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NAVAL WAR COLLEGE.

SESSION OF 1899.

PREPARATION FOR WAR:

A DISCUSSION OF SOME OF THE VARIOUS ELEMENTS TO BE
CONSIDERED IN THE FORMATION OF PLANS OF
OPERATIONS AND IN THE STUDY
OF CAMPAIGNS.

BY

COMMANDER CHARLES H. STOCKTON, U. S. NAVY,
PRESIDENT NAVAL WAR COLLEGE.

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PREPARATION FOR WAR.

The great masters in the art of war have announced as an axiom that of all things which contribute most directly and effectually to the success of a military undertaking, Preparation holds the first place.

This announcement and rule, made for the first time many centuries ago, and repeated often since, was never truer or more pertinent than at the present day.

Wars are shorter, warlike appliances more effective and complicated, and military movements more rapid, while the masses of men and material to be manipulated are greater now than ever before in the history of the world. Hence the time of preparation is necessarily longer and more absorbing, the actual war time shorter, more concentrated, and more overwhelming.

A celebrated English military writer, in discussing the present military situation in Europe, puts the phases of modern war in a most effective way before us when he says:

It may well give us pause to speculate upon what may happen at no very distant future; the victor in the coming strife—for come it must—may stand the possessor of unlimited resources, resources which Napoleon never imagined in his wildest dreams; trained men outnumbering his in the proportion of at least five to one; means of transport by sea and land immeasurably greater, independent of weather, and at least five times as swift; means of communication so incalculably rapid as to be practically instantaneous; better food in far smaller compass; and death-dealing weapons lighter and more mobile, delivering with unerring certainty their blows from tenfold distances with twentyfold rapidity.

If Preparation, then, is the first thing necessary to success in war, to no country is preparation more essential than to ours, whose experience in actual war has

been meager, whose population and pursuits are normally so peaceful, and whose situation and isolation heretofore has allowed a growth so rapid and so great that we have attained rank as one of the great powers in the world without having been obliged to establish our position by the test of an extensive or great foreign war.

It has been said that great states which have arisen out of chaos require time to consolidate and organize themselves, their whole power and energy being chiefly directed toward that point. During this period of consolidation and organization their foreign wars are few, and the wars that do take place bear the stamp of a state unity not well cemented.

In repeating the statement thus made, we are not only repeating a general truth, but we are also summarizing to a great extent the military experience of our country.

The Revolutionary war, with an existing Tory element; the war of 1812, with New England reluctant and protesting; the Mexican war, with a northern lack of sympathy for the ultimate objects of the conflict, and finally the great civil war, all emphasize the condition of a nation not well cemented in unity nor fully consolidated in strength.

Yet every war brought us closer together, and the first war after our independence, that of 1812, alone made us a coherent nationality. In this connection let me quote from two distinguished men not given to the undue exaltation of war.

Mr. Henry Adams, the historian, says (Vol. IX, p. 220):

In 1815, for the first time, Americans ceased to doubt the path they were to follow. Not only was the unity of their nation established, but its probable divergence from older societies was also well defined. * * *

The war gave a severe shock to the Anglican sympathies of society, and peace seemed to widen the breach between European

and American tastes. * * * That Europe, within certain limits, might tend toward American ideas was possible, but that America should under any circumstances follow the experience of European development might thenceforward be reckoned as improbable. American character was formed, if not fixed.

Mr. Carl Schurz, in his *Life of Henry Clay* (Vol. I, p. 121), says:

For the war of 1812, with all the losses in blood and treasure entailed by it, and in spite of the peace which ignored the declared causes of the war, transformed the American Republic in the estimation of the world from a feeble experimental curiosity into a power—a real power, full of brains, and with visible claws and teeth. It made the American people, who had so far consisted of the peoples of so many little Commonwealths, not seldom wondering whether they could profitably stay longer together, a consciously united nation with a common country—a great country—worth fighting for, and a common national destiny—nobody could say how great, and a common national pride, at that time filling every American heart brim full. * * * A war that had such results was not fought in vain.

With the close of the civil and the Spanish-American wars, with the definite reestablishment of the nation, and with a consequent increased homogeneity of the country, North and South, should end the period of internal consolidation and begin the development of external strength.

With the new period beginning will come a conflict of interests: First, with other powers with respect to their interests upon the American Continent and its neighboring islands and waters; second, with other great powers as a result of our growing and antagonistic interests upon the great field of the world's commerce.

