

(No Model.)

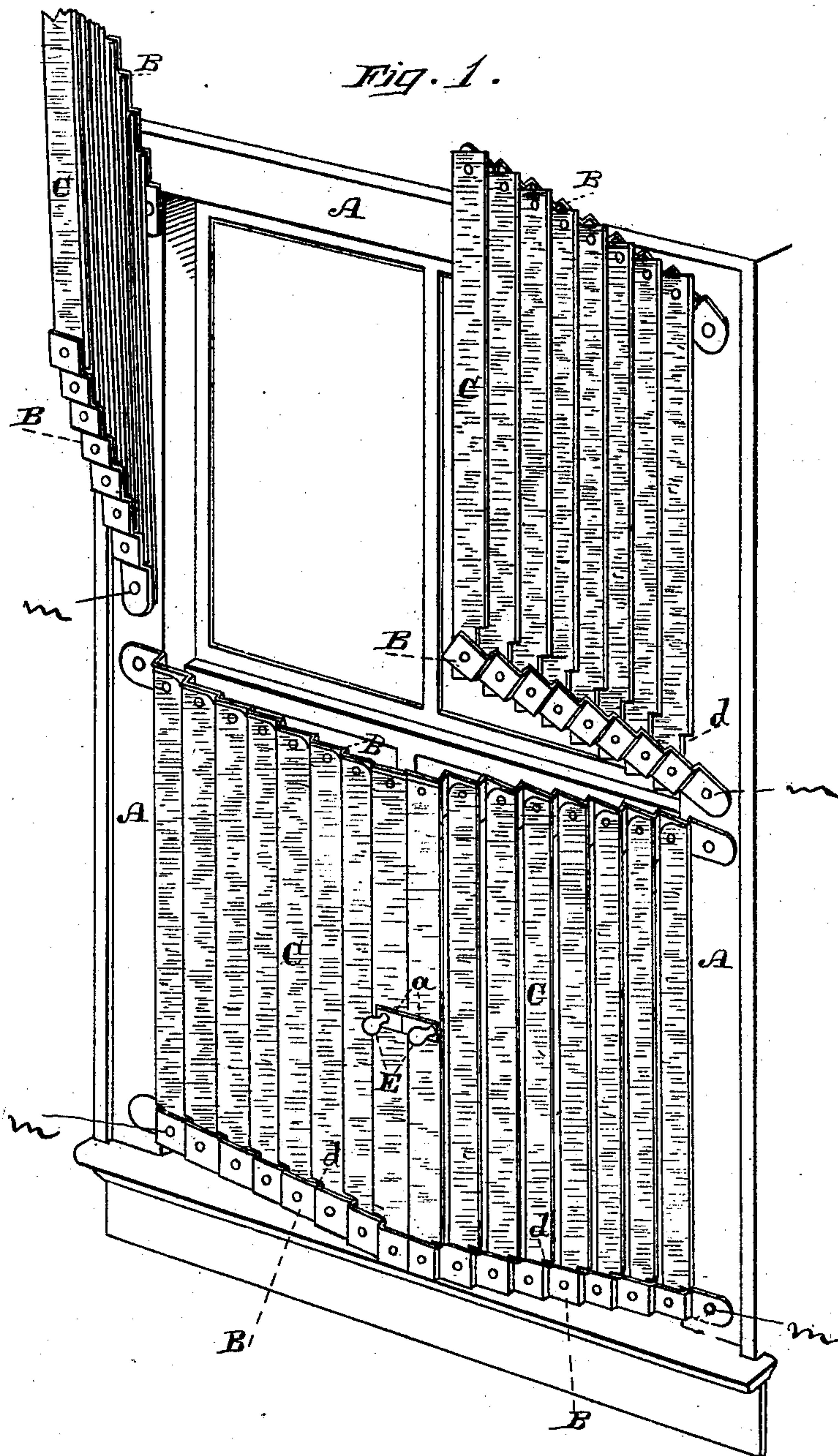
2 Sheets—Sheet 1.

J. WILLIAMS.

WINDOW BLIND.

No. 275,557.

Patented Apr. 10, 1883.



Witnesses,
Geo. H. Strong.
J. H. Stouffer.

