CXXXVIII. The figures in this table are to be understood in all cases as prefixed to the quantity $M$, which, as far as relates to tension material, represents a determinate amount of wrought iron; while, as it relates to compression material, $M$ represents an amount of cast or wrought iron, varying as the forms and proportions of parts vary. But, in the present discussion $M$ may be assumed to have a uniform value in expressions relating to material under the heading of chords; and of ends, whether oblique or vertical.

The quantities under the head posts, require in general, probable twice as high a value for $M$, as that required for the other classes of thrust members, as it regards all but the first named truss, while the first is not represented in that column at all, although the parts there referred to are as indispensable, practically, and require nearly as much material as corresponding parts in the other plans.

With regard to plan No 2 (the Finck). 6 posts actually required (two of which, at the quarterings, sustain determinate weight equal to $W$ each), are also omitted in the table, to place this plan upon an equal footing with the preceding one.

There is also a consideration with regard to the effects of load upon these two trusses, especially the first, which render it partially necessary to use diagonal ties, or "panel rods" in the several panels; and such have usually been introduced wherever such bridges have been constructed.

As any one pair of suspension rods in the Bollman truss may be under full load, while the others are without load, the loaded node would, in such case, be depressed, while that on either side would retain nearly its normal position. Thus would result an obliquity