

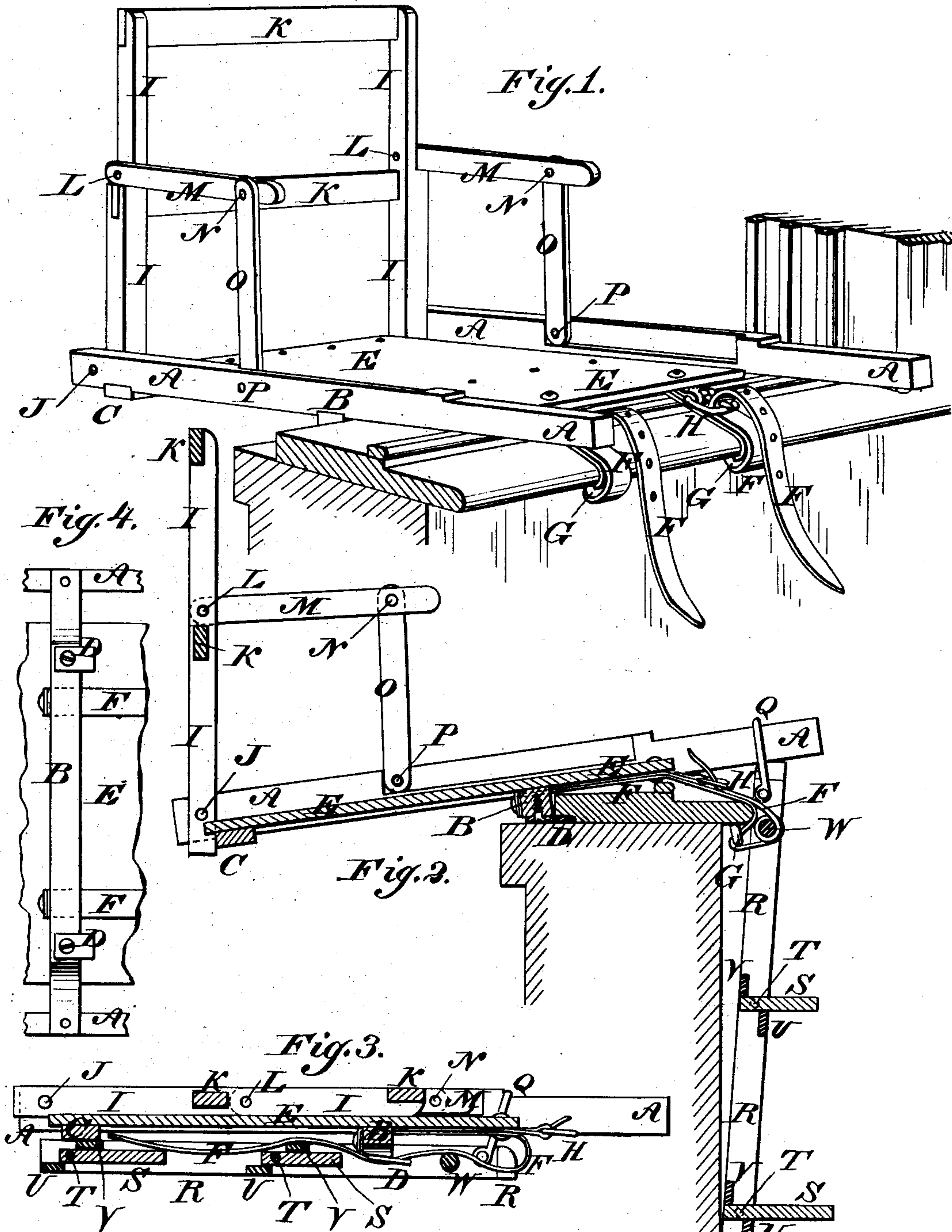
(No Model.)

B. H. KOECHLING.

FOLDING WINDOW CLEANING CHAIR.

No. 244,755.

Patented July 26, 1881.



WITNESSES:

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INVENTOR:

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UNITED STATES PATENT OFFICE.

BERNHARD H. KOECHLING, OF NEW YORK, N. Y.

FOLDING WINDOW-CLEANING CHAIR.

SPECIFICATION forming part of Letters Patent No. 244,755, dated July 26, 1881.

Application filed November 20, 1880. (No model.)

To all whom it may concern:

Be it known that I, BERNHARD H. KOECHLING, of the city, county, and State of New York, have invented a new and useful Improvement in Folding Window-Cleaning Chairs, of which the following is a specification.

