

THE DOOM OF THE IRON CLADS.

(New York Times, Aug. 9.)

Between the iron clad ship and the iron-clad man there is a singular resemblance, which bids fair to be carried out by the former like the latter, becoming obsolete. Armor was disused because the penetrating force of projectiles, constantly increasing and calling for thicker plates to resist them rendered such defence practically idle. Now, ships are going through much the same experience that the men at arms did of old. As fast as the plates have been made thicker, guns have been made bigger and more powerful. A few years ago the English *Warrior* was pronounced impregnable; but soon after plates like those that cover her were easily riddled with shot. Then, the *Lord Warden*, then the *Bellerophon* and the *Hercules* passed through the same experience. Finally the *Glatton*, the last and most invulnerable of ships, has been found to be no more exempt from the possibility of penetration. The guns have steadily advanced with the plates, so that at last a thirty five ton gun throws a 700 pound shot propelled by one hundred and ten pounds of powder. We have thus been brought to the point which sagacious engineers, some time back suggested as probable. It is now proposed, that is to say, to abandon armor as a defence for guns, and even to a great extent for ships, and no less an authority than Sir William Armstrong is found among leading advocates of the change.

It is not alone because of the increased perforating power of guns that the change is recommended. The highest class of gun is always very costly, and requires a very costly ship to carry it. Even the thinly armored ship will still, in a general or average way, be far safer from the largest, or any guns, than a ship not plated at all. The coming danger, however, is not from above water but below. The new torpedoes, and especially that known as the "Moline," have undergone great development, and from these destructive engines the heaviest armored ship that floats is no more safe than a New York pilot boat. It is pretty certain that the torpedoes will come into general use. Horrible as they seem, there appears no more logical reason why they should not be used than other implements of war. But iron-clads, from their comparative slowness and unwieldiness, are especially liable to the attack of torpedoes. Hence a return to the old idea of getting lightness and speed, and an abandonment of the futile effort to be invulnerable, is likely to be applied to vessels just as it was once to men, and for very much the same reasons. The general principle is, that all additions to defensive weight must be attended by a diminution of armament and speed, unless the size of the ship be increased in very rapid proportion. According to the new lights, it would seem that a country with a little sea coast and limited merchant marine might find her account in still having a few and very large and powerful vessels to cope with hostile fleets; but powers like the United States or Great Britain are likely to have far less relative need of them. For such powers are recommended much lighter and faster craft than either our own *Decatur* or the English *Warrior*; and there are many naval engineers who now agree with Sir William Armstrong in holding that "swift vessels of iron divided into numerous water tight compartments, with boilers and machinery below the water line, and only very partially

armored, constitute the class of seagoing ships which it would be most prudent to build, under the present prospect of the progress of artillery and the science of attack."

In surveying the march of scientific improvement in its relation to naval warfare, it is undeniable that these countries have the most to congratulate themselves upon which hesitated to embark in large outlays, on armored ships, pending the experiments of the last few years, and have waited to profit by the experiments of others, and put off preparing an iron clad navy until in the actual presence of necessity. Still such a course of economy is very hazardous, and might lead to grave misfortune, and mara-time Powers of the first rank owe it to their own self respect to keep abreast of the world in all matters of naval architecture and engineering. Meanwhile it is tolerably certain that the building of light, swift steamers of the best model, and in compartments, is hardly ever likely to be unwise or superfluous. A monitor may be superseded by the growth and deadly efficacy of torpedoes or other sea monsters, but this is hardly ever likely to be the case with an *Iroquois* or a *Kearsarge*.

