

## OUR NAVAL RESOURCES.

(From the *U. S. Army and Navy Journal*.)

There are some fifty odd iron clads of the monitor class laid up, for the most part at League Island, many of which are not worth the cost of their repair. The Secretary of the Navy frankly admits that their usefulness has passed away or is passing away, and he correctly adds: "They make a part of the necessary expenditure of the great war, and the nation must accept the loss, and from its abundant resources must supply the deficiency thus occasioned." This view we trust congress will promptly accept and act upon in their current legislation for the Navy.

For our part, we are satisfied it is wise to throw out of present consideration a large part of our iron-clad Navy, and transfer many if not most of the vessels to the scrap-iron heap. It was created for a special purpose, and it served that purpose very well; contributing at least its due proportion to the suppression of the rebellion. Therefore its present diminished value is no more to be considered than the arsenals left full of small arms at the close of the war, the value of which improved breech-loading weapons had so reduced as to make the Government glad to sell them at one-fourth of their cost value. Precisely in the same spirit these useless monitors should be disposed of at whatever price they will bring in the market, or even at the worst for old iron. For any naval purpose, the entire lot are mere rubbish, and should be so estimated in all efforts towards the maintenance of the naval force required by the exigencies of our commercial position, and the national interests that require watch and protection.

At the same time we have one great advantage that we are able to profit by the vast and continuous experiments in naval as well as in military resources of offence and defence which the great European powers are obliged to make. But to rely wholly on such experiments will not be safe or expedient by any means. Under the inspiration of that great practical genius for invention which characterizes our people, we assuredly have our independent field to be occupied, and from which to make important contributions of inventions calculated to enhance our naval resources. Nevertheless, we repeat, the necessity that such a maritime power as England in her insular position, is under to stimulate and develop every possible means of naval improvement is fortunate for us, and may, if properly utilized, save us large expenditures, very much as the enterprise and sharp spirit of competition on the part of private individuals in this country have saved the Government nearly all the expense of having at its disposition at least three different breech loading rifles of American invention, better than any as yet produced in Europe.

Already the costly, prolonged, and far reaching experiments made in England, at Shoeburyness—that marvellously obstinate battle which is there being fought out between armor and armament—have demonstrated that while there are rigid bounds to the possible thickness and impregnability of armor plating which ships can be made to carry, no such limit has yet been reached in regard to the size of ordnance and projectiles, with their corresponding destructive power. And added to that fact, as we said in our last issue, is the torpedo, that terrible auxiliary force against iron armored vessels of any present construction.

Upon this subject there is no division of sentiment. Our highest naval commanders

our naval constructors, and our military engineers agree as to the important part which torpedo vessels and torpedo contrivances may be confidently expected to take in naval and military operations hereafter.

In the French navy there were no less than fifty iron clad vessels of the most powerful description as yet devised at the outbreak of the Franco Prussian war; with an armament of more than 640 guns of the heaviest calibre; and yet, simply from fear of a thorough torpedo service on the part of the Prussian engineers, that great force, created at an enormous cost, was rendered wholly inactive and as powerless for offence in Prussian waters, as if built of deal boards and armed with fire-engines. And we may add, that these French armor-plated ships although of a high degree of impregnability as a class were also faster than the wooden vessels of the American navy. The English have constructed even a more formidable iron-clad navy than the French, both as to numbers and characters of vessels, and with guns of weightier metal. Many of these ships have attained the speed of fourteen knots an hour, and no expenditure of money has been spared in their construction, yet it is now apparent that not the best of them, afloat or under construction, not even the *Glutton*, would be impregnable in a conflict with ordnance already in use; and there is not one of them that would not be pitifully at the mercy of a readily contrived torpedo boat of comparatively small cost. Hence it would look very much like an absolute demonstration that all this enormous expenditure in England and France upon iron armored vessels, in great part, has been to no material purpose, so far as the future naval warfare between two great powers is concerned, except to develop the resources of artillery and torpedoes.

