

A Warning voice from the Spanish Armada.

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Composition and Strength of Naval Forces.

The composition of the English fleet and its strength compared with population, deserve consideration. The total tonnage of all kinds gives about one ton to every 140 of the then population of England. The tonnage of the present ironclad fleet of Great Britain gives about one ton to every 80 of the population. The numbers of men on board the Royal ships was about 1,750th of the population. The number included in the Naval Estimates, now made, are altogether about 1,540th of our population. The total number of adult males in the seafaring professions of that time, judging by an estimate made in 1572, must have been (including the Royal Navy) about 22,000, or 1,200th of the population. The number of adult males in the present seafaring professions (including 60,000 in the Royal Navy) is about 350,000 or about 1,90th of our population. Thus the fleets, both Royal and mercantile, and the whole marine of the country were small for their day, as compared with our time. The remarkable point is the very large proportion of this small marine, that was available for the defence of the country: The men in the Royal ships were about 2 7ths of the seafaring men, and the whole number employed was about 5 7ths of them. If we take the former of these to represent the peace establishment of the Navy, that proportion would give us now about 100,000 men, in place of the 60,000 we annually provide for. And if we take the latter to represent the war establishment, that proportion would give us 250,000 men. During the great war with France, at the beginning of this century, we employed nearly 150,000 men in the Navy; and I believe it has been estimated that we should now require at least double the strength of our peace establishment on an outbreak of serious war.

There were two modes at that time, in which the mercantile marine could be brought in to assist the Royal Navy. The first was by the impressment of sailors; that is to say, it was then understood that every man in the country was liable to be called upon to assist in the defence of it, either in the Army or in the Navy. This practice was used at the time, because the pay in the Royal ships was not sufficient to attract the mercantile seamen, except when a prospect of booty was added to it.

The second mode was the requirement from certain of the port towns of quotas of ships and men to be furnished by them in war time, as a return for special commercial privileges granted to them. Thus we see that at sea, as on land, the principal was that as the wealth of the country increased, those who gained the chief profit should be prepared to defend what they had got by their enterprise. We have lost the idea of that principal, and have only kept the power of impressment in its most obnoxious form; and thus it has come to pass that with the greatest sea-commerce the world has ever seen, we have no system of securing it against a rival power, except by a costly permanent war fleet; which, though very expensive in peace, is quite inadequate for the demands of a serious war.

It is also remarkable how, in that spring time of British commerce, all those demands on the lives and property of the sea-merch-

ants, seemed only to rouse the enthusiasm of all to a pitch beyond what was required of them. The port towns not only supplied vessels beyond the quotas asked, but private persons equipped and themselves brought ships to the support of the admirals. The spirit of the people having been preserved and organized, rose equal to the great occasion. The action of the English at sea, at that period, may be fairly compared to the deeds of Greece at Salamis. The English, like the Greeks, virtually took to the sea with their whole available maritime force, and their spirit was an earnest of their ability to do the work before them. The tone of all the letters is like that of Nelson and his sea captains; exultation at the opportunity of at last having a good fight with the great rival; a clear perception of the difficulty, but also a resolute mind to meet it, and a confidence in their intimate knowledge of the ships they were to fight in, and the sea they were to fight on.

And as was said in the *Times* the other day, commenting on the works of that gifted and patriotic writer who died last month, "It was well for us that English commercial enterprise took that form in the days of Queen Elizabeth. Had these Devon gentle men stayed at home tilling their paternal acres; had Hawkins, Forbisher, and Drake, confined themselves to coasting voyages in the narrow seas, the story of the Armada would have ended differently, in spite of the elements; and in place of being mistress of her vast Colonial Empire, England might have seen herself a province of the House of Austria."

Construction of Ships.

