It must be recollected that the problem those builders had to solve was a far more difficult one than presents itself to the consideration of the Naval Architects of the present day inasmuch as the vessel had to be built to *sail* and fight, whereas now-a-days she has only to use steam power to do as she pleases (theoretically at least) with the element in which her life is to be passed.

Under the old system we had manageable ships, they did not capsize in a gale, go ashore in a dead calm, or roll so fearfully in a sea-way as to prevent the possibility of movement on board.

The vessels of this class will we fear be useless in a heavy sea and their efficiency in action doubtful.

The *Thunderer*, an ironclad ocean cruiser of the same type as the *Devastation*, was successfully launched at Pembroke Dock yard last Monday. Although she was commenced in 1869, the suspicions as to the utility of this class of vessel and of her stability gained such strength that it was determined to delay the construction of the *Thunderer* until the *Devastation* had been completed and her properties fairly tested. The success of the last mentioned vessel was such, however, as, in the opinion of the authorities, fully justified them in proceeding with the sister ship. During her construction, committees have sat upon her design and compelled alterations to be made, while from the day she was first laid upon the stocks her peculiarities have given rise to many debates in the House of Commons. She is still a monitor in every respect, constructed upon the principle of the *Glatton* and the American monitors, with certain differences, which give her a special character. Thus, instead of having as low a freeboard as possible, a heighth of four feet six inches has been allotted to the hull above the water line; and instead of being constructed upon as small a scale as possible she has been built on a scale sufficient to enable her to carry the unprecedented armament of four 35 ton guns, admirably mounted upon Captain Scott's gun-carriage with the capacity of storing during a voyage the extraordinary supply of 1750 tons of coal. With such capabilities as these she has a burthen of 4500 tons, a length of 285 feet, and an extreme breath of 62½ feet; and large as these proportions are, one of the few defects the Committee of Ships' Designs find in her is that she is not large enough.

Carrying as she does an overwhelming armament, protected as she is by iron plating of from 12 to 14in. thick, and stable as she is reported to be upon competent authority, the *Thunderer* fully justifies Sir Spencer Robinson's remark upon ships of this class. that "in proof of the constructor's department having exercised unusual forethought, it is only necessary to say that our most recent and most powerful ironclads carry not only more powerful artillery, but 9 inch armour where our rivals carry 7 or 8in., and that no naval Power has ships approaching the combination of armour plating heavy guns, speed, and sea-going qualities possessed by the *Devastation* type." The Committee of Ships' Designs, too, in considering the qualities of this class of vessels, give it their strong approval, but they considered that such ships should be larger, and plated with heavier armour; and at the same time recommended the addition of the superstructure which the Admiralty thought fit to adopt. In fact, their most forcible objection applies to the height of the bow, which is only 9 ft. out of the water, and they recommend, if actual trial proves this height to be insufficient, that the forecastle should be raised to the necessary level.

With all her weights on board, the *Thunderer* is expected to draw about 25 ft. to 26 ft., and her freeboard will then be 4 ft. 6 in. She is propelled by engines of 800 nominal horse-power, but guaranteed to work up to 5000 horse power. As she is to rely upon steam alone, and is totally unprovided with masts or sails, she is provided with two distinct sets of engines, connected with twin screws, and capable of acting independently of each other. The object of this arrangement is that if one of the engines is disabled, the ship will not be left without any means of motion beyond the caprice of the waves. Perhaps one of the most remarkable features of this wonderful vessel is its capacity for stowing away coal. It can carry more than twice the quantity of the largest of our ironclads, being able to provide itself with a sufficient consumption for twelve days, or as much as 1750 tons.

The ceremony of christening was gracefully performed by Mrs. Meyrick, of Bush House. Owing to the prow projecting from the stem, a special contrivance was fitted for breaking the bottle. The cords suspending the weights over the dog shores were cut by Mrs. Meyrick with a chisel and mallet. The chisel and mallet, as well as the tray which contained them, are masterpieces of fine workmanship, and reflect credit on the art workmen of the establishment. Inside this tray was a fine picture of the ship, with the following leading particulars respecting her:—"Her Majesty's ship *Thunderer*, twin screw armour-plated turret-ship, named and launched at Pembroke Yard, the 25th of March, 1872, by Mrs. Meyrick. Armament, four 35-ton guns; engines, 5,600 horse-power, indicative, length between perpendiculars, 285 ft.; breadth, extreme, 62 ft. 3 in.; depth in hold, 18 ft.; burden in tons, 4407."