Out of this clashing of interests will arise occasionally a period of war—at rare intervals we all hope—but none the less certain. For these occasions of war it becomes our simple and natural duty, as members of a military profession, to prepare. The notice will be short, the preparation should be long and thorough.

The preparation of material is necessary, and should go on, but above all the preparation of the personnel, without which the material is nothing, should be the duty of the hour, the day, and all peace time. This preparation of the personnel should include, among other matters for the Navy of the United States:

1. Formation of plans of organization, including plans of a ready mobilization.
2. Preparation for actual war.
3. Formation of plans for operations.

When this preliminary work has been completed, or is interrupted by actual war, coming, as it almost invariably does, without much warning, there is left for actual war time: First, the question of offensive or defensive operation; second, action.

Maritime warfare can be divided broadly into three general forms of action, as follows:

1. The war of fleets and squadrons.
2. War against commerce.
3. Maritime expeditions, combined or naval. (I do not include blockades, as they are either of the first or second form.)

The first form of warfare, which may be called that of grand movements, requires fleets and money, ports and supplies, and the best class of vessels for the line of battle. By means of these grand movements the command of the sea is secured or retained, and as the greater includes the less, so the grand movements give freedom for and allow or accompany the minor movements of commerce-destroying and territorial attack.

The second form of warfare, that of commerce-destroying, is minor, because difficult to attain without command of the sea, and also by itself generally secondary in results unless in form of blockade. Combined with other operations, it is of course an element making for successful termination of war.

The third form of warfare, territorial attack by combined expeditions, also requires a command of the

sea by the vessels of the line of battle, and if the enemy is unable to dispute the command of the sea from want of force, the expedition is minor as a naval movement, because, being combined, it is only naval to a partial extent, and if all naval, it is limited in its reaching effect and possibilities.

Let us now return to the question of preparation, and especially to the formation of plans of organization.

It is not necessary before a professional audience to lay undue stress upon the importance of a proper and complete organization of the naval service, and of the particular forces engaged in operations, both with respect to material and personnel. Of this subject and its kindred one, of mobilization for war, too much can not be said. Mobilization itself should have careful, thorough, and practical treatment; it includes the setting in motion of the material of the "elements of war," which the Germans call *Kriegsmitteln*, and the assembling of the combat forces, or *Streitkräfte*. There is no one subject that can better occupy the officers who are connected with this College than the discussion and evolution of such schemes, to be finally presented in a cogent shape to those busy men who administer the various bureaus and offices which compose what we know as the Navy Department.

The subject of this lecture will not, however, include these questions of organization and mobilization, important as they are, but will deal with the subjects that follow—of Preparation for War generally, and, more particularly, of the elements to be considered in the formation and execution of plans of naval operations.

Plans for rapid and systematic mobilization have, however, been formulated and, to an extent, put in operation at the present day for the armies and navies of the principal European powers, and hence the events which precede and follow the actual outbreak

of war progress too quickly to allow time for a general or special reconnoissance of the theater of operations either at home or abroad. Hence this reconnoissance, that formerly took place in time of war, should be made now in these times of peace. This is particularly the case with naval warfare; for to the existence of men and vessels in reserve and the powers of rapid assemblage are added the greatly enhanced qualities of speed and sea endurance. These properties give to naval operations such a possibility of quickness and vigor in the execution, as well as increased length of reach, that the time permitted for the preparation for counter attack or defense is correspondingly shortened.

A thorough acquaintance with these matters is of essential importance in the preparation for war, for, no matter who takes the initiative, we should be fully aware of the length of time it takes us to assemble and concentrate our forces upon given points either at home or abroad. Actual practice alone will give us this, and if squadrons were habitually kept together, a long step toward preparation and actual readiness would be made.

Of equal importance is the knowledge of the time required by possible enemies to mobilize and concentrate their force or forces at any one or more of their principal ports. This knowledge should, if it is within the bounds of possibility, be sufficiently accurate and definite to establish, within the limits of a day, the time required for the assembly ready for distant service.

Besides the very short time at our disposition upon the eve of war for military and naval preparation, it must be remembered that the postponement of the time of preparation until this period is objectionable in other respects. Measures taken during such a time, a time of emergency and great popular excitement, will naturally be imperfect, ill-digested, and extravagant,

the conditions being particularly unfavorable to deliberation and good judgment.

As a matter of good government policy, such preparations made upon the eve of a threatened outbreak are undesirable, being unfavorable to a reasonable diplomatic settlement of delicate questions, and also to the maintenance at home of a calm frame of mind. There are, of course, certain lines of policy which may be followed which require and create elaborate and more or less theatrical preparation for war, but this is not a matter pertaining to the naval or military policy of a country, but may be put more particularly within the domain of state policy of a certain kind.

