A. COLE & E. DAVIS.

Sash-Fasteners.

No. 141,120. Patented July 22, 1873.

Fig. 1.

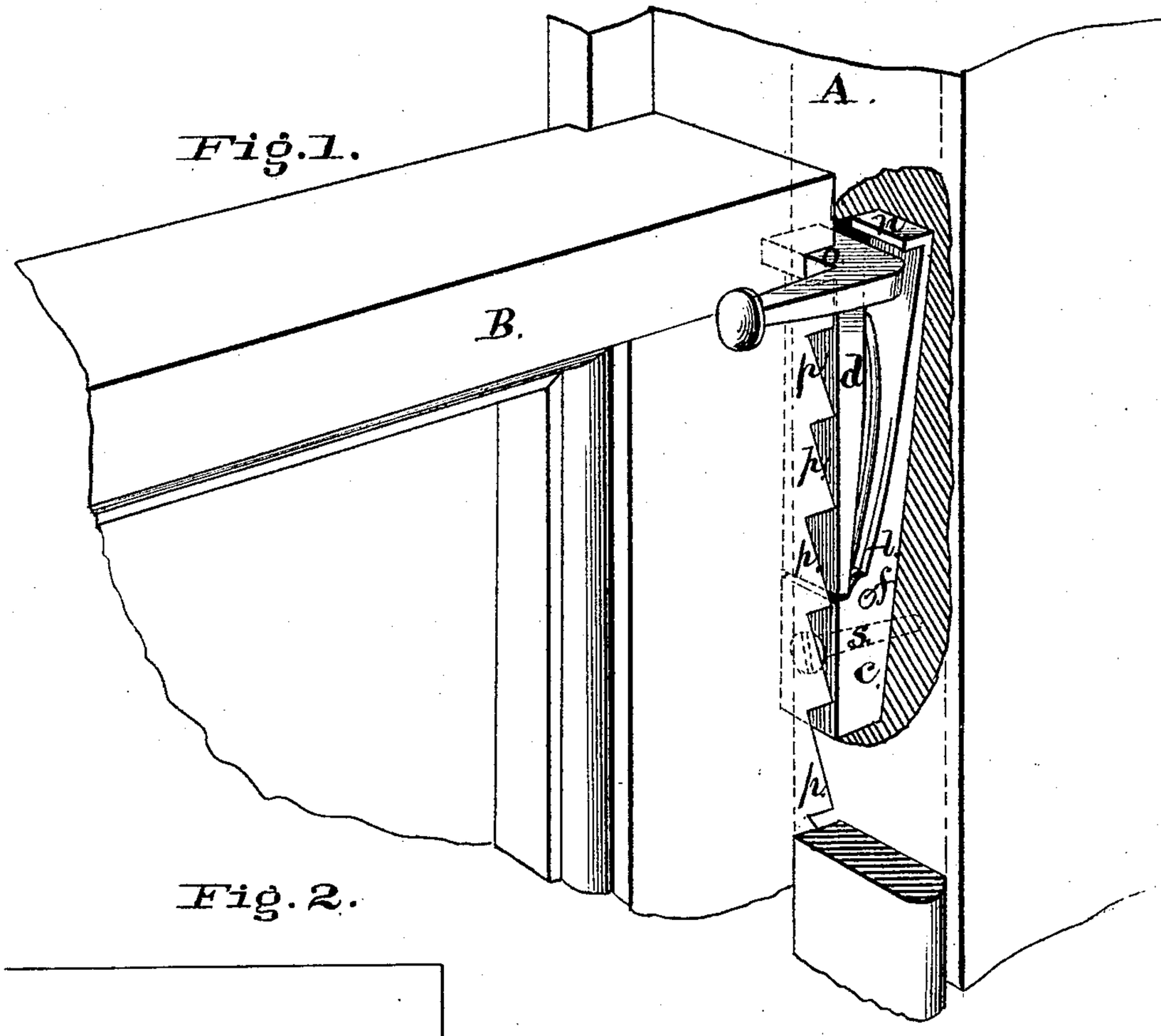

Fig. 2.

