



VIEW ON THE MIDWAY PLAISANCE LOOKING TOWARDS THE FERRIS WHEEL, THE CARS OF WHICH WERE NOT YET PUT ON.

corative art at the Exhibition. Our picture shows it as it appears when passing in a gondola.

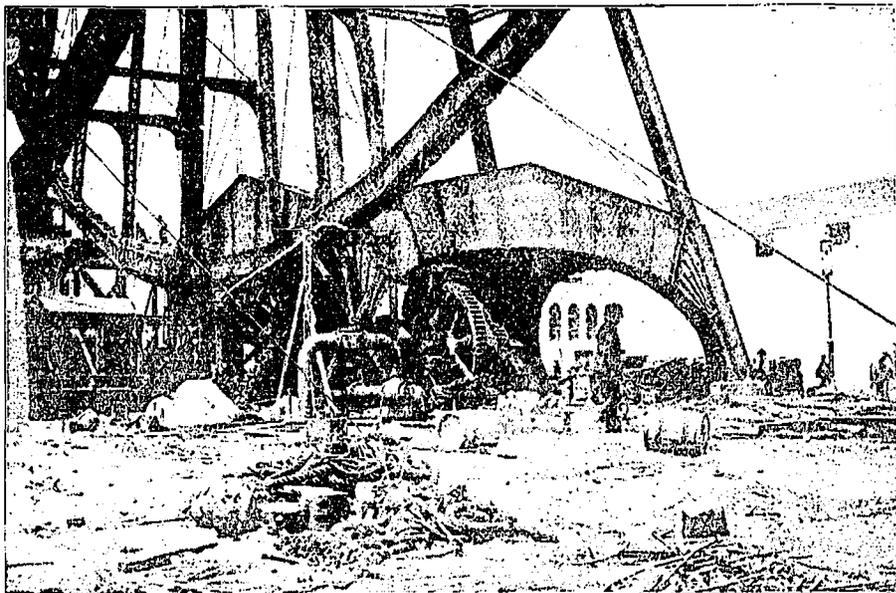
The three views showing the great Ferris Wheel in course of construction, will be interesting to many of our readers. As this stands a unique and daring piece of engineering, we have thought it worth while publishing the following description of this notable enterprise:—

It is not easy for the mind to grasp the stupendous nature of this undertaking. The wheel itself is two hundred and fifty feet in diameter; at its highest point it is two hundred and sixty feet above the earth. The Obelisk of Luxor or Trajan's Pillar at Rome would not be long enough to serve for a radial spoke.

Then, again, its enormous weight. The cantilever bridge at Niagara was looked upon as an engineering wonder when it was built. Its construction took three years. The Ferris Wheel was built in five months, and its weight is four times that of the Niagara bridge. The Cincinnati cantilever is a quarter of a mile long, and its weight is about the same as the Ferris Wheel. The bridge is set immovable, resting on two supports, while the wheel is swung upon an axle lifted 140 feet in the air.

The wheel was constructed, in its separate parts, at Detroit, and shipped to Chicago. So confident was Mr. Ferris in the accuracy of his plans and measurements that he did not have the wheel set up before it was shipped. When it was taken from the cars at Chicago every spoke and bar, truss and girder, went together as though each had been previously fitted to its neighbor.

The towers, eight in number, are twenty feet square and thirty-five feet high, of solid cement reaching from the foundation to the surface.



AT THE BASE OF ONE OF THE COLUMNS SUPPORTING THE GREAT FERRIS WHEEL. WORK NOT YET COMPLETE.



VIEW SHOWING THE LOWER CONSTRUCTION OF THE FERRIS WHEEL AND THE CARS SCATTERED ABOUT READY TO BE PLACED IN POSITION.

Buried in the concrete are massive steel bars, and to them are bolted the steel towers which rise one hundred and forty feet in the air, supporting the wheel.

The axis of the wheel is 44 feet long, 32 inches in diameter and weighs 70 tons. It is the largest steel shaft ever forged, and was made by two men and a boy.

This gigantic shaft had to be lifted 140 feet in the air, and set in its sockets at the top of the towers. The great hubs were then fitted in place, and the work of hanging the wheel began. Beginning at the bottom, the heavy castings weighing five tons each, which form the rims of the two wheels—for there are two really, with the cars hanging between—were hung one by one on rods which carry the weight of the wheel. Slowly the circle was completed, the last of the sections being lifted two hundred and seventy feet, to drop into its place. Then the thirty-six cars, which could seat two regiments of soldiers, were attached, and the great wheel was fairly in place.

But would it move? Two thousand tons or more strung on a single axle—could this monstrous bulk be set in motion? A finger was lifted, a throttle was opened, and the great wheel began to turn, and has gone on turning and stopping, obeying the lightest touch of its driver with a precision and accuracy that is not the least of the marvels of this mechanical wonder.

In July came the terrific hurricane, the wind blew 110 miles an hour. But the wheel hardly shivered. It turned as evenly and smoothly as if fanned by summer zephyrs.

The wheel cost in place 392,000. It was a large sum to stake on an experimental idea. It turned out a brilliant success.