

Scientific American.

ESTABLISHED 1845

MUNN & CO., EDITORS AND PROPRIETORS.

PUBLISHED WEEKLY AT

No. 361 BROADWAY, NEW YORK.

TERMS FOR THE SCIENTIFIC AMERICAN.

(Established 1845.)

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, postage prepaid, £1 1s. 5d. 4.00
 Remit by postal or express money order, or by bank draft or check.
 MUNN & CO., 361 Broadway, corner Franklin Street, New York.

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(Established 1876)

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NEW YORK, SATURDAY, JUNE 4, 1898.

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THE ARMORED CRUISER IN THE NAVIES OF THE WORLD.

The modern warship is the most cosmopolitan product of this essentially cosmopolitan age. Except for a few minor characteristics, which may temporarily distinguish the ships of one nation from those of the rest of the world, there are no broad international differences in naval construction such as we find in the other great branches of industry.

The reason is not far to seek. It is to be found in the fact that each great naval power realizes that it must not only have many ships, but the ships must be the very best possible. The question of naval efficiency is a question of national life and death, and no sentimental objections are now allowed for a moment to prevent a nation from imitating its neighbors and rival in the construction of the latest types of ships, guns and armor. Occasionally, in former years, a nation held on to some inferior and obsolete practice rather than follow the lead of its more progressive rivals, as when some years ago England continued to build muzzle-loading guns when other nations were adopting the breech-loader, and France at a later day refused for some years to follow England's example in the building of rapid-fire weapons; but such conservatism has always cost the nations dearly and has resulted in the conveyance of much costly material to the scrap heap.

Hence it has come to pass that the publication of each year's naval programmes of construction is an event looked for with profound interest by naval constructors, inasmuch as these programmes show conclusively what is the majority opinion as regards the best types of ships to build.

We have taken occasion to read carefully through the lists of the world's navies and note what is the general character of the ships which have lately been built or are under construction or are authorized to be built, and we are impressed with the fact that the coming warship will be of a type between the battleship and the swift armored cruiser, a vessel with heavy battery, medium armor protection, high speed and exceptionally large coal supply.

Two tendencies are noticeable, each of which we as a nation should take special note of. The first is the disposition to build armored cruisers instead of the protected type, the other is the very high speed which is being given to battleships, a speed which in many cases gives to the battleship all the advantages claimed for the armored cruiser.

The following is a statement of the armored cruisers built or building in each navy. We have included no ship of less than 18 knots speed, and it will be noticed that it is only the older ships that are as slow as this; the later cruisers being of 20 knots speed or over. In the British navy there are seven armored cruisers of the Australia type, of 5,600 tons and over 18 knots speed, with a belt of 10-inch armor, and an armament of two 9-2-inch and ten 6-inch rapid-fire guns. The normal coal capacity is 900 tons. There are also under construction four armored cruisers of 12,000 tons, 21 knots, 800 tons coal supply; they will have a 6-inch belt and 6-inch protection for the guns, and an armament of two 9-2-inch and twelve 6-inch rapid-fire guns.

The Argentine Republic possesses two armored cruisers, the "Garibaldi" and the "San Martino," which are sister ships to the "Christobal Colon," of the Spanish navy. They are vessels of 6,840 tons and 20 knots speed, with a 6-inch belt and citadel and an armament of two 10-inch, ten 6-inch, and six 4-7-inch rapid-firers.

Austria-Hungary possesses the "Kaiserin Maria Theresia": 5,270 tons, 19 knots, 4-inch belt, and armament of two 9-4, and eight 5-9 rapid-firers. She is also constructing an armored cruiser of 6,100 tons, 10½-inch belt, and 20 knots speed, to carry the same armament as the vessel just mentioned.

Chile possesses in the "Esmeralda" a remarkable vessel of 7,020 tons, which to a 6-inch belt and extremely powerful battery of two 8-inch rapid-firers, sixteen 6-inch and eight 3-inch rapid-firers adds the high speed of 23 knots an hour. Such a ship, preying upon an enemy's commerce, would prove to be the "Alabama" of her day. Another powerful armored cruiser is being built for this enterprising republic by the Armstrongs, the firm that built the "Esmeralda." This is the "O'Higgins," of which we have lately heard so much. She is of 8,500 tons displacement and 22 knots speed and will carry 1,500 tons of coal. Her belt is 7 inches thick and she carries an armament of four 8-inch rapid-firers, ten 6-inch, four 4-7-inch and ten 3-inch rapid-firers. The 8-inch rapid-firer can fire from three to four shots per minute, so these guns could discharge as many shells per minute as a dozen 8-inch slow-fire guns.

