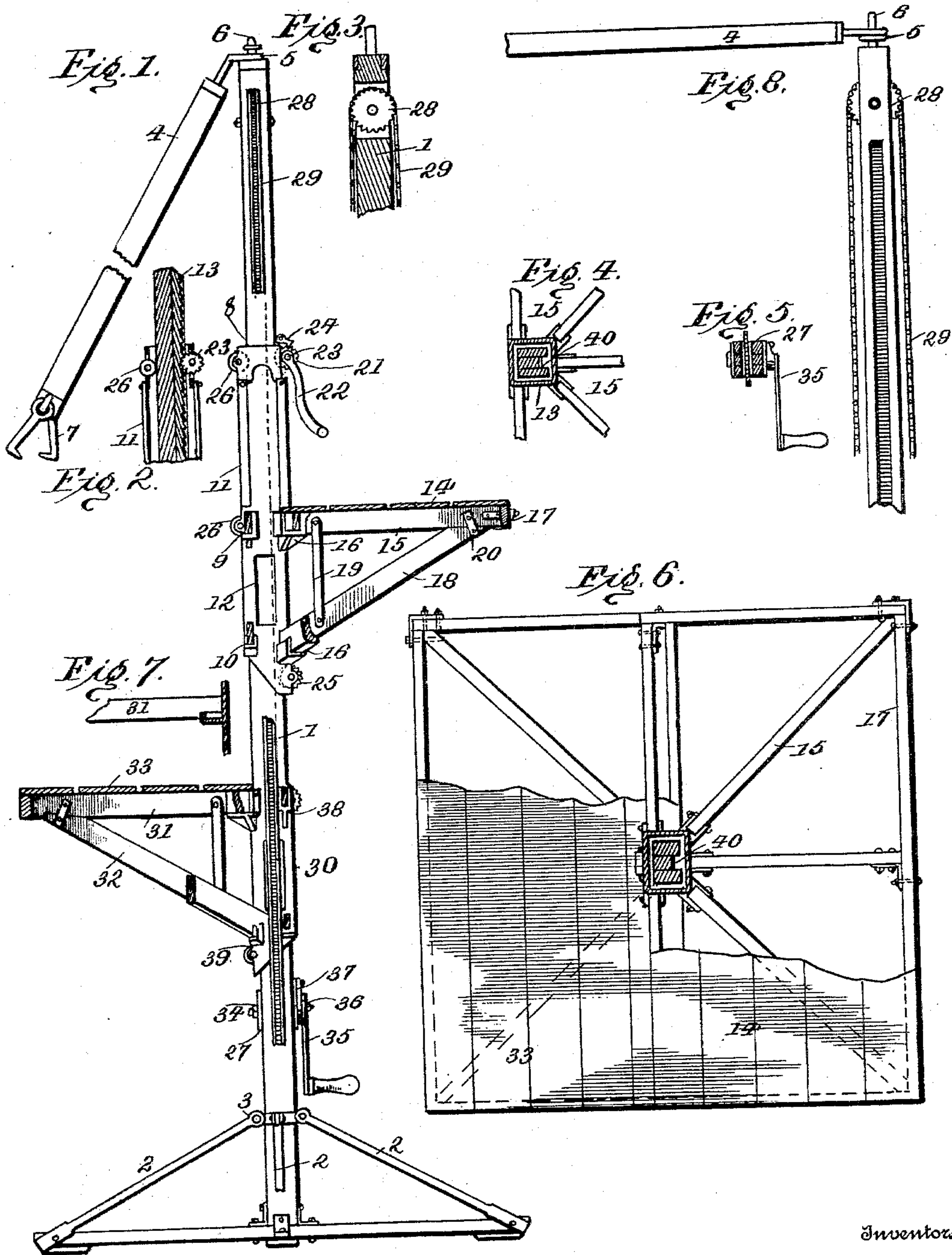


(No Model.)

R. RUE & J. C. DEVINE.  
SCAFFOLD.

No. 597,205.

