

FOREIGN NAVIES.

(From the Pall Mall Gazette.)

The navies of the world have changed in every conceivable way during the last ten years. Their form is altered; their size is in some cases diminished and in others increased; nor have the principles upon which they are managed remained the same. With hardly an exception, their power is increased. So rapid have been the alterations in the navies of some countries, and so little attention have they attracted, that it is a matter of considerable interest that their condition should be known as accurately as possible now that the British navy is undergoing reforms which promise to affect its character in many important respects. Ten years ago our navy regarded France as its only great rival, and the interests of this country were thought sufficiently preserved by not permitting the French navy to exceed ours in strength or number. But, in the last ten years, the substitution of iron for wooden men-of-war has not only had a tendency to reduce the navies of the world to a more common level, but it has encouraged nations which hitherto had thought little of rivalling England at sea to undertake vigorously the construction of fighting ships. In these ten years Russia, North Germany, Austria, Sweden, and Italy, and even Turkey, have been engaged in increasing materially the strength of their navies, and would now be formidable enemies at sea.

France and America have, however, led the way in naval reform, and have taken up with such vigour naval construction and manufacture of naval ordnance that we have been content to do little more than follow in their wake. The French navy has not, however, been remarkable for any great achievements; here and there it gained a victory, but its success has not been remarkable. It is doubtful, indeed, whether under the present Emperor came to the throne there were more than 300 vessels of every kind in the navy; and whether out of this number, fifty could be regarded as efficient fighting ships. At the present time there are 430, including fifty ironclads. Since 1857 no effort have been spared to increase the strength of the navy. At the beginning of this year its effective force was 214 steamers and ten sailing vessels, in addition to about 100 hulks and other ships. Of the steamers fifty were ironclads. These ironclad vessels have been constructed on the block principle; that is, they have been built in classes which are founded upon five or six types. This feature distinguishes the armour-clad navy of France from that of England. Hardly four of our vessels are alike, but in the French navy uniformity has been aimed at rather than variety. By this means France has in its possession small and compact squadrons of ironclads, capable of uniform action, bearing the same ornaments, manned by crews uniform in character and numbers and having a uniform rate of speed. Here it is superior to our navy; but when we compare individual ships the superiority lies with us. France has no vessels to compare with our *Hercules* or *Monarch*, with the *Captain* or the new vessels which are now under construction. As with us, however, the recent shipbuilding for the French navy has been almost exclusively devoted to coast defence. Heavily plated floating batteries, capable of using the heaviest artillery possible, are the latest constructions in the French navy. The *Taureau*, the *Boule Dogue* and the *Cerberus* are the heaviest ships which have as yet been built. Besides these there are seventeen sea-going ironclads which may be divided into three classes; they are plated

with armour varying from four to five inches in thickness, and capable of going from twelve to fourteen knots an hour. The number of ironclads built and being built for coast defence is about thirty; these are likewise constructed in classes, and, though their speed is not so great as that of the sea-going vessels they are more heavily clad with armour and carry heavier armaments. The number of seamen and officers is about 43,000, though with the reserves it would be possible to collect 170,000 on an emergency. The armament of the French navy has not been so successful as with us. All the ironclads have been rearméd, but it appears that, in adopting the breech-loading system and applying it to the new heavy naval artillery, the French Government has acted with more haste than prudence. The new artillery varies in calibre from $7\frac{1}{2}$ to 10 $\frac{1}{2}$ inches, and is very powerful.