Inventor
Joseph Williams
By
Dewey & Co.
Attorneys

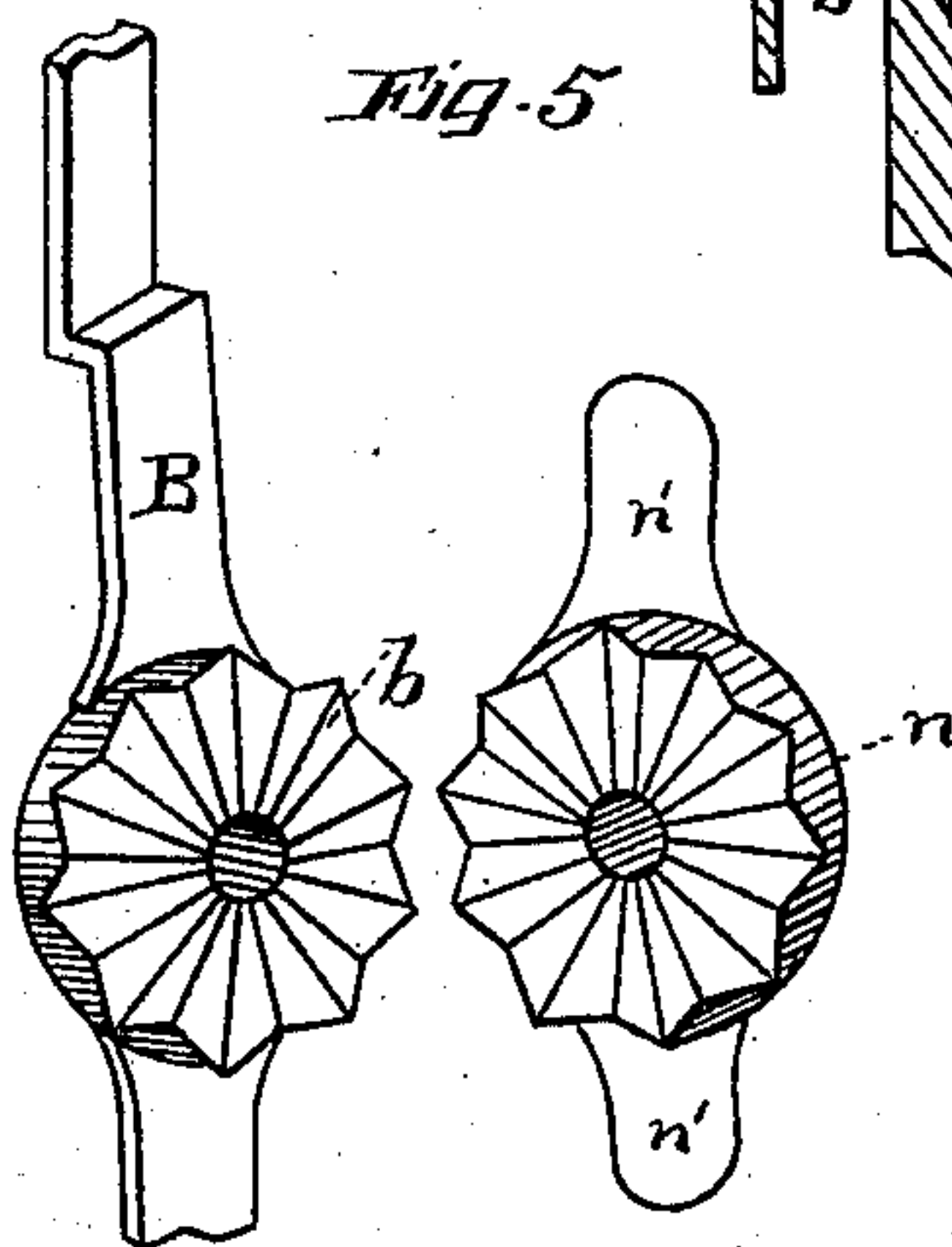
