

THE GERMAN NAVY.

The very serious revelations which were recently made in the House of Commons by the First Lord of the Admiralty, says the London *Iron*, seem to show that if England were at the present time to be involved in war, it would be found that of all the heavily armor plated vessels which have of late years been added to our ironclad fleet very few would be in a fit condition to go to sea, owing to the dilapidated state of their boilers. Under these circumstances, it may be interesting to our readers to learn the present strength of the German navy, and progress which that rapidly rising nation has made during the last twenty five years in this branch of its armament.

At the commencement of 1818 the Prussian navy merely consisted of one sailing corvette, called the *Amazon*, and two gun boats, while the naval department formed a section of the Engineers of the Guard. Towards the end of 1849, this fleet, if we may call it such, numbered a sailing corvette, two steamers—the *Adler* and the *Elizbeth*, and forty-two gun-boats—forty-five vessels in all armed with ninety seven guns and manned with 1753 sailors and forty eight officers. The *Amazon* carried 34-pounder carronades; the steamers 25 pounder howitzers working on pivots and two 32-pounder guns; the gun boats, one 26 pounder howitzer and a long bronze 24-pounder gun; but some of the smaller ones only carried one gun. These gun boats were propelled either by the aid of sails or oars, it being possible in the latter case to unship the masts at will.

The actual organization of the navy, which had hitherto been supplied from the army, was commenced in 1848, and in the two following years a division of sailors was formed, a school of cadets established on board the *Amazon*, and the fleet was increased by the despatch boats *Undine* and *Salamander*, the brig *Mercury*, and the corvette *Dantzic*. The *Dantzic* was the first large war vessel ever constructed in Prussia. During the succeeding ten years the number of ships steadily increased, until in 1863 the fleet consisted of thirty one steam vessels armed with 164 guns, eight sailing ships carrying 144 guns, and forty gun boats with seventy six guns, forming a total of seventy nine ships of war with an armament of 334 pieces of ordnance. This navy held its own against that of Denmark in the war of 1864, but as the shelling of the vessels with armor plates had already been introduced both in France and England in 1860, when the *Gloire*, the *Warrior*, and the *Black Prince* were built, the Prussian Government, not to be behind the rest of Europe, had determined to strengthen their fleet by the addition of ten armorplated frigates. The first of these, the *Arminius* built by Messrs. Samuda Brothers, of Poplar, was launched in August, 1864. She is an iron ship with a belt of armor $4\frac{1}{2}$ inches thick at the water line, and has two turrets, each containing a pair of bronze guns of $8\frac{1}{2}$ inches bore. She is 197 feet long and 36 feet broad, and has a displacement of 1583 tons. The next one which was built, the *Prince Adalbert* is also only a small turret vessel, having 1477 tons displacement, with a length of 160 feet, and carrying two guns, of $6\frac{1}{2}$ inches diameter of bore, in her turrets and one of $8\frac{1}{2}$ inches diameter in a small battery with which she is provided. All the iron clads

since built are of a much heavier description, having each over 5000 tons displacement, with the exception of the *Hansa* 3500 tons displacement, which was launched in 1873.

The *Preussen*, originally named the *Borussia*, the *Grosser Kurfurst* and the *King Frederick the Great* are all turret vessels about 6600 tons displacement, carrying each four guns of 10 inches diameter in the turrets and two of $6\frac{1}{2}$ inches on deck. They are plated with a belt of 9 inch armor at the water line and 6 inch armor on the sides and are only surpassed in strength of hull by the central battery rams *Kaiser* and *Deutschland*, at present in course of construction at Messrs Samuda Brothers' works. The first of these the *Kaiser* was launched some two months since and is now being completed for sea. These frigates of 7500 tons displacement are 280 feet long and 63 feet broad and carry armor 10 inches thick at the belt and on the battery, but are only armed with guns of the same calibre as the large turret ships. The *King William* is the largest ship of the German navy, being 355 feet long and having a displacement of 9575 tons; but she is only protected with armor 8 inches thick and her guns are only 8 1-4 inches in the bore. As the *Kaiser* and *Deutschland* are not yet ready for sea the effective navy afloat comprises at the present time only ten iron armor, clad frigates, of which five are turret and five broadside vessels and three iron torpedo vessels. Five iron armor clad frigates with all round fire of the *Heracles* type and three iron clad torpedo boats are being constructed.

