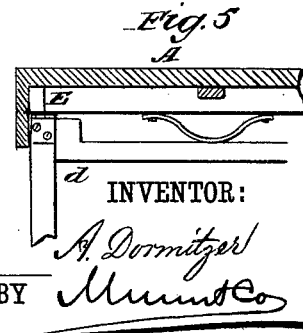
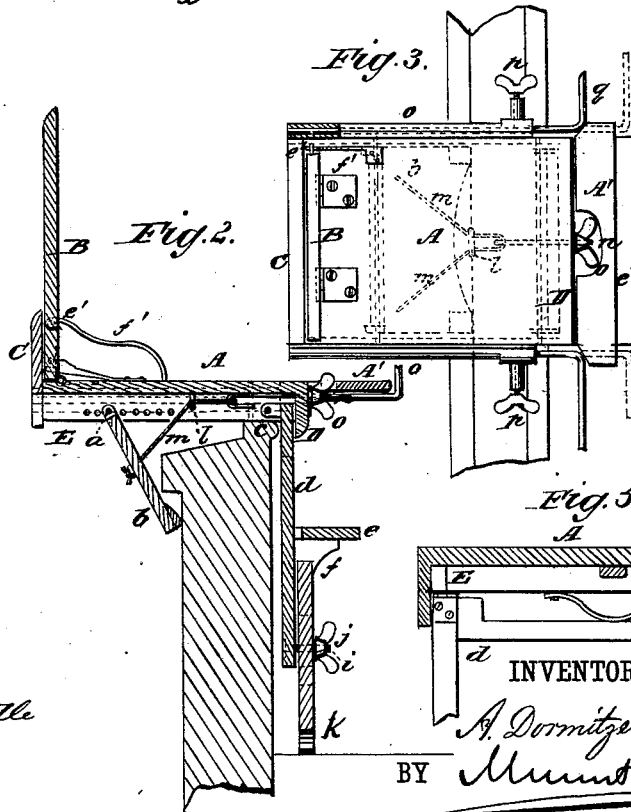
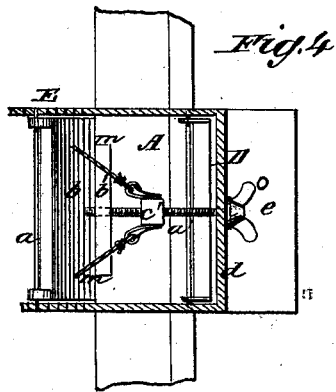
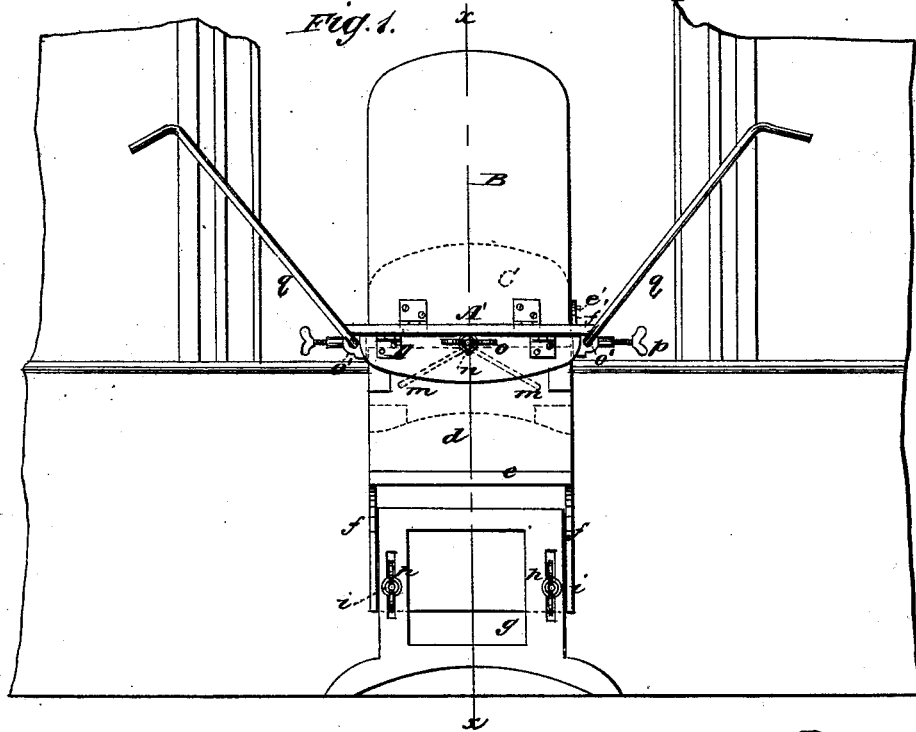


A. DORMITZER.
Window-Cleaning Step-Chair.

No. 206,936.

Patented Aug. 13, 1878.