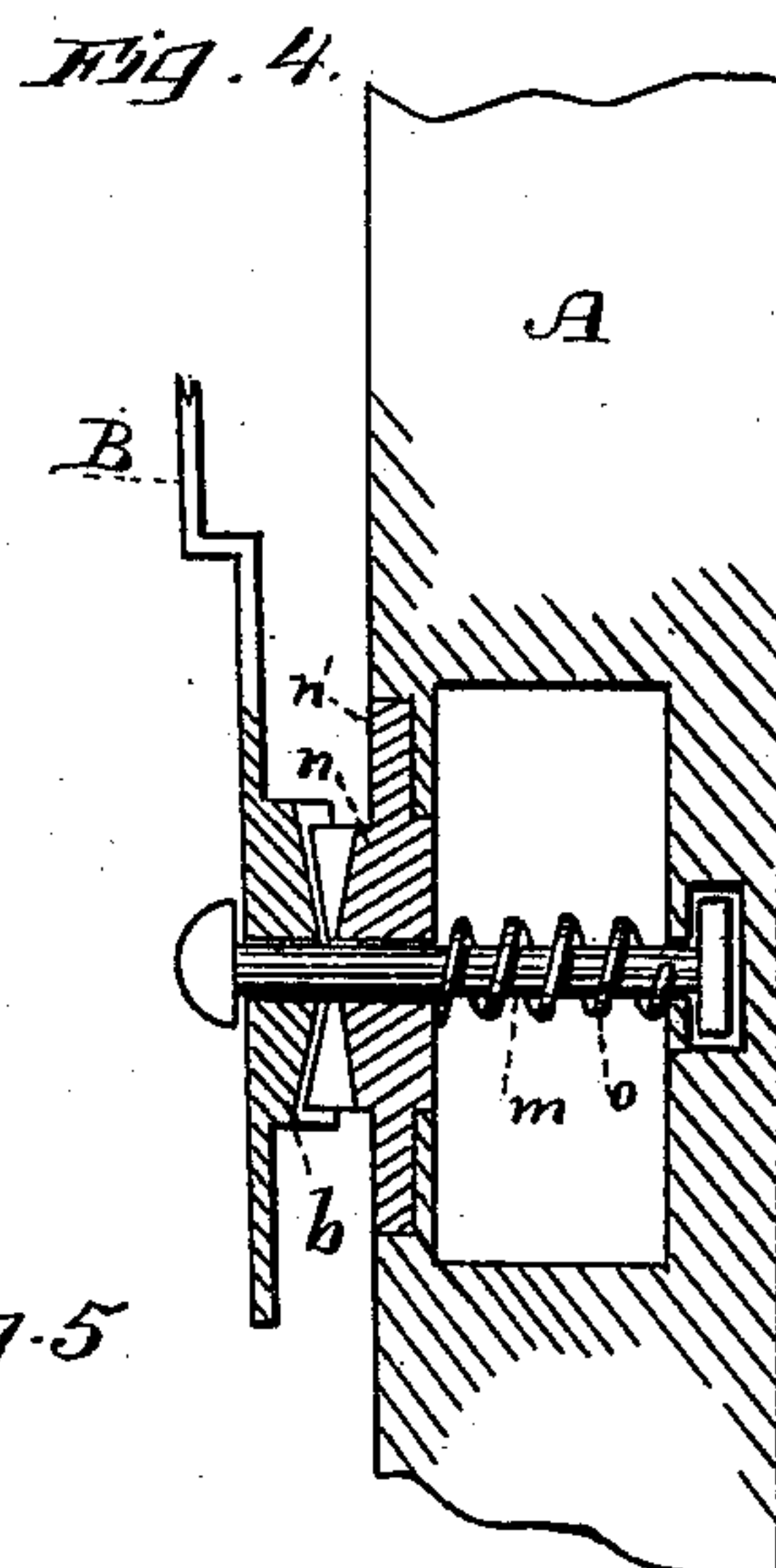