Patented Jan. 11, 1898.



Witnesses

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# UNITED STATES PATENT OFFICE.

ROSS RUE AND JOHN C. DEVINE, OF ALLIANCE, OHIO.

## SCAFFOLD.

SPECIFICATION forming part of Letters Patent No. 597,205, dated January 11, 1898.

Application filed February 15, 1897. Serial No. 623,354. (No model.)

*To all whom it may concern:*

Be it known that we, ROSS RUE and JOHN C. DEVINE, citizens of the United States, residing at Alliance, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Scaffolds; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the figures of reference marked thereon, in which—

Figure 1 is a side elevation of a post, showing a transverse section of the working scaffold and also of the elevating scaffold or platform. Fig. 2 is a longitudinal section showing a portion of the standard, also showing the top or upper end of the sliding head. Fig. 3 is a view showing the top or upper end of the standard and its sprocket-wheel, also showing a portion of the elevating-chain. Fig. 4 is a transverse section of the post or standard, showing the sliding head located thereon, also showing portions of the arms for supporting the scaffold. Fig. 5 is a transverse section of the post or standard, showing the location of the lower sprocket-wheel and its crank and shaft. Fig. 6 is a top view of the working scaffold, also a top view of the elevating-scaffold, showing parts of the scaffolding broken away in both the working and elevating scaffolds. Fig. 7 is a view showing a portion of one of the scaffold-arms. Fig. 8 is a side view of a portion of the post or standard, showing the location of the rack-bar.

The present invention has relation to scaffolds; and it consists in the different parts and combination of parts hereinafter described, and particularly pointed out in the claims.

Similar figures of reference indicate corresponding parts in all the views of the drawings.

In the accompanying drawings, 1 represents a post or standard which is formed of a height to correspond substantially with the height designed to elevate the working scaffold. The post or standard 1 is held in an upright position by means of the braces 2, which braces are connected to the post or standard 1 by means of the band 3.

For the purpose of holding the top or upper end of the post or standard 1 the brace or guy-bar 4 is provided, said guy-bar being pro-

vided at its top or upper end with the angle-iron 5, which angle-iron is pivotally connected to the pin 6. In the drawings but one guy-bar is shown, but it will be understood that two or more bars may be connected so as to hold the post or standard 1 against displacement in any direction. The bottom or lower end of the guy-bar 4 is provided with the pivoted dogs 7, which pivoted dogs are for the purpose of being attached to the joist of a building or some other fixed object.

Upon the post or standard 1 is located the sliding heads or bands 8, 9, and 10, said heads or bands being connected together and held the desired distance apart by means of the bars 11 and 12, said bars being located substantially as illustrated in the drawings.

Upon one side of the post or standard 1 is located the rack-bar 13, which rack-bar is securely attached in any convenient and well-known manner to the post or standard 1 and is formed of a length to correspond with the length of travel designed to be given to the scaffold 14.

For the purpose of supporting the scaffold 14 in a horizontal position the braces 15 are provided, which braces are seated into and connected to the sockets 16, their outer ends being connected to the frame 17 of the scaffold 14.

For the purpose of connecting the bars 18 and the braces 15 together the bars 19 and 20 are provided, which are connected in any convenient and well-known manner. To the sliding head 8 is journaled the crank-shaft 21, which crank-shaft is provided with the crank 22 and the pinion 23, which pinion is so located that it will mesh with the rack-bar 13. As the pinion 23 is rotated in one direction it will elevate the sliding head 8, carrying with it the different parts connected to said sliding head, and when said pinion is rotated in the opposite direction the sliding head will be lowered, by which arrangement the scaffold 14 is moved up or down, as desired.

