A. E. BOND.

WINDOW SCAFFOLD.

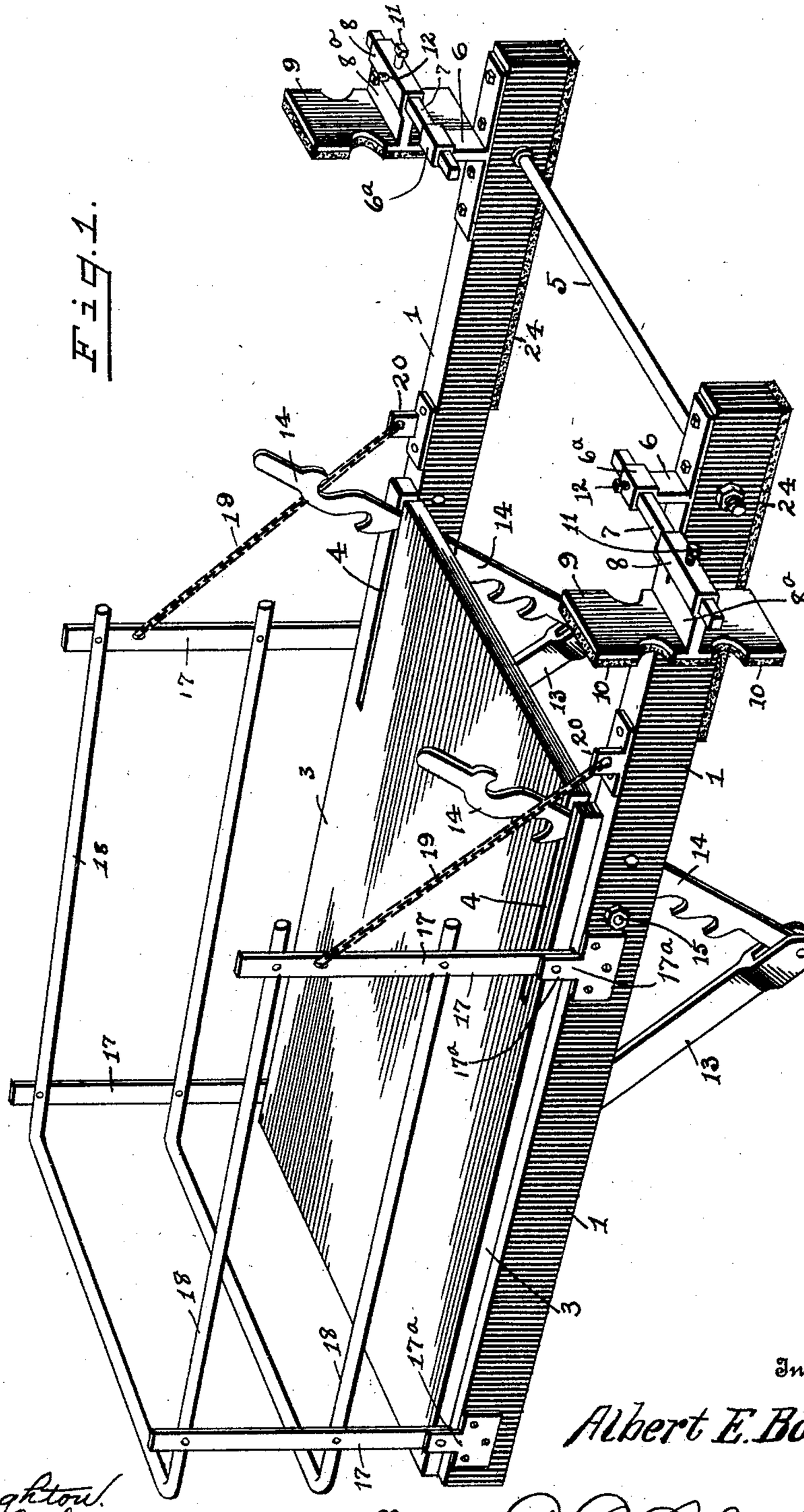
APPLICATION FILED SEPT. 12, 1908.

933,740.

Patented Sept. 14, 1909.

2 SHEETS—SHEET 1.

Fig. 1.




Witnesses

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A. L. Phelps

Inventor

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2 SHEETS—SHEET 2.

Fig. 2.

