

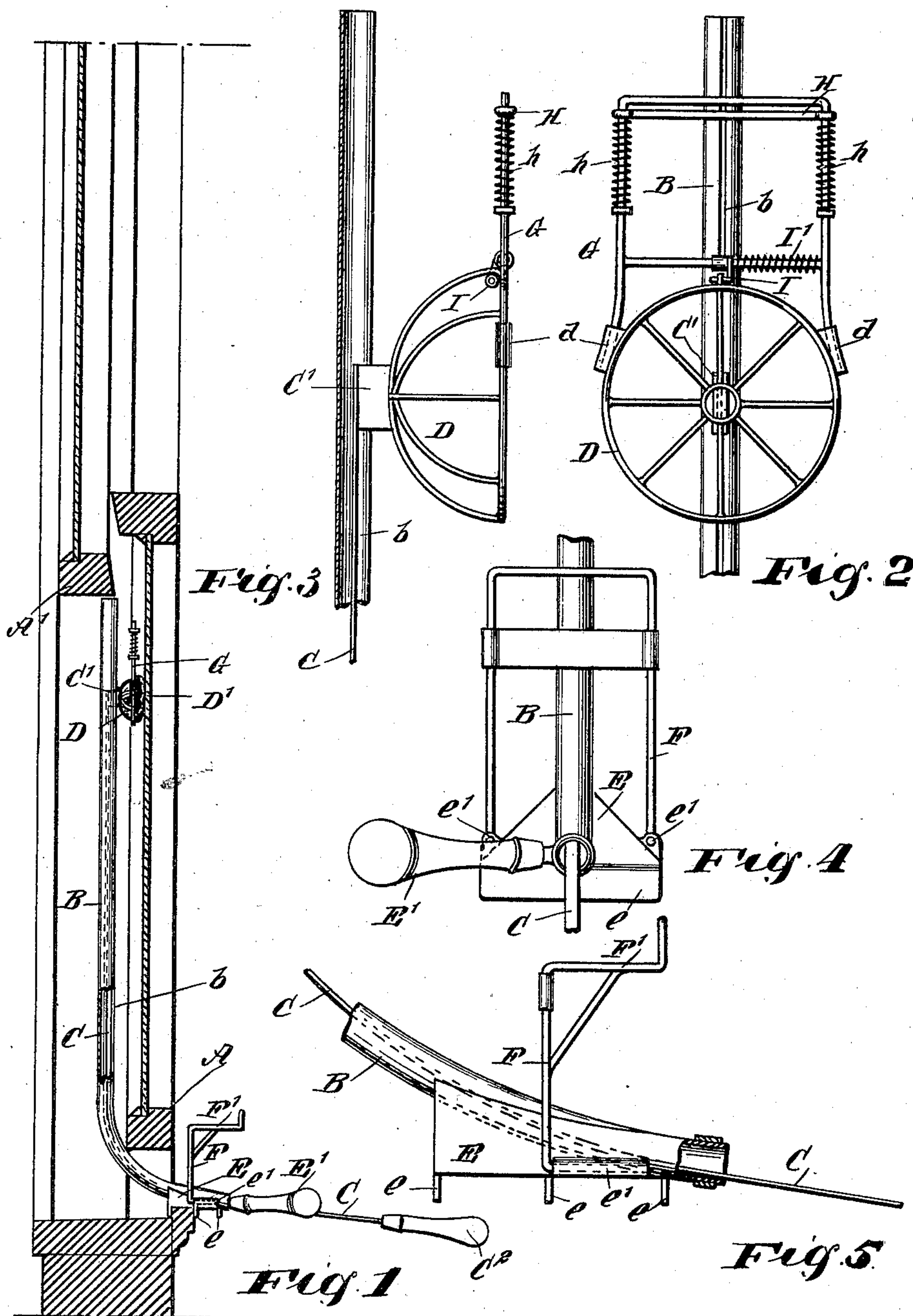
No. 628,764.

Patented July 11, 1899.

L. COCHRANE & F. THIELEMAN.
WINDOW CLEANER.

(Application filed Mar. 22, 1899.)

(No Model.)



WITNESSES:

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UNITED STATES PATENT OFFICE.

LEWIS COCHRANE AND FRIEDRICH THIELEMANN, OF NEW YORK, N. Y.

WINDOW-CLEANER.

SPECIFICATION forming part of Letters Patent No. 628,764, dated July 11, 1899.

Application filed March 22, 1899. Serial No. 710,078. (No model.)

To all whom it may concern:

Be it known that we, LEWIS COCHRANE and FRIEDRICH THIELEMANN, both of the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Window-Cleaning Device, of which the following is a full, clear, and exact description.

