

T. T. DUFFY.
Blind-Stop.

No. 164,431.

Patented June 15, 1875.

Fig. 1.

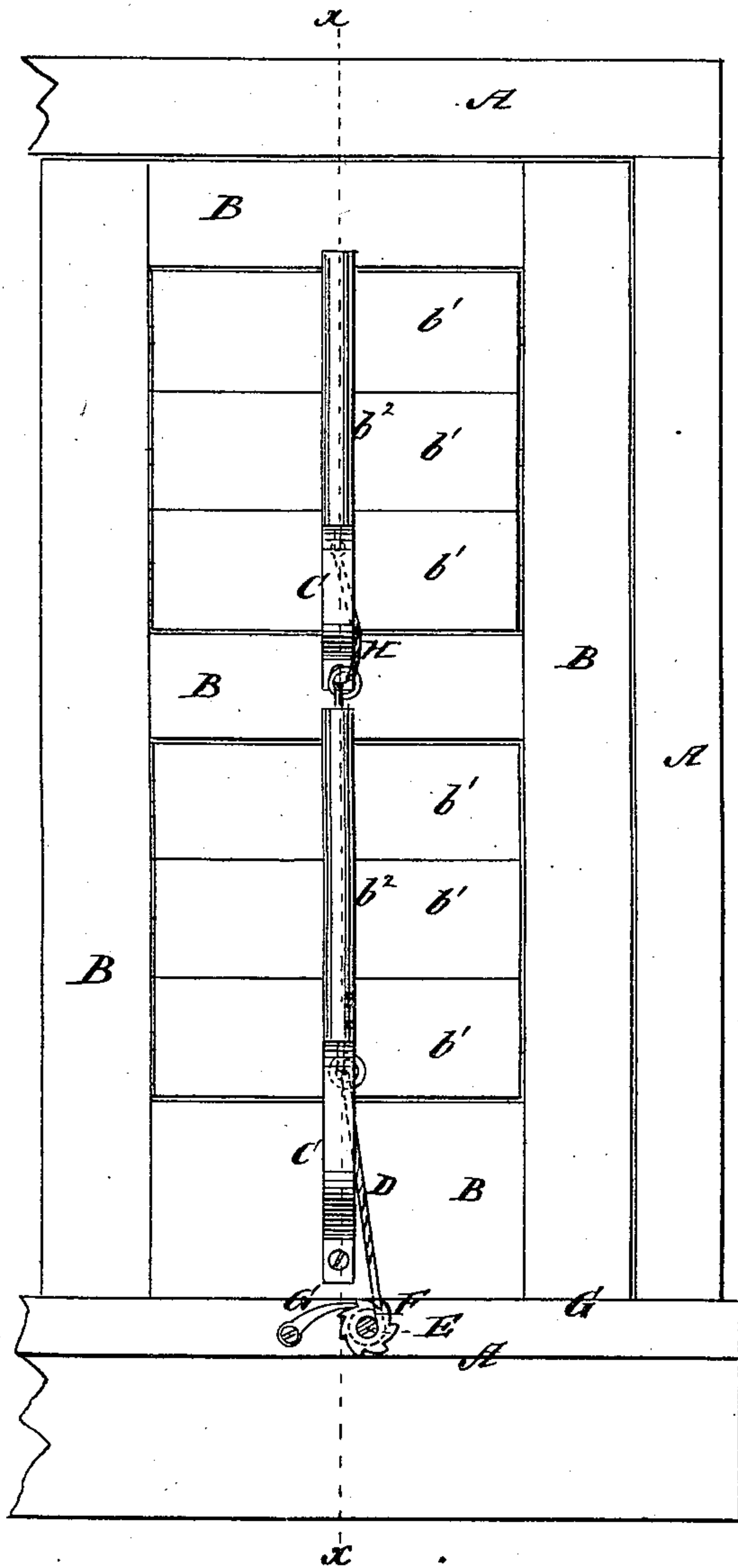
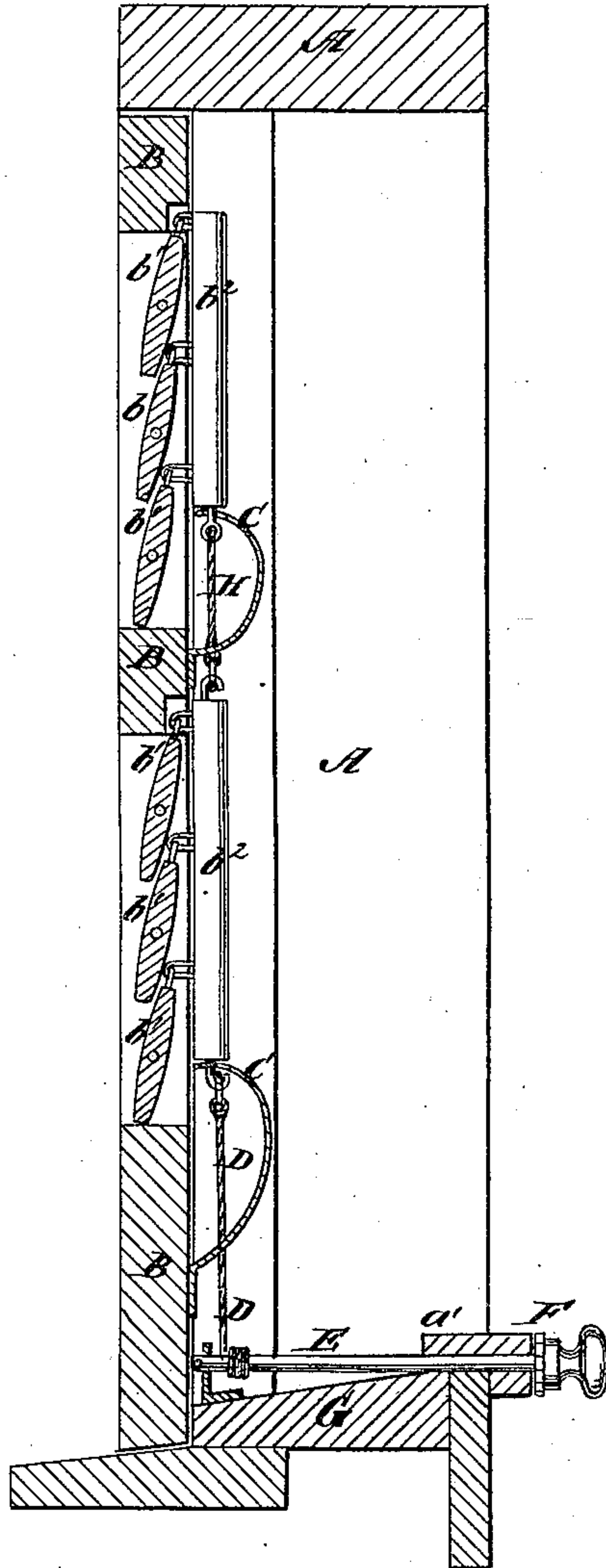