The sudden nature of war is historical. This suddenness has been shown in a cogent manner not long since by a publication made by the intelligence branch of the quartermaster general's office of the British army. In this little work a historical abstract has been made covering a period of years from 1700 to 1870, one hundred and seventy-one years in all. During this period one hundred and seventeen cases of hostilities have occurred in the civilized world, one hundred and seven of which have been commenced either by subjects of European powers or citizens of the United States without due declaration of war. In forty-one of these cases the manifest motive was to secure an advantage over the enemy by the suddenness of the movement and the consequent surprise to an unprepared foe. Even with the United States, whose Constitution vests such declaration in Congress, the specific terms of its declarations have been that a "state of war actually exists" between the United States and such and such a power, acknowledging by its very declaration the existence of preceding acts of hostilities and war. Do not let, then, any person in civil or military life feel unduly apprehensive that the preparatory work at this or similar institutions will lead to overmuch and dangerous readiness for

war. We can not ignore the teachings of our own history, even to the most recent day, and the traditional and habitual want of preparation on the part of the United States for war. We may easily rest assured that with our susceptible and certainly high-spirited people, more or less given to excitement, and fully conscious, in civil life at least, of our great national wealth and unworked strength, that we will ever exceed in the possibilities for war any and all preparation.

Let us come, then, to the subject of preparation for war as narrowed down in the last grouping. We mean this to include, then, a preliminary study, made in times of profound peace, of the probable theaters of operations, both at home upon our own coasts and waters and abroad, and also a preliminary study of our own resources for offense and defense and those of our possible enemies.

These studies should be broad and general in their scope, but based upon accurate information; and when we narrow our range to a particular field or plan of operations, a closer and more detailed examination should follow of the designated field, making use of the most recent and accurate information.

As a part of the wider and more general study incident to the preparation for war should come the examination of campaigns and naval wars that are a matter of history. The necessary preparation for war, so far as it relates to the formation of plans of operations, may be said to be capable of division under three distinct heads:

1. The historical.
2. The geographical.
3. The statistical.

First, as to the historical. There is a prejudice existing against the study of past naval and military history which has been referred to in the case of naval

history by a late president of this institution, Captain Mahan, in a former address. Repetitions and restatements are always permissible, if not necessary, in spoken lectures, so before discussing the use of historical examination in its narrow sense, let me digress for a moment and speak of its value in the broader sense.

Naval history has been termed both obsolete and theoretical. The tools of war may be obsolete, but the lessons to be learned from history are still valuable, and instead of being "theory," history is, on the contrary, the crystallized experience of others.

An English writer has illustrated the attitude of many toward historical study in so practical a manner that I will venture to repeat it. He refers to what easily may be an actual case: An officer of experience and rank, fresh from distinguished service in the field of battle, appears before men of his profession and relates his story of the campaign or of the action in which he was a participant; it is well received, called practical, the real thing, etc. The same officer reduces his narrative to writing, corrects errors, verifies statements, prunes extravagances, etc., and prints it. Is it still less practical? Does it become theory?

A German officer, in discussing the question of the study of military history as a means of increasing the military capacity of an officer, points out that no personal acquaintance with European or other warfare can compensate for a lack of knowledge of the larger experience of the past which may be derived from a careful study of what has happened to others.

He calls attention to the fact that every man's experience is confined to the narrow circle of his own activity, which activity is most likely to be exercised in a different position and sphere in every new war in which he is engaged. "Even within the same limited sphere," he says, "personal experiences of war differ entirely one from another; one man has only been present at successful actions; another only at defeat; a third has

never been under fire at all. One was in the advanced guard which was struggling with all its forces to win the day, while another only arrived at the battlefield when the enemy's strength was almost broken."

In the study of naval or military history the first object to be attained is to acquaint one's self with the exact facts; and these facts, which are not always grouped systematically or completely by writers, should be mastered in the following general order: First, a knowledge of the cause of the war; second, the mastering of the description of the theater of operations—this is not always given, either by text or map, but maps should always be referred to; third, the strength of the belligerent forces should be known and a due comparison made; and finally, the plans of the opposing leaders.

