had no experience and is at present urgently in need of opportunity to manoeuvre a fleet of battleships so that the combined force will be employed to the best advantage. A study of naval tactics is evidently a most urgent necessity, and while the naval war games throw some light on this subject, it is realized by most naval officers that there is urgent necessity for elaborate and constant drill to develop a most efficient system of battle tactics. Admiral McCalla several years ago proposed a system of naval tactics which has not been adopted and which was adversely criticised by the experts with the naval war

games. This system is somewhat similar to the double echelon tactics of Captain Labres, of the Austrian navy. Without discussing the merits of these systems of naval tactics, a point is brought out to show that we have no provision for a reserve force in a naval engagement. McCalla's tactics seem to provide such a reserve, but these tactics have not been tried by any fleet, and we do not know how this reserve force can be brought into play efficiently in a naval engagement; though most battles on land have been decided by the timely appearance of the reserves. We need a large fleet to demonstrate this and other important features which we cannot expect our British cousins to tell us while they guard all their manoeuvres so strictly from the eyes of foreign attachés.

The urgent necessity of a powerful navy in order to preserve the peace of the world does not admit of any argument. The question is, What do we need? The reason why we need a navy is apparent from the recent war in the East. If we consider our relations to China and Japan we may well reflect whether we can continue to exclude Chinese from the United States, or include the Japanese in the same category as the Chinese and still demand the right of Americans to trade in China and send missionaries there. If China had had a navy she would not have been obliged to let England take Hongkong, the Germans to seize Kiaochaou, France to take Tonquin, and, finally, Russia to seize Port Arthur. China is wealthy, and the Europeans seized the Chinese ports because they had the power. If the United States has not an adequate navy there is no reason why any power that feels it to be to her interest to seize any part of our territory should hesitate to do so. It is hardly probable that any European power would attempt anything of the kind at present, but we cannot expect them to keep their hands off the American continent or respect the Monroe doctrine unless we have the force wherewith to compel this respect.

The completion of the Panama canal in 1914 will require an adequate naval force for its protection. The force required is generally thought by officers of the United States navy to be at least fifty battleships, which should be divided into five squadrons of nine battleships each, including flagships, and one

reserve for each of the five squadrons. This organization would give two squadrons each in the Atlantic and in the Pacific Oceans, with one squadron in the Caribbean sea that could readily reinforce either the Atlantic or Pacific fleets, maintaining command of the Isthmian canal. These fifty battleships would require a proportion of other naval vessels which would give thirty-three armored cruisers of the Washington type, and twenty-five fast scouts, which would be transoceanic merchant steamers built for the navy but armed only in time of war. The rest of the fleet would be 100 torpedo-boat destroyers. There will be a number of auxiliaries, viz.: colliers, transports, ammunition ships, depot machine ships for repairs, distilling ships, hospital ships, and cable ships. Gunboats and cruisers not armored will be useful only in dealings with weak navies, such as those of the South American republics. No such vessels should be built in the future. The navy should confine itself entirely to the four types mentioned, namely, battleships, armored cruisers, fast scouts and destroyers. The auxiliary vessels can be obtained from the merchant marine, and obsolete battleships will be able to do all the duty against weak navies.

The proposition to build fast scouts which shall be transoceanic mail steamers, to be armed only in case of war, would provide a fleet of twenty-five fast scouts, like the *St. Paul* and *St. Louis*, capable of maintaining a sea speed of twenty-four knots. In view of the fact that the American people will not listen to any argument for subsidizing mail steamers, might it not be possible for the government to build these transoceanic mail steamers as fast military scouts, which in time of peace may be leased to private companies to operate and to maintain in condition for conversion into scouts, while carrying transoceanic passengers and mails? Something must be done to aid our merchant marine, for at this present moment there is not a single transoceanic merchant steamer being built in any shipyard in the United States, and every suggestion as to how to build up our merchant marine should be diligently considered.

Our patriotism ought to cause us to provide this navy, this fleet of fifty battleships before 1914. The United States should be at least equal to that of any other power on the high seas.

The establishment of the Peace Congress at The Hague does not mean disarmament. The police of a city is necessary even when there are law courts, and The Hague Peace Congress will need an adequate police force in the shape of the navies of the world in order to enforce its decrees, and the nations that have the most to protect, the largest sea interests, the greatest sea coast, etc., should have the largest naval force. Surely the United States navy should be equal to that of England, but England has now fifty-two battleships built, while we have but fifteen actually finished with ten more building. By 1914 England will have at least one hundred battleships, at the present rate which she is laying down these vessels. Germany completed her program for thirty-eight battleships by laying down the last one this year; while it is contemplated to double this fleet and provide for a total of seventy-six battleships by 1914.

In view of this, and of the fact that the French, Russian and Japanese navies will also be largely increased to number at least fifty battleships by 1914, the appeal I make for fifty battleships for the United States navy is surely not extravagant. During a recent cruise on the Asiatic station in command of the Monterey, I saw a great deal of the Chinese, and in common with all other naval officers, I realize that the Chinese, as a race, are indeed a wonderful people, endowed with the highest abilities. If the Chinese could once be aroused from the lethargy of their intense selfishness and be endowed with a patriotism such as we now see pervading Japan, the yellow peril would not be a mere nightmare.

The American people can not remain silent in the future affairs of the world. We must rise to the occasion and be so prepared for war that no nation will dare to go to war with us. During the nearly four years that I served as naval attaché in Berlin, Rome and Vienna, this doctrine of preparedness for war was constantly being asserted in Europe. The German Emperor claims to have preserved the peace of Europe for thirty years by his magnificent armies which are so efficient that no one has dared to go to war with him. He is the most enthusiastic disciple of Mahan's doctrine of the influence of sea power, and his great speech that Germany's future is upon the

sea has been circulated into every hamlet throughout the German Empire.

The far-sighted German Emperor devotes his energy to the creation of a powerful navy. The wonderful growth of the German Navy League, which acquired an active membership of 600,000 within three years after it was founded, illustrates German activity in regard to sea interests. The German Navy League has branches in every town throughout the empire, and fortnightly meetings are well attended to hear illustrated lectures about the navy and maritime life to interest the inland population of the empire in naval affairs. The ravages of the Napoleonic war and the Thirty Years' war, etc., are depicted so that for the future the Germans will want to have all their wars away from their homes upon the high seas or in the enemy's country.

Germany has only recently become a great maritime power, and has made the most rapid progress in recent years. Her navy is most efficient because in all naval affairs Germany—and the same is true of Japan—is not handicapped by conservative traditions. American machinery and manufactures are invading Germany. The German navy is up to date, all her battleships have triple screws, and they carry liquid fuel. Turbine machinery has been introduced. The Germans are far in the lead of all nations in all that pertains to torpedoes and submarine mines.

The constant drill and thorough training of the German navy personnel is admirable; but it is so exacting in minor details that some of my brother officers have questioned if the German sailor would ever rise to an emergency should anything happen not foreseen by the drill book. We are prone to disparage the intelligence of all foreigners because of the stupid appearance and conduct of immigrants just landed. The immigrants find themselves with everything about them different from that to which they were accustomed, but the foreign sailor on board of his own ships with the environment of his fellow subjects is at home and is just as bright and quick as are the seamen of other countries in their own ships.

An instance came to my knowledge in the fall of 1901 before

Prince Henry's visit. Prince Henry was cruising in his flagship, "Kaiser Friedrich III," in the Baltic when she struck an uncharted glacial boulder on Adler Shoal. The ship struck with great violence in the wake of a petroleum oil tank in her double bottoms. Both inner and outer bottoms were penetrated. The force of the blow forced oil up through an air-escape pipe with such violence that the pipe burst at the level of the top of the boilers and the oil flowed down and was ignited by the fires under the boilers. Flame and smoke filled the compartment, while water streamed in through the leak, but the sailors did not abandon this fire room until after they had screwed up the stiffening braces of the watertight bulkheads, after which they pumped water into the compartment through the fire mains to float the burning oil up to the ceiling of the protective deck, so that the flames were extinguished when the compartment was entirely filled with water. Prince Henry then took the ship to Kiel. Surely there was nothing prescribed in the drill book for this emergency, and even American sailors could not have done any better.

We have a high opinion of ourselves in the United States navy, but we are conservative and have not yet introduced triple screws for our battleships, smokeless liquid fuel, nor turbine engines. We are just beginning to introduce torpedo armament in our battleships, and we must admit that we are far behind European navies in torpedo and mining warfare. We therefore urgently need these battleships now in time of peace so that we may drill with them and be fully prepared to use them in time of war.

The cost of this enormous fleet of fifty battleships with proportion of other vessels must be considered, and if we take the actual battleship as costing \$8,000,000, it will require \$400,000,000 to build the fifty battleships and probably as much more again to build the 205 other vessels (armored cruisers, scouts, destroyers and auxiliaries), or a total of \$800,000,000, ignoring the fact that we have twenty-five battleships already built and building. Eight hundred million dollars spent in ten years would require \$80,000,000 annually, or at the rate of \$1 per capita of United States population. For maintenance would be required

about \$80,000,000 annually, or a total of \$2 per capita. This is naval war insurance. As compared with our naval pension since the civil war, which has cost us annually about what this fleet of fifty battleships will cost, this naval war insurance is not expensive. The pensions represent a very small fraction of the damages done by the war, and if we do not provide this fleet now, in time of peace, a war will find us unprepared and the enemy will oblige us to pay an indemnity to reimburse him for what he had spent to build his navy.

Congressional Record. 43: 1323-4. January 22, 1909.

Richard Bartholdt.

Mr. Chairman, if there ever was a time in our history when preparations for war and further increases of armaments are both unwise and unnecessary, it is the present; unwise because the normal annual expenditures in the national household now exceed the revenues by considerably more than \$100,000,000, and unnecessary because we are not only at peace with all the world, but, what is more, we have wisely managed to safeguard our peace as it had never been safeguarded before. Hence every consideration of prudence and patriotism points to the present as the most propitious time to pause, temporarily at least, in our vast expenditures for so remote an eventuality as war.

We are all agreed that if our country were in any immediate danger of a foreign invasion or of war with a foreign foe no sacrifice would be too great for us to make for our defense. To raise money, we would issue bonds and, if needs be, mortgage our homes for that purpose; in fact, this mighty nation, rising in its own defense, would be a spectacle of patriotic self-sacrifice such as the world has never witnessed before.

In such a crisis we would justly scorn financial considerations or even deficits in the treasury, for in the face of national danger all other interests must be subordinated to the one paramount duty, the national defense. I will even go further, and say that if there were but a well-authenticated probability of any foreign complications preparations to obey the law of self-

defense would still be in order. But at a time when there is no more probability of war than there is of lightning striking our houses at this season of the year—and I shall give my reasons for this assertion—at such a time, I claim, we have no moral right to run the government into debt in order to pay for totally unnecessary increases of the implements of war. Before flattering national vanity by increasing the navy beyond the requirements of effective national defense I hold it to be our bounden duty to provide for the necessities of the peaceful development of the country and to subordinate the unreasonable demands of the jingo to the obligations which the government owes to the peaceable citizen and taxpayer.

And as not one of us, Republican or Democrat, can furnish to his constituents a valid excuse for government expenditures in excess of government revenues, except in time of war, this duty becomes the more patent to all.

When I came to Congress sixteen years ago the navy cost us about \$22,000,000 annually. This year's budget calls for over one hundred and thirty-five millions. While in that same period of time the population has increased only about 35 per cent., naval expenditures have increased over 600 per cent. These figures show that we have already gone back on the traditions handed down to us by the founders of the Republic, which teach us to rely for national safety upon our inherent strength, our righteousness, and our sense of justice, and that instead we have accepted the false theory through which monarchs from time immemorial have filched money from the pockets of their people, namely, the theory that armaments and man-killing machineries alone can vouchsafe security and peace. Do not the figures I have just cited bear out this assertion? And have we not actually been told time and again that a big navy is the best guaranty of peace? It is false, I say again, and our own history proves it to be false. Why was it that we enjoyed both peace and immunity from attack when we had no navy at all? Does it not dawn upon those who are misled by that fallacy and who constantly shout for more arsenals and more battle ships that, after all, there might have been something besides the big stick that deterred either Europe or Asia from invading this

Republic of free men? Was not safety rather to be found in our isolated position, our numbers, our limitless resources, our love of peace and justice, our stout hearts, and in the patriotism born of liberty?

But let us for an instant meet on common ground. Let us admit, for argument's sake, a powerful navy to be the only real guaranty of our security. How many battle ships would we have to build to be absolutely secure? Certainly more than any other one nation, and in fact more than all other nations combined; for if naval armaments are to be the only safeguard of a nation's peace, we would be in constant danger of being overawed, because our big stick is not as big as all the other big sticks combined. Is not this the true logic of the plea for a bigger navy? And if it is, then all those who believe in the peace-promoting mission of the fleet would be forced to the conclusion that true patriotism requires the immediate construction, not of two, but of at least a hundred, *Dreadnoughts*. The fact, however, that they are willing to content themselves with two amounts to an abandonment of their own theory and is a practical admission that our safety rests on a better, securer foundation than mere iron clads, and one which our navy boomers quite evidently rely on themselves. From their view point two additional ships can not possibly afford adequate protection, and if, nevertheless, they are satisfied with this increase, we have a right to conclude that it makes no difference whether we build two more ships or none at all. Either course would be inconsistent with and contrary to the theory that the peace and tranquility of the United States depends upon battle ships alone. If we are not to be entirely burglar proof until our navy equals that of Great Britain, or, in fact, the navies of all nations combined—and that is and must be the contention of our friends, the navy boomers—then it is immaterial whether we have two iron clads more or less at this time, because we are insecure in any event.

There is but one consistent course to be taken in this emergency. It is to refuse all unreasonable demands for additional armaments. Such a course will be consistent, in the first place, with American traditions; it will also be consistent with the

enlightened sentiment of the world, and it will be consistent with our own professions, as well as with the actual situation.

The sentiment of the people everywhere is for peace and not for war, and that sentiment is stronger than you and I realize. The governments, too, seem willing at last to heed the voice of the people. As proof I point to The Hague conferences, the pan-American conferences, the many arbitration treaties, to the official recognition willingly accorded by the governments to the Interparliamentary Union, that world organization of lawmakers which aims to substitute arbitration and judicial decisions for war, and last, but not least, to the fact that, in spite of the recent political upheavals in the Balkans, peace has been maintained. There was a time, and it was true up to a few years ago, that you could not strike a match in the European Orient without causing a terrific explosion, and what has happened there recently? Turkey has had a bloodless revolution, resulting in a new era of constitutional government; Austria quietly annexed the Turkish provinces of Bosnia and Herzegovina; and the Servians declared their political independence; and all this without the shedding of a drop of human blood, when, ten years ago, either one of these events would have been sure to cause a world conflagration. What is it? Say what you please, but in my judgment it is the progressive thought and enlightenment of the people, the growing sentiment in favor of enduring peace, and the fear of the great military powers, because of that sentiment, to put their war machinery in motion. It seems almost as if in the incredibly short period of ten years a transition had taken place, as if the world had suddenly emerged, in this respect at least, from a state of semi-barbarism and risen to a higher civilization, in the light of which rulers are either afraid or ashamed to draw the sword and prefer to keep the peace by resorting to arbitration or appealing to the courts established by international agreements. Certain it is that a new era has dawned and that the increased armaments which followed the first Hague conference, and to which my friend from Illinois [Mr. Foss] so frequently refers, merely mark the last flickering up of the halo of the old system, a system, however, which is doomed to oblivion, doomed

to give way to that new order of things which will recognize a legalized machinery of justice, instead of brute force, as the only legitimate means of settling international controversies.

Look at the wonderful change wrought within the last few years in our own country and its relations with the outside world. Thanks to the wisdom and energy of Secretary Root, we have concluded arbitration treaties with about 20 countries of America, Europe, and Asia. We have been relieved as a result of the second Hague Conference of our real or fancied responsibilities with regard to the debts of the Latin-American countries, inasmuch as it was agreed at The Hague, all powers consenting, that contractual debts shall no longer be collectible by force. More than that, we have an understanding with Japan which, in my judgment, will go down into history as one of the greatest achievements of the present administration. In the course of the remarks I submitted on the battle ship question at the last session I used this language:

Unless we are all in ignorance as to the true situation—and it is incredible that the Mikado's diplomatic representatives should misrepresent it to us—a simple agreement to arbitrate differences and to mutually guarantee territorial integrity and undisputed home sovereignty would effectually dispose of the Japanese question for all time to come, and not a single battle ship will be needed to secure the benefits of such a treaty.

While our understanding with Japan—or call it agreement or declaration of principles, or anything else—does not go quite as far as I then indicated, it surely carries with it the guarantees of amity and good will, and forms the basis upon which peace between the two nations can be maintained. The situation regarding the Philippines has also been cleared. The fact of this outside possession of the United States has constantly been used as an argument for a bigger navy; but it is now clear that neither a European power nor Japan wants these islands, and our understanding with the government of the Mikado covers this very point. From this brief review of the situation it appears that war involving this country is a much more remote possibility to-day than it ever was before.

Now, as to the latest scare about a possible war with Japan. Does it not strike the Members of this House as a most peculiar coincidence that every time we consider the naval appropriation

bill there suddenly appears the handwriting on the wall picturing a war? Is it merely an accident that on the very day when we were expected to vote on battle ships the morning papers reproduce, with glaring headlines and in double-leaded type, the opinion of a New York editor, whose views otherwise they so frequently discredit and whose California interests are too well known to need any comment here? The President of the United States has, with praiseworthy foresight, repudiated in advance and on behalf of the Nation whatever action the California legislature may take with respect to the so-called "Japanese bills." Hence Japan can not, and I am sure will not, hold the American Nation responsible for whatever the legislature of a single state may do, no more than the British Government would hold us responsible for resolutions of mass meetings of Irish-American citizens denouncing England. The trouble between California and Japan can never be settled by war, because war never settles a question of right or wrong. It must be a question of the deepest concern to us, however, to find some way by which the supremacy of the Nation and its foreign policies can be maintained as against the rights of individual States. In other words, national obligations must be made as binding upon each state government as they are upon the national government, and as sacred in their observance as the provisions of the Constitution itself. It is therefore really an American question, and one to be adjudicated by ourselves; and this being well understood all over the world, no sane nation will go to the length of declaring war upon us on account of it. Some of them may refuse to negotiate arbitration treaties with us because of the sovereign rights of the separate States, but they will no more dream of drawing the sword because of petty grievances arising from this situation than they would ever interfere with our international affairs. If a single State could coerce the national government to make a state question a concern of the government and to defend the action of a State, right or wrong, the case would, of course, be different; but, in the determination of so grave a question as war, all governments are guided and controlled by the attitude of the responsible government and not by that of its press and its component parts.

And as long as Japan is satisfied as to the correct and friendly attitude of the government at Washington, no amount of jingo talk by the press or individuals will ever drive her into a bloody conflict with the United States. It is even unnecessary to call attention to the fact that our naval strength is double that of Japan to-day.

Congressional Record. 43: 1325-6. January 22, 1909.

James A. Tawney.

But that is not the only reason why there is no danger of war with Japan. Would Japan, even if she was able financially, ever think of sending a fleet of battle ships from Yokohama to attack our Pacific coast distant 4,200 miles? Her vessels would have to be supplied somewhere in the Pacific Ocean with coal and other supplies. For this purpose a naval base would be as essential to her success as war ships. A war ship without coal may be a thing of beauty, but it is as harmless as a dove. There is no available place in the Pacific Ocean except Hawaii from which a hostile fleet could operate against our Pacific coast, and when we have fortified the Hawaiian Islands, as they will be when the money now appropriated and being appropriated this year is expended, under the recommendations of the Taft Board, the Hawaiian Islands will be as impregnable as Gibraltar, and impossible of being captured by Japan or any other nation.

There is no naval vessel afloat that can sail in time of peace from Yokohama to the Pacific coast and back again with her own coal, a distance of 8,400 miles. Without a naval base in the Pacific no oriental country could send a fleet of naval vessels and accompany that fleet with enough colliers to supply them with the necessary coal. If anyone doubts this let him study the coaling needs of our fleet on its trip around the world and the way those needs were supplied. So I say, Mr. Chairman, from no standpoint are we in any danger of war with Japan or any other oriental country. But we have just recently concluded an agreement with Japan which we were

told before the naval bill was brought up for consideration insures the most friendly relations with that country. The country rejoiced over this fact, for our people have always enjoyed and will always endeavor to continue the most peaceful and friendly relations with the people of Japan.

Congressional Record. 43: 1708-10. February 1, 1909.

Lemuel P. Padgett.

The two battle ships authorized in the present bill will add 52,000 tons to the battle-ship tonnage of the United States and make it very easily the second naval power in the world. And in my humble judgment there is no good reason why it should strive to be more, and I think there is sufficient reason why the ambition of the most strenuous advocate of a great navy should be abundantly satisfied. I think these figures clearly demonstrate that in the future under ordinary conditions there will be no necessity for so large an increase of our navy as is provided in the present bill. It should be remembered that every battle ship added to the navy causes an increase of officers and enlisted men to man her of about 900 men, adding about \$1,000,000 each year as the cost for the maintenance of the ship. The construction of every battle ship demands the building of four torpedo boats and also additional cruisers and other auxiliary ships. At the present time we have six large battle ships building, and the two authorized in this bill will make eight. Last year I called attention to the fact that we were at that time, on a war basis, upon the complement of the ships built and building, short 22,701 men necessary to man the ships and were 1,846 officers short.

We are increasing our officers at the rate of about 150 a year. At the last session we authorized an increase of 6,000 enlisted men; and allowing for the two ships authorized in the present bill, we would still be more than 17,000 men short on a war basis and 14,000 short on a peace basis. In his last annual report, Admiral Pillsbury states that it takes, on an average, six years to train a man-of-war's man. With this large shortage of

men and officers, both on a war and peace basis, to man our present ships built, building, and authorized, we can see what tremendous additional expenses are going to be imposed in the near future, as soon as the ships now building are completed.

Congressional Record. 43: 2969-76. February 23, 1909.

Richmond Pearson Hobson.

Between nations where there is no common authority and no common power each nation must be its own judge of what is just and must provide the power necessary to have its just policies prevail, and the more ample the power the less the chance of necessity for its use. Americans should realize that at the present stage of the world our country's foreign policies, though scrupulously just, must depend absolutely upon our national power, and that without ample power at hand these policies must fail. A good illustration is found in the case of the Russian occupation of Manchuria. America called on Russia to evacuate Manchuria as Russia had promised, and American consuls were assigned to Manchurian cities with the full authority of China. But we had no fleet in the Pacific, no power available beneath our demand. So Russia promptly stopped our consuls, ignored our demand, and remained in Manchuria.

It is conservative to say that if America had possessed in the Pacific Ocean a fleet commensurate with our interests bordering that ocean Russia would have acceded to our just demand and the evacuation of Manchuria would have spared the world the war between Russia and Japan. Another modern illustration of the effect of having power and lacking power is seen in the contrast of the terms of the treaty of Shimonosiki and those of the treaty of Portsmouth. At the time of concluding the former treaty Japan was weak; at the time of the latter she was powerful. The former treaty forbade her taking from China precisely the same territory she took by the latter. At the time of the former treaty the powers forbade any encroachment upon Korea. Shortly after the latter treaty Japan

absorbed Korea, and not a protest was heard from any power. A good illustration is found in the contrast of our treatment of Chinese and Japanese in America. Another illustration is found in the contrast of the terms of the treaty of San Stefano, drafted at Constantinople at the conclusion of the Russo-Turkish war, when Russia was master of the field, and the terms of the treaty of Berlin that supplanted the former treaty. The appearance of the British fleet in the Sea of Marmora and British troops in Malta caused Russia to consent to transfer negotiations from San Stefano to Berlin, and Austrian co-operation with the British took away from Russia the control of the situation. The treaty of Berlin promptly set aside the terms of the treaty of San Stefano, and Russia thereby lost practically all of the fruits of her victory over the Turks.

If America had waited until her navy counted four additional battle ships, the trouble in Cuba could have been settled by diplomacy. But we did not have the margin of power, consequently we had war. The same can be said of the war of 1812, the war with the Barbary pirates, and the war with France. It is thought by many that if the Union had possessed larger power at the outset, the civil war could have been brought to a speedy close, if not averted altogether.

America has reached the statue of manhood and moved out into the world. Whether we like it or not we are in the midst of the world's activities, in the vortex of its politics, and the time has come when we must place upon ourselves, and not upon others, our security and the effectiveness of our policy. To-day the only basis for our diplomacy with Europe is for America herself to establish an equilibrium in the Atlantic Ocean as against any individual nation of Europe. This means that we have a great responsibility with regard to our naval progress. With our whole fleet in the Atlantic we just hold an equilibrium with Germany and with France, and are far below an equilibrium with Great Britain. While Great Britain is building 12 large vessels of the *Dreadnought* type, she is this year authorizing 6 more; while Germany is building 9 of such large vessels, she is this year authorizing 4 more; and yet we are only building 4 of these vessels, and this year are only authorizing 2 more.

Thus for our whole navy with its two ocean demands we are only advancing at a rate of one-half that of Germany and one-third that of Great Britain. It does not take the eye of a prophet to see the steady approach of the day when, without the benefit of the balance of power of Europe we shall find ourselves absolutely defenseless on the land with a fleet completely outclassed on the sea, while grave questions arise, whose peaceful solution with honor will demand at least an equilibrium of power which we can not furnish.

