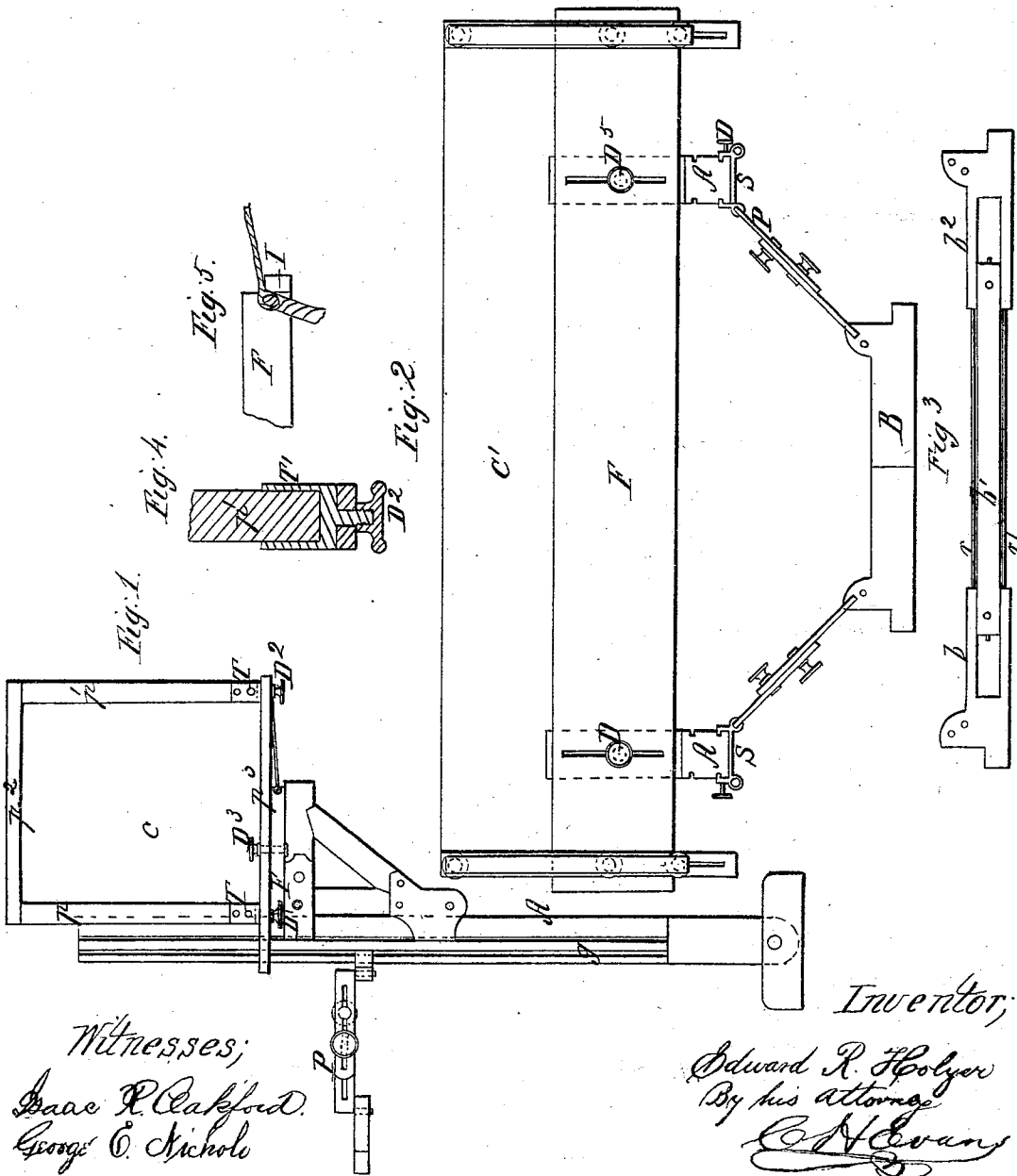


*E. R. Holzer,*

*Scaffold.*

*No. 102,542.*

*Patented May 3, 1870.*



*Witnesses;*  
*Isaac R. Calford.*  
*George C. Nichol*

*Inventor;*  
*Edward R. Holzer*  
*By his attorney*  
*C. H. Evans*

# United States Patent Office.

EDWARD R. HOLZER, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 102,542, dated May 3, 1870; antedated April 29, 1870.

## IMPROVED SCAFFOLD.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, EDWARD R. HOLZER, of the city and county of Philadelphia, and State of Pennsylvania, have invented a new and useful Improvement in Scaffolds; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawing making a part of this specification.

This invention, is an improvement on the scaffold patented by me under date of May 12, 1868, and consists in securing the posts in a vertical position, by means of a sill-piece made adjustable, so as to suit any size window, and extension-plates connected with sliding straps on the posts.

Also, attaching to the edge and ends of the platform canvas screens, for the purpose of protecting the work and workmen from high winds and flying dust.