Happily we are in the condition to profit by this European demonstration and experience, and we shall be grossly culpable if we do not profit both in regard to what we should provide and that which we should avoid. Of course we should not run into any wasteful expenditure in the unnecessary attempt to keep pace with European navies in their extent, but we can never safely consent to be inferior in the ordnance of our vessels, in their speed, and in their general fitness as single ships for the exigencies of modern naval war. At present we are deplorably deficient and inferior in these respects.

In efforts towards the education of our naval officers we have likewise something to imitate. The growing and controlling influence of modern science upon the business of war, makes it imperative that the naval officers' field of knowledge and acquirements should be something very different from that of a Decatur, a Lawrence, a Perry or a Stewart. The school at Annapolis may fill its measure, but it is a cadet school at best, a school for boys, and open to what we have said in connection with all such. It is effective and most valuable as far as it goes, but there is something more needed for naval as well as army officers than mere cadet education. This is comprehended in England; we should at once follow their example; and the cost involved would be trifling. There should be founded either at Annapolis or some convenient naval yard, an advanced class for naval officers of at least three years sea-service, at which they shall be taught all that the most advanced sciences may have to impart that can be of value or bear upon naval operations, and thus serve to keep our officers, as they have always been hitherto, the peers in all things of any naval officers in the world.

In another particular, immediate efforts are exigent. In dry-dock facilities we are absolutely inferior to the appliances of a single private establishment in England, that of the Lairds. And in this connection we hope our Congress will be induced to weigh the report of the present accomplished chief of the Bureau of Yards and Docks who has lately made a survey of foreign naval yards. Our dock resources are dangerously unequal to contingencies, the possibility of which it were folly to overlook or not provide for. The English Admiralty is expending \$30,000,000 in dock yards, and Germany having invested \$9,000,000 in her prudent, economical fashion upon the establishment at Wilhelmshaven, is doing as much more at Kiel. Even the Italians have dock accommodations at Splezzin, far greater than any establishment in the United States.

THE Hon Judge Dunkin's late constituents marked their pleasure at his elevation to the judicial bench, and the services he has rendered the county by a public dinner at Sutton, in the county of Bromo, on Thursday the 8th inst. The Hon. Sir G. E. Cartier, Bart, Minister of Militia and Defence, in reply to the toast of the Ministry delivered the following statesmanslike and patriotic speech:—

"Sir George E. Cartier, on rising to reply, was received with the most unreserved applause. He said he had expected a great deal of kindness in being among them. He expected of course, in coming to the dinner to be surrounded by the British inhabitants of the county of Bromo and adjacent counties, and though not belonging to the same race and religion as the majority of those around him, he expected a good and hearty welcome at their hands. He did not expect, however, that at that festival they would have had the delicate kindness—so to speak—at the moment he was going to respond to the toast, of greeting his ears with the music of a song which he had composed when he was a student at law. Every young man liked to sing, his national song, and nothing could have been more pleasing to him than to hear the song he had composed so long ago now sung as a cordial greeting to him by the people of that county. He would recollect it all the remainder of his life. But coming to the toast with which he had been connected as a member of the Privy Council, he would return, both on account of his colleagues and himself, his most sincere thanks. In doing so he knew there were gentlemen present who did not approve of the policy of his colleagues and himself. Still he was very much obliged to them for having drank the toast in so hearty a manner. He (Sir George) had been alluded to as having been connected with public life for so long a period, and it would be false modesty on his part to say that his career had not met now and then with a certain measure of success. If it had, the credit was not due to himself but to the party to which he belonged; and it was due also to them, the inhabitants of the county of Bromo. The principal cause was in the fact that he had been supported not only by a majority of French Canadians, but by a large proportion of the British inhabitants of the Province of Quebec also. The inhabitants of this Province were not only of different races but of different religions, and no public man could expect true success who did not respect these. Well this was what himself and colleagues had attempted to do, and the result was that not only had har-