WITNESSES:

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ANNA DORMITZER, OF NEW YORK, N. Y.

IMPROVEMENT IN WINDOW-CLEANING STEP-CHAIRS.

Specification forming part of Letters Patent No. **206,936**, dated August 13, 1878; application filed April 16, 1878.

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 Improved Window-Cleaning Step-Chair, of which the following is a specification:

Figure 1 is a front elevation of my improved window-cleaning chair. Fig. 2 is a vertical section taken on line *xx* in Fig. 1. Fig. 3 is a plan view. Fig. 4 is an inverted sectional plan view. Fig. 5 is a detail sectional view of the joint between the seat and lower support.

Similar letters of reference indicate corresponding parts.

My present invention is an improvement on the window-cleaning chair for which Letters Patent No. 200,441 were granted to me February 19, 1878.

The object of my present invention is to render the window-cleaning chair lighter and more portable, to simplify its adjustment, and to render it stronger and more reliable and complete.

Referring to the drawings, A is a platform of a suitable size to sit or stand upon, and B is the back or guard, hinged to one end of the platform, and supported and stiffened, when unfolded, by a piece, C, which is attached to the end of the platform and projects a short distance above it.

Upon the opposite end and opposite side of the platform A a piece, D, is secured, from which the strips E extend along the under surface of the platform at its edges for receiving the rod *a*, upon which the brace *b* swings, and for receiving the rod *c*, upon which the step-support *d* is pivoted.

A step, *e*, is attached to the support *d* by means of brackets *f*, and between these brackets a frame, *g*, having slots *h*, is fitted. The frame *g* is clamped to the support *d* by bolts *i*, which are provided with wing-nuts *j*.

The frame *g* is provided with feet *k*, which rest upon the floor when the device is in position in a window.

Chains *m* are attached to the brace *b* a short distance from its pivot, and run through an apertured piece of wood or staple, *l*, secured to the under side of the platform A, and are

attached to the hooked end of a bolt, *n*, that extends through the piece D to receive a wing-nut, *o*. By means of this bolt and chain the brace *b* is drawn against the wall so as to securely hold the platform A against downward pressure.

Instead of employing a bolt with a hook-head, as described, I may employ a long screw, *a*, as shown in Fig. 4, journaled in the front piece D and in a block, *b'*, attached to the under side of the seat, said screw having a winged head for convenience in turning. Upon the screw is placed a traveling-nut, *e'*, which is provided with two snap-hooks for receiving the chain *m*.

The end of the screw *a'* may be squared to receive a key for turning it, in which case the screw will not project beyond the surface of the piece D.

Instead of a single central screw, I may place one at each side of the platform and attach one chain to each nut; but the single screw is preferable, as both sides of the brace may be drawn into contact with the wall at one operation.

The back or guard B is provided with screws or studs *e'*, which are engaged by the curved wires *f'*, which are attached to the seat A, and serve to support and render secure the back or guard B. The wires also serve to hang the vessels which contain the articles used in cleaning the window. The board *d* may be provided with studs or screws *e'*, which may be engaged by curved wires *f'*, as in the case of the back B.

The edges of the platform A are grooved to receive the rods or braces *q*, which are secured by the half-round metallic covers *o'*, which are fastened to the edges of the platform by means of screws. The metallic covers *o'* are provided with thumb-screws *p* for holding the braces in any required position, and they are also provided with spring-catches or detents, which prevent the braces from escaping from the grooves in the edges of the platform.

The braces *q* are bent at right angles, so that they may engage the inner surface of the wall at the sides of the window. A folding step, A', is hinged to the front edge of the platform A, and has projecting ends, which

are supported when in use by the brace-rods *q*. This step may be hinged to the board *d* and may be supported by folding brackets.

The chair is put into position for use by unfolding it and placing the platform *E* on the window-sill and drawing the chain, by means of the screws, so as to bring the brace *b* into contact with the outside of the wall. The braces *q* are now brought against the inner side of the wall, and are clamped by the thumb-screws *p*. The frame *q* is now moved down until the spurs with which its feet are provided enter the floor. The guard or back *B* is raised into a vertical position, when the chair is ready for use.

The chair is folded, when it is desired to store it away, by reversing the process just described.

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

1. In a window-cleaning chair, the combination of the hooked screw *n*, chains *m*, and brace *b*, substantially as shown and described.

2. As a new article of manufacture, the herein-described window-chair, provided with curved wires *f' f'* attached to seat, to serve as braces to the back and a support to vessels used in cleaning windows.

3. The right-angled braces *q*, in combination with the platform *A*, having grooved sides, and the metal covers *o*, having thumb-screws *p*, substantially as herein shown and described.

4. The combination, in a window-cleaning chair, of the folding step *A'* with the platform *A*, substantially as shown and described.

ANNA DORMITZER.

Witnesses:

C. SEDGWICK,
GEO. M. HOPKINS.