It may be interesting to know the view taken of this vessel by Mr. Ericssen, the famous designer of monitors. In a letter which he wrote from New York, in February, 1870, criticising the proposal of Mr. Robeson, the Secretary of the United States Navy, as interpreted by the English press, he maintains that "while the security of the maritime cities and dockyards of the United States against foreign aggression has of late years been deemed assured, the means thus relied upon have suddenly lost their potency." For, he adds, "Mr. Reed is now building Monitors, carrying the full thickness of solid armour possible, by adopting the turret and abandoning freeboard and sails. The *Devastation* and *Thunderer*," he continues, "may steam up the Hudson in spite of our batteries and our monitors, and dictate terms off Castle Garden." The *Times* observe, "This is strong language for an American, apparently unaware that Mr. Ericssen is a Swede.

ANTICOSTI.

From the position of this island, situate in the Gulf of the St. Lawrence, and the South-west point of which is about fifty miles from Gaspe Basin, and twenty five miles from Mingan on the north, it is astonishing, considering the short distances from both mainlands, that it should remain a desolate waste. It extends 130 miles, and it contains 4,200 square miles of earth, rock and lake, the former, in many places, being equal for vegetable products, to land on either shore. During the summer, it gives the marine hunter as good a chance to make money from its sea harvest, as he could obtain from any fishing or hunting grounds on either the north or the south coasts. It occurs to us that Anticosti as a place of settlement for sea-faring people—has been rejected by the hardy Acadians who reside in more desolate localities—and for what reason?—not that there is any lack of material on the fishing-grounds in the vicinity of the island in summer, nor has it lost its local reputation as a hunting-ground during winter—but because these people have not had sufficient knowledge of the climate and the natural advantages of the island. The geographical position of Heath Point, Anticosti, is just 100 miles north of the Magdalen group, which, as sea islands, are noted for their agricultural products. The Island of Anticosti is however, not to be supposed to equal any of the latter group in vegetation; on account of isolation its climate is variable, and appears to belong to itself. But we question, whether, after studied observation for one year on any portion of the South Coast, that its climate will be found to differ greatly from any locality situate on on either shore of the St Lawrence, between that and Quebec. Mr. Julian, at one time keeper of the lighthouse at Heath Point who lived on Anticosti long enough to bring up a large family—informed the writer that from the first spring of his residence at that point, he annually worked at and extended a garden in the vicinity of the lighthouse, from which he obtained sufficient potatoes, cabbages and other vegetables of a hardy nature for kitchen use to supply his family until the return of the crop of the following year. In a line 138 miles north-west from the spot where an artificial garden was made at Heath Point, lies another neatly fenced in sandy patch, belonging to the Hudson Bay Co. at Mingan, where potatoes and other vegetables are annually produced. During the writer's visit to Mingan, this garden was productive to an astonishing degree, a result no doubt, brought about by proper manuring and the determination of Mr. Peter McKenzie, then in charge, to carry out the established rules of cultivation. We believe this is the most northern locality where anything horticultural has been attempted.

La Liberté of Paris announces that the committee of artillery has declared at length as the condemnation of the French field artillery. It has reported to the Minister of War that this condemnation, already pronounced by the opinion of the Army, has been ratified by experience; that the French artillery is no longer on a level with the progress made by other nations and that all the efforts which can be made for its improvement would afford only insufficient and for that reason dangerous palliatives; and that it is necessary to adopt a system of artillery entirely new; the guns to be breech-loaders. As to the material to be used it will undoubtedly be steel, since we learn from the American report on the Paris Exposition that even in 1867, the opinion of French officers had settled upon this material, though no examples of it were presented in the Exposition. The report of the committee was a necessary consequence of the late war, in which the lesson of the inefficiency of its artilley service was not the least notable of the many France received—*Army and Navy Journal.*

A quiet man rang a door bell one night. 'Is the gentleman in?' he asked of the servant. 'I don't know. Did you wish to see him particularly?' 'Oh, no! I merely wanted to tell him his house is on fire.'