Japan captured 5 Russian battle ships and added them to her fleet, and she has made provision for 11 *Dreadnoughts* since the war was over. Two are completed—the *Aki* and *Satsuma*—2 more are building, 2 others are expected to be laid down this year, and five more are in contemplation, making 11 altogether. They have to-day 13 battle ships ready and 11 armored cruisers. To insure us control of the sea in the Pacific would require our whole existing navy and all its increase now authorized, and would require the permanent location of that whole force in the Pacific. This latter necessity will exist, as pointed out above, even after the completion of the Panama canal.

After the Panama canal is completed an enemy's fleet in Asia would still be closer to our Pacific coast than our own fleet in the Atlantic, and an enemy's fleet in Europe would be nearer to our Atlantic coast than our fleet in the Pacific. Ours is the only nation in the world which is driven by geographical necessity to having two great fleets. In addition to naval and military preparations, Japan has made great financial preparations. The Imperial Government receives a large percentage of the corporate earnings of the Empire without these revenues appearing at all in financial statements. The war with Russia was largely paid for as it progressed, and the result of the war established a great national credit, upon which Japan has borrowed over \$1,000,000,000, the bulk of which has been available for war preparations and a large part of which is held in a war chest in specie to be on hand for the conduct of the next war.

In fact, war with America would not appear to the Japanese in the light of a drain. With almost no extra expenditure they could possess themselves of our outlying territory of vast value,

including Alaska; could levy upon the rich Pacific slope and retire without serious resistance, and apparently without any chance of suffering reprisals or chance of having the outlying territory retaken. On the strength of such achievements they would expect to establish another enormous national credit, available for preparations for the subsequent war for permanent control, in preparation for which they would expect to have the resources and population of China available.

In addition to naval, military, and financial preparations, Japan has made diplomatic preparations of the greatest significance. India is at the mercy of Japan. As a result, Japan has been able to form an alliance with the British Empire, offensive and defensive, lasting till 1915. This alliance has been officially interpreted by a British official, Sir Wilfrid Laurier, the Canadian premier, February 28 last, in the Canadian parliament, as meaning that British, Canadian, and Japanese forces would be found co-operating on the frontiers of America in case of war.

France is unable to protect her colony of Cochin China against Japan, and must stand in with the latter. Japan has entered into a convention with France, one result of which has been French co-operation in financing Japan.

Russia's far eastern interests are more or less at the mercy of Japan. Japan has entered into a significant convention with Russia.

It is not necessary to discuss the nation against which these preparations are directed; the supreme fact is that they have been completed, naval, military, financial, and diplomatic, and are now available for Japan, while America continues absolutely defenseless.

Congressional Record. 45: 3819. March 25, 1910.

Richard Bartholdt.

A few months ago Secretary of State Knox, with the consent of the President, addressed a note to the powers proposing to invest the international prize court, recently created, with the jurisdiction of a court of arbitral justice. The plan was

an inspiration and will immortalize its author. While the Second Hague Conference had unanimously approved the principle of obligatory arbitration, as well as a continuance of The Hague court as a court of arbitral justice with permanent judges, the question of distributing 17 judges among 45 nations had divided the conference, and as no agreement could be reached the matter was left to future diplomatic negotiations. In the meantime an international prize court, with permanent judges, had been established by consent of the nations, and the American proposition, according to the Knox plan, therefore is to invest this court with jurisdiction in arbitration as well as prize questions, and so sensible and practical is this proposition that the powers, one by one, are now signifying their assent to it. This assures us a permanent high court at The Hague for the settlement of all controversies which the nations may see fit to submit to it. And if this institution means anything it means that every nation can have its rights protected by law and judicial decision, and that armaments are no longer necessary except for the enforcement of the court's decrees.

Is anyone to believe that our State Department did not realize this logic and did not draw the same conclusion when it sent its circular note containing that proposal to all the nations of the earth? And does not the navy department, by its insistence on further naval increase, and the more so by its latest phantastic plan of leading the world in naval construction (I refer to the proposed \$18,000,000 *Dreadnoughts*), actually repudiate our Department of State and negative, not to say give the lie to, its peaceful professions? And would not Congress, by approving the new naval programme, serve notice on the world that the American proposition heretofore mentioned was not made in good faith, and that our promises, official though they may be, are mere pretense and sham? The honor of the American Nation is involved in this matter, much more than in any difficulty which may cause a jingo to shout for war, and I plead for its vindication.

Congressional Record. 45: 6806-7. May 20, 1910.

Jacob H. Gallinger.

Mr. President, I desire to put in the RECORD some statistics, which need not be read, in reference to our navy as it stands at the present time. I find upon looking at the statistics prepared by the well-informed and exceedingly accurate author of the Navy Yearbook, an indispensable publication, that he has brought the figures up to the present moment, and it develops that we have the second largest tonnage in the world, being exceeded only by Great Britain. In the number of war ships of all kinds we are sixth, but in the tonnage we are second.

I will ask permission, without reading, to insert in the RECORD an interview that was given by Mr. Pulsifer, the author of the Navy Yearbook, to the Associated Press a few days ago, which he tells me is absolutely correct. I ask that it be inserted without reading.

The matter referred to is as follows:

The United States leads the world in the total displacement of completed warships, with the single exception of Great Britain, but is behind five other countries in the number of such vessels. Adding to these completed war craft the ships provided for, but not completed, this Government outranks all others, except the British, in total displacement, but ranks only sixth in number. Reckoning the war vessels built and building, the United States and Germany are running on equal terms, but the former is leading in displacement when the ships provided for in the pending naval appropriation bill are added to the calculation. Great Britain, the United States, and Germany remain the leading naval powers.

These warship rating facts are set forth in table which Pitman Pulsifer, compiler of the Navy Yearbook, has prepared.

Great Britain already has four *Dreadnoughts*, aggregating 73,700 tons; the United States four, with 72,000 tons; Germany three, with 55,500 tons, which includes an 18,500-ton battle ship completed since the last yearbook was issued; and Japan one, having 19,200 tonnage. Those provided for will swell this *Dreadnought* list to: British 17, displacement, 353,700; United States (including two battle ships provided in pending bill), 10, displacement, 221,650; Germany, 13, displacement, 275,000; France, none given; Japan, 6, displacement, 118,410; Russia, 4, displacement, 92,000; and Italy, 4, displacement, 80,000.

The average age of the completed battle ships and first-class cruisers runs from 3 years and 9 months in the United States to 6 years and 10 months in Japan.

Great Britain, the naval pacemaker of the world, will have 498 completed and provided for war ships, of 2,106,873 tons total displacement, including three 25,000-ton battle ships of either twelve 12-inch or ten 13½-inch armament and one armored 26,000-ton cruiser, armed with eight 12-inch guns, not agreed upon when the

yearbook was published. Of them 445, with 1,758,350 tonnage, are completed. There will be 108 battle ships and cruisers of 1,581,680 tons aggregate displacement. The British ships, now carrying 256 large guns—11-inch and upward—will have 386 large guns when all craft provided for are finished.

The United States, when its ships completed and provided for are in operation, will have 179 war craft, of 839,945 tons displacement, including 50 battle ships and armored cruisers, carrying 204 large guns. Of the grand total, 146 vessels are already completed, having 685,706 tons displacement and 136 large guns, 44 of the vessels being battle ships and armored cruisers.

Germany will have 233 ships, of which 199 are already completed. It will have altogether 46 battle ships and armored cruisers, with displacement of 654,334 tons and 208 large guns.

France will have 503 war craft, of 766,906 tons displacement, including 46 battle ships and armored cruisers, with 79 large guns. Of all these, 431 vessels are completed.

Japan will have 191 war vessels, of 493,704 tons displacement, including 30 battle ships and armored cruisers, of 408,465 tons displacement, and 118 large guns, of which there are already completed 179 vessels.

Russia will have 224 vessels, of 412,250 tons displacement, including 23 battle ships and armored cruisers and 98 large guns. Already completed are 209 vessels.

Italy will have 122 vessels, of 259,278 tons displacement, embracing 25 battle ships and armored cruisers and 68 large guns.

I also ask to insert in the RECORD a table showing the cost of the ships of the navy up to June 30, 1909, prepared by this same gentleman, which, I assume, is correct in every particular; and I think it will be of interest to Senators to look at it and see just where we are going in that direction.

This table is as follows:

SELECTED ARTICLES ON

Cost of ships of the navy.

STATEMENT SHOWING COST OF EACH COMPLETED BATTLE SHIP BUILT UNDER APPROPRIATIONS FOR INCREASE OF THE NAVY TO JUNE 30, 1909.

Battle ships.	Hull and machinery, including armor.	Equipage including armament.	Total.
Texas	\$3,638,284.99	\$563,836.50	\$4,202,121.49
Indiana	5,333,708.05	649,663.93	5,983,371.98
Massachusetts	5,401,844.97	645,272.98	6,047,117.95
Oregon	5,914,021.90	661,010.86	6,575,032.76
Iowa	5,162,587.12	708,619.20	5,871,206.32
Kearsarge	4,429,890.69	613,700.99	5,043,591.68
Kentucky	4,418,094.99	580,024.44	4,998,119.43
Alabama	4,077,010.09	588,810.13	4,665,820.22
Wisconsin	4,162,617.53	561,276.75	4,723,894.28
Illinois	4,073,429.26	547,979.56	4,621,408.82
Maine	4,567,464.52	814,439.09	5,381,903.61
Missouri	4,438,925.08	819,335.47	5,258,260.55
Ohio	4,475,375.45	790,129.39	5,265,504.84
Connecticut	6,394,757.77	1,516,496.41	7,911,254.18
Kansas	6,200,929.39	1,369,253.92	7,570,183.31
Louisiana	6,060,902.24	1,364,799.43	7,425,701.67
Minnesota	6,145,642.76	1,298,251.11	7,443,893.87
Vermont	6,159,952.28	1,405,495.15	7,565,447.43
Georgia	5,541,279.58	1,004,754.46	6,546,034.04
Nebraska	5,634,515.96	1,153,281.00	6,787,796.96
New Jersey	5,366,369.88	1,170,356.60	6,536,726.48
Rhode Island	5,343,619.83	1,192,952.45	6,536,572.28
Virginia	5,486,133.52	1,217,517.97	6,703,651.49
Idaho	4,795,535.06	1,097,286.15	5,892,821.21
Mississippi	4,740,800.95	1,092,000.46	5,832,801.41
New Hampshire	5,976,236.99	1,153,666.06	7,129,903.05
Total completed battle ships	133,939,930.85	24,580,210.46	158,520,141.31

Congressional Record. 45: 6809-10. May 20, 1910.

Henry Cabot Lodge.

I ask that a table, prepared by Mr. Pulsifer in regard to the navies of the world, may be printed in the RECORD in this tabular form. This big sheet contains the statistics. It is all given in narrative form in what the Senator from New Hampshire had printed this afternoon. But I should like to have it also in tabular form. I think it would be very useful.

The matter referred to is as follows:

MR. PULSIFER'S WAR-SHIP RATING.

As regards the United States and Germany, reckoning only vessels completed, United States is ahead; reckoning those built and building, they are about equal; adding the ships provided for in pending naval appropriation bill, United States leads Germany.

Mr. Pulsifer has prepared tables giving interesting data, which will enable anyone to see wherein one naval power has the advantage of another in any important particular. The tables include ships provided for since the Navy Yearbook was published, and also the ships provided for in the pending naval appropriation bill:

Ships completed.

Country.	Number and displacement of all ships.		Number and displacement of battle ships and armored cruisers.		Number of large guns (11, 12, 13, and 14 inch).	Number and displacement of "Dreadnoughts."	
	Number.	Tons.	Number.	Tons.		Number.	Tons.
Great Britain.....	445	1,758,350	95	1,301,680	256	4	73,700
United States.....	146	685,706	*44	*592,691	136	4	72,000
Germany.....	†199	†628,200	†36	†434,834	100	†3	†55,500
France.....	431	602,920	38	414,263	55
Japan.....	179	400,368	25	309,265	64	1	19,200
Russia.....	209	259,263	15	162,409	34
Italy.. ..	112	216,038	19	195,695	28

* Including *Charleston*, *Milwaukee*, and *St. Louis* (29,100 tons). Officially the three ships are protected cruisers. They are actually armored cruisers and so treated by standard foreign publications.

† Including one battle ship (18,500 tons) completed since Navy Yearbook was published.

Average age first-class battle ships and armored cruisers.

Country.	Years.	Months.	Days.
Great Britain.....	5	11	2
United States.....	3	9	20
Germany.....	5	0	0
France.....	4	6	16
Japan.....	6	10	26
Russia.....	5	8	17
Italy.....	4	4	0

Ships completed and provided for.

Country.	Number and displacement of all ships.		Number and displacement of battle ships and armored cruisers.		Number of large guns (11, 12, 13, and 14 inch).	Number and displacement of "Dreadnoughts."	
	Number.	Tons.	Number.	Tons.		Number.	Tons.
Great Britain	*498	*2,106,873	*108	*1,581,680	386	*17	*353,700
United States.....	†179	†839,945	†150	†742,341	204	†10	†221,650
Germany.....	233	820,692	46	654,334	208	13	275,000
France.....	503	766,906	46	552,183	79
Japan.....	191	493,704	30	408,465	118	6	118,410
Russia.....	224	412,250	23	313,135	98	4	92,000
Italy.....	122	259,278	25	295,359	68	4	80,000

* Including three battle ships, displacement 25,000 tons each; armament either twelve 12-inch or ten 13½-inch guns (given above at twelve 12-inch); and one armored cruiser, displacement 26,000 tons; armament eight 12-inch guns, which were not agreed upon when Navy Yearbook was published.

† Including two battle ships, displacement 27,000 tons each; armament twelve 12-inch or ten 14-inch guns (given above at twelve 12-inch), provided in pending bill.

‡ Including *Charleston*, *Milwaukee*, and *St. Louis* (29,100 tons). Officially the three ships are protected cruisers. They are actually armored cruisers and so treated by standard foreign publications.

Congressional Record. 45: 6922-3. May 23, 1910.

George C. Perkins.

If we imagined war to occur within the next six months, we should have, according to the plan of the Secretary of the Navy, just published, a battle ship fleet of 16 vessels—from 13,000 to 20,000 tons displace, from 17 to 21 knots speed—carrying eighty-four 12-inch guns. Two of these ships would carry ten 12-inch guns each, two 8 guns, and fourteen 4 guns each.

Germany could send out only 12 first-class battle ships carrying sixty-four 11-inch guns. Her vessels would range from 12,067 to 18,500 tons of 18 to 19½ knots speed. Two of these vessels would carry 12 guns each, the rest 4 guns.

Japan could put forward 15 battle ships of the first-class, of 12,320 to 19,210 tons, from 18 to 22 knots speed, carrying sixty 12-inch guns. All would be 4-gun ships.

To-day, therefore, the United States can, with the exception of England, send the strongest fighting force to sea.

If we imagined this to occur when we shall have in commission all the fighting vessels built and authorized, and other nations the same, we shall be able to send out a fleet of 21 battle ships of from 18 to 21 knots speed, 12,500 to 26,000 tons displacement, carrying one hundred and thirty-two 12-inch guns. If Germany, with her authorized vessels completed, were our antagonist, we should be outclassed, for she could oppose to us 20 battle ships and 3 cruisers, which are virtually battle ships, of 18 to 25 knots speed, 12,997 to 23,000 tons displacement, and carrying one hundred and eighty-four 11 and 12-inch guns. In other words, Germany could bring to bear upon each of the American ships more big guns than we could bring to bear on each of the German vessels. The American fleet would, it seems to me, be overmatched.

If our antagonist were Japan, we should be the stronger, but not by such a margin as has been claimed for us. Against the American fleet, as before set forth, Japan could oppose 18 battle ships and fighting cruisers of 18 to 25 knots speed, 12,230 to 21,000 tons displacement, carrying one hundred and six 12-inch guns. It is apparent from these figures that it would require the entire battle ship fleet of the United States of a similar class of vessels to cope with the fleet of Japan. Even then we should have an advantage of only 26 guns. The Germans would have an advantage over us of 52. It is idle, I think, to make the claim that we could send one-half of our fleet to the Pacific and be the equal of Japan in sea power on that ocean. One-half of our fleet, above constituted, would give Japan an advantage of 8 vessels and forty-five 12-inch guns. I think that what has been said shows conclusively that to oppose Japan we should need our entire battle ship fleet. If we take account of all the ships of both nations, carrying guns of over 10-inch caliber, we find that the United States will have 33 battle ships of all classes, carrying 180 guns, one-half of the force, or, say, 17 battle ships,

carrying 90 guns, would have to meet 21 Japanese fighting ships carrying 118 guns.

But the second-class battle ships would not be brought into the fighting line and the truer comparison will be with homogeneous fleets of 18 knots speed and big-gun power. In this event it would take the entire number of American ships that would form the first line of battle to oppose successfully the fleet of Japan. It is idle, therefore, I think, to assume that we can with one-half our present fleet meet Japan on equal terms on the Pacific.

It will be noted that, while now the United States surpasses in sea strength Germany and Japan, with the completion of the vessels authorized by these three nations the relative positions are very materially changed. Germany will hold the first place, and Japan will, with very limited construction, hold her own in comparison with the United States. These results, remarkable in the case of Germany, will have been brought about by the construction of all-big-gun ships of high speed. If, therefore, we are to hold our own as a sea power, we must do more than simply replace by means of one ship a year the loss suffered by old ships becoming obsolete. We must increase the actual number of our battleships as well as construct them of heaviest gun power and high speed. There is no danger of war with Germany or Japan, but these nations, the former particularly, show what a remarkable change in the relative power of a battle fleet can be made in a few years by judicious construction. I do not think that, for the present at least, one battle ship a year will meet the relative loss in sea power which will result from the programme thus far carried out.

Congressional Record. 45: 8727. June 20, 1910.

Atterson W. Rucker.

It is estimated that the initial cost of each of the proposed battle ships will be \$12,000,000, and that the cost of maintenance will approximate \$1,000,000 each annually. The life of a battle ship being, as has been stated authoritatively, twenty years, a

simple mathematical calculation will demonstrate that each of these ships is, as a matter of fact, actually costing the Government \$32,000,000, or an aggregate for the two of \$64,000,000.

The President has declared that it is the policy of the Republican party to build two such ships each year until the completion of the Panama canal. No one seriously believes that that gigantic enterprise will be finished within five years, but assuming that to be the period of its construction, the taxpayers of this country will have been, at its conclusion, burdened to the extent of \$320,000,000 for the proposed 10 new battle ships, leaving out of the computation the additional millions to be expended for auxiliaries, torpedo protectors, and so forth, which constitute what is denominated the unit of strength of equipment of a battle ship.

Cosmopolitan. 29: 609-11. October, 1900.

Our Navy Fifty Years from Now. William E. Chandler.

The twentieth century is destined to witness some very important new departures in the art of naval warfare, and the most notable of these may be the disappearance of armored ships. My notion is that fifty years hence the armor-clad fighting-vessel will be as completely out-of-date as is the armored fighting-man to-day. Soldiers are no longer protected in battle by suits of mail, because they prefer to take their chances of being wounded or killed rather than carry the weight and suffer the incidental impediment to their activity. To the war-ships of the future the same idea will be considered as applying, and, in order to inflict the utmost possible damage upon the enemy, they will accept great risks fearlessly, relying for safety upon rapidity of movement, skill in manoeuvring, and, above all, a dexterity in a sea-fight which shall accomplish the destruction of the adversary before the latter can succeed in striking a deadly blow.

The typical war-ship of the twentieth century—of fifty years hence, let us say—will be exceedingly swift and readily dirigible, so as to manoeuvre with ease. It will carry a great many guns of moderate caliber, the very large ship-cannon of to-day being

dispensed with, and all of them will be of the rapid-fire kind, while the shells will be loaded with high explosives capable of enormous destruction.

It is obvious that, if the war-ship of the future is to have great speed, its motive power must be proportionate. Engines will doubtless be improved very much, but my belief is that some far more efficient substitute will be found for steam as a propelling agent. What that substitute will be nobody can say, though electricity seems more likely than anything else. In the present state of the electrical art that force is not available for such use, inasmuch as storage batteries would weigh too much; but later discovery may do away with the necessity of employing accumulators, introducing some new and easy method of producing and applying electric energy.

It does not seem too much to expect that the cruiser of the twentieth century, with her improved machinery and new motive-power, will have a steaming radius twice as great as that of the best vessel of her type to-day. In other words, she will be able to travel twice as far without a fresh supply of fuel. Our fastest naval greyhound, the "Minneapolis," has a steaming radius of about nine thousand miles, and, on the basis suggested, the swiftest fighting-craft of fifty years hence (not including torpedo-boats) could make a voyage of eighteen thousand miles, at a stretch, without entering a port. This ship of the future will possess an astonishing activity, traversing immense distances at a high rate of speed, and with a small consumption of fuel. A very notable point about our war-ships of the present day is their low fuel-consumption on long voyages; but this has always implied slow going, the coal-consumption running up with a startling multiple when speed is increased.

If my theory be correct, the armored ship of the twentieth century will be regarded, like the mail-clad fighting-man, as a relic of the past, and the war-vessel will take its chances in conflict, just as the soldier does to-day. Perhaps the war-ship may retain a light protective coat, very strong for its thickness, but the enormously heavy plates now in use will be dispensed with, simply for the reason that they interfere too much with the activity and serviceableness of the dirigible floating platform

which carries the guns. Our new battle-ship, the "Kearsarge," carries no less than twenty-seven hundred tons of armor—a weight so gigantic as to render her clumsy and sluggish.

Already our own navy department has come to realize that armor has been overdone, and the thickness of the steel plates is to be much reduced in the newly ordered war-ships. This, unquestionably, is a step in the right direction. One trouble about the modern battle-ship is that in a sea-way she finds difficulty in firing her guns, because she rocks so much, and it has been asserted by experts that a cruiser like the "Brooklyn," having a higher freeboard and therefore a more stable gun-platform, could stand off at long range in rough weather and "knock out" the most powerful battle-ship, which would be as helpless under such circumstances as a cow attacked by a tiger-cat. It is not sufficient to be formidable merely in defense; readiness to attack, which in a war-vessel implies nimbleness, is at least equally important.

Not being myself an expert in such matters, technically speaking, I am obliged to confine myself to generalities. To attempt a discussion of the relative merits of the battle-ship and the armored cruiser, for example, would be to venture outside of my knowledge and into a field with which I have not a proper scientific acquaintance. On the other hand, I do not hesitate to venture the prediction that fifty years from now there will be no such great differentiation in types of fighting-ships as we behold at present. At one extreme we have the battle-ship, and at the other the unprotected greyhound cruiser with small offensive power and no defensive equipment except her heels—in other words, her ability to run in case of danger. If I am not mistaken, the sea-fighters of the future will be, in the main, of one type—with light armor, if any; swift, nimble of movement, and with tremendous destructive power. Already there is a marked tendency to increase the number of guns and make them of somewhat smaller caliber, the great ship-cannon mounted in the turrets of the "Indiana" and other battle-ships of ours to-day being too slow of fire and too clumsy to handle. When high explosives are used in shells, as will soon be the case, projectiles of moderate size will carry them in adequate quan-

tities, and the best results will be obtained by concentrating the fire of many guns. It goes without saying that the weapons employed, whatever their size, will all be of the quick-fire type, so as to throw literally a storm of bursting projectiles at the enemy.

The loss of life in a twentieth-century naval battle will be very great, the means of destruction used being so tremendous, and we may expect now and then to see a vessel wiped out with a single well-aimed shot, all on board perishing, because in such a conflict there will be no time to pick up the survivors. On the other hand, much will be gained for safety by making the ships fireproof—a change which has already been adopted in the plans for all of our newly ordered fighting-craft. Warships in future will be non-combustible from stem to stern. Wood has to be utilized for some purposes on board, though the furniture may be of metal, but there is no difficulty in rendering it absolutely proof against fire by a mineralizing process which has been adopted by the government for this purpose.

Necessarily, the enemy's vessels would be as vulnerable as our own, for lack of armor—a remark which recalls to my mind an incident that occurred when I was Secretary of the Navy. We had begun the new navy by contracting for the "Chicago," the "Boston," the "Atlanta," and the "Dolphin," and our next program was a very modest one, calling for the construction of only four additional ships. More were wanted, but it was thought that four were as many as we could hope to get. In those days the importance of sea-power was not recognized in this country as it is now, and many people in Congress could always be counted on to oppose any measure for the increase of our maritime forces. A Democratic Senator from the East, in particular, was against furnishing money for a Republican Secretary to spend on war-vessels, and it was in vain that he was urged to consent to it. Looking for a pretext for opposition, he found one that was rather ingenious. He came into the room of the Senate Naval Committee one morning and said:

"Mr. Chairman, I've been thinking this business over, and I don't see that we need any more ships—at all events, not just

now. Here is this new stuff called dynamite, which is so powerful that a small projectile loaded with it may destroy and blow to atoms the biggest war-vessel in the world. There is no use in putting a great sum of money into a craft that can be smashed with a single shot. So I think that, instead of going any further, the subject of dynamite ought to receive careful investigation."

Evidently it did not occur to the Senator to consider that dynamite, in a fight on the seas, could not be thrown at us except from a ship, which necessarily would be as vulnerable to attack by high explosives as our own vessels. But the remarks quoted are interesting to-day, as illustrating the development of ideas on the subject of naval warfare within the last eighteen years. The money for the four ships I wanted was not given to me, but to Mr. Whitney afterward.