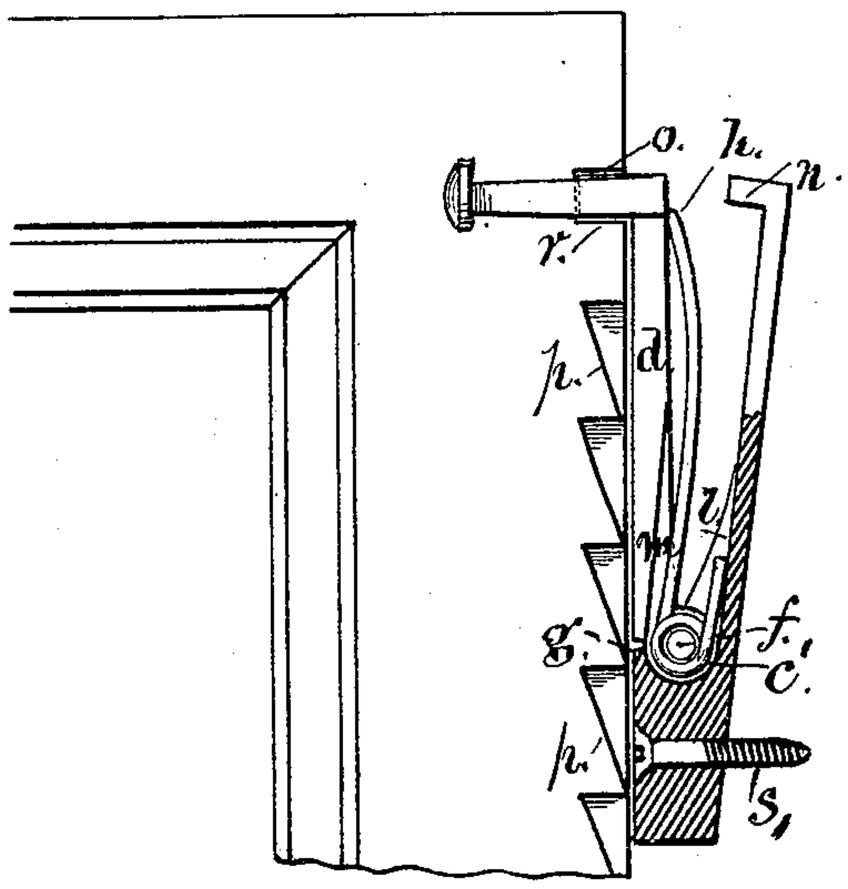

Fig. 3.

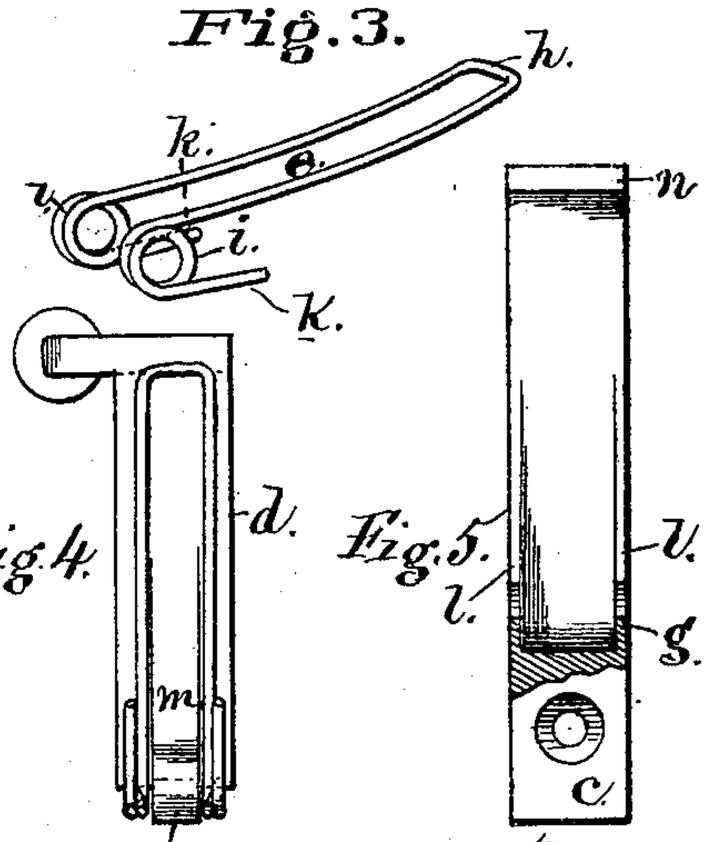

Fig. 4.

Fig. 5.

Witnesses.
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Davis B. Moulden.

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UNITED STATES PATENT OFFICE.

ALEXANDER COLE AND EZRA DAVIS, OF SARATOGA SPRINGS, NEW YORK.

IMPROVEMENT IN SASH-FASTENERS.

Specification forming part of Letters Patent No. **141,120**, dated July 22, 1873; application filed May 21, 1873.

