

(No Model.)

A. DORMITZER.

COMBINED WINDOW CLEANING CHAIR AND FIRE ESCAPE.

No. 256,654.

Patented Apr. 18, 1882.

Fig. 1.

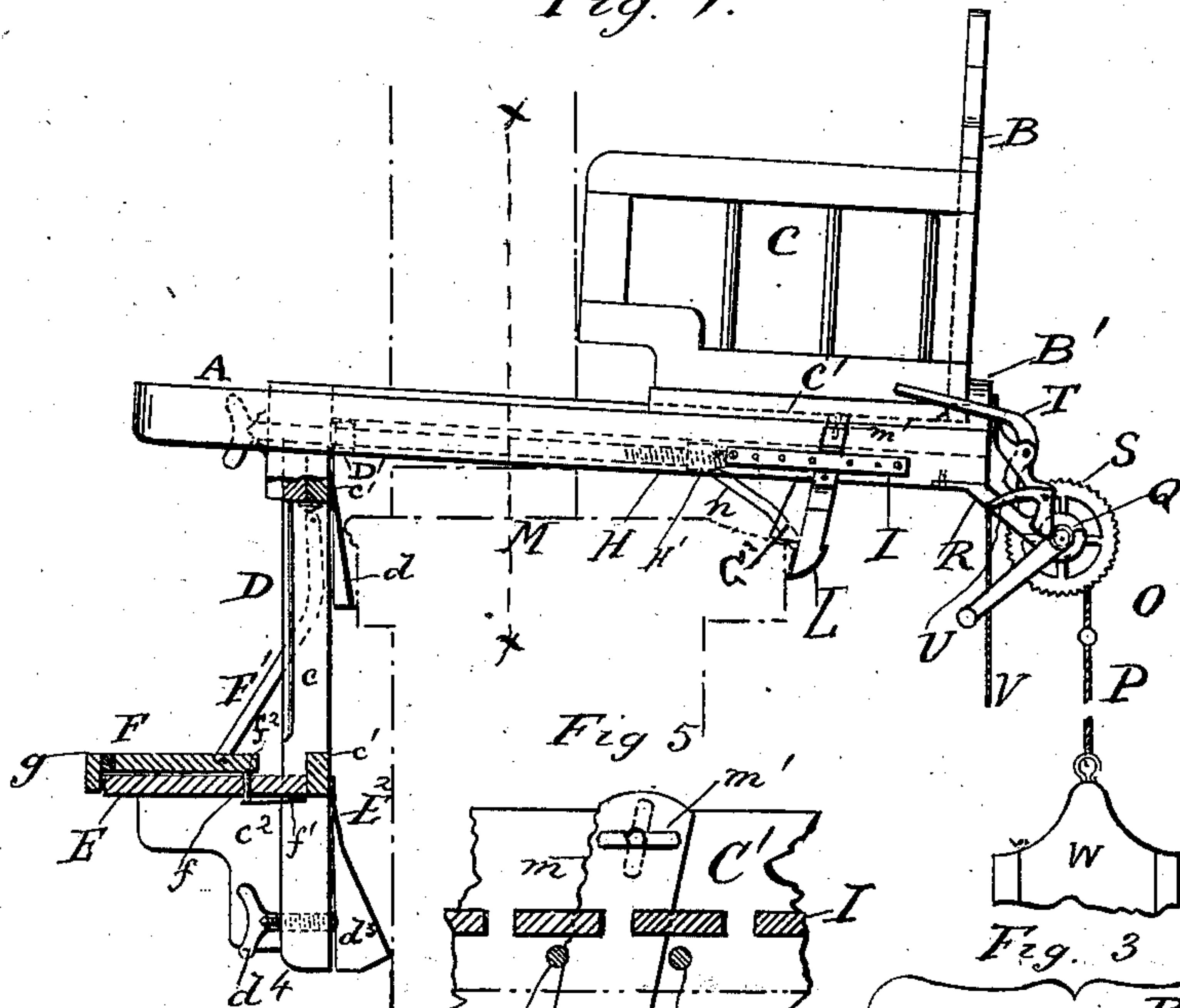


Fig. 2.