According to my notion, it will be thought fifty years hence that six million dollars is too large a sum to risk in a single war-ship, and that it is better to build two or three of less size for the same money. I am strongly inclined to think that, under twentieth-century conditions, two or three comparatively small fighting-vessels, powerfully armed and very speedy, may do much more execution and accomplish more effective results than one huge floating fortress. One trouble about modern battle-ships is that they are apt to be obsolete by the time they are finished, and a few years hence we may find our boasted sea-fighters relegated to rust in the navy-yards, alongside of the old-time wooden frigates. It is the experience of foreign nations that any type of iron-clad vessel becomes so out-of-date in about ten years as to be almost useless.

The use of the torpedo in naval warfare will be greatly developed in the course of the next fifty years. Of the employment of torpedo-boats I have always been a strong advocate; but the lessons of recent history point to the conclusion that small craft of this kind are too vulnerable to be of much practical service, unless for scouting duty or to steal upon an unsuspecting foe at night. This latter move, indeed, is rendered almost impracticable by the detective searchlight. Probably the torpedo-boat of the future will be of considerable size, and

will carry a fair battery of rapid-fire guns, so as to be able to put up some sort of fight, while seeking a chance to deliver its more deadly and destructive missile.

I am inclined to think that the pneumatic gun will be dispensed with. Its range is very short and its trajectory so high as to make accuracy of aim difficult. Besides, what will be the use of it when ordinary guns throw high explosives? As for the range of ship-cannon, it is not likely to be increased; for there is no object in throwing a shell ten or fifteen miles when a ship is concealed by the curvature of the earth at seven miles. Furthermore, war-vessels would hardly begin an action until within two miles of each other. One important new departure will be the adoption of some sort of paint for ships' bottoms which will prevent them from fouling. This is a matter of the utmost importance, inasmuch as a foul bottom cuts down a ship's speed and greatly increases her consumption of fuel.

The submarine boat, in my opinion, has a great future before it. In harbors it can hardly be operated with safety, owing to obstructions—particularly torpedoes in war-time. It needs a clear field, and its most effective work will be done outside the mouths of harbors, perhaps running out on the surface of the water—for the sake of clear vision—and then diving to attack the enemy. It may be that, some time in the future, war-ships will carry submarine boats for torpedo service at sea. The question is chiefly one of weight; for, if such a boat can be made light enough, there is no reason why it should not be carried on the deck of a large man-o'-war, just as enormously heavy steam-launches are a part of the equipment of a modern battle-ship.

The increase of our navy depends wholly upon a determination to develop our merchant marine. If the latter is revived, our fighting force on the seas must be increased proportionately, and before the end of the twentieth century we are likely to find ourselves only second in rank among the nations of the world in respect to sea-power, Great Britain still holding the first place. But commerce must come before a larger navy, for, lacking the pugnacity of Germany, France and Russia, we are

not likely to build up a great fighting force on the ocean merely with a view to making ourselves formidable in a martial sense. Our first duty is to revive our carrying trade in ships suitable for naval service in time of war.

Cosmopolitan. 44: 586-92. May, 1908.

If War Should Come. Richmond Pearson Hobson.

During the past two decades Japan has seized upon and utilized to the utmost the inventions and discoveries made by the white race. And in consequence Japan holds today the mighty forces of nature and of organization more completely at her command than any nation of the white race. In naval and military affairs each western nation has built up a practice of its own, with both good and bad characteristics. Japan, on the other hand, has appropriated the good characteristics of all; and just at the time when Japan is emerging from feudalism she has made her entry into the council chamber of the nations through the gate of war forced open by the mighty power of her military organization.

War is not yet obsolete even among the white nations in their relations with each other, and it behooves them to understand the meaning of Japan's rise in power through victorious handling of the weapons of war. The presence of superior power is absolutely necessary to check the natural course of that nation toward war with foreign powers, now that war within her own body has ceased as a result of the union of the feudal lords behind the Mikado.

No internal question at this moment is comparable in importance to the present and prospective strength of Japan compared with that of our country. The supreme duty of America at this moment is to gage accurately the possibilities of Japan's military power and to make that power ineffectual by the provision of an unquestionably superior force. No other thing that our government can do would have so powerful an influence for the establishment of justice and the maintenance of peace in internal relationships.

The strength of a nation is in the number of its able-bodied

men, their availability for action, the average fighting value of the men, and the preparation and efficiency of their organization.

The Japanese population is more available for war at the present moment than the population of any white nation. The people are not only more disposed for war, on account of the stage of their civilization and their recent victories, but are more willing than the people of the West to bear the greater burdens of taxation without murmuring against the government. Furthermore, the women are more ready to do the work while the men are on the battlefield. In the next place, the military forces can be maintained and a campaign properly executed at a cost far below what the same movements would impose upon the white nations.

The Japanese now have in Pacific waters eleven battle-ships and eleven armored cruisers, making twenty-two armored vessels. It should be noted that the Japanese armored cruisers *Tsu Kuba*, *Okoma*, *Ibuki*, and *Satsuma* carry twelve-inch guns, larger than any guns carried by our armored cruisers. These Japanese armored cruisers will certainly be found on the battle-line with the regular battle-ships. The moderate superiority of our fleet will soon disappear. Our own ships will gradually deteriorate because of the lack of docking and repairing facilities, and the Japanese will be constantly adding to their fleet the great new ships as they are completed. The only two of this type that we have in course of construction will probably go into commission in the summer of 1910, and will be on the Atlantic seaboard. The Japanese by that time will certainly have in commission eight, and possibly eleven, more vessels, all of the new type. Conservative estimates have placed one vessel of the new type as equivalent to at least three vessels of the type that compose our fleet.

Cosmopolitan. 48: 157-60. January, 1910.

No Peace for the Warring World. Sir Edward Hobart Seymour.

Of course peace commissions, of a more or less civil nature, have aimed to restrict the mechanical violence of war machinery, but peace organizations of the character of the Hague

Commission have been unable to accomplish much more than arouse the interest of public sentiment. The peace of the nations is best insured by sufficient warships to maintain it. The sea must be policed as efficiently as the land. There is as much need for the power of arrest at sea as there is in the street. The British navy has been compelled to discover this fact in the proper control of her colonial lands. Perhaps its supremacy has been established largely upon grounds of police duty rather than national aggressiveness. Navies are police forces of the sea. Upon them the peace of nations very largely depends.

Current Literature. 44: 597-9. June, 1908.

Four and Two Battleships.

How many battleships does this nation need? Something over a year ago the President's opinion was that we needed to provide for but one new battleship a year in order to keep our navy in its present state of efficiency. His message a few weeks ago calling upon Congress to provide for four new battleships startled the nation with its demand, and by the earnestness with which it was made. The President has changed his mind for two reasons. One is the failure of the recent Peace Conference to agree upon any check to the increase of the world's navies. The other is the development of a new type of battleship in the *Dreadnought*, of double or even treble the efficiency of previous types. We have provided for but two ships of this type. Other nations, especially Germany, have provided for a considerably larger number. The inference seems to be that in a few years our navy, now second in rank, and, in the opinion of Sir William Henry White, equal, ship for ship, "to anything the world contains," will be an obsolete navy of inferior vessels. "If we desire to avoid insult," were the President's closing words, "we must be able to repel it; if we desire to secure peace, one of the most powerful instruments of our rising prosperity, it must be known that we are at all times ready for war." And he pointed to China as an illustration of what a nation may be brought to by neglecting necessary precautions.

The reply of both houses of Congress to this request for four battleships was a loud and emphatic no. The argument that prevailed in each branch of Congress was the appeal to the state of the treasury. "The treasury deficit for April," said Senator Aldrich, "will be \$11,000,000, and for the present fiscal year \$60,000,000. The appropriation bills now pending carry \$104,000,000 more than those of last year. The proposed Public Building bill will add \$20,000,000 to this amount. That leaves an aggregate increase of \$124,000,000, with a deficit of \$60,000,000. What is Congress going to do?" In vain the champions of four battleships pointed to a treasury surplus of \$252,000,000 in reply to this searching question. In vain they pointed out that other nations are even borrowing money to build themselves statlier mansions on the sea.

In the course of the debate some startling figures were brought out. Congressman Tawney declared that the United States is expending in military and naval preparations for war \$2,683,000 more than France, only \$35,884,000 less than Germany, and \$66,473,000 less than Great Britain. Reckoning in our pensions, we are expending for wars past and to come \$84,975,000 more than Great Britain, \$136,000,000 more than Germany, and \$152,859,000 more than France. He asserted that no European nation has sufficient transport service to land an army of 200,000 men on our shores in ninety days' time, even without any opposition; and that no Oriental nation would attempt to send a fleet past the Hawaiian Islands for the purpose of assaulting our Pacific coast, for the reason that, without a naval base, the vessels would never be able to return home after the assault. Senator Hale declared that we now have built or building a navy large enough to maintain in the Pacific a fleet larger than that which has just steamed to San Francisco, and at the same time a considerably larger fleet in the Atlantic Ocean. Seventy per cent. of our national expenditures, he estimates, are now made on account of wars of the past and future.

Current Literature. 46: 238-43. March, 1909.

End of the Battleship Cruise.

In rendering the battleship "the symbol of modern civilization," adds the *Hamburger Nachrichten*, Theodore Roosevelt has "benefited not his own nation alone, but all mankind," seeing that "naval power is the true test of the greatness of a land." This praise is echoed by a writer in the *Leipzig Grenzboten*, who anticipates a time when the Dreadnoughts of the fatherland will exceed sixty, all less than twenty years old, all equipped with thirteen-inch guns only. "Mr. Roosevelt has brought that prospect nearer for ourselves, and to that extent we owe him a debt we can never repay." Had it not been for the cruise of the sixteen units, adds the *Süddeutsche Reichsrespondenz*, "we might be satisfied with few ships."

By the end of the year 1914, according to the *Paris Eclair*, whose naval expert has had access to some official estimates, Great Britain will rejoice in the possession of seventy-two battleships, each larger than the Dreadnought, Germany will have thirty-nine, France thirty, and the United States at least as many. Japan will then have twenty-one Dreadnoughts. "Thus is it possible to measure the extent of the influence exerted by the initiative of Mr. Roosevelt, who, whatever else may be thought of him, is one of the master minds of the age." "He has vindicated the thirteen-inch gun," observes the *Paris Figaro*, "and to him alone must be awarded the credit if target practice in every fleet on the blue seas means the coming of the man behind the gun into his own." Australia, too, we are reminded by the *London News*, will before many years have her own warships on the deep—a result made possible for her by the effect upon antipodean opinion of the visit of the great squadron. Even Brazil and China, this London paper notices, have "caught the battleship craze," and the King of Siam will order one when he can borrow the funds.

"How glibly the powers talk of sending a fleet around the world in the wake of the American squadron," the *Paris Armée et Marine* says, "but could they do it? Japan has not the seamanship, France has not the ships, Germany has not the

money." This service organ further suggests that France send a commission of naval experts to this country to make a careful study of American shipyards and American methods of naval administration. "There must be some explanation of the fact that accidents are less frequent aboard American battleships than aboard the battleships of any other great power." There is an impression that the exact contrary is the case, it admits, but that is the result of the fact that American accidents are made public while in Germany the officials conceal mishaps.

Forum. 24: 1-15. September, 1897.

A Plea for the Navy. Hilary A. Herbert.

We may now inquire what interests we have that might possibly need the protection of a navy, and what facilities our conditions, geographical and commercial, would afford to an enemy for an attack by water. We may then form some opinion as to how much the United States navy should be increased.

The United States have over 3,000 miles of sea-coast, excluding Alaska. We have more population and more wealth in cities by the sea than perhaps all the other nations of the world together. The statistics of our coast-wise commerce are wanting; but our Commissioner of Navigation estimates that we have more water-borne traffic than even the United Kingdom of Great Britain. It is often said that others do our carrying, and that we have but a small merchant marine. Excluding our shipping upon the great lakes and western rivers, the registered, enrolled, and licensed American vessels, carrying to and from our Atlantic, Gulf and Pacific coasts,—some to foreign and the rest to home ports, and all subject to attack by foreign ships of war,—foot up a tonnage of 3,104,000 tons; while, according to the latest available figures, Russia, Germany, and Italy have an aggregate tonnage, coastwise-going ships included, of only 2,768,000 tons. If we now count in our vessels on the great lakes, we have a total American tonnage,—western-river commerce still excluded—of 4,428,000 tons, which is far more than the total mercantile marine of Russia, Germany, Italy, Japan, and Spain;

and excluding Great Britain and the United States, these five nations are, as we have seen, the greatest naval powers of the world. A naval war, therefore, would be a serious matter for our country, and particularly because, the United States having refused long ago, at the Paris Conference, to consent to the abolition of privateering, the right to issue letters-of-marque and reprisal to private vessels to prey on an enemy's commerce still exists as against us in favor of all the other powers of the world. What would become of our foreign carrying trade and our vast coast-wise traffic, if an enemy should commission a lot of swift vessels to hover along our coasts from Machias to Galveston, or from San Diego to Puget Sound?

As to our cities by the sea, it should be remembered that they are now, for the most part, in no better condition to be defended against attacks by water than they were during the civil war; and that the harbor defenses of that day were not equal to the ships and guns then brought against them. The war-ships and guns of to-day are infinitely better than those of 1861-5.

It thus appears: First, that we have more property on shore assailable from the water than any other nation; second, that we have more property (commerce) afloat and assailable by navies than any other nation; and third, that, except Great Britain, we have more merchant ships afloat on the ocean (great lakes included) than the five greatest naval powers of the world combined.

Taking these conclusions as postulates, and considering them in connection with the tables we have examined, it seems to follow that our navy should be further increased, unless the opponents of such increase can establish the single proposition that we are never to have any more wars with naval powers. They cannot admit the possibility of war, and contend that we can prepare for it when in sight. Many nations act unwisely; but none would be so Quixotic as to give us notice and wait until we had prepared for a contest; and a modern naval war would be over in less time than it takes to build a single gun-boat.

The whole argument against an increase of the navy must therefore rest upon the impossibility of war; and it is usually

put thus: No nation would dare to attack us, the United States of America; and if we shall, as we mean to do, cultivate peace and honest commerce with all the peoples of the earth, we shall never have cause to initiate war.

This reasoning assumes, among other things, that all nations are wise and prudent. If we should concede—what cannot be established—that the rulers of nations are always prudent, and that individually they always estimate wisely their own relative military strength, it must nevertheless be admitted that public sentiment, which, after all, dominates now and then even kings and emperors, is not always so wise as it should be.

It is not a great many years since the people of Portugal were demanding a declaration of war against Great Britain; and it was for a time doubtful whether the King could resist the clamor. It was public sentiment in France that brought on the Franco-German war. The French Emperor was loath to begin hostilities; but the campaigns of Napoleon I over the Rhine were in the air. Napoleon III issued his proclamation; and in a few weeks he was a prisoner of war at Sedan. King George of Greece certainly knew—from the standpoint of prudence and wisdom, which we are assuming for rulers—that Greece could not whip Turkey. Perhaps he hoped for the intervention that never came, or came too late. But, however that was, the spirit of Salamis and Thermopylae dominated the Greeks; and, desperate as were the chances of war, the chances that the King's crown could survive a revolution were more desperate still. War was declared; and we know the result.

To come nearer home. No one can affirm with certainty, what is to be the outcome of the Cuban revolution. There is much evidence to show: That the Spanish populace are as thoroughly determined not to give up Cuba as were the Greeks recently to succor their fellow-Christians in Crete; that to acknowledge its inability to overcome the rebellion unaided would endanger the present dynasty; and that, as a last resort, the Spanish government, to save itself, would declare war against us, preferring to lose the island—if not all—only after a brave struggle with the hated Americans. In Spain, too, as in Greece, there would be the hope of intervention.

If the Franco-German and the Greco-Turkish war—instances which might be indefinitely multiplied—show the power of the people even in monarchical countries, what shall we say of the influence of public sentiment in our own country; and who shall aver that we can always count on conservatism in our future councils of state? That we are sensitive, high-spirited and warlike, goes without saying; and it would be an interesting task to show, from past history, that our people, more than any other, are controlled by sentiment. One instance, however, will suffice. Where was the conservatism or prudence of the Anti-Slavery party or the Secessionists—those who created the conditions that led to our civil war? It was non-existent on either side. The characteristics that brought on and carried on that great struggle still exist. The pride of our people in themselves, North and South, was intensified by that conflict. It is not declamation, but the plain statement of a patent fact, to say that the people, North and South, now that they are thoroughly united under homogeneous institutions, feel a common pride in the courage displayed on both sides in the civil war, and that an opportunity to make common cause against a public enemy would meet a widespread welcome.

Public sentiment in America never was so united; nor was it ever prouder or more sensitive than it is to-day. A spark can kindle a conflagration among us at any moment. Look at the unanimity with which Congress and the people sustained President Cleveland's Venezuela message; and at the utterances of the people, the press, and the United States Senate on the Cuban question. The House, too, no doubt, would have adopted the resolution recognizing the belligerent rights of the Cubans, if it had been able to reach a vote. On the Cuban question, administrations—upon which so much of responsibility rests—have so far been, and are likely hereafter to be, more conservative than Congress. But who is there to affirm that Presidents will always resist the demands made upon them for warlike measures? President Madison naturally hesitated in 1812 to declare war against Great Britain. The odds were fearful; but the war party compelled him, just as it compelled Napoleon III in 1870, King George of Greece in 1897, and as it might compel Spain in the near future, to a declaration of war.

And here it may be as well to answer the argument that a larger navy would only be a greater inducement to war. "Jingoism" is not a matter of calculation, but of sentiment. Warlike Congressmen, as the "Congressional Record" shows, are not necessarily friends of an increased navy. And so of our people. Prudence with them is undoubtedly "a rascally virtue." Adverting again to our civil war, it was only a woeful minority on either side that stopped to count the cost when that great struggle was approaching. So it certainly would be if a foreign nation should give us cause for war. Preparedness on our part will simply suggest to other nations that they must not give us cause of offence.

It is further to be considered that in the always varying relations of states, and of their citizens and subjects toward one another, new questions of dispute are constantly arising. In case of a naval war between two or more great naval powers, difficulties as well as opportunities for us will almost certainly come. We have trade relations with all the world. We furnish many articles which are absolutely contraband of war; and others, as coal and provisions, which are sometimes contraband and sometimes not. A blockade may be sometimes effective and justify confiscation of vessels and cargo, and sometimes not. We should always be able to protect our commerce instantly, and see that such questions are not decided wrongfully to our detriment. We cannot afford to be in the condition we occupied during the Napoleonic era, when Great Britain and France, under orders in council and the Berlin and Milan decrees, warred on our commerce until we were compelled at last, in sheer desperation, to fight first the one and then the other. We saved our honor by the war of 1812; but irreparable injury had been done us before we took up arms to prevent it. The prime cause of offence to France and England during the wars was, that much of the commerce that each was seeking to destroy sought refuge under our flag. That is precisely what would happen again under like circumstances. A great opportunity would be ours to get back a large share of the carrying trade of the world,—a contingency dependent only upon our ability to protect the commerce that would seek the shelter of our flag. To realize from

such conditions, we shall need only such a navy as will be, beyond question, sufficient to turn the scales of battle, if we should be forced into the contest. With such a navy, our rights would be promptly respected wherever our flag appeared.

Regardless, however, of any question of territorial extension, it seems to me that we should add to the number of our battle-ships and build many more torpedo-boats.

This does not imply that due weight should not be given to the fact that we are far the most powerful nation on this continent; that we are nearly three thousand miles distant from Europe; that any European power detaching a fleet to attack our coast or to raid our commerce must watch its rivals near by; and that our purpose is and should be peace with all the world.

On the other hand, we must remember that naval power is not an abstract, but a relative quantity; that we cannot shut our eyes to what other nations are doing; that no human prescience can foretell the circumstances or the quarters from which wars may come; that we have more ships that need protection than any nation but one; that our ports, our shipping, and our ever-widening commerce are subject to attack; and that, with modern ships, naval wars will come and go almost like the lightning's flash. We should be able to command our peace and protect our rights at all times.

Certainly it would not be too much to add, say, six more battle-ships to our Atlantic fleet and half as many to the Pacific. And seventy-five torpedo-boats would not be an undue addition to this class of our vessels. These, it is believed, should be built during a programme of some five years,—two battle-ships and about fifteen torpedo-boats to be laid down each year.

It is always advantageous to lay down a naval building programme extending through a series of years. The manufacture of ships, engines, guns, torpedoes, requires the highest class of skilled laborers. And every consideration of economy and efficiency requires that, once assembled, such laborers should be kept together. Germany—my recollection is—once had a ship-building programme extending through ten years; but Great Britain has maintained among nations the most continuous and orderly system, and so has attained the greatest relative economy and efficiency in the construction of ships.

Let me say, in conclusion, that all classes are interested in maintaining the efficiency of our navy,—above all, farmers. Their crops form the bulk of our exports; their surplus must seek, and must be protected while it seeks, the markets of the world.

Harper's Monthly. 91: 767-75. October, 1895.

The Future in Relation to American Naval Power.

Captain A. T. Mahan.

That the United States navy should within the last dozen years have been almost wholly recast upon more modern lines is not, in itself alone, a fact that should cause comment, or give rise to questions about its future career or sphere of action. If this country needs, or shall ever need, a navy at all, indisputably in 1883 the hour had come when the time-worn hulks of that day, mostly the honored but superannuated survivors of the civil war should drop out of the ranks, submit to well-earned retirement or inevitable dissolution, and allow their places to be taken by other vessels, capable of performing the duties to which they themselves were no longer adequate.

It is therefore unlikely that there underlay this recreation of the navy—for such in truth it was—any more recondite cause than the urgent necessity of possessing tools wholly fit for the work which war-ships are called upon to do. The thing had to be done, if the national fleet was to be other than an impotent parody of naval force, a costly effigy of straw. But concurrently with the process of rebuilding, there has been concentrated upon the development of the new service a degree of attention greater than can be attributed even to the voracious curiosity of this age of news-mongering and of interviewers. This attention is in some quarters undisguisedly reluctant and hostile, in others not only friendly but expectant, in both cases betraying a latent impression that there is, between the appearance of the newcomer and the era upon which we are now entering, something in common. If such coincidence there be, however, it is indicative not of a deliberate purpose, but of

a commencing change of conditions, economical and political, throughout the world, with which sea power, in the broad sense of the phrase, will be closely associated; not, indeed, as the cause, not even chiefly as a result, but rather as the leading characteristic of activities which shall cease to be mainly internal, and shall occupy themselves with the wider interests that concern the relations of states to the world at large. And it is just at this point that the opposing lines of feeling divide. Those who hold that our political interests are confined to matters within our own borders, and are unwilling to admit that circumstances may in the future compel us to political action without them, look with dislike and suspicion upon the growth of a body whose very existence indicates that nations have international duties as well as international rights, and that international complications will arise from which we can no more escape than the states which have preceded us in history, or those contemporary with us; while others, looking upon the conditions and signs of these times, and the extra-territorial activities in which foreign states have so restlessly and widely embarked, feel that the nation may, however greatly against its wish, become involved in controversies not unlike those which in the middle of the century caused very serious friction, but which the generation that saw the century open would have thought too remote for its concern, and certainly wholly beyond its power to influence.

Religious creeds, dealing with eternal verities, may be susceptible of a certain permanency of statement; yet even here we in this day have witnessed the embarrassment of some religious bodies, arising from a traditional adherence to merely human formulas, which reflect views of the truth as it appeared to the men who framed them in the distant past; but political creeds, dealing as they do chiefly with the transient and shifting conditions of a world which is continually passing away, can claim no fixity of allegiance, except where they express, not the policy of a day, but the unchanging dictates of righteousness. And inasmuch as the path of ideal righteousness is not always plain nor always practicable; as expediency, policy, the choice of the lesser evil, must at times control; as nations, like

men, will at times differ honestly, but irreconcilably, on questions of right—there do arise disputes where agreement cannot be reached, and where the appeal must be made to force, that final factor which underlies the security of civil society even more than it affects the relations of states. The well-balanced faculties of Washington, indeed, saw this in his day with absolute clearness. Jefferson either would not or could not. That there should be no navy was a cardinal prepossession of his political thought, born of an exaggerated fear of organized military force as a political factor. Though possessed with a passion for annexation which dominated much of his political action, he laid down as the limit of the country's geographical expansion the point beyond which it would entail the maintenance of a navy. Yet fate, ironical here as elsewhere in his administration, compelled the recognition that, unless a policy of total seclusion is adopted—if even then—it is not necessary to acquire territory beyond the sea in order to undergo serious international complications, which could much more easily have been avoided had there been an imposing armed shipping to throw into the scale of the nation's argument and compel the adversary to recognize the impolicy, as well as what the United States then claimed to be the wrongfulness, of his course.

