M. & V. RATHKNECHT.

METALLIC WINDOW-BLINDS.

No. 177,277. Patented May 9, 1876.

Fig. 1.

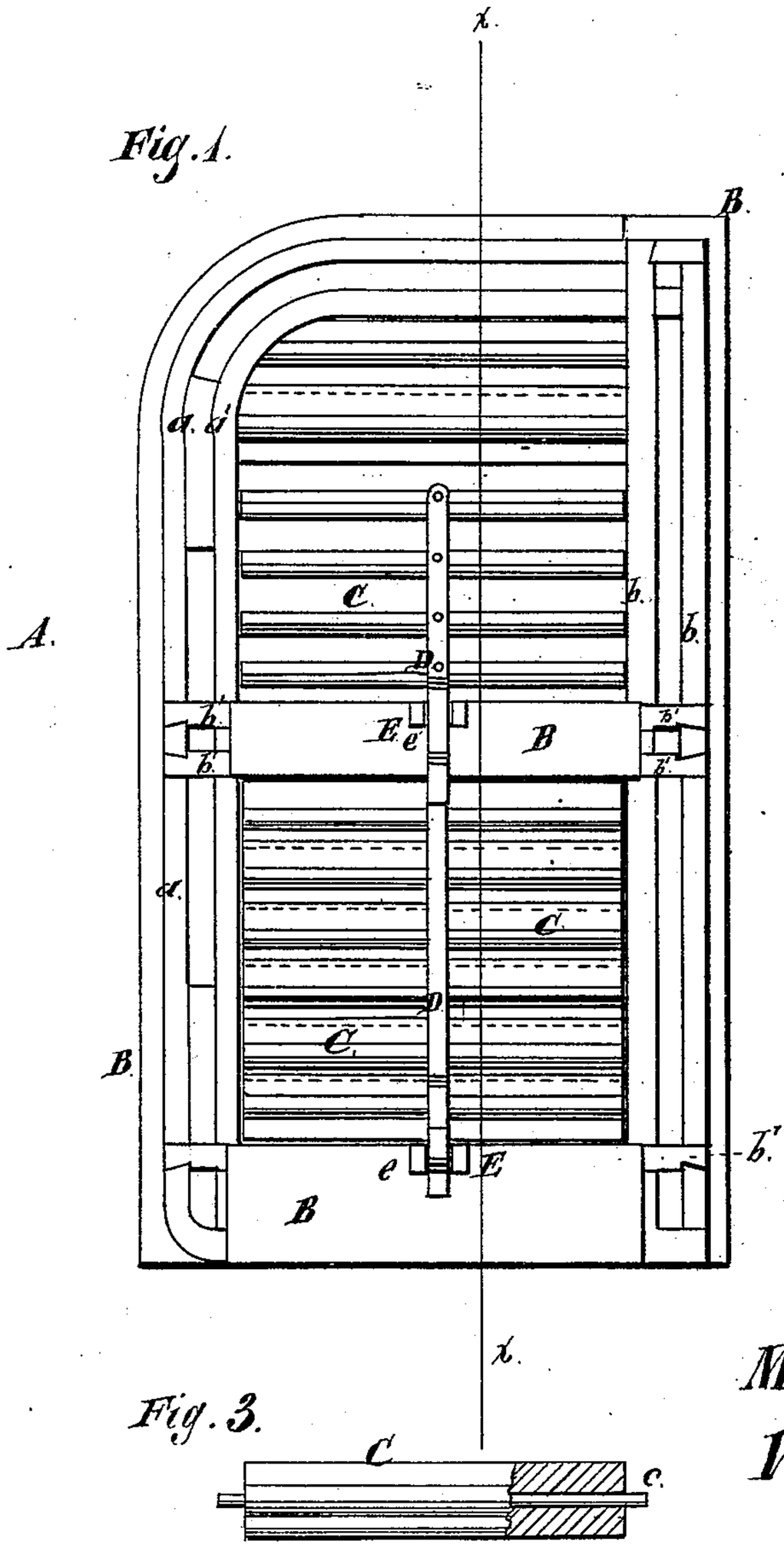

Fig. 2.

