of top-hamper which was entailed on the ships of the royal navy, by the accommodation required for the numerous officers and gentlemen generally embarked on board them, and also by the mania for gorgeous decorations. This mania is well exemplified by the fact, that of the Sovereign of the Seas it is stated, “ she beareth five lanthornes, the biggest of which will hold ten persons to stand upright, and without shouldring one another.”

Sir Walter Raleigh, in his Discourse on the Royal Navy and Sea-Service, adverts to the same subject. He says, “ We find by experience, that the greatest ships are lesse serviceable, goe very deep to water, and of marvellous charge and fearefull cumber, our channells decaying every yeare. Besides, they are lesse nimble, lesse maineable, and very seldome imployed. *Grande navio, grande fatica,* saith the Spainard ; a ship of GOO tons will carry as good ordnance as a ship of 1200 tons; and though the greater have double the number, the lesser will turne her broad sides twice before the greater can wend once ; and so no advantage in that overplus of ordnance. And in the building of all ships, these six things are principally required. 1. First, that she be strong built ; 2. Secondly, that she be swift ; 3. Thirdly, that she be stout sided ; 4. Fourthly, that she carry out her guns all weather ; 5. Fifthly, that she hull and try well, which we call a good sea ship ; 6. Sixthly, that she stay well when bourding and turning on a wind is required.

“ 1. To make her strong, consisteth in the truth of the workeman and the care of the officers.

“ 2. To make her sayle well, is to give a long run for­ward, and so afterward done by art and just proportion. For, as in laying out of her bows before, and quarters behind, she neither sinck into nor hang in the water, but lye cleare off and above it; and that the shipwrights be not deceived herein (as for the most part they have ever been), they must be sure that the ship sinck no deeper into the water than they promise, for otherwise the bow and quarter will utterly spoile her sayling.

“ 3. That she be stout, the same is provided and per­formed by a long bearing floore, and by sharing off above water even from the lower edge of the ports.

“ 4. To carry out her ordnance all weather, this long bearing floore, and sharing off from above the ports, is a chiefe cause, provided alwayes that your lowest tyre of ord­nance must lye foure foot cleare above water when all load­ing is in, or else those your best pieces will be of small use at the same in any growne weather that makes the billoe to rise, for then you shall be enforced to take in all your lower ports, or else hazard the ship.

“ 5. To make her a good sea ship, that is, to hull and trye well, there are two things specially to be observed ; the one that she have a good draught of water, the other that she be not overcharged, which commonly the king’s ships are, and therefore in them we are forced to lye at trye with our maine course and missen, which, with a deep keel and standing streake, she will performe.

“ 6. The hinderance to stay well is the extreame length of a ship, especially if she be floaty and want sharpnesse of way forwards ; and it is most true, that those over-long ships are fitter for our seas than for the ocean ; but one hundred foot long, and five and thirty foot broad, is a good proportion for a great ship. It is a speciall observation, that all ships sharpe before, that want a long floore, will fall roughly into the sea, and take in water over head and ears.

“ So will all narrow quartered ships sinck after the tayle. The high charging of ships is it that brings them all ill qua­litics, makes them extreame leeward, makes them sinck deep into the water, makes them labour, and makes them overset. Men may not expect the ease of many cabbins, and safety at once, in eea-service. Two decks and a half is sufficient to yield shelter and lodging for men and mariners, and no more charging at all higher, but only one low cab-

bin for the master. But our marriners will say, that a ship will beare more charging aloft for cabbins, and that is true, if none but ordinary marryners were to serve in them, who are able to endure, and are used to, the tumbling and rowl- ing of ships from side to side when the sea is never so little growne ; but men of better sort and better breeding would be glad to find more steadinesse and lesse tottering cadge work. And albeit, the marriners doe covet store of cab­bins, yet indeed they are but sluttish dens, that bread sick- nesse in peace, serving to cover stealths, and in fight arc dangerous to teare men with their splinters.”

In Fuller’s Worthies, we have also a short summary of the comparative qualities of the ships **of** different nations in the middle of the seventeenth century. It is as follows : “ First, for the Portugal, his carvils and caracts, whereof few now remain (the charges of maintaining them far ex­ceeding the profit they bring in) ; they were the veriest drones on the sea, the rather because formerly their seeling was darn’d up with a certain kind of morter to dead the shot, a fashion now by them disused.

“ The French, however dexterous in land-battles, are left-handed in sea-fights, whose best ships are of Dutch building. The Dutch build their ships so floaty and buoy­ant, they have little hold in the water in comparison to ours, which keep the better winde, and so outsail them.

“ The Spanish pride hath infected their ships with lofti­ness, which makes them but the fairer markes to our shot. Besides, the winde hath so much power of them in bad weather, so that it drives them two leagues for one of ours to the leeward, which is very dangerous upon a lee shore. \*

“ Indeed the Turkish frigots, especially some thirty-six of Algier, formed and built much nearer the English mode, and manned by renegadoes, many of them English, being already too nimble heel’d for the Dutch, may hereafter prove mischievous to us, if not seasonably prevented.”

During the early part of the seventeenth century, the Dutch navy rapidly increased in importance. Their suc­cess in having wrested from the Portuguese a share of the commerce of the east, emboldened them, in the then de­pressed state of the Spanish marine, to make a similar at­tempt on the west, and endeavour to establish settlements in South America.

The wars with Spain, in which they were consequently engaged, had such an important effect in establishing their maritime power, that in 1650 their navy consisted of 120 vessels fitted for war, seventy of which had two tiers of guns ; and their fleet was in all respects the most efficient in Europe.

Evelyn, in his tract on Navigation and Commerce, speak­ing of the fisheries, says, “ Holland and Zeeland alone should, from a few’ despicable boats, be able to set forth above 20,000 vessels of all sorts, fit for the rude seas, of which more than 7000 are yearly employed upon this oc­casion. 'Tis evident that by this particular trade they are able to breed above 40,000 fishermen and 116,000 mari­ners, as the census (1639) has been accurately calculated.”

The tremendous struggle in which they were enabled by these means to engage with us shortly after this period, in consequence of the injurious operation of the navigation act on their commerce, had a most influential effect on the im­provement of our navy, which at the commencement of the contest was very unequal to that of the Dutch ; and it is probable that this war was the means of enabling us to con­tend triumphantly against the immense and unexpected at­tempts of Louis XIV. to wrest the sceptre of the seas from our grasp.

The sovereigns of the house of Stuart, without excep­tion, appear to have devoted much attention to the improve­ment of the navy. Charles I. may be almost said to have lost both crown and life in consequence of these efforts ; nor would it be doing justice to Cromwell to omit mention