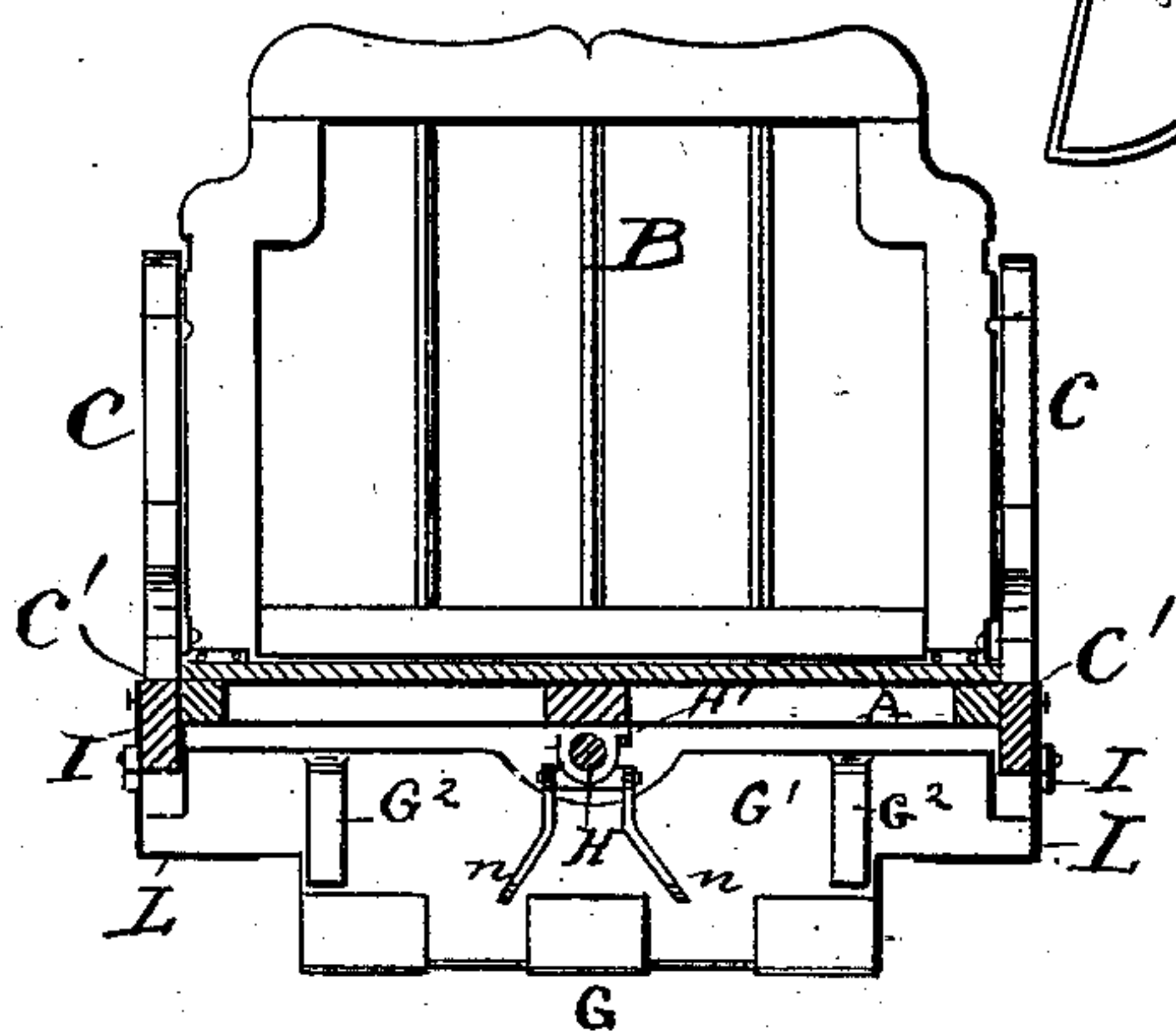


Fig. 5.

