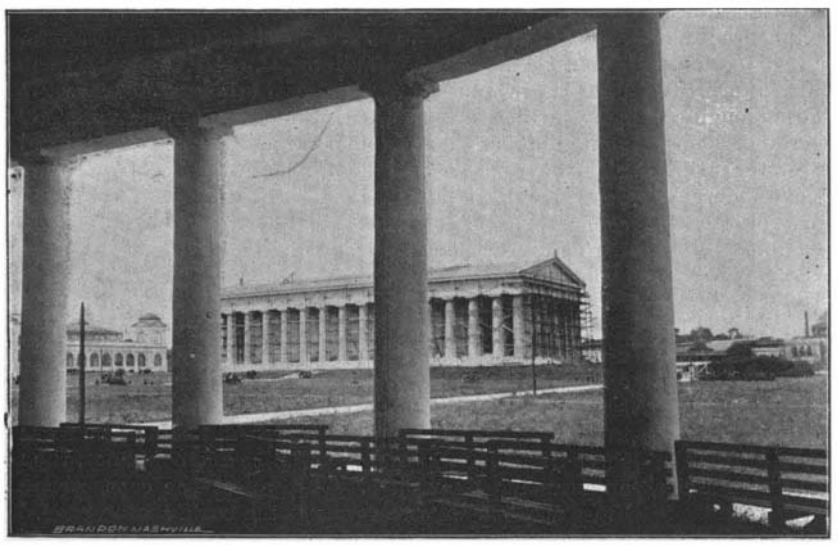
THE TENNESSEE CENTENNIAL EXPOSITION.

Since the Chicago World's Fair, of 1893, there have been expositions held somewhere in the United States every year, with one exception, the California Midwinter Exposition and the International Cotton States Exposition following each other in quick succession, and now the present year is to witness what the indomitable energy of a single State can accomplish. Tennessee will hold what will be called the "Tennessee Centennial and International Exposition" at Nashville. The date of the opening of the Exposition is May 1 and that of the closing October 31. The occasion of the Exposition is the one hundredth anniversary of the admission of Tennessee as a State into the Union. It is very creditable that this progressive State should express its gratitude to the founders of the commonwealth in such an eminently patriotic manner. Tennessee is the first State in the Union to so celebrate the one hundredth anniversary of her statehood, and the interest which has been evinced by all sections of the country shows that the celebration will be of national importance. It is not intended to run the Exposition as a money making scheme, as it is largely prompted by sentiment, and the grave defects in the management of all the American expositions since and including the Chicago World's Fair have been carefully guarded against. President Cleveland has signed the bill appropriating $130,000 for the erection of a suitable building to contain the government exhibits; so that the success of the Exposition seems now assured. Many of the Exposition buildings are already finished and nearly all will be ready to receive exhibits by March 1; so that there is very little chance of any delay in the opening of the Exposition.

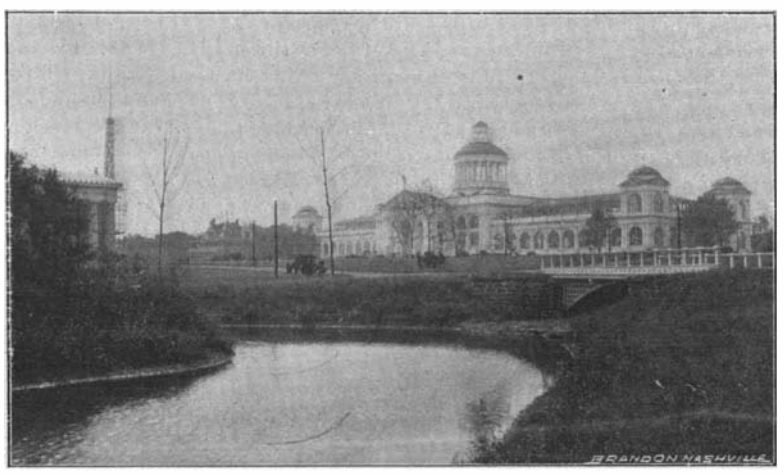


PARTHENON FROM COLONNADE.

Shortly after June 1, 1894, a company was organized, a charter was secured and stock was issued. Notwithstanding the fact that the Exposition was arranged for at a time of great financial stringency, the money necessary to guarantee the success of the Exposition was forthcoming. As was the case with the Chicago World's Fair, it was found impossible to finish the work in time to allow of opening the Exposition on June 1, 1896; so, following the precedent set by the World's Fair, the grounds were dedicated with appropriate ceremonies on the anniversary and the opening of the Exposition itself was postponed for one year.

