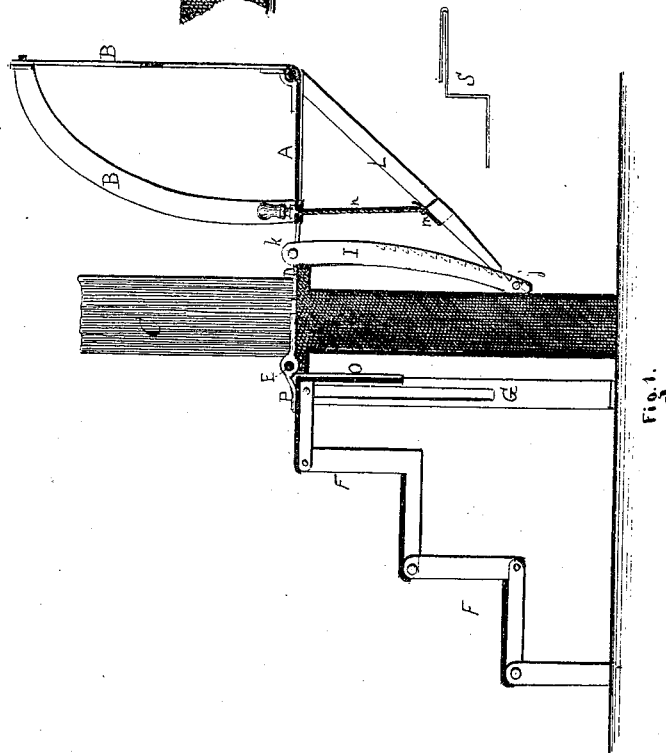
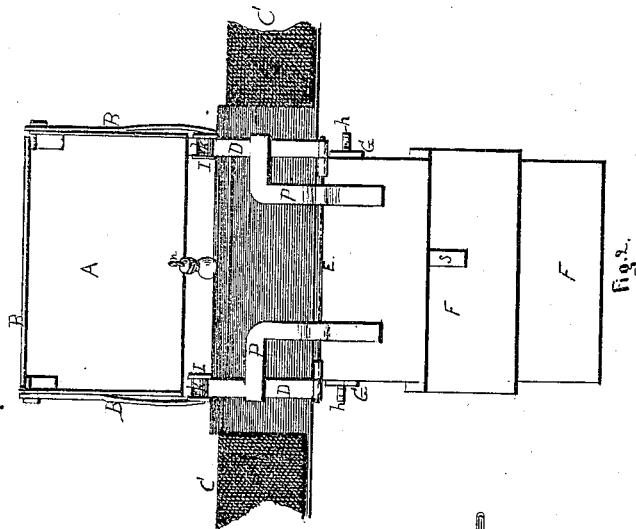


E. Herbster,

Window Washer.

No. 107,493

Patented Sept. 20, 1870.



Witnesses:

Wm. Ellsworth
Norman

Inventor:

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United States Patent Office.

EDWARD HERBSTER, OF CHICAGO, ILLINOIS.

Letters Patent No. 107,493, dated September 20, 1870.

IMPROVEMENT IN STANDS FOR CLEANING WINDOWS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, EDWARD HERBSTER, of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Stands for Cleaning Windows; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 is a longitudinal vertical section, and

Figure 2 is a top view.

Similar letters of reference indicate corresponding parts in the several figures of the drawing.

My invention has for its object to provide for public use a safe, convenient, and effective means by which persons can stand outside of windows for the purpose of cleaning them; and

Such means consist in the device constructed as I will now proceed to describe in detail.

In the drawing—

A is the platform, upon which the operator stands in cleaning a window, provided upon three sides with a railing or guard, B.

This platform, when in use, is placed upon the outside of a window, C, as shown in the drawing, and is provided with two parallel arms, D, extending horizontally from one side to bear upon the window-sill.

Through the inner ends of the arms D a rod, E, passes, to which a series of folding steps, F, are hinged upon the inside of the window.

To relieve the strain upon the hinge which connect the steps to the rod E, and to afford a firm support for the upper end of the steps, slotted legs G are attached, by means of set-screws h, to opposite ends of the top step, and reaching to the floor. By this arrangement the steps are not only held firmly in position, but adapted for adjustment, to permit the application of the stand to windows which are located at different heights from the floor.

I I are two curved arms depending from the arms D of the platform, and connected at their lower ends by a rod, j. They are provided with friction-rollers k at their upper ends, as shown, which admit of their free movement upon the arms D.

L L are two arms hinged to the outer edge of the platform, in such a manner as to swing freely beneath the same. They are connected together about midway by the cross-bar m, and their free ends are adapted to engage with racks formed upon the outer or convex sides of the pendent arms I.

A rope or chain, n, connects the cross-bar of the arms L with the platform upon the outside of the window.

When the stand is applied to a window, the steps are placed upon the inside and the platform upon the outside, as previously mentioned, with the arms D resting upon the window-sill.

The lower ends of the pendent arms I bear against the outside of the structure containing the window, their upper ends resting against the window-sill, and the platform is supported from these arms by means of the arms L.

The weight of the platform serves to hold the arms I in position against the window-sill, the latter being clamped firmly between said arms and a strip, O, affixed to the back of the upper step, as shown.

By operating the rope n, the arms I and L are disengaged, to lower the platform and remove the stand, or the former clamped more firmly in position, as circumstances may require.

P P are right-angular dogs, hung upon the rod E in such a manner as to slide freely, and are adapted to fit over the arms D upon the window-sill, to prevent the steps from being folded upward upon the rod.

By this arrangement the whole stand is locked upon a window-sill, against the possibility of casual displacement.

By my invention a stand is produced which can be applied to a window with the utmost expedition, and which can also be removed and folded into a small compass for transportation.

The steps may, if desired, be held in place with relation to each other by means of one or more removable angular bars extending along the under side of one or more of the steps.

Having thus described my invention,

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

1. A portable stand for cleaning windows, consisting of the folding steps F, the hinged platform A and its supporting arms, substantially as herein shown and described.

2. In combination with the platform A and arms D, the pendent rack-arms I and hinged adjustable arms L, substantially as described, for the purpose specified.

3. In combination with the folding steps, the adjustable supporting legs G, substantially as described, for the purpose specified.

4. The angular dogs P, in combination with the rod E and arms D of the platform, substantially as described, for the purpose specified.

5. In combination with the arms D and folding steps F, the pendent arms I and strip O, substantially as described, for the purpose specified.

6. The removable angular bars S, in combination with the folding steps, substantially as described, for the purpose specified.

EDWARD HERBSTER.

Witnesses:

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