By such an analysis of the history or histories of certain campaigns or wars we acquire the salient matter preliminary to following the course of actual operations. This acquisition made, it becomes in order to trace and ascertain, so far as we can do so and so far as history shows it, the events in their relations as cause and effect. By this method we will have very often—possibly in most cases—to refer to more than one commentary, but in an exhaustive study of naval and military history much chaff must be gone through with to get at the kernels of wheat.

The examination of the course of the campaigns is continued and concluded by an endeavor to form a judgment as to the fitness and completeness of the means employed to the ends desired.

In a narrower sense a historical examination of the probable theaters of war, or a possible field of operations, should be made, in order to learn by history the elements that may again enter into operations covering a similar area. Some points are historically strategical, successive wars showing that operations

are naturally based upon them, or that they are for political or military reasons objectives of campaigns.

The islands and waters of the West Indies have become well known to the students of military and, more especially, naval history. The future is teeming with great possibilities of a similar kind in the same area. Brest, Portsmouth in England, the Straits of Gibraltar, the Gulf of Lyons and Genoa, the Grecian Archipelago, the waters about Sardinia and Corsica, the Mediterranean coast of Egypt, and the English Channel are likely in the future to be as rich in military and naval associations as in the past.

Even within our own borders, limited as our naval and military history has been, there are points that history has shown to be strategical. Halifax, the Canadian border near Niagara, both lake and land, the vicinity of the capes of the Chesapeake, Ship Island and its neighboring waters, the Mississippi River, Bermuda, and Jamaica are as likely to be used for offensive operations against our waters and cities in the future as in the past.

The historical examination being made, we should then enter into the geographical study of the features of the particular area under examination. The geographical study of an area is as important to naval operations as it is to land operations. Charts, both general and special, are as necessary to naval campaigns as maps to military movements. Fortunately we share with the rest of the world in the possibility of securing charts, carefully and deliberately made for purposes of navigation in time of peace, that comprise all navigable seas and waters. Von Moltke well says that geography is three-fourths the science of war.

The geographical study of a given field of naval operations is, then, to a great extent the question of distances and a hydrographical study of the waters and coasts of that area. It means a careful scrutiny

of the charts of these waters with a view to their safe and free navigation by the largest as well as the smallest vessels likely to be incorporated into a naval force operating there; and also an inquiry into the nautical conditions by sailing directions, as well as charts and other means, of the various bays, harbors, roadsteads, and anchorages, with a view to their entrance and uses for refuge in bad weather, as well as for their natural facilities for coaling, repair, refit, blockade, or for landing operations. A further examination should be made, from a more purely military standpoint, of the availability of certain harbors and anchorages for temporary or permanent defenses, on shore and afloat, and also the value of these anchorages as points from which temporary or prolonged offensive operations may be based, either by vessels of large size, by fleets, or by smaller craft, such as torpedo boats. This brings into consideration the availability and desirability of certain of the harbors for use as future naval stations and their defensibility, and includes, besides, their local conditions, their relations toward other waters, toward other ports, and toward centers of population. With this examination will go an inquiry as to the resources and topography of the tributary country, as to the inland communications by water and by road and by railways, and also as to the positions of these harbors in relation to the avenues of trade and the commerce of the seas. In other words, this examination means a study of the elements which, combined, give strategical value and importance to any place, body of water, or section of country.

The geographical conditions of the strongholds of Canada—Halifax, Quebec, and Esquimalt—show the use and strength of the navy which makes them almost impregnable.

Questions of commercial geography may enter into the study of a given country and of a naval campaign.

These may relate to the interference caused by blockade, capture of ports or territory, or commerce destroying, with the movements of great staples in such quantities to materially affect the markets and industries of the world. We had an instance of that kind during our civil war, when the blockade of the Southern ports caused a cotton famine throughout the world; which in turn created a distress in portions of England, made excessive prices everywhere, stimulated production in Egypt and India, furthered adventurous blockade-running, and brought to the front, directly and indirectly, political questions that became grave as well as vexatious.

Any offensive operations against certain of our ports or certain of our territory would be likely to repeat the same scarcity of cotton in the world, while operations against some of our Atlantic, Gulf, or Pacific ports would seriously interfere with the world's supply of breadstuffs.

In the same way the blockade or interference with the trade of India or Odessa would affect the supplies of grain, a similar interference with Australian ports would affect the supply of wool, or the great supply of coal for the Pacific emanating from New South Wales.

This distress would not be alone to the consumer, it would be severely felt by the producer. The consumer could turn to other markets or to substitute products, but the producing country having a large population depending for a livelihood upon the production and sale of the staples would feel a distress that would become so severe and so general as to affect the progress or conclusion of the war. Even in the turbulent countries of Central America it has been found that peace prevails during the season for gathering the coffee crop, as not only quiet but large bodies of men are needed for picking, preparing, and transportation of the crop to the seaboard.

