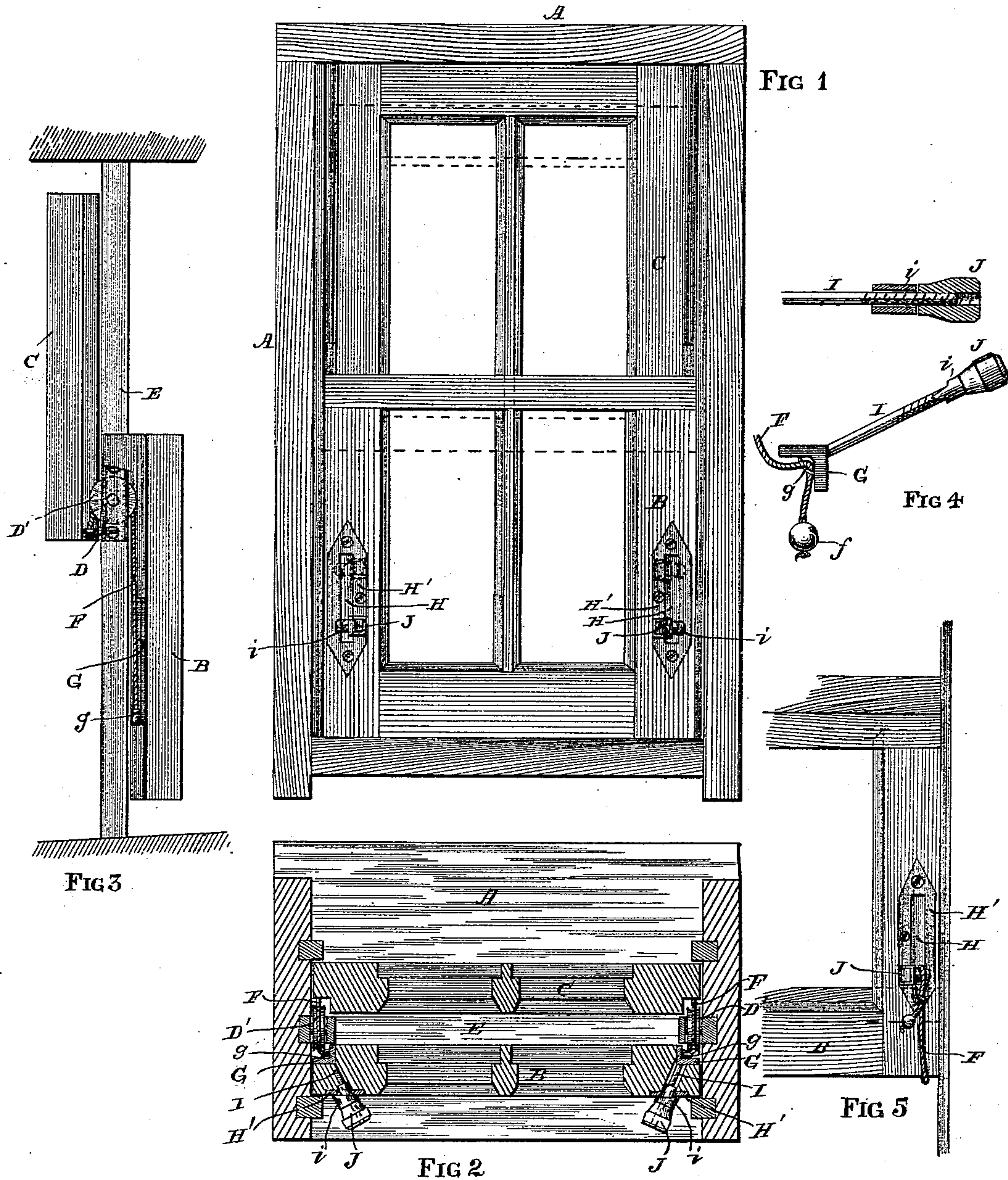


J. W. DEVENNY.
Sash-Balance.

No. 211,974.

Patented Feb. 4, 1879.



WITNESSES
H. Bradford
James H. Lange.

