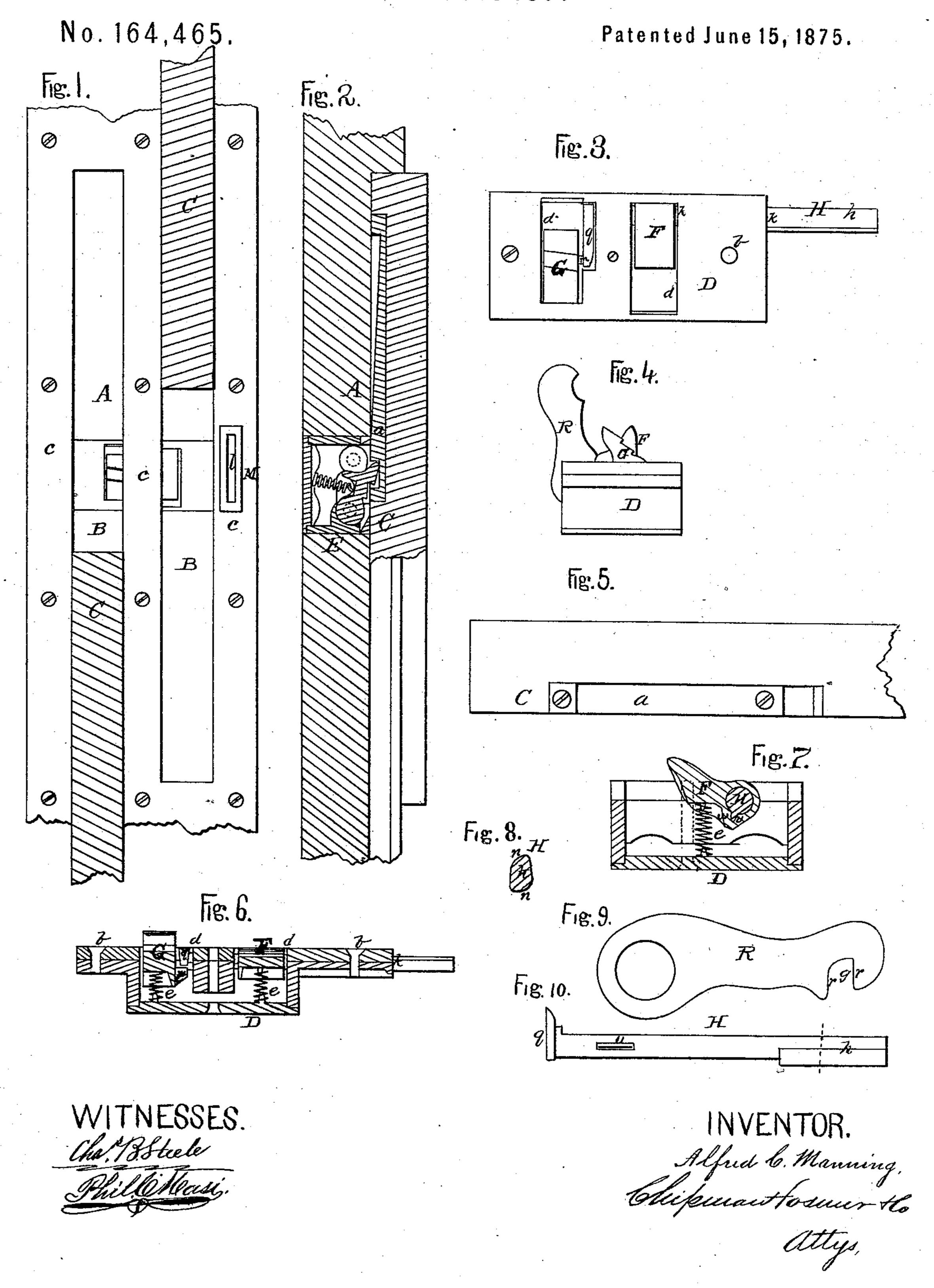
## A. C. MANNING. Sash-Fastener.



