

THE CENTURY VASE AT THE FAIR.

This most elaborate and highly finished representation of American art work in silver, valued at \$25,000, and designed to commemorate the completion of the first century of the republic, forms a portion of the exhibit of the Gorham Manufacturing Company at the Columbian Exposition. Their display is in a pavilion at the beginning of the United States section, in the Manufactures and Fine Arts building, its main entrance being on the circle bounded by the four countries, the United States, Germany, England, and France. The vase is 4 feet 2 inches high, and its base is 5 feet 4 inches long, the weight of silver in it being 2,000 ounces. The pioneer and Indian on the front of the oval base suggest the first phase of life here, and at the extremities of the oval are festoons of native flowers. Above, on the left, is represented the genius of war, and on the right a lion led by children. The front panel of the vase, rising from the plinth, represents Genius ready to inscribe on the tablet the progress made in literature, science, etc., while surmounting the vase are four figures, the three subordinate ones representing Europe, Asia, and Africa, while the central and highest shows America inviting all nations to unite with her in an international exposition.



THE WORLD'S COLUMBIAN EXPOSITION—THE CENTURY VASE.

THE SANTA MARIA AT THE FAIR.

The principal vessel of the Columbus caravels, moored at her pier alongside of the Casino, has attracted constant attention ever since she became practically a portion of the great World's Columbian Exposition at Chicago. Crowds of visitors go aboard of the little craft every day, but the number of such visitors is small compared with the far greater number of those who simply content themselves with an outside view, on account of the multitude of other attractions which the Fair presents. In our view the Casino is seen nearest the vessel, the Music Hall beyond, and the statue of the Republic on the left.

The arrival at New York of the vessels built to faithfully represent the original squadron of Columbus, and the great naval parade and review in honor of the event, were fully described and illustrated in the SCIENTIFIC AMERICAN of April 29 and May 6. The Santa Maria, it will be remembered, is the largest of the three vessels of the squadron, but her greatest length is only 75 feet, width 23 feet, and burden from 120 to 130 tons. One would be counted a venturesome navigator who started in these days to cross the ocean in such a craft, and it is the vividness with which this idea presents itself to a visitor familiar with modern facilities for travel that constitutes the never-tiring interest the little craft has for so many thousands of sightseers.

The New Torpedo Boat Ericsson.

The first steel vessel ever built on the Mississippi is now nearly ready for launching, and her builders, the Iowa Iron Works, of Dubuque, propose to invite the governors of the States in the Mississippi Valley to be present. The Ericsson is guaranteed to have the highest speed of

any vessel of our navy—24 knots. The Ericsson was built according to the act of June 30, 1890, and the contract price was \$125,000. The motive power is derived from two coil or tubulous boilers, and is transmitted through two screws, one slightly in advance of the other, though not overlapping. The engines are two vertical, inverted, four-cylinder, quadru-

ple-expansion, direct acting engines. The propelling and circulating pump engines have a combined horse power of 1,800. The torpedo tubes are for the new 18-inch Whitehead torpedoes.