It will be seen from the above that the Government does not possess a single vessel of the *Devastation* and *Fury* class, either plated with 14 inches thickness of armor, or carrying guns of such a weight as 35 tons, nor have they thought it necessary to build any low freeboard monitors like our iron seagoing vessels of the *Rupert* or *Cyclops* class; but this may be accounted for by the fact of their sea-board being infinitely more limited than our own. Whether the German fleet is in a really effective state and ready to put the sea or not, we are of course unable to say, since we believe no report has been issued on the subject, and we, consequently, have not any means of ascertaining whether the boilers of their ironclads have suffered to anything like the same extent as those of our own ships,

The suggestion of an ex-M P. in the *Times*, whose identity is not very doubtful, that we should ask our colonies to defray the expenses we incur by protecting them by means of our ships, in order that they may be really "self supporting" colonies, seems very like a political bait, which is not likely to be grabbed by either the Earl of Carnarvon or Sir Stafford Northcote. Dutch colonists may feel such payments to constitute "the most natural" link between them and the Netherlands," but we question whether English ones would not regard it as another step, and a very suspicious one, in the process of detachment, begun when we drew upon their own resources in Military matters. When the colonies, now receiving naval protection, ask to pay us, we shall not decline to receive their money, but until then the less we move in the matter the better. Into the question of "extra allowances" for the Navy on tropical stations we need not now enter. It is an altogether different matter.

We learn, from New York papers, that the officers of the Imperial Brazilian Navy emphatically deny the accuracy of the statements respecting the late torpedo war in Paraguay, made by Herr Treuenfeldt at a meeting of the Society of Telegraphic Engineers, and reported in the *Broad Arrow* of 11th April last (p. 453). A Brazilian officer writes that the continuance of the war for a period of four years was due to various causes, and chiefly to the difficulties of communication in a marshy country; but that it is a mistake to suppose that the operations of any portion of the forces on land were paralysed by Herr Treuenfeldt's torpedo arrangements. Many of these torpedoes, with mechanical self acting apparatus, were badly constructed; thirteen of those taken up by the Brazilian Fleet had their powder wet, fourteen others exploded in the midst of the parties that were to have directed them; for although the system, which consisting in floating the torpedo down stream, and firing it at the proper moment by means of a string from a canoe concealed under the bank of the stream, appeared safe enough in theory, it proved very much the contrary in practice; and in not one instance, it is asserted, did the operations arrest the movements of the naval squadrons against whom they were devised.

EXTRACTING A BULLET RECEIVED AT THE BATTLE OF WATERLOO.—The *Sussex Express* states that on Wednesday Dr. Harding, of Walhurst, successfully extracted a French musket bullet from the hand of James Jenner, weighing over three quarters of an ounce, which was firmly imbedded in him at the battle of Waterloo. In spite of the inconvenience arising from the bullet during nearly sixty years the man has worked uninterruptedly as an agricultural labourer in the parish, where he bears an excellent character. He is eighty years of age.

A TRAFALGAR VETERAN.—On Wednesday last week, Captain Gilbert Kennicott, R.N., died at Folkstone in his 87th year. The deceased lost the sight of one eye at the battle of Trafalgar, and was otherwise severely injured. He had been mayor of Folkstone, and had served for many years as one of its magistrates. Captain Gilbert Kennicott served under Collingwood, and received no less than fourteen wounds. His funeral took place at Folkestone Cemetery on Monday.

MANITOBA WHEAT.—Mr. Alexander Adams informs the *Manitoban* that he cut this season for Thomas and Wm. Lang, near Point du Chene, eight acres syle and club wheat which he regards the best he has seen in nineteen years' experience in Ontario. It will yield not less he thinks than forty five bushels to the acre, notwithstanding the grasshopper visitation. The wheat was put in early, thus almost escaping damage from this pest.

HAPPY "CAROLINA" Under this heading a correspondent of an Eastern paper says: "From my observation I am satisfied every dollar paid for taxes in South Carolina runs twenty different risks of being stolen before it gets into the Treasury, and is certain to be stolen after it gets there." Even at 50 per cent. discount on this statement, things must be in a "happy" condition indeed.

London Oct. 13.—The *Times* says that Von Arnim's son has written to the journals denying that his father had any hand in the publication of the Ultramontane pamphlet entitled the 'Revolution from Above,' in which the Foreign Office feared he would publish the missing documents.