With respect to the size and construction of the vessels, the opinion of the experienced sea-captains of the time was generally in favour of the smaller and handier English vessel. "Grande navis grande fatica" says Sir Walter Raleigh. Lord Howard calls his ship (the Ark Royal, 800 tons), with evident delight, "the best addition for all conditions." When the adventurous mariners of England took to the great ocean, they were obliged, no doubt, to give up the galley, from want of labourers for the oars, and to use small sailing vessels manned by a few very good seamen; and to compete with the great Spanish galleons, they had to be quick and handy. This suited their genius, and they and their ships became famous together; but we must not assume that the smaller size was deliberately selected for a great naval war. Indeed, the English seem to have been quite as much behind hand in the theory of shipbuilding, then as they have been almost ever since; and to have borrowed their ideas from the Netherlands. Lord Howard's first demand after his first engagement with the Armada was for larger ships; and, as we have seen, Sir W. Monson preferred larger vessels and a proportion of galleys for sea fights. The whole of the vessels of that period of all nations, apparently, carried so much top hamper as to be obliged to give up a large part of the hold to ballast; hence the number of attending victualling ships; the victualler was to them what the collier is to a modern squadron, and gave the limit of their cruising power. This was also limited by the unwholesomeness of the vessels after a short time; the number of men put *hors de combats* by this cause was a very serious loss both to the English and Spanish fleets, but more so to the latter on account of their crowded state. Otherwise the English ships appear to have been very well built, as far as the workmanship was concerned, and cheaply.

The armament of both Spanish and English fleets was probably alike in point of size of guns. Sir W. Monson gives a list of the guns in use, and said that demi-cannon (30½ lbs. ball, carrying 170 paces point blank) was the largest gun commonly used on board ship. Sir W. Winter mentions culverins (17½ lb. ball, 200 paces P. B. range) and demi-culverins (9½ lb. ball, 200 paces P. B. range); and, after the second day's fight, Medina Sidonia sent off an express to Parma for 4, 6, and 10 lb. balls. The ranges of the guns given by Monson should be borne in mind in the account of the fighting; some of the English guns being, no doubt, of good iron construction may possibly have been better shooting guns than the bronze pieces of the Spaniards.

Government Delays.

The Royal drag had not, therefore, the same effect on the wheels of Neptune's car as it had upon the chariot of Mars. It was felt however, and produced quite as much noise. Hawkins wanted to cruise off Spain, but the expense (£2,700 per month) was too much for the great Queen. What a Chancellor of the Exchequer she would have made for these days! Lord Howard complains, in March '88, that Sir F. Drake's squadron is not allowed to be completed, and that some of the large men of war are kept lying idly in the Medway at Chatham, "to defend the church there," he supposes; "sparing and war have no affinity together." "Money and jewels will not redeem the time." And he includes Lord Burghley among the economists. "I pray we do not curse, for this, a long grey beard with a white head without." Mr. Puff was apparently right when he called on Lord Burghley to shake his head as if there was something in it.

There were alternate panics and fits of economy worthy of the most peace devoted government of commercial days. Even in the beginning of 1588, when we know Philip was hoping that Parma was already in England, the fleet was much dismantled, and many seamen allowed to go; and immediately afterwards they had to be refitted at a greater expense, and an inferior lot of men taken to replace those who had gone to seek employment elsewhere. Then, at a time when the goodwill of the sailors was of so much importance, the rations were reduced, and issued monthly, with such delays, that the fleet was short of food during the whole operations. It appears as if the Government of England, at the time, was unable to realize the crisis, which we can see now was occurring in the fates of Spain and England; that the former, if not checked, would inevitably continue her course of aggrandisement, and swallow up first Holland, then England; and that the latter was at a point in her existence, at which the people were both prepared and able to rise to the occasion, and gain a new footing in the world in fair fight.

One can hardly believe it possible that such infatuated economy existed in those days, but we have an instance in our own days of the deliberated blindness of a Government in like case. In 1858, when there were rumours of war in the political air, the Royal dockyards of England were allowed to get reduced into such a condition that if the whole force of them had been put on the work of fitting out the vessels lying in harbour for war, irrespective of building new vessels and of chance repairs, it would have taken two years to do the work.

A list of the whole of the Royal ships mentioned in Bruce, as having been employed on this service, is appended, and in it will be seen several well known names in the