The difference of conditions between the United States of to-day and of the beginning of this century illustrates aptly how necessary it is to avoid implicit acceptance of precedents, crystallized into maxims, and to seek for the quickening principle which justified, wholly or in part, the policy of one generation, but whose application may insure a very different course of action in a succeeding age. When the century opened, the United States was not only a continental power, as she now is, but she was one of several, of nearly equal strength as far as North America was concerned, with all whom she had differences arising out of conflicting interests, and with whom, moreover, she was in direct geographical contact—a condition which has been usually recognized as entailing peculiar proneness to political friction; for, while the interests of two nations may clash in quarters of the world remote from either, there is both greater frequency and greater bitterness when matters of dispute exist

near at home, and especially along an artificial boundary, where the inhabitants of each are directly in contact with the causes of the irritation. It was therefore the natural and proper aim of the government of that day to abolish the sources of difficulty, by bringing all the territory in question under our own control, if it could be done by fair means. We consequently entered upon a course of action precisely such as a European continental state would have followed under like circumstances. In order to get possession of the territory in which our interests were involved, we bargained and manoeuvred and threatened; and, although Jefferson's methods were peaceful enough, few will be inclined to claim that they were marked by excess of scrupulousness, or even of adherence to his own political convictions. From the highly moral stand-point, the acquisition of Louisiana under the actual conditions—being the purchase from a government which had no right to sell in defiance of the remonstrance addressed to us by the power who had ceded the territory upon the express condition that it should not so be sold, but which was too weak to enforce its just reclamation against both Napoleon and ourselves—reduces itself pretty much to a choice between overreaching and violence, as the less repulsive means of compassing an end in itself both desirable and proper; nor does the attempt, by strained construction, to wrest West Florida into the bargain give a higher tone to the transaction. As a matter of policy, however, there is no doubt that our government was most wise; and the transfer, as well as the incorporation, of the territory was facilitated by the meagreness of the population that went with the soil. With all our love of freedom, it is not likely that many qualms were felt as to the political inclinations of the people concerning their transfer of allegiance. In questions of great import to nations or to the world, the wishes or interests or technical rights of minorities must yield, and there is not necessarily any more injustice in this than in their yielding to a majority at the polls.

While the need of continental expansion pressed thus heavily upon the statesman of Jefferson's era, questions relating to more distant interests were very properly postponed. At the time that matters of such immediate importance were pend-

ing, to enter willingly upon the consideration of subjects our concern in which was more remote, either in time or place, would have entailed a dissemination of attention and of power that is as greatly to be deprecated in statesmanship as it is in the operations of war. Still, while the government of the day would gladly have avoided such complications, it found, as have the statesmen of all times, that if external interests exist, whatsoever their character, they cannot be ignored, nor can the measures which prudence dictates for their protection be with safety neglected. Without political ambitions outside the continent, the commercial enterprise of the people brought our interests into violent antagonism with clear, unmistakable, and vital interests of foreign belligerent states; for we shall sorely misread the lessons of 1812, and of the events which led to it, if we fail to see that the questions in dispute involved issues more immediately vital to Great Britain, in her then desperate struggle, than they were to ourselves, and that the great majority of her statesmen and people, of both parties, so regarded them. The attempt of our government to temporize with the difficulty, to overcome violence by means of peaceable coercion, instead of meeting it by the creation of a naval force so strong as to be a factor of consideration in the international situation, led us into an avoidable war.

The conditions which now constitute the political situation of the United States, relatively to the world at large, are fundamentally different than those that obtained at the beginning of the century. It is not a mere question of greater growth, or bigger size. It is not only that we are larger, stronger, have, as it were, reached our majority, and are able to go out into the world. That alone would be a difference of degree, not of kind. The great difference between the past and the present is that we then, as regards close contact with the power of the chief nations of the world, were really in a state of political isolation which no longer exists. This arose from our geographical position—re-enforced by the slowness and uncertainty of the existing means of intercommunication—and yet more from the grave preoccupation of foreign statesmen with questions of unprecedented and ominous importance upon the

continent of Europe. A policy of isolation was for us then—though even then only partially—practicable. It was also expedient, because we were weak, and in order to allow the individuality of the nation time to accentuate itself. Save the questions connected with the navigation of the Mississippi, collision with other peoples was only likely to arise and actually did arise, from going beyond our own borders in search of trade. The reasons now evoked by some against our political action outside our own borders might then with equal appositeness have been used against our commercial enterprises. Let us stay at home, or we shall get into trouble. Jefferson, in truth, averse in principle to commerce as to war, was happily logical in his embargo system. It not only punished the foreigner and diminished the danger of international complications, but it kept our own ships out of harm's way; and if it did destroy trade, and cause the grass to grow in the streets of New York, the incident, if inconvenient, had its compensations, by repressing hazardous external activities.

Few, of course, would now look with composure upon a policy, whatever its ground, which contemplated the peaceable seclusion of this nation from its principal lines of commerce. In 1807, however, a great party accepted the alternative rather than fight, or even than create a force which might entail war, although it would more probably have prevented it. But would it be more prudent now to ignore the fact that we are no longer—however much we may regret it—in a position of insignificance or isolation, political or geographical, in any way resembling the times of Jefferson, and that from the changed conditions may result to us a dilemma similar to that which confronted him and his supporters? Not only have we grown—that is a detail—but the face of the world is changed, economically and politically. The sea, now as always the great means of communication between nations, is traversed with a rapidity and a certainty that have minimized distances. Events which under former conditions would have been distant and of small concern now happen at our doors and closely affect us. Proximity, as has been noted, is a fruitful source of political friction, but proximity is the characteristic of the age. The world has grown

smaller. Positions formerly distant have become to us of vital importance from their nearness. But, while distances have shortened, they remain for us water distances, and, however short, for political influence they must in the last resort be traversed by a navy, the only instrument by which the nation can, when emergencies arise, project its power beyond its own shore-line.

Whatever seeming justification, therefore, there may have been in the transient conditions of his own day for Jefferson's dictum concerning a navy, rested upon a state of things that no longer obtains, and even then soon passed away. The war of 1812 demonstrated the usefulness of a navy—not indeed, by the admirable but utterly unavailing single-ship victories that illustrated its course, but by the prostration into which our seaboard and external communications fell, through the lack of a navy at all proportionate to the country's needs and exposure. The navy doubtless reaped honor in that brilliant sea-struggle, but the honor was its own alone; only discredit accrued to statesmen who, with such men to serve them, none the less left the country open to the humiliation of its harried coasts and blasted commerce. Never was there a more lustrous example of what Jomini calls "the sterile glory of fighting battles merely to win them." Except for the prestige which at last awakened the country to the high efficiency of the petty force we called our navy, and showed what the sea might be to us, never was blood more uselessly spilled than in the frigate and sloop actions of that day. They presented no analogy to the outpost and reconnoissance fighting, to the detached services, that are not only inevitable, but invaluable in maintaining the morale of a military organization in campaign. They were simply scattered efforts, without relation either one to another or to any main body whatsoever capable of affecting seriously the issues of war, or, indeed, to any plan of operations worthy of the name.

Not very long after the war of 1812, within the space of two administrations, there came another incident, epoch-making in the history of our external policy, and of vital bearing on the navy, in the enunciation of the Monroe doctrine. That pronouncement has at times been curiously warped from its original

scope and purpose. In its name have been put forth theories so much at odds with the relations of states, as hitherto understood, that, if they be seriously maintained, it is desirable in the interests of exact definition that their supporters advance some other name for them. It is not necessary to attribute finality to the Monroe doctrine, any more than to any other political dogma, in order to deprecate the application of the phrase to propositions that over-ride or transcend it. We should beware of being misled by names, and especially where such error may induce a popular belief that a foreign state is wilfully outraging a principle to the defence of which the country is committed. We have been committed to the Monroe doctrine itself, not perhaps by any such formal assumption of obligations as cannot be evaded, but by certain precedents, and by a general attitude, upon the whole consistently maintained, from which we could not silently recede without risk of national mortification. If seriously challenged, as in Mexico by the third Napoleon, we should hardly decline to emulate the sentiments so nobly expressed by the British government, when, in response to the emperors of Russia and France, it declined to abandon the struggling Spanish patriots to the government set over them by Napoleon: "To Spain his Majesty is not bound by any formal instrument; but his Majesty has, in the face of the world, contracted with that nation engagements not less sacred, and not less binding upon his Majesty's mind, than the most solemn treaties." We may also have to accent certain corollaries which may appear naturally to result from the Monroe doctrine, but we are by no means committed to some propositions which have lately been tallied with its name. Those propositions possibly embody a sound policy, more applicable to present conditions than the Monroe doctrine itself, and therefore destined to succeed it; but they are not the same thing. There is, however, something in common between it and them. Reduced to its barest statement, and stripped of all deductions, natural or forced, the Monroe doctrine, if it were not a mere political abstraction, formulated an idea to which in the last resort effect could only be given through the instrumentality of a navy; for the gist of it, the kernel of the truth, was that the country had at

that time distant interests on the land, political interests of a high order in the destiny of a foreign territory, of which a distinguishing characteristic was that they could only be assured by sea.

Like most stages in a nation's progress, the Monroe doctrine though elicited by a particular political incident, was not an isolated step unrelated to the past, but a development. It had its antecedents in feelings, which arose before our war of independence, and which in 1778, though we were then in deadly need of the French alliance, found expression in the stipulation that France should not attempt to regain Canada. Even then, and also in 1783, the same jealousy did not extend to the Floridas, which at the latter date were ceded by Great Britain to Spain; and we expressly acquiesced in the conquest of the British West India Islands by our allies. From then to 1815 no remonstrance was made against the transfer of territories in the West Indies and Caribbean sea from one belligerent to another—an indifference which would scarcely be shown at the present time, even though the position immediately involved were intrinsically of trivial importance; for the question at stake would be one of principle, of consequences, far-reaching as Hampden's tribute of ship-money.

It is beyond the professional province of a naval officer to inquire how far the Monroe doctrine would itself logically carry us, or how far it may be, now or hereafter, developed by the recognition and statement of further national interests, thereby formulating another and wider view of the necessary range of our political influence. It is sufficient to quote its enunciation as a fact, and to note that it was the expression of a great national interest, not merely of a popular sympathy with South American revolutionists; for, had it been the latter, it would doubtless have proved as inoperative and evanescent as declarations arising from such emotions commonly are. We have from generation to generation been much stirred by the sufferings of Greeks or Bulgarians or Armenians at the hands of Turkey; but, not being ourselves injuriously affected, our feelings have not passed into acts, and for that very reason have been ephemeral. No

more than other nations are we exempt from the profound truth enunciated by Washington—seared into his own consciousness by the bitter futilities of the French alliance in 1778 and the following years, and by the extravagant demands based upon it by the Directory during his Presidential term—that it is absurd to expect governments to act upon disinterested motives. It is not as an utterance of passing concern, benevolent or selfish, but because it voiced an enduring principle of necessary self-interest, that the Monroe doctrine has retained its vitality, and has been so easily made to do duty as the expression of intuitive national sensitiveness to occurrences of various kinds in regions beyond the sea. At its christening the principle was directed against an apprehended intervention in American affairs which depended not upon actual European concern in the territory involved, but upon a purely political arrangement between certain great powers, itself the result of ideas at the time moribund. In its first application, therefore, it was a confession that danger of European complications did exist, under conditions far less provocative of real European interest than those which now obtain and are continually growing. Its subsequent applications have been many and various, and the incidents giving rise to them have been increasingly important, culminating up to the present in the growth of the United States to be a great Pacific power, and her probable dependence in the near future upon an Isthmian canal for the freest and most copious intercourse between her two ocean seaboard. In the elasticity and flexibility with which the dogma has thus accommodated itself to varying conditions, rather than in the strict wording of the original statement, is to be seen the essential characteristic of a living principle—the recognition, namely, that not merely the interests of individual citizens, but the interests of the United States as a nation, are bound up with regions beyond the sea, not part of our own political domain, in which we may, therefore, under some imaginable circumstances, be forced to take action.

It is important to recognize this, for it will help clear away the error from a somewhat misleading statement fre-

quently made—that the United States needs a navy for defence only, adding often, explanatorily, for the defence of our own coasts. Now in a certain sense we all want a navy for defence only. It is to be hoped that the United States will never seek war except for the defence of her rights, her obligations, or her necessary interests. In that sense our policy may always be defensive only, although it may compel us at times to steps justified rather by expediency—the choice of the lesser evil—than by incontrovertible right. But if we have interests beyond sea which a navy may have to protect, it plainly follows that the navy has more to do, even in war, than to defend the coast, and it must be added as a received military axiom that war, however defensive in moral character, must be waged aggressively if it is to hope for success.

For national security, the correlative of a national principle firmly held and distinctly avowed is not only the will but the power to enforce it. The clear expression of national purpose, accompanied by evident and adequate means to carry it into effect, is the surest safeguard against war, provided always that the national contention is maintained with a candid and courteous consideration of the rights and susceptibilities of other states. On the other hand, no condition is more hazardous than that of a dormant popular feeling, liable to be roused into action by a moment of passion, such as that which swept over the North when the flag was fired upon at Sumter, but behind which lies no organized power for action. It is on the score of due preparation for such an ultimate contingency that nations, and especially free nations, are most often deficient. Yet if wanting in definiteness of foresight and persistency of action, owing to the inevitable frequency of change in the governments that represent them, democracies seem in compensation to be gifted with an instinct, the result perhaps of the free and rapid interchange of thought by which they are characterized, that intuitively and unconsciously assimilates political truths, and prepares in part for political action before the time for action has come. That the mass of United

States citizens do not understandingly realize that the nation has vital political interests beyond the sea is probably true; still more likely is it that they are not tracing any connection between them and the reconstruction of the navy. Yet the interests exist, and the navy is growing, and in the latter fact is the best surety that no breach of peace will ensue from the maintenance of the former.

It is, then, not the indication of a formal political purpose, far less of anything like a threat, that is, from my point of view, to be recognized in the recent development of the navy. Nations do not, as a rule, move with the foresight and the fixed plan which distinguish a very few individuals of the human race. They do not practice on the pistol-range before sending a challenge; if they did, wars would be fewer, as is proved by the present long-continued armed peace in Europe. Gradually and imperceptibly the popular feeling, which underlies most lasting national movements, is aroused and swayed by incidents, often trivial, but of the same general type, whose recurrence gradually moulds public opinion and evokes national action, until at last there issues that settled public conviction which alone, in a free state, deserves the name of national policy. What the origin of those particular events whose interaction establishes a strong political current in a particular direction it is perhaps unprofitable to inquire. Some will see in the chain of cause and effect only a chapter of accidents, presenting an interesting philosophical study, and nothing more; others, equally persuaded that nations do not effectively shape their mission in the world, will find in them the ordering of a Divine ruler, who does not permit the individual or the nation to escape its due share of the world's burdens. But, however explained, it is a common experience of history that in the gradual ripening of events there comes often suddenly and unexpectedly the emergency, the call for action to maintain the nation's contention. That there is an increased disposition on the part of civilized countries to deal with such cases by ordinary diplomatic discussion and mutual concession can be gratefully acknowledged; but that such dispositions

are not always sufficient to reach a peaceable solution is equally an indisputable teaching of the recent past. Popular emotion, once fairly roused, sweeps away the barriers of calm deliberation, and is deaf to the voice of reason. That the consideration of relative power enters for much in the diplomatic settlement of international difficulties is also certain, just as that it goes for much in the ordering of individual careers. "Can," as well as "will," plays a large share in the decisions of life.

Like each man and woman, no state lives to itself alone in a political seclusion resembling the physical isolation which so long was the ideal of China and Japan. All, whether they will or no, are members of a community, larger or smaller, and more and more those of the European family, to which we racially belong, are touching each other throughout the world, with consequent friction of varying degree. That the greater rapidity of communication afforded by steam has wrought, in the influence of sea power over the face of the globe, an extension that is multiplying the points of contact and emphasizing the importance of navies is a fact the intelligent appreciation of which is daily more and more manifest in the periodical literature of Europe, and is further shown by the growing stress laid upon that arm of military strength by foreign governments; while the mutual preparation of the armies on the European continent, and the fairly settled territorial conditions, make each state yearly more wary of initiating a contest, and thus entail a political quiescence there, except in the internal affairs of each country. Their field of external action is now the world, and it is hardly doubtful that their struggle, unaccompanied as yet by actual clash of arms, is even under that condition drawing nearer to ourselves. Coincidentally with our own extension to the Pacific Ocean, which for so long had a good international claim to its name, that sea has become more and more the scene of political development, of commercial activities and rivalries, in which all the great powers, ourselves included, have a share. Through these causes Central and Caribbean America, now intrinsically unimportant, are in turn brought into great prominence, as

constituting the gateway between the Atlantic and Pacific when the Isthmian canal shall have been made, and as guarding the approaches to it. The appearance of Japan as a great ambitious state, resting on solid political and military foundations, but which has scarcely yet reached a condition of equilibrium in international standing, has fairly startled the world; and it is a striking illustration of the somewhat sudden nearness and unforeseen relations into which modern states are brought that the Hawaiian Islands, so interesting from the international point of view to the countries of European civilization, are largely occupied by Japanese and Chinese.

In all these questions we have a stake, reluctantly it may be, but necessarily, for our evident interests are involved, in some instances directly, in others by very probable implication. Whether it be optimistic or pessimistic so to think, the opinion that we can indefinitely keep clear of embarrassing problems is hardly tenable; while war between two foreign states, which under the uncertainties of the international situation throughout the world may at any time break out, will greatly increase the occasions of possible collision with the belligerent countries, and the consequent perplexities of our statesmen seeking to avoid entanglement and maintain neutrality.

Although peace is not only the avowed but for the most part the actual desire of European governments, they profess no such aversion to distant political enterprises and colonial acquisitions as we by tradition have learned to do. On the contrary, their committal to such divergent enlargements of the national activities and influence is one of the most pregnant facts of our time, the more so that their course is marked in the case of each state by a persistence of the same national traits that characterized the great era of colonization, which followed the termination of the religious wars in Europe, and led to the world-wide contests of the eighteenth century. In one nation the action is mainly political—that of a government pushed by long-standing tradition and by its passion of administration, to extend the sphere of its operations, so as to acquire a greater field in which to organize and domi-

nate, somewhat regardless of economical advantage. In another the impulse comes from the restless, ubiquitous energy of the individual citizens, singly or in companies, moved primarily by the desire of gain, but carrying ever with them, subordinate only to the commercial aim, the irresistible tendency of the race to rule as well as to trade, and dragging the home government to recognize and assume the consequences of their enterprise. Yet again there is the movement, whose motive is throughout mainly private and mercantile, in which the individual seeks wealth only, with little or no political ambition, and where the government intervenes chiefly that it may retain control of its subjects in regions where but for such intervention they would become estranged from it. But, however diverse the modes of operation, all have a common characteristic, in that they bear the stamp of the national genius—a proof that the various impulses are not artificial, but natural, and that they will therefore continue until an adjustment is reached.

What the process will be, and what the conclusion, it is impossible to foresee; but that friction has at times been very great, and matters dangerously near passing from the communications of cabinets to the tempers of the peoples, is sufficiently known. If, on the one hand, some look upon this as a lesson to us to keep clear of similar adventures, on the other hand it gives a warning that not only do causes of offence exist which may at an unforeseen moment result in a rupture extending to many parts of the world, but also, that there is a spirit abroad which may yet challenge our claim to exclude its action and interference in any quarter, unless it finds us there prepared in adequate strength to forbid it, or to exercise our own. More and more civilized man is needing and seeking ground to occupy, room over which to expand and in which to live. Like all natural forces, the impulse takes the direction of least resistance, but when in its course it comes upon some region rich in possibilities, but unfruitful through the incapacity or negligence of those who dwell therein, the incompetent race or system will go down, as the inferior race has ever fallen back and disappeared before the persistent impact of the superior. The re-

cent and familiar instance of Egypt is entirely in point. The continuance of the existing system—if it can be called such—had become impossible, not because of the native Egyptians, who had endured the like for ages, but because there were therein involved the interests of several European states, of which two were principally concerned by, present material interest and traditional rivalry. Of these one, and that the one most directly affected, refused to take part in the proposed interference, with the result that this was not abandoned, but carried out solely by the other, which remains in political and administrative control of the country. Whether the original enterprise or the continued presence of Great Britain in Egypt is, entirely clear of technical details, open to the criticism of the pure moralist is as little to the point as the morality of an earthquake: the general action was justified by broad considerations of moral expediency, being to the benefit of the world at large, and of the people of Egypt in particular—however they might have voted in the matter.

But what is chiefly instructive in this occurrence is the inevitableness, which it shares in common with the great majority of cases where civilized and highly organized peoples have trespassed upon the technical rights of possession of the previous occupants of the land—of which our own dealings with the American Indian afford another example. The inalienable rights of the individual are entitled to a respect which they unfortunately do not always get; but there is no inalienable right in any community to control the use of a region where it does so to the detriment of the world at large, of its neighbors in particular, or even at times of its own subjects. Witness, for example, the present angry resistance of the Arabs at Jiddah to the remedying of a condition of things which threatens to propagate a deadly disease far and wide beyond the locality by which it is engendered, or the horrible conditions under which the Armenian subjects of Turkey have lived and are living. When such conditions obtain, they can be prolonged only by the general indifference or mutual jealousies of the other peoples

concerned—as in the instance of Turkey—or because there is sufficient force to perpetuate the misrule, in which case the right is inalienable only until its misuse brings ruin, or a stronger force appears to dispossess it. It is because so much of the world still remains in the possession of the savage, or of states whose imperfect development, political or economical, does not enable them to realize for the general use nearly the result of which the territory is capable, while at the same time the redundant energies of civilized states, both government and peoples, are finding lack of openings and scantness of livelihood at home, that there now obtains a condition of aggressive restlessness with which all have to reckon.

That the United States does not now share this tendency is entirely evident. Neither her government nor her people are to any great extent affected by it. But the force of circumstances has imposed upon her the necessity, recognized with practical unanimity by her people, of insuring to the weaker states of America, although of racial and political antecedents different from her own, freedom to develop politics along their own lines and according to their own capacities, without interference in that respect from governments foreign to these continents. The duty is self-assumed; and resting, as it does, not upon political philanthropy, but simply upon our own proximate interests as affected by such foreign interference, has towards others rather the nature of a right than a duty. But, from either point of view, the facility with which the claim has been heretofore allowed by the great powers has been due partly to the lack of pressing importance in the questions that have arisen, and partly to the great latent strength of our nation, which was an argument more than adequate to support contentions involving matters of no greater immediate moment, for example, than that of the Honduras Bay Islands or of the Mosquito Coast. Great Britain there yielded, it is true, though reluctantly and slowly; and it is also true that, so far as organized force is concerned, she could have destroyed our navy then existing and otherwise have greatly injured us; but the substantial importance of the

question, though real, was remote in the future, and, as it was, she made a political bargain which was more to her advantage than ours. But while our claim has thus far received a tacit acquiescence, it remains to be seen whether it will continue to command the same if the states whose political freedom of action we assert make no more decided advance towards political stability than several of them have yet done, and our own organized naval force remains as slender, comparatively, as it once was, and even yet is. It is probably safe to say that an undertaking like that of Great Britain in Egypt, if attempted in this hemisphere by a non-American state, would not be tolerated by us if able to prevent it; but the moral force of our contention might conceivably be weakened, in the view of an opponent, by attendant circumstances, in which case our physical power to support it should be open to no doubt.

That we shall seek to secure the peaceable solution of each difficulty as it arises is attested by our whole history, and by the disposition of our people; but to do so, whatever the steps taken in any particular case, will bring us into new political relations and may entail serious disputes with other states. In maintaining the justest policy, the most reasonable influence, one of the political elements, long dormant, and still one of the most essential, is military strength—in the broad sense of the word military, which includes naval as well—not merely potential, which our own is, but organized and developed, which our own as yet is not. We wisely quote Washington's warning against entangling alliances, but too readily forget his teaching about preparation for war. The progress of the world from age to age, in its ever-changing manifestations, is a great political drama, possessing a unity, doubtless, in its general development, but in which, as act follows act, one situation alone can engage, at one time, the attention of the actors. Of this drama, war is simply a violent and tumultuous political incident. A navy, therefore, whose primary sphere of action is war, is in the last analysis and from the least misleading point of view a political factor of the utmost importance in international

affairs, one more often deterrent than irritant. It is in that light, according to the conditions of the age and of the nation, that it asks and deserves the appreciation of the state, and that it should be developed in proportion to the reasonable possibilities of the political future.

Harper's Weekly. 50: 337-8. March 10, 1906.

Why We Need a Bigger Navy. Walter Scott Meriwether.

It did not require Kaiser Wilhelm's recent dictum to prove that the best insurance against war is the possession of a powerful navy, but since that utterance of his has attracted so much attention, it may be interesting to show the amount of such insurance which each nation now carries.

According to a recent estimate by Representative George E. Foss, chairman of the House Naval Committee, our naval appropriation act for the current year carried \$100,000,000, and yet on the basis of per capita this is a little more than \$1 for each man, woman, and child in the country. It is only about 4 per cent. of our foreign trade during the past year, which amounted to about \$2,500,000,000. It is 14 per cent. of our annual governmental expenditures, a less percentage than was expended upon the navy one hundred years ago. It is only one-tenth of 1 per cent. of our national wealth. It is about one-third of what this country annually expended in premiums on fire-insurance, yet one hostile ship of war winning to New York's harbor approaches could start a work of destruction that would bankrupt every insurance company here and abroad, while the amount of damage she could cause would be more than sufficient to maintain for more than one hundred years a navy thrice as big as the one we now possess.

There will be many to assert that this is inconceivable—many to contend that no nation has fleets powerful enough to force an entrance past the batteries which guard New York. Thanks to the panic which the Spanish-American war brought to the seaboard citizen, and which was reflected

in the halls of legislation, that is doubtless true, but what if there should be a coalition of powers against this republic? That is not inconceivable and, according to one well-known English observer, not even unlikely.

"It is only the knowledge that the sea barrier is impenetrable," writes Lieutenant Carlyon Bellairs, of the Royal Navy, "which will effectually prevent the expanding Teutonic, Slavonic, and Latin races of Europe from contemplating aggression on the American continent. If unable to do so singly, nothing but sea power will prevent them from trying to effect their purpose in combination."