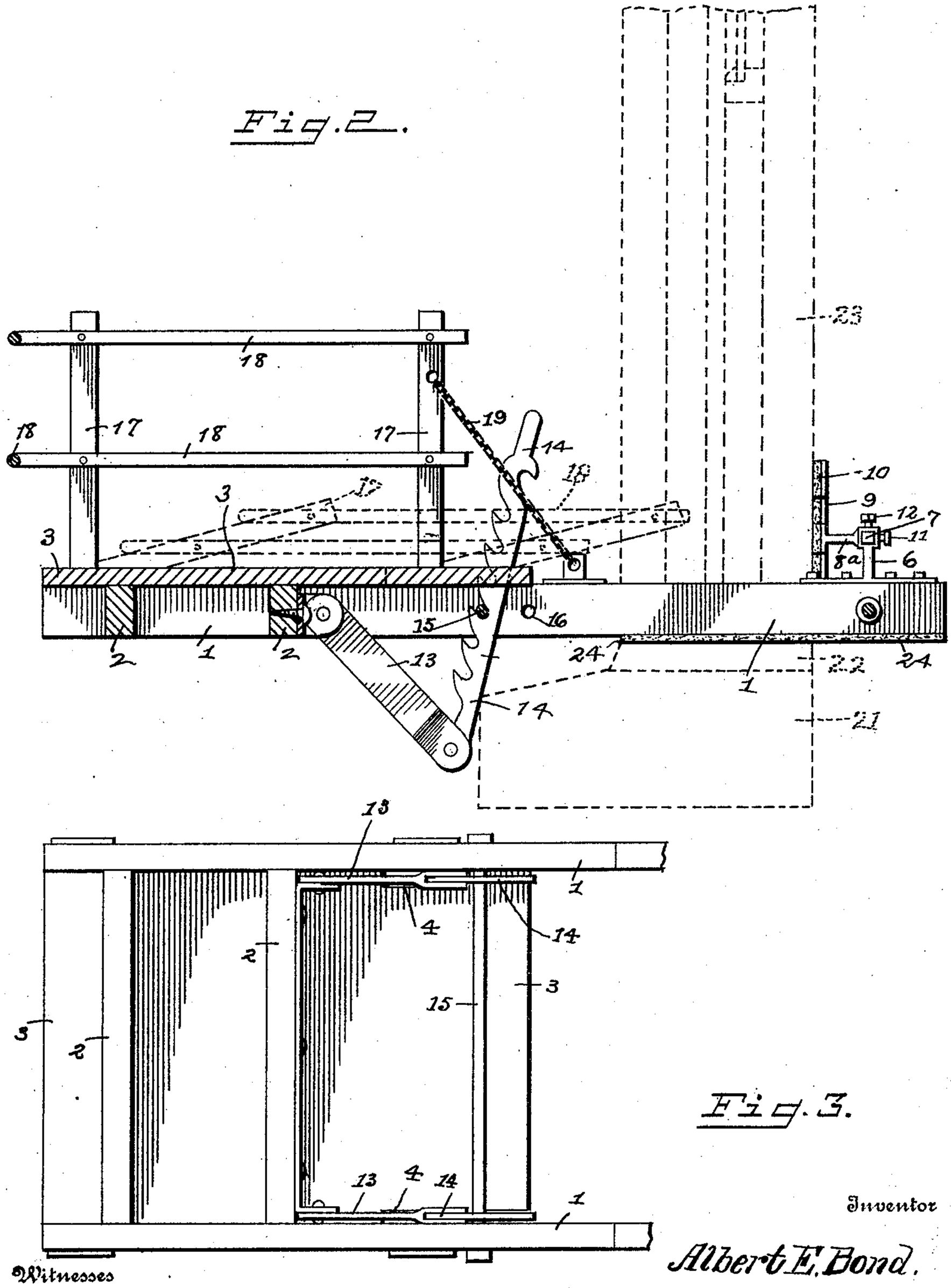





Fig. 3.

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# UNITED STATES PATENT OFFICE.

ALBERT E. BOND, OF COSHOCTON, OHIO.

## WINDOW-SCAFFOLD.

933,740. Specification of Letters Patent. Patented Sept. 14, 1909.

Application filed September 12, 1908. Serial No. 452,716.

*To all whom it may concern:*

Be it known that I, ALBERT E. BOND, a citizen of the United States, residing at Coshocton, in the county of Coshocton and State of Ohio, have invented certain new and useful Improvements in Window-Scaffolds, of which the following is a specification.

My invention relates to the improvement of window scaffolds of that class which are adapted for the support of a person washing the outer sides of windows, and the objects of my invention are to provide a window scaffold of improved construction and arrangement of parts having improved means for its support in windows having various depths of sills; to provide adjustable and positive means for the engagement of the inner sides of the window frame; to provide means for folding my improved scaffold into such compact form as to facilitate its insertion through the lower half of a window, and to otherwise produce a substantial, convenient and safe support for window washers, which is adapted for use in windows of varying constructions. These objects I accomplish in the manner illustrated in the accompanying drawings, in which:

Figure 1 is a perspective view of my improved window scaffold, Fig. 2 is a central longitudinal section of the same, showing by dotted lines its position with relation to the window frame and sill, and, Fig. 3 is a view of a portion of the underside of my device.

Similar numerals refer to similar parts throughout the several views.