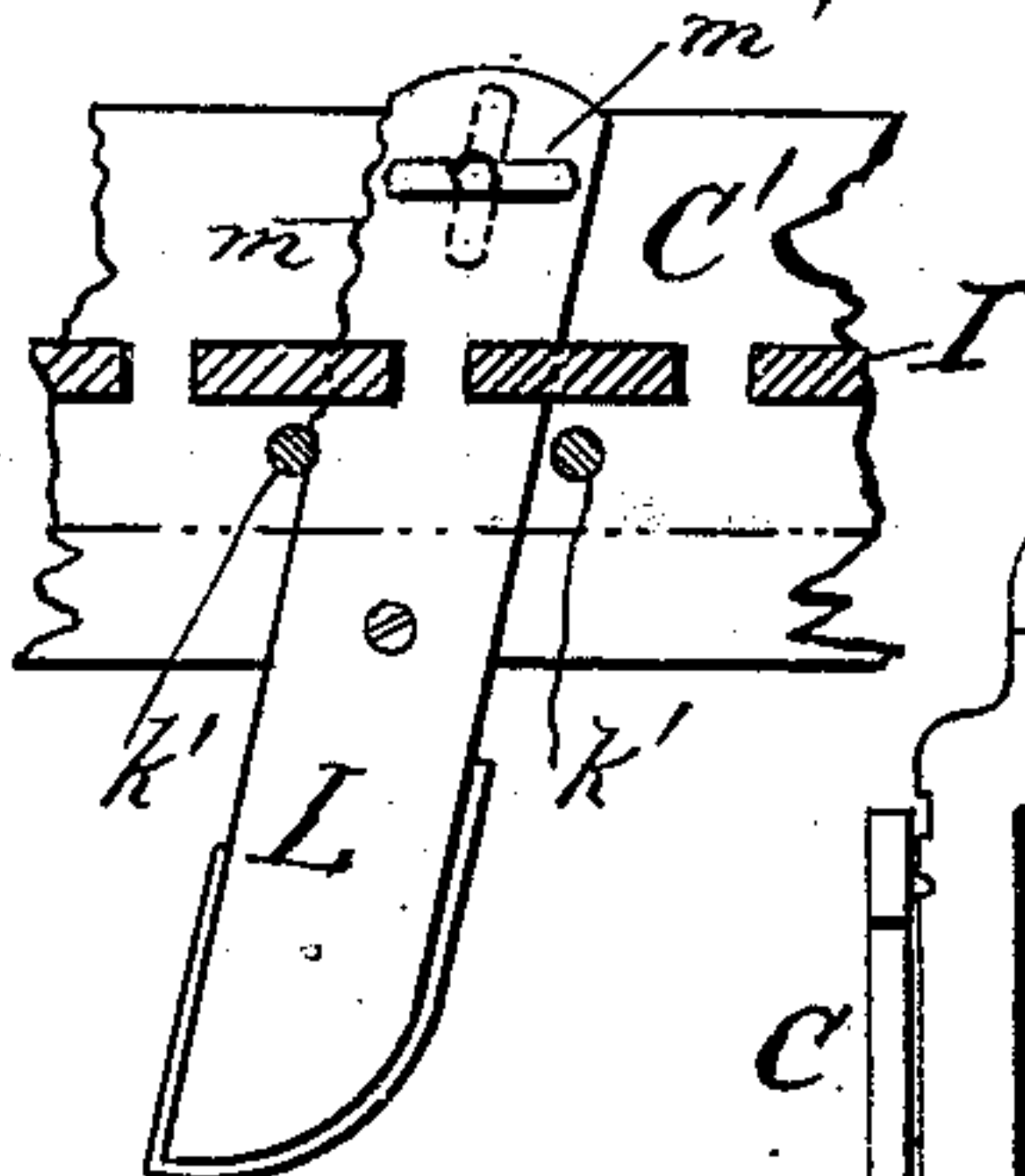


Fig. 3.

