No. 786,499. PATENTED APR. 4, 1905.

S. C. JOHNSON.

ROOF SCAFFOLD.

APPLICATION FILED SEPT. 5, 1903.

2 SHEETS—SHEET 1.

Fig. 1.

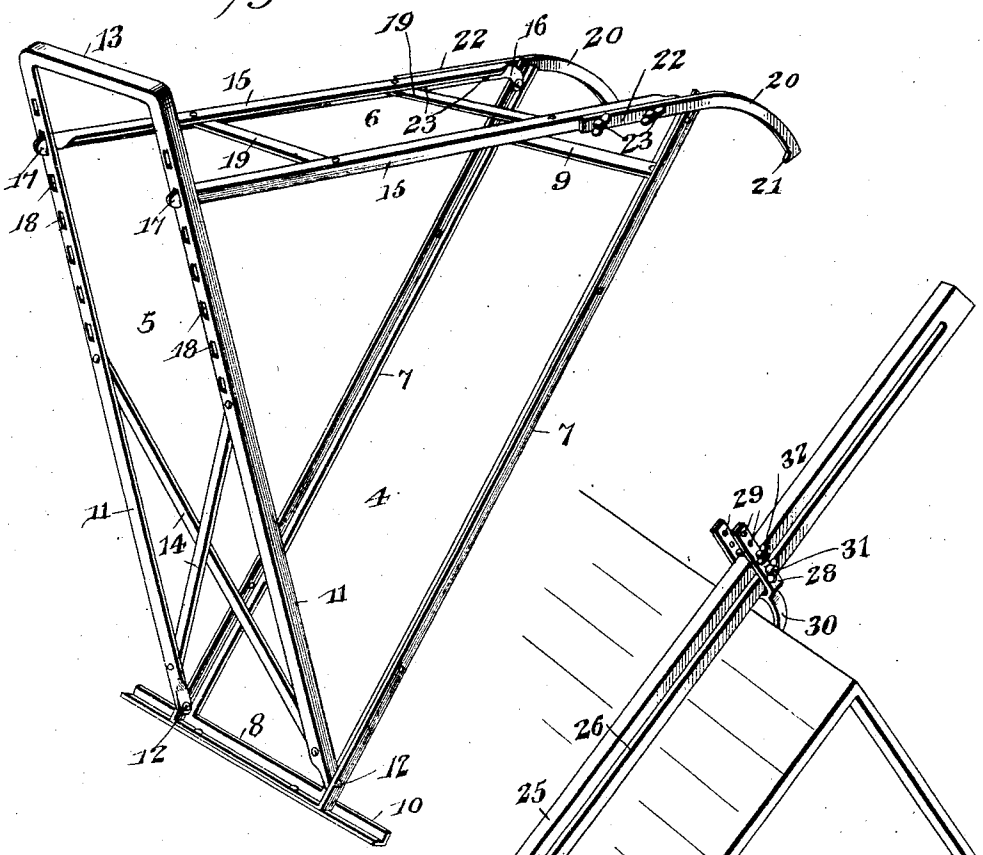


Fig. 2.

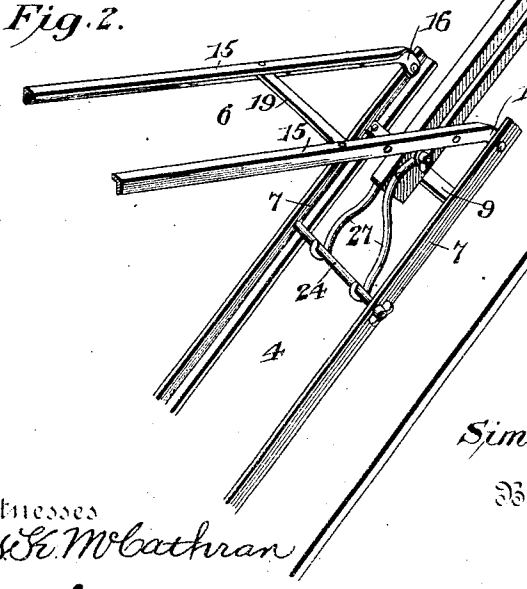
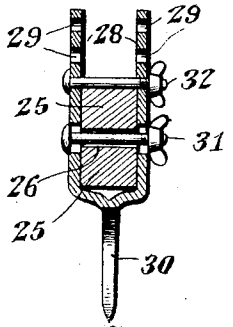


Fig. 3.