The serious interference with the supply of coal to a country like California, where coal is only mined in small quantities, of that of provisions to a country wanting in breadstuffs, like that of England, would be an important and, in the latter case, a vital matter. The protection of, or interference with, such movements of staples can readily become a naval matter of the first magnitude. The deprivation of such essentials is a legitimate object in war time, however effected.

The statistical side of the preparation for war and for warlike operations bears upon the knowledge attainable of the facilities for war, especially those facilities that are created by man or caused by his existence as a fighting animal. All of these facilities, natural and artificial, must be considered in weighing the military and naval conditions of ports, sections of countries, or nations. They enter into and give value to such ports and points strategically.

There are, however, certain places having limited population that are more or less inaccessible from populated centers, and also without close proximity to means of transportation and communication, that still possess such fine geographical position which, added to good harbors and facilities for defense, make them of great strategical importance. King George's Sound, in Australia, and Chiriqui Lagoon (in the event of a canal), in the Caribbean Sea, are places of this nature; they have few or no artificial facilities.

Statistical information bearing upon the climate, winds, and prevailing weather at various seasons of the countries under discussion are, of course, matters of importance in naval operations.

The sickly and hurricane season in the West Indies; the northers in the Gulf of Mexico; the ice at Vladivostok, upon the Great Lakes, at Louisburg, in the St. Lawrence are and were matters determining times of military and naval operations. These are

mentioned here, however, more in the way of enumeration, for it is hardly necessary to speak of the importance of climate, for instance, in its bearing upon the personnel of a naval force, dictating not only the season and time for operations, but also requiring a consideration of the amount of human exertion possible, as well as other matters of precautionary hygiene.

The Santiago campaign, with its sad and demoralizing loss of life at the end on shore, is an evidence of the great importance of this matter.

Of the strictly statistical matters to which attention will necessarily and at once be directed, the foremost are those giving a knowledge of the forces and resources of the possible enemy. With this knowledge is included complete and detailed information of the organization and distribution of these forces, both habitually and at the moment, as well as their discipline and condition and the spirit actuating them. At the present time, on account of the wide publicity given such matters through various military and naval publications, and also by means of the various intelligence departments of different countries, this is a much easier task than in years gone by.

There is rather a disposition now to parade military and, more particularly, naval matters and resources.

No country does this more than our own. (I suppose to an extent newly-laid eggs must have their cackling accompaniment; they certainly get it with us.)

The duty of acquiring this information is done with us by the Office of Naval Intelligence, with which this College and its permanent staff should have the closest relationship.

The general staff of the German army, at Berlin, was the first to inaugurate this system of gathering intelligence. It contains three sections, especially charged with attentively following all military movements,

both at home and abroad, for the purpose of keeping themselves informed concerning everything touching organization, recruitment, armament, equipment, the geographical configuration of the neighboring countries, in the construction and demolition of fortresses and the development of ordinary roads, railroads, canals, etc. This is in addition to other duties not now necessary to mention.

The countries of the world are distributed among these three sections, and form the subjects of special study. This office of the general staff at Berlin, and its workings, has been copied more or less closely by every naval and military power of consequence in the civilized world.

Besides the finished naval resources, a current knowledge of the raw or unworked naval resources is important. Although I am distinctly opposed to relying upon improvised naval material, the habitual absence of continuous constructional policy and foresight with us forbids a neglect of the possibilities and of the elements existing in that way that could be utilized. In addition to these material resources that are more or less elements of war, there are some other elements that should be well known, both as to ourselves and to others. I refer to such matters as the number, quality, and spirit of the arms-bearing population; the quantity, quality, and proximity of the coal supply; the best way of transporting it to vessels by land and sea; facilities for docking and for repairs to vessels and machinery; means for transporting, by sea and overland, men and supplies; means of communication and concentration, and a thousand other matters of more or less importance. These should be well known to the Office of Naval Intelligence and be within easy reach of those charged with formulating or suggesting plans of operations.

Having made a study of the theater of operations in its historical, geographical, and statistical aspects,

ideas should be formed and formulated of the relative strategical value and importance of the principal points. By strategical points I mean those positions the control or occupation of which, in the field of operations, adds to the power for warlike action of a fleet or army.

