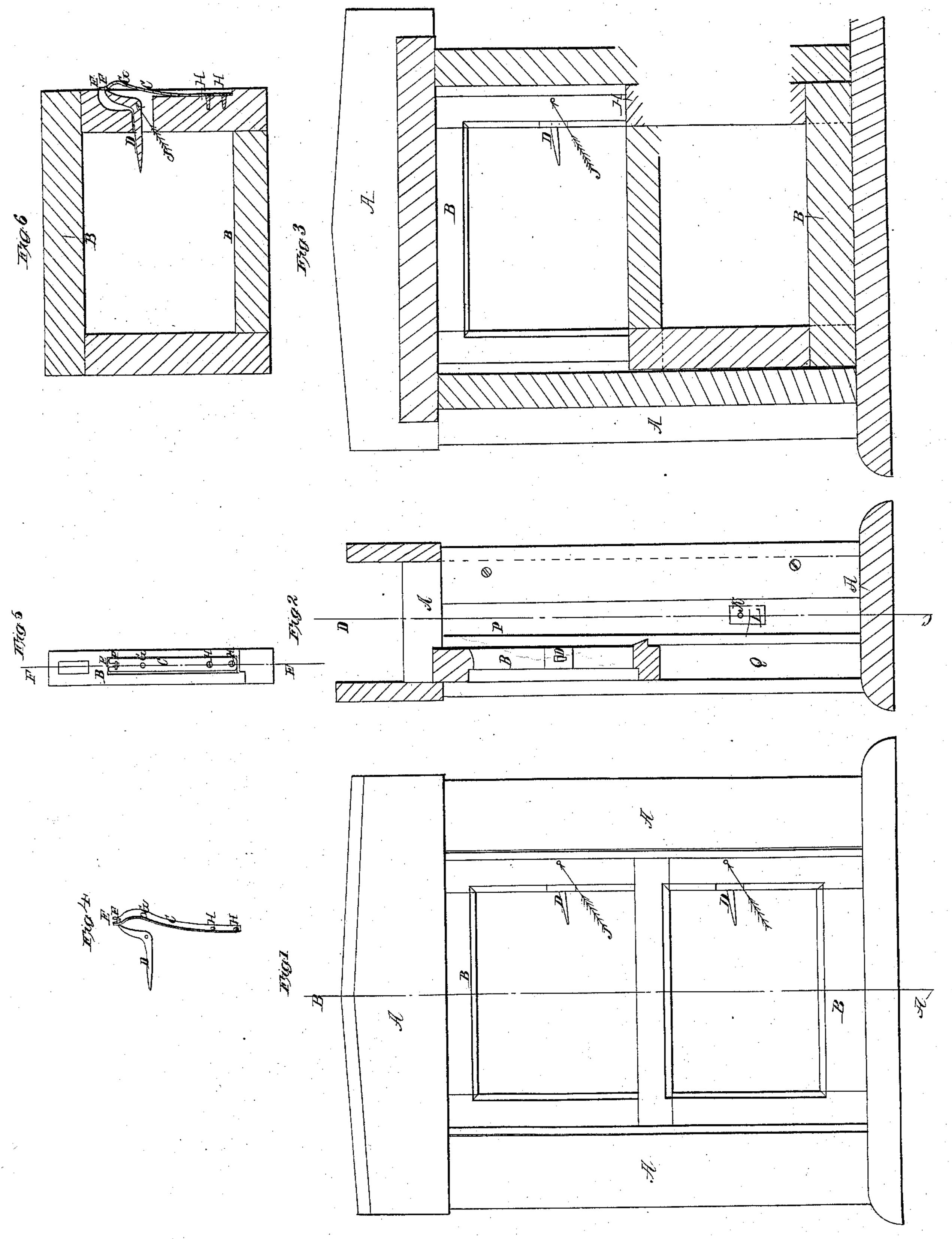
M. Morthest, Sast Holder.

177/5,939.

Patented Oct. 21, 1856.



UNITED STATES PATENT OFFICE.

W. WORTHEN, OF DANVILLE, NEW HAMPSHIRE.

BALANCE AND FASTENER FOR WINDOW-SASH.

Specification of Letters Patent No. 15,939, dated October 21, 1856.

