

In fact, all fears on this score for a well constructed bridge are entirely groundless, whether the span be long or short.

COMPARISON BETWEEN THIS AND OTHER SUSPENSION  
BRIDGES.

To be able to form a better judgment of the relative strength of the bridge here proposed, and that of other well known structures, it will be useful to bring their principal dimensions together.

The nearest approach to this work is perhaps the Freiburg bridge, a structure which measures 889 feet between the points of suspension. This remarkable edifice was designed exclusively for common road purposes; and though forming part of one of the highways leading into a city of eight or ten thousand inhabitants, it is very slightly and cheaply built.

Its weight is 740 lbs. per lineal foot, and no outlay has been permitted in any part of it for the purpose of adding to the stiffness due to its weight.

This bridge is upheld by four cables, each formed of 1056 strands of wire, and containing, altogether, 4224 strands.

In the rail-way bridge under discussion there are to be *twenty-four thousand strands*, or nearly six times as many.

But the Freiburg bridge was twice crossed on the day of its inauguration, by 300 soldiers in rank, marching to military music; a weight of about 20