A. A. JAQUA.

WINDOW BLINDS.

No. 182,075. Patented Sept. 12, 1876.

Fig. 1.

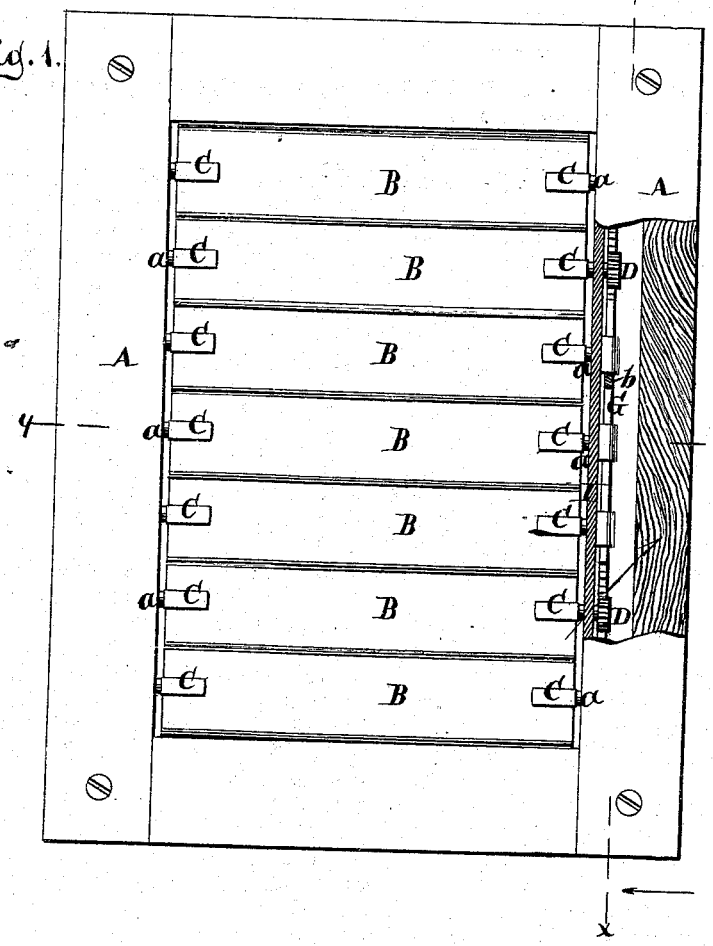


Fig. 2.

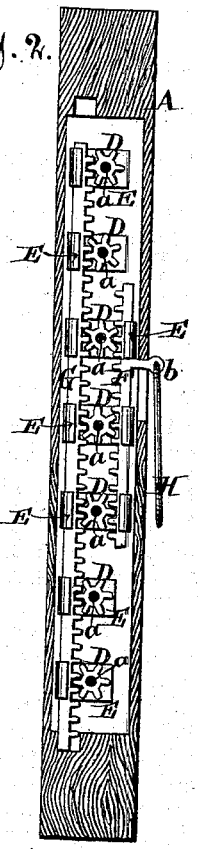


Fig. 3.

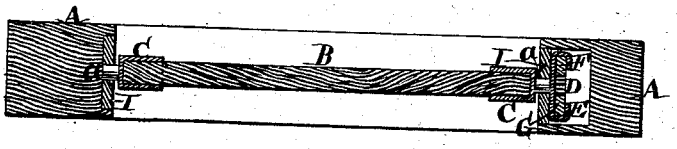
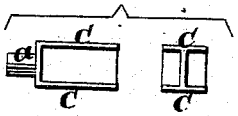
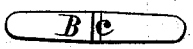


Fig. 4.



Witnesses.
Charles F. Love
Louis Mc Frost.

Fig. 5.



Inventor.
Amos A. Jaqua

UNITED STATES PATENT OFFICE.

AMOS A. JAQUA, OF NEW YORK, N. Y.

IMPROVEMENT IN WINDOW-BLINDS.

