

Scientific American.

ESTABLISHED 1845.

MUNN & CO., Editors and Proprietors.

PUBLISHED WEEKLY AT

No. 361 BROADWAY, NEW YORK.

O. D. MUNN.

A. E. BEACH.

TERMS FOR THE SCIENTIFIC AMERICAN.

One copy, one year, for the U. S., Canada or Mexico. \$3 00
One copy, six months, for the U. S., Canada or Mexico. 1 50
One copy, one year, to any foreign country belonging to Postal Union. 4 00

The Scientific American Supplement

is a distinct paper from the SCIENTIFIC AMERICAN. THE SUPPLEMENT is issued weekly. Every number contains 16 octavo pages, uniform in size with SCIENTIFIC AMERICAN. Terms of subscription for SUPPLEMENT, \$5.00 a year, for U. S., Canada or Mexico. \$6.00 a year to foreign countries belonging to the Postal Union. Single copies, 10 cents. Sold by all newsdealers throughout the country. See prospectus last page.

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MUNN & CO., Publishers, 361 Broadway, New York.

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NEW YORK, SATURDAY, APRIL 25, 1891.

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THE UNITED STATES' POSITION IN A DEFENSIVE WAR.

The recent diplomatic correspondence between the United States and Italian governments, in connection with the New Orleans riot, if such term may be applied to that outbreak, has awakened attention to the relative power of the different navies of the world. While there has been no well-founded apprehension that war between this country and Italy was imminent, the suggestion of a possibility of the menacing presence of Italian war ships in these waters has reminded us forcibly of our weakness at sea and on the coasts. To-day the three thousand miles of ocean are our best protection against European powers. They operate now, as they did in the Revolution, to make an energetic defense possible with apparently inadequate means. Fortunately the supposition of war at the present time or in the near future is entirely problematical. The necessity for actual measures of defense is no greater now than at any recent time.

In establishing a navy the United States has begun with the construction of unarmored cruisers, protected partly by deflecting steel decks and coal bunkers. Great success has been attained with these, and their speed and general reliability have been adequately proved. No country has surpassed them. The next step is in the direction of armored fighting ships.

The United States high-speed protected cruiser No. 12, now building, is the representative of the connecting link between the ships of the so-called White Squadron and the armored line-of-battle ships alluded to. It is to be 400 feet long, with 21 knots sustained speed and 20,000 sustained horse power. It can carry 2,000 tons of coal, disposed in part in lateral bunkers so as to protect the vital portions of the ship as far as possible. This amount of coal will keep the ship at sea for 109 days, steaming at a speed of 10 knots. Such a ship is a commerce destroyer, and would do immense damage to an enemy's shipping in a single cruise. Three line-of-battle ships, with heavy armor, are also in process of construction by the United States.

The efficiency and value in war of the heavily armored fighting ship of to-day is practically unknown. In the great navies each vessel has its rating. The armament, armor, and speed are the controlling factors to determine her position, offensive and defensive. But to obtain a more practical idea of relative capabilities, trial maneuvers have been instituted by different governments. While one object of these trials has been to try the defensive powers of coast batteries and harbor defense ships, the sea-going qualities of the squadrons have been subjected to the most exacting tests—to tests assimilated to the conditions of actual war.

The result of these operations has been to show that the war ship of the navies of the day, whose value in action is unproved, as a sea-going vessel is seriously wanting. In the English autumn maneuvers, ship after ship has broken down, boilers have leaked, difficulties in coaling have been experienced, and speed has universally fallen far below the rating deduced from speed trials.

It is this condition of things that emphasizes the value of the protection offered by the ocean that intervenes between America and Europe. A modern ship of war, in coming across the water, would seriously deplete its coal bunkers. When it reached our coast, a comparatively short range of travel would be left, especially if high speed were kept up on the voyage. There would also be a good chance of its machinery breaking down.

The coast line of battle ship illustrated in the present issue shows what the United States is doing to be prepared for the contingency of the approach of a hostile fleet. These vessels are the most formidable of any that the government has yet contracted for. Their tonnage and armor bring them in direct comparison with the more powerful vessels of foreign nations. While the dimensions of the ship, of her armor and armament, are impressive, they lose by comparison with the great war ships Italia and Lepanto of the Italian navy. These sister ships are 400 feet 6 inches long, and displace 13,480 tons. The armor in places is 21 inches thick. The side armor is 18 inches thick. The armor alone weighs nearly 3,000 tons.

The guns include four 110 ton guns of 17½ inch caliber, eight 6 inch guns, and a number of smaller rapid-firing pieces. The appearance of the ships is well shown in a cut published in our issue of May 26, 1888.

