(No Model.)

F. M. HERBST.

SCAFFOLDING.

No. 595,064. Patented Dec. 7, 1897.

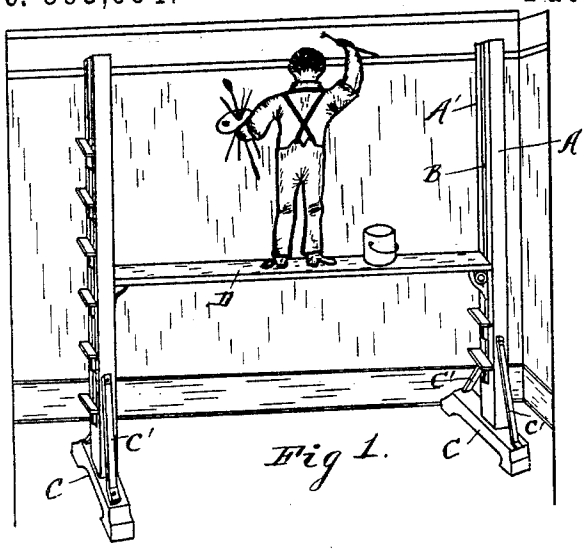


Fig 1.

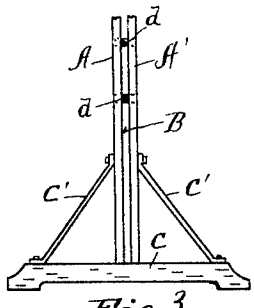


Fig 3.

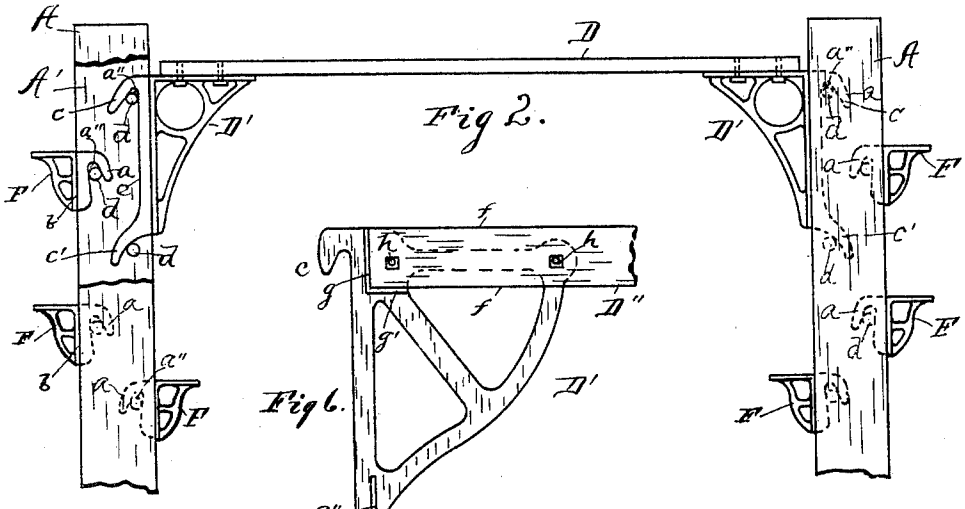


Fig 2.

Fig 6.



Fig 7.

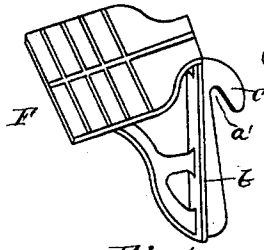


Fig 4.

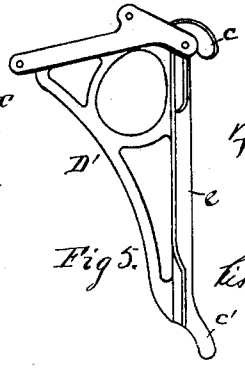


Fig 5.

F. M. Herbst.

INVENTOR:

by R. J. McCarty

his ATTORNEY:

WITNESSES:

L. L. Allen.

Chas. B. Neeve.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

FRANK M. HERBST, OF DAYTON, OHIO.

SCAFFOLDING.

SPECIFICATION forming part of Letters Patent No. 595,064, dated December 7, 1897.

Application filed June 28, 1897. Serial No. 642,722. (No model.)

To all whom it may concern:

Be it known that I, FRANK M. HERBST, a citizen of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Scaffolding; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in scaffolding; and it consists of a combination of ladder and scaffold that is especially adapted to the work of painters, decorators, paperhangers, &c.