Figure 1 is a perspective view of the improvement arranged for use. Fig. 2 is a sectional side elevation of the improvement, shown as provided with steps. Fig. 3 is a sectional side elevation of the improvement folded. Fig. 4 is an under side view of a part of the improvement.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish folding window-cleaning chairs so constructed that that they can be readily secured to and detached from the window-sills, will be securely held in place, and can be folded compactly for storage and transportation.

A are two side bars, which are connected a little in front of their centers by a cross-bar, B, and at their rear ends by a cross-bar, C. The cross-bars B C are made of such a length that the frame A B C can be readily passed through a window and placed upon the window-sill.

To the lower side of the cross-bar B are attached plates or prongs D, to enter recesses in the outer edge of the window-sill or window-sill cap, to hold the chair from slipping inward and its outer part from rising.

To the cross-bar B, and to the forward part of the bottom boards, E, which form the seat of the chair, are attached straps F, which are designed to be passed through staples G or other keepers attached to the lower inner part of the window-sill or window-sill cap, and then secured by buckles H, attached to the said straps at or near the forward edge of the seat-boards E, securing the chair firmly in place in the window.

To the inner sides of the outer ends of the side bars, A, are hinged the lower ends of the bar I by pivots J, passing through the said bars A I in such positions that when the bars I are vertical their lower ends will rest against the outer side of the cross-bar C, to prevent the bars I from being pushed outward beyond a vertical position. The bars I are connected at their middle parts and upper ends by cross-bars K. The bars I K thus form a folding back

to the chair. The outer part of the upper half of the bars I are cut away, and to the said bars I, just above their shoulders, are hinged by pivots L the rear ends of the bars M. The forward parts of the bars M are hinged by pivots N to the upper ends of the bars O, the lower ends of which are hinged by pivots P to the side bars, A, at the rear ends of rabbets formed in the inner sides of the middle parts of the said side bars, A. The bars M O thus form folding arms for the chair. When the back I K is folded down upon the seat-boards E the bars M O fold down into the spaces formed by cutting away parts of the bars I and rabbeting the bars A, so that the chair folds up very compactly. The ends of the side bars, A, project at the inner side of the window, and upon the said projecting ends are placed links Q, to the lower ends of which are hinged the upper ends of two bars, R, which hang down along the wall below the window. The bars R are provided with one or more steps, S, which are hinged at the rear parts of their ends to the bars R by pivots T, so that the said steps S can be turned up into the plane of the bars R, or turned down at right angles with the said bars R.

To the forward side of the bars R are attached the ends of a cross-bar, U, for each step S, in such a position that the said step will rest upon the said bar U when horizontal, as shown in Fig. 2.

To the rear sides of the bars R, at a distance above the bar U equal to the thickness of the step S, are attached the ends of a cross-bar, V, for the upper side of the rear edge of the step S to rest against when the said step is in a horizontal position, so that the step S will be supported by the cross-bars U V, and the pivots T will be relieved from the strain. The bars U V also serve as stops to keep the step S in place when turned into the same plane with the bars R. The upper parts of the bars R are connected by a round, W, around which, when the steps are used, the straps F are passed one or more times, after being passed through the staples G and before being passed through the buckles H, as shown in Fig. 2, to fasten the steps securely in place.

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

1. A folding window-cleaning chair con-

5 constructed substantially as herein shown and described, consisting of the frame A B C, having seat-boards E, the catches D, the hinged back I K, the hinged arms M O, and the straps F, as set forth.

2. The combination, with the frame A B C, of the back I K, pivoted to bars A, the bars M, pivoted to bars I, and supported on an outside shoulder thereof, and the bars O, pivoted to
10 both the bars A and M, as and for the purpose specified.

3. In a folding window-cleaning chair, the combination, with the frame A B C, of the catches D and the straps F, substantially as
15 herein shown and described, whereby the chair can be firmly and quickly secured to a window-sill, as set forth.

4. In a folding window-cleaning chair, the combination, with the side bars, A, of the base-

frame and the straps F, of the suspended frame 20 R U V W and hinged steps S, substantially as herein shown and described, whereby convenient access may be had to the chair, as set forth.

5. In a folding window-cleaning chair, the 25 combination, with the bars R, suspended from the side bars, A, of the base-frame, of the hinged steps S and the cross-bars U V, attached to the front and rear sides of the said bars R at a distance apart equal to the thickness of the 30 said steps, substantially as herein shown and described, whereby the step will be firmly supported and can be turned up into the plane of the said bars, as set forth.

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Witnesses:

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