Witnesses
Jas. K. McCathran
B. L. Foster

Simon C. Johnson, Inventor
By E. G. Siggers
Attorney

No. 786,499. PATENTED APR. 4, 1905.

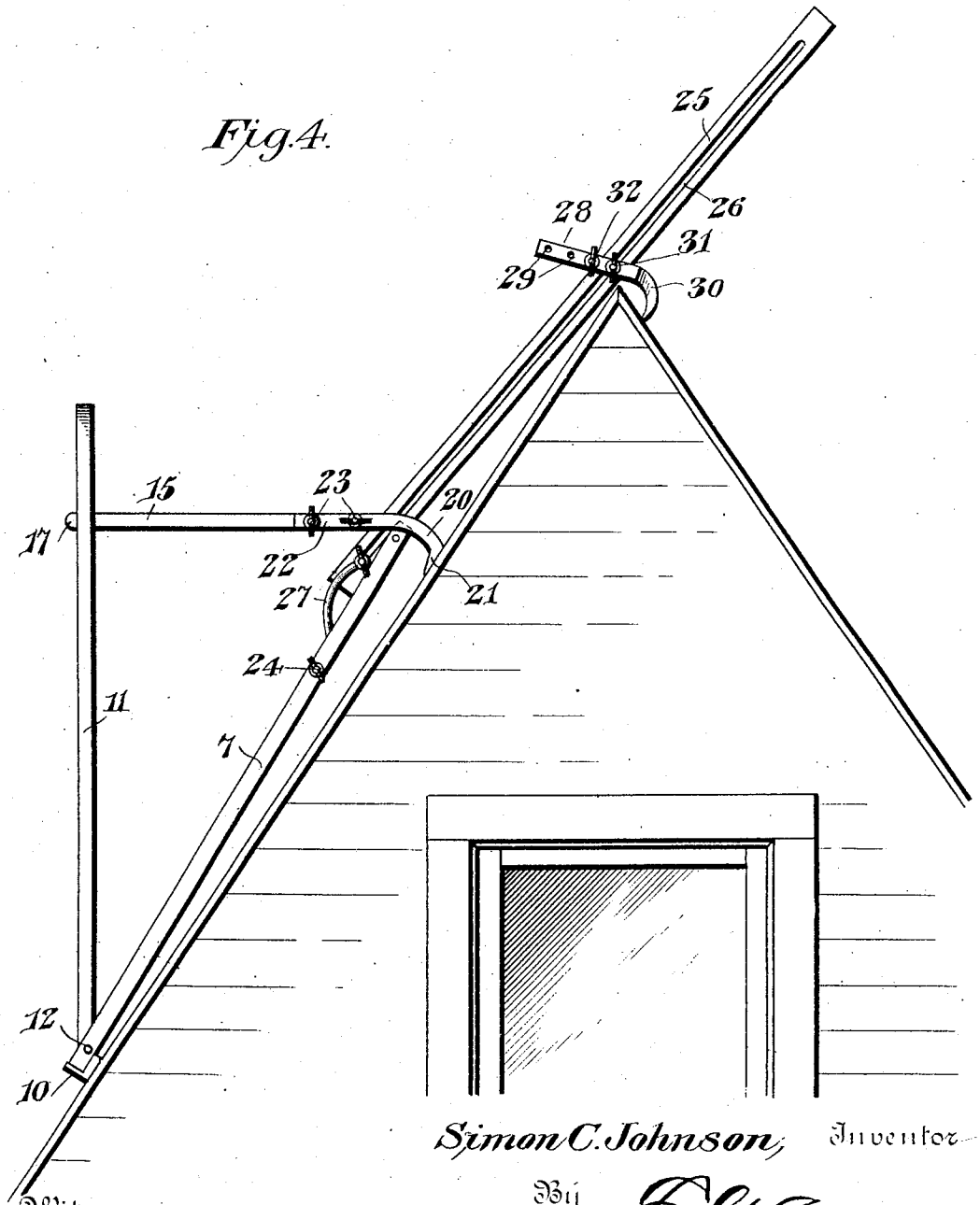
S. C. JOHNSON.

ROOF SCAFFOLD.

