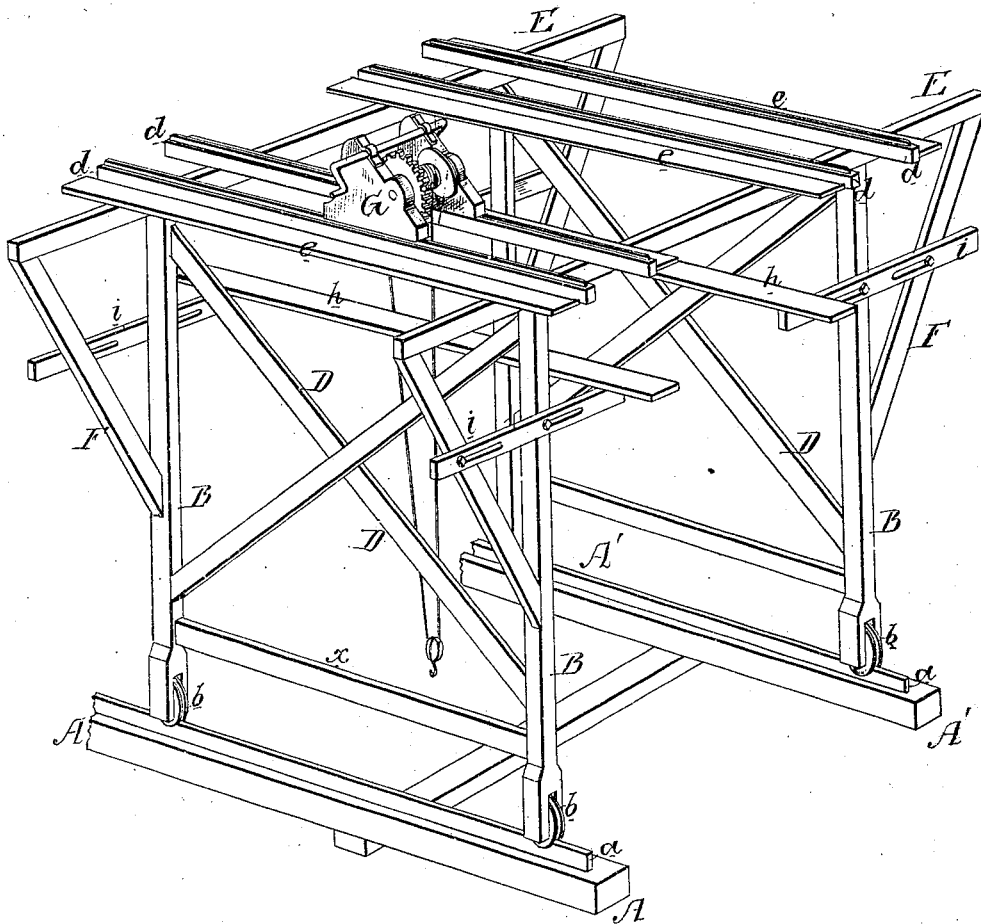


D. R. KELLY.  
Traversing Scaffold.

No. 169,270.

Patented Oct. 26, 1875.



Witnesses, Harry Smith  
Thomas M. Evans

Daniel R. Kelly  
by his Attor.  
Hudson and Son

# UNITED STATES PATENT OFFICE.

DANIEL R. KELLY, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO  
CLARKE, REEVES & CO., OF SAME PLACE.

## IMPROVEMENT IN TRAVERSING SCAFFOLDS.

Specification forming part of Letters Patent No. 169,270, dated October 26, 1875; application filed  
October 2, 1874.

*To all whom it may concern:*

Be it known that I, DANIEL R. KELLY, of Philadelphia, Pennsylvania, have invented an Improved Scaffold for Erecting Bridges, &c., of which the following is a specification:

The object of my invention is to facilitate and economize the erection of truss-frame bridges by means of a scaffold arranged to be moved on the lower false work or staging, and constructed in the manner illustrated in the perspective view of the accompanying drawing.

Heretofore it has been the practice, in erecting truss-frame bridges, to build above the false work for supporting the trusses a staging of the entire length of each span—a costly structure, the use of which may be dispensed with by adopting my invention.

A and A' represent parts of the longitudinal stringers of the usual lower false work, and to these stringers are secured rails *a*, adapted to the grooved wheels *b* of the movable scaffold, which consists of two opposite side frames, connected together, each frame being composed in the present instance of two posts, B B, properly braced by diagonals D D, and connected together by ties *x*, too clearly shown in the drawing to need explanation. The opposite side frames are connected together at the top only, and there by transverse beams E E, the outward-projecting ends of which are connected by braces F to the posts, so as to impart rigidity to the whole structure. To these transverse beams E are secured two pairs of longitudinal sleepers, *d* *d*, having rails adapted to the wheels of traversing crabs G, four of which I generally employ in connection with my improved scaffold, although but one is shown in the drawing. The scaffold, it will be seen, is so constructed that there shall be a clear space between the frames for the trusses of the bridge, the top of the scaffold being higher than the tops of the said trusses. Foot-boards *e* are secured to the transverse beams E for the convenience of those who have to operate the crabs, and boards *h* are secured to slotted bars *i*, which are made so adjustable on the frames that the

boards can be moved inward or outward from the same, for a purpose rendered apparent hereafter. The movable scaffold is used for erection section after section of a truss-frame bridge, the scaffold, after being used for the erection of one section, being moved along the stringers A A' of the false work to a position where it can be employed in the erection of another section. After being thus adjusted the crabs are brought into play, first for the placing of the lower chords and beams, then for raising the posts and the upper chord-sections, in fixing which the operations of the workmen are facilitated by moving the foot-boards *h* inward close to the posts.

Prior to fixing the outer diagonals and counter diagonals of each section of the truss, however, the foot-boards *h* are moved inward out of the way, and when the section of the bridge has been completed by the connection of the cross-ties the entire scaffolding, which includes the foot-boards *h* *h*, is clear of the newly-erected sections, and may be moved forward to a position where it can be available for the erection of other sections.

By the above-described traversing scaffold I am enabled to dispense with the costly superstructures of the false work heretofore considered indispensable in the erection of truss-frame bridges.

I claim as my invention—

1. The within-described traversing scaffold, consisting of frames arranged and braced as described, so that there shall be a clear space between them for the truss-frames of a bridge, in combination with wheels adapted to rails on the false work, and with tracks parallel with the said rails, adapted to traversing crabs, all substantially as set forth.

2. The combination of adjustable foot-boards *h* with the traversing scaffold.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

DANL. R. KELLY.

Witnesses:

HUBERT HOWSON,  
HARRY SMITH.