In carrying out my invention, I employ an oblong framework which comprises two parallel side beams 1 which are connected in their rear portions by cross beams 2. The side beams 1 support a platform 3 which terminates short of the forward ends of the beams and which is provided in its forward end portion adjacent to each side thereof, with a longitudinal recess or open end slot 4, the latter lying adjacent to the vertical planes of the inner faces of the beams 1. The forward end portions of the beams 1 are connected by a transverse rod 5. Secured upon the upper side of each of the beams 1, near its forward end, is a vertical bracket 6, the upper termination of which is in the form of a transverse keeper or sleeve $6^a$ having a squared opening therethrough in the direction of the width of the scaffold. Slidably mounted in each of these keepers or heads $6^a$ is the inner portion of a horizontal outwardly extending bar 7, the latter extending loosely through a sleeve termination 8 of an arm $8^a$ which projects from the center of the height of a vertical clamping plate 9, the latter having its rear face suitably padded as indicated at 10. By means of a set screw 11 which passes through a threaded opening in the sleeve 8, the clamping plate 9 may be held at a desirable point on the bar 7 and the position of said bar may be changed by sliding the same through the keeper $6^a$ and turning inward a set screw 12 which engages a threaded opening in said keeper, thus providing for the inward and outward adjustment of the bars 7 and an independent adjustment of the plates 9. To the inner side of each of the beams 1, I pivot beneath the platform 3 the upper and rear end of a bar 13, the lower end of which has pivotally connected therewith, the lower end of a rack bar 14 which rack bar is inclined upwardly and forwardly from the bar 13 and extends through one of the slotted openings 4 of the platform. These opposing rack bars are adapted to have their corresponding teeth or notches engage a transverse rod 15 which is adapted to be removably inserted and supported in one of two or more separated openings 16 formed at opposite points in the beams 1.

As indicated in the drawing, I provide the outer portion of my scaffold with a safety railing, which comprises bars 17, the lower or corresponding ends of which are pivotally connected with the side members of horizontal U-shaped rail rods 18. The standards or bars 17 which are nearest the inner end of the platform 3 are connected by chains 19 with suitable brackets 20 which rise from the upper sides of the beams 1 in front of the platform.

In order to insert my improved scaffold in a window frame, the railing which comprises the pivoted standards 18 and pivoted rails 17, is folded forward to the position indicated in dotted lines in Fig. 2 of the drawing, thus admitting of the insertion of the outer portion of the scaffold through the lower half of a window until the inner straight sides of the rack bars 14 are in contact with the outer side of the window sill which is indicated in dotted lines at 21.

When in this position the inner end portions of the beams 1 bear upon the base of the window frame 22, the clamping or retaining plates 9 being so adjusted that their padded surfaces bear against or engage the inner faces of the vertical side members 22 of the window frame. As indicated at 24, I preferably provide the undersides of the bearing portions of the sills 1 with suitable pads which prevent the marring of the window frame base. It will be understood that by changing the engagement of the rack bars with the rod 15, said rack bars may have their degree of inclination changed to facilitate engagement with sills of various constructions or depths and that a further adjustment may be attained of said rack bars, by changing the rod 15 from one of the openings 16 to another. It is obvious that by moving the clamping plates or members 9 laterally, window frames of different widths may be properly engaged thereby. The scaffold having thus been supported, it is obvious that although the outer side of the window sill is ordinarily of considerable less height than the bottom of the window frame, the manner of support described, will result in the sills of the scaffold being retained in a horizontal position regardless of the difference in height of said sill and frame. The scaffold having thus been affixed in the frame and its platform projected on the outer side of the window, the jointed railing may be raised to the vertical position indicated in Fig. 1 of the drawing, said railing structure being limited in its outward movement by the chains 19 and its pivotal connections being sufficiently close to cause a desirable binding action between the bars 17 and 18, thereby prevening any tendency of the railing structure from dropping inward toward the building.

It is obvious that a scaffold such as I have described herein, will be of special utility as a support for the washers of windows in comparatively tall buildings where the danger accompanying such work is extreme. It will also be observed that the construction of my improved scaffold is such as to permit of its manufacture at a reasonable cost and that by raising the rack bars until the bars 13 are substantially parallel with the beams 1, said rack bars may be folded or extended in the direction of the length of the scaffold, which in conjunction with the folding of the railing structure, will permit of the device being converted into a comparatively low structure, which will facilitate its package for shipment or storage when not in use.

What I claim, is:

1. In a window scaffold, the combination with a frame, of means carried by said frame for engaging the inner faces of a window frame, a folding railing mounted upon the outer portion of said frame, a pivoted bar 13, a rack bar pivotally connected thereto and extending upwardly through the frame, and a member carried by said frame and adapted to be engaged by said rack bar, the inner faces of said rack bar being a non-serrated one, said non-serrated face engaging the outer edge of the window sill when said rack bar is forced into engagement with said member.

2. In a window scaffold, the combination with a frame comprising parallel beams and a platform, and means carried by said beams for engaging the inner surfaces of a window frame, of adjustable means for engaging the outer side of a window sill comprising pivoted bars 13 and toothed bars 14 jointedly connected with said pivoted bars, and a detachable rod extending between the frame beams with which said toothed bars are adapted to engage as described and means for supporting said rod in a plurality of positions longitudinally of the frame.

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

ALBERT E. BOND.

Witnesses:
CARL R. HERBIG,
LOUIS BRENDEL.