But protestants will say that there is nowhere visible any concert against this republic, and that in all likelihood the only other wars in which this country is ever to engage again will be the savage ones of peace. Yet it is only a few years ago since these parochialists were ringing their little parish bells over the demise of war, and at the same time—this being in 1897—some officials then high in the administration of the affairs of this country were fatuously assuring the earnest advocates of stronger armaments that there would never be another war. Since then the war drums have throbbed thrice over, and so scarlet was the hue of those sins of omission on the part of a Congress which, at the opening of the Spanish-American war, had left the country in such an appalling state of defencelessness, that there were many in the navy to covertly rejoice over the panic of seaboard citizens, and to a unit these and many more have since adhered to the faith that if the fifty millions hurriedly appropriated by Congress directly after the Maine disaster had been previously appropriated for the upbuilding of the navy there would never have been a Spanish-American war, and along the coast line there would never have been imagined such "heavy firings" as disturbed the peace of the coastwise folks during the early days of that conflict.

But there are now signs of an awakening to the changed requirements of the country, and the Congress which has always been without a policy in regard to naval construction, saving that one of a general antipathy to the navy and its needs, has recently granted considerable to the much-neglected

service, but always in a grudging way, consistently paring appropriations to pressing needs, and further nullifying the good intentions of those who would have a navy which, unit for unit, would be superior to any other; by setting a limitation on the size of vessels to be built, and, as in the case of the recently authorized Mississippi and Idaho, setting it so far below the standard that other nations are constructing that both of these battle-ships may be classed as waste products, ships that may be overtaken by obsolescence almost before they are commissioned.

It is to be hoped that the lessons from the war in the East, which are now conceded to read that the bigger ship, with its greater protection, superior speed and more powerful battery, far outclasses on all three of these important factors the smaller, weaker-protected, and lesser-armed antagonist, will be taken to heart by those hardy tars and eminent naval constructors who form the naval committees of the Upper and Lower House. For one needs only to glance at the vast contracts which we have taken as a world power to realize that our naval responsibilities of the future are second only to those of Great Britain. Since our recent accession to this high place in the world's affairs we have assumed, and have had thrust upon us, some immense liabilities in New and Old World policies. Specifically in the Far East do the most thoughtful now find a situation which leads them to unhesitatingly champion the rapid upbuilding of a strong navy. There, also, is the Panama canal and the commercial expansion which will inevitably follow the opening of the transisthmian waterway; and not the least among our responsibilities, is the self-imposed one of the Monroe doctrine, a formula which does not rest on any law of nations, but on our ability to maintain it. In the opinion of many observers our ability to enforce this doctrine and our chances of maintaining peace with the rest of the world depend solely on our navy programme.

"How many battleships," a distinguished American naval authority was recently asked, "should we have to be insured against aggression?"

"Seventy," he replied, "If we are to be prepared to defend

our own against all comers, we must have sixteen battle-ships along the Atlantic coast, twenty-four for the Gulf of Mexico and the Caribbean sea, sixteen on the Pacific coast, and sixteen in Philippine waters. We may never get them, but if we are to put up the front of a world power, the time may come when we will need them."

Independent. 57: 972-4. October 27, 1904.

The New Navy. Charles E. Jefferson, D. D.

To many it is a cause for boundless rejoicing, the joy of the nation and the pride of the New World, but some of us cannot help asking whereunto this thing is going to grow. We have increased our naval expenditures seven hundred per cent. within eighteen years, and the tree is yet green. Our navy as planned already outranks that of all countries except England and France, and the end is not yet. The experts are all agreed that we must push ahead of France, and bolder spirits claim that we must surpass England. To stand second to England will demand an annual naval expenditure of \$200,000,000. Our naval expenditures thus far are not half that sum, but already Congress is obliged to cut down its appropriations for rivers and harbors and for public improvements, and must haggle sometimes for years over the price of a piece of land to put a public building on. We cannot eat our cake and keep it too, nor can we spend \$200,000,000 a year on a navy and have it left for something else.

Then one wonders sometimes just what we want such an enormous navy for. Of course, the steel kings want it, and so do the manufacturers of armor and projectiles and ships. There is probably a slight profit in battle ships at \$8,000,000 apiece. A hundred millions a year is a plum of fair dimensions, and that the sight of it should quicken patriotism is not surprising. Then the naval experts want it, for they have a laudable professional pride in pushing our navy to the head of the procession. Editors of a certain sort want it, for it lends itself easily to graphic treatment and money-making head-

lines. And the great crowds of barbarians in all of our cities want it, just as they want many another thing which it is not good for them to have. But why sensible, patriotic Americans who understand the genius of their country and who have read history even a little, and who want our Republic to escape the entanglements and delusions which have wrought havoc with the greatest empires of the past—why they should want to surrender the policy we followed for a hundred years with success, and adopt the policy of governments which are being slowly crushed by the weight of their armaments, this is, indeed, a puzzle.

One cannot help wondering how it comes that Americans with all their education are so easily gulled. For instance: when men say that a great navy is just as essential to a nation as a police force is to a city, one wonders that anybody can be so dull witted as not to see the fallacy. There are not many of us who go with Tolstoy in saying that all use of force is wrong and forbidden, for crazy men and drunken men and thugs must sometimes be coerced into action which they would not of themselves have preferred. And as bandits can carry on their depredations on water as well as on land, every nation should do its part in policing the highways of the sea. But every sane man knows that we are not just now building up a naval police force. We are building up a fighting navy, a navy not for capturing pirates, but for fighting the biggest navy afloat. We are not thinking of pirates, but of Russia, of Germany, of England, and of France, our neighbors in the family of Christian nations!

One wonders also at the Quaker-like language of these naval enthusiasts. "A large navy is the most potent means of securing peace," says one. "It is essential to the maintenance of peace," says another. "Preparedness for war is the best possible guarantee of peace," says a third. This is the gospel being preached by our President, by many Senators and Congressmen, and by a host of eloquent talkers, who succeed in deceiving even the elect. But why be hoodwinked by a falsehood so transparent? All history proves that the way to preserve the peace is to prepare for peace. This was the doctrine

of our fathers, and they refused, therefore, to fortify the Canadian frontier or to fill the lakes with men of war. Their policy has worked well. It is the custom of every Government to compel its citizens to go unarmed. The men in Sicily and Kentucky who prepare to fight always fight. It is only when men cease to carry dangerous weapons that they are able to preserve the peace. Napoleon III would not reduce his army—he prepared to war. Bismarck also prepared for war, and war came. Japan prepared for war, so did China—they fought, Russia has been adding to her battle-ships, so has Japan—they are using them. A nation cannot fill its belt with bowie knives and revolvers without wanting to see what they will do. When we get our navy up to the desired size we will use it. Some one will insult us, step on our toes in some of the markets of the world, the barbaric press will shriek, the blood will boil, and there will be war!

Before we had a navy we never knew the sense of fear. We walked unarmed among the nations of the earth, and people of all lands were our friends. Now that we have our battleships we are in a state of chronic alarm. We are suspected, feared, and in many quarters hated. We listen breathlessly to hear what far-off critics are saying about us. We read each day in magazine or paper of some new and fearful peril. We know not what a day may bring forth. We have whetted our sword in the ears of the nations, and have said to our neighbors, "If you want a scrap, come on!"

And this is the nation from which the world had expected better things, the Republic which influenced and led the nations without a navy for a hundred years, which defended the Monroe doctrine against France and against the British Empire, not by might nor by power, but by the potent spirit of a great people who dared to do justly and to love mercy.

To some of us it is inexpressibly sad the change which has come over the spirit of many of our people. Wealth has spoiled us, success has coarsened us, power has intoxicated us. We are becoming cheap and common, aping the customs of nations far below us. Losing our faith in moral forces,

we are being swayed more and more by the ideals which brought Rome to ruin, and which we once counted it our greatest joy to have escaped. To us as a nation was granted the inestimable privilege of doing a beautiful and original thing, of walking among the nations as their helper and friend, trusting them and being trusted by them in return, never suggesting by bristling guns and deadly projectiles that we were their enemy or that they were ours. God gave us a continent washed by two broad oceans that here unmolested we might work out in peace the problems of liberty and love. Europe is a mass of prejudices, enmities and age-long hatreds. Nothing original can be attempted there. Men must watch one another sword in hand. But to us was given a home far away from the rivalries that embittered and the hatreds which destroyed in order that we might succeed where all who went before us had failed. But, alas! the seductions of Egypt are too mighty for us, the brute in us is too strong. Our ideals have for many eyes grown dim. Instead of spending our money on great public improvements which would make America the wonder of the world, or upon the black race, which might be made one of the great races of history, we are squandering hundreds of millions on instruments of slaughter, thereby educating a new generation of American boys to barbaric ideals of life, and bringing down the moral tone of the world.

And the pity of it is that all this is done in Christendom, and under the direction and with the sanction of the men who pray, "Our Father," and who claim to find heaven's will expressed in the Sermon on the Mount. The Czar of Russia, the Emperor of Germany, the President of France, the King of England and the President of the United States are all of them professedly Christian men, surrounded by counselors who claim also to be Christians, and yet they allow the intolerable outrage of this armed peace to go on. The first thing we give to pagan peoples is perfected methods in the art of human slaughter. Japan uses our guns before she learns our prayers. Small wonder is it that the philosophers of India ask in perplexity: "Is Christianity indeed the religion that is to come, or are we to look for another?" But

some one says that America cannot disarm until all other nations do. Our reply is: Can she not make a beginning? Can she not lead the way?

Independent. 58: 639-41. March 23, 1905.

Shall the Navy Be Increased? John D. Long.

I rejoice that the tendencies of our national Government and especially of our national public sentiment are toward the paths of peace. But there is always danger that in strengthening our military armament, though only with the intent of securing better means of defense or insuring a proper international police power, we may incur the temptation to use our increased force in an offensive direction. A man with a pistol in his pocket is more likely to use that weapon than if he does not happen to have it on his person.

It seems to me, for instance, that we are pushing the Monroe doctrine a little too far. There is grave danger that in asserting too radically what is recognized at home and abroad as an established doctrine of our country, we may place ourselves in the position of interfering too far in the affairs and with the rights of other nations. It is, of course, only another name for the doctrine that "might makes right," and that we are justified in keeping other nations away from further territorial encroachment on this hemisphere on the ground that it is not for our interests, however much it may be for theirs, to do so.

I do not like the Santo Domingo treaty, so far as we have been informed with regard to it. It seems to me impolitic, and it certainly would be prolific of embarrassing and costly entanglement for us to commit ourselves to the role of a debt collector for foreign powers—collecting from various South American countries debts which they may happen to owe to countries in Europe. Such a policy is likely to lead not in the ways of peace, but to those complications arising from interference in the affairs of other nations and carrying the peril of the chance of war.

Then, too, there is no telling the extent and involvement of the obligations upon us to which this policy, however it may be defended in the particular instance of Santo Domingo, may lead. It becomes a precedent; it makes us practically a sponsor for any South American country with reference to which it is adopted—at first as to its financial liabilities and then by easy steps as to its general relations. There is something more at stake than the mere collecting and holding of Santo Domingo revenues for the payment of Santo Domingo debts. The minute we enter into this obligation we become practically responsible for these debts. Suppose a revolution or disorder or corruption or that the revenues of that island fall off so that they are unequal to meet the payments for which we collect them. May not some creditor nation in that case say that by our interference we have prevented its direct action upon Santo Domingo, and are, therefore, under obligation to make good the damage? In other words, an infinite variety of obligations suggest themselves. It is certainly a departure from the well established Washingtonian policy of nonentanglement for our country which has stood till these later days.

In this connection, I am not at all certain that the emphasis which in recent years has been laid upon our naval development may not suggest a cautionary signal. We have never had so strong and effective a navy as now. Being for the present in less demand in the Orient, our ships find employment in drill and maneuver and there is also a tendency, of course, to gather some of the small craft, including now and then a big one, at any point where the telegraph suggests that there has been a riot or an uprising or a threat of change of government in some of the countries south of us. Naval officers feel under obligations to pursue the very proper policy of protecting American interests and so are led to take a hand. In other words, we run just now the risk of getting our finger into too many pies, with a chance of burning it, and wisdom and prudence suggest the opposite trend toward reserve and self-restraint and toward being very sure that it is our own business which we are minding.

I recognize, however, that preparedness is a vital considera-

tion, and that with our increasing national development we cannot keep altogether within the more limited lines of the past. I have entire faith in the high mind and honest purpose of our present national administration, and I am referring rather to possible national tendencies under present leadings than to anything else. But I fancy that there is likely to be a reaction in this direction and that it is a time when it is wise, in homely phrase, "to go slow."

I share in the belief that our country ought to have a large navy. This was my view when I was in the department and I never saw occasion to change it. There is much more need for us to maintain a large navy than for us to keep a large army. We have not much to fear from any land invasion of this country by any foreign power, protected as we are by nature and by the ocean, by the navy and by our fortifications, and by the spirit and overwhelming numbers of our people. Furthermore, a large army can be improvised in a comparatively short time and our volunteers have always made good soldiers, but it takes years to build ships of modern sort, and, of course, we ought not to fall back into the dilapidated naval condition in which we were for so many years after the civil war.

On the other hand, I am very strongly of the opinion that the recent system of appropriating every year for large numbers of new battleships is not wise and is going too far and too fast. In the first place we have a very good navy now. There are, as I learn from Senate document No. 117, recently published, some 265 vessels fit for service, including 14 battleships and armored cruisers, 18 protected cruisers and a variety of gunboats, torpedo boats and monitors and various other craft. There are also some 47 vessels authorized or under construction, among which are 5 protected cruisers, 10 armored cruisers and 14 first class battleships. Battleships and cruisers are practically equally large and effective and are each from 12,000 to 16,500 tons. In other words, we have already twice as many of these great ships authorized or under construction as are now in service. This is a very rapid and expensive rate of increase.

In conversation with the Secretary of the Navy last sum-

mer I expressed the opinion, which I still have, and which I have as a very cordial advocate of a large navy, that it is time to pause. As I then said to him, I would this year refrain from appropriating for any battleship, certainly for not more than one.

There are three reasons for this.

First, there is a growing feeling in the country that we are carrying this increase too far, and the result will, as always happens, be a reaction in public sentiment, which is liable to be injurious to the navy and to delay its slower and healthier development much more than the self-restraint of not appropriating for a battleship this year would do.

Second, we are threatened with a deficit in our national treasury and with several millions less revenue than our expenditure. On good business principles, therefore, if we can, by not appropriating for three battleships this year, save some twenty millions of dollars, it would, in the absence of any crying necessity for their immediate construction, be good business sense to do so.

Third, it seems to be a fact that we have some difficulty in securing officers and men enough to properly man all the ships we now have. If we add to our present number of big ships twice as many more, we have to face the alternative of letting them rust in dock or of going to the enormous expense of additional officers and men and of their training, education and support—twice or three times as many officers and men as we now have.

The naval expenditure is approaching a very high figure. During the year 1898, when the Spanish war was going on and everything was on a war footing, actual hostilities made a great draft on the treasury, and yet the appropriations for the navy department were, as I gather from the same document, something like \$125,000,000; in 1899, when the quiver of the war was still on, \$62,000,000; in 1900, \$58,000,000; in 1901, \$69,000,000. Last year, 1904, they were over \$103,000,000, almost as much as during the war with Spain; this year about the same.

These expenditures for the navy in a time of peace on the basis of a time of war are a little out of keeping with our

position as a peaceful nation. Too great a navy will be regarded not in the light of protection, but of menace and of temptation to involve ourselves in the affairs of other nations and so to incur the danger of being drawn into their wars. It is not altogether easy to find occupation for the vessels we now have. We must, of course, have enough for any probable emergency, but if we get an undue number, people are going to ask, "What in thunder are we going to do with them?"

Independent. 59: 20-2. July 6, 1905.

An Anglo-American Navy. Paul Morton.

The Right Honorable Sir Charles W. Dilke in a recent article declares the real meaning of the remarkable changes in Great Britain's naval policy to be that the present British Government is frankly and profoundly convinced that Great Britain will never again wage war with the United States. This feeling is shared by most Americans. A few prominent men of the United States have expressed their disapproval of a large American navy by stating that it is unnecessary, extravagant and altogether undesirable; that by a policy of non-exportation of food products this country could force Great Britain and the other powers of Europe to sue for peace in thirty days' time, because the people of those countries are our best customers and absolutely depend upon the United States for their food supply.

To me this seems absurd, and in my opinion it will not be long before the growth and development of industry in this country will make it almost impossible for us to furnish any considerable quantity of breadstuffs to foreign countries. Within the next twenty-five years we are quite likely to consume all we produce. In the meantime other sources of food supply in the world will have been so developed as to furnish substitutes for the present American exports; especially with Northwest British America come to the front as a wheat raising country.

To my mind the fact that Great Britain is our best cus-

tomers makes it most important that we should have a navy which in case of dire necessity might be used to protect mutual interests. The policy of non-exportation advocated by some of our distinguished citizens would be as detrimental to us as to those we undertook to punish, and in case Great Britain should become involved in war with any foreign power, it might be vital for this country to keep open the avenues of trade, and to do this it would be necessary to call in the agency of an all-powerful American navy. The sentiment of the American people is now quite generally in favor of having a navy second only to that of Great Britain and the almost unanimous feeling in this country is that the English speaking people of the world together should have a combination navy that could hold its own against all the navies of other nations. The American navy combined with that of Great Britain would be an absolute power in the world's affairs.

All serious differences which the United States may have hereafter with foreign countries will be settled either by arbitration or by battleships. Most great modern wars have been settled by navies. Even in the civil war in America the blockading of the Southern ports by the Union navy, which prevented the people of the South from exchanging their cotton and other products for munitions of war, was an important factor in giving the North its final victory. More and more it is demonstrated by the Spanish-American war and the war between Japan and Russia that the power that controls the sea measures the power which will control the earth.

The American people are for peace. They think their greatest conquests are to be made in commerce. They deplore war. Their resources are great. They already furnish a large proportion of the surplus food to the world. However, they are not satisfied that their country should be considered only as the granary of the world. They want it to be regarded as the world's workshop, also. The wonderful resources of America, the ingenuity of the American people, their business instincts, their ability to work hard, all tend to make them ambitious to become the manufacturing people of the world, and with this in view

they hope to do a share of the world's commerce commensurate with their wealth and resources. Neither will they be satisfied with making America the granary and the workshop, for the American people have ambitions along financial lines. It will not be many years before New York City has a population of ten million people, and the ambition of its financiers is to make it the counting-house of the world's commerce.

Personally, I am an "intense" American, but I believe in expansion. When I say expansion I do not necessarily mean an expansion of territory. I mean the internal expansion that is now going on in the United States. I believe in the expansion of our navy, of our political influence, and the reason for all this is that these things lead to expansion in commerce and finance.

The American people feel their taxes probably less than any other nation. They are already the richest people in the world and rapidly growing wealthier. The money is not being concentrated in New York or any single financial center, but it is generally distributed throughout the country. The agricultural classes never owned as much or owed as little as they do today. In brief, the American people as a nation are in a position to pay for anything they want, easily and without adding perceptibly to their burdens. This is shown not only in the annual appropriations and the building of the navy, but in the building of such enterprises as the Panama canal, the devotion of \$25,000,000 to irrigation, and other stupendous undertakings which have been brought about without a perceptible increase in per capita burden of taxation.

It is not necessary for us to have a navy as large as that of England, but I stand emphatically for a navy second only to that of England. I believe in a navy of such fighting force that it will discourage any other nation from desire to engage the United States in warfare. I believe in a navy so formidable that it will preserve peace; a navy so well prepared for war at all times that war will never come. My conception of the American navy can be stated in three words—construction, instruction and destruction. I believe we should build as good ships as anybody. I believe they should be first-class in every

particular. I believe they should be as well armored and their guns should be as large and that each ship should have as many guns as the best battleship of any other nation.

I know that our officers are just as gallant, just as brave, just as skilled as the officers of any other navy. I believe that our officers are the best educated men of their class in the world. I know that our enlisted men are now nearly all American born. I know that they are the best clothed, the best sheltered, the best fed and the best paid men of any navy in the world, and I believe if war ever comes, which God forbid, when fight we must, our officers and our men will fight as well as, if not better than, the men of any other navy.

The navies of Great Britain, of Germany and of France are supplemented by a large merchant marine, which up to the present time we are without. I believe in the upbuilding of our merchant marine. I believe that exporting as we do more goods in tonnage than any other nation of the earth, we should own and operate more ships. Our greatest weakness in transportation is on the seas. We must devise some way to show the world that we can triumph in the carriage of freight by water in the same manner as we have on land.

The United States will in time logically and inevitably become the most powerful nation in the world. This will be due to geographical position, and extent of country, diversified resources, enormous natural wealth, the composite and alert character of the population and also to the fact that the tax resisting power of the American people has as yet been encroached upon to but slight degree and promises in the future to become almost inexhaustible. The fulfillment of such a destiny as this will be advanced or retarded in direct ratio to the expansion of the naval power of the country.

England is now the greatest naval power in the world and probably will remain so for many years to come. Her people are so accustomed to regard naval expenditure as a necessity that no complaint is made of taxation for the purpose of maintaining a supreme position. The United States is the only country which has or can secure the money in the immediate future required to build up a naval power approximating that of England.

With the navies of the two countries large enough when combined to constitute an unquestioned authority in the affairs of the world, it would not only be a matter of sympathy between English speaking peoples or self interest in the maintenance of international markets to prevent war, but there would be a possible moral obligation resting in the possession of this power, which would be as compelling in bringing about united action for peace throughout the world as any need for self protection.

Independent. 62: 323-6. February 7, 1907.

The Shout for Big Ships. Park Benjamin.

In connection with the present precipitate demand for big ships for the navy, with the consequent premature antiquation of the existing fleet, it may be of interest to note something of the conditions prevailing in the navy as it actually is. Upon the facts adduced conclusions may perhaps be drawn as to whether the headlong building of big ships is really the first and most necessary thing to do in order to increase our naval strength.

As it has become somewhat a fashion lately to meet criticisms leveled at any branch of the national public service with more or less vociferous shouts of "muckraking," it seems desirable at the outset to say: First, that no evidence exists, so far as the writer knows and firmly believes, of any graft whatever in connection with the navy; and second, that the statements hereinafter made as to the present situation are (with one exception and that noted) all taken from the recent reports of the Secretary of the Navy and the bureau chiefs, and from the printed "hearing" of the latter before the Naval Committee of the House. For the sake of brevity, details are largely omitted, and the subjects have been grouped under their respective headings.

I. ADMINISTRATION: (a) *The navy has no general staff.*—No military administrative authority under the Secretary to initiate and direct the policy of the department, to co-ordinate the work of the supply bureaus and to ensure effective preparations of the fleet for war. "Unless we are to suffer defeat in its early

stages," it is officially insisted, the conduct of a serious war will require such an establishment; also that we should not "wait for the disasters of actual war to provide it."

(b) *The navy has not practiced and is not practicing battle tactics.*—"Practice and skill," says the Bureau of Navigation, "in maneuvering the battle fleet to an advantageous position are essential if the ability of gun-pointers to hit the target is to be utilized to the utmost. . . . The paramount importance of battle tactics demands any sacrifice to secure and maintain sixteen battleships in the Atlantic fleet," in order that the higher officers "may acquire facility in the exercise of a large fleet and in maneuvering one homogeneous squadron against another"; but "the captains and flag officers *have not yet had* that practice and opportunity to acquire skill in handling a large number of vessels." (My italics.)

(c) *The navy has no reserve of trained men to join the colors at once at the outbreak of war.*—Every other foreign country having a first class navy has such a reserve. There is, of course, the Naval Militia of the several States, but as to this organization, says the Secretary of the Navy, "so long as it is organized upon its present basis there seems to be no hope that it can adequately fulfill the duties of a reserve."

(d) *The navy is sustaining severe losses in its trained men.*—It is of very little avail to educate men to high skill as marksmen if we are quickly to lose them, thru the expiration of enlistment terms and refusal to re-enlist. Lieut. Ridley McLean, U. S. N., a competent authority on the subject, announces, in the *Journal of the Naval Institute*, that in the year 1905-6 we lost from nine battleships noted no less than *forty-seven per cent.* of the trained pointers of the 12 or 13-inch guns; *fifty per cent.* of the trained pointers of the 8-inch guns, and *forty-one per cent.* of the trained pointers of the 4, 5 and 6-inch guns. This is certainly a startling showing, and Lieutenant McLean grimly adds: "These men are probably gone for good, and the training expended on them during the last few years was lost just as the ships were ready to utilize their skill in battle practice." What it costs to educate gun-pointers thus fruitlessly may be judged from the amount demanded for the coming fiscal year for target practice, namely, \$1,651,058.

(e) *The rate of desertion in the navy is high.*—The number of deserters last year was nearly one-third as great as the whole number of the new men enlisted in that period. The number of enlisted men in the service is about 32,500, or some 4,800 below the authorized total. Of these, 3,998 deserted, or about 12 per cent. We captured and convicted of this crime only 257. About one-third of the deserters ran away from the battleships and armored cruisers in active service, one-third from the receiving vessels at the navy yards, and one-third from the smaller ships, thus showing a catholicity of objection to all types in the fleet. In the Marine Corps the desertions ranged from 13 to 14 per cent.