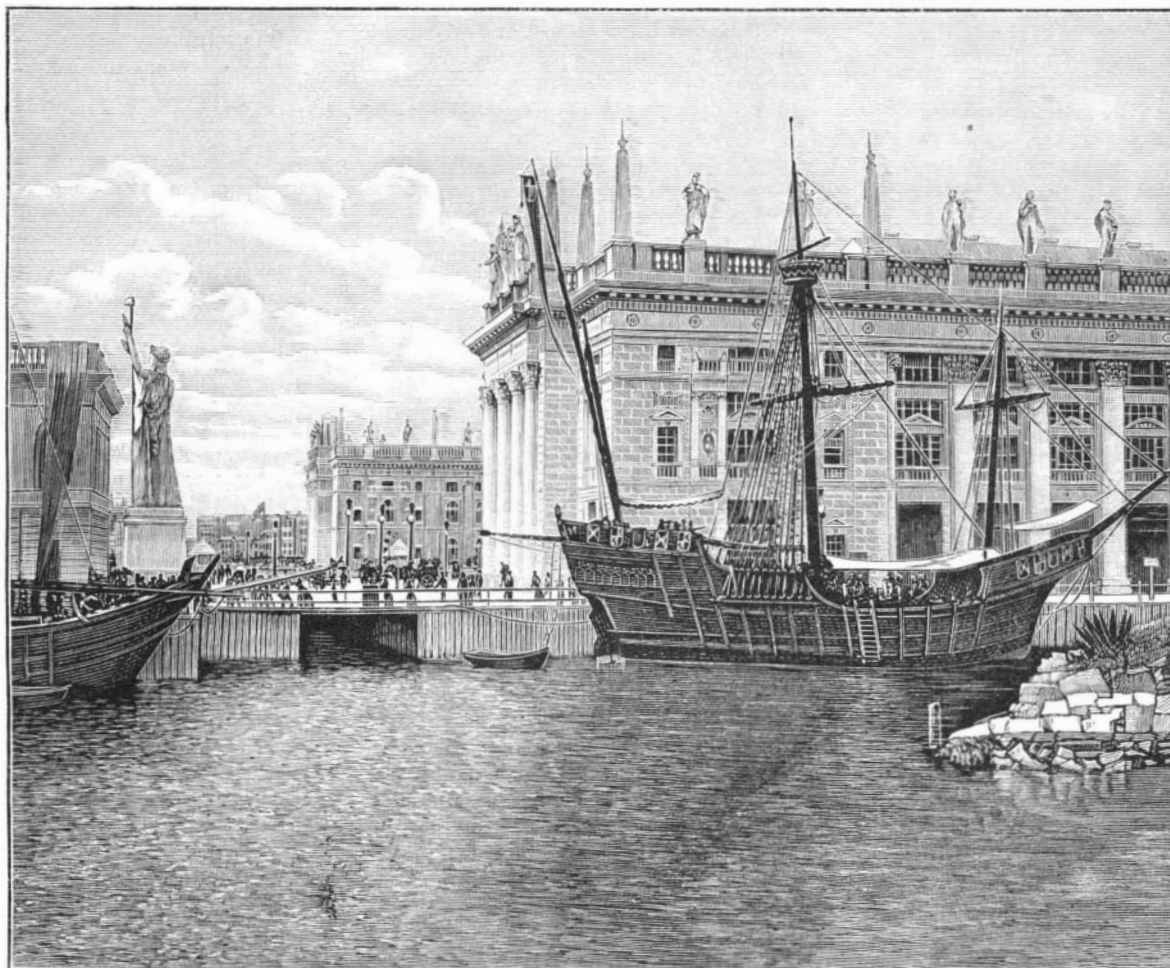
The Wilmot & Hobbs Manufacturing Company, of Bridgeport, Conn., has recently been awarded an important government contract for their cold-rolled steel for especially difficult stamped and drawn work. This steel, of which the company is now making a specialty, had been previously submitted to severe competitive tests, and is said to have well demonstrated its superiority.

time to go into the question of infringement under the present circumstances of the patent. Moreover, the exceptional control of an entire art enjoyed by the Bell Company for seventeen years, because of the unprecedented scope of the Bell patent, which would have protected it against the use of the Berliner invention had it been in other hands, would probably be deemed by any court of equity a good reason for turning a deaf ear to any plea of urgency on the part of the Bell Company in dealing with an alleged infringer.

It is understood that testimony is now being taken in the government suit, and we have no doubt that any unnecessary delay in pushing the case to a conclusion will be chargeable to the Department of Justice rather than to the defendant.

The Berliner Telephone Patent.

Not much has been heard recently, says the *Electrical Engineer*, of the government suit to annul the Berliner microphone patent. It is quite certain, however, that the case will not run on undetermined for seven or eight years, like the old and still unsettled suit to cancel the Bell patent of 1876. It is evident that the American Bell Telephone Company has a stronger motive for seeking dispatch than for securing delay this time. The Berliner patent is on a very different footing from that occupied by the Bell patent when it was attacked by the Department of Justice. That patent had been very thoroughly adjudicated and upheld by the courts, and the government suit went harmlessly on its leisurely course during the remaining life of the patent (and still goes on, although the patent is some months dead), forming no obstacle to the issuance of injunctions against infringers. But the Berliner patent, which on its face seems fundamental in respect to nearly all existing forms of microphone transmitters, has not yet had the judgment of any court as to its scope or validity. In its first ordeal it is put upon its defense under the attack of the Attorney-General. It is, therefore, not at all likely that its owners, the American Bell Telephone Company, will institute any infringement suits until it knows whether or not it has a sound patent. A court would hardly take



THE WORLD'S COLUMBIAN EXPOSITION—THE SHIP OF COLUMBUS, THE SANTA MARIA, AT HER DESTINATION.

THE decision of Judge Coxe filed July 18, 1893, affirming the expiration of the Faure storage battery patent in the United States, will not, says *Electricity*, make the manufacture of this type of accumulator in this country entirely free, as the courts have already construed the scope of this patent to include only the application of the active materials in the form of paste, paint or cement, while the Brush patent, which is yet in force, is broader and covers all forms of active material applied to the plates except where it is in the form of paint, paste or cement, or is formed from the material of the plate itself, as in the Plante type of cell. The decision, however, opens a field in this line of business in which considerable progress may be expected, and it will doubtless be taken advantage of by the manufacturers against whom injunctions have been procured by the company which controlled the Faure patent.