It will be understood that in the construction of brick walls the scaffold upon which the brick-mason stands should be at such a point with reference to the height of the wall that the mason can with ease work upon the wall. For the purpose of holding the scaffold



at the desired distance below the top of the wall the detent or dog 24 is provided, which detent engages the pinion 23. To the sliding head 10 is journaled the pinion 25, which pinion meshes with the rack-bar 13 and is for the purpose of preventing said head from binding upon the post or standard 1 and at the same time reducing the friction. To the sliding heads 8 and 9 are journaled the antifriction-rollers 26, which antifriction-rollers are located substantially as shown in Fig. 1. To the post or standard 1 are journaled the sprocket-wheels 27 and 28, one of said sprocket-wheels being located near the bottom of said post or standard and the other one near the top of said post or standard. The sprocket-wheels 27 and 28 are formed of a diameter greater than the width or thickness of the post or standard 1, and are so formed for the purpose of permitting the chain 29 to pass freely up and down and around the sprocket-wheels, as hereinafter described. To one member or side of the continuous sprocket-chain 29 is securely attached in any convenient and well-known manner the sliding head 30, to which sliding head are connected the bars 31 and the braces 32, by which arrangement the head 30, together with the bars 31, the braces 32, and the platform 33, will follow the movements of the member of the continuous chain to which said sliding head is connected. The object and purpose of providing the platform 33 is to elevate the building material, such as brick and mortar, and when the platform 33 has been elevated to within a short distance below the platform 14, or until the top or upper end of the head 30 strikes or nearly strikes the bottom or lower end of the head 10, after which the material located on the platform 33 can be removed to the platform 14, which places the material in proper position to be used by the workmen.

For the purpose of operating the chain 29, together with the different parts connected therewith, the sprocket-wheel 27 is mounted upon a shaft, such as 34, which shaft is provided with a crank 35 and the ratchet-pinion 36, which ratchet-pinion is held against backward rotation by means of the detent or dog 37. We have illustrated the means for operating the chain as that of a crank, but it will be understood that we do not desire to be limited to such mechanism, as power may be applied in many different ways and the same object accomplished.

The top or upper end of the sliding head 30 is provided with the pinion 38 and the antifriction-roller 39, which are for the purpose of preventing the sliding head from binding as it moves up and down upon the post or standard 1.

In illustrating our invention we have shown

but one post or standard 1, but in the construction of long scaffolds it will be understood that a series of posts or standards are to be used, located a suitable distance to one side of the wall, and any desired number of said posts or standards provided with the mechanism herein shown; but inasmuch as the construction is to be simply a duplication of what is shown we do not deem it necessary to illustrate but a single post or standard.

It will be understood that the sliding heads 8, 9, and 10 should be so formed as to size that the chain 29 can move freely up and down upon either side of the post or standard and pass under or between the inner faces of said heads and the outer faces of the posts or standards.

For the purpose of preventing the heads 8, 9, and 10 from moving laterally with reference to the post or standard 1 the rack-bar 13 is set into the groove 40, so that the side faces of the pinions 23 and 25 will abut against the walls of the groove 40, or such portions of the pinions 23 and 25 that are set into the groove 40.

The purpose of holding the heads 8, 9, and 10 against lateral movement is (a) to produce friction, and (b) to so hold said heads that they will not interfere with the movements of the chain 29.

Having fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The combination of a post or standard provided with the groove 40, and the rack-bar 13, the sliding heads 8, 9, and 10, connected together, braces connected to and moving with the sliding heads 8, 9, and 10, the pinion 23, journaled to the head 8, the pinion 25, located below the platform 14, the platform 14 and the antifriction-roller 26, substantially as and for the purpose specified.

2. The combination of a post or standard pivotally attached at its top or upper end, guy-bars, sprocket-wheels located respectively at the top or upper portion and the bottom or lower portion of said post or standard, an elevating-chain connected to the sprocket-wheels, a head or frame connected to the elevating-chain and carrying a platform, and a platform adjustably connected to the post or standard located above the elevating-platform, substantially as and for the purpose specified.

In testimony that we claim the above we have hereunto subscribed our names in the presence of two witnesses.

ROSS RUE.

JOHN C. DEVINE.

Witnesses:

JAMES I. RICKARD,  
ALONZO C. STRONG.