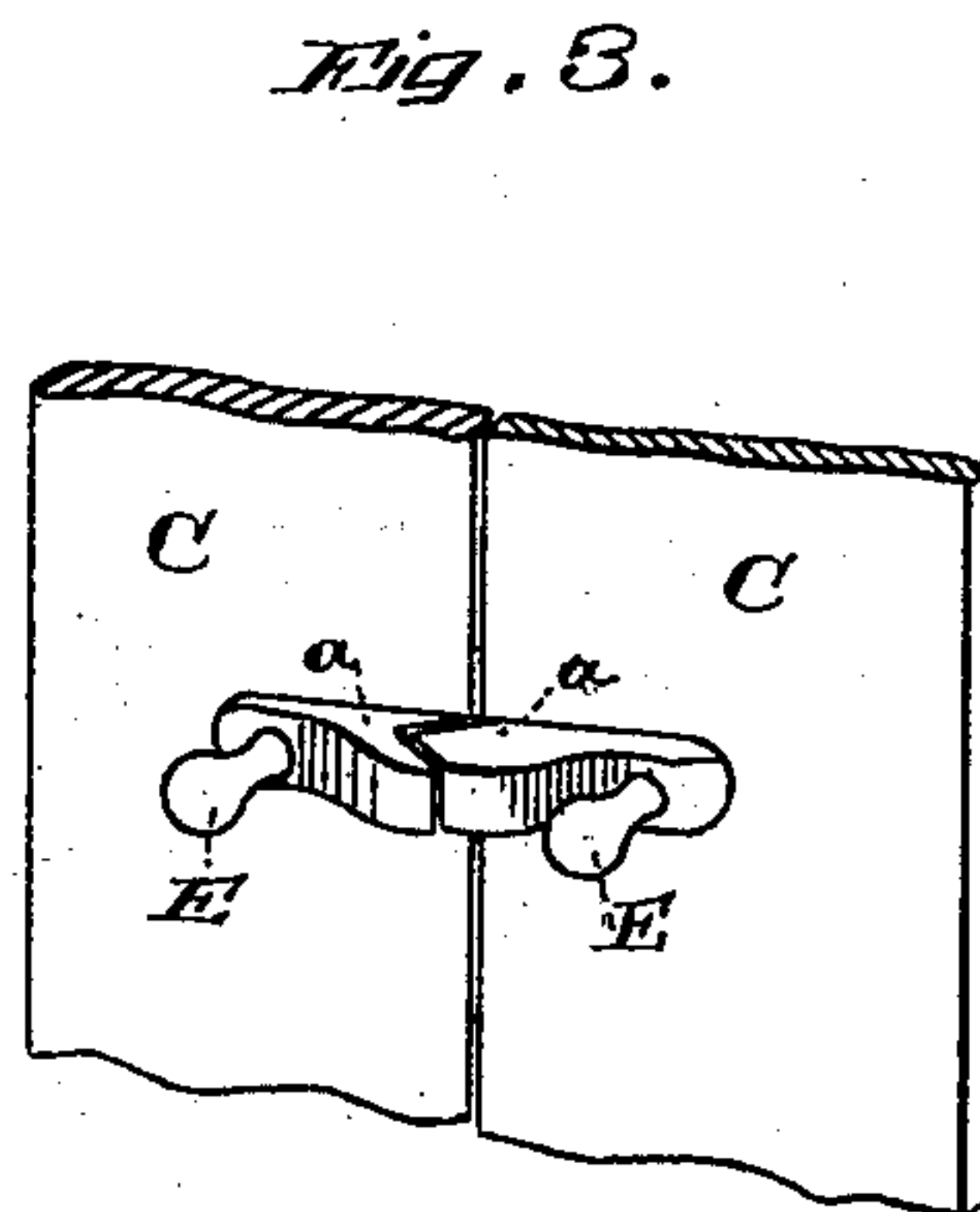
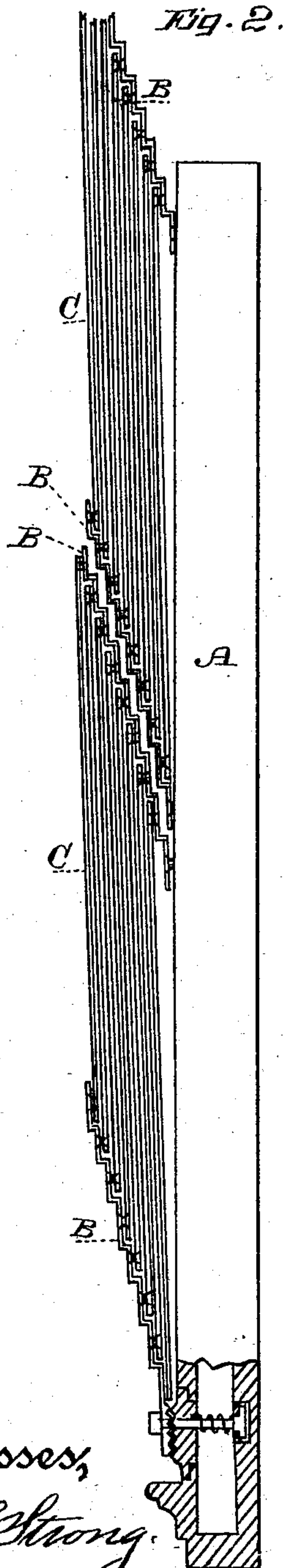
(No. Model.)