## UNITED STATES PATENT OFFICE

ALFRED C. MANNING, OF HARTFORD, CONNECTICUT.

## IMPROVEMENT IN SASH-FASTENERS.

Specification forming part of Letters Patent No. 164,465, dated June 15, 1875; application filed June 5, 1875.

## CASE B.

To all whom it may concern:

Be it known that I, Alfred C. Manning, of Hartford, in the county of Hartford and State of Connecticut, have invented a new and valuable Improvement in Window-Locks; 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 drawings is a representation of a front view embracing my invention. Fig. 2 is a vertical section. Fig. 3 is a top view of the tumbler-case, showing tumblers. Figs. 4,

5, 6, 7, 8, 9, and 10 are details.

This invention has relation to certain improvements in window-fasteners of the character described in my Letters Patent of the United States No. 104,974, bearing date July 5, 1870; and it consists in the construction and novel arrangement of the operating-shaft with parallel sides, to form a key-seat for a suitably-notched key designed to be introduced through a narrow slot, as hereinafter described.

In the accompanying drawings, the letter A designates the side of the window-frame, with the parallel sash-grooves B B. C C indicate the edges of the sash-frames which are located in these grooves. D indicates the casing of the lock, provided with the screw-holes b. This casing is designed to be let into the side board E of the window-frame before the guide-strips c are secured thereto. Two openings, d, are formed in the upper plate of this casing, through which the toes of the tumblers F and G play, springs e serving to keep these tumblers up to their work. H represents the key-shaft carrying the tumbler F, journaled in bearings at k k, and provided with an extension, h, having parallel sides, which is designed to be grasped by the notch q of a key, R, of form similar to that indicated in the drawings. This key is formed of plate metal, and is introduced to the key-shaft through a narrow slot, l, made in the inner guide-strip of the side of the window-frame. The other end of the key-shaft is provided with a cam

projection, g, which is designed to engage with a stud, m, on the side of the other tumbler, G, which is pivoted to the walls of the casing. These tumblers F and G are pivoted one on opposite sides of the casing, and when the key-shaft is turned they rotate toward each other, respectively, downward and upward out of the notches of the lock-plates a in the sashes. The operating-shaft H is provided with a lug, V, having a length equal to the width of the tumbler F, which is provided with an angular recess, w, in the shaft-opening, somewhat larger than the lug, so that the tumbler can have a certain amount of play against the walls of the notch-plates without moving the operating-shaft. This recess is an angular enlargement of the opening through which the shaft passes, and the tumbler is, therefore, enabled to be readily slipped on the shaft.

The large size of the lug gives it great dura-

bility.

The key-seat or extended portion of the operating shaft is located transversely under the slot l, extending entirely across the same, and at right angles with the plane of the slot. In the drawings the shaft is arranged in the horizontal position, the plane of the key-slot being vertical. This slot is designed to have sufficient length to admit of the introduction of the key, and the necessary vertical movement of the same required in turning the shaft.

The parallel sides of the extension h, which forms the key-seat, are, when the shaft is in a position of rest, inclined downward and inward, and are connected by curved surfaces n. Thus the face presented toward the slot-opening is angular, bounded on one side by a plane surface and on the other by a curved surface. Therefore the shaft cannot be operated by means of direct pressure, or by means of thin nippers or a pair of scissors. The notch q of the key has its parallel sides r inclined to correspond. It is designed to be hooked over and back of the shaft.

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

The tumbler or operating shaft H, having

an extension, h, or key-seat provided with | hereunto subscribed my name in the presence parallel sides, and arranged to extend across | of two witnesses. and at right angles with the key-slot l, in combination with the plate-key R, having the notch g, with parallel sides, substantially as specified.

In testimony that I claim the above I have

ALFRED C. MANNING.

Witnesses:

P. F. BUTLER,

E. M. PINNEY.