

**COURSE OF LECTURES UPON THE  
DEFENCE OF THE SEA-COAST OF  
THE U.S: DELIVERED BEFORE THE  
U. S. NAVAL WAR COLLEGE,  
NOVEMBER, 1887**

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Naval War College, November, 1887 by Henry L. Abbot

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**HENRY L. ABBOT**

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COURSE OF LECTURES  
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DEFENCE  
OF THE  
SEA-COAST OF THE UNITED STATES

DELIVERED BEFORE THE  
U. S. NAVAL WAR COLLEGE

BY  
BVT. BRIG.-GEN. HENRY L. ABBOT, U. S. ARMY  
*Colonel Corps of Engineers*

NOVEMBER, 1887

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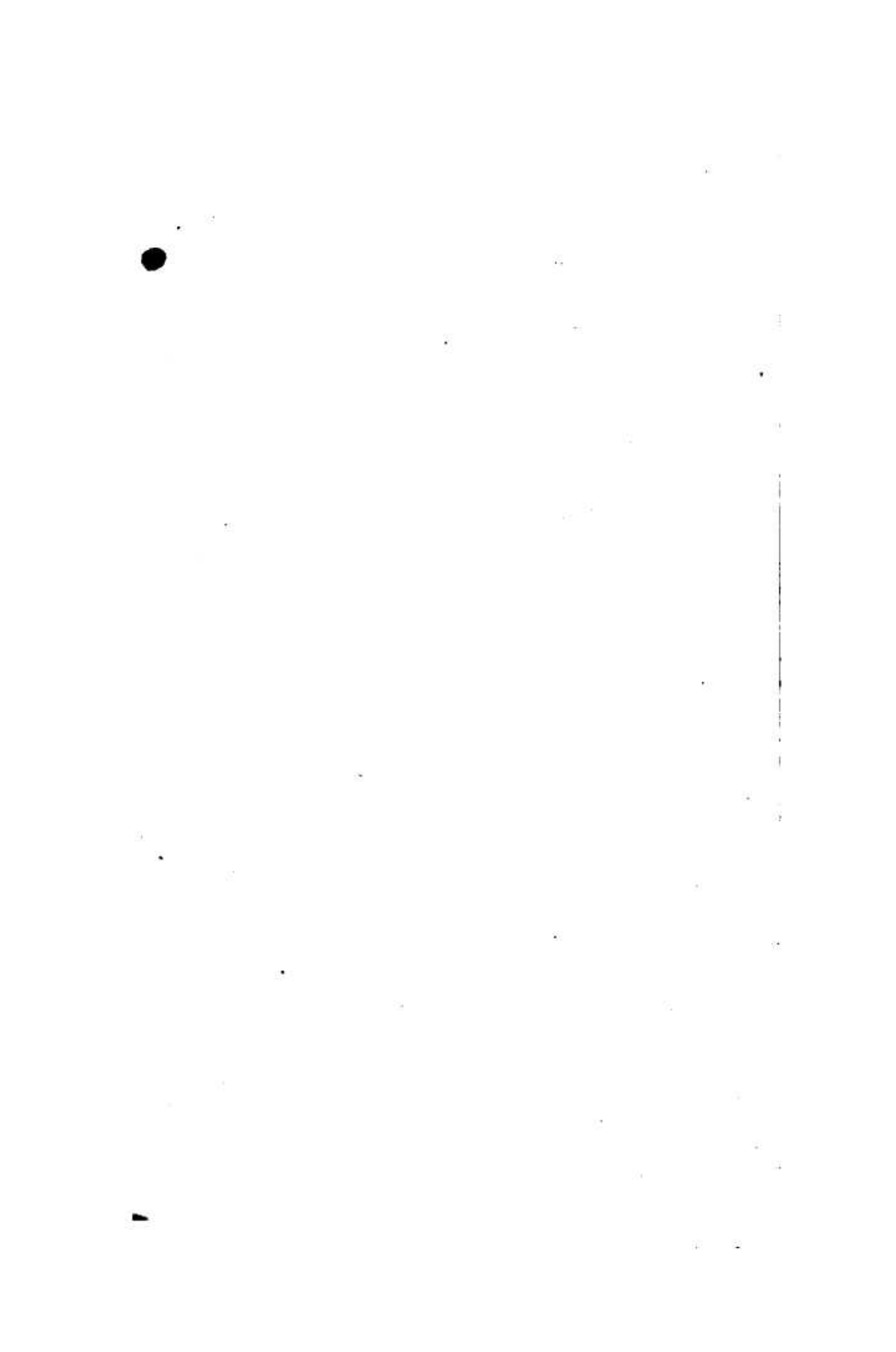
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# FIRST LECTURE.