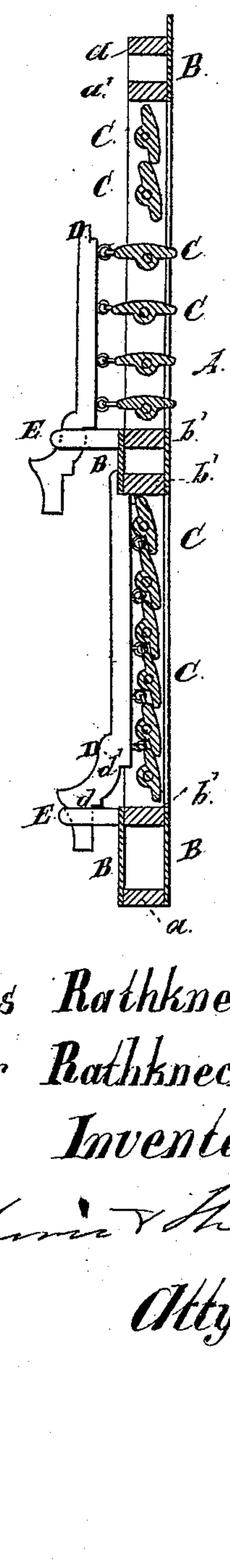

Fig. 3.

Witnesses:

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UNITED STATES PATENT OFFICE.

MATHIAS RATHKNECHT AND VICTOR RATHKNECHT, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN METALLIC WINDOW-BLINDS.

Specification forming part of Letters Patent No. **177,277**, dated May 9, 1876; application filed January 15, 1876.

To all whom it may concern:

Be it known that we, MATHIAS RATHKNECHT and VICTOR RATHKNECHT, of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Metallic Window-Blinds, which is fully described in the following specification, reference being had to the accompanying drawings, in which—

Figure 1 is a view of the blind, looking from the inside; Fig. 2, a cross-section taken on the line *x x*, Fig. 1; and Fig. 3, a view of a single slat, a portion being broken away to show the interior construction.

The object of our invention is to make a metallic frame that will not yield or sag, in which are fixed adjustable metallic slats, which may be closed and fastened so as to be secure and fire-proof.

The invention consists in the construction of the frame-bars of iron, bent in the form desired for the blind, and supporting-bars of like material, dovetailed and riveted to the former; also, in casting the slats around their journals; and, also, in a device for fastening the slats when closed, all of which will be hereinafter fully described.

The blind-frame A is constructed in the following manner: A piece of bar-iron, *a*, of suitable size, is bent, as shown in the drawings, in the form desired for the blind, with the exception of the straight side, where the two blinds come together. A second bar, *a'*, like the first, is bent in a similar manner, but does not extend across the lower end of the blind. This latter bar is placed inside of and at a little distance from the frame. Two straight pieces of bar-iron, *b b*, connect the free ends of the bar *a*, to which they are attached by halving and dovetailing them together. In the same way the upper end of the bar *a'* is attached at its upper end to the bars *b b*, and at its lower end to the bar *a*. The cross-bars *b' b'*, at the middle and lower end of the frame, connect the bars *a a'* and *b b'*, to which they are fastened, in the manner described above. Metallic plates B, of suitable width and thickness, are placed upon the outside of these bars, to which they are fastened by rivets passing through the joints of the bars. These plates form the outside finish for the frame of the blind. Within this frame are pivoted slats C, which are in the form of ordinary pivoted slats, except that they are metal, and are provided with journals in a special manner. This is accomplished by placing a rod, *c*, in the mold for the slat, and pouring the metal around it, so that the journals are permanently attached to the slat and virtually a part of it, as seen in Fig. 3. A metallic bar, D, is provided with the ordinary rings or straps, which are attached to corresponding rings or straps on the slats C, the latter being inserted in the slats in any suitable way, or cast with them. The bars D are turned outward at their lower ends, and provided with the square shoulder *d* at the lower end of the bar, and *d'* a little above it. To the middle cross-bars and the lower end of the frame are attached two pieces or straps, E. These pieces are forked at their outer ends, as seen at *e e*. The bars D pass between these forks or projections *e*, which act as guides and supports.

When the slats are to be closed the bars D are forced upward, so as to turn the slats up, and the bar is thrust inward, so as to bring the shoulder *d* of the body of the stop E as seen in the lower portion of Fig. 2. When in this position the slats are securely locked, and cannot be turned until the bar D is pulled outward, so as to disengage the shoulder *d* from the stop E. The bar may then be pulled down, opening the slats, and the shoulder *d*, coming against the stop E, will prevent the bar from falling too low, and thus closing the slats by turning them downward.

The position of the adjusting-bar, stop, and slats, when the latter are open, is shown in the upper portion of Fig. 2.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

1. A blind-frame, consisting of the bent bars *a a'*, straight upright bars *b*, and cross-

bars b', fastened together by halving and dovetailing, substantially as and for the purpose set forth.

2. The cast metallic slats C, provided with journal-rods c, around which the slats are cast, substantially as described.

3. A slat adjusting and fastening device, consisting of the bar D, linked to the slats, and having an angular shoulder, d, at its lower end, and a forked strap, E, attached to the blind-frame.

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