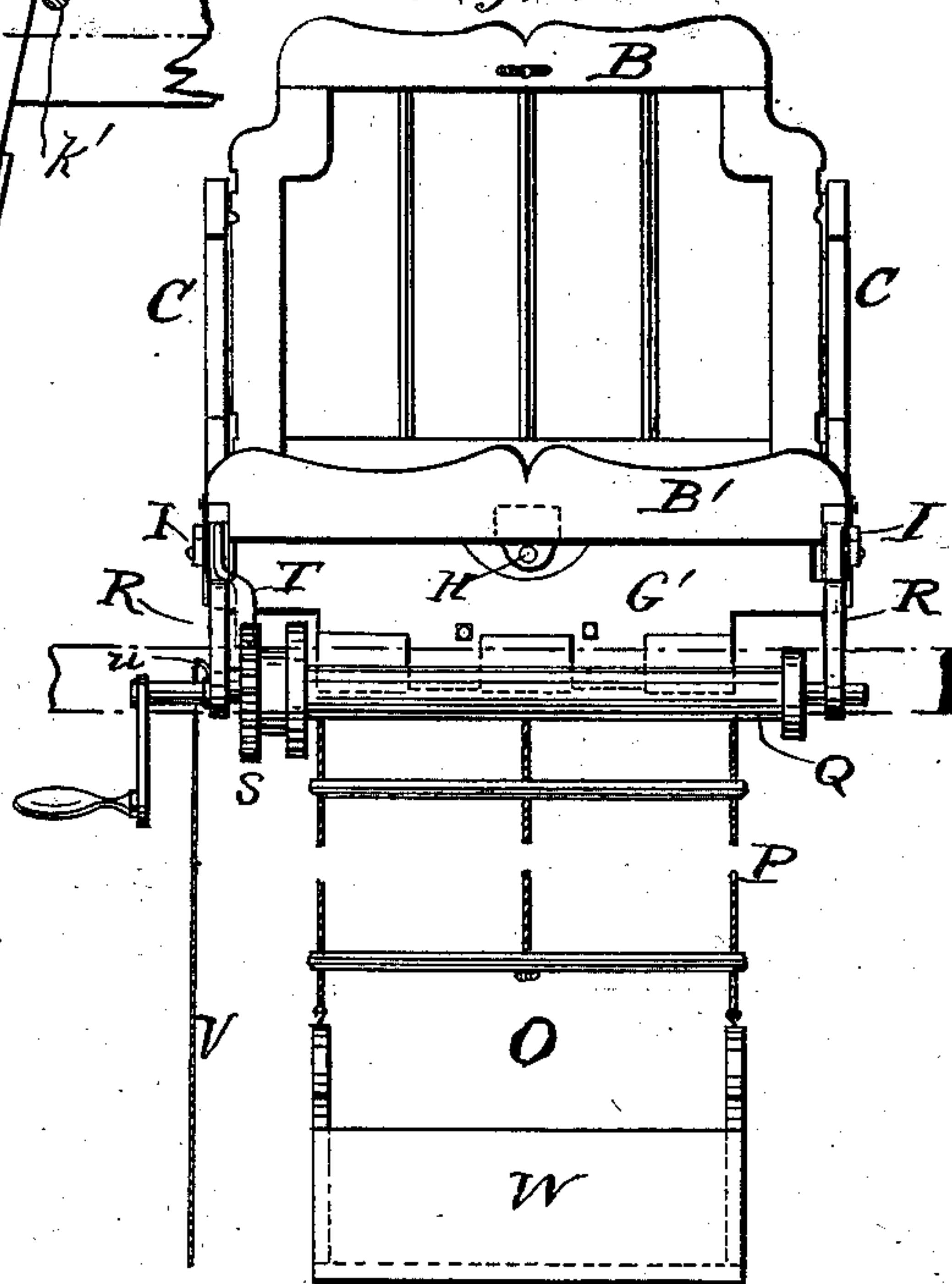


Fig. 4.

WITNESSES:

W. Colborne Brooks

Wm. W. Lyster

INVENTOR

Anna Dormitzer

BY

Isaac J. Storer

ATTORNEY



# UNITED STATES PATENT OFFICE.

ANNA DORMITZER, OF NEW YORK, N. Y.

## COMBINED WINDOW-CLEANING CHAIR AND FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 256,654, dated April 18, 1882.

Application filed December 10, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, ANNA DORMITZER, of the city, county, and State of New York, have invented certain new and useful Improvements in Combined Window-Cleaning Chairs and Fire-Escapes, of which the following is a specification.

This invention is designed as an improvement on the window-cleaning chair for which Letters Patent of the United States Nos. 200,441, 206,935, 206,936, 219,234, and 244,203 were granted and issued to me respectively February 19 and August 13, 1878, September 2, 1879, and July 12, 1881; and its object is to further simplify the chair, to make it less expensive, and to provide a most convenient and safe device by which to escape from a burning building.