II. GUNS AND AMMUNITION: (a) *The navy has no adequate reserve of guns.*—Last year the navy department's estimate for this purpose was \$1,500,000, which was reduced by Congress to \$750,000. The amount asked for the coming year is \$1,396,000 to secure a reserve amounting to only one-fourth of the guns of the present and prospective fleet, up to and including the "Idaho." The Chief of the Ordnance Bureau says "this appropriation is considered absolutely necessary for the efficiency of the navy." Afterward we are told reserve guns will be estimated as a part of the armament of every vessel, the allowance for reserve being 25 per cent. Is not this a somewhat belated precaution in view of the admissions by the Chief of the Bureau of Ordnance that "trouble is still caused by the rapid wear or erosion of the bores of high-powered largest caliber guns. There will shortly have to be withdrawn for relining"? Bear in mind that, excluding small guns for torpedo defense, the big ships are to have *nothing* but the high-power largest caliber guns. There has always been a dense silence as to the lifetime of these high-powered navy guns. Several of them in the past have destroyed themselves and one blew its muzzle off at Indian Head in February of last year, causing the powder charges of all of its type to be promptly reduced, with corresponding loss of armor piercing power. Some tests by the army people of one of their 12-inch guns made recently, fix its lifetime at but sixty rounds, or, at battle-firing rate, about one hour and a half. Estimating two hours as the time a fleet would take to run by harbor fortifications the conclusion is that "a new 12-inch gun would not last

thru such an engagement." The probable self-destroying capacity of high-powered naval guns at their present rate of fire (two shots a minute for 12-inch and four shots a minute for 6-inch, with a near likelihood of this being increased) seems sufficiently great to make a 25 per cent. reserve—even if we had it—look small.

(b) *The navy has nothing approaching an adequate reserve of ammunition.*—A modern battleship at her maximum rate of fire will exhaust the magazine supply of her main battery in half an hour, and her secondary battery supply will not last much longer. The navy department says it is imperative that at the earliest practicable date there be acquired a supply sufficient to refill the main battery magazines of the fleet twice and the secondary battle magazines once. The expenditures involved are stated to be so great that a sufficient reserve to fill the magazines of the fleet once is all that can now be attempted and this one reserve is to cost \$9,126,526 of which \$2,000,000 was appropriated last year. On the other hand our facilities for getting ammunition appear to be so small that it is officially announced that at the present rate of accumulation the reserve needed to fill the fleet's magazines *but once* will not be completed until 1910.

That is not all. The ships, it seems, cannot carry sufficient ammunition even if we had it. "In the *design* of vessels of the battle fleet, the *space and weight assigned to ammunition has been so restricted* that the ammunition on board, under certain conditions of battle, would be expended in something less than an hour." So says the Chief of the Ordnance Bureau.

And that is not all. We have no way of getting ammunition to the fleet except by the colliers or like vessels "rarely available when needed" and which "cannot carry ammunition in any sufficient quantity." Under existing conditions the Ordnance Bureau Chief announces that he "would be unable to deliver the ammunition at the place needed, that is to the fleet, wherever it may be."

(c) *The navy has not enough torpedoes to supply even the existing boats, let alone any reserve of them.*—The Chief of Ordnance announces that we are so short of torpedoes that we lack supply for ten destroyers and for six of the large torpedo boats. He says, after pointing out the foregoing:

"When I consider the possible consequences I cannot describe our condition in regard to torpedoes as anything but deplorable. It is an absolute necessity, if we are to be prepared for war, to get torpedoes, for if our torpedo boats can make only one attack (and all of them cannot do that now) they will become useless as fighting machines soon after the opening of war."

Also that

"There exists no reserve of torpedoes, a situation which as long as it lasts means that the torpedo fleet is not prepared for war."

We have no Government torpedo factory, as have Great Britain, France, Japan and Russia. Germany has what is practically one, while the Whitehead Company, in Austria and England, is making and selling to the great powers about 1,000 torpedoes a year. Our only source is one company, turning out torpedoes "not altogether satisfactorily," as a by-product, with a capacity of but 100 per year. No wonder Admiral Mason calls our situation "fraught with danger." Torpedoes cost now about \$5,000 each. We are told that we need 200 yearly and all the facilities for building them.

(d) *The navy has no offensive mines such as used by the Japanese at Port Arthur, and no large supply of defensive mines for advanced bases.*—Our battleships and cruisers now carry thirteen mines each, merely for self-protection, putting them out when forced to anchor in the vicinity of an enemy, in order to coal or make repairs. It is officially estimated that we need 2,500 mines for use in war, to be accumulated in five years at the rate of 500 per year.

(e) *The navy has not installed any efficient system of fire-control for its guns, and the ships are accordingly unfit for battle.*—The present system suits the slow rate of fire used a few years ago. Since then we have improved guns, etc., until each gun can fire rapidly and accurately; but the Ordnance Chief announces that the batteries as a whole are inefficient, because we cannot transmit rapidly to the guns the information absolutely necessary to insure accuracy; that the system is not sufficient to permit of control of rapid fire, and that "the ships will not be ready for action until an improved system is installed."

(f) *The navy has no up-to-date rifles or machine guns of rifle caliber*, and conditions are getting steadily worse. Imagine buying last year 4,000 rifles for the navy of a type which the army has abandoned!

III. REPAIRS, ETC. (a) *The naval drydocks are altogether insufficient.*—Battleships require constant overhauling and renewing. So rapid is naval progress that the Chief Naval Constructor estimates that to bring a steel ship up-to-date after four or five years' service, in addition to the cost of overhauling and repairs, necessitates an expenditure of from 15 to 30 per cent. of her original cost. To refit ships, and especially to clean their bottoms, drydocks are indispensable. The basis of the whole big ship argument is the increased speed of the big ships. But how greatly speed may be cut down by marine growths on the ship the fate of both Cervera's and Rodjesvensky's squadrons abundantly testifies. Battleships draw about 27 feet of water. We have now only five graving docks capable of receiving ships drawing 27 feet and over. Five are building and not yet finished. The Chief of the Bureau of Yards and Docks says that "additional docking facilities are greatly needed and would vastly increase the efficiency of the service," and it is pointed out, by way of contrast, that some navy yards in foreign countries have a dozen drydocks, and that England has one yard with nearly twenty docks capable of cleaning a whole fleet in a few days. It is rather significant that he asks for a floating steel dock capable of taking up an injured vessel drawing 37 feet of water, which draft cannot now be accommodated by any dry dock in the United States, and that this dock "would be capable of lifting a ship of 20,000 tons," the size of our now violently advocated big ships.

The foregoing will, perhaps, suffice even without going into the absence of coal-reserve (we are buying "little more than necessary for use to keep the fleet going") or the lamentable insufficiency of submarines, of which, built and building, France has 89 and Great Britain 48 to our 12. to warrant the question, Is this preparedness of the fleet we have? Remembering that we have thirty-eight millions yet to pay for that fleet, let us sum up this remarkable unbosoming of the highest officials of

the navy department; no proper military administrative system, with consequent defeat in war openly predicted; no captains or flag officers who have handled or ever had opportunity to handle war vessels in battle tactics; no reserve on which to draw for trained men; more than a million and a half a year spent for target practice only to see the very individuals made expert marksmen by that very practice walk out of the service in disheartening numbers; a high rate of desertion; not even a 25 per cent. reserve of guns over and above those afloat, and the latter of doubtful lifetime; an ammunition reserve, not enough to refill the fleet's magazines once, and yet such a vastly increased rate of firing that a battleship can get rid of all the ammunition it has in half an hour; magazines that do not hold a sufficient supply even if we had it; no way of getting the necessary supply to the fleet if absent from the navy yards; so "deplorable" a condition with regard to torpedoes that sixteen large torpedo boats might be useless and all the rest have to scuttle back to port after making but one attack; none of the submarine naval mines which proved so fearfully efficacious in the Russo-Japanese war; an antiquated system of fire-control rendering the ships not ready for action; no up-to-date rifles for landing parties and the like, but instead abandoned army small arms; and no sufficiency of naval dry docks, the most necessary of all means for keeping up the speed—the all important speed we are told—of the ships.

More extraordinary still, altho the great naval powers elsewhere have provided most of these things, and altho their immense importance as affecting our naval efficiency cannot be disputed, no one is demanding that we should exercise any notable precipitation in obtaining them. Unquestionably we shall get them all in time, but the bureau chiefs, despite their emphatic words, seldom insist that we shall do other than string out their acquisition over periods of years. Nor do they waste over-much eloquence in telling us that other nations have or insist upon the *force majeure* which compels us to get the same instantly. That only applies it seems to "Big Ships."

Independent. 64: 351. February 13, 1908.

The Demand for More Battleships. Lucia Ames Mead.

If one-tenth of the sums squandered on short-lived battleships were spent on efforts toward world organization and on peace budgets, administered as concerns ourselves by a commission appointed by the President, we could have an international exchange of visits and courtesies and lectureships which would gradually substitute sanity for hysteria, friendship for suspicion, and prosperity for panic. A great navy bears no more relation to our "dignity" than do fire engines or lighthouses. It is not to be gauged by population.

Independent. 64: 458-9. February 27, 1908.

Some Fallacies of Militarism. Charles E. Jefferson, D. D.

"A nation unarmed is at the mercy of its neighbors." So some men say, but it is not so. Mexico is not armed. She is not at our mercy. We cannot touch her. Suppose the President wanted to harm her; he could not do it. Suppose Congress wanted to wrong her; it could not do it. Suppose that thousands of Americans wanted to rob her; they could not do it. Why not? God is in his world. Something in us would hold us back; God in us would protest. Something in us would protest. There is no other reason. Russia has no navy. Is she at the mercy of anybody? When she had a navy she was at the mercy of Japan; now that she has no navy she is at the mercy of nobody. Why do not the nations pounce down upon her? Now is their opportunity. They cannot do it. Why not? There is a God. Men are not tigers; men are men. God's in his world—that's all. If all our ships were at the bottom of the sea we should not be at the mercy of anybody. No nation would attack us; no nation could attack us unless we deserved by our foolishness to be attacked. All the protection that a nation needs in the twentieth century is a disposition in her rulers and statesmen to love mercy and do justly, and walk as a nation ought to walk. A lot of religious people are atheists in their reasonings and policies; God is not in all their thoughts.

"We must protect the Philippines!" From whom? Tell us who wants the Philippines? Nobody. They are a white elephant which can be left out over night with safety. Nobody will take them. They are one of the heaviest burdens this nation has ever tried to lift. They have been a drain on us from the day we bought them. They would be a millstone around the neck of any nation. We could afford to pay today any nation a hundred million dollars to take them off our hands, and then we should be a gainer by the bargain. To spend hundreds of millions in protecting a thing which nobody wants—only men driven delirious by brooding always on war are capable of such grotesque and unfathomable stupidity.

Independent. 65: 276. July 30, 1908.

President Roosevelt and the Navy.

The President says a big navy is the only guarantee of the Monroe doctrine. Perhaps he forgets that the Second Hague Conference practically made this a canon of international law, and tho the nations conceivably might not obey the rules of international law, except at the cannon's mouth, yet as a matter of fact, history shows that they do. The moral law has been sufficient to make the nations live up to the award of every dispute between them settled by arbitration.

The President also fears we may need a big navy because friction may be caused by our increasingly exclusive immigration policy. It may, and doubtless will, produce friction, but that is a different thing from predicting that a nation would be foolish enough to go to war because of the exercise of our right to keep aliens from entering our ports.

Nation. 76: 324-5. April 23, 1903.

The Naval Folly.

A distinguished naval officer writes to us: "One of the signs of the times is the transfer of the struggle for armed

superiority from the land to the sea. In this transfer we have become entangled—largely through our holding on to the Philippines, which makes us guilty of the strategic blunder of maintaining an outpost many thousands of miles from our base.” He asks us to comment upon this surprising change in policy which results in “substituting Jack Tar for Tommy Atkins on the peasant’s back.”

The theme is inviting. Take the matter of expense. All public expense means, by so much, personal deprivation. Income to the Government means outgo to the citizen. We have frequently remarked on the swollen and swelling naval appropriations of Great Britain, France and Germany. The huge estimates for new ships and their maintenance are presented to Commons, Chamber, or Reichstag with an apologetic air. But how stands our own account? We are pushing up our annual expenditure on the navy at a portentous rate. Twenty years ago the naval appropriation bill carried less than \$15,000,000. Even as late as 1895 it had reached only about \$25,000,000. But the bill for the current year appropriated no less than \$80,000,000. That is to say, the naval tax has mounted from about 45 cents per capita in 1892 to \$1 in 1903—a cornerstone fact for the McKinley monument. Moreover, the expense is bound to go on by cumulative additions. One hand washes the other, and for both the country has to pay. A programme of navy enlargement to the tune of \$20,000,000, as provided this year, compels enlarged appropriations for equipment and support. New ships require more men; 3,000 more seamen are to be enlisted, under the terms of the last naval appropriation bill, with 550 men added to the Marine Corps, and the number of midshipmen in the Naval Academy doubled. All told, we are at the present time clearly on a road which will speedily lead us to a naval establishment that will demand an outlay of \$150,000,000, annually.

Thus rapidly are we wiping out, of our own motion, the advantage which we have always boasted that we had over European nations. Our isolation, with our expanding population, freed us from the necessity of going armed to the teeth. How we have asked triumphantly could the John or Hans or Jacques of the Old World hope to compete with the free labor

of American farmers and artisans, so long as the former had to go to their work in the field or shop each with a soldier strapped upon his back? Well, we are strapping on a sailor instead. Do not forget that the dread of vast military establishments which Americans have proverbially expressed has had to do primarily with their costliness. This was what Mr. Roosevelt had in mind when he wrote, seven years ago, "We do not wish to bring ourselves to a position where we shall have to emulate the European system of enormous armies." This was also what he had in mind the other day when, as president, he congratulated the people of the West on the fact that the army, and the expense of it, were being substantially cut down. It is not that he or anybody fears that a great standing army will destroy our liberties; only that it will eat up our resources. But what shall it profit us to save \$5,000,000 on the army if we promptly waste it and \$20,000,000 more on the navy? Of all money unproductively locked up, that put into battleships not absolutely needed is the most profligately squandered.

And, as our naval correspondent points out so sagaciously, we are going into this game of naval strategy with an immense strategic blunder at the start. The theory is that we must prepare to defend ourselves by a navy against the possible aggressions of foreign nations. All the millions asked are for defence. No advocate of a big navy for the United States says openly that we dream of attacking anybody. All the talk is simply of making ourselves so strong that no one will dare to assail us. And yet in this process of making ourselves strong, we begin by making ourselves weak strategically, and laying ourselves open to an attack which we have no means of resisting! Who can doubt that, if war were to break out to-morrow between this country and England or France or Russia or Japan, the Philippines would fall to the enemy at the first blow? Their retention is a source of peril to us, in a military sense, just as it was to Spain. Where, on our professed principles of strategy, we should have been drawing ourselves in to become impregnable, we have been spreading ourselves out with the result of becoming highly vulnerable.

Oh, but nobody is going to challenge us in the Philippines.

It is not at all necessary to have a fleet in the Pacific strong enough to meet any combination which might be made against us. We are a peace-loving nation. No power is going to attack us. But this is to give up the whole case. If we do not need a preponderant navy to defend the Philippines, we certainly do not to defend our own shores. If we are to rely upon our good intentions in the one case, we safely may in the other. The truth is that there is no logical middle ground between a small and efficient navy designed for use in peace, and one big enough to meet all comers in any possible war. We are muddling away at great expense in a futile effort to find something between the two. We are not in a position, and there is no likelihood of our ever being in it, to outclass the great naval armaments of Europe; yet as if that impossible goal were our definite objective, we take needless millions from the labor and thrift of our people, and deliberately assume an unnecessary handicap in the industrial competition now pressing so hard upon all the world.

North American Review. 175: 544-57. October, 1902.

America Mistress of the Seas. Richmond Pearson Hobson.

The two facts of the century just closed that portend most for the human race are the rise of Russia and the growth of the United States.

Within these two nations are gathering mighty factors of national power, mightier factors than have yet appeared in the history of the world, factors resembling in general nature but exceeding in magnitude those that brought forth the Empire of Rome and the British Empire—cumulative factors that mark Russia for a military empire destined to throw Rome into the shade, and the United States for a mighty naval power toward which the vast power of Great Britain is but a stepping-stone.

In the United States we find elements of power, numbers and vigor of population and material resources, without a parallel in history, together with conditions never yet equalled—maritime frontiers, vast material interests, and sacred principles—which demand the growth of power upon the sea.

In population, the United States is half again as large as Germany, nearly twice as large as the white population of the British Empire, nearly twice as large as Austria-Hungary, and more than twice as large as France. The population of the United States is increasing twice as rapidly as the population of Germany, and three times as rapidly as the population of Great Britain and the other nations of Europe, while it has from twelve to fifteen times the space to expand in, with a richness of soil that would enable the United States to support a population equal to the present population of the earth, without taxing the soil beyond the degree now existing in Europe; and every improvement in transportation and means of intercommunication will cause the United States to draw off more and more the hardy and vigorous people of Europe, and thus to make even a greater disparity in the rate of increase.

Moreover, the average American, man for man, is from two to five times as vigorous as the average European. The average American man is an inch taller than the average Englishman, who is the tallest man in Europe, and the average American eats about twice as much strong food as the average Englishman, who is the best fed man in Europe.

In the United States, furthermore, about two and a half times as much is spent per capita for education as is spent in England and Germany, which stand at the top of the list in Europe.

The average American wheat-grower produces three times as much wheat as the average English wheat-grower, four times as much as the average French, five times as much as the average German. Similar averages are found in the output of manufactured articles. The output per man in American locomotive works is twice as large as the output in the English locomotive works, which stand first in Europe. The average American wields about 2,000 foot-tons of mechanical energy per day; the average Englishman about 1,500; the average Frenchman and German about 900; and the other averages in Europe are below 500.

There are in the United States nearly 100,000 more members of the international organization, the Young Men's Chris-

tian Association, than there are in all the rest of the world combined. If a famine occurs in Russia, or a cataclysm in the islands of the seas, the first relief ships sail from American shores. An American army besieging the City of Santiago feeds the women, children and old men, instead of starving these to reduce the city. America, concluding a war with a fallen foe, restrains its fleet and pays twenty millions of dollars, instead of ravaging the enemy's coast and exacting two hundred millions for war indemnity. America, after pouring out blood and treasure, gives Cuba its independence.

Every test goes to show that Americans, with a few generations of free life in a free continent, are already physically, intellectually and spiritually, a race of giants.

For vigor in warfare, no such manifestations are found in history as were shown in the American civil war. Though having but 16,000 men in the United States army at the beginning, the war involved numbers twice as large as the hordes of Xerxes, the casualties alone being 200,000 more than there were soldiers altogether in the German armies that invaded France in the Franco-Prussian war. Campaigns in that war, for distances covered and obstacles overcome, have no parallel, except, perhaps, in Hannibal's invasion of Italy; while numerous battlefields counted percentage losses from three to five times as great as the bloodiest on record, those of Napoleon and Frederick the Great. In the supreme test of individual fighting, as shown by regimental records, there were over five hundred cases in the civil war where the losses of single regiments in single engagements exceeded the loss of the Light Brigade at Balaclava, and one hundred and twenty-five cases exceeding the record of the German army in the war with France.

For vigor in naval warfare, no such record exists in the world as that of the American navy. In the war of 1812, the British navy was at the zenith of its glory, fresh from the victories of Nelson, having counted an almost unbroken record of 200 victories with European foes. The force sent against America was seven times as strong as the American navy; eighteen battles were fought, and fifteen were won by the American ships, with losses less than one-sixth the British losses.

In the Spanish-American war, the American navy simultaneously broke two world records, first with cruising vessels against cruising vessels at Manila, then with armored vessels against armored vessels at Santiago, achieving in both cases a mathematical maximum of fighting efficiency, compassing the total destruction of the enemy without any loss to the victor. The American navy alone of all navies of the earth, has never known defeat.

Together with its vast, vigorous population, the United States has unmeasured natural resources, a domain from sea to sea spanning the temperate zone, in richness of soil, the Earth's Garden Area, holding below the soil one-third of the known mineral deposits of the earth, having matchless waterways, the granary, butchery and workshop of the world.

Thus, with a heavy preponderance of numbers, great superiority of vigor, and matchless natural resources, the United States, compared with other powers, has stupendous elements of world influence.

This world influence can rest only upon sea power. Our frontiers are all maritime. Though Canada is a hostage from the British Empire, our contact with that Empire, as with all the world powers, is the sea. The conditions and mighty forces are wonderfully concurrent for bringing forth naval growth, sure, swift, irresistible.

We have in the United States, 17,000 miles of coast-line, and on this coast-line, and upon the harbors and great rivers leading up from the coast-line, we have built innumerable cities representing accumulations of more homes and property vulnerable from the sea than are found on all the coast-line, harbors and navigable rivers of the continent of Europe combined. Fortifications, mines and torpedoes have been, and still are, useful accessories in coast defence, but they never have arrested, and they cannot now effectually stop, a determined commander of a strong fleet.

The only accident policy, the only insurance, the only adequate guarantee of security, for all this property, for all these homes, upon which depends the happiness of so many millions of American citizens; is the navy; and the prosperity of the

inland population is inseparably bound up with the prosperity of the coastwise populations. Moreover, without adequate protection, this exposed side of the nation would be a standing invitation for attack from nations jealous of our commercial ascendancy.

Estimating legitimate naval requirements from coast-line exposure, the navy of the United States should be the largest in the world.

Besides the largest amount of coast property, the United States has the largest amount of water-borne property exposed to attack from the sea, billions upon billions in coastwise, river and lake trade, and exports now the largest in the world, exceeding \$1,500,000,000 annually. When we are at war, the navy only can prevent blockade of our ports, and insure the departure of this property; the navy only can give us safe convoy or a clear road for passage. When Europe is at war, the navy only can insure our rights as a neutral, and permit us to realize the security of our isolation, and render us, in fact as in word, independent of European turmoil.

Estimating legitimate naval requirements by the quantity of exposed water-borne property, the navy of the United States, again should be the largest in the world.

But the huge figures of \$1,500,000,000 of American property now shipped annually over the seas, is only an introduction to the coming importance of over-sea markets. With the differentiation of labor and the increasing necessity for free exchange of products, the national importance of foreign markets is, in a general way, proportional to the productiveness of the nation, notwithstanding the importance of the home markets. With the United States now producing one-third of the world's food-stuffs, one-third of the world's mineral products, eight-tenths of the world's principal article of clothing, while she stands but on the threshold of her possibilities of production in these fields; with the United States now employing more mechanical energy than all Europe combined, and now producing \$12,500,000,000 annually manufactured articles more than the combined manufactured articles of Great Britain, Germany and France. while its rate of interest in manufactured articles is twice as great

as the rate of increase in Europe; with the United States thus advancing by leaps and bounds, and already almost at the point where it will produce as much as all Europe combined, the matter of foreign markets, important for all nations, is of supreme importance for us.

While the domestic markets of the other great powers offer an inviting field, they are subject to embarrassment by local legislation. The markets of most importance for all the great nations are the new markets of undeveloped lands, where all may have an equal chance. These markets are of vital importance to a nation making such gigantic strides as the United States is making in industrial and commercial expansion. In the fierce and fiercer-growing competition of the great powers for advantage in new markets over the seas, where the local people themselves can make but feeble show of power, the security of the nation's interests can rest only upon the nation's fleets.

To emphasize the far-reaching importance of this question, take the case of the new market of China. From long experience in the reconstruction of gunboats raised at Manila and reconstructed at Hongkong, I can testify that the industrial capacity of the Chinese is scarcely below that of Americans, while from careful investigation I should estimate the average wages of a hard-working man in China at less than six cents a day. These two facts have a momentous significance. China will be opened up. The disturbances which drew the attention of the world, and which were the occasion of opening the eyes of the soldiers sent there as to conditions existing in the Orient—who, in turn, spread the knowledge broadcast over all parts of the world—will but accelerate a movement already rapid; and soon we shall see more than one-quarter of the human race double, then quadruple, then increase tenfold, then twentyfold its productiveness, demanding, as the standard of life rises with the rate of wages, double, quadruple, then tenfold, then twentyfold more products from the rest of the world. The history of the world does not record a parallel to the magnitude of the economic impulsion that will be felt, an impulsion overtopping that felt in the renaissance and at the discovery of America.

In this coming market of China the United States has an incontestable right to an equal chance. Moreover, lying, as she does, midway between Europe and Asia, with the Atlantic and Gulf coast-line and the Mississippi valley to be brought by the Isthmian canal, along with the Pacific coast, face to face with the Orient, and being the pre-eminent producing nation with a natural elasticity and adaptability, she should with a fair chance and no favor hold control in the Chinese market.

Over this field, fraught with so much of vital interest, there is a danger line. China herself can offer no resistance to aggression. The European nations, which fought long and bloody wars for the American continents that offered only virgin resources, and for India with its slothful population, will strive for control in China, where, with unmeasured virgin resources, there is an ocean of wealth in the industrial population. Protestations and treaties to the contrary notwithstanding, the European nations will have a steady set toward the seizure of China.

History shows that the conquering nation invariably absorbs the commerce of the conquered. Promises of an open door will not suffice. Our recognized rights to an equal chance in China's markets can rest in security only upon a strong policy that will not permit the partition of China. For such a policy, the United States must rely on herself alone, and must maintain in the Far East a comparatively large fleet.

Similar conditions hold for the important coming markets of South America, markets of the present and immediate future, and of the more distant though not overdistant future when European and American immigration will develop a second America.