The selection of a site for the Exposition was a happy one. The old West Side Park and contiguous property was secured, the area covered being 200 acres. The tract is a magnificent stretch of blue grass land lying within two miles of the public square of Nashville. The ground was improved at once. Two beautiful lakes were created, the rolling surface was terraced, 1,000 trees were planted and miles of drives, walks and bypaths were laid out, while the drainage and lighting has been carried out on approved lines. By May 1 the Park will be all that a perfect climate, a fertile soil and artistic landscape gardening can make it. In the great circle around the center lake is an imposing collection of monumental, though ephemeral, Exposition buildings. As will be seen by reference to our bird's eye view, the ensemble is most imposing; in fact, it looks like a bit of the Columbian Exposition, set down under kinder skies, in a more genial climate. In front of the magnificent reproduction of the Parthenon, which is the centerpiece of the Exposition, stands a heroic statue of Pallas Athene, 43 feet high. A little further on is a reproduction of the famous bridge of Venice, the Rialto.

The Parthenon, the noblest example of ancient architecture, is reproduced exactly, as to outward form and color, and stands on a considerable elevation. It is a fireproof structure and is intended to house the art collections. The light comes from a large skylight in the roof, as in all Greek temples. The largest building on the grounds is the Commerce building, which is at the left of the Parthenon. Its dimensions are 500 × 315 feet, the wings being 150 feet wide. The height of its central dome is 175 feet. This building will house many of the important exhibits, both foreign and domestic. Tennessee is a great agricultural State, producing almost every crop grown in two zones. Naturally their agricultural exhibit was given one of the finest buildings on the grounds. It measures 525 × 175 feet. As is the case with the other buildings, the exterior is covered with staff. The building to the right of the Agricultural building is the Machinery building, constructed in the Doric style. It is of the type of the famous Propylæum in Munich, and measures 375 × 138 feet. In order that the building may be pleasant on warm days, no steam will be admitted, but the boilers and engines will be at the power house, which is directly back of the Agricultural building. Simplicity is the feature of the design selected for the Transportation building, which is directly opposite the Machinery building, across the little lake. A most pleasant effect has been obtained, without the use of a single column, merely in the grouping of the masses in the proper proportion.



COMMERCE BUILDING FROM LAKE.

The building has a frontage of 400 feet and a depth of 125 feet. Next to the Transportation building is the History building, where the historical relics of the State will be exhibited. The design provides for a Greek cross with a dome. One wing will be used for colonial history, another for early times in Tennessee, the third for Confederate relics, and the fourth for Federal relics of the late war. The building will, of course, be made fireproof, owing to the great value of its contents. The space between the two lakes back of the Parthenon is devoted to the minerals and forestry, the Auditorium, the Horticulture and the Government buildings. The Minerals and Forestry building is built in the Roman-Doric style. It measures 400 feet by 125 feet. The building will prove especially attractive to those who are interested in the wonderful mineral and timber resources of the Middle and Southern States. In the southern end beautiful marble, onyx, granite and sandstone specimens will be shown, while at the northern end will be placed all grades and kinds of coal and countless varieties of timber. The Auditorium is colonial in design and Ionic in treatment. The interior of the building is furnished in hard wood, the seating capacity being 6,000, and the stage and band pit are ample for all purposes. Above the colonnades are pleasant balconies for the viewing of pageants by day and the elaborate electrical and fireworks displays by night. The tower is 140 feet in height and affords a magnificent view of the exposition. The Women's building occupies the corner of the Exposition grounds, and is designed by a woman, as the building is devoted entirely to women and their work. An assemby hall is provided for meetings under the control of the women's board. Other rooms are devoted to the various arts and industries in which women have been engaged; one section being devoted to patents taken out by women, another to books and musical compositions by women, and so on, to painting, sculpture, cooking, embroidery, education, etc.

The Children's building is one of the unique features of the Exposition. It belongs to the children, and in it various things will be designed and arranged for their amusement and instruction. The design of the building is pretty, and fills the interval between the Administration and the Women's buildings. The most interesting department will be that in which the work of the children will be exhibited. Another section will present whatever is of interest and use to the children gathered from all over the world. In the rear of the building, for the pleasure of the little visitors, a park of tame deer will be kept.

AUDITORIUM.

