(No Model.) 2 Sheets—Sheet 1.

F. W. BRUENER.

APPARATUS FOR SUPPORTING PERSONS AND THINGS IN FRONT OF WINDOWS.

No. 303,980. Patented Aug. 26, 1884.

Fig. 2.

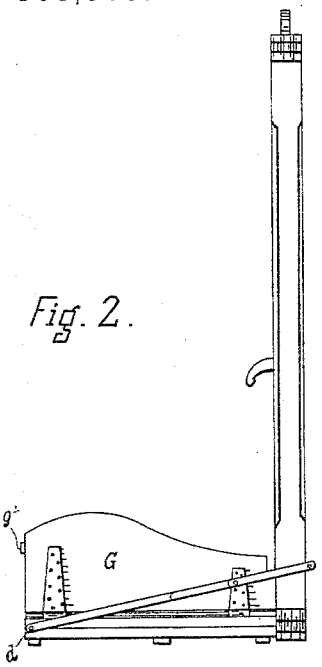


Fig. 1.

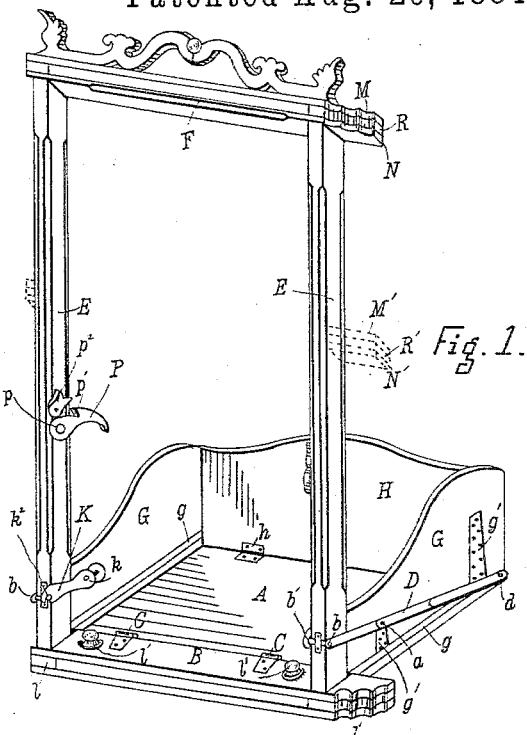


Fig. 3.

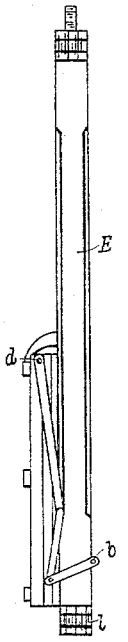
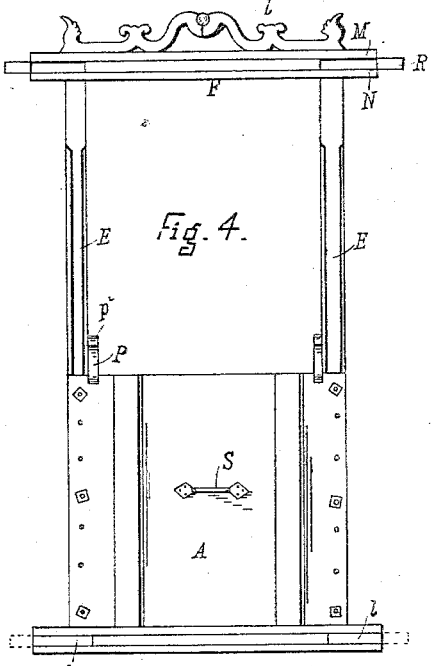


Fig. 4.



ATTEST—

J. Wm. Stiehli

Walter Chamberlin

INVENTOR—

Friederig W. Bruener,

per Wm. Hubbell Fisher

Atty

(No Model.) 2 Sheets—Sheet 2.

F. W. BRUENER.

APPARATUS FOR SUPPORTING PERSONS AND THINGS IN FRONT OF WINDOWS.

No. 303,980. Patented Aug. 26, 1884.

Fig. 5.

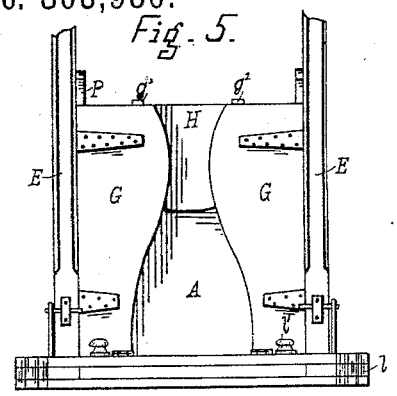
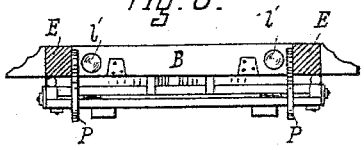


Fig. 6.