Thus in France the most arduous efforts have been made, and with great success, to construct a powerful navy. In America there have been the same efforts, but they have taken a different course. With the Americans special emergencies direct special efforts, and they have governed their views of naval policy by this principle. Before the great war broke out, the American navy was not remarkable either for size or power. But during the war with amazing celerity it was transformed to such an extent as to excite fear and criticism in all the great European nations. With hardly a single ironclad when the war commenced, it has now more than any nation in the globe. To such an extent is this the case, that while the British and French navies can reckon altogether about 50 ironclads apiece, America has in its possession and in course of construction 75. These are chiefly monitors or turret vessels; they are of small tonnage, and are intended to carry small but heavy armaments. The construction of wooden ships has lately been taken up vigorously under the indefatigable direction of Mr. Eads, one of the principal constructors. Although the number of effective ships last year was 278, of which 115 were in commission. As regards officers and men, there were 2048 of the former, and 13,600 of the latter. It is noticeable, too, that most of these officers were on the active list. The American navy is far more elastic than either the French or the British. It was as suddenly reduced at the termination of the war as it had been increased during its outbreak. In England variety and solidity have been aimed at. Our ships are very costly and powerful, and are built as if they were intended to last for ever. We have a much larger navy than America; our ironclads, though fewer in number, are more powerful, and our ordnance is much better. Our weakness, if any exists, lies in the principles of construction we have adopted, in our having kept so steadily to the broadside, while America has almost entirely adopted the turret system. To our four or five turret ships the Americans have about 50. But to both France and America we are decidedly superior both in ordnance and in crews. We have a magnificent body of trained men at the present time who would be available at once on any emergency. But the great fact to be noted with regard to both these navies is, that while we have been reducing the numbers of ships and men steadily in the last ten years, they have increased enormously in power and to a certain extent in numbers. It is only in analyzing the condition of such navies as the American and French that it is possible to ascertain how our own navy stands as a power; but it certainly seems doubtful whether for the sake

of efficiency the rate of construction has been large enough, and whether we have not been too rapid in the destruction of some of our old men-of-war.

Though the navies of France and America alone are capable of comparison with England, there are several others which, in the last ten years, have developed to such an extent as to be worth examining. Indeed in one way Russia is ahead of the French and British navies. She has more turret ships, some of which were reported to be sea-going. That they were of the latest pattern is certain, but that they were sea-going has been denied. Last year the Russian navy consisted of 292 vessels of which 29 were sailing, and 24 were ironclads. This fleet is divided into two grand divisions—one for the Baltic, and the other for the Black Sea. As regards the ironclad navy, Russia has 24 vessels; of these 11 are turret ships, six are monitors, three are floating batteries and the rest are broadside ships. They carry altogether 149 guns. The monitors were purchased from the American Government at the termination of the war, and the turret vessels are built from the newest designs known, some having been furnished by Captain Coles and adopted by the Russian Government four or five years ago. The manning of the navy is almost on the same scale as our own, the number of sailors being 60,430, and of officers 3,791.

The Prussian navy has developed in an astonishing manner lately. Her heavy artillery is not only home made but very formidable; her ships have been built chiefly in this country. Twenty years ago a Prussian navy did not exist, and five years ago it was a comparatively small affair; but since the Danish war the annexations of Prussia made the possession of a powerful navy more necessary than ever to her welfare. At present, therefore, she has four very powerful ironclads. Eighty-six small vessels complete the Prussian navy. It is manned by 3,390 men and marines and 167 officers. The Prussian Government is now building new dockyards, the most important of which is at Jade, on the North Sea.

Austria and Italy have each a more extensive navy than Prussia, and they have the greater advantage of older traditions. Austria has thirty-nine or forty steamers, of which seven are iron clads; while Italy has ninety-four steamships, of which twenty-four are iron-clads. These two navies possess in some degree a greater interest to the world than even our own or the French, for they proved their power in actual war. The Austrian sailors were far better than the Italian, although the ships of the latter were finer and more powerful than those of Austria. The Austrian government employs 440 officers and about 14,000 sailors. Though conscription is employed, voluntary enlistment is encouraged and largely used especially in Dalmatia. The term of service required in the Austrian is not so long as in the British navy, it being limited to eight instead of ten years, as with us. The Italian force is larger than that of Austria, for it includes nearly 1300 officers and 15,500 sailors. The number of ships seems small in comparison; but the Italian navy has suffered serious disasters since 1866. Not only were three iron-clads lost at Lissa, but the unsettled state of Italian finance compelled the Government to discontinue last year the construction of four new ironclads which had been commenced. Although the Italian navy includes 24 ironclads, many of those are not much better than gunboats, and very few of them, except those we have mentioned, are in any way remarkable.