Specification forming part of Letters Patent No. **182,075**, dated September 12, 1876; application filed July 25, 1876.

To all whom it may concern:

Be it known that I, AMOS A. JAQUA, of the city, county, and State of New York, have invented a new and useful Improvement in Window-Blinds, which improvement is fully set forth in the annexed specification, reference being had to the accompanying drawings.

The nature of my invention is the construction of window-blinds so that the slats of the blinds shall revolve upon their tenons without the use of the ordinary center-rod and wire staples, thereby saving the expense of repairs involved in the use of the old style of blinds.

By the use of my invention another great difficulty attending the use of the old style of blind is obviated—viz., the sticking of the slats in one position when painted newly, or from other causes.

My improvement also makes the blinds far more durable. It is also far more convenient than the old arrangement of slats and blinds, for the slats can be placed at any angle desired, and will always remain so, until, by design, their angle is changed.

In the drawings, Figure 1 represents a front view of a window-blind containing my improvement. Fig. 2 is a vertical section thereof in the line *x x*, Fig. 1, looking in the direction of the arrow marked opposite to that line. Fig. 3 is a cross-section of the same in the line *y y*, Fig. 1. Fig. 4 shows my improved tenon for window-blinds, blind-doors, shutters, and other articles of like nature. Fig. 5 is an end view of one of the blind-slats *c*, representing the slit in the slat.

My improvement consists of a blind having a plate or plates, I, of metal or other suitable material, secured to the inside edge of the stile or stiles A. These stiles A are grooved, so as to receive the plate or plates I and attachments. The said plates I are perforated with holes, at suitable distances apart, to receive the tenons *a* of the slats B. These tenons *a* are made of metal or other suitable material, and are provided with flanges C. Upon the back of one of these plates I, after the tenon *a* has been inserted through said plate I, and upon the end of said tenon *a*, are small metal clips E, perforated with holes, to pass over the tenon *a*, and bent so as to hold the rack G in position. Said rack G is constructed with teeth, which take into the pinions D, which are also perforated with holes in their centers to pass over the ends of the tenons *a*, and are thus secured to the tenons *a*. The plate I, upon the other stile A of the blind, is merely perforated with holes, at proper distances to receive the tenons *a*, and form a proper bearing for said tenons *a*. The slats B of the blind are made square upon both ends. At each end of the slats B is cut a slit, *c*, in which is inserted the tenon *a*, provided with one or more flanges, C, upon either side of the slats B. The flange or flanges C hold the slat B in position, making it firm and secure.

To the rack F, which operates the pinions D, is secured a lug, *b*, to which is attached the handle H.

I do not confine myself to this mode of operating the rack F; but the same may be worked by any suitable device.

The motion transmitted from the rack F to pinions D is communicated to the rack G, and thence to the tenons *a* of the blind-slats B.

The pinions D, when secured to the tenons *a*, as shown, by being passed over the ends of said tenons *a*, hold in position the rack G, tenons *a*, and plates I, and clips E, making the running parts of the blind secure and firm, and ready for the trade, as a new article of manufacture, which can be applied to blinds by any blind-maker.

By my improvement, as above set forth, a complete blind is formed, with tenons *a*, provided with one or more flanges, C, for the slats B, and proper bearings for said tenons *a*, the same operated by a rack-and-pinion motion.

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

1. The clips E, in combination with the rack G, pinion D, and operating-rack F.

2. A blind-slat, B, with one or both ends square, and perforated, so as to receive the tenon *a*.

3. The blind-slat B, in combination with the blind-slat tenon *a*.

4. The combination of the racks G and F, pinion D, clips E, plates I, tenon *a*, and slats B, for the uses and purposes mentioned.

In testimony whereof I have hereunto set my hand this 18th day of July, 1876.

AMOS A. JAQUA.

In presence of—
CHARLES G. COE,
LOUIS W. FROST.