John W. Devenny
INVENTOR
per Roden Bros.
Attorneys.

UNITED STATES PATENT OFFICE.

JOHN W. DEVENNY, OF MIDDLEPORT, OHIO, ASSIGNOR OF ONE-HALF HIS
RIGHT TO S. M. HYSELL, OF SAME PLACE.

IMPROVEMENT IN SASH-BALANCES.

Specification forming part of Letters Patent No. 211,974, dated February 4, 1879; application filed
August 2, 1878.

To all whom it may concern:

Be it known that I, JOHN W. DEVENNY, of Middleport, in the county of Meigs and State of Ohio, have invented certain new and useful Improvements in Sash-Balances; and I do hereby declare that the following is a full, clear, and exact description of my invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification, and in which—

Figure 1 is a front elevation of a window frame and sash, showing my improved sash-balance. Fig. 2 is a cross-section. Fig. 3 is side view. Fig. 4 is a detail view of the rod, having a thumb-screw, and secured to the angular plate; and Fig. 5 is a detached front view of the lower sash, showing the cord brought around the bottom of said sash, and tied or looped to the thumb-screw when both sashes are at the top of the frame.

Corresponding parts in the several figures are denoted by similar letters of reference.

The object of my invention is to provide a cheap, effective, and easily-operating sash-balance that will, besides its ordinary use, allow the top sash to be slightly lowered, for ventilation and other purposes, without raising the lower sash; and to this end it consists of a threaded rod working in a slot made in the side bars of the lower sash, to the outer end of which is screwed a thumb-screw, and to the inner end is firmly secured an angular plate, having a staple fastened to its lower end, substantially as hereinafter more fully described and claimed.

In the annexed drawings, A refers to a window-frame, and B C to the lower and upper sash, respectively. A block, D, having a pulley, D', of the same width and depth as the parting-bead E, is fastened to said parting-bead a little above the lower end of the sash B when the same is raised.

Over the pulley D' works the cord F, the inner end of which is fastened to the lower end of the side bar of the sash C, and the outer end is passed through a staple, g, attached to an angular plate, G, and is held

therein by means of a metallic ball or small weight attached to its end.

The plate G will be described more fully hereinafter.

The outer front corners of the side bars of the sash C and the outer rear corners of the side bars of the sash B are rabbeted, to allow the cords to work freely therein.

Cut into the side bars of the sash B, near its lower end, is an oblique slot, H, faced by a slotted metallic plate, H', flush with the outer surface of the side bars, which opens inwardly onto the rabbeted portion of the said side bars.

Working in the slot H is a rod, I, threaded near its outer end, which receives, first, a loose collar, i, a portion of its length being reduced to allow it to be partially inserted into said slot in order to guide properly; and, second, a thumb-screw, J.

The inner end of the rod I is firmly secured to the angular oblong plate G, near its top, upon the inner surface of which, near its bottom, is a staple, g, through which passes the cord F, as mentioned heretofore.

The plate G partially works in the rabbet on the side bar of the sash B.

The operation is as follows: The rod I is inserted into the slot H, and is held firmly at the bottom of the slot by means of the collar i and thumb-screw J, when the sash can be raised or lowered and held at any convenient point, as in the ordinary manner. When it is desired to partially lower the upper sash without raising the lower one, the rod I is secured at any point above the lower end of the slot H, when the sash will be lowered from the top of the frame A a distance corresponding with that between the lower end of the slot and the part therein where the rod I is secured.

Sometimes it is found necessary to have both sash held at the top of the frame A, which can be accomplished as follows: Hold the sash C at the top and raise the sash B, when the metallic weight f will cause the cord F to hang down, when it can be taken hold of and brought around the bottom of the sash B, and looped or tied to the thumb-screw J, as clearly shown in Fig. 5.

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

The combination of the threaded bar I, working in the slotted plate H', having the thumb-screw J, with or without the collar *i*, and angular plate G, having staple *g*, with the weighted cord F, and pulley D', substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own I hereunto affix my signature in presence of two witnesses.

JOHN W. DEVENNY.

Witnesses:

S. M. HYSELL,

M. L. PEYTON.