The offices of the Exposition will be located in the Administration building, a handsome structure, erected in the club house style, with hard wood interior and wide porches. The offices are furnished with every convenience.

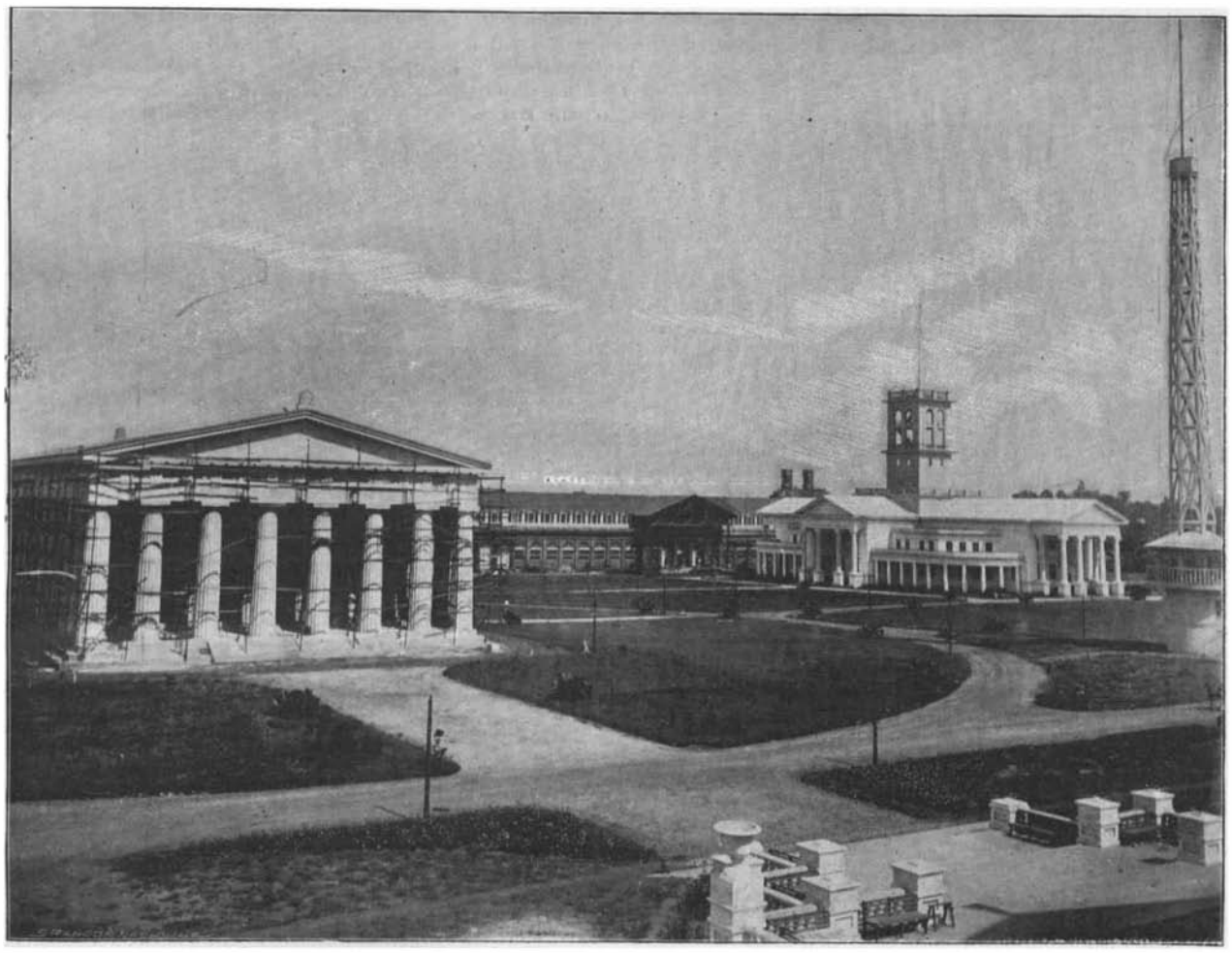
The United States Government building is directly back of the Auditorium. It is destined to contain an interesting exhibit of the various departments of the federal government.

Among the other

buildings are the History building, the Negro building, Dairy, etc.

Excellent means of transit to and around the grounds have been provided.

