into three brackets, superposed to each other by means of intermediate chords as shown on plate IX.

The designer claims that, by this arrangement, the weight is kept as low as possible, and that by avoiding the necessity for carrying all the weight to the top of the central tower over the pier, there results not only great economy in this tower, but also in all the compression members of the web, which become of the simplest form and most manageable lengths, while the stability is greatly increased, and the erection becomes so simple and cheap that the structure furnishes its own false works except for the central space.

Each Cantilever, or bracket, is divided by the two intermediate chords into three subsidiary brackets superposed to each other, and 36 feet deep. These again are divided vertically into panels 30 feet long by the posts, those posts alone carrying the live and dead load, to which the diagonal ties are attached; the posts above these merely serving to carry the weight of the Cantilever chords, and to prevent them from sagging below a straight line.

The process of erection consists in extending the parts with a balanced beam, panel by panel, each side of the pier, using each subsidiary bracket as the foundation for that overlying it, and then, after the brackets are completed, rolling a counterbalanced wooden truss, 300 feet long, into the intervening space, on and around which to erect the central span, which is 200 feet in length.

The shore ends of the Cantilevers are sustained by three piers, through which the anchorage is distributed.

There are three trusses, the bridge being divided by them in cross section into two roadways, one for the railroad, and the other for a double carriage roadway 20 feet wide; the sidewalks being placed on brackets overhead of the carriage roadway. When a second track is to be added, it is to be provided for by independent trusses on the other side of the carriage roadway, which would then be in the middle.

The lower boom, or chord, is composed of 24-inch iron plates and 8-inch channel bars, riveted together into the form of a continuous box girder open at the top. The vertical posts consist of two channel bars each, latticed, and the diagonals and the suspension chains, or upper chords, are of flat bars, 6 inches