APPLICATION FILED SEPT. 5, 1903.

2 SHEETS—SHEET 2.

Fig. 4.



Witnesses
Jas. K. McCathran
B. G. Foster

Simon C. Johnson, Inventor
By E. G. Siggers
Attorney.

PHOTO-LITHOGRAPHED BY SACHETT & WILHELMS LITHO. & PTG. CO. NEW YORK.

No. 786,499. Patented April 4, 1905.

UNITED STATES PATENT OFFICE.

SIMON C. JOHNSON, OF DEKALB, ILLINOIS.

ROOF-SCAFFOLD.

SPECIFICATION forming part of Letters Patent No. 786,499, dated April 4, 1905.

Application filed September 5, 1903. Serial No. 172,166.

To all whom it may concern:

Be it known that I, SIMON C. JOHNSON, a citizen of the United States, residing at Dekalb, in the county of Dekalb and State of Illinois, have invented a new and useful Roof-Scaffold, of which the following is a specification.

The present invention relates more particularly to that class of scaffolds which are hung from the ridge of a roof, and it is in the nature of an improvement on the structure shown and described in my copending application filed December 1, 1902, Serial No. 137,357.

One of the objects is to provide a scaffold which can be adjusted to the slope of a roof and to employ in connection therewith hanger-hooks that engage over the ridge or peak and adjust themselves upon the adjustment of the scaffold, so that they will always properly hug the apex.

A still further object is to provide in connection with the above means of an adjustable nature which will permit the placing of the scaffold at different distances from the apex of the roof.

Another object is to provide a structure which is extremely light in weight, though strong and rigid, said structure being compactly foldable, so that it will occupy very little space when not in use.

The preferred form of construction is illustrated in the accompanying drawings, wherein—

Figure 1 is a perspective view of the scaffold as ordinarily employed. Fig. 2 is a perspective view showing the means for hanging the scaffold upon the lower portions of a roof. Fig. 3 is a cross-sectional view, on an enlarged scale, through the hanger means. Fig. 4 is a view in elevation showing the manner in which the scaffold may be supported upon the lower portion of a roof without removing the hooks.

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

In the embodiment illustrated the scaffold consists of a roof member 4, a supporting member 5, and a bridge member 6. The roof member is preferably formed of an angle-iron doubled into substantially U shape to form spaced side bars 7, connected at their lower ends by a cross-piece 8. The upper ends of the side bars are also connected by a cross-piece 9. In order to obtain an extended base, an angle-iron 10 is secured to the cross-piece 8 and projects beyond the side bars 7. The supporting member is also a U-shaped frame formed of angle-iron and comprising upright standards 11, pivoted at their lower ends, as shown at 12, to the side bars 7 of the roof member, their ends being connected by an integral transverse web 13. Diagonal braces 14 preferably connect the standards to connect the same. The bridge member 6 consists of side bars 15, which are also formed of angle-iron and have downturned terminals 16, pivoted to the upper ends of the side bars 7. The opposite ends of the side bars 15 are formed of hooks 17, which are adapted to engage in suitable sockets 18, formed in the inwardly-extending flanges of the standards. Cross-pieces 19 connect the bars 15 of the bridge member and serve as braces therefor. The bridge member is provided with hanger-hooks 20, that are curved downwardly and have spurs 21 at their free ends. These hooks are carried by the side bars 15 and project beyond the side bars 7 of the roof member. They may be made integral with the bars 15; but in the construction illustrated they are detachable for the reasons hereinafter set forth. When detachable, they are provided with shanks 22, that lie alongside the bars 15 and are fastened thereto by bolts 23, passing through the shanks and the bars.

When the device is to be used as shown in Fig. 1, the hooks 20 are engaged over the apex or peak of the roof and the bridge member is placed in horizontal position by locating the hooks 17 in the proper sockets of the standards. This adjustment of the bridge member also adjusts the hooks by raising or lowering them, thus making the angle formed by said hooks and the side bars of the roof member substantially the same as the angle of the roof. The scaffold, therefore, will always securely engage

over the roof. It will be evident, moreover, that it is very strong and rigid, though light in weight. It will also fold compactly, for the reason that the supporting member will fit within the roof member and be covered by the bridge member when so folded.