Generally, similar conditions hold for all the other new markets of the world; and we may say broadly, for all over-sea markets, that the security of America's trade interests must depend upon the size of her fleets. Having interests great and wide-flung, and increasing more rapidly than those of any other nation, the United States should have the greatest navy in the world. Here again, our insurance against attempts to invade our rights, and thus for the security of our peace, will rest upon the size of our navy.

Thus, from considerations of material interests far-reaching and vital to our country's welfare—considerations that involve the security of our coast, the protection of our waterborne commerce, the safeguarding of our rights in foreign markets and new markets, our interests in each of these cases being larger than those of any other nation—from each and every consideration of material interest upon which the legitimate size of a navy should be computed, the United States should maintain the greatest navy in the world; indeed, the size being proportioned to her needs, the navy of the United States should be almost equal to the combined navies of the world.

But material interests are not the only considerations that should prompt the United States to maintain a great navy. We have sacred principles committed to our charge which can be upheld only by a great navy.

We have not receded one step from the Monroe doctrine of our forefathers, yet South America is as far from us as it is from Europe. When the race for South-American markets becomes close, and when the growing European immigration to South America becomes stronger and more controlling, we can maintain the Monroe doctrine there, and guaranteed against an assault upon it, only by being able to send to South America as large a fleet as Europe could send.

But Americans now living have a greater Monroe doctrine to uphold. We may differ among ourselves in judgment as to methods adopted and to be adopted with the Philippine Islands; but no earnest American would willingly see his country stand aside and allow those 10,000,000 of helpless people, now committed to our charge, to pass under the yoke of a European monarchy. In other words, the Monroe doctrine has already crossed the Pacific and to-day covers the Philippine Archipelago. Yet the Philippine Islands are more than 8,000 miles away across the seas. How can we, a nation of action that means what it says, how can we fulfill our bounden duty of protection for the Filipinos except through a strong navy?

But in principle the Monroe doctrine should have wider extension, an extension limited only by our nation's opportunities and possibilities for world influence. The white race,

in possession of the truths of science and the forces of nature, now controls the destinies of the yellow and black races, though these number nearly three times the entire white race. In the action of the great white nations, controlling the happiness of these hundreds of millions, the United States should have a strong and determining influence. Would it not be selfish and cowardly in us to stand off and see the destinies of these myriads of helpless people dominated by the harsh methods of European monarchies and despotisms?

No man liveth unto himself, neither does any nation; no individual enjoys a blessing without a concurrent responsibility to his fellows, neither does any nation. With nations as with men, Heaven requires works proportionate to talents and opportunities.

We are the only completely liberal nation of the earth. Europe has been evolved by series of conquests, the processes of which have left its society stratified, men and women living and dying where they are born, the vast bulk being born peasants. We have been evolved by free processes only, never ruling over others, and never being ruled over ourselves, producing in our body social and body politic a homogeneous medium, in which men and women rise and fall and seek their levels, according to their relative weights, according to individual force and usefulness, according to individual attainments and worth. Being the only completely liberal nation of the earth, we are constituted the champion of free institutions, and the advocate of human liberties for the whole earth.

It was no mere chance that planted the foot of America at the Gateway of the Orient, the habitat of the teeming millions. Our forefathers laid down the Monroe doctrine when they numbered less than 10,000,000 of population, shortly after our shores had been invaded. Now, with more than 80,000,000 of population, having passed beyond the point where any nation or combination of nations could invade our shores and threaten the nation's life, with unparalleled elements of power and influence, I do not believe I over-estimate our enlarged responsibilities, or over-estimate our possibilities of realizing practical world policies, when I say that Americans of to-day should ex-

tend the Monroe doctrine to cover the Empire of China. We have a perfect right to say that China shall not be partitioned. In addition, I think we should say to the powers of Europe, "We will join you in opening up China. It is best for China and for the world that life and property should be secure and Western methods have free course throughout that empire; but we propose that China shall be opened up as Japan was opened up, by the American method—not as India was opened up, and as Africa is being opened up, by the European monarchial method, that involves the conquest and subjugation of the peoples."

Further, without venturing to intermeddle with affairs of others, I believe we should extend the Monroe doctrine into an American doctrine that would exert influence and lend a helping hand to all the less happy peoples of the earth, creating and exerting powerful influence for the oppressed of all lands, and for all the yellow and black peoples as they come under the dominion of the white race—a doctrine that would exalt the idea of responsibility and duty, making the best interests of these peoples the guiding purpose of the great nations.

In advancing such a doctrine, we should render a service not only to the belated races themselves, but to the white nations and the world at large, ourselves included, increasing the industrial productiveness and thereby the commerce of the world, and adding to the intellectual and spiritual progress of the races, which would be a moral asset for the world.

Further, we are the only innately peaceful nation of the great powers. The European powers are organized for invasion and for repelling invasion, the nations constituting great military camps, where war and warfare, the military and militarism, permeate and mould the minds and character of the peoples. In America, the contrast is complete; with no wish for conquest, no dread of invasion, free from the military, Americans are engaged in and absorbed by the useful pursuits of peace. Indeed, the absorption of individual business is so complete and personal liberty is so secure, that the citizens forget public affairs—this forgetfulness constituting, in fact, an incidental weakness from which flows periodically bad gov-

ernment in the cities and slackness in our national purposes, especially our foreign policies, a weakness that should be reduced to a minimum by every thoughtful citizen making it a point, whether entering politics himself or not, to take an interest in public affairs.

Being the only fundamentally peaceful nation of the world, we are constituted the advocate and champion of peace for the world.

Moreover, in championing peace as in championing free institutions, we should render a service to the world, including ourselves. War that would injure the British Empire, with which we have \$800,000,000 annual commerce, would injure us in injuring our market; similarly, war that would injure France would injure us; war that would injure Germany would injure us; an injury to any part of the human race would be an injury to us and the whole race.

In addition, engaged in peaceful pursuits, we learn to appreciate and respect the rights of others, and are coming more and more to recognize the principle that advantage as well as right lies not in injuring one's neighbor, not in reducing his happiness, but actually in helping him and adding to his happiness—that an increase of happiness for any citizen is an asset for the community, that an advance in the welfare of any people is an asset for the world. With our wonderful system of government, too, where each unit retains control of the affairs of the unit and participates in the common affairs in the measure warranted by its interests involved, we are evolving the only system which can be extended indefinitely, and which can lead to a brotherhood of the nations in which they could live in peace with each other, each attending to its own affairs, having only its just weight in the common council, while endeavoring not to injure other nations, but actually to help them as much as possible.

As pointed out above, the world influence of our country must rest upon the navy alone; it is only through a great navy that we can extend our Monroe doctrine to China, through it alone can we give effect to our general advocacy of free institutions, to our advocacy of peace and of the brotherhood of

man. Our forefathers and fathers were nobly engaged and showed a splendid devotion when they colonized our country, won its independence, founded the government, perfected its institutions and perpetuated the nation. Our country has now graduated, and we of this generation are called upon to shape its course as it steps forth into the world to play its part as a world power, to inaugurate its career of world service. We should be unworthy of our inheritance, did we not lay out and seek for our country a mighty and beneficent role, to fill its majestic and glorious opportunities and possibilities for useful service to mankind.

For this glorious role, that we should all covet for our country, for fulfilling our sacred duties as a nation, we must maintain a great navy.

To meet these demands of sacred principles that appeal to the conscience, as for those of material interests, the United States should have the largest navy in the world; indeed, the proportions would not be strained if the navy of the United States equalled the combined navies of the earth.

Furthermore, conditions are such in the world, with the great European nations holding each other in check, one power against another, one alliance against another, that the United States with a mighty navy can hold the balance of power for the world, and can cast the deciding vote in the councils of the nations where world policies are determined, where questions of war and peace are considered. It is hardly overstating the case to say that, with a dominating navy, the United States can dictate peace to the world and can wonderfully hasten the reign of beneficence in world policies.

Let all earnest men and women, who wish for the reign of peace and good-will on earth, realize the fact that, though Hague Conferences and International Peace Societies are useful, the real practical way to hasten this reign is to place control in the hands of the nation of peace, the nation of liberty, the nation of beneficent promptings; let them realize that the United States navy, which alone can give control to the nation, is thus the bulwark of human liberty, the agent of peace, the instrument of brotherly love.

No one need have apprehension as to the effect on our institutions of having a great navy. No navy ever overthrew any government in the history of the world. With a navy equal to the combined navies of the earth, the numbers of citizens involved would be but a little handful out on the sea, and however strict in discipline and military methods they may be among themselves, the body of the nation would remain unaffected. There could not be the slightest tendency toward militarism; while the accompanying sense of power and of control would but deepen, in the minds and hearts of men engaged only in peaceful pursuits, the feeling of responsibility, quickening the nation's conscience, advancing the nation's moral development. Indeed, noble efforts for other nations and for the world would be a wholesome tonic for our nation. Breathing the purer air of such an exalted station would quicken the pulse of the nation and send a brighter, stronger current to eliminate morbid germs from all the tissues of the body politic, offsetting tendencies toward commercialism and materialism.

It is of momentous significance that naval power can go hand in hand with complete liberalism, the struggle for supremacy being simply a race for wealth. Here the liberal nations, in which productiveness is the prime incentive, where the population remains in productive pursuits, will hold the controlling advantage. It is naval power that ultimately will give control to the useful and the good, that will give the earth's inheritance to the meek; naval power is the agency for regenerating and redeeming the world.

The resources of the United States, as pointed out above, are so stupendous that if our navy equalled the combined navies of the earth, the American tax-payer would not be conscious of even the slightest burden, and in the practical work of building ships and preparing them, and organizing a navy, there are no evidences that any nation has greater aptitude, and our shipyards have already the necessary capacity.

While there are thus paramount reasons why we should be the greatest of naval powers, we are to-day only the fourth power, having 550,000 tons of warship displacement. Great

Britain has 1,800,000 tons; France has 715,000 tons; Russia has 20,000 tons more than we have; Germany is but little below us and has recently authorized a vast increase, equivalent to doubling and trebling her entire naval force. The other powers have also undertaken large programmes of construction. At the session of Congress before the last, not a single new ship was authorized. I do not believe the people know this. I believe they wish and will demand, irrespective of party, that every session of Congress make adequate, sure, consecutive appropriation for increases in ships and personnel.

When we recall that it takes three years to build a battleship, while an enemy's fleet can leave Europe and appear on our shores in two weeks, when we remember that our naval insufficiency is a constant danger to our peace, while such vital interests are at stake, we cannot fail to recognize the urgency of the situation. We should set forth at once with a steadfast purpose and a carefully thought out progressive programme. It is better to lay out a programme on the basis of appropriation for new construction, rather than a set list with fixed types and numbers, leaving the navy department to determine each year the types, and the numbers of each type, to aggregate the proposed appropriation. Taking account of the situation and conditions now existing, I would suggest the following programme,—to start with the appropriation made at the Congress just adjourned, about \$30,000,000, and make an increase of \$5,000,000 for next year, or \$35,000,000 altogether for 1903, and increase this amount by \$5,000,000, or \$40,000,000 altogether for 1904, and so on, increasing for each year by \$5,000,000 the appropriation of the previous year, making for 1905, \$45,000,000; 1906, \$50,000,000; 1907, \$55,000,000; 1908, \$60,000,000; 1909, \$65,000,000; 1910, \$70,000,000; 1911, \$75,000,000; 1912, \$80,000,000; 1913, \$85,000,000; 1914, \$90,000,000; 1915, \$95,000,000; 1916, \$100,000,000, and so on, till we become the first naval power. If the European nations continue to build along their present lines, I estimate that we should overtake Great Britain about 1920, when, at the rate indicated, our naval appropriation for new ships would be \$120,000,000. The probabilities are strong, however, that the powers will accelerate even their present

rates of increase, and we could scarcely expect to reach the top before 1930, when the annual appropriation would be \$170,000,000 for new ships.

Pursuing this course, we should prevent Germany from passing us and should ultimately convince even Great Britain that she cannot remain in the race.

Of course, there is a chance that some power or combination of powers may endeavor to deal us a staggering blow before we have gathered full speed. For such a case, we should be prepared to accelerate to any required extent the momentary speed of increase. We cannot ignore in this light the gigantic efforts now being put forth by Germany. It is only a dictate of prudence for us not to let Germany pass us. It is possible, too, that our world interests and the principles we stand for may gradually cause Continental nations to make combinations for the purpose of checking us. We should be alive to any such movement and prepared to make efforts in proportion.

It may be remarked, however, that any present or future effort of a single nation or combination of nations to strike at America's naval growth would but hasten the day of America's naval supremacy. The conditions for supremacy now exist. Mighty forces are at work. The most potential nation in history, standing upon the strategic vantage-ground of the world, with unparalleled equipment, is being called upon by the strongest demands of interest and the most imperative appeals of duty. Like the cumulative processes of nature, the movement will be irresistible. It cannot be checked. The finger of fate is pointing forward. America will be the controlling world power, holding the sceptre of the sea, reigning in mighty beneficence with the guiding principle of a maximum of world service. She will help all the nations of the earth. Europe will be saved by her young offspring grown to manhood. The race will work out its salvation through the rise of America. I believe this is the will of God.

Outlook. 88: 281-2. February 1, 1908.

President Pritchett's Plea for a Strong Navy.

President Pritchett's justification of President Roosevelt's naval policy is accompanied by a similar plea, in larger type and different diction, in Hearst's *American*, and by others in the intermediate grades of journalism. A systematic attempt is being made to persuade Congress, which refuses to give even \$1,000,000 towards saving our forests, to vote for four new \$10,000,000 battle-ships, with accompaniments costing probably \$20,000,000 more, in addition to our war budget, estimated, we believe, at \$218,000,000 for this year. This is what President Pritchett means by his unexplained expression, a "strong navy." There are some of us who have seen war budgets increase two hundred times during a period when our population has increased only twenty times, who perceive a serious difference between a navy some years ago reasonably strong, and the present one, excessive and already dangerous as an incitement to the increase of military burdens in other nations. We would like to present the following considerations:

(1) Our national defense is needed a thousand times as much against internal enemies of graft, homicide, and criminal recklessness as against external foes. Twice as many are annually murdered in our country as fell on the American side in three years of the Philippine war, though the Filipinos' loss was immense; eighty thousand more persons have been recently killed by accident in four years than were killed on both sides in the four years of the civil war. The enemies we most need to fight are not to be conquered by bullets, but by ballots, education, and law. We have still six million illiterates, and are paying the average teacher less than a garbage-collector, while a hysterical fear lest we have not enough costly steel constructions to annihilate an unknown, supposititious foe is making us blind to the dangers that are weakening and dishonoring the Republic, and are humbugging us into spending money precisely where it is least needed.

(2) President Pritchett says: "Our international human nature is not likely to be made over again in a century." Justice

between nations no more depends on a change of human nature than does justice between states. It is proper organization, not saintliness, that prevents New York and Pennsylvania, or Pisa and Florence, from fighting each other, as the latter used to. A navy's size bears no relation to its "dignity," any more than the number of fire-engines or jails is proportioned to the dignity of a city, or his pistols and burglar alarms to the dignity of a man.

(3) The sole just criterion for the size of a navy is the degree of national danger. Last April President Roosevelt wrote to the National Peace Congress: "We are no longer enlarging our navy. We are simply keeping up its strength. The addition of one battleship a year barely enables us to make good the units which become obsolete." In November he asks for four new battle-ships. Will some one please explain why? Japan is preparing to lower her military taxation, as reported, \$200,000,000 within five years. She is yielding generously to our prejudices about immigration. The Drago-Porter agreement at The Hague has relieved us from any supposed need of a navy to compel South American nations to pay contractual debts to Europeans. The settlement of Central American difficulties, our new treaty with Japan now under consideration, our ability to remove at one stroke all possibility of attack on the Philippines by merely asking the nations to neutralize them as soon as we grant them the independence which Secretary Taft has promised—all these facts, and the new treaty between Russia and England and the latter's pleasanter relations with Germany, show a horizon unmarked by the shadow of a war cloud anywhere. Why, then, this sudden scare and change of policy? No nation was safer and less frightened than we thirty years ago, when our navy was small. To-day we have no enemy in the world; we have had only two and one-half years of foreign war since 1812; we were not then invaded and the two wars were of our own making. No nation could so safely as we lead the world in a gradual reduction of armaments.

(4) President Pritchett tells us that Jesus made no anti-slavery or anti-military crusade, and that we "have made progress just in proportion as we have followed his methods." If

he means that mankind should literally imitate Christ's methods, no advance could have been made in science, discovery, or political development. If he means that we should be inspired by Jesus' spirit to deal with present problems as he would have us, then would not his spirit of justice, which has abolished slavery the world over, likewise command us to end the world's remnant of injustice—the settlement of questions of fact and principle by explosives? The motto for men who love justice is, "In time of peace, prepare for peace."

JOHN COLEMAN ADAMS, D.D.

Church of the Redeemer, Hartford.

J. T. SUNDERLAND.

Pastor of Unity Church, Hartford.

ARTHUR DEERIN CALL,

President Connecticut Peace Society.

Outlook. 88: 329-30. February 8, 1908.

Dr. Pritchett's Argument for a Strong Navy. C. M. Mead.

President Pritchett contributes an elaborate article to *The Outlook* for January 11 in defense of President Roosevelt's "Doctrine of a Strong Navy." Boiled down, the argument is this: Man is a fighting animal. Both as individuals and as nations men have always quarreled; and even after they have become civilized, they quarrel still. Notwithstanding all that has been accomplished in thousands of years by way of reducing the frequency and savageness of wars, they have not been abolished; and thousands of years must yet pass before civilization can be expected to bring war entirely to an end. Therefore there is always a possibility that we may have to fight; consequently we ought always to be ready to fight; hence we ought to have a large navy. Q. E. D.

Now let us come down from these generalities to certain plain facts. We have had a national existence of one hundred and twenty years. Up to within a few years we have had a very small navy and a very small army; and we have never been attacked by any foreign power. We have had three foreign wars,

in every one of which we have been the attacking party. It is very certain that our having a small army and navy has not brought any war upon us. And the danger of being attacked must now be less than ever before because of our much larger population and larger resources. Yet, if Dr. Pritchett's argument is valid, we ought to have been spending something like fifty million dollars annually in building and equipping war-ships from the very beginning, for the purpose of guarding against a danger which in one hundred and twenty years has shown no signs of appearing, and which no telescopic or microscopic gaze is yet able to descry. Would that have been wisdom or sound statesmanship? Is it practical common sense to be spending millions upon millions on war-ships, in order to be prepared for a mere possibility of danger which actual experience furnishes no ground for anticipating?

This enormous navy, we are told, is designed not for waging war but for preserving peace. It should be so large as to deter any power from attacking us and so be a great peacemaker. How delightful! But of course a doctrine that is good for us must be equally good for all nations. Accordingly, if we need to have a navy large enough to frighten the biggest nation in the world, then every other nation has the same need; and the logical consequence must be a never-ending rivalry in inventing and constructing larger and more destructive war-ships. If perfect security against attack from another power can be gained only by having a bigger navy or army than that other power, then the ideal condition of assured peace—perfect and universal—is to be secured by *every* nation's having so much bigger a fighting force than *every other* that no one of them will ever dare to play the aggressor! How this can be accomplished, perhaps, Dr. Pritchett is mathematician enough to figure up. This picture of a state of universal peace—all the nations of the world armed to the teeth, and not fighting only because no one dares to begin the fight—differs slightly from the old prophet Micah's conception: "They shall beat their swords into plowshares, and their spears into pruning-hooks; nation shall not lift up sword against nation, neither shall they learn war any more." But poor old Micah was not "up to date."

But, seriously, President Roosevelt and Dr. Pritchett know perfectly well that we are practically impregnable against attack from without, unless possibly our Philippine possessions might be assailed. And, undoubtedly, if we were not only fools enough to saddle ourselves with such an exposure in the first place, but mean to be fools enough to fight an enormously expensive war in order to preserve what is at the best already nothing but a bill of expense to us, then, to be sure, we shall need a large navy, and perhaps be thrashed after all. But the mere possibility of such a war ought to be enough to lead us to relieve ourselves of the Philippines by giving them—what ought to be given anyway—their independence, guaranteed by neutralization, as that of Switzerland and Belgium is guaranteed.

Aside from this possibility of war over the Philippines (and this is only a rather remote one), no one can discern any danger of assault from without which need alarm the most timid. But even if such danger should appear, President Roosevelt knows that, though compulsory international arbitration has not been attained, arbitration could in any conceivable case be resorted to. If he wants peace, he can make sure of it in that way. There is some slight reason why the European nations—crowded close together as they are—should keep up heavy armaments. For us, protected by the Atlantic and Pacific Oceans, there is none at all.

Outlook. 88: 344-6. February 15, 1908.

For the Preservation of Peace.

An esteemed correspondent, who writes not for publication, cannot understand how *The Outlook*, "in an age when the world is growing weary of the ancient and barbarous methods of defense and of settling quarrels, should refuse to say one word against the wild and wicked squandering of national treasure in the multiplication of the implements of slaughter, when the slums of our cities are increasing with the years, and when ten million ignorant black men are piled up in rotting masses under our flag." We do not doubt that his perplexity is shared by

other readers. We have published a number of letters opposing our position respecting the navy, and without replying to them. Nor do we propose now to reply. But our readers have a right to a plain answer to a plain question, and we attempt here once more to define our position in an honest endeavor to meet our correspondents' perplexity.

The first function of government is to protect person and property. It has other functions; but if it fails in this, it fails to do that for which it has been called into existence. It is its duty to protect every individual in the community from violence from other individuals, and equally its duty to protect the community from other communities. The government must protect the citizen in our great cities from footpads; it must protect the railway and the mine in our Territories from mobs; and it is equally bound to protect its citizens in Hawaii and its subjects in the Philippines alike from domestic violence and from foreign aggression. It must arm the police in the cities with clubs; it must arm the militia in the Territories with rifles; and it must arm its police of the sea with ironclads. The navy is the policeman's club for the protection of persons and property in places where neither policemen nor militiamen can give protection. The American citizen in Peking and the American subject in Manila have the same right to protection that our esteemed correspondent has in New York City.

That every man has a right to defend himself is believed by most men; that every man has a duty to defend those whose lives and well-being are intrusted to his keeping is believed by practically all men. One may perhaps choose to surrender his watch or even submit to be mauled rather than resist his assailant; but he may not choose to see his wife mauled or his child carried away by a kidnapper without offering resistance. He may go unarmed in a well-settled and highly civilized community because the community arms itself for his protection; but if he takes his family into a community where they are liable to be assailed by savages or ruffians, he is bound to go armed for their protection. In the navy the nation arms itself to protect the persons and property intrusted to its protection. Not so to arm itself is to be recreant to its elemental obligations. These are

the considerations which lead the great body of the American people to subscribe to Governor Hughes's creed: "It is our aim to live in friendship with all nations, and to realize the aims of a free government secure from the interruptions of strife and the wastes of war. It is entirely consistent with these aims and it is our duty to make adequate provision for our defense, and to maintain the efficiency of our army and navy. And this I approve."

What is an adequate navy? Another esteemed correspondent, a clergyman of international reputation, states in a letter, also not intended for publication, the following reasons for thinking that our present navy is not adequate:

"The United States fronts on two oceans separated by thousands of miles, with a sea-coast of enormous length, with a very great number of harbors. To defend such coasts requires in itself a large navy, which must be divided into a great number of separate commands. Besides, we have to defend the West Indies, the Hawaiian Islands, and the Philippines. Our present navy is altogether inadequate for the purpose. Massed in the Pacific it might defend the Pacific coast and our islands in the Pacific. But then our Atlantic coast would be without defense. Or, if our fleet should be massed in the Atlantic, the Pacific would be defenseless. If the navy were divided, both coasts would be alike defenseless. If we should be involved in war with Japan, Germany, or England, with our present naval force, in all probability we would be driven from all of our insular possessions and have to submit to hostile landings upon our coast."

This statement appears to us conservative and rational—not the statement of an alarmist, not a specious defense of militarism by a lover of the glory of war. That our present navy is inadequate appears to *The Outlook* highly probable; yet what is an adequate navy *The Outlook* does not attempt to determine.

It is no concern of the United States to keep pace with European nations in their endeavor to outclass each other in naval equipment; no concern whether the United States or Germany is the second naval power in the world. It is of great concern to the United States that it have naval power enough to protect all its territory and all its citizens in all their legitimate

interests in all parts of the world. What is necessary for that purpose we do not know. We do not believe that the critics of the navy know. That is an expert question to be determined by experts. Our position on this subject may be summed up in a sentence, thus: It is the duty of the United States Government, and a primary and fundamental duty, to maintain a navy adequate to protect its citizens and its subjects in all lands; what size and type of navy is adequate for that purpose must necessarily be left to the naval authorities in the Administration and in Congress.

Those who insist on believing that the advocates of an adequate navy are inspired by the spirit of militarism will not be dissuaded from that belief by disavowals; but they might be influenced by reading the letters of Queen Victoria. That she was a lover of peace, that all her influence was put forth to maintain and promote peace, no one who knows her life can doubt. That she believed that an adequate navy was an essential means for the preservation of peace her letters abundantly show. Two sentences from her correspondence must here suffice:

May, 1856. "With respect to the policy of not too rapidly reducing our naval armaments, Sir C. Wood only anticipates the Queen's most anxious wish on this subject, for we cannot tell what may not happen anywhere at any moment. . . . And it is best to be prepared, for else you excite suspicion if you have suddenly to make preparations without being *able* to state for what they are intended."

