success should we labour under similar disadvantages ; or whether there are causes now in operation which may ren­der a favourable result questionable ?

In pursuing our inquiry into the present state of the theory of ships, and particularly as it is applied to our mer­cantile navy, we shall arrive at an answer to this question. It certainly does not necessarily follow, that because our vessels of war have been inferior to those of other nations, our merchant-shipping should be in a similar position with respect to their mercantile navies.

The merchant princes of England, with their boundless wealth, proverbial generosity, and persevering enterprise, might surely have attracted the attention of men of science to the improvement of their argosies. That they have not done so is indisputable : the startling fact, that one ship and a half is the average daily loss registered on the books at Lloyd’s, appears as a sad corroboration of the acknowledged truth, that the mercantile navy of England is the least speedy and the most unsafe that belongs to a civilized na­tion. Several causes have combined to produce this result, and to check any improvement in our merchant-ships. These it will be our object to explain.

During the late long war, when our fleets swept the com­merce of the other nations from the seas, almost the whole traffic of the world was in our hands, and the carrying trade was shared only by the Americans, their neutra­lity obtaining for them the same advantages that we com­manded by our power ; but at the peace the seas were again free to the ships of all nations, and that which had been for a long series of years almost a monopoly, was thrown open to competition. It might naturally be inferred that this would operate injuriously to us ; yet the question cannot but arise, why, with all the advantages of possession of the ground, of connection, and of stock, we have been, and still conti - nue to be, supplanted by other maritime nations ? We have not only lost much of the carrying trade for foreign merchants, but even English merchants find it for their in­terest, as individuals, to employ a great proportion of foreign shipping, to euch an extent indeed, that nearly one half of the commerce on our western coast is carried on in Ame­rican vessels. It may be urged against these statements, that the statistics of our mercantile navy show an increase in its numerical strength. This may be admitted, and the force of the argument remain the same ; for it is not found­ed on its positive increase or decrease, but on its relative increase compared with that of the mercantile navies of other nations.

That there should have been a diminution in the demand for our shipping at the conclusion of the war, is a necessary consequence of the many causes of the employment of ships which belong only to a state of war ; besides which, as in time of peace the delays occasioned by waiting for convoy are avoided, the time expended in the voyages is shorter, and therefore a less number of ships is required to perform the same quantity of work. We have, however, suffered more than the proportion due to these considerations, which, it should be remembered, must also, in a lesser degree, have operated to check the progress of the American mercantile navy ; however, it is this navy which is principally supplant­ing ours. We cannot evade the conclusion, that the reason for this must be found in the inefficiency and inadequacy of the ships themselves, and that the absence of all improve­ment in our mercantile navy has placed it in this disadvan­tageous position.

During the war, almost the only colonial supplies which could reach the continental powers were those plundered by their privateers from the English merchant. The only safety to the English merchant-ship was in sailing in large convoys, in which the velocity of the whole fleet was ne­cessarily regulated by that of the worst sailer. It was there­fore of far more importance to the merchant who had few

opportunities for adventure, to choose those ships which would carry a larger quantity than those which were pos­sessed of a quality, velocity, of which they could not avail themselves. This operated as an effectual bar to all im­provement in the forms of our mercantile shipping, for it caused the absurdities of the late law for tonnage to remain unnoticed for a series of years ; and when at length their injurious tendency was perceived, it was not until they had become so completely identified in men’s minds with ships themselves, that years more were suffered to elapse before it was clearly made manifest, that the cause of the inferiority of the shipping was the absurdity of the law. Years more must yet elapse before the mercantile navy of Britain can re­cover from the state to which these laws have reduced it.

While English merchant-ships were restricted to sailing in convoys, the neutrality of the Americans enabled their vessels to sail singly, and consequently it became immedi­ately desirable to attain the greatest velocity which was con­sistent with a due portion of the other requisite qualities for a merchant-ship ; there was therefore virtually a premium on improvement. Thus the peace found America in posses­sion of an immense commercial navy, which, on an ave­rage, could perform its passages in one third less time than our own ; and although this is necessarily attained by some sacrifice of capacity, the result has shown the sacrifice to have been judicious. The peace also found America in possession of ship-builders who had made the improvement of the qualities of ships their study. She therefore was not only in possession of a better mercantile navy, with which to compete with us, but she had also the vantage-ground of superior knowledge, and a far more extended experience, from which to start for the future competition. What won­der, then, that we have failed in the contest ? The wonder should rather be, that we are not wholly driven from the field. Similar injurious causes operated against the English shipping in comparison with that of several of the maritime powers. Convoy was no safety to their ships of traffic, since their ships of war found no safety for themselves. The only chance tor escaping our cruisers lay in sailing singly, as less likely to attract observation, and in trusting to their velocity if observed ; besides which, the northern nations of Europe have long been possessed of a very superior class of mercantile shipping, the result partly of the advanced state of the knowledge of the science of naval architecture among them, and partly also of this custom of sailing singly on long voyages, even amidst all the dangers of war. It cannot be a matter of astonishment, therefore, that when the seas were once more open to ships of all nations, the foreign merchants, whom absence of commerce had impo­verished, should choose those which would the soonest al­low of a rcturn of capital, and at the same time diminish the risk of its loss ; for it must be remembered, that the safety of a ship is not only dependent on her powers as a sea-boat, but is in inverse proportion to the time she is ex­posed to the dangers of the seas. Again, if the foreign merchant thus preferred the foreign ship to the British, surely that competition, which is the very spirit of commer­cial enterprise, must of necessity have impelled the British merchant to pursue the same course ; for it could not be a matter of indifference to him whether his goods should be the first in the market, or should arrive when that market was glutted.

The present modification of the tonnage laws is compa­ratively harmless, but the leaven of the old law remains. England possesses upwards of two millions and a half of ton­nage in inferior shipping ; and the merchant-builders of Bri­tain, reared under the baneful influence of that law, are, with a few honourable exceptions, unequal to the task of compe­tition with the more educated and more practised foreigner. The theory of ships is, even by those who are the most in­structed in its principles, yet considered **in** its infancy ; it