2 Sheets—Sheet 2.

J. WILLIAMS.
WINDOW BLIND.

No. 275,557.

Patented Apr. 10, 1883.



Witnesses,
Geo. H. Strong
J. H. House

Inventor
Joseph Williams
By
Dewey & Co.
Attorneys

UNITED STATES PATENT OFFICE.

JOSEPH WILLIAMS, OF SAN JOSÉ, CALIFORNIA.

WINDOW-BLIND.

SPECIFICATION forming part of Letters Patent No. 275,557, dated April 10, 1883.

Application filed January 6, 1883. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH WILLIAMS, of San José, county of Santa Clara, State of California, have invented an Improved Window-Blind; and I hereby declare the following to be a description thereof.

My invention relates to a new and useful window-blind; and it consists in a number of independent parallel strips pivoted above and below to peculiar guides which are pivoted to the window-frame. The strips are so arranged that when the guides are horizontal said strips are extended to cover the window; but when the guides are raised to a vertical position the strips fold on one another and lie in narrow compass at the sides of the window-frame, as will hereinafter fully appear.

The object of my invention is to provide an effective window-blind, easy to open and close, and little liable to become disarranged.

Referring to the accompanying drawings, Figure 1 is a perspective view of my device, showing the lower blinds closed and the upper ones partly and fully opened. Fig. 2 is a side view, showing blinds fully opened. Fig. 3 is a detail showing catch *a*. Fig. 4 is a detail showing adjustable hinge. Fig. 5 shows details of said hinge.

Let A represent the window-frame.

B represents the guides. Of these there are eight—two at the bottom, two at the top, and four at the center of the window-frame. One end of each guide is pivoted or suitably hinged to the frame. These guides are bent in a rising series of steps, with treads and risers toward the center, the lower two of the central ones being so bent that they may pass above and over the other two in swinging upward, as is shown in Fig. 2.

C represents the strips forming the blind. The lower set of these are pivoted at their bottoms under and to the horizontal steps or treads of the lower guides, while at their tops they are pivoted to and above the lower central guides. The upper set are pivoted in like manner to the upper guides. These form the four independent shutters constituting the window-blind. The lower ends of all the strips are provided with shoulders *d*, which, when the blinds are closed and the guides horizon-

tal, come in contact with the riser or vertical portion of the guides and prevent them from turning farther down, Fig. 1.

E represents knobs or handles placed in the catches *a*, as will hereinafter be explained.

To open the blinds, take hold of a knob and force it up. The guides swing from a horizontal toward a vertical position. The strips C, by being pivoted each to a tread of the guide, gradually pass on top of each other until the guides reach a vertical position over the side of the window-frame, when the strips lie upon each other in the same vertical plane and in a narrow compass, as shown in Figs. 1 and 2. Each shutter may thus be moved up, the four lying vertically, two on each side of the window-frame, the tops of the lower ones overlapping the bottoms of the upper ones. Any one may be operated independently, if desired, the greater rise of the lower central guides permitting them to pass over the upper central guides and their strips without interference.

The catches *a*, which are here shown as a means for securing the blinds together when closed, consist of strips of metal pivoted by the knobs E to the strips, the end of one being adapted to enter the grooved or recessed end of the other, Fig. 3.

It is obvious that I must have some means for setting the blinds in any position desired. These means are shown in Figs. 4 and 5. A recess is made in the window-frame, in which the pin *m* extends and is secured. This pin has a ratchet-disk, *n*, loose upon it, and a spiral spring, *o*, around it in the hole keeps said ratchet-disk to its place. This disk is provided with ears *n'*, to cause it to fit into a suitable recess in the frame and prevent its turning.

The end of the guide B is pivoted upon the pin *m*. The underface of the guide B is formed or provided with a ratchet-disk, *b*, as shown, with which the disk *n* engages under the influence of the spring *o*. The two ratchets are thus held closely together, and if a strong enough spring be used they will remain in engagement under the ordinary weight of the blind; but when the blind has force applied to it to raise or lower it the ratchets readily slip on each other, acting as a hinge. Thus the blind may be opened and adjusted to any de-

sined place. Each of the independent shutters will be provided with this means for adjusting them.

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

10 1. In a window-blind, the swinging guides B, bent in treads and risers, as shown, and pivoted or hinged to the window-frame, in combination with the separate independent strips C, pivoted to the treads of the guides B, substantially as herein described.

15 2. In a window-blind, the swinging guides B, bent in treads and risers, as shown, and pivoted or hinged to the window-frame, in combination with the separate independent strips C, pivoted to the treads of the guides, and having shoulders *d* at their bottoms to impinge

against the risers of the guides and prevent them from turning below the horizontal, substantially as herein described. 20

3. In a window-blind, the independent strips C and the bent guides B, to which they are pivoted, as described, said guides having toothed or ratchet disks *b*, in combination with 25 the pivot-pin *m*, secured in the frame, the loose ratchet-disk *n* upon said pin, and the spring *o*, forcing and holding said ratchet-disk *n* in engagement with the ratchet-disk *b* of the guides, substantially as and for the purpose 30 herein described.

In witness whereof I hereunto set my hand.

JOSEPH WILLIAMS.

Witnesses:

THOS. O'CONNOR,

J. H. BLOOD.