These points in our possession form bases of operations, in the possession of the enemy they should form our objectives. They are, however, but territorial objectives; the primary objective of any naval campaign being the enemy's force or fleet; if he has more than one, his principal one.

By the defeat of this fleet or force the command of the sea will be secured, and we will then be at liberty to make a territorial attack of any kind; for it is worse than useless to prepare for such a movement unless the fleet is first disposed of.

In the late war the termination was due to the loss of sea power by Spain. With colonies insular in character, and separated by sea from the mother country, the hopeless inability to command the sea, shown after the defeat of Cervera's fleet, preceded as it was by the destruction of the Manila fleet, made the loss of these colonies only a question of time. Undoubtedly much loss of life and material could have been inflicted by the continuance of the war, but the results were inevitable. Neither supplies nor reinforcements could be furnished from Spain, while military and other supplies, as well as reinforcements, could be poured in steady streams from the Atlantic and Pacific coasts of the United States by seas over which our forces had complete command.

When the sea power of Spain, then, was hopelessly lost, Cuba, like ripe fruit on a tree, fell as such fruit would fall, with a single but necessary shake. That shake was the attack and capture of the town, harbor, and defending force of Santiago by the land forces of the United States.

Modern teaching of military movements on shore is to the same effect, though it is possibly less essential in army than in naval movements, the movements of fleets and naval forces being vastly more free and rapid than those of land forces, the legs of the fleet being mechanical and the sea full of roads and pathways leading in all directions. Von Moltke, in ordering the offensive at the outbreak of the Franco-German war in 1870, worded his orders to the 3rd army to the effect that when reenforced by the Baden and Wurtemberg divisions it should advance to the south by the left bank of the Rhine to seek and attack the enemy, closing by saying: "In this way the construction of bridges to the south of Lautenburg will be prevented and the whole of south Germany protected in the most effective manner."

Grant, in discussing the movements upon Richmond, stated that Lee's army was his objective, rather than Richmond or its vicinity.

With the command of the sea in our possession, either by the absence or defeat of the enemy's forces, a freedom to attack territory will be ours, which territorial objective can be the principal fortified port, the principal mercantile port, or the capital of the country, or a port which combines the three in one.

The formation of any plan of operations in time of peace should not, of course, be rigid, but tentative in its nature, with a breadth of sphere and an elasticity that will allow for varying conditions.

For instance, the numerical strength of the land and naval forces, their readiness for war, their expeditionary possibilities, and finally, their distribution at the time of outbreak, vary from time to time.

The plans of mobilization and concentration should be peace problems. The arsenals for outfit, or rather the particular navy yards, should be matters of previous determination in peace time, the selection

of advanced bases and coaling points being made upon the eve or outbreak of war, from information well digested and collected in peace time.

Our naval operations during the civil war brought out the special necessity for some of the matters just mentioned. One was the necessity of having bases of operations and supplies close to the objectives and areas of operations, whether such operations were in the nature of attacks or blockades.

The use of Hampton Roads, the capture of Port Royal, the use and possession of Key West, Ship Island anchorage, and afterwards Pensacola, gave our naval forces important and even essential points, and when New Orleans fell its useful facilities and valuable position made it the important point for the Lower Mississippi and neighboring waters. The value of Guantanamo with respect to Santiago, or Key West with Havana, in the war with Spain, is too recent to require more than mention.

These points, except perhaps Hampton Roads, were in the nature of secondary bases, in close proximity to the fields of operations.

Another object lesson of our great civil war, not always appreciated to its full extent and in its vital effect upon the final result of the war, was the great value of the command of the sea which we enjoyed during the war. The raids of the *Alabama* in the Gulf, and of the *Florida*, *Tallahassee*, and *Tacony* upon the Atlantic, only emphasized, by the momentary disturbance and confusion they created, the exceptional nature of such interruption and the completeness of the control of the sea by the Federal Navy.

The lines of communication and supply extended from the extreme Southwest to the North Atlantic ports, and they were free and unrestricted highways, while the Northern coasts and ports remained, during the war, almost unprovided with defensive measures.

Streams of vessels passed North and South, carrying bodies of men of both services and military supplies of all kinds, with convoy and without disturbance. As a result of this freedom our opportunities for naval and military operations against the maritime frontiers of the enemy's country were unrestricted, and the blockade was carried on effectively against a country which depended upon its agricultural products almost entirely for the procuring of other necessary supplies by means of its commercial relations with the outside world.

The weakness of a maritime frontier was exemplified in this war. Here it was plainly shown that the safety of such a frontier is not given by the sea which encircles it, but depends upon the skill and power of its defending naval forces. Its very accessibility is its weakness.

