SHIP-BUILDING.

*Introductory Observations.*

That profound thinker, Sir Walter Raleigh, has left this aphorism on record, “ Whosoever commands the sea com­mands the trade ; whosoever commands the trade of the world commands the riches of the world, and consequently the world itself.” The time has passed by in which the command of the seas either can or ought to be maintained according to the spirit in which. Sir Walter Raleigh framed this aphorism. Still the principle it is intended to enforce is as essential to the wellbeing of England now as it was then. We rejoice at the liberality of international commu­nication, and of the political relations which distinguish the present age. We do more ; we fervently hope that the same spirit may increase, even until all national distinc­tions and national divisions shall vanish before it. Yet we cannot but remember that it is with nations as with indi­viduals. Interests may clash, quarrels may arise, and the friendships and the kindly feelings of to-day may be suc­ceeded by the dissensions and the feuds of to-morrow ; and therefore, even in the midst of a peace unexampled for its heartiness, and for the good faith which apparently per­vades the councils of the nations of Europe, we cannot with wisdom neglect those means of defence which have hither­to preserved our land inviolate.

The aphorism of Sir Walter Raleigh is of general ap­plication ; but to an insular power, and which can only he reckoned of secondary rank in the scale of nations, in as far as size and population only are involved, naval pre-emi­nence is essential to its independence. An eminent states­man has lately most forcibly urged upon the continental nations of Europe this all-important fact, that the command of the seas, when vested in an insular power, gives her despo­tic authority over the nations of the earth, because she is herself invulnerable. He proceeds from this position to the conclusion, that the interest of Europe renders it im­perative, that since the sceptre of the seas is at present held **by** an insular power, it should be wrested from her grasp, and bestowed on another, which, by being continental, must be vulnerable on her land frontier, and cannot therefore be despotic in her naval rule. Thus far does the continental writer pursue the argument, because thus far only are the interests of continental nations concerned ; but for us there is yet another induction to be made; it is this : The same cause which invests an insular power with universal domi­nion as long as she can maintain the sovereignty of the seas, must divest her of all power when that sovereignty is lost ; she falls at once from her high pre-eminence ; first on the list of nations, to rank among the secondary powers ; for the sea, her impregnable fortress in the one case, becomes a barrier to her enterprise in the other. It would be no dif­ficult task to prove, from the history of Europe, that the in­fluence of England among the nations has increased or di­minished in proportion as her navy has been fostered or ne­glected.

It is strange, that with such a tremendous stake at issue as national independence, it should be possible to wτite, and to write with truth, that there have been periods in our his­tory, during which the navy and the naval resources of this country have been suffered to decline. The naval sceptre has more than once trembled in our grasp : we trust the time is far distant in which we may again wield it in anger ; but should that time ever arrive, the struggle must be des­perate, because the powers of Europe have been taught that our naval pre-eminence places their destinies in our hands.

In connection with the occasional neglect of her naval

resources, is another strange anomaly, namely, that England has less than any other maritime power encouraged the ap­plication of the exact sciences to naval architecture. She has not to this day one original truly scientific treatise on the subject in her language ; and, passing by some few pa­pers and tracts of modern times, she can only cite the writ­ings of uneducated and unlearned men, as Mungo Murray, Hutchinson, and Stalkart, against those of such names as the Bernoullis, Euler, Chapman, Don Juan, Bouguer, Clairbois, Romrae, and a host of others. The establishment of a school for naval architecture at Portsmouth has been directly and indirectly the means of diffusing much knowledge on this important subject, and the result has been a very consider­able improvement in our ships of war, so that latterly they may perhaps fairly claim equality with those of other nations. It is perhaps principally in her merchant-shipping that Eng­land now suffers from this neglect of science.

It is a recognised principle that demand creates supply, and therefore we may presume that in England there has been no demand, such as would encourage men of science to furnish forth the supply. It is not irrelevant to the sub­ject of this article to trace out the causes which have ope­rated to this effect ; they must be made known to be re­moved ; and it is in vain to urge improvement if there be any insuperable bar to its progress in operation. And again, it cannot be irrelevant, in an article on a national subject, and in a national work, to pursue the inquiry to its end, the more so as we believe the task will lead us to the conclusion, that, however harmless hitherto this state of apathy to im­provement may have been, the time has now arrived when its continuance will be dangerous to our naval pre-emi­nence ; for through it, to quote again from Sir Walter Ra­leigh, we may lose “ the command of the trade of the world, the command of the riches of the world, and consequently of the world itself.” .

The predilection for the sea, and for a seafaring life, which is proverbially general throughout the population of England, may most probably be traced to an early period in our history, when, after the Norman conquest, for a long period of years, both shores of the narrow seas were under one rule, and the nobles of the land had possessions on either side of the Channel. This, and the constant inter­course kept up between England and her armies during the long subsequent wars, must have trained a hardy race of seamen, and have made passages by sea familiar to the entire population. The impression once given, the facili­ties afforded for maritime adventure, by the great compara­tive extent of our coast, and its numberless harbours, were quite sufficient to maintain it. Our insular situation will not alone account for our love of naval enterprise ; otherwise ft similar predisposition would be general with the inhabitants of islands, whereas we find a most remarkable instance to the contrary in Ireland, a country possessed of even more maritime advantages than England ; with a more indented, and therefore a more favourable coast, with proportionally larger rivers, and with many lakes of great magnitude in the interior. This predilection of our population for the sea has hitherto enabled us most triumphantly to maintain our naval pre eminence, even against the known and acknowledg­ed advantages of superior ships ; for it is universally ad­mitted that the naval powers of the Continent have, through­out their struggles with us, been possessed of superior classes of vessels, in many respects, to those which we have em­ployed against them.

It is a question for serious consideration, whether we are sure, throughout the future, to be able to contend with equal