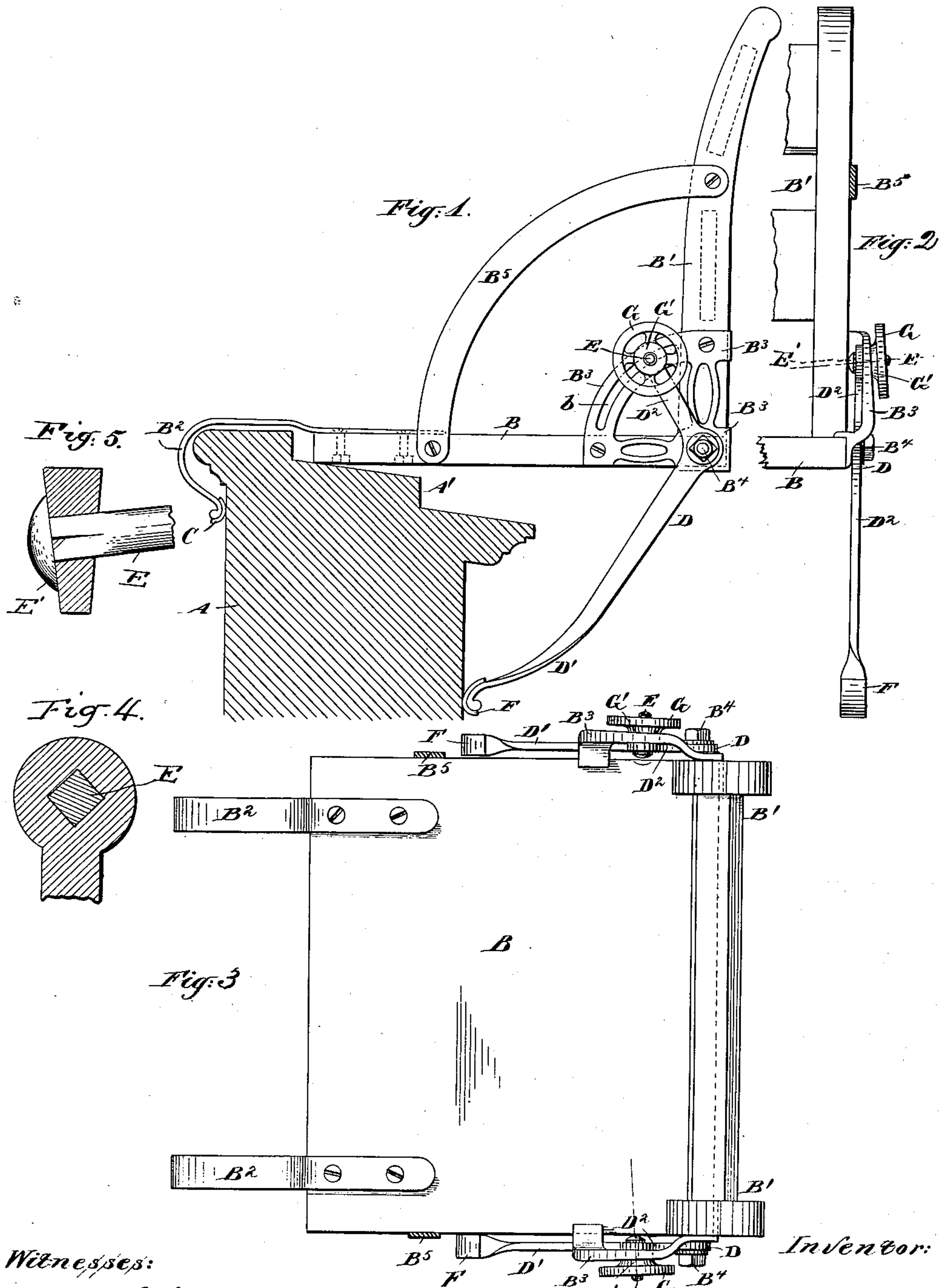


(No Model.)

F. STAEDELI.  
WINDOW CHAIR.

No. 487,859.

Patented Dec. 13, 1892.



Witnesses:  
Charles R. Searle.  
Jose L. Fingleton.

Inventor:  
Felix Staedeli  
by his attorney  
Thomas Dyer Stetson



# UNITED STATES PATENT OFFICE.

FELIX STAEDLI, OF NEW YORK, N. Y.

## WINDOW-CHAIR.

SPECIFICATION forming part of Letters Patent No. 487,859, dated December 13, 1892.

Application filed March 19, 1892. Serial No. 425,511. (No model.)

*To all whom it may concern.*

Be it known that I, FELIX STAEDLI, a citizen of the United States, residing in the city and county of New York, in the State of New York, have invented a certain new and useful Improvement in Window-Chairs, of which the following is a specification.

The improvement applies to that class of devices adapted to support a person in position for washing the outsides of windows. The invention contributes to its absolute security with perfect adaptation to serve in windows of greatly-differing buildings.