To all whom it may concern:

Be it known that we, ALEXANDER COLE and EZRA DAVIS, in the town of Saratoga Springs, county of Saratoga and State of New York, have invented an Improvement in Construction of Sash-Fasteners; and we do hereby declare that the following, taken in connection with the drawings which accompany and form part of this specification, is a description of our invention sufficient to enable those skilled in the art to practice it.

Our invention relates to an improved construction of sash-fasteners; and consists in the combination of a peculiarly-made spring with the rivet which holds the bed-piece to the thumb-piece; also, in a special construction of the bed-piece, and in the arrangement for joint action of the spring, bed-piece, and thumb-piece.

In the drawings, Figure 1 is a perspective view of my improved fastener applied to a window casing and sash. Fig. 2 is a side view, the fastener being partly in section. Fig. 3 shows my peculiar spring in perspective; and Figs. 4 and 5 are detail views, the former of the hinge-piece, and the latter of the bed-piece.

A represents a section of a window-frame having my improved fastener applied to it, and B a section of sash. My device is made complete in itself, ready to be applied to the frame by a single screw; and consists of two main parts, *c d*, and spring *e*, all of peculiar construction, and a rivet, *f*, connecting these parts together, and around which the spring is coiled, as hereinafter described. The bed-piece *c* is made with its lower end strong and quadrangular in cross-section, and adapted to be flush within a cavity made for the fastener in the window-frame, and has a concave recess, *c'*, to receive the socket or hinge part of the hinge or thumb piece *d*, and to permit its proper movements upon the rivet or bolt *f*, which forms its axis. A shoulder, *g*, serves to limit the outward movement of the thumb-piece, and the recess serves in a measure to protect and cover the coils of the spring, and through which coils the bolt or rivet passes, thus holding the spring to place and permitting it to perform its proper functions. The eye *d'* of the thumb-piece is of such breadth as to leave between its sides and the eyes of the bed-piece sufficient space for the coils of the spring. This spring is formed of a single piece of wire doubled at its center, as seen at *h;* each member is then coiled as seen at *i i*, and the short remaining ends *k k* are then bent so as to project on the same side of the axis of the coils as the bent end *h*, but diverging from it. These short ends *k k*, which we call the foot of the spring, rest, as seen, upon the bed-piece, and they are protected and sustained laterally by the side rims or flanges *l l* on the bed-piece, and which extend far enough for this purpose. The thumb-piece we make with a rib, *m*, extending from its socket or hinge along the central portion of its inner face, such rib or swell serving to steady and protect the two sides of the doubled part of the spring. The spring is so made before it is applied, that when the rivet has united it and the other parts together, the ends *k k* bear upon the bed-piece and adjacent to or against the flanges *l l*, and the longer arm of the spring, spanning or embracing the rib *m*, bears with force at its bight or bend *h* against the outer end of the thumb-piece, throwing it outward. A lip or flange, *n*, on the inner face of the bed-piece at its outer or upper end, serves to limit the inward motion of the thumb-piece. A projection, *o*, on the outer side of the upper end of the thumb-piece forms the latch or locking part, which, when the device is applied and in use, engages with the teeth or notches *p* on the edge of the sash. With inclined teeth, such as seen at *p*, it will be seen that in lifting the sash the fastener does not interfere, and need not be pressed inward by hand, but that it will automatically lock the sash against falling. Other notches, as at *r*, not having the inclines, will also automatically cause it to lock, but will require the thumb-piece to be pushed in, in order to move the sash either up or down. The notches and the teeth may be located as desired upon the sash.

This construction is strong, simple, and efficient, and with almost no possibility of getting out of order. A single screw serves to hold the entire device to place in the window-frame, such screw passing through the solid or thick part, as seen at *s*, and it can be easily

applied by anybody to the casing of any style of frame.

We claim—

1. The spring *e*, bent and coiled as shown and described, in combination with the rivet or bolt *f*, which connects the thumb-piece with the bed-piece, the rivet passing through both coils *i i*, all as shown and described.

2. The bed-piece *c*, constructed as described, with a rounded recess back of the hinge adapted to receive the coils of the spring and the socket of the thumb-piece, and having the lip *n* and the side rims or guards *l l*, aiding to maintain in position the free ends of the spring, all substantially as shown and described.

3. The combination of the bed-piece *c*, thumb-piece *d*, and the spring *e*, adapted to be applied to the window by a single screw, when these parts are constructed, relatively arranged, and operate as set forth.

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Witnesses:
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