May, 1859. "England will not be listened to in Europe, and be powerless for the preservation of the general peace, which must be her first object under the present circumstances, if she is known to be despicably weak in her military resources."

What Queen Victoria here states as a counsel of statesmanship, Maeterlinck has well stated as the counsel of philosophy:

"Our aggressive nervousness, our watchful susceptibility, that sort of perpetual state of alarm in which our jealous vanity moves, all these arise, at bottom, from the sense of our weakness and of our physical inferiority, which toil as best they may to overawe, with a proud and irritable mask, the men, often churlish, unjust, and malevolent, that surround us. The more

that we feel ourselves disarmed in the face of attack, the more are we tortured by the longing to prove to others and to persuade ourselves that no one attacks with impunity."

It is because *The Outlook* is a lover of peace that it believes that the United States should have a navy adequate to preserve the peace. To spend more money than is reasonably adjudged necessary for that purpose is criminal extravagance. To spend less is criminal neglect.

Scientific American Supplement. 53: 21858-9. February 22, 1902. (Reprinted from Philadelphia Record.)

Naval Development during the Next Decade.

Rear-Admiral George W. Melville.

Probably the four most significant events in the nation's history during the past decade have been the satisfactory solution of the financial question, our remarkable industrial expansion, the acquisition of the Philippines and the rapid development of the navy. Not only our own thoughtful people, but also our continental neighbors have been impressed with our action in these matters, and as a result, our relative military and industrial standing has greatly advanced.

Our progress in securing the front rank in financial credit; our ability to hold the home market as well as to successfully compete in the foreign field; our rapid colonial extension, and our success in virtually obtaining the command of the waters of North America, have forced us into a position as a world power.

It is not only our right to extend our trade, but it is our duty to prevent foreign markets from being unjustly taken away. We must never forget, however, that prosperity and success produce rivals and incite the jealous to opposition. They, therefore, bring new responsibilities, and it is certain that in order to hold on to what we have secured through conquest or industrial superiority we must maintain an armed force of sufficient strength to manifest our readiness and ability to protect commercial rights and privileges.

Only by right, and not by might, will this nation fulfill her highest destiny. For all time the thought should be dispelled that increased material prosperity can be maintained by conquest. It should ever be kept in mind, however, that those countries which are rich in natural resources, but wherein there is no martial spirit, are always the objects of attack and conquest. It is as essential to be in readiness to restrain by military and naval forces the foes that are beyond the boundaries of a country as it is to effectively control, by a local police, the turbulent within a community.

In this age of strenuous life and action war can only be averted by those nations which are in condition to resist aggression. The best guarantee for peace is military strength and preparedness. Our environments are such that no nation would dare to attack us except from the sea, and, therefore, the navy must constitute the first line of defense from a foe. We don't require a navy great enough to attack the coast of any continental power, but we do require a fleet of battleships that could quickly prevent an enemy reaching our shores. Since the navy should be too large rather than too small, it should be regarded as a weapon rather than a shield, for the exigency might arise when it would be necessary to seek the enemy's shores. If maintained to a strength sufficient to be used only as a shield, it would not be long before the navy might be compelled to retreat from its position offshore and seek the shelter of the harbor batteries.

The question of the development of sea power has always been an attractive one. There is a wonder and romance to the sea which makes everything pertaining to the ocean of absorbing interest. The element of danger is never removed from those who go down to the sea in ships, and as the scene is ever changing, the subject is always of interest. It will be remembered that the navy has always kept in close touch with the people, and has never been used in suppression of liberty. Despotism as may be the organization of the individual warship, there is a spirit pervading the service that keeps the navy in sympathy with the purpose of the great mass of the community. Life on the deep is a busy, stirring and invigorating one, and the

spirit of unrest and anarchy has never secured a firm footing in any naval service.

With each succeeding year new and powerful forces are arrayed in favor of increasing the navy. It is inevitable that there will be a progressive and rapid development of the naval organization during the next decade. By briefly mentioning some of the elements that are back of the movement to advance our relative naval strength one can best realize how certain we are to advance in standing as a sea power.

Probably the strongest force arrayed in behalf of a greater service is the attitude and action of the general press. Fortunately for the interests of the nation the question of increasing the navy is not a political one. Its augmentation is urged as vigorously in the South as it is in the North. In demanding that the complement of warships be increased the people of the Pacific coast are as enthusiastic on the question as those living on the Atlantic. It is a happy coincidence that there is a keen desire everywhere for information relating to the construction, organization and use of the battleship. Many writers now find the subject a profitable field for the employment of their literary talent, since there is a commercial value in news pertaining to the naval service. The several thousand daily papers and the hundreds of magazines and periodicals are almost a unit in urging the Congress to give more men and more ships to the service. The press is, therefore, a mighty force in working for a larger navy.

The subject meets with such approval that it is now an interesting and leading topic of the lecture field. By means of lantern slides and interesting descriptions of warships addresses upon the navy are exceedingly popular. The warships in themselves are also powerful educators in influencing public sentiment as to the necessity for an increased naval establishment. It is safe to say that during the past four years hundreds of thousands of visitors have been shown over the battleships and have been told of our naval needs and necessities.

There are a dozen naval stations and navy yards which are centers of influence for creating an interest in the organization. The mechanics at these stations have allied themselves with

organized labor, and as a result the Congress of the United States receives hundreds of earnest and powerful petitions urging the construction of warships at the navy yards. At least ten shipbuilding firms in this country can build battleships and armored cruisers, and some of these establishments have a literary bureau for creating public interest in warship construction. Over fifty firms can build gunboats, and hundreds can manufacture naval stores and supplies. All these firms have a selfish, if not a patriotic interest in the enlargement of our fleet, and in the past these forces have been quite powerful factors in helping you to secure more war vessels.

The army of tourists and commercial travelers, who annually visit Europe return to America strong believers in a larger navy. The influence of these classes is very great, and has made itself felt upon this question in the halls of Congress. The commercial and maritime associations of the leading seaports have also done effective work in aiding us to secure a larger navy. These organizations have correspondents in every section of the country, and the indirect aid extended has been greatly appreciated. The shipping interests particularly are interested in the movement, for the friends of the merchant marine fully understand that a fleet of battleships paves the way for the formation of a line of merchant steamers.

As to the attitude of the administrative officers of the government upon this question, every Secretary of the Navy and President for the past twenty years has urged the progressive development of this branch of the military service. They have personally visited the ships, and also urged the creation of a naval reserve. The annual appropriation for the naval service has gradually increased, till now it is over double and nearly treble what it was five years ago. For the next fiscal year, including public works of a naval character, Secretary Long has submitted estimates calling for an appropriation of practically \$100,000,000. The Secretary has been an extremely conservative administrator, and the naval needs must have been very urgent, otherwise he would not have recommended an appropriation of such character. The President has indorsed in its entirety the budget submitted by Secretary Long. There has

been no Chief Executive whose knowledge of naval affairs has been so thorough as that possessed by Mr. Roosevelt, for only a few years after leaving college he wrote a naval history of the war of 1812 that has long been regarded as one of the best upon the subject. His appointment as Assistant Secretary of the Navy was, therefore, to his particular liking, and while in that office he learned fully of our needs. If the estimates submitted by Mr. Long had been in any way excessive the matter would hardly have escaped the attention of the President.

The naval estimates have been received with such favor that it is exceedingly probable that the Congress will even increase the appropriations urged by the navy department.

It is neither wise nor necessary to set our standard of naval strength by that of any other power. No nation should be regarded as a probable foe, but all are commercial rivals. The history of the world shows that every commercial rival is also a possible foe, for nations will rush to arms in defense of maritime and commercial rights sooner than they will for almost any other cause.

One need not possess a great military mind to realize that now we are in possession of the Philippines, it will be near those islands where we shall have to fight our future decisive battles. It is there of necessity where we are weak, and it will take many years to strongly intrench ourselves in that locality. There is already a cry of "Asia for the Asiatics." It is certain that we must eventually renounce all sovereignty of the Philippines or else prepare ourselves to hold these islands against an efficient naval power whose base of operation may be much nearer than our own. It is a fact that once a nation acquires territory the flag is never hauled down except at a loss of military prestige and commercial influence. We are going to maintain a protectorate over this littoral beyond the Pacific for some time, and a strong navy is the first requisite of this responsibility and duty. We should establish in some harbor in the Philippines large engineering shops, where machinery could not only be built and repaired, but where warships could be docked and built. For the past three years the private docks in China and Japan have been reaping a financial harvest in the

repair of our ships, and military reasons demand that we should not continue to strengthen these establishments in this way.

The defense of the Philippines is but one of the many reasons why we should have an increased naval establishment. Within ten years an interoceanic canal connecting the Atlantic and Pacific oceans should be well under way, and no matter at what point it is cut, it will require a strong navy to insure its safety and neutrality when completed. Such a canal is a military necessity, even though the final cost should run up into the hundreds of millions. Such a canal would help guarantee peace, since it would permit us to move our fleets quickly from coast to coast. It will be a paying investment in the end to do the work. The canal can certainly be built for half what it cost England to overcome the Boers. Anything, therefore which will avert war is worth paying for.

We are bound to advance in relative naval strength, for it is more than probable that before the end of the decade we shall rank next to England as a seagoing power. Some exigency may compel us to suddenly increase our naval strength, and if industrial and commercial reasons justify the purchase of steamship lines, it may be pertinent to ask why we may not be compelled to make a wholesale purchase of warships from some nation that has greater temporary need of gold coin than steel guns. Just previous to the Spanish-American war we were ready to purchase anything in the shape of war material that could be bought, and it is not at all improbable that some of the surplus millions in the Treasury may go to the purchase of foreign warships. It may be that there is no precedent for such action. This nation, however, is going to care less for what has been than for what may be. To maintain its position as a dominant world power it will make precedent. The financial condition of several countries is such that they will have to dispose of some of their most promising assets, and it may be that we can make for the peace of the world by suddenly augmenting our naval strength in this manner.

Progressive development will not only be made in the direction of building more ships, but advance will take place along the line of making each vessel more formidable. Improvement

will be evinced everywhere, but in several particular respects marked progress will be noted.

There will be a noticeable gain in the speed construction of warships. Up to the present time it has taken five years to design and build a warship, for in no instance has the modern battleship been commissioned in less than five years from the time she was authorized. Since several of the navy yards are now in condition to build the largest type of warship, the private firms are going to be spurred on to faster work in the completion of war vessels. Unless individual establishments expedite the construction of naval work, the government may undertake the task of building its own warships. The nation which is superior in speed construction possesses an important military advantage, and with our great resources we should be second to no nation in this respect.

The progressive improvement that has been made in the character of armor will continue. We have two establishments which can turn out armor of all descriptions, and there is every prospect that at an early date a third firm will compete for this work. It can also be expected that not only will the capacity of the plants be enlarged, but that means will be found for making the armor more rapidly. It should also be possible to fit the armor to the hull more simply and expeditiously, and this will assist in lessening the time of speed construction.

It is highly probable that there will be a change in the size of the main battery of the warships. The large gun has had its day. There is no evidence that any material damage was done to any Spanish warships at the battle of Santiago by our 12-inch guns. In that engagement the conditions for using large guns was exceptionally favorable. The 12-inch gun is too heavy, long and cumbersome for existing needs. It is to be hoped that we will take the initiative in designing a battleship whose main battery is not over 10 inches. The 10-inch weapon of to-day is capable of more effect than the 12-inch gun of five years ago, and this is due to the fact that we now possess a safer and more powerful explosive, a more reliable breech mechanism and a handier gun-mount. As it is not likely that

heavier armor will be placed on board the warship, and as the gun has always kept in advance of armor, we can secure the best arrangement of battery by the installation of smaller weapons.

There is a phase of the armor and gun controversy that has not yet been investigated to the satisfaction of naval engineers, although these expert officers have called attention to its importance. I refer to the indirect damage that will be wrought by the impact of every 8-inch or larger shell upon striking the armor belt. There are at least one hundred separate steam cylinders or motors on every warship. There are miles of piping and electric conduits. There are scores of bearings and supporting brackets for piping. There are innumerable joints of various descriptions, also many electric junction boxes. The impact of several good-sized shells upon the armor protecting the machinery compartments will undoubtedly put out of use some important auxiliaries. It will not be necessary for the shell to explode within the vessel to put the warship out of action, for the shock transmitted by the projectile striking the armor will cause some machine of importance to the fighting efficiency of the vessel to be seriously impaired.

Structural and machinery steel will withstand strain and pressure, but it will not resist shock. The impact of the projectile upon the armor will be transmitted to a greater distance than is anticipated. It is more than probable that the most serious damage inflicted will be found in compartments other than in those whose armor has been hit. Damage will not only be done to the auxiliary connections, but it is extremely probable that some sections of the hull riveting will be greatly impaired. Experience has already shown that these rivets can be easily sheared by shock. If the hull armor of any warship gets much pounding from 8-inch or 10-inch shells it may not be necessary for the projectiles to burst within the ship to cause the vessel to sink, for rivets will be sheared, seams will be opened, and possibly the out-board valve chambers loosened. In short, the naval engineer of to-day is much more concerned as to what will be the indirect rather than the direct damage inflicted by modern ordnance upon striking the armor of a modern battleship.

By reason of reducing the weight of the battery and armor, there will be opportunity afforded to increase the efficiency and reliability of the propelling and auxiliary machinery. By making some of these parts heavier, the liability to accident and derangement will be greatly lessened. The use of electricity will be extended, particularly for motors which do not require much power. It can be expected that the steam turbine will be successfully installed in small gunboats and torpedo-boats. An improved type of water tube boiler and an economical installation of engines of American design will have been adopted, and thus it will be possible for the future battleship to steam much more efficiently. The use of such steam generators will also permit the vessels to get up steam more quickly, and thereby increase the fighting efficiency of the ship. The standardization of auxiliaries will have been accomplished, and, therefore, the fleet will be more self-sustaining in regard to repairs.

The triple screw will be in general use in all strong navies, for economic, structural and tactical reasons will compel its adoption in warships.

It can also be expected that a satisfactory system will be devised for burning crude petroleum with economy and reliability. The burning of this incomparable fuel will be so perfected that it will be possible, when necessity arises, to force the combustion from 50 to 75 per cent, thus giving the commander of the warship the power to obtain maximum speed in very short time.

Even in the direction of the personnel will there be an improvement. Ever since the beginning of a steam navy there has been a tendency to demand increased intelligence and skill from every one attached to a warship. It was recently remarked by a very capable and distinguished British naval captain that drunkenness has decreased in the naval service proportionately to the enlargement of the machinery plant. In explanation of this statement he said that no commanding officer would rest content to go to sea with a dissipated crew, particularly if their duties related to the machinery portion of the vessel. With this higher skill has come higher pay, and thus a better class of men is progressively being secured.

Scientific American. 88: 18. January 10, 1903.

Proposed Increase of Our Navy.

It was inevitable that the present international complications over the Venezuelan affair should very forcibly direct the attention of the people of the United States to the question of the present strength and needed increase of the navy. It was just seven years ago that the affairs of this South American republic involved us in a very definite announcement of the Monroe doctrine, and contemporaneously with that incident it was brought home to the people of the United States that to maintain the position so definitely stated, it would be necessary for us to possess an adequate naval force. Even stronger argument than this was afforded by the Spanish war, which bequeathed to this country some widely-scattered foreign possessions, and rendered us vulnerable to foreign attack, where, before the incident we might, by virtue of our isolation, have considered ourselves practically secure. It has been the invariable experience in the history of this country that naval appropriations can only be secured, or secured in adequate degree, under the menace of such international complications as are too obvious to be overlooked.

In view of the fact that the present Congress will probably deal with a liberal hand in granting naval appropriations, it becomes increasingly necessary to make sure that the ships authorized are of the type that is most pressingly required. While keeping a watchful eye upon the trend of design among foreign navies, and incorporating the best elements of these designs, we should, above all things, have an eye to our particular necessities—to the nature of the duties which will be required of our ships in view of the altered international conditions brought about by the two Venezuelan incidents and by the Spanish war.

When we commenced the construction of our new navy, we held no possessions not included within our Atlantic, Gulf and Pacific seaboard, and hence our first battleships of the "Oregon" type were very properly designed as "coast-defense" vessels. They were of moderate size, and coal-carrying capacity

and speed were sacrificed to extremely heavy armor and armament. We had no designs on the sea coast or foreign possessions of other nations; and we wished to possess a naval force that would suffice for duties of a purely police or protective character. To-day, however, we find ourselves in close commercial and military touch with the whole world. Porto Rico to the east, Honolulu and the Philippines to the west of us, lie exposed, by virtue of their insular position, to the attack of any future enemy. Should it be our misfortune to be involved in another naval war, our battleships and cruisers can no longer elect to lie within easy reach of coaling stations, drydocks or repair yards. They must be prepared to steam far and fast, and arrive at a distant field of conflict with a reserve of fuel in their bunkers, and with a large enough ammunition supply to enable them to fight a successful engagement without having to steam back to some friendly port to replenish coal bunkers and ammunition rooms. At the same time it is desirable that our ships, when they meet the enemy, should be able to steam at a uniform speed, maneuver with equal facility, and present, ship for ship, an overwhelming superiority both for attack and defense.

Fortunately, in our latest battleships and cruisers of the "Connecticut" and "Tennessee" type, we have vessels which amply fulfill these conditions. Ship for ship they are probably more powerful than those of any other fleet. They carry an unusually large supply of ammunition and coal, and their speed, while not so high as that of some of the latest foreign ships, is, we think, ample for carrying out the naval policy outlined above.

When we come then to the question of the immediate needs of the future, we think that Congress cannot do better than authorize a certain number of battleships and cruisers of the exact type of these, our latest designs. To insure this desirable uniformity, or, in other words, to insure that we shall possess at least one homogeneous fleet of battleships and another of cruisers, every vessel in each fleet being identical with the others, it would be well for Congress to follow the admirable German method and authorize an extensive shipbuilding

programme to cover a certain number of years. A total number of ships, say a dozen battleships, and eighteen or twenty cruisers, should be authorized at once with the understanding that a certain proportion of these, say two battleships and three cruisers, are to be laid down each year, and the money necessary for that year's construction voted regularly for the purpose.

Only by such a method can we insure, first, that our navy shall grow by regular increments and not by spasmodic effort; and secondly, that the ships as they are completed, shall form homogeneous fleets with the material advantages which are to be secured by such homogeneity.

Scientific American. 88: 95. February 7, 1903.

The Needed Increase of Our Navy. Carlos de Zafra.

To the Editor of the Scientific American:

In connection with the "new ships for the navy," and the necessity for "an elaborate programme of construction," in your issue of the 17th instant, Senator Joy's bill providing for the construction of twenty-five battleships, Senator Hale's opposition to the construction of modern high-powered battleships, and the recent organization of a Navy League in the United States, are all subjects of considerable importance to the nation, as well as of considerable interest to naval folks and citizens in general.

The necessity for a programme of construction, although more keenly felt now than ever before, brings to mind the fate of one that was drafted in 1881 by a special board appointed by Secretary of the Navy William H. Hunt. This board, with Rear-Admiral John Rodgers presiding, "advised the construction of twenty-one armored battleships, seventy unarmored cruisers of various kinds, five rams, five torpedo gun-boats, and twenty torpedo boats, all to be built of steel." This programme was thought to be necessary as a nucleus for a modern navy at a time when neither the Philippines, Hawaiian Islands, Porto Rico, nor any other outlying possessions existed to divert our attention during war times. If such a programme were deemed necessary twenty years ago, what must be the increased

necessity of to-day, with our advent into international politics, and consequent dealings with powers whose naval forces have become our superiors?

It has taken nearly twenty years to build up the United States navy to the strength advised by the Rodgers board; in other words, we are twenty years behindhand; but what else is to be expected with the present method of obtaining favorable naval legislation? At one time construction was delayed one year by the chicane policy of Congress in appropriating three of the heaviest fighting vessels, yet at the same time placing a clause in the appropriation to the effect that no contract for construction should be made until that for the armor had been previously made, the price for the latter being also fixed at a figure considerably lower than it was possible to obtain it. Other delays have been due to the failure of Congress to make any appropriation, on the ground that our shipyards were taxed to their utmost with government and private work already on hand; yet while we have been waiting for our shipyards to clear their ways, no less than six vessels of war, from protected cruisers to battleships, have been or are being built for Japan, Russia, and Turkey. Thus we fail to see the validity of such excuses.

With this and other opposition in mind, the introduction of a bill by Senator Joy of Missouri, providing for the construction of twenty-five battleships seems a bold step, and its outcome is of extreme importance for several reasons. If the construction therein provided for is to be completed within five years, our navy would at the end of that time be up to the strength of what it ought to be to-day. We should be in possession of about forty-five battleships; but in the meantime Germany, who only a few years ago had a very low position in the rank of naval powers and is now rapidly overtaking us, will also possess at least an equal number of battleships, as provided in a naval program adopted by her some years ago; so that, bold as Senator Joy's bill may appear at first, but slight thought will convince one that after all its provisions are, if anything, modest and that thirty battleships would be none too many. The inadequacy of former appropriations since the begin-

ning of the new navy is also forcibly shown. And furthermore, whether Senator Joy's bill provides for one or fifty battleships, no material benefit would result until at least three, and possibly five, years after its passage—the time required for construction; and in the meantime nations could be created or exterminated, so that the passage of such a bill, provided it also includes an immediate increase in the personnel of not less than 14,000 men—whose thorough training would require as much time as the construction of their ships—and also for supernumerary ships with which to replace those drawn out of active service as being obsolete or deteriorated, could not be too readily effected if we are to enforce the Monroe doctrine and impress aggressive foreigners with the importance of respecting it.

It is to meet problems such as this, and to give to the nation in general a naval education, that the recently organized Navy League of the United States will have a wide field for operations.

Scientific American. 98: 386. May 30, 1908.

Our Rank as Second Naval Power.

When the leading naval annual in Great Britain in estimating the relative strength of the world's navies recently placed the United States in the second position, on the ground that she could put in the battle line more heavy, armor-piercing guns than any navy except that of Great Britain, the estimate was widely accepted both in this country and abroad. Our nearest competitor for second place is Germany, and this in spite of the fact that in her earliest ships that are reckoned as effective, she mounted the 9.4-inch gun as the main armament. It is the present activity of Germany in the construction of exceptionally powerful battleships of the all-big-gun type, coupled with her ambitious and systematic programme for the future, which renders it certain that if any navy displaces us from second position in the next three years it will be that of our German friends.

As matters now stand the United States possesses twenty-five battleships of a total displacement of 334,146 tons; Germany twenty-three of 276,166 tons. Of armored cruisers the

United States has fifteen of 186,543 tons, and Germany ten of 113,528 tons. The total tonnage of American armored ships now afloat is 520,691 tons, and Germany possesses 389,694 tons of armored ships. Of the twenty-five United States battleships none mounts a gun in the main battery of less than 12 inches caliber. Among the twenty-three German battleships ten carry nothing heavier than a 9.4-inch rifle.

As we have often pointed out in these pages, the fighting strength of the navy lies in its battle line, and since the Japanese war it has come to be well understood that the strength of the battle line lies in the number of heavy armor-piercing guns that can be concentrated in a given length of that line. Although the United States at present holds a decided lead over its nearest rival, the question of future preponderance, unless we maintain our recently-announced policy of building two battleships a year, seems to lie with the German navy, because of the systematic plan of new construction covering a series of years which that country has adopted. By an act passed in 1900 and amended in 1906 the German navy in the year 1917 will contain thirty-eight battleships, all of the newer ships to be of the "Dreadnought" type. Three of these are to be built this year; three in 1909, and three in 1910. Two will be built in 1911, and then one a year up to the year 1917. Three of these "Dreadnoughts" are now under construction, and one of them, the "Nassau," was recently launched. They are of 19,000 tons displacement, and are variously credited with carrying an armament of from twelve to sixteen 11-inch, 50-caliber guns of great power. Two other battleships of the mixed-caliber type, carrying each four 11-inch guns, are also under construction.

Now had the question of future increase of our navy been left to be determined by the haphazard method of previous years, there might well have been some concern for our holding the position of second naval power. Fortunately, the United States Senate, in authorizing the construction of two more 20,000-ton "Dreadnoughts," adopted for the future a definite naval policy of authorizing two battleships a year. If the United States maintains this programme, we shall have by the year 1917 forty-nine battleships, supposing, of course, which is not likely, that some

of our earlier battleships will not have been struck off the list as non-effective. The German navy, unless some older ships be struck from the list, will in 1917 possess thirty-eight battleships. At the present time we have under construction four battleships of the "Dreadnought" type, namely, the "Michigan" and "South Carolina," of 16,000 tons, carrying eight 12-inch guns, and the "Delaware" and "North Dakota," of 20,000 tons, carrying ten 12-inch guns. Congress has also recently authorized two additional "Dreadnoughts" similar to the "North Dakota." It was a wise step on the part of the Senate to accompany the authorization of these last two ships by an appropriation for their construction, since this will enable them to be put in hand at once, and will raise the number of the "Dreadnought" type under construction at the present time to six. In this connection it is gratifying to note that one of the new ships will be built by the government at the Brooklyn navy yard, a policy which the SCIENTIFIC AMERICAN has earnestly advocated, on the ground that it will give us a most excellent ship, and will serve to maintain this our leading yard in a constant state of high efficiency.

THE UNIVERSITY LIBRARY

This book is DUE on the last date stamped below

MAY 28 1952

MAY 6 1953

REC'D MLD

AUG 3 1 1963

g
—
1.02

UC SOUTHERN REGIONAL LIBRARY FACILITY



AA 000 549 929 8