The following interesting sketch is given by the *Lindsay Post* :—

"We met at the residence of Mr. John Chisholm here, on Monday last, a namesake of his—a Mr. Hugh Chisholm—who if he lives till next Christmas day, will have completed his 105th year! In conversation with the venerable old gentleman, we ascertained that he was born at Johnstown New York State, on the 25th December, 1767. His father was a native of Scotland, who when the American Revolutionary War broke out, adhered to the British cause, and when the royal party were defeated, came to Canada, and like the other U. E. Loyalists, received a grant of land in the eastern part of Ontario. Mr. Chisholm distinctly remembers many of the stirring events during the latter part of the war of Independence—in particular the surrender of Lord Cornwallis at Yorktown and the recognition by Britain of American nationality. He was then a lad of 16 years of age, for all this occurred in 1783. The old gentleman was a volunteer during the war of 1812-14—we forget in what regiment—but at all events he expressed a very high opinion of Sir Isaac Brock and a very poor one of Sir James Yeo, the British admiral on the lakes at that time. Soon after peace the Canadians heard of Bonaparte's escape from Elba, that he was conquering the world, and that the "tight little isle" was about giving up in despair the task of subduing the hero of Austerlitz and Jena. Mr. Chisholm and a number of the men of Glengarry then determined to cross the ocean and assist in maintaining in the east as they had done in the west, the honor of old England; and before this project could be carried into execution news came that the battle of Waterloo had been fought and that peace once more reigned over Europe. Mr. Chisholm grows animated when talking over these old events. He is a fluent speaker in Gaelic, his native tongue, but has not a very good command of the English. He is still in apparent good health—his eyesight and hearing alone being a little defective. He is now living on a farm of his own on the Severn River in Muskoka or in the neighborhood of it and since his residence there has been in the habit of coming into Lindsay about twice or three times a year.

THREATENED WAR BETWEEN AUSTRIA AND RUSSIA.—A Vienna correspondent considers war between Austria and Russia highly probable in consequence of Russia's oppressive designs, and adds: "It is certain for some reason yet unknown, Austria has determined on strongly fortifying Galicia against the possibility of a Russian attack, and the sum to be spent for the purpose as well as the extent of the projected fortifications, seems to indicate that Austria must have serious grounds for their application. It is almost certain that delegations will grant the credit required seeing that the two governments are agreed in demanding it. Rumors of arms and ammunition and of Russian hostile intentions have been current of late here among all classes of people and in the press. In any case, the discovery of the Pan Slav society its organization and its manner of setting to work, happening just at the moment it became known that Austria was preparing to fortify the frontier most exposed to Russian attack, has caused a sensation here. Until lately it has been generally supposed that the Emperor Francis Joseph's visit to Berlin would be undertaken purely from motives of courtesy, in return for the visit the German Emperor made here last year. Few people believed the visit would have any political significance, and the few who did attach some such meaning to it, supposed that the subject for discussion would be Rome and the election of the present Pope's successor. Austria is one of the four countries which claims the right of veto in the case of a cardinal obnoxious to her being elected. This right has not, I believe been used in this century, but in the present state of church affairs, it may be considered certain that Austria as well as France, Italy and Spain will exercise the right if they see fit. It is supposed here by a few persons, that Bismarck is anxious to make the interests of Austria and Germany also identical in this matter and thus indirectly, through Austria, prevent the election of any Pope specially inimical to Germany. The Hungarian papers declare the approaching meeting of the Emperors is arranged solely to further the ends of the much spoken of triple alliance of Austria, Germany and Italy, the chief object of which will be to hold Russia in check. They say that the round of visits between the members of the three reigning families will be completed by the meeting of Victor Emanuel and this Emperor, next September.—U.S. Army and Navy Journal.

The demand for iron ships in Great Britain accompanied by a revival of commerce has led to some results worthy of notice. Pig iron has risen \$7 to \$10 a ton and rails and sheet iron have advanced \$15 to \$20 per ton. The wages of the iron workers have risen ten per cent., while their hours for work have come down from ten to nine. These changes, it is noticed, are equivalent to a rise of 20 per cent. in the cost of labor. In consequence of these important changes we learn from the English reports that the cost of constructing an improved propeller has risen within a year from \$135 to \$155 a ton, and is still rising. The Clyde builders have been compelled to open mines in Spain and Norway. These facts go far to reduce the discrimination against builders in the United States, and if Congress would remit the duties on ships, building materials and other taxes now imposed, the ship builders would have an opportunity to carry on their business on a more extended scale than ever.