Fig. 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

THOMAS T. DUFFY, OF DUBUQUE, IOWA.

IMPROVEMENT IN BLIND-STOPS.

Specification forming part of Letters Patent No. **164,431**, dated June 15, 1875; application filed November 30, 1874.

To all whom it may concern:

Be it known that I, THOMAS T. DUFFY, of Dubuque, in the county of Dubuque and State of Iowa, have invented a new and useful Improvement in Device for Operating the Slats of Window-Blinds, of which the following is a specification:

Figure 1 is a front view of my improved device, shown as applied to a window-blind. Fig. 2 is a vertical section of the same, taken through the line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish an improved device for operating the slats of window-blinds, and locking them open to any desired extent without its being necessary to raise the window-sash, and which shall be simple in construction, and can readily be applied to the window.

The invention consists in the combination of elliptic springs with the slat-rods of a window-blind to hold the slats closed; in the combination of the cord, the rod and shaft, the ratchet-wheel, and the pawl with the lower slat-rod and its spring; and in the combination of the connecting-cord with the upper and the lower slat-rods and their springs, and with the cord, rod or shaft, ratchet-wheel, and pawl, as hereinafter fully described.

A represents a window frame or casing. B is a blind, the slats b^1 of which are connected by rods b^2 , in the usual way, so that they may all be turned upon their pivots at the same time, to open or close them. C are elliptic springs, one end of which is attached to the frame of the blind B, and their other ends are connected with the slat-rods b^2 in such a way as to hold the slats closed. To the lower end of the lower rod b^2 is attached a small hook to receive a small ring attached to the end of a cord, D, the other end of which is attached to the rod or shaft E. The rod or shaft E passes in between the sill of the window-frame A and the board a' , attached to the upper side of the inner part of said sill, and its forward end works in a bearing at-

tached to the sill of the said window-frame. To the inner end of the rod or shaft E is attached a knob or other handle for convenience in operating it. To the inner end of the rod or shaft E is also attached a ratchet-wheel, F, with the teeth of which engages the pawl G, which is pivoted to the sill of the window-frame A. By this construction, by turning the rod or shaft E, the cord D will be wound upon the said rod or shaft E, and the slat-rod b^2 will be drawn down, opening the slats b^1 to any desired extent, where they will be held securely by the ratchet-wheel and pawl F G. By withdrawing the pawl G from the ratchet-wheel F, the elasticity of the spring C will raise the rod b^2 , and close the slats b^1 . To the lower end of the upper slat-rod b^2 is attached the end of a short cord, H, which has a small ring attached to its other end, to be hooked upon a small hook attached to the upper end of the lower slat-rod b^2 , so that the upper and lower slats can be opened at the same time by turning the rod or shaft E. When the blind is to be opened the lower cord D is detached from the slat-rod b^2 , which leaves the blind free.

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

1. The combination of elliptic springs C, secured at one end to the rod and at the other end to the frame, with the slat-rods b^2 of a window-blind, to hold the slats b^1 closed, substantially as herein shown and described.

2. The combination of the cord D, rod or shaft E, ratchet-wheel F, and pawl G with the lower slat-rod b^2 and its spring C, substantially as herein shown and described.

3. The combination of the connecting-cord H with the upper and lower slat-rods and their springs, and with the cord D, rod or shaft E, ratchet-wheel F, and pawl G, substantially as herein shown and described.

THOMAS T. DUFFY.

Witnesses:

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