In case a scaffold is to be supported at a distance from the apex which would prohibit the use of the hooks 20 a separate hanger is employed, and in this case said hooks 20 are removed. A bolt 24 is passed through and extends across the space between the side bars 7. A hanger beam or bar 25 is employed, which is provided with a longitudinal slot 26. The lower end of this beam carries spaced hooks 27, that engage the bolt 24. A yoke 28 slidably embraces the beam or bar 25, and the opposite legs thereof are provided with alined openings 29. This yoke carries at its lower end a depending hanger-hook 30, that is arranged to engage over the apex of the roof, as illustrated in Fig. 2. Bolts 31 and 32 are passed through the legs of said yoke, one of these bolts, as 31, also passing through the slot of the hanger-bar. The other bolt, 32, extends across the upper face of the bar and is adjustable toward and from the same by being passed through any of the openings 29. The use of this supplemental hanger will be clearly evident by reference to Fig. 2. The hooks 20 of the scaffold having been removed, the hooks 27 of the hanger-bar are engaged beneath the bolt 24, which is first placed in position. The hook 30 is then adjusted to a proper distance along the bar, and the bolt 32 being placed in any of the openings 29 desired said hook can be disposed in different angular relations to the hanger-bar to properly coact with the slope of the roof. This will be evident when it is considered that by placing the bolt 32 in the outer openings the yoke can swing upon the bolt 31 as a pivot. After having obtained the desired relation the bolts are tightened so as to clamp the hook against movement. If desired, the hooks of the scaffold need not be removed, for, as illustrated in Fig. 4, the hanger-bar can be attached to the scaffold and said scaffold supported upon the lower portion of a roof, in which case the said hooks constitute supports that bear against the roof.

From the foregoing it is thought that the construction, operation, and many advantages of the herein-described invention will be apparent to those skilled in the art without further description, and it will be understood that various changes in the size, shape, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a structure of the class described, the combination with a roof member, of a supporting member pivoted to the lower portion of the roof member, a bridge member pivoted to the upper portion of the roof member and having an adjustable engagement with the supporting member, said bridge member including longitudinally-disposed spaced side bars, and downturned hooks carried by and arranged longitudinally of the side bars, said hooks being located at the pivoted end of the bridge member and extending beyond the same, being arranged to engage over the apex of a roof.

2. In a structure of the class described, the combination with a roof member comprising spaced side bars and connections between the upper and lower ends of the side bars, of a supporting member comprising an arched frame forming spaced upright standards, said frame being pivoted to the lower end of the roof member, and a bridge member comprising spaced side bars pivoted to the upper ends of the side bars of the roof member, said bridge-bars having vertically-adjustable engagements with the standards, and separate downturned hooks carried by the pivoted ends and extending longitudinally of the bridge-bars and projecting beyond the upper end of the roof member.

3. In a structure of the class described, the combination with a roof-scaffold, of a hanger-bar having a longitudinally-disposed slot, means for securing the hanger-bar to the scaffold, a yoke embracing the bar and having a depending hook, and a bolt passing through the slot and engaging the portions of the yoke on opposite sides of the bar.

4. In a structure of the class described, a roof-scaffold comprising a roof member, a bridge member pivoted to the upper end of the roof member, and a supporting member pivoted to the lower end of the roof member and having an adjustable engagement with the bridge member, in combination with a hanger-bar having a longitudinally-disposed slot, hooks carried by the lower end of the hanger-bar and constituting means for detachably securing the same to the roof member or scaffold, a yoke embracing the hanger-bar and having a depending hook, and a bolt passing through the slot of the hanger-bar and engaging the portions of the yoke on the opposite sides of the same.

5. In a structure of the class described, the combination with a roof-scaffold, of a hanger, means for securing the hanger to the scaffold, a hook mounted on the hanger and movable thereon to different angular relations with respect thereto, and means for holding the hook in different angular relations to the hanger.

6. In a structure of the class described, the combination with a roof-scaffold, of a hanger-bar, means for securing the hanger-bar to the scaffold, said hanger-bar having a longitudi-

nally-disposed slot, a yoke embracing the bar and extending above the same, a hook depending from the yoke beneath the bar, and bolts passing through the yoke, one of said bolts being located in the slot of the bar, the other being adjustable in the yoke and extending across the upper face of the bar

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

SIMON C. JOHNSON.

Witnesses:

BENJ. S. WHITE,

GEORGE H. MILLER.