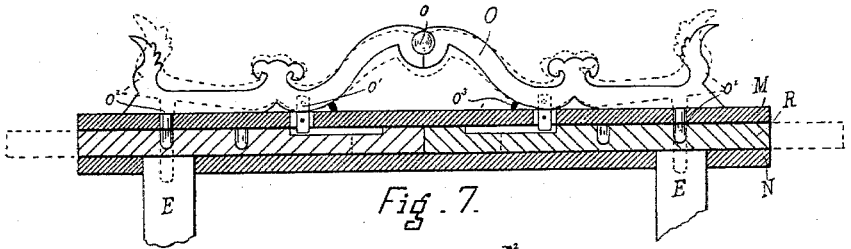


Fig. 7.

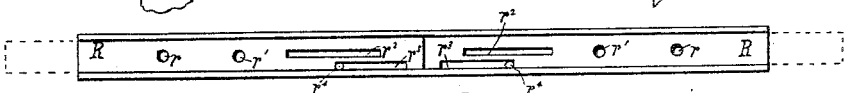


Fig. 8.

Fig. 9.

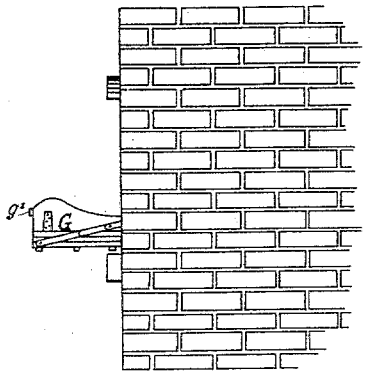
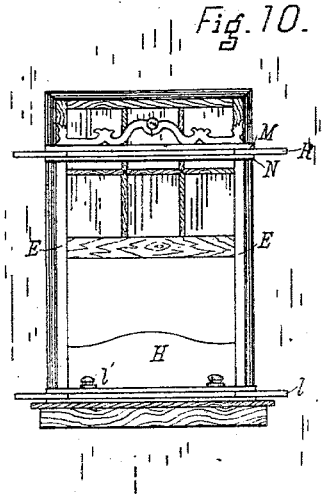


Fig. 10.



ATTEST

J. Wm. Stehli

Walter Chamberlin

INVENTOR

Friederig W. Bruener

per Wm. Hubbell Fisher

Atty

UNITED STATES PATENT OFFICE.

FRIEDERIG WILH. BRUENER, OF COVINGTON, KENTUCKY.

APPARATUS FOR SUPPORTING PERSONS AND THINGS IN FRONT OF WINDOWS.

SPECIFICATION forming part of Letters Patent No. 303,980, dated August 26, 1884.

Application filed August 9, 1883. (No model.)

To all whom it may concern:

Be it known that I, FRIEDERIG W. BRUENER, a resident of the city of Covington, in Kenton county and State of Kentucky, have invented certain new and useful Improvements in Apparatus for Supporting Persons and Things in Front of Windows, of which the following is a specification.

Great difficulty has been experienced in washing the outsides of windows, especially those located in upper stories, because of the danger met in getting out on the window-sill. Furthermore, the persons engaged in this sort of work are usually women, who experience considerable discomfort from the exposure which necessarily ensues in the practice of their vocation. Various devices have been invented, which meet these difficulties with varying degrees of success. To this class of inventions my device belongs, and it presents especial advantages from the thoroughness with which it attains these ends. It is easily placed in any window of any story or floor, and, once there, is perfectly secure, affording good support for the person employed, allowing room and support for the bucket or other vessel used, and by its peculiar arrangement tends to diminish the dizziness which so often comes to people engaged in such work, and also, in case of women, protects their lower limbs from exposure.

My device is portable and can be easily removed from a window, folded up, and taken to another window and adjusted thereto.

In the drawings, Figure 1 represents a general view in perspective of a device illustrating my invention. Fig. 2 is a side view, with the end and the side leaf or fence closed. Fig. 3 is a side view of the apparatus folded up and ready for transportation. Fig. 4 is a front view of the apparatus when folded. In Fig. 5 the leaves are folded as in Fig. 4, the other side being shown and the upper portion of the apparatus broken off. Fig. 6 is such a view as would be obtained by looking down on so much of the device as is shown in Fig. 5. Fig. 7 is a sectional elevation of the top of the device, showing method of adjusting to windows of various widths. Fig. 8 is a top view of the cross beam or brace R. Fig. 9 shows the device as it projects beyond the walls of the house. Fig. 10 shows a window in which my apparatus is placed, the point of view being the inside of the room.

