

drift bolts, if it be preferred. For additional security against slipping, a third bolt may be put through the splice pieces and the cap; or cleats may be nailed to the latter above and below, at the toe of each inclined post.

All bolt holes in timber should be accurately located and bored before the falsework is erected. On this account the bents should be all built after one pattern, so that the parts may be interchangeable. If the bents be of different heights, the variation may be effected in the lowest tiers. Bolts are always preferable to spikes for connecting timbers, especially when the falsework has to be taken down, and re-erected for another span. Care should be taken to avoid any unnecessary injury to the timber, in order that it may not be sold at too great a loss after the work is finished.

There should be at least two plank walks on top of the lower falsework, exterior to the trusses, and a runway midway between, formed of several joists set on edge for the purpose of bringing out the material thereon upon timber trucks.

The posts of the upper falsework should rest on the caps of the lower falsework, a few inches inside of the trusses, unless the bents are placed beneath the panel points, in which case they should be placed two feet to one side: they should be attached to the caps by splice timbers and cleats. The height of the upper falsework should be such that the upper surface of the cap will be at least six inches below the under sides of the upper chord sections, so as to permit of the use of camber blocks between.

The author would suggest that the end bents of upper falsework be made three or four feet higher than the others, and the use of four posts instead of two (one on the inside, and one on the outside, of each truss), in order to aid in raising and holding in place the heavy batter braces. After the latter are put in position, a horizontal timber may be firmly bolted to the bent at the level of the other bent caps, for the temporary flooring to rest upon. Stout beams stretching from bent to bent will be required as fulcra for the levers by which the chord sections are handled. The upper falsework should be braced by diagonal timbers, both longitudinally and transversely. The sizes of