A diagram for the lower lateral system, giving the following information:—

Sizes and marks of rods.
Positions of same, showing which eyes are to go next the trusses.
Sections, lengths, and marks of lateral struts.
Diameters and lengths of lateral pins, if any.
Diameters and lengths of fillers for same.
Sizes and marks of jaws, if there be any difference between them.

A diagram for the upper lateral system and portal bracing, giving the following information:—

Sizes and marks of rods.
Positions of same, showing which eyes are to go next the trusses.
Sections and marks of lateral and portal struts.
Diameters and lengths of portal pins.
Diameters and lengths of fillers for same.
Diameter and length under head of portal strut attaching bolts.

He should also be provided with a plan of the bottom chord packing (the transverse dimensions being exaggerated, so that the size of each piece may be written thereon), a bill of bolts, giving the number and position of each kind, and a clear statement of the system of marking the iron.

Before starting to erect the bridge, the foreman should study carefully all the plans, so that he will have a clear picture of the bridge in his mind’s eye, and will not have to be continually referring to the drawings during the erection. On a work of any magnitude, there should be kept on hand a few standard nuts of each size ordinarily used, so that the loss of a nut or two will cause no delay: for the same reason there should be a few extra bolts of each size.

The material, as a general rule, is all piled on one side of the stream: the raising should therefore be commenced at the other side, so that the passage of the material will not interfere with the work. If there be no objection, the far end of the bridge should be the fixed one, so as to start from something permanent; but this is not absolutely necessary.

To illustrate the method of raising, take, for example, the