The features of the invention will be hereinafter fully described in connection with the accompanying drawings, of which—

Figure 1 is a view in perspective of my improved scaffold. Fig. 2 is an elevation of the upper portion of a ladder-scaffold constructed in accordance with my invention. Fig. 3 is an end elevation of the lower portion of one of the end standards. Fig. 4 is an enlarged perspective view of one of the step-brackets. Fig. 5 is a similar view of one of the scaffold-brackets. Fig. 6 is an elevation of a modified form of scaffold-bracket. An end of the scaffold is shown broken off. Fig. 7 is a top view of Fig. 6.

Referring now to the drawings, upon which similar letters of reference indicate corresponding parts, the standards or uprights consist each of two parallel pieces A and A′ with an intervening space B and having their ends mounted each in a base C, to which they are rigidly held by braces C′ C′.

d designates a plurality of round pins mounted in said uprights across the space B. These pins are placed alternately in inward and outward positions to enable the step-brackets F to be placed in positions on opposite sides of the standards, as shown in Fig. 2. The step-brackets each have an outwardly and downwardly projecting tongue *a*, that provides a tapering space *a′* between said tongue and the vertical edge of the bracket, in which the pins *d* rigidly fit when pressure is placed on said brackets. This construction of the tongue *a* is essential in order to provide this rigid connection between the pins *d* and the brackets. The relative size of the pins *d* should be such as to provide a space *a″* above the pins when they are in the positions shown in the drawings. The flange *b* of the bracket projects into the slot or space B when the brackets are in position and prevents any possible lateral or loose movement of said brackets.

D designates a scaffold or horizontal piece supportable in an upper or lower position on brackets D′. These brackets are substantially larger than the step-brackets and are each provided at its upper end with a tongue *c*, similar to tongue *a*, and which hooks and locks over one of the pins *d* in the same manner as do the tongues *a*. At the lower end of each of said brackets there is another tongue *c′*, that projects inwardly on the inner side of a lower pin *d* and supports the lower end of the bracket in position. The pin behind which the said tongue *c′* projects is in a vertical line with the upper pin over which the tongue *c* hooks. *e* designates a flange on the inner side of each of said brackets and projecting into the space B and serves in the same manner as the flange *b* on the step-brackets to prevent any possible lateral movement.

It will be noted in Figs. 2 and 4 that the tongues *a* and *c* project out from the bodies of the brackets, so as to provide a tapering space behind said tongues, or a space with less area at the top than at the bottom, and it is essential that the pins *d* be of a sufficient size to prevent their entering the full depth of said spaces. These are important features in the construction of said parts, as thereby the brackets become firmly locked in their positions and do not become detached or loose by the usual wear.

In Figs. 6 and 7 I have shown some modification in the structural features of the brackets D′, by which they are adapted to an attachment with a scaffold or horizontal piece D″, the latter being essentially in a position, with its longitudinal edges *f* occupying an upper and lower horizontal plane, to obtain greater supporting strength. In this construction the bracket is provided on both sides with vertical and horizontal flanges *g*

and g', against which the inner ends of the piece D'' abut and are rigidly attached to said brackets by bolts h, that pass through openings therein. On the lower portion of the brackets D' and on each side thereof is a vertical flange g'' in line with the upper flange g and which, together with said flange g, limits the entry of the brackets into the space B. In the employment of this form of bracket and scaffolding, as shown in Figs. 5 and 6, two uprights or standards with their scaffolds D'' are placed parallel with each other, and any suitable number of cross-pieces may be placed thereon, and standing room may thus be had for any number of workmen.

Having described my invention, I claim—

1. The combination with standards A A' having spaces B; a plurality of pins d mounted in said standards across said spaces, each alternate pin being out of line with the preceding and succeeding pins; of brackets having tongues c adapted to hook over said pins, and a lower tongue c', adapted to rest against the inner side of one of said pins in a vertical line with the pin over which the hook or tongue c fits, horizontal and vertical flanges g and g' projecting from each side of said brackets near the upper edge, and a lower vertical flange g'' projecting from the lower sides of said brackets in line with the flanges g, substantially as shown and described.

2. In a scaffolding, the combination with standards A and A' having an intervening space, and a plurality of pins mounted in said standards across said spaces, the positions of said pins alternating inwardly and outwardly, of a plurality of brackets provided with outwardly and downwardly projecting tongues a supportable on said pins on two sides of the standards, a series of larger brackets having upper tongues c and lower tongues c' adapted to engage with two of said pins in the same vertical line, the spaces between the tongues a and c, and the bodies of said brackets being essentially of a smaller area at their upper terminals so that the said brackets will become rigidly connected with the pins when weight is placed on said brackets, as herein shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

FRANK M. HERBST.

Witnesses:

R. J. McCARTY,

H. J. FIORINI.