

glance at some facts which may assist us in arriving at practical conclusions.

To appreciate their value it is necessary briefly to call to mind the salient features of our defensive arrangements and policy from 1859 to 1879. The first thing of striking importance is the growth of a purely military spirit amongst us, plainly exhibited by the spontaneous action of the nation in arming and organizing itself into a volunteer force of some 170,000, binding itself to serve for the defence of Great Britain only; the resuscitation and total re-organization by successive Governments of the Militia and Yeomanry, a force of some 130,000, legally bound to serve only in *Great Britain and Ireland*; the complete organization of our regular army—"horse, foot, and artillery"; the construction of splendid fortifications and military works in the United Kingdom, at Plymouth, Portsmouth, Chatham, &c., which did not exist twenty years ago. How, the whole of these great, extraordinary, and rapid movements in a purely military direction springing originally from a feeling of national insecurity, created by the fall of the national confidence in the power of "the wooden walls of old England" to protect these islands from invasion, and the substitution of no amount of thickness of armour for wood can win back that blind and implicit bygone trust so rudely shaken by a practical appreciation of the change produced by steam. But, besides, all these solid proofs of the quick growth of a purely military spirit, there are others more subtle, but nevertheless as sure. Most Englishmen would now be ashamed to acknowledge ignorance of the broad features of the military history of recent wars, or the leading principles of military operations. The press and the current literature teem with articles from a purely military standpoint. On the other hand, the Navy, as a sort of abstract quantity of national necessity, absorbs no such popular attention, though the service is, as it deserves to be, most popular. It would be very hard to find an Englishman, unconnected with the service, who is ashamed to say he knows nothing at all of recent naval history, and still less of the broad principles of naval operations and arrangements. The nation gets angry and excited when an iron-clad goes to the bottom, and, from ignorance of naval matters, generally blames the wrong, but, in the intervals between mishaps which must occasionally happen, the popular mind is somewhat lethargic, if not wholly apathetic, in its regard of much that appertains to "England's right arm."

To sum up the results of our national defensive efforts of the past twenty years, it may be said, as regards the army, we have sought out, defined, and carried out the general principles to govern our military arrangements, we have taken every advantage of "advancing science" to improve and perfect the details; but with respect to the Navy we have only used "advancing science" for the improvement of some details, such as ships, without ever the faintest national effort to seek out the great general principles which must guide our naval arrangements. This is doubly remarkable when it is remembered that it was the change produced on naval operations by steam that has led us so far afoot towards a purely military goal, and caused us, so to speak, to turn our back on those new naval principles which are the very essence of the problem submitted by steam for England's solution.

As the annual value of our trade with China and Japan approaches £15,000,000, the arrangements for supplying and securing to our fleet in war ample supplies of coal is surely a question of very considerable national importance, yet it does not command popular sympathy. But the question of coal supply does not simply concern the power of the British war fleets to keep the sea; on it rests the whole complex operations of our steam trade. Steam companies take care to provide ample fuel for their wants, and store it at the most convenient points along the great highroads of the sea. Though, as a general rule, these vessels have far superior coal-carrying capacity to any of our war-ships, they are nevertheless dependent on fixed coaling stations, the great majority of which are on British territory. The main object of hostile cruisers would

be to damage our sea trade, and no more effective mode could suggest itself than burning the coal of our steam mercantile fleets. If the defence of these British coal-stores abroad is to be left to sea-going ships, instead of such ships being at their proper places on the high seas, they will be in war snugly lying off the coal wharves. Were the Home Guards to send a cavalry force on any expedition without spurs, horseshoes or the means of making them, there would be a general outcry; yet the nation silently acquiesces in the despatch of whole fleets, composed of ships which are complicated masses of intricate machinery, to distant parts of the world without providing them with means of repair, floating or fixed, and does not even provide dock accommodation for war-ships at such important places as the *Cape*, *British Columbia*, *Halifax, N.S.*, and *Quebec*, commanding as they do the great passages leading from one hemisphere to the other. In 1859 the total tonnage of British vessels which entered and cleared at ports in the United Kingdom was 13,000,000 odd; in 1877 it was 53,000,000 odd. We have, therefore, now four times as great a national stake on the water as we had in 1859, at which period we commenced giving our exclusive attention to purely military arrangements. It is instructive to think of facts such as these, and it cannot be too often repeated that one-half of the people of these islands are now dependent on over-sea transport for food. It is also a matter for serious reflection that other nations are making rapid strides in naval development, while two new naval powers, Germany and Italy, have risen out of the troubled Europe of the last two decades.

An extended position, connected by long lines, requires a much greater force to maintain it than to attack it. An insignificant attacking force can harass and worry it, unless the most careful, painstaking attention be paid to strategical laws, based on accurate knowledge, and all arrangements are made subject to those laws.

We have water-roads 13,000 miles in length, commanded by points in British territory, but there is not a place of refuge where helpless merchant ships in war can find even temporary safety or security along their whole length. It is evident that as the absolute necessity of arming our mercantile marine in war becomes more apparent, so will the value and importance of our fixed points commanding the great water-roads become more clear as a great element of maritime strength. They must not merely be protected coal depôts, but naval storehouses where guns, gun-mountings, and ammunition suitable for the use of the mercantile marine can be safely stored.

Before offering necessarily brief remarks on the colonial portion of our subject, it may be instructive to summarise some remarkable changes which, from a defensive point of view, the twenty years just closed has brought about in our colonial history. We have since 1859 withdrawn regular troops from all our great colonies having responsible governments, except the *Cape*. In the interval which has elapsed the United Kingdom has gone so far as to sell old military clothing and muskets to Canada, while Canada has developed a military system capable of placing 600,000 men under arms, and, as all are aware, has tendered offers of substantial military assistance to us within the last few months. The colonies of Australasia have organized local military forces, and erected defensive works and the *Cape* is at this moment engaged in providing military means of internal local defence. The West Indian colonies do not appear to have followed in the same path. The example set by the mother-country has not been without its influence on her children, and, therefore, it is not surprising to find that in naval directions little has been done. Canada has provided herself with a naval force of small armed steamers for lake service. Victoria is distinguished by the possession of the "Cerberus" and "Nelson," and a naval establishment of some 350 of all ranks. We may look in vain elsewhere for any advance as regards naval preparations in any of our great colonies at all proportionate either to their military progress or mercantile development. If we cast our eyes towards India