manner in which its weight of metal has been calculated, I believe it to be much the least expensive bridge of any.

Having set forth what I consider the points—and they cover the whole field of inquiry—in which I consider the Clark, Reeves & Co.'s bridge as not only entitled to the award of "best" absolutely, but as the one which should be "adopted for practical construction," I shall briefly allude to the objections offered; and first, as to

I.—Anchorage.

It is a peculiarity of the design that the piers, as they are called, are not under normal conditions, either weight or thrust-bearing. They receive the strains (whether compression or extension) by which a moving load would tend to displace the hinge-point, and they receive, in a large degree, wind strains. The mere fact, that anchorage is necessary to meet these strains, is no more an objection than it is (where equally necessary) in a cantilever or suspension bridge.

II.—The want of provision by lateral and diagonal bracing for wind strains in the openings for the roadways.

It is not believed there is any defect here which can not be provided for, and so it is stated in the main report. These matters are not exhibited in the drawing. The designers state that they have been fully considered. Something equivalent is common to all through trusses, and a nearer resemblance is found in the St. Louis bridge. The cross and lateral bracing is necessarily interrupted, and substitutes for these members is found in greatly strengthening the main members and in a proper application of braces or brackets.

It is to be remembered that though the lunettes rise to a height at point of meeting of 80 feet above the floor (90 feet in the second design), the point of attachment of the floor suspenders is generally comparatively low, rising to the extreme height only through a short interval near the centre of the bridge; hence the floor weight (including the total live load) is not in reality borne high.