

(No Model.)

A. DORMITZER.
WINDOW CLEANING CHAIR.

No. 293,428.

Patented Feb. 12, 1884.

Fig. 1.

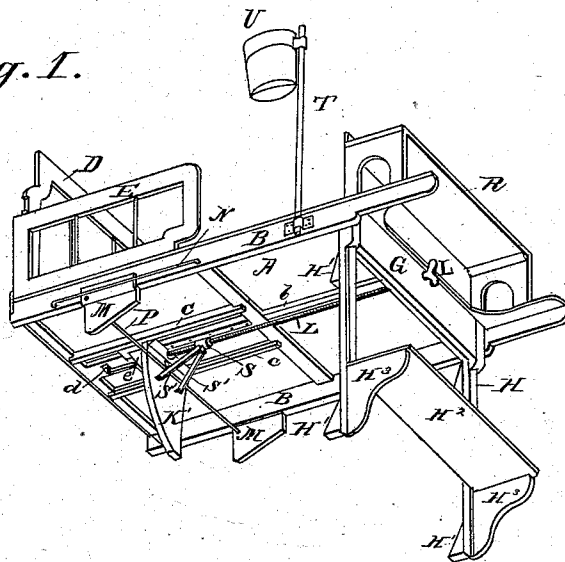


Fig. 4.

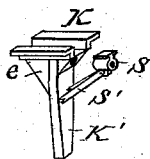


Fig. 2.

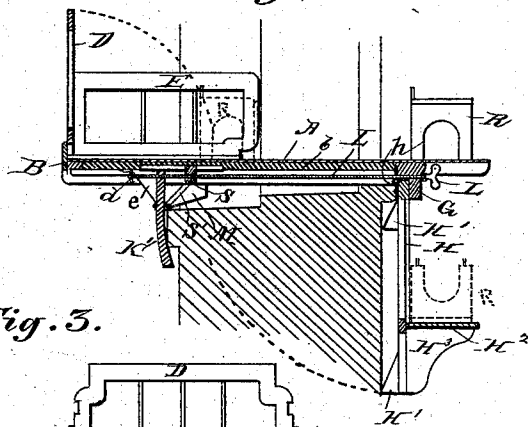
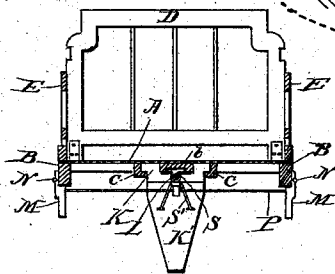


Fig. 3.



Witnesses.

Alf Steiger.

W B Moore

Inventor.

Anna Dormitzer

By David A. Burr

Attorney

UNITED STATES PATENT OFFICE.

ANNA DORMITZER, OF NEW YORK, N. Y.

WINDOW-CLEANING CHAIR.

SPECIFICATION forming part of Letters Patent No. 293,428, dated February 12, 1884.

Application filed December 4, 1883. (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 a new and useful Improvement in Window-Cleaning Chairs; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

My invention relates to the chair for cleaning windows described in the several Letters Patent of the United States heretofore granted to me, and which are numbered 200,441, 206,935, 206,936, 219,234, 244,203, and 256,654, and has for its object a simplification in the construction of the chair, and in the devices for its secure attachment to a window-sill.

My improvements consist in fitting to the under side of the chair an adjustable brace or clamp adapted to engage the outer face of the window-sill, constructed with a wide base to afford a firm and rigid support to the clamp, so that it may not yield when made to bear against the sill, said base being left free to be moved back and forth for adjustment against the sill to and from the front edge of the chair by means of a screw engaging a traveling nut connected to the clamp.