France is already well provided with armored cruisers, and her new ships are to be nearly all of the armored type. The "Charner," "Bruix" and "Treville," of about 4,800 tons and 18½ knots speed, carry a 3½-inch belt and an armament of two 7-6-inch and six 5-5-inch rapid-fire guns. The "Pothuau," 5,360 tons, 19½ knots, is armed with two 7-6-inch and ten 5-5-inch guns and has a 3½-inch belt. The "Dupuy de Lome," 6,406 tons, 20 knots speed, is completely

sheathed from stem to stern and up to the top deck with 4 inches of steel. Her armament is similar to that of the "Bruix." It is in new construction, however, that the French are showing the high value they put upon the armored cruiser type. No less than nine of these vessels, the smallest of which is of 7,700 tons displacement and none of less than 21 knots speed, are either building or proposed. The "Dupleix" and "Kléber," each of 7,700 tons and 21 knots and will carry a 6-inch belt. They will have a battery of ten 6-4-inch rapid-fire guns of great power. The six great ships of the Dupetit Thouars class will be of 9,517 tons and 21 knots speed. They will be armed with two 7-6-inch, eight 6-4-inch and four 3-9-inch rapid-fire guns. They can carry a normal supply of 1,020 tons of coal, in addition to a supply of liquid fuel. Not content with this, the French have laid down a large armored vessel of 11,270 tons, the "Jeanne d'Arc," which is to steam at 23 knots and carry a normal coal supply of 1,400 tons. The armament will consist of two 7-6, eight 5-5 and twelve 3-9 rapid-fire guns, and she will have a 6-inch belt.

Germany is building the "Fürst Bismarck," of 10,650 tons and 19 knots. She is to have a 7½-inch belt and carry four 9-4, twelve 5-9 and ten 3-4 guns, all, including the 9-4-inch, to be rapid-firers.

Italy possesses two armored cruisers of 6,500 tons and 20 knots speed, which carry a 6-inch belt and an armament of twelve 6-inch and six 4-7-inch rapid-firers; one armored cruiser of 4,583 tons and 19 knots; and she is building two sister ships to the "Christobal Colon" (Spanish), which was constructed in Italy.

Japan is also in the fashion in the construction of two 9,750-ton armored cruisers of 21½ knots speed and a third of 9,436 tons and 21½ knots. The armament of each will consist of four 8-inch rapid-firers, fourteen 6-inch and twelve 3-inch rapid-firers.

It was Russia who a few years ago started the construction of huge armored cruisers by building the "Rurik," of 10,923 tons and 18 knots speed. She has a 10-inch belt and an armament of four 8-inch, sixteen 6-inch and six 4-7-inch guns, all slow-firers, with a maximum coal supply of 2,000 tons. She followed this with the "Rossia," 12,130 tons, 10-inch belt, 20 knots speed and a similar armament, except that it consists of rapid-firers. She also possesses the "Pamyat Azova," 6,000 tons, 9-inch belt and 18½ knots speed. Two others are authorized, one of 7,800 tons and 20 knots and the other of 12,336 tons and 21 knots speed, and it is reported that the fast 6,000-ton cruiser to be built by the Cramps is to be of the armored type.

Spain, our present antagonist, is relatively by far the strongest in this type of ship of all the nations. She has either built or just about completed nine large and fast armored ships, including the "Carlos V." of 9,235 tons, 2-inch belt, 20 knots speed and armament of two 11-inch, eight 5-5-inch, four 3-9-inch rapid-fire guns; two of the "Christobal Colon" type, of 6,840 tons, 20 knots speed, 6-inch belt and citadel, and armament of two 10-inch, ten 6-inch and six 4-7-inch rapid-firers; and six of the "Vizcaya" type, of 7,000 tons, 20 knots speed, 12-inch belt and armament of two 11-inch and ten 5-5-inch rapid-fire guns.

In general it may be said that the fleets of armored cruisers in the navies of the world, especially those recently laid down or authorized, are characterized by high speed, exceptionally heavy armament, in which the rapid-firer predominates, and great coal carrying capacity. It is evident that this is to be the prevailing type of ship in the cruiser class. The decision to build these vessels, and to build them in large numbers, is evidently unanimous as far as the foreign naval powers, great and small, are concerned. As we have already pointed out, our present building program makes no provision whatever for this type, and unless the defect is remedied at an early date, we are liable to be confronted by a fleet of swift hostile warships, against which we would be powerless to act.

At the same time, prudence suggests that we await the actual conflict between our ships and those of Spain before the supplementary naval bill is passed. The experience gained in such a battle will be of untold value in determining the relative value of the various types of vessels, and the country will be in a far better position to judge of its need a few weeks hence than it is just at present. The armored cruiser, it almost goes without saying, is our most pressing need, and we are glad to note that a bill is now before Congress calling for the construction of several of this type. The same bill, however, calls for a further authorization of torpedo boats and destroyers. The exact value of these small craft has yet to be determined, and this can only be done in the test of a naval fight.

OBSTACLES TO SOUTH AMERICAN TRADE.

We are in receipt of a letter from a correspondent in Tocopilla, Chile, Mr. Juan E. Franz, who complains of the fact that although it is possible to send by postal order any small sums from the Chilean post offices to most of the countries in Europe, "facilities which are very favorable to business," if it is desired to remit small sums to the United States it is necessary either to buy drafts on England or pay excessive premiums for