In estimating the times and distances possible for naval vessels it must be borne in mind that the speed of vessels is diminished by combination. The single commerce destroyer and the single torpedo boat represent the highest speed, diminishing with the squadron of unarmored vessels, and still more for a squadron of battle ships, the average speed of which for making long passages will rarely reach 12 knots. The speed of a convoy of transports or freight steamers is the slowest of all.

In discussing the opening of operations, we find that the question of taking the offensive or defensive is to a great extent a question determined by the circumstances of relative strength of force and readiness. Even when the defensive is forced upon us by the general policy of the war, offensive movements in individual instances and operations are preferable.

Von Der Goltz well says: "It is only by the offensive that the object of all warfare can be realized—the destruction of the enemy's army. * * * The

defender does not make war, he submits to it. To make war is to attack."

It must be remembered, however, that we are dealing with this question as one of strategical movements, not of battle tactics or action.

While the question of the assumption of the offensive or defensive is almost entirely dependent upon the circumstances at the time of an outbreak of war, it, however, may not be out of place to give the advantage ascribed by military writers to both.

It has been said that the power of an armed force consists both of moral and material strength.

As to moral strength, it is at its best in offensive movements. Such movements give confidence to rank and file alike. To the general officers directing an offensive movement it has the great advantage of presenting a definite and tangible end. The adversary, upon the other hand, is in the dark. At best he can only surmise, unless he has definite information, and concerning the absolute certainty of this he can never feel sure. The defensive, it can be seen, here occupies a secondary rôle, necessarily subordinate to the movements and maneuvers of the attack.

We are very apt to gain in taking the initiative, either by surprise or energy, or both, a partial success. This superiority, great or little, once gained at the opening of a campaign, has its moral effect both upon the forces actively employed and the people sustaining them at home. Every incentive is thus given for its maintenance to the end of the campaign.

Manifestly the superiority in large movements at sea and afloat in a moral sense is with the offensive. This does not mean an attack of insufficient force upon strongly defended positions. Here the force that is equal to the attack must be much greater than the force defending, as defensive facilities have outgrown the attacking facilities on shore. Take an armored turret, for example, ten men inside, and

twenty outside attacking. The moral advantage here is with the defensive. In an attack upon forts or batteries defending harbors the defensive facilities have relatively gained upon attacking facilities. Vertical and plunging fire, disappearing batteries, and submarine mines have gained, in my mind, upon ships alone, whose prescribed pathways and approaches are here made fixed and rigid by channel limitations.

As to the strategical advantages of the defensive, they are:

1. The knowledge of the countries and waters in which we operate. We control, also, as well as know, the country with its resources, and are familiar with the climate and other natural conditions.

2. Morally we have the powerful consideration of a defense of our dignity, our homes, and our country; of not making war, but only repelling it.

To a certain extent the creation of proper offensive facilities does not rest with those of our profession, but certainly a knowledge of our defensive possibilities is within our reach; this includes a thorough familiarity with our maritime frontiers, the strategic features of our coasts, and of our resources and capacities. If any strong naval power were at war with the United States, with the Navy we have or are likely to have within the next ten years, our policy would have to be a defensive one in its general scope, though it could be offensive in the execution of this defensive so far as it is practicable—in other words, the offensive-defensive.

The attacks upon the enemy's naval force would be made when his forces came within the zone of our maritime frontier, taking any and every shape that the circumstances and war resources would permit. We would, as mentioned before, have certain advantages resulting from the knowledge of our waters and territory. We would have ample supplies and a

dense population, whose centers would be closely connected with each other and with the seaboard. The business of supply and transportation, with our genius in that way, would probably be well done after a time. If we succeed, and a command of the sea along our own coasts be secured, the sphere of the offensive-defensive would not be unduly exceeded by the undertaking of counter attacks upon the adjacent bases of operations of the enemy. Our enemy in the case under discussion being necessarily a European power, these counter attacks would most likely involve operations against the coaling or naval stations in his American colonies. There are a number about us: Halifax, Bermuda, Jamaica, Barbadoes, Port Castries, Esquimalt, or Vancouver, for example, for the British. These attacks could be made by a maritime expedition of combined forces.

The French have near us Martinique and Guadeloupe, and, to a much less degree, St. Pierre and Miquelon.

Let it be borne in mind, however, that the teaching of history is that, as a rule, serious operations by sea against an enemy's ports are practicable only to the naval powers that hold and can retain the command of the sea.

