

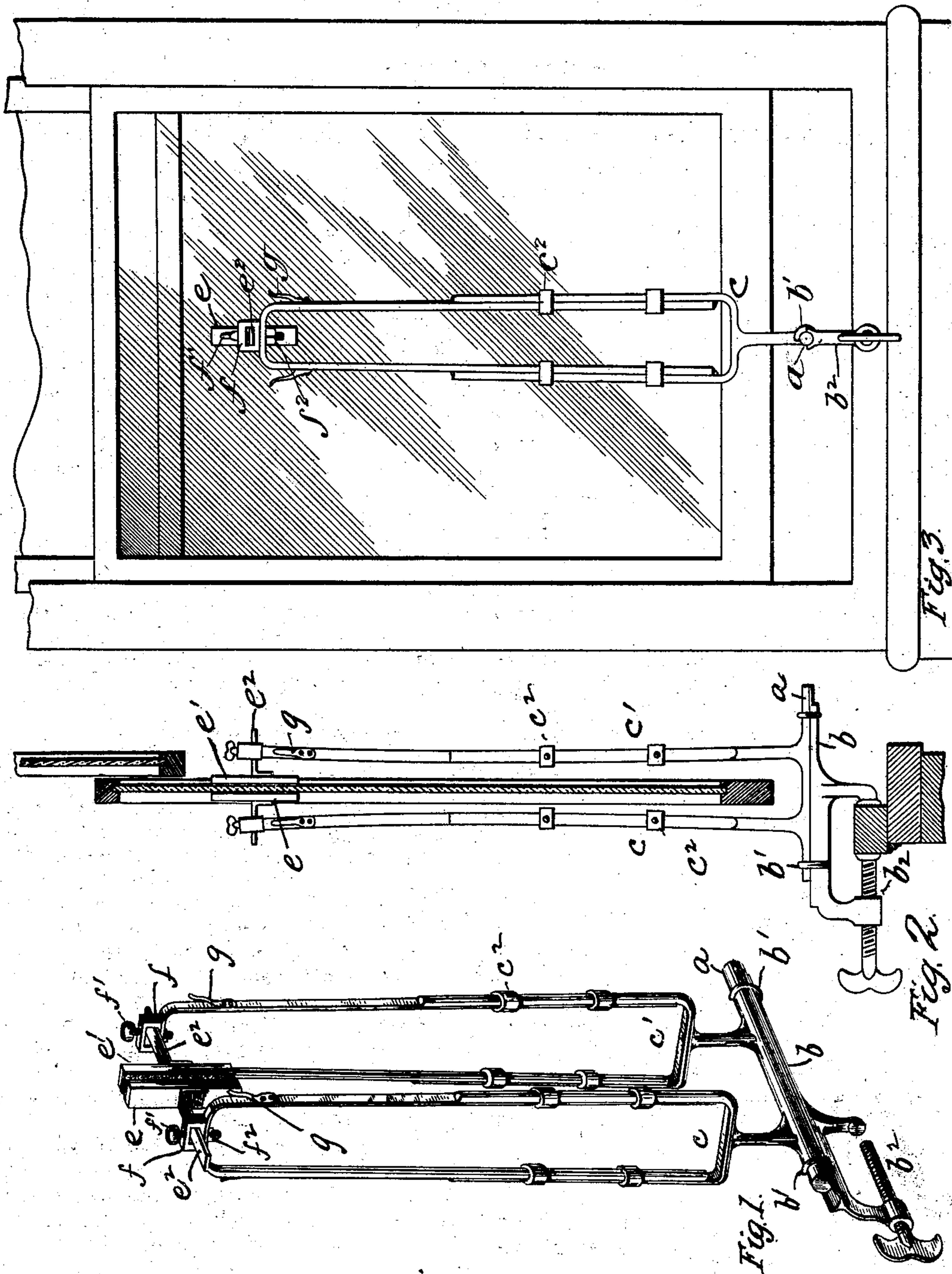
No. 694,615.

Patented Mar. 4, 1902.

B. L. COHN.
WINDOW WASHER.

(Application filed Nov. 19, 1901)

(No Model.)



Witnesses
Frank S. Ober
Charles M. Chapin

Inventor
Bernard L. Cohn
By his Attorney *[Signature]*

UNITED STATES PATENT OFFICE.

BERNARD L. COHN, OF NEW YORK, N. Y.

WINDOW-WASHER.

SPECIFICATION forming part of Letters Patent No. 694,615, dated March 4, 1902.

Application filed November 19, 1901. Serial No. 82,891. (No model.)

To all whom it may concern:

Be it known that I, BERNARD L. COHN, a citizen of the United States, residing at the city of New York, in the borough of Manhattan and State of New York, have invented certain new and useful Improvements in Window-Washers, of which the following is a full, clear, and exact description.

This invention is an apparatus for facilitating the washing of windows, the object being to provide a simple device which can be easily adjusted and handled and by means of which both sides of the glass in a sash can be washed at the same time and without the necessity of the operator exposing himself to the inconvenience and danger of working on the outside of a building, the whole operation being accomplished from the inside.

