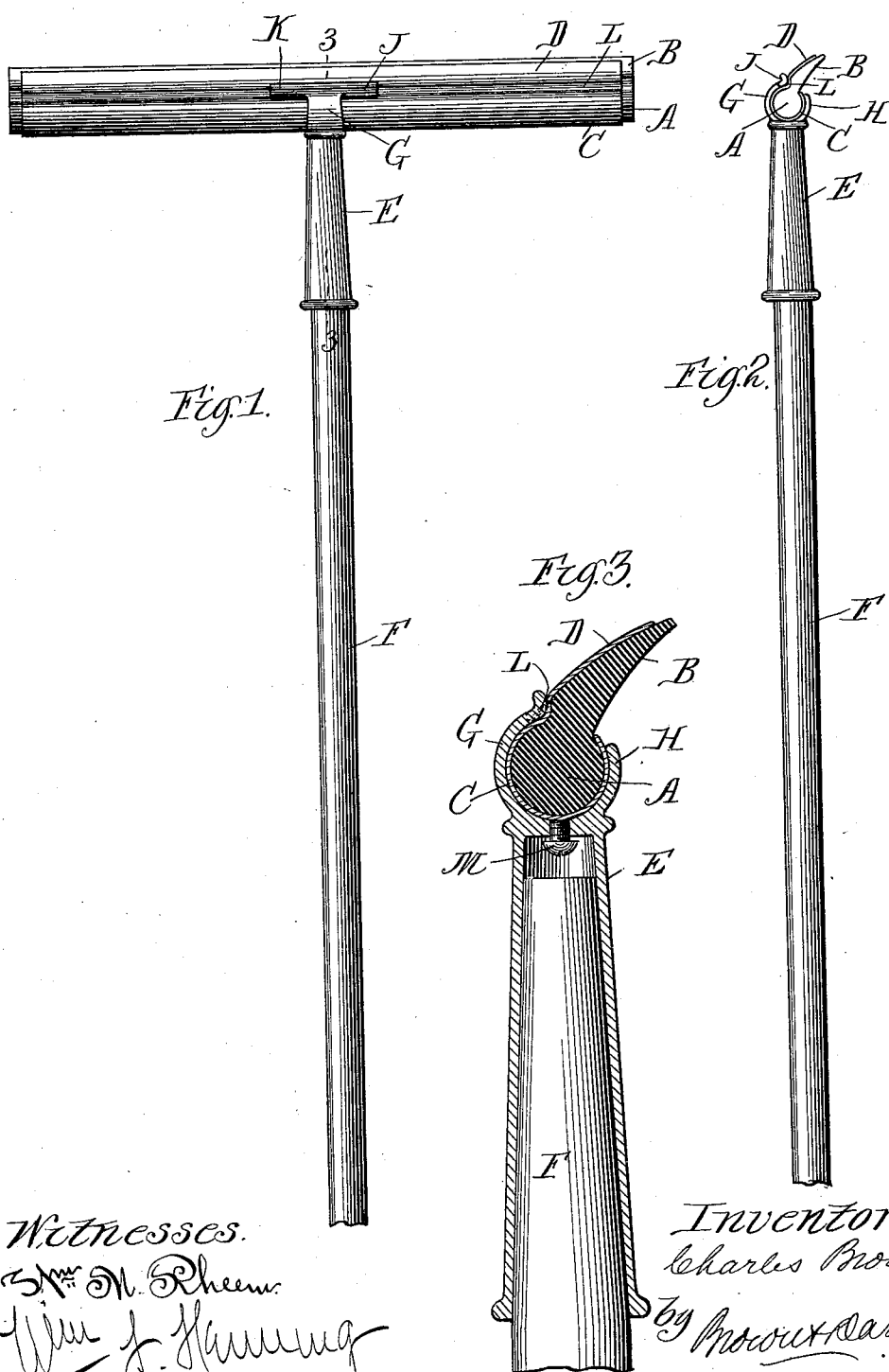


(No Model.)

C. BROWN.
WINDOW CLEANER.

No. 592,076.

Patented Oct. 19, 1897.



Witnesses.
Wm. M. Rheem.
Wm. J. Hanning

Inventor
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UNITED STATES PATENT OFFICE.

CHARLES BROWN, OF CHICAGO, ILLINOIS.

WINDOW-CLEANER.

SPECIFICATION forming part of Letters Patent No. 592,076, dated October 19, 1897.

Application filed December 21, 1896. Serial No. 616,470. (No model.)

To all whom it may concern:

Be it known that I, CHARLES BROWN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Window-Cleaner, of which the following is a specification.

This invention relates to window-cleaners.

The object of the invention is to provide a window-cleaner which is simple, durable, inexpensive, and thoroughly efficient.

A further object of the invention is to provide a window-cleaner wherein the parts may be readily removed and replaced as occasion may require.