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## GENERAL CONSIDERATIONS.

Introduction—The art of war as applied to Coast Defence ; strategy ; grand tactics ; logistics ; art of the Engineer—Probable nature of the attack ; needful calibres ; number of guns ; guns ashore and guns afloat ; naval tactics against forts.

IN accepting the invitation to lecture before the Naval War College on our Coast Defences, I duly appreciated not only the courtesy extended by it to the body of Military Engineers which I represent, but also the assistance to be received from an interchange of views upon debatable points where the duties of the land and naval forces follow parallel lines and demand mutual co-operation of the most cordial character. Good cannot fail to result from dropping occasionally the technical study of our respective specialties, and taking a general view of what is needed by the country to prevent its thousands of miles of coast line from opening to an enemy modes of attack where heavy blows may be delivered with little risk, and where decisive results may be attained without affording us a chance of bringing our power as a nation to bear.

The great mass of our population is now, and from the nature of things must remain, ignorant of the requirements of National Defence. The duty of considering what should be done, and how it should be done, has been devolved upon a little band of professional Army and Navy men, largely graduates of West Point and Annapolis, small in numbers and

with no ready mode of interchanging views. Yet we are expected to elaborate a wise and comprehensive system of coast defence; and when the evil day comes we shall justly and mercilessly be held responsible if, blinded by professional technicalities, we have failed to grasp the problem in its entirety. We are too much tempted to forget that our responsibility is by no means limited to details. We are expected to form broad and harmonious views of what the Nation needs; and only in this way shall we secure for our opinions that weight which unanimity among experts always carries with intelligent men who feel themselves to lack technical information. What the Army and Navy agree in recommending will not be lightly thrust aside; and I know of no better mode of inducing unanimity of opinion than the plan of mutual co-operation in study introduced by the founders of the Naval War College.

In preparing these lectures I have borne in mind the professional character of the audience, which would render details on such subjects as modern guns, modern armor, modern torpedoes, and submarine mines as wearisome as a twice-told tale; they will only be touched upon when necessary to make my meaning clear. On the other hand, it would tax your patience to spend time in elaborating details of land construction, such as foundations, strength of materials, and other technicalities of the profession which, of vital importance to the constructor, can have no interest to a naval officer. In a word, I shall try to present the general subject of Coast Defence from the point of view of an Army Engineer, omitting technicalities with which you are familiar and also those in which you have no interest. In return I shall be grateful for suggestions as to any matters which may appear doubtful as seen from a naval point of view.

THE ART OF WAR AS APPLIED TO COAST DEFENCE.

General Brialmont justly observes in his latest treatise on Fortification that the defence of a sea-coast resembles that of a chain of rugged mountains. At most points it is unassailable. The few deep bays and mouths of rivers, which have attracted commerce and caused the erection of cities and the establishment of dock-yards and naval stations, are like the natural passes through the mountains that have created the roads and villages by which the enemy must move to the attack.

There is, however, a marked difference in the nature of this attack. The army advances like a swarm of ants, imposing in numbers but weak in individual power; the fleets approach like a platoon of elephants in the days of Alexander, terrible as individuals, but few in number and handicapped by difficulties in the use of their weapons.

It is only two centuries since admirals stepped from the quarter-deck to command armies in the field, and since generals won victories upon the water by applying land tactics. The Services have long been distinct, but it does not follow that we may not still derive mutual benefit by approaching this problem of coast defence from our different standpoints, and applying principles learned in different fields of duty.

This is the more true because works of coast defence are less a matter of pure fortification than an application of technical details which are becoming more complex from year to year. The Engineer charged with planning them is compelled to study the subject somewhat from a naval standpoint, because the arrangements of all defensive works are regulated by the mode of attack; and the latter, which has undergone radical changes in the last few