The canvas placed along the edge also prevents the sand used in rough-casting building-fronts from falling and scattering over persons beneath the scaffold.

Figure 1 is an end elevation of my improvement in scaffolds.

Figure 2 is a plan view of same.

Figure 3 is a plan view of the adjustable sill-piece.

Figure 4 is a sectional view of a portion of one of the frames used.

Figure 5 is an edge view of the platform, showing the manner of securing the canvas.

To enable those skilled in the art to make and use my invention, I will now proceed to describe its construction and operation.

Formed in the opposite sides of post A are grooves *g*, for receiving the bent ends of the sliding strap S.

The said strap fits closely to the back part of the post, and is provided on each corner with a socket, into one of which is inserted and works the pin on the end of the extension-plate P.

This plate is made in two or more parts, connected together and sliding in and out by means of suitable slots and thumb-screws, and has formed on its opposite end a pin, which engages in openings made in the sill-piece B.

The sill-piece B is made in three sections, *b*, *b*<sup>1</sup>, and *b*<sup>2</sup>.

The central one, *b*<sup>1</sup>, is narrower than the other two sections, and has its edges beveled, and fits into corresponding recesses formed in the sections *b* and *b*<sup>2</sup>.

Immediately below the section *b*<sup>1</sup>, and secured in the approaching ends of the sections *b* and *b*<sup>2</sup>, are two guide-rods, *r* and *r*<sup>1</sup>.

One end of rod *r* is secured in the section *b*, and the opposite end fitting and sliding in a slot formed

of sufficient depth in the end of section *b*<sup>2</sup>; the rod *r*<sup>1</sup> is secured to section *b*<sup>2</sup>, and works in section *b* in a similar manner.

Thus constructed it (the sill-piece) is applicable to any width of window, and when extended, is held apart by means of set-screws.

The sill-piece B is applied to the window-sill, and is extended so as to fit closely in the frame, where it is held by means of the offsets formed on the ends of sections *b* and *b*<sup>2</sup>.

The post A is then elevated to a vertical position, and the sliding strap S, carrying with it the extension-plate P, is moved to the proper position, where it is secured by means of a set-screw, D.

The projecting end of plate P is then hooked into one of the openings formed in the sill-piece B, the block is lengthened or shortened according to the width of the window and the distance that the posts are placed apart, as shown in fig. 2.

A frame, composed of the upright pieces *p* and *p*<sup>1</sup> and cross-pieces *p*<sup>2</sup> and *p*<sup>3</sup>, is applied on top and near each end of the platform F; the upright pieces, *p* and *p*<sup>1</sup> being connected to the bottom piece *p*<sup>3</sup> by means of straps T and T<sup>1</sup>, secured over their lower ends.

The said straps have each a pin, provided with a thread formed on their lower side, which projects through a slot cut in the piece *p*<sup>3</sup>, and are secured by means of set-screws D<sup>1</sup> and D<sup>2</sup>, so as to be moved in and out.

Secured in the platform F is a set-screw, D<sup>3</sup>, which passes up through the slot formed in the cross-piece *p*<sup>2</sup>, in order to allow the frame to be adjusted on the platform.

Secured to the framing-pieces *p*, *p*<sup>1</sup>, *p*<sup>2</sup>, and *p*<sup>3</sup>, by means of a groove formed in the inside edges, is a canvas screen, C, and on the edge of and extending the whole length of the platform F, is a screen, C<sup>1</sup>.

The groove for securing the said screen to the platform is made somewhat circular in form, and partially covered by means of a strip, I, and the canvas sewed to a rope which fits the groove. This screen collects the sand and prevents it and other material from dropping down on persons beneath the scaffold.

The platform F can be adjusted so as to be slid in or out on the brackets by means of set-screws D<sup>4</sup> and D<sup>5</sup>.

Having thus described my invention, its construction and operation,

What I claim, and desire to secure by Letters Patent of the United States, is—

1. The construction and arrangement of the sill-piece B, substantially as and for the purpose set forth.

2. The arrangement of the grooves *g* in the post

A; also the strap S sliding therein, or their equivalent, whereby the extension-plate P or a brace can be held and guided on the post so as to slide past the bracket without interfering with it.

3. In combination with the strap S and sill-piece B, the construction and arrangement of the extension-plate P, as and for the purpose set forth.

4. The arrangement of the platform F, provided with frames composed of pieces  $p$ ,  $p^1$ ,  $p^2$ , and  $p^3$ , straps T and T', set-screws D<sup>1</sup>, D<sup>2</sup>, D<sup>3</sup>, D<sup>4</sup>, and D<sup>5</sup>, as and for the purpose set forth.

5. Constructing the edge of the platform F, also the inner edges of the framing-pieces  $p$  and  $p^1$ , or  $p^2$  and  $p^3$ , with grooves for inserting and securing the edges of the canvas screens C and C', as and for the purpose specified.

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

EDWARD R. HOLZER.

Witnesses:

CHARLES H. EVANS,  
ISAAC R. OAKFORD.