Again, the status of our new coast defense ships in the matter of armor is indicated by the fact that armor 18 inches and more in thickness is carried by 19 English, 13 French, 10 Italian and 7 Russian ships. The Duilio and Dandolo of the Italian navy, each of 10,960 tons displacement, and each including in its armament four 17¼ inch rifles, are good representatives of foreign practice. It is with such ships as these that our new vessels might be called upon to cope.

But figures alone are deceptive. Immense advances in naval engineering have been made here and abroad during the last few years. Eighteen inch armor of nickel steel is far superior to the plates supplied to the ships now in commission. Two to four inches advantage could safely be allowed in rating the armor of the new ships. The speed will undoubtedly be far better,

comparatively, than in the older ships, although it may be rated as less. Thus the Italia succeeded in attaining 17.8 knots on her speed trial. But if put in commission, it would not be surprising if a falling off of several knots were to ensue; at least this is the lesson of every practical trial of the great navies during a number of years.

Again, modern ammunition is far in advance of the work of even five years ago. The value of the largest Armstrong guns, such as are used on the Italian ships cited, is utterly problematical. The tendency now is to abandon the larger calibers and endeavor to secure sufficiently good results with smaller pieces. In the shock of action, heated by the combustion of their charges, with every vent rapidly scored by escaping portions of the charge, the large built-up guns rapidly deteriorate. It is more than probable that the modern 13 inch guns of the American ships would excel in fighting power the heavier pieces of the Italian ships.

The shallowness of our harbors and the narrowness of the entrances thereto protect our cities and coast to some extent. The Italia and Lepanto draw 30 feet, and could not well get past Sandy Hook at the entrance of New York Harbor, many miles from the city. Theoretically they might lie offshore and send shells into New York, but whether they could do so with any practical results is doubtful. A large number of shots would be required to do extensive damage, and it is uncertain how many discharges a 17½ inch gun may stand before disablement. It would not do to send a ship across to fire in a bombardment a comparatively small number of shots before being reduced to the smaller pieces and machine guns for protection, its career as an offensive element thus terminating.

SAMUEL PLIMSOLL.

Samuel Plimsoll, who is known in England as "the sailors' friend," recently arrived in this country. He is prosecuting an inquiry into the business of transporting live cattle across the ocean. In a letter dated in New York and recently published in the London Times, Mr. Plimsoll claims that a certain class of ship owners are so indifferent to the lives of the men that they load their vessels with three tiers of cattle. First the "tween" deck is loaded from end to end and from one side to the other as close as the animals can stand. The main deck is similarly loaded with cattle which cannot lie down, so close are they, and lastly the upper deck is also loaded in the same way.

Mr. Plimsoll claims that a vessel thus loaded becomes "crank," rolls badly and is apt to become unmanageable. "I feared," he said, "such shocking recklessness would be discredited, and so besides inquiring of many people, obtained written testimony." He closes his letter to the Times as follows: "It is not quite a year since the Erin sailed, cattle-laden, from this port with 74 men on board, and never again heard from. I went down to the far east of London to see the poor widows and fatherless children of that portion of the crew which lived at Tidal Basin E, and shall never forget the anguish of bereavement and the misery of poverty I then saw."

Mr. Plimsoll also instances the case of the Thanemore, another cattle-laden ship which has recently been given up as lost, as sustaining his theory that such methods of transportation are dangerous to life and property.

This agitation attracts attention because of Mr. Plimsoll's past record. He originated a movement for the better protection of the lives of seamen and battled for it long and earnestly until Parliament passed an amendment to the Merchant Shipping Acts which became law in August, 1876. This amendment provides for the detection of unseaworthy vessels, is aimed to prevent overloading, provides that all deck cargoes shall be included in the tonnage, and that grain cargoes shall not be carried loose in bulk, but shall be kept from shifting, either by boards or bulkheads or by being carried in sacks. The latter object was further secured by the Act of 1880.

Mr. Plimsoll amassed a large fortune as a coal merchant and he has used his means liberally and devoted much time to his efforts for the protection of the men who go down to the sea in ships. He sought a seat in Parliament in order to further his reform, and was elected in 1868 and re-elected in 1872. Both Mr. and Mrs. Plimsoll were fond of the sea, and on one occasion they went from London to Hull on the Yorkshire coast, a voyage which skirts the most dangerous portions of the British shores. The steamer upon which they took passage seems to have been greatly overloaded, and a very severe storm was encountered, the vessel, crew and passengers being in great peril. In gratitude for their escape Mr. and Mrs. Plimsoll resolved to undertake the agitation which resulted in one of the greatest reforms of modern times, and which he still continues. Mr. Plimsoll's new crusade meets with very vigorous opposition. His opponents claim that the carrying of live cattle is not more dangerous than the carrying of other cargo, notably cotton. The business, however, has been made the subject of special inquiry by the department committee of the British Department of Agriculture, while Mr. Plimsoll is making exhaustive