The amusement feature of all world's fairs has come to be regarded as a very important one, and in America this section is now universally known as the "Midway," in honor of the Midway Plaisance of the Chicago Exposition, but in the Tennessee Exposition a new name has been devised for this interesting center. It is called "Vanity Fair," after the show mentioned in "Pilgrim's Progress," which was seen by Christian in his journey through life. In the triangle of the ground many features which were attractive at the World's Fair will be in evidence, as well as a number of new shows. The Director General has, however, decided that there shall be no exhibitions which will be offensive to any one. Another of the special features which add to the beauty of the grounds will be what is known as a "gourd arbor." This will be a long avenue leading from the main entrance of the Auditorium to the walks of the western part of the park. A light, airy framework covers the walk, which will be overgrown with flowers and vines.



PARTHENON AND AUDITORIUM.

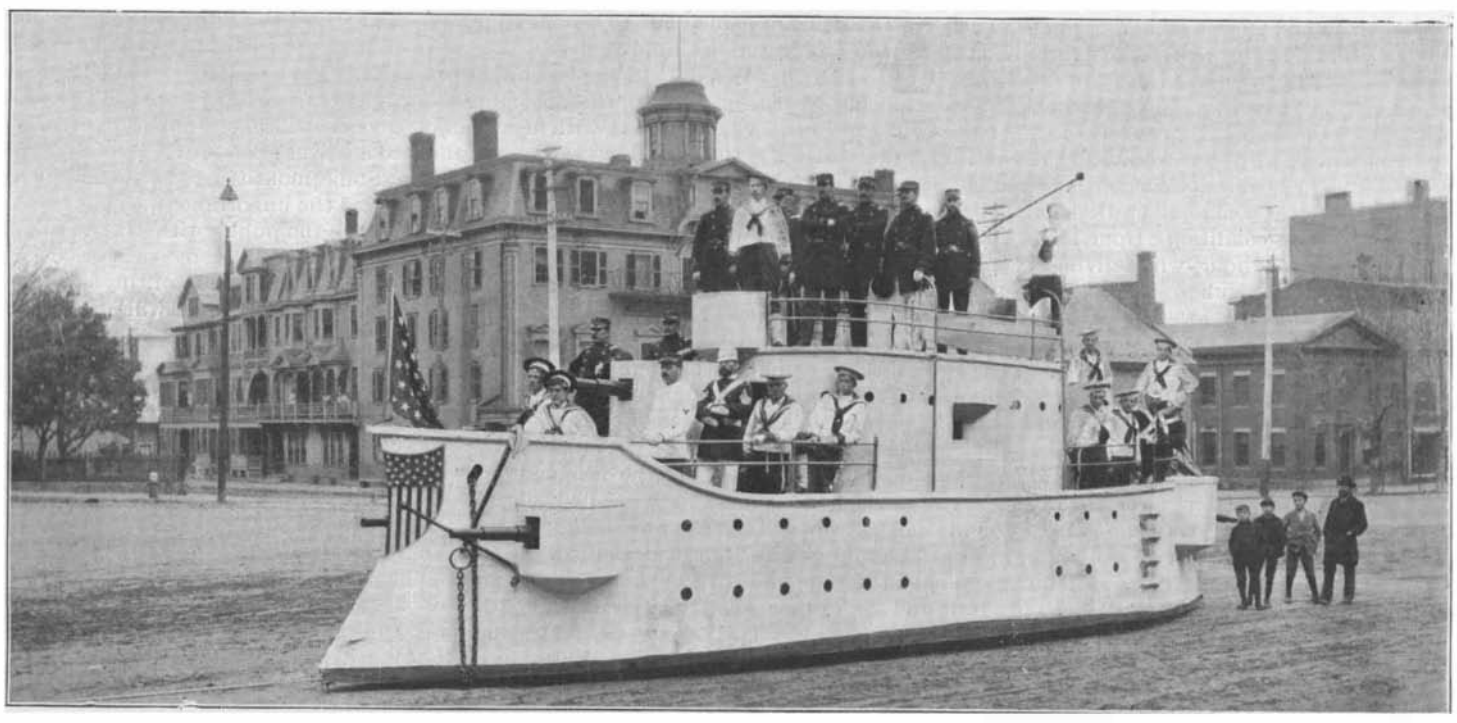
It is, of course, too early as yet to give any idea of what the exhibits will be, but there is every reason to believe that they will be so interesting that visitors will come from every State in the Union, and possibly from abroad. The foreign commissioner of the Exposition spent a long time in Europe, and obtained a large number of commercial exhibits from abroad. The chief officers of the Exposition are: Mr. John W. Thomas, president; Messrs. V. L. Kirkman, W. A. Henderson and John Overton, vice presidents; and Mr. Charles E. Currey, secretary. The Director General is Mr. E. C. Lewis. The buildings are under the direction of Mr. Robert T. Creighton, engineer, and the chief of the Bureau of Promotion and Publicity is Mr. Herman Justi, to whom we are indebted for courtesies.