In carrying out these objects my invention consists of a support adapted to be clamped to the window sill or frame in combination with two substantially parallel arms pivoted to the support and leading therefrom upward on each side of the sash, thus embracing the glass, said arms being provided with rubbers at their upper ends, which are held in contact, respectively, with the inside and outside of the glass by the natural spring of the arms or otherwise, so that when the arms are swung on their pivotal support the rubbers will at each stroke scrub both sides of the glass in an arc-shaped path, and by moving the sash up or down at the same time nearly the entire surface of the glass will be traversed by the rubbers.

My invention also comprehends a construction for the arms, whereby they may be extended at will, so that the rubbers can be directed into the corners or other portions of the glass which cannot be touched by the normal swing of the apparatus on its pivot.

The invention will be described in detail in connection with the accompanying drawings, in which—

Figure 1 is a perspective view of the apparatus complete. Fig. 2 is a sectional view of a window sash and frame, showing my improved apparatus applied thereto in operative position; and Fig. 3 is a front elevation of a window frame and sash, also showing the window-washer attached in working position.

Referring to the drawing by letter, *a* indicates a round bar resting freely in a gutter-shaped support *b* and being confined therein by hook-clips *b'*, preventing the bar from becoming unseated. The supporting part *b* has fastened to it integrally or otherwise a clamp *b²* of common construction. Attached to the upper side of the bar *a* are two arms *c* and *c'*, respectively, which extend upward therefrom and have a slight natural bias toward each other, so that when separated at their free ends spring-power will be developed in them. Each of these arms is formed into a loop the plane of which is at right angles to the bar *a*, this construction affording rigidity. The sides of the loops are made extensible by constructing them in two parts, connected by collars or bands *c²*, which secure them with sufficient friction to prevent displacement in use. At the upper end of each arm or loop is secured a rubber *e e'*, respectively, said rubbers facing each other and normally pressed into contact by the natural spring of the arms. Each rubber, which may consist of a block having an india-rubber corrugated face, or a sponge, rag, or other similar rubbing appliance, is secured to a bracket *e²*, passing through a clamp *f*, in which it is held in position by a set-screw *f'*. The clamp itself is also swiveled on a vertical axis and held by a nut or set-screw *f²*, so that when necessary, by loosening the latter set-screw, the rubber can be swung around sidewise to be replaced by a different kind of rubber, such as a polisher, without removing the apparatus from its operative position on the window. The hooks shown at *g* are a convenience for hanging up extra rags or rubbers.

The apparatus is used in the following manner: After raising the window-sash slightly the clamp is adjusted to the window-sill at about the central point, as shown in Fig. 1, the arms being for the moment tilted downward below the lower bar of the sash. When properly secured, the arms are swung upward, so that one of them will pass to the outside of the glass and the other inside, the arms being meanwhile sprung apart to enable the rubbers to pass the lower bar of the sash. When thus adjusted, the sash is lifted until the lower portion of the glass is between the rubbers. Then, with the inner arm *c*

grasped in one hand and the sash in the other, the arm is swung from side to side simultaneously with the lowering of the sash. Thus the entire surface both inside and outside of the glass will be rubbed except the upper corners. These are then reached on the inside by simultaneously rubbing with and extending the inner arm, it being thus possible to traverse the remote corners of the glass. To reach the corners on the outside, it is only necessary for the workman to pass his arm under the sash and grasp the arm *c'* and extending it as in the first instance cause the outer rubber to traverse the remote portions of the glass.

It is evident that instead of commencing the washing operation with the sash in its elevated position the work may be done by commencing with the sash in its lowermost position and working downward by gradually raising the sash.

The upper sash of a window is washed in substantially the same way, it being necessary to lower the upper sash into range of the apparatus while the lower sash is lifted out of the way. In order to bring the apparatus into the plane of the upper sash, the bar *a*, carrying the arms *c c'*, has a limited longitudinal movement along the gutter-support *b*, so that when the upper sash is to be cleaned the bar *a* is moved outward to bring the arms into coöperative working position. After the glass has been cleaned by the usual scrubbing it can be polished by substituting wads of paper or other polishing material in the place of the scrubbers and the surfaces of the glass again traversed. The extending arms

also provide for using the same apparatus on various sizes of windows, as will be obvious.

In cleaning the corners of the glass it may be more convenient to remove the arms and bar *a* from the support and manipulate the device entirely in the hands. This can be done by simply lifting the bar *a* out of engagement with the hooks *b'*. It is obvious that the apparatus can be made of wood, metal, or any other suitable material.

Having described my invention, I claim—

1. A window-washer, comprising a suitable support *b*, a pair of parallel arms pivoted to said support, each arm consisting of a loop whose sides are adjustable in length, and rubbers located at the free ends of the arms.

2. A window-washer, comprising the combination of a gutter-shaped support *b*, a bar *a* confined in said gutter but adapted to slide longitudinally therein for the purpose described, and a pair of arms attached to said bar *a* and provided with rubbers at their free ends, the arms having a natural spring toward each other.

3. A window-washer, comprising the combination of a gutter-shaped support *b*, a bar *a* confined in said gutter but adapted to slide longitudinally therein for the purpose described, and a pair of arms attached to said bar *a* and provided with rubbers at their free ends.

In witness whereof I subscribe my signature in presence of two witnesses.

BERNARD L. COHN.

Witnesses:

WALDO M. CHAPIN,
FRANK S. OBER.