A indicates the adjustable platform upon which the person employed to wash the windows stands. This platform is connected to a supporting piece or pieces in such a manner that the platform, when out of use, can be folded up, and when let down for use will be suitably supported and be able to bear the superincumbent weight for which it is designed.

The preferable manner of connecting the platform to the table is as follows: The inner edge of the platform A is secured to the lower cross-piece, B, by means of hinge-connections C, and the platform is upheld in a definite position—preferably a horizontal one—by means of cords or rods D. Where rods are employed, these rods are adapted to break joint by being made in one or more sections hinged at one or more points, *a*. The inner end of one of the rods or cords is connected to one of the uprights E at any suitable point—as, for instance, *b*—and the inner end of the other rod or cord, D, is similarly connected to the other upright, E. The outer ends of the rods are connected to the platform at points where the rods may be enabled to well support the platform and its load when the platform is in a horizontal position. The preferred location of the rods is at those points of the platform which are respectively on the right and left in Fig. 4, the connection between the rod and the platform being a hinge or pivotal one.

For the purpose of giving great efficiency to the rods, I have connected them to the edges of the platform and near its outer or front edge at *d*. The cross-piece B and the uprights E are attached together, and the latter are preferably provided at or near their top with a cross-brace, F. In many instances of the employment of such a platform it will be desirable that the platform be surrounded by a guard or fence. This fence may be rigidly attached to the platform, but is preferably arranged to fold upon it; and a desirable mode in which this fence may fold is shown in the drawings, as follows: The fence extends about

the platform A, and consists of the end piece, H, and two side pieces, G. The end piece, H, is hinged to the platform A by the hinges *h*, so that it folds upon the top of platform A. On the sides of the platform A pieces *g* are attached, projecting above the top of the platform a distance about equal to the thickness of the end piece, H, so that the sides G, hinged at *g'*, may be folded flat upon the end piece, H, after the latter has been folded upon the platform A. The sides G are provided at their outer ends with shoulders or studs g^2, of any suitable material, which project inwardly from the ends of the side pieces, G, forming supports against which the end piece, H, rests. As an additional support, when desired, the hooks K may be used. These hooks are pivoted at *k* on the sides G, and their other ends, k^2, respectively, hook over pins *b'* on the uprights E. For convenience of construction the pin *b* is preferably the same one used as a pivot for rod D, as shown in Fig. 1, although a separate pin may be used at this or any other point. The hinges C and rods D form so strong a support for the platform A that the hooks K may be dispensed with and not interfere with the usefulness of my device. When desired, the hinges to the sides G and end piece, H, may be dispensed with, in which case the platform and sides and end will form a sort of rigid box or inclosure. This box can be brought up against the uprights. By making this box somewhat narrower (as I prefer in such case to do) than the distance between the two uprights E the box may be folded up between said uprights, and more entirely out of the way, without making any special change in its construction.

Across the upper ends of the uprights E a cross-piece, F, is attached. This cross-piece may be of any length, and where long enough to span the widest windows no adjustable extension-pieces will be necessary; but, for the sake of compactness, this cross-piece is made only a little longer than ordinary windows are wide; and in such an event a preferred mode of constructing the cross-piece, in connection with the extension-pieces, and convenient means of adjusting the latter, is as follows: The cross-piece consists, essentially, of two beams, M and N, between which the adjustable sliding pieces R are placed and secured in position by the double lever O. The beam N is firmly secured to the uprights E, and the beam M is attached to it in any convenient manner, leaving space between the two for the two sliding beams, R. Each sliding beam R is provided with two or more holes, *r* and *r'*, and two slots r^2 and r^3. The double lever O is jointed at *o* and fulcrumed at *o'*, the fulcrum *o'* being in its turn pivoted in the beam M, and having its lower end extending downward into the slot r^2, thus limiting the movement of the sliding beam R. This limitation of motion of the sliding beam R may be attained by a pin projecting into another slot, as the pin r^4, projecting upward from beam N into the slot r^3. Each half of the double lever O is provided, respectively, with a pin o^2, which projects downwardly through an opening in beam M, and fits in hole *r* of its respective sliding beam, R, when the latter is in, and into hole *r'* when it is out. The outer portion of each lever beyond its pivot may be made heavier than the inner portion at the inner side of the said pivot; or a spring may be employed to continually tend to press the outer ends of the levers down. A desirable means for keeping said outer end down is shown, and consists of elastic projections o^3, extending from the under surfaces of double lever O against the beam M. The action of these elastic projections, which may be metal or rubber springs, is to depress the outer ends of the double lever O, thereby keeping the pin O^2 in position in one or the other of the holes *r r'*, as these are presented to said pin. The double lever O is shown in the drawing as an ornamental top piece, and for the sake of appearance is preferably made in some such design; but as its main object is to hold the sliding beams R in place, it may be constructed without ornament and of a plain design.