The invention consists of an improved clamping device for securing the chair and fire-escape to a window-sill, and of a simple, safe, and readily-manipulated fire-escape combined with and secured to the chair.

Figure 1 is a side view of my improved device, partly in section, in position in a window-frame. Fig. 2 is a cross-section of the device on line *x x*, Fig. 1. Fig. 3 is a rear elevation of a portion of the device. Fig. 4 is an enlarged plan view of a rack-plate in position. Fig. 5 is an enlarged end elevation of a portion of the clamping device.

Similar letters of reference indicate corresponding parts.

In the drawings, A represents the chair-platform, provided with a raised strip, B', fastened along its rear edge, to serve as a partial support to the back guard, B, that is hinged on the face of the platform A, between the side guards, C C, which are hinged on the upper edges of the side strips, C' C', that are securely fastened on the edges of the said platform A.

On the under side of the platform A, near its front end, is a cross-brace, D', which serves to strengthen the chair and to afford support for the swinging rectangular step-frame D, which is hinged thereto. Said frame D consists of two vertical parallel side bars, *c c*, securely held together at top and bottom by cross-bars *c' c'*, while from the front of said bars *c c*, at their lower ends, are the projecting brackets *c<sup>2</sup> c<sup>2</sup>*, supporting the fixed step E. On the rear faces of these bars *cc* are secured wedge-

shaped blocks *d d*, faced with leather or other suitable soft material, that are designed to take against the inner face of the window-sill or wainscot when the chair is in position, the leather preventing the sill or wainscot from becoming defaced.

On the rear faces of the bars *c c* are secured springs *E<sup>2</sup>*, that have on their lower ends wedge-shaped leather-covered blocks *d<sup>3</sup>*, to prevent the defacement of the wainscot and to afford a better hold thereon, and these blocks *d<sup>3</sup>* may be pressed against the wainscot with any desired force by set-screws *d<sup>4</sup>*, that pass through the bars *c c*.

Pivoted to the sides of the side bars, *c c*, near their tops are flat curved iron supports *F'*, that carry the auxiliary step F, which swivels between their lower ends, and is held flat on the top of the fixed step E, when desired, by a stud, *f*, which is attached on the end of a spring, *f'*, secured on the under side of the step E, and which projects up through the center of said step E into a corresponding socket, *f<sup>2</sup>*, therein. This step F is also provided with two pivoted legs, *g g*, that may be folded in slots in said step, and may be unfolded and adjusted when said step is elevated for the operator to stand on to reach the top of the window or window-frame.

On the side strips of the platform, near the rear thereof, are firmly secured racks I, in such a manner that throughout their lengths spaces *h* are left between them and the platform side strips. The inner faces of these racks I are fashioned into alternate projections *i* and depressions *i'*, and said racks I are held in place by end bolts or screws, *k*, and by pins or equivalent devices *k'*, which latter pass through the projections *i*, and thereby form sockets for the reception of the end plates of the clamping device G, which is arranged on the under side of the platform A, and operates to secure the chair on a window-sill. This improved clamping device G consists of a flat bar or plate, *G'*, extending across the platform A on the underside thereof, and having secured on its ends upward-projecting metal plates L, that are designed to extend upward through and be adjusted in sockets formed in the racks I. Said plate G has fixed on its front vertical blocks *G<sup>2</sup>*, that terminate a little below its median horizontal line, so that their lower ends may rest on the top of the



outer window-sill when the chair is in position, while that portion of the plate G below the ends of the blocks G<sup>2</sup> has anti-friction pieces fixed on its face, as indicated in Fig. 2, that will  
 5 take against the outer face of the sill when the chair is secured in position in a window. The said plates L have serrated front edges, as shown at m, and are provided near their extremities with buttons m'. It will be seen,  
 10 then, that the clamping device G is held in place by the engagement of its plates L in the racks I.