The ports in the world from which modern squadrons and fleets of any size fit out and sail are limited in number and well known. The variety and technical nature of the supplies of a modern fleet, the size and depth required for harbors by large armored vessels, and the coaling, hoisting, and docking facilities demanded, limit the ports available in any one country to a very few.

These ports should be watched upon the outbreak of a war by cruisers and, if possible, masked by a naval force of sufficient strength. It has been the policy of England to do this with France, and with any other power the policy would doubtless be the

same. England has done this in the past even upon the approach of possibilities of war without waiting for the outbreak, masking often individual vessels.

In dealing in this and other lectures with coast defense, I wish to convey clearly the idea of coast defense and not harbor defense. Coast defense is a very much used term, especially by our brethren of the Army, when defense of a harbor or port is meant. Both have their value; harbor defense successfully carried out continues the possession of the port in our hands; coast defense provides for its freedom of trade movements, the continuance of its utility, and the vitality of all that pertains and depends upon it as a port.

Harbor defense is entirely military in its character or mixed military and naval. By a successful defense of this kind the enemy is denied the occupation and use of the port, which includes its facilities, both artificial and natural, while the property existing, both public and private, is preserved from destruction and injury. But this may be the case, and still, by blockade or outside command of the sea, the use of the port may be suspended or paralyzed.

Trade and commerce may be stopped—the very things that have called into existence the port and gave to it life, activity, and prosperity, as well as indirectly to all the country of which it is the outlet. The prevention of this paralysis is the function of coast defense, properly so called; this coast and outer defense can only be made by the naval forces of the country.

It is true, during the Napoleonic wars, the French had a system of coast batteries, permanent and movable, which prevented the landing of an enemy and allowed, to an extent, communication by sea between the coast ports; but this was for military purposes only, and ended with the range of their guns and did not permit the general use of their ports or remove

the British forces off the coast of France or outside of the zone of their maritime frontier.

Organization having been completed, preparation finished, the plan of operations and its nature decided upon, next comes—action. The Emperor Napoleon once said that when he formed a military plan there was no man more cowardly than himself. He exaggerated all the dangers and imagined all the evils possible under the circumstances.

But when the time came for putting in execution his plan, his watchword was Audacity! Audacity! Audacity!

The conduct of war as a whole has been compared to the action of a complicated machine, whose friction is extraordinary. The combinations which are so easy to project upon paper can only be put into rapid execution by the greatest effort.

In order, then, to attain successful and certain results, it is necessary to put into operation all of the forces at our disposal, even to their extreme limit of tension. All means of action should be concentrated upon the decisive point, and, above all, no time should be lost. It has been well said that “rapidity of movement kills in their germs a crowd of measures which the enemy would have taken.” This was one of the secrets of Stonewall Jackson’s success during the civil war.

Surprise due to promptness of action plays a part much more considerable in strategy than in tactics. Napoleon, Frederick the Great, Cæsar, Hannibal, and Alexander owe to rapidity much of their brilliant success and great fame. He who strikes quickly strikes twice.

Let me now close with a quotation from a work by Colonel Maurice, of the English army, in which he aptly says:

There is no royal road to the knowledge of the art of handling armies, any more than to any other branch of human activity.

All that the best summary on that subject can profess to do for a reader is to assist him in undertaking a methodic study for himself of the principles which have guided great commanders; of the experiences of those who have fought in great battles and great campaigns; in endeavoring to put himself in their place so as to see with their eyes, hear with their ears, and realize the passions which influenced them, and the circumstances under which their decisions had to be formed.

The historical student has at least one advantage which is always and absolutely denied to the general. He may never, for many reasons, have an altogether correct and completely true picture of all the circumstances which occurred on a given day, but he has a far more complete one than could possibly be before the general at the moment when he formed his decisions. Still more, he has far better materials for judgment than any one of the minor actors who had themselves to decide what they ought to do, within the limitations of the orders they received, on most incomplete knowledge of what others were doing at distant parts of the field; of the positions and designs of the enemy, and of many other facts which may now be known with certainty by anyone who will read what happened.

Then he will perhaps perceive that, after all, the question whether he would himself have given the right decision, no matter what his previous training may have been, will be more a question of character than of knowledge. Nevertheless, he is much more likely to decide aright if he has in mind some larger knowledge of the accumulated experience of the past than if, without anything to guide him, he judges by a so-called common sense which has already led him to ignore the earnest advice of those who have been themselves most successful in war.