To all whom it may concern:

Be it known that I, Walter Worthen, of Danville, in the county of Rockingham and State of New Hampshire, have invented a novel and useful Improvement in Window-Sash Balances and Fasteners; and I hereby declare that the following specification, in connection with the accompanying drawings and references thereon, constitute a lucid, clear, and exact description of the

construction and use of the same.

In referring to said drawings, Figure 1 denotes an elevation, or inside view of the window frame and window sash with my 15 fastener and balance attached; Fig. 2, transverse and vertical section on line A, B; Fig. 1, showing the parts beyond, one of the sashes being removed so as to fully show the recess L, and pin or catch K. Fig. 20 3, is a longitudinal and vertical section of the whole frame and the front sash therein | on line C, D, Fig. 2, and showing the parts beyond. Fig. 4, is a perspective view of the spring balance, and fastener C as connected ²⁵ with its lever D, both being disconnected from the window sash. Fig. 5, is an edge view of the window sash showing my spring balance and fastener attached thereto. Fig. 6, is a section view of this sash disconnected 30 from the window frame on line E, F.

Invention.—The nature of my invention consists in so constructing, and operating one single spring as within described that it will answer both to balance the sash in any desired elevation, and so that it will effectively fasten the sash when the window

is closed, as will be hereafter seen.

Construction.—To enable persons skilled in the art to which my invention appertains to construct and carry out the same, I will describe it as follows: I construct a window frame and sash after any of the ordinary forms, or I may use a window already constructed, the frame of which is seen at A, ⁴⁵ A, Figs. 1, 2, and 3, of the drawing. To this frame I fit the sash seen at B, so that they may slide freely up and down in the grooves P and Q. I then construct a steel spring seen at C, Figs. 3, 4, 5, and 6, with ⁵⁰ a slot formed in its upper part as seen at E into which the head F of the lever D is placed to press this spring C, back into the sash to disconnect the spring C from | the pin K, which is fixed to the casing in I

the recess L, formed in the side of the casing seen at Fig. 2. The lever D, may be made of brass or any other proper metal as seen in the several figures of the drawing, and turning on the pin J which passes through it and the stile of the sash, there 60 is to be a mortise formed through the sash B to receive the lever D, through which one end of it projects sufficient to be operated by the hand, while the opposite end has a head formed on it as seen at F to connect 65 it with the spring C, as seen at Figs. 3, 4, 5 and 6.

I form a hole through the spring near its upper end as seen at G Figs. 3, 4, 5 and 6 for stopping or fastening the sash by catch-70 ing on to a pin K or its equivalent firmly fixed in the side, or grooves P and Q of the window frame seen at Figs. 2 and 3. The springs C are fastened to the sash B by two wood screws seen at H, H, after a 75 proper recess has been formed in the sash B for them the springs C to be placed and

to freely slide in or operate in.

The outward pressure of the projection on the spring C against the side of the 80 window frame effectually keeps the sash balanced in any desired elevation, and when the lower sash B is pressed entirely down by the hand, the spring C will catch on to and hold the sash by the pins K in the window 85 frame and thereby firmly fasten and hold the sash, and when it is desired to raise the window sash, the fingers should be placed against the under side or edge of the lever D, pressing it upward so that it will both 90 disconnect the spring or fastener from the pin K and raise the window as may be desired. By placing the fingers upon the top of the lever D in the upper sash and pressing it down, the spring C will be discon- 95 nected from the pin K and the sash lowered, as may be desired and there remain until it is desirable to again raise or close it, which will be readily understood.

It will be observed that the curve formed 100 in the spring C will cause them to ride over the pin K in the recess L, until the hole G, comes over the pin K, when the spring C will instantly press outward allowing this pin to pass through the hole G 105 in the spring C, and thereby hold or fasten the window, it being wholly self operating for closing the window. For opening the

window the lever D must be pressed so as to disconnect the spring C from the pin K when the sash can be readily moved as may be desired.

What I claim as my invention and desire to secure by Letters Patent is—

Balancing and fastening window sash,

both by one spring, constructed arranged operated essentially in the manner and for the purposes fully set forth.

WALTER WORTHEN.

Witnesses:

Benja. Robinson, E. W. Scott.