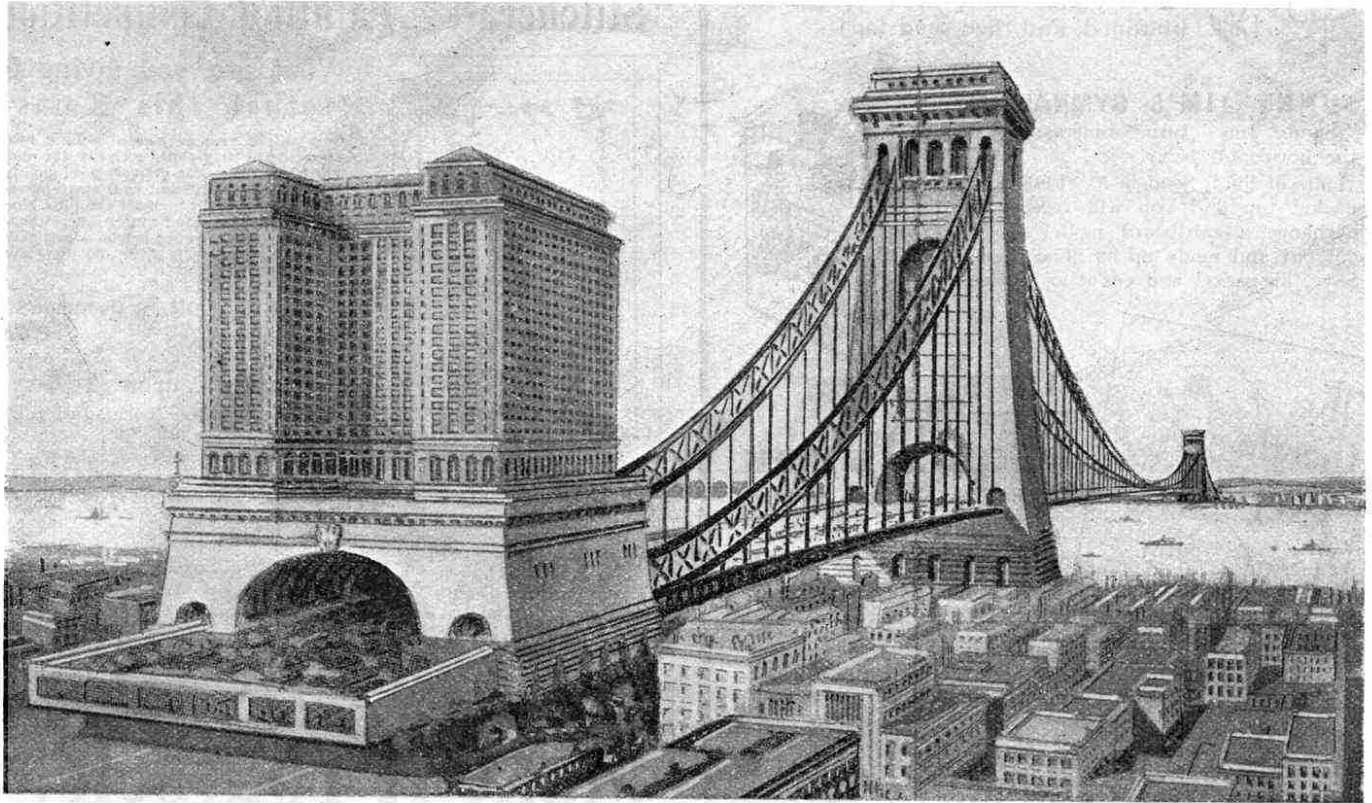


*Famous Bridges II.*

# A Monster Bridge:

## Two Tramways, Two Railways and a Road Wider than Kingsway



The above drawing, which is reproduced by the courtesy of the "Architect's Journal" and "Everyday Science," gives a vivid representation of the completed appearance of the proposed new bridge at New York

**A**LTHOUGH the business section of the city of New York is located on the island of Manhattan, nearly everyone lives on the mainland, where the suburbs are situated. These residential districts are separated from the city by the East River and the Hudson River, the latter being almost a mile in width.

### First Bridge at New York

It is not so very long since there were no bridges at New York, and city workers had to cross the East River and the Hudson River, morning and evening, by ferry steamers. As the numbers of workers in New York continued to increase, however, the accommodation provided by these ferry steamers became very much overcrowded. It was in the desire to ease the situation, created by the changed conditions, that the first suspension bridge across the East River was built. This bridge was rapidly followed by other bridges, until at length the great American city became famous for having more large bridges than any other city in the world.

In the meantime every year has brought more workers and more traffic. Now, even the present numerous bridges already

existing are not sufficient to accommodate the increasing flow of pedestrians and vehicles from one shore to the other.

### Largest Bridge in the World

Plans are therefore being made for the building of a new bridge, and this, although not the longest, will certainly be the largest bridge in the world. It may possibly be the last massive iron bridge to be built, for the cost of such heavy metal structures is now rapidly becoming prohibitive.

According to the present arrangements the bridge will be 6,600 ft. in length. It will be divided into two shore spans, each 1,710 ft. in length, and a central span of 3,240 ft. The distance between the anchorage on Manhattan Island and the anchorage on the mainland will be 7,460 ft.

### Bridge Road Wider than Kingsway

The new bridge will not only accommodate vehicles and pedestrians, but will also carry trams and trains. It will have two decks, each 220 ft. in width. The upper deck will be divided into two roadways, one for motors and the other

for vehicles. This roadway will be 155 ft. in width, and our London readers will be able to realise what this will look like when it is mentioned that it will be wider than Kingsway.

On each side of this roadway will be a tramway track, beyond which will be two footpaths 17 ft. in breadth. Access to the upper deck of the bridge will be gained by a central lofty arch, with two smaller side arches to admit the traffic to the bridge approach. The lower deck of the bridge will be used only by trains, and it will carry ten lines of railway track.

The bridge will be of the suspension type, the two decks being suspended from four steel cables, two on either side. These cables will consist of 80 lines of eye-bars, arranged in three banks and enclosed in tubular bronze casings 15 ft. in diameter.

### Massive Towers

In order to obtain sufficient height to give the suspension cables the requisite curvature, it will be necessary for the suspending towers to be 840 ft. in height. Each tower will measure 400 ft. in breadth at the ground level, tapering to 200 ft.

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