The invention consists, substantially, in the construction, combination, location, and relative arrangement of parts, all as will be more fully hereinafter set forth, as shown in the accompanying drawings, and finally specifically pointed out in the appended claim.

Referring to the accompanying drawings and to the various views and reference-signs appearing thereon, Figure 1 is a view in side elevation of a window-cleaner embodying the principles of my invention. Fig. 2 is an end view of the same. Fig. 3 is a broken transverse sectional view taken on the line 3 3, Fig. 1.

In carrying out my invention I provide a solid piece of rubber or other suitable material having one of its edges enlarged and preferably rounding, as indicated at A, and a tapering extension therefrom forming the other edge, as indicated at B. This rubber or other material is arranged to be received in a casing or sheathing, preferably of metal, said casing or sheathing being provided with an enlarged portion, as indicated at C, suitably shaped to conform to the shape of the enlarged edge A of the rubber and adapted to receive the same therein. Said sheathing or casing is also provided with an extension D, arranged to form a backing or support on the rear side of the portion B of rubber, and extending to a point slightly below the extreme outer edge of said extension B, as clearly shown in the drawings. The block of rubber and the metal sheathing or casing are of such relative lengths as that the rubber projects slightly beyond the ends of said casing or sheathing, as clearly indicated in Fig. 1. The

rubber block is adapted to be slid endwise into or out of the casing, thus facilitating the replacement of the block of rubber when worn out by a new one.

Reference-sign E designates a suitable casting having a socket adapted to receive the end of a handle F. Said casting is also provided with the holding-jaws G H, suitably curved to conform to the shape of the enlarged portion C of the metallic casing, and through the space inclosed by said jaws the casing in which the block of rubber is mounted is adapted to be slid endwise when the parts are to be assembled for use.

In order that the cleaner may be suitably supported and braced in the casting, I provide the holding-jaw G, at the extremity thereof, with extensions J K, projecting from opposite sides, and which extensions bear against the rear side of the cleaner and efficiently support the same.

In order that the casing may be suitably and efficiently supported and held in the jaws of the handle and be prevented from rocking endwise therein, I may provide said sheathing or casing with a longitudinal groove or depression, as clearly indicated at L, adapted to receive the end and extensions J K of the holder-jaw G.

If desired, and in order to rigidly hold the cleaner in the casting, I may insert a threaded set-screw M through said casting and into the space occupied by said casting when arranged in said holding-jaws, said screw adapted to impinge against the outer surface of the casing and securely clamp the same in place.

When it is desired to remove the sheathing or casing from the holder, the set-screw M is unscrewed and the sheathing or casing is withdrawn by an endwise movement from the said holding-jaws, and, similarly, the sheathing is inserted in the holding-jaws by sliding the same longitudinally into the space inclosed by said jaws, the end of the jaw G and the extensions J K thereon being received and sliding in the channel or depression L. Then, by turning upon the set-screw M, the casing is firmly clamped and held in the jaws.

The extension or tapering edge B of the rubber is preferably inclined from a line forming an extension of the axis of the handle F, as clearly shown, in order that the rubbing or

cleaning surface thereof may be brought into suitable relation with the surface to be cleaned, and by planing or squaring off the extreme end of said extension I form a sharp edge or corner which forms the rubbing-surface.

The provision of the extension D of the sheathing or casing enables the rubber extension B to be firmly supported and braced during the cleaning operation. When the rubber has been worn out, it may be readily removed and replaced with a new one without the removal of the casing or other parts of the cleaner by simply projecting the same longitudinally through the casing.

By arranging the ends of the rubber to project beyond the ends of the casing, I provide against danger of injury to the window-frame or other woodwork while the cleaner is being used.

From the foregoing description it will be seen that I provide an exceedingly simple, durable, inexpensive, and efficient window-cleaner, and while I have shown and described a specific construction and arrangement of parts it is obvious that many variations and changes therein would readily suggest themselves to persons skilled in the art and still fall within the spirit and scope of my invention. I do not desire, therefore, to be limited

to the exact construction and arrangement shown; but,

Having now set forth the object and nature of my invention and a form of apparatus embodying the same, and having described the construction, arrangement, function, and purpose thereof, what I claim as new and useful and of my own invention, and desire to secure by Letters Patent of the United States, is—

In a window-cleaner, a solid block of suitable material having one edge thereof enlarged and tapering therefrom toward the other edge, a casing arranged to encircle the enlarged part of said block and provided with an extension forming a support for the tapering extension of said block, said casing being provided with a longitudinally-extending channel or depression, a handle, including holding-jaws, provided at the engaging end thereof with sidewise extensions arranged to be received in said channel or depression; as and for the purpose set forth.

In witness whereof I have hereunto set my hand this 19th day of December, 1896.

CHARLES BROWN.

Witnesses:

S. E. DARBY,
MILLS MORRIS.