A stout thumb-screw, H, is passed from the front of the chair rearward, and has its ex-  
 15 tremity journaled in a suitable hanger depending from the platform A, and on this screw H is a traveling nut, H', from which there project rearward through the bar G' two bars, n  
 20 n, to connect said bar G' and nut H'. These bars n n are pivoted on the nut H', so as to move in vertical planes, and they incline downward as well as rearward to enter through the bar G', where they are secured, so that when the screw H is turned in one direction the  
 25 clamping-bar G' is inclined with its lower edge forward with all necessary force against the outside of the window-sill M, whereby said sill M is clasped firmly between the frame D and the clamping-bar G'. By turning the screw  
 30 H in the opposite direction the lower edge of the clamping-bar G' is carried rearward, so that the chair may be removed from its position in the window; and the bars n n, being pivoted to the nut H', facilitate the downward and for-  
 35 ward swinging of the bar G' when it is desired to withdraw the plates L from certain of the rack-sockets, in order to adjust them in other of the rack-sockets to change the angle of inclination of the bar G' or its distance from the  
 40 frame D; and, if desired, the plates L may be entirely withdrawn from the racks I, in which case the clamping device G will swing down in a reversed position, depending from the nut H'.

The chair may be adapted to window-sills of  
 45 any width by adjusting the distance between the step-frame D and the bar G', and this adjustment is made by turning the angle-plate buttons m' vertically and then introducing the ends of said plates L up through any two op-  
 50 posite sockets in the racks I, the buttons m' in this position readily passing up through the depressions i'. Then the buttons m' are turned horizontally to prevent the clamping device from becoming displaced, and at the same time  
 55 the serrated edges of the plates L bear against the pins k' that are immediately opposed to them, while the rear edges of the said plates L take against those pins k' opposite them, and thereby hold the clamping device G up in  
 60 desired position. The lower ends of the blocks G<sup>2</sup> at the same time rest on the top of the outer window-sill and the lower front edge of the bar G' takes against the outer face of the sill, as hereinbefore set forth, so that the chair is sup-  
 65 ported in a horizontal or nearly horizontal position, and may be secured therein by operating the screw H.

The fire-escape O, which is combined with the chair, consists of a rope ladder, P, with rigid rungs suspended from the windlass Q, that revolves in hangers R, secured to the rear  
 70 corners of the chair.

On one end of the windlass Q is a ratchet, S, in whose teeth the pawl T, which is pivoted on a hanger, R, engages, and the elongated  
 75 arm of said pawl T serves by its weight to keep the finger of said pawl engaged in the teeth of the ratchet S, as well as to afford a convenient handle whereby any one may control the de-  
 80 scent of the fire-escape.

As a further security against the too rapid descent at any time of the fire-escape, the eccentric-lever U, pivoted on a hanger, R, is provided. Downward pressure upon the arm of  
 85 this lever U brings the outer curve of the eccentric against the windlass-shaft, and according to the force exerted the descent of the escape may be made more gradual or entirely checked. The cord V, leading from the arm of  
 90 this lever U, will, if held by a person on the fire-escape, enable the operator to regulate at will the downward movement of said escape.

At the lower end of the ladder P a box or basket, W, is suspended, which may be used for the reception of persons or goods to be saved  
 95 from the building to which the device is attached, or may be lowered to rest upon the ground and serve to steady the ladder P when one is descending the latter; and weights may be placed in said box or basket W to give the  
 100 ladder greater stability.

When using this device simply as a fire-escape the back and side guards of the chair may be dispensed with.

Having thus described my invention, I claim  
 105 as new and desire to secure by Letters Patent—

1. The combination, with the platform A and step-frame D, of the clamping device G, consisting of clamping-bar G', blocks G<sup>2</sup>, end plates, L, racks I, screw H, traveling nut H',  
 110 and pivoted bars n n, constructed, arranged, and operated substantially as herein shown and described.

2. As a means for supporting the combined chair and fire-escape in position on a window-  
 115 sill, the combination, with the screw-adjusted bar G', of the blocks G<sup>2</sup>, serrated end plates, L, and racks I, substantially as herein shown and described.

3. The combination, with the window-clean-  
 120 ing chair, provided with platform A, step-frame D, and suitable clamping devices and hangers, all constructed substantially as herein shown and described, of the rope ladder P, windlass Q, ratchet S, pawl T, connected eccentric reg-  
 125 ulating-lever and cord U V, and basket W, all arranged and operated as set forth.

ANNA DORMITZER.

Witnesses:

JAMES H. HUNTER,  
 WM. W. LUYSTER.