

E. E. JOHNSON.

Window-Shades.

No. 135,713.

Patented Feb. 11, 1873.

Fig. 1

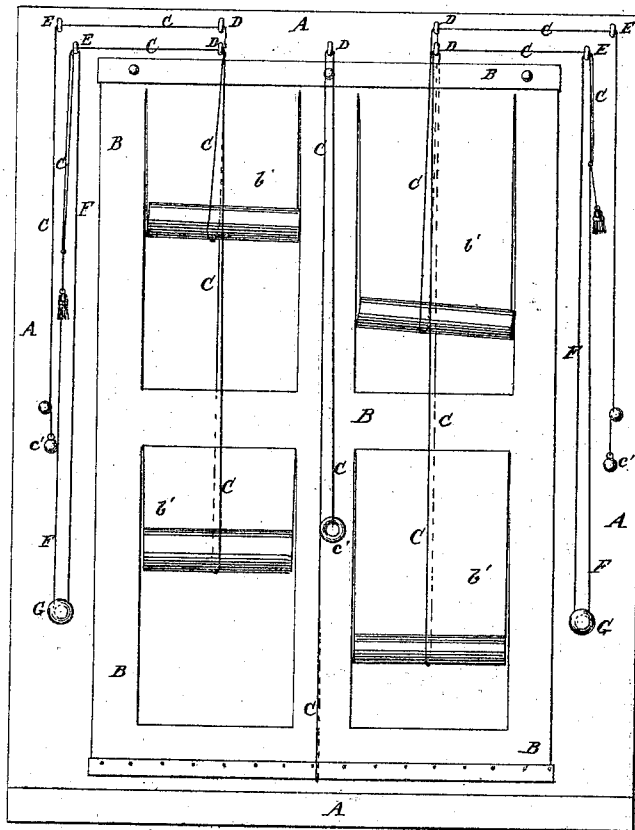
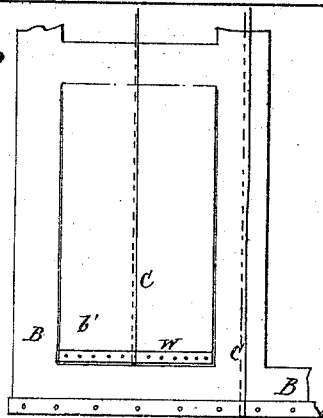


Fig. 2



Witnesses:

A. W. Hingqvist
A. J. Goldsmith.

Inventor:

Edward E. Johnson

UNITED STATES PATENT OFFICE.

EDWARD E. JOHNSON, OF PAINESVILLE, OHIO.

IMPROVEMENT IN WINDOW-SHADES.

Specification forming part of Letters Patent No. **135,713**, dated February 11, 1873.

To all whom it may concern:

Be it known that I, EDWARD E. JOHNSON, of Painesville, in the county of Lake and State of Ohio, have invented a new and useful Improvement in Window-Shades, Blinds, &c., of which the following is a specification:

Figure 1 is a front view of a window-blind, illustrating my invention. Fig. 2 is a detail front view of a portion of the blind.

Similar letters of reference indicate corresponding parts.

My invention has for its object to improve the construction of window-shades, inside blinds, &c., which improved blinds shall be so constructed that any desired part of the window may be uncovered to admit the light. The invention consists in sections formed in the body of the main blind or shade in such a way that the said sections may be rolled up from their lower ends, or the blind and sections may be rolled up together.

A represents the casing of a window. B represents an inside blind, the upper edge of which is secured to the upper part of the casing A. The blind B may be made of slats woven together, of muslin, or other suitable material. In the body of the shade or blind B are formed sections *b'*, the bottom and side edges of which are loose, and their upper edges are permanently connected with the body of the shade B. The lower edge of the sections *b'* should be provided with hooks, or other fastenings, to connect the said lower edges with the body of the blind or shade B, so that the whole shade may be rolled up together. The lower ends of the sections *b'* are provided with weights W to hold said sections straight when hanging free, and to cause said sections to roll up more freely when operated by the cords, as hereinafter described. C are cords, the upper ends of which are attached to the upper part of the blind B, or to the casing A above said

blind. The cords C pass down along the rear side of the central parts of the blind B and of the sections *b'*, around the lower edges of said blind and sections, up along the forward sides of said blind and sections, and through eyes or other guides D attached to the upper part of the casing A. The free ends of the cords C hang down so low that they may be readily reached, and have ornamental weights *c'* attached to them. The cord C of the main blind B hangs down along the center of said blind. The cords C of the sections *b'*, after passing through the guides D above said sections, pass laterally along the casing, through other guides, E, and down along the sides of the casing.

The cords of the lower sections *b'* may be attached to the endless cords F, which pass through the upper guides E, and around knobs or other guides G attached to the lower-side parts of the casing.

By this arrangement, by drawing upon the proper cord, any desired section *b'* of the blind B may be rolled up from its lower end, uncovering and letting the light through any desired part of the window; or, by connecting the lower edges of the sections *b'* with the adjacent edge of the main blind, and pulling upon the central cord, the whole blind may be rolled up from its lower edge.

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

The flexible window-blind or shade B provided with the weighted sections *b'*, and with cords arranged so that the said sections may be rolled together with the blind or shade, or separately, as described.

EDWARD E. JOHNSON.

Witnesses:

I. A. EDDY,

A. J. GOLDSMITH.