It consists, also, in combining with the adjustable clamp sliding inclined-faced blocks adapted to travel under the two side bars of the chair, and made to move in unison with the clamp by means of a transverse rod coupling them therewith. I furthermore detach the auxiliary step which has heretofore been hinged or otherwise coupled with the main step of the chair, and fit it with tenons to enter mortises in the chair and front step, so that said auxiliary step may be used interchangeably, either in connection with the inner or the outer end of the chair, and be also stowed away on the step when not in use. My chair is thus reduced to the simple form of a seat made to fit over and project from the sill, a fixed stay-frame adapted to drop from the seat on the inner side of the sill to bear against the inside wall, and furnished with a step by which to mount up on the chair, an outer clamp to fit against the outer edge of the sill and bind the chair firmly in position, and in-

clined-faced blocks moving in unison with the clamp to rest on top of the sill and supply an adjustable even bearing for the chair thereupon.

In the accompanying drawings, Figure 1 is a view in perspective of the under side of the chair when opened out ready to be placed in position in the window; Fig. 2, a sectional side elevation of the chair adjusted in position upon the window-sill, with the auxiliary step in position on its inner end, the position of the step, both when on the outer end and when stowed on the main step, being indicated by dotted lines; Fig. 3, a transverse section view in line *x x* of Fig. 2, looking outward toward the clamp; Fig. 4, a detached view, on an enlarged scale, of the outer clamping-piece.

The seat or platform of the chair is designated by the letter A. It is constructed of a strong frame, covered, by preference, with a sheet of light veneered stuff. The frame is re-enforced at its outer rear edge by a strip, B, which projects up above the level of the frame, and serves to give support to the lower edge of a back piece or guard, D, hinged to the seat to fold down inwardly thereon between two side guards, E E, which are each hinged to a side strip on the edge of the platform high enough to allow of their folding inward upon the top of the rear guard, D, when it lies flat on the seat. When turned up, the side guards are supported by the interposed rear piece, D, which in turn receives support at its upper end against lugs projecting slightly from the inner rear edges of the side guards, E E, near the top thereof. The inner edge of the seat or platform is likewise re-enforced by a transverse strip, G, firmly secured thereto. The upper cross-piece of a stay-frame, H H, is hinged at *h* to the under side of the seat, so as to bear against the inner side of this transverse strip G and receive support therefrom, when the frame is opened out at a right angle to the seat. This stay-frame H H, when thus opened out from under the seat, is adapted to serve as a stay for the same against the inner face of the wall, on the inside of the window. Its length is such as to give a wide, firm support to the seat, which will serve effectually in preventing it from tipping outward as it

rests upon the sill. This inner stay-frame or support, H H, is furnished on its inner side with inclined-faced blocks H' H', which are cushioned or faced with leather or other soft material, to serve as pads to prevent the mar-
 5 ring of the wall by the pressure of the stay-frame against it. A step, H², is secured to the lower or outer end of the stay-frame H upon suitable brackets, H³ H³, and by means there-
 10 of a person may readily mount upon the seat or platform A when the chair is adjusted in the window.

Upon the under side of the seat or platform, and on each side of its central bar, b, two
 15 blocks, K K, are fitted to slide longitudinally in direction from front to rear in ways formed by and between the central bar, b, and parallel cleats c c on either side thereof. To these blocks a clamping plate or support, K', is rigidly
 20 secured, so as to project therefrom at a right angle with the seat, and this plate is braced on the rear by angle-blocks e e, fitted to the blocks and plate, as shown in Fig. 4. These blocks K K not only permit the clamp-
 25 ing-plate K' to slide for adjustment to and from the front of the seat, but by their length afford an extended base or bearing for the inner end of the clamp against the under side of the seat. The lower end of this clamp K',
 30 thus rigidly secured to the sliding blocks, so as to project at a right angle, or thereabout, from the seat, is preferably curved or bent inward toward the front of the seat, to give it a firmer
 35 hold against the wall or window-sill when applied thereto. It is adjusted by means of a long thumb-screw, L, led through the middle of the front re-enforcing strip, G, to extend thence parallel with the central bar, b, of the
 40 seat to a hanger, d, on the under side of the bar, near its rear end, in which it is journaled to rotate freely. This thumb-screw engages a traveling nut, S, which is coupled by two rods, S' S', to the inner face of the clamp K', and
 45 which travels in a way formed between two lateral strips, f f.