French Waterways.

According to an official report recently issued there were in France, at the close of 1895, says the Engineering and Mining Journal, a total of 13,751 kilometers of interior navigable waterways, of which 8,838 kilometers were rivers, lakes, and other natural channels, and 4,913 kilometers were canals. The natural waterways include a number of rivers which have been made navigable for at least part of their length by dams, locks, or other artificial works. From 1878 to 1895 there was an increase of about 15 per cent in the total length reported, chiefly due to the improvement of rivers. These channels are under the control of the State, and are divided by law into two classes. Waterways of the first class must be able to carry boats of 2 meters draught, and the locks, if there are any, must be able to pass boats 38·50 meters long and 5·20 meters beam. There are 4,204 kilometers which come up to these requirements; all the rest are of the second class. The total quantity of freight moved on the rivers and canals in 1895 was 27,173,904 tons. Of this traffic 32·3 per cent was stone, brick, lumber, and building materials, 28·1 per cent was coal, and 7·4 per cent was iron, steel, and other metallurgical products. These three items make up 67·4 per cent of the total. The waterways were used, as might be expected, chiefly for the carriage of heavy freight, which must be moved at a low cost.

A TROLLEY MAN OF WAR.

While the comic papers have been cartooning military engagements of the future as between portable forts operating on trolley lines, it has remained for the enterprising superintendent, W. W. Sargent, of the Fitchburg & Leominster, Mass., Street Railway to actually build what to all appearances was a very formidable fighter. Like the steam locomotive copy built at Terre Haute, this new idea is suggestive of endless possibilities for future occasions of celebrations, parades, and novel special cars. The cruiser McKinley was operated through the principal streets of Fitchburg and surrounding towns during the late presidential campaign, and was in every way a success, serving as a novel feature in many parades and making all its trips without a breakdown or accident of any kind. At one time it carried one hundred and four men, this being the entire crew of officers and men. The car was designed to run slowly through the street during a procession with its crew marching in front, on both sides and in the rear, while many of the officers would ride, then during a long jump from town to town, officers and men would ride together. The boat, which is 37 feet long, was built on a construction car 26 feet long with 6 foot 6 inch wheel base, equipped with two 12-A, 30 horse power Westinghouse motors. It was constructed of sheathing and timber, the whole being covered with canvas painted and varnished. The hull was painted white, superstructure cream, ironwork bronze, guns, and anchor chain black, sponsons, lifeboats and turrets white. It was lighted with twenty-five incandescent lamps. Red fire was used on many occasions in the smokestack which gave it a decided martial appearance. After celebrating the victory, special parties were given an opportunity to enjoy the novelty of a ride on the cruiser. A few days ago she was dismantled and will be erected on a raft at the pleasure park of the company (Fitchburg & Leominster Street Railway) in early spring. The boat was designed by naval architect W. W. Lapointe, and was constructed at the car house of the Fitchburg & Leominster Street Railway Company, under the direct supervision of its superintendent, W. W. Sargent. We are indebted for the foregoing particulars and for our engraving to the courtesy of the Street Railway Review.



TROLLEY MAN OF WAR USED IN THE LATE CAMPAIGN.

Coal Consumption on a Cruiser.

The results of the thirty hours' coal consumption trial of the second-class cruiser Juno recently were as follows: Steam in boilers, 142 pounds per square inch; vacuum, port 27·1, starboard 26·1; revolutions, port 117·9, starboard 119; indicated horse power, 4,863; giving a mean speed of 16·3 knots per hour. The amount of coal used was 1 64 pounds per indicated horse power per hour. The Juno was taken into the Channel for a four hours' forced draught trial. The mean results recorded were: Steam in boilers, 149 pounds; in engines, 151 pounds; vacuum, starboard 26 inches, port 26·6 inches; revolutions, starboard 149·3, port 149·3; indicated horse power, starboard 4,832, port 4,939—total, 9,771; air pressure, 0·92 inch; speed, 20 knots, or half a knot in excess of contract. The vessel returned to Devonport Harbor, where she will be equipped for sea.

THE Rockefeller steamer Robert Fulton, 440 feet over all, is the largest steamer on the Great Lakes.