cylindrical (or conic segmental) brace $b$, running from each truck frame obliquely downward to an abutting block $c$, which is common to the two trusses, with chords or ties $d$, from truck to truck for each pair.

The truck wheels are from 20 to 24 inches in diameter, with 5 to 6 inches width of rim, and with short axles or shafts, 3 to 4 inches in diameter, according to dimensions of bridge. The axles run in journal boxes fitted to the truck-frame so as to bring the axles in the direction of radii to the circular track $l$, upon which the trucks are to run.

The truck frame consists of two cast iron side plates (of which $g$ and $h$ present an outside and an inside view), of an I formed cross section, and contour as seen at $g$. These plates upon the insides, have projecting portions as shown by the dark surface of diagram $h$, meeting from opposite plates, in the centre of the frame at a common surface of contact, and forming continuous tubes or sockets through the frame, which serve as media through which the ties $d$, act upon the cylindrical braces $b$, thus forming a rigid truss, which should be so proportioned as to be able to support (upon the two trusses), the whole weight of superstructure, throwing it upon the centre block $c$.

The chord ties $d$, of the two trusses, crossing one another upon the same level, are kept from mutual interference by cutting out the middle portion of one set, and replacing the removed part with two pieces to each tie bar, one passing above and the other below the single continuous rods of the other set, as shown at $f$.

The block $c$ has a cylindrical cavity in the underside, 10 to 12 inches in diameter, and about 7 inches deep, into which is fitted (loosely) a solid cylinder entering about 4 inches into the cavity, and leaving a space of