The accompanying drawings form a part of this specification and represent what I consider the best means of carrying out the invention.

Figure 1 is a side elevation of my chair with a vertical section of the adjacent portion of the building with the chair in use. Fig. 2 is an elevation of a portion of the chair as seen from the interior of the building, and Fig. 3 is a plan view. Figs. 4 and 5 show certain portions on a larger scale. Fig. 4 is a vertical section, and Fig. 5 a horizontal section.

Similar letters of reference indicate corresponding parts in all the figures.

A is the wall of the building, and A' the sill of a window therein.

B is the seat, and B' the rigidly-attached back of the window-chair.

B<sup>2</sup> B<sup>2</sup> are stout hooks extending forward from the seat and rigidly attached thereto, adapted to take a reliable hold of the interior of the building below the window-sill. The bearing of each hook against the hard-finish or other surface of the interior is faced with a pad of leather C. A casting B<sup>3</sup> on each side of the chair strengthens and stiffens the union of the seat with the back and also carries a pivot B<sup>4</sup>, on which turns a lever D, which performs important functions. The lower arm D' of this lever is fitted with a leather pad F and in the use of the chair applies firmly against the exterior of the stone or other material of the building. The upper arm D<sup>2</sup>, set nearly or quite at a right angle with the arm D', applies on the inner face of the arc shown in the casting B<sup>3</sup>. The arc is concentric to the axis of the pivot B<sup>4</sup> and has a slot correspondingly curved, (marked b.) The thickness of the metal in this arc increases from

the upper end downward to the lower end of the slot.

A transverse screw-threaded pin E is set in a square hole in the arm D<sup>2</sup> and plays in the slot b without resistance, except as it is confined by the threaded wheel G, serving as a nut on the pin E and adapted to hold and release the lever D at will. The pin E has a head E', and a square portion of the shank adjacent to the head engages in the square hole in the arm D<sup>2</sup> and prevents it from turning. The pin E is stiffly set in the arm D<sup>2</sup>, as if it were forged thereon. It may be actually forged in one with the lever when the parts are of wrought iron or steel. In such case the pin is set just sufficiently oblique to the plane of motion of the arm to allow the wheel G to apply with its corresponding collar or hub G' bearing fairly on the inclined outer face of B<sup>3</sup> on each edge of the slot b. When made, as shown, with the pin E forged separately, I can have the hole in the holding part of D<sup>2</sup> a little larger than the pin, and prefer to so make it, so as to allow a little looseness.

The person adjusting the chair for use in a window turns the wheel G in the direction to relax the grip. If, as is preferred, there is a lever D and a hand-wheel G, &c., on each side, both are correspondingly relaxed, and then, holding the chair above its final correct position, the wheel or wheels G being turned to grip their respective arcs of the castings B<sup>3</sup>, the chair is for a moment supported by the grip of these parts in such false position. Now by taking hold of the hand-wheels G and relaxing their grip the chair sinks by its own gravity, correspondingly turning the levers D and bringing the screw-threaded pins E into thicker and thicker parts of their slots b, so that it is still gripped. When it is thus allowed to sink to the level position, or, if preferred, a little below the level, the hand-wheels may be turned a very little to tighten, and the parts are now immovable; or the chair may be left a little high without such turning of the hand-wheels to tighten, and on the occupant placing himself or herself in the chair the increased weight will depress it a little and the wedge-like action of the increasing thickness will tighten the hold of the hand wheel or wheels on the casting B<sup>3</sup> and all will be firm. The inclined position of each



pin E and hand-wheel G and the wedge-like effect of the increased thickness of the arc in the casting B<sup>8</sup> as the pin and its connections are traversed downward therein induces another important effect, insuring safety to the user. No matter in what condition the devices shall be, if the weight of a person is thrown on it and it commences to sink that movement tightens the grip on it and the motion is soon arrested.

Modifications may be made by any good mechanic without departing from the principle or sacrificing the advantages of the invention. One lever D and one hand-wheel G may serve, as already intimated. An arm on a nut may serve instead of a wheel G, and other material than leather may form the pads C and F, or such pads may be omitted for many uses without seriously marring the surfaces.

The braces B<sup>5</sup>, which aid to strengthen and stiffen the rigid union of the seat B with the

back B', may have a different curvature or may be straight, if preferred.

I claim as my invention—

In a window-chair having a seat B and means, as the hooks B<sup>2</sup>, for engaging strongly within the building and a lever or levers D to press against the face of the building outside, the combination therewith of the casting B<sup>8</sup> and the threaded pin E and nut or hand-wheel G, tapped thereon, the casting, being thicker in the portion toward which the pin is traversed by the sinking of the chair, adapted to act wedgewise, all substantially as herein specified.

In testimony that I claim the invention above set forth I affix my signature in presence of two witnesses.

FELIX STAEDELI.

Witnesses:

THOMAS DREW STETSON,  
CHARLES R. SEARLE.