Scientific American.

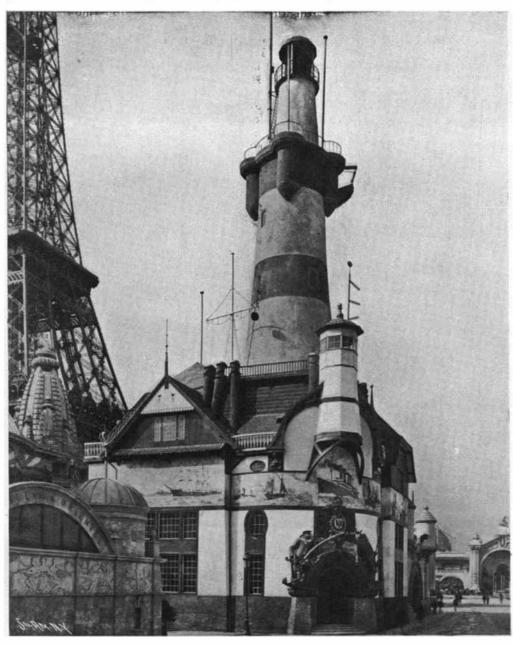
PARIS EXPOSITION—BUILDING OF THE GERMAN MARINE.

At one end of the Champ de Mars, near the Seine, is the picturesque building which has been erected to represent the German marine. The photograph gives a good idea of its general appearance. The main portion of the building is in characteristic German style, and is decorated with marine emblems. The walls are finished in white staff, with an ornamental border in fresco representing various forms of steam-

ships and sailing vessels. At one corner is an arched entrance, above which are two sailors in relief, each with appropriate emblems, supporting the national coat of arms. Above the main doorway is a small tourelle in the form of a lighthouse, carrying above a system of semaphore signals. The building is surmounted by a tower which rises to a considerable height, representing one of the German lighthouses; it is painted alternately white and brick red; a platform near the top is upheld by four projecting turrets, and from this rises the upper portion supporting the cupola, in which has been installed a powerful arc projector of the Schuckert system; from this elevated point it sends its rays to all points of the Exposition grounds.

The building has three stories, not including the lighthouse. On the first floor are a number of exhibits of great interest covering a variety of subjects pertaining to marine architecture and life-saving apparatus. There is a large globe of bronze, about 12 feet in diameter; upon it the continents are represented in silver and the sea in light blue, while the routes of the principal German navigation companies are traced by lines of different colors. The genius upholding the globe is in repoussé bronze, as are also the handsomely executed figures beneath the globe. The total height of the globe from the floor is about 30 feet. Around the base are the signs of the zodiac represented in relief, and a series of tablets bear the names of the prominent navigation companies. Another illustration shows a model of the large office building of the North German Lloyd erected at Bremen; it was designed by the architect Poppe, of that city. The model is

executed in plaster, and measures about 7 feet square at the base; under the model are a number of photographs showing interior views in different vessels of the company, and below these are a number of small models representing the principal vessels: among the largest of these may be mentioned the "Kaiser Wilhelm II.," the "Friedrich der Grosse," etc. The great number of models shown indicates the size of the company's fleet. In front of each vessel is a card giving the principal dimensions and data. Not far from this is to be seen a partial section of the new steamer "Deutschland," executed in one-third natural size. The front is arranged to be flush with the wall, and the spectator looks into the interior of the vessel. The main gallery is thus seen, with its three decks and its upper dome of stained glass; below is represented the main dining saloon, with all its fittings reproduced in miniature; red is the prevailing color of the upholstering and tables; upon the latter are numerous incandescent lamps. The gallery above is finished in hardwood and bronze; the finishing of the different saloons is shown, and the whole gives a very good idea of the interior arrangement of the vessel. On one side is a large model of the same vessel, which measures about 12 feet long; it is finely executed in all its details. Near



PARIS EXPOSITION-PAVILION OF THE GERMAN MARINE.



EXHIBIT OF THE NORTH GERMAN LLOYD-PAVILION OF THE GERMAN MARINE.

it a model of about the same size shows the "Kaiser Wilhelm der Grosse" of the same company; a smaller model, about 8 feet long, shows the "Friedrich der Grosse." The different war vessels are also represented by a number of models of smaller size; among these may be mentioned the armored cruiser "Weissenburg," also the "Yakumo," built for the Japanese service. These two vessels were built at the Vulcan Works at Stettin. The first-class battleship "Karl der Grosse" is represented by a model of fine work-

manship, showing the details of the

The floating dock at Hamburg

armament.

of 17,500 tons, constructed by Blohm & Voss, is represented in miniature; it carries a derrick crane of 150 tons. Upon the dock is the steamship "Potsdam"; a portion of the quay is seen, united to the dock by a number of bridges; a railroad runs along the water's edge. Another model shows the operation of lengthening out the government postal steamer "Preussen" upon a floating dock, and the method of putting in the intermediate pieces; at the same time the interior arrangement of the vessel may be observed. An interesting collection consists of a number of torpedo boats, constructed for the different governments by the Schichau works at Elbing. Among these is represented one of eleven torpedo boats of 27 knots built for the Russian marine, and another of 30 knots for Italy. A number of types constructed for the Japanese, Russian, and Chinese marine are to be seen, and torpedo cruisers built for Norway and Austria. The Vulcan docks, of Stettin, have also a number of models, among which may be mentioned the armored cruiser "Hertha;" the cruiser "Bogatyr," built for the Russian government, is also shown.

On the second floor one of the main objects of interest is a large model of the port of Hamburg, built upon a platform. The buildings and streets of the city and the different docks with their vessels are well represented, giving a good idea of the large amount of shipping handled by this port, which has become one of the most important of Europe. Near it is a model of the boat which is to be used in the Antarctic expedition which is to take place next year;

> the boat is represented in 1 scale. Its actual length is 138 feet, with a maximum width of 36 feet; it has 1,442 tons displacement. The engines are designed to furnish 275 horse power. This boat has been built at the Howaldtswerke at Kiel. Among the other models to be seen on this floor may be mentioned those of the principal yachts of 1899, besides a number of other vessels. On the third floor is seen the floating crane, "Turgud Alb," built for Constantinople by the Bremen Company, and the armored cruiser "Victoria Louise." A number of collections of ships' instruments are shown here; Schaffer & Budenberg, of Magdeburg, have an extensive exhibit of marine pumps and valves. Different forms of diving apparatus are to be seen, and several improved forms of divers' suits,