Upon either side of the frame of the seat or platform A plates or block M M are fitted to slide longitudinally upon its side bars and to project downward therefrom. They are con-
 50 fined upon the side bars as they traverse thereon by means of parallel rods N N, secured at either end to the frame, and which extend longitudinally over the upper end of the blocks, and fit each into a longitudinal groove in the
 55 face thereof, as shown in Fig. 1 of the drawings. The lower face of each block M is made to slope upward toward the inner end of the seat, and the two blocks are united, so as to move simultaneously in unison with each other
 60 and with the central clamp, K', by means of a transverse connecting-rod, P, whose ends project through transverse apertures in the side blocks, and which is made fast centrally to the inner face of the clamp K', as shown in
 65 Fig. 1.

In the use of the chair thus simply constructed the platform or seat is placed upon the

window-sill, and its front support or stay-frame, H H, let down at a right angle thereto, is made to bear against the inner face of the wall
 70 under the window, on the inside thereof, a firm bearing being obtained against the wall, irrespective of the inward projection of the sill beyond its face, by means of the pad-blocks H' H'. (See Fig. 2.) The clamp K' and the
 75 side blocks, M M, moving with it are then drawn inward by turning the thumb-screw L until the side blocks obtain a firm, even bearing on the window-sill, and the lower end of the central
 80 clamp is brought to bear against the outer face of the sill or wall. The operation of the screw will permit the clamp to be so tightened up against the wall as to lock the chair firmly and securely to the sill.

The step H² facilitates the ready use of the
 85 chair, and the folding guards D E E, being turned up, supply a complete back to the chair, adding to the safety of its use by preventing the accidental fall therefrom of a per-
 90 son seated thereon. To facilitate its use in reaching the extreme upper portion of the window when required, I supply therewith a detachable step, R, whose feet or four lower
 95 corners are provided with projecting dowels or tenons adapted to fit into counterpart mortises or recesses in the side bars of the platform, both at its inner end, to admit of
 100 the use of the auxiliary step within the window, (see Fig. 1,) and also at about the center thereof, to admit of its use on the outside. (See dotted lines, Fig. 2.) The upper face of the
 105 main step H is also provided with counterpart recesses to engage the dowels of the auxiliary step R, so that when the chair is folded up this auxiliary step may be fitted upon the
 110 main step, (see dotted lines, Fig. 2,) and with it folded away under the platform or seat of the chair.

The equipment of the chair for domestic use is completed by means of a vessel, U, di-
 110 vided into two compartments, one higher than the other, and adapted the one to hold water and the other wash-rags, &c., for cleaning the window. This convenient vessel is adapted
 115 to hook onto the side guards of the chair or upon a rod, T, fitted in a socket in the seat-frame.

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

1. An unyielding clamp projecting rigidly
 120 from blocks traversing in ways upon the under side of the platform of a window-cleaning chair, in combination with its stay-frame, a thumb-screw extending under the platform
 125 from its front rearwardly, and a traveling nut upon said screw coupled to the clamp, substantially in the manner and for the purpose herein set forth.

2. The combination, with a central clamp adapted to traverse upon the under side of the
 130 platform of a window-chair in a direction from front to rear, and to engage the outer face of the sill or wall, and which is provided with a thumb-screw adapted to produce an adjust-

ment of said clamp, of lateral inclined-faced
blocks traversing longitudinally upon the sides
of the platform, to rest upon the window-sill,
and a transverse connecting-bar coupling said
5 blocks with each other and the central clamp,
so that the three shall move in unison, sub-
stantially in the manner and for the purpose
herein set forth.

In testimony whereof I have signed my name
to this specification in the presence of two sub- 10
scribing witnesses.

ANNA DORMITZER.

Witnesses:

G. M. WOODCOCK,
A. B. MOORE.