O. DAVIS.

Sash-Balances.

No. 154,587. Patented Sept. 1, 1874.

Fig. 1

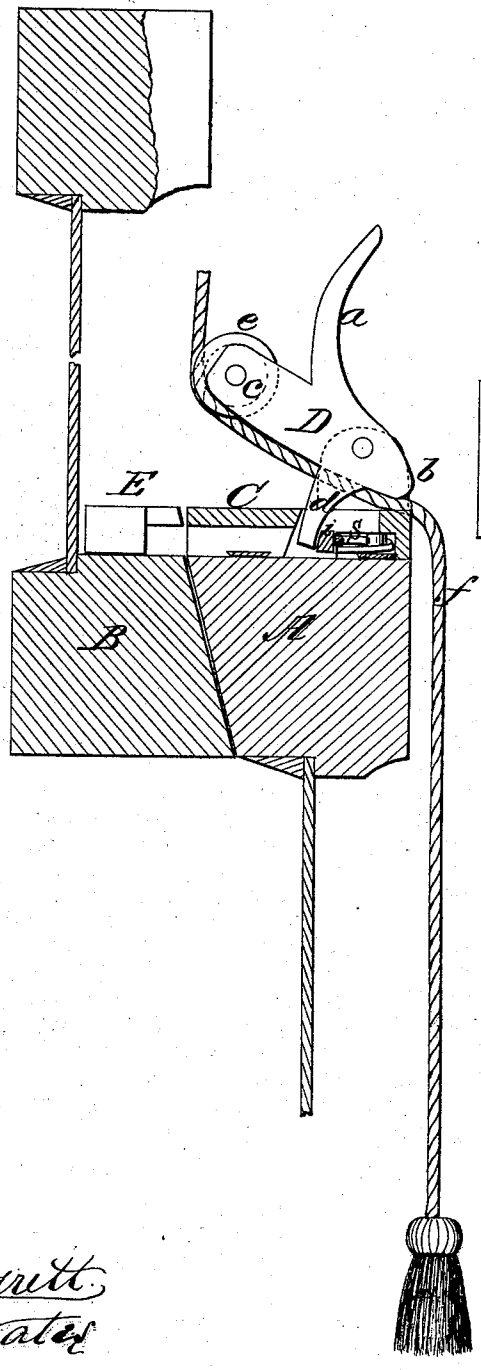


Fig. 2

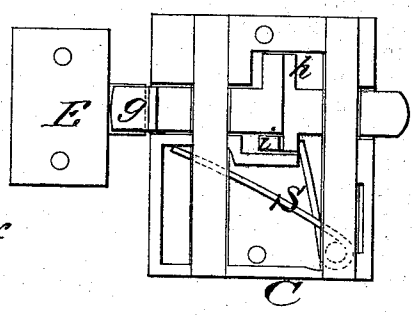
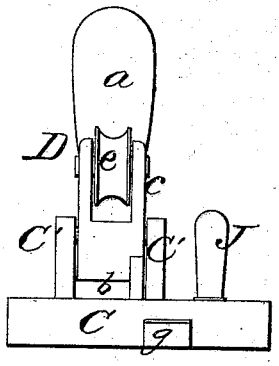


Fig. 3



WITNESSES

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UNITED STATES PATENT OFFICE.

OBADIAH DAVIS, OF BATTLE CREEK, MICHIGAN.

IMPROVEMENT IN SASH-BALANCES.

Specification forming part of Letters Patent No. **154,587**, dated September 1, 1874; application filed July 25, 1874.

To all whom it may concern:

Be it known that I, OBADIAH DAVIS, of Battle Creek, in the county of Calhoun and State of Michigan, have invented a new and valuable Improvement in Sash-Balance; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a vertical sectional view of my sash-balance. Fig. 2 is a plan view, and Fig. 3 is a front view, of the same.

This invention has relation to sash balances and locks; and it consists of a spring clamping-dog composed of a griping portion, a finger portion, and a tongue, combined with a locking-bolt and an operating-spring, whereby the sash-cord is released from the action of the griping portion of the said dog at the same time that the bolt is retracted by the tongue, as will be hereinafter more fully explained.

In the annexed drawings, A designates the upper rail of the lower sash, and B is the lower rail of the upper sash. C designates a lock-case, which is secured upon the rail A at the middle of its length, in which case works a lock-bolt, *g*, which serves, in connection with a catch, E, on the rail B, to lock this rail to the rail A when they are brought together. The bolt *g* has an offset, *h*, on one side of it, from which a handle, J, rises, and is allowed free play in a slot made through the case C. By means of this handle J, a person can retract the bolt and release the sashes, and by means of a spring, S, the bolt is shot out so that it will engage automatically with its catch E. D designates a dog, which is pivoted between two ears, C′ C′, cast on top of the case C, and which is constructed with a curved finger-piece, *a*, a griping portion, *b*, an arm, *c*, and a tongue, *d*. The latter portion—to wit, the tongue *d*—passes down through the case C, and is acted on by the spring S, through the medium of a lug, *i*, on the bolt *g*. This action of the spring holds the dog D in the position shown in Fig. 1, in which position the suspension-cord *f* will be griped and held by the portion *b*. The cord *f* passes beneath the portion *b*, thence up and beneath an anti-friction roller, *e*, and is fastened to the sash B, after passing over a pulley applied to the heading of the window-frame. By pressing the finger-piece *a* of the dog D forward, the suspension-cord *f* will be released, and the sash may be raised or lowered. At the same time the cord *f* is released, as stated, the bolt *g* will be retracted from its catch E by the action of the tongue *d* on the lug *i*.

What I claim as new, and desire to secure by Letters Patent, is—

The combination of the dog D, having the tongue *d*, finger-piece *a*, and griping portion *b*, with the bolt G and spring S, operating substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

OBADIAH DAVIS.

Witnesses:
E. HARBECK,
CHARLES E. THOMAS.