Our invention relates to an improvement in devices designed for facilitating the cleaning of the outer side of a window-pane and comprises the novel features hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a sectional elevation of a window with the device in place ready for use. Fig. 2 is a front elevation of the upper end of the device, showing the means for holding the sponge, rag, or similar article which is used as a scrubber. Fig. 3 is a side elevation of the same device with the tube in section, and Figs. 4 and 5 are front and side elevations of the lower portion or base of the device.

The object of our invention is to provide a mechanism which shall be simple in construction and easily handled and which may be operated from inside the window to wash and clean the outer side of the window-pane.

Our device consists, essentially, of a tubular arm, which is slotted throughout the greater portion of its length and has therein a slide which is provided with an arm passing through said slot and carrying outside the tube a device adapted to hold a sponge or rag by which the window-pane is scrubbed. This slide is connected to the end of a spring band or bar which projects from the inner lower ends of the arm, where it may be engaged to move the slide up and down in the arm.

The tubular arm B is preferably constructed of a piece of tubing or a pipe and has a slot *b* extending from its upper end to near the bend, which is formed in the lower end of the tube. This lower end of the tube is given an easy bend to facilitate the action of the spring band or bar C and to bring the lower end of the tube beneath the window A and inside the room. The body of the tube B is straight and is adapted to lie close alongside the outer sur-

face of the window-pane, the lower end curving inwardly beneath the window. At its lower end a base-piece E is secured thereto, which is provided with transversely-extending guides *e*, adapted to engage the raised rib or strip which lies at the inner edge of the window-sill. This base is also provided with a handle E', by which it may be held in place and moved along the window-sill, so as to scrub all portions of the window. Within the tubular arm B is mounted a slide C', which is secured to the upper end of the spring-band C. This slide projects through the slot *b* in the tube and outside of the tube carries a concave basket D, which, as herein shown, is constructed of wire. This basket is designed to hold a sponge or rag or any similar material D', which will act as a scrubber upon the window.

In order to enable the device to reach to the upper surface of a window-sash while the same is slightly raised, an upward extension G is provided, consisting of a wire frame having its lower ends adapted to be inserted in sockets *d*, formed upon the side edges of the basket D. This frame is provided with a cross-bar carrying an arm I, which is controlled by a spring I', coiled about the cross-bar. This bar is so constructed that the arm I, which has a lateral bend at its outer end, may be caught beneath one of the ribs of the basket D, and thus hold the device in place. This frame is also provided with a movable cross-bar H, having eyes in its end passing about the side bars of the frame and held upward by spiral springs *h*. A rag or a piece of sponge may be placed between the cross-bar H and the upper end of the frame and is held in place by the pressure of the springs *h*. This portion extending above the basket and being capable of projection beyond the end of the arm B may be inserted in the space between the window-pane and the upper sash A'. The lower end of the device is provided with another guide consisting of a wire frame F, bent so as to provide a recess F' in its upper portion, and at its lower portion having the ends of the side bars bent backwardly, so that they may enter sockets *e'*, formed upon the base E. The outer surface of this guide will engage the inner surface of the lower sash when the device is used for washing the lower sash and will engage the lower and in-

ner surfaces of the lower sash by the recess F' when the device is used for washing the outer sash. This device engaging the inner surface of the sash will prevent the arm B
5 from falling outward if released for a moment.

The lower end of the spring-bar C projects from the lower end of the tubular arm B and is provided with a handle C², by means of
10 which it may be caused to reciprocate in the arm, and thus to move the basket D, containing the scrubber D', up and down over the surface of the window-pane.

With this device it is possible to thoroughly
15 wash the outside of a window while remaining entirely at the inside, the window being raised only a very small amount. All danger which follows from getting outside the windows to wash them is thus obviated, as well
20 as the danger of taking cold caused by exposure to cold weather. After the window has been washed the wet sponges or rags which have been used may be replaced by dry rags and the window wiped clean and dry.

25 Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. A device for cleaning windows, comprising a slotted tubular arm adapted to be extended alongside the window-face and curved
30 at its lower end to pass beneath the window; a slide within the arm; a cup adapted to receive a sponge or similar scrubbing material and connected with the slide; a removable upwardly-extending clamp secured to the cup
35 and extending close to the window-face, and a spring-bar within the tube and connected with the slide to move it; substantially as described.

2. A device for cleaning windows, comprising a slotted tubular arm, a slide mounted therein, a spring-bar connected with the slide and extending within the arm, a device for holding the window-rubbing material, secured
40 to the slide, and a removable guide attachable to the lower part of the arm and engaging the under and inner sides of the window-sash, substantially as described. 45

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