The object of the sliding beams R is briefly this: Since the distance between the uprights E must be such as to permit them to be placed in a narrow window-frame, in wide windows the projecting ends of the beams M N will, without making the brace or piece F inconveniently long, not be long enough to secure a firm hold on the window-frame, in which case the sliding beams R are brought into play.

The method of operating the sliding beams R is this: Either end of the double lever O is raised. This will depress the pivot *o* and elevate the other end of the lever, so that it takes the position shown in dotted lines in Fig. 7. In this position the pins o^2 are raised entirely out of the holes *r*, so that the beams R may be drawn out as far as the slots will permit. The double lever O is now dropped and elastic projections o^3 force the outer ends down, when the pins o^2 enter the holes *r'* and retain the sliding beams R in the position given them.

At the bottom of my apparatus, and for similar reasons, a similar arrangement may exist, consisting of the sliding beam *l* in the cross-beam B, and which beams are held in position by pins attached to the handles *l'*, passing through the upper half of the cross-beam B into holes in the sliding beam *l*, corresponding to holes *r r'* in sliding beams R.

In contracting my apparatus, the end piece, H, is folded upon the platform A, then the two side pieces, G, folded over it, then the whole folded up to or against the frame E, to which latter it is secured by a catch of any convenient shape. As shown in Fig. 1, this catch consists of a hook, P, pivoted at *p*, and provided with a notch, *p'*, into which the pawl p^2 drops when the hook is lowered, thus securing the latter in position.

On the back of the platform A is preferably

attached, as shown, a handle, S, by means of which the device when folded may be carried from place to place.

It is not necessary that the uprights E should be as long as shown in the drawings; nor is the top piece, F, a necessity. Instead the uprights E may be considerably shortened and top piece, F, be omitted, and in lieu thereof the uprights may be provided with projections R′ M′ N′, (shown in dotted lines in Fig. 1,) which will serve as supports for the top of the uprights against the window-frame. When desired, these projections may in any suitable manner be made extensible, one convenient mode being one similar to that already described for the sliding beams R and *l*.

The platform may not be made to fold up, but be rigidly attached to its supporting-pieces, as B, E, E, and F, or their equivalents, and will be useful, but it is not nearly so portable or convenient.

My apparatus may be usefully employed for assisting persons in work other than that of washing windows, as, for instance, the apparatus may support workmen while painting on or about the window or its frame, or while setting the sash cords and weights, or glazing, or fixing down pipes or lightning-rods adjacent to windows. The apparatus is also useful as a temporary balcony, and for a variety of other obvious and useful purposes too numerous for mention.

One or more of the features of my invention may be employed without the remainder, and when desired, one or more of said features are, so far as applicable, to be employed with those window-supports or apparatus for supporting persons while at work upon windows, &c., which are of a description or descriptions other than that herein specifically set forth.

What I claim as new and useful, and desire to secure by Letters Patent, is—

1. In a support at the front of a window, the uprights E, lower cross-beam, B, provided with extensible end portions, and upper cross-beam, also provided with extensible end portions, the extensible end portions engaging the inner side of the window-frame, substantially as and for the purposes specified.

2. The combination of uprights E, cross-beams F and B, platform A, provided with rods D, sides G, and end piece, H, substantially as and for the purposes described.

3. The combination of uprights E, cross-beams B and F, platform A, provided with rods D, and sides G, provided with hooks K, substantially as and for the purposes described.

4. The combination of uprights E, cross-beam B, platform A, provided with rods D, sides G, and end piece, H, and lateral projections from the uprights, substantially as and for the purposes described.

5. The combination of uprights E, cross-beams B and F, platform A, sides G, end H, rod D, hook K, hook P, and pawl p^2, substantially as and for the purposes described.

6. A support at the front of a window having top piece, F, consisting of double lever O, having pins O^2, beams M and N, and sliding beam R, provided with holes r r' and slots r^2 r^3, substantially as and for the purposes described.

FRIEDERIG WILH. BRUENER.

Witnesses:
G. H. SCHLUETER,
G. GERDING.