C. S. JENNINGS.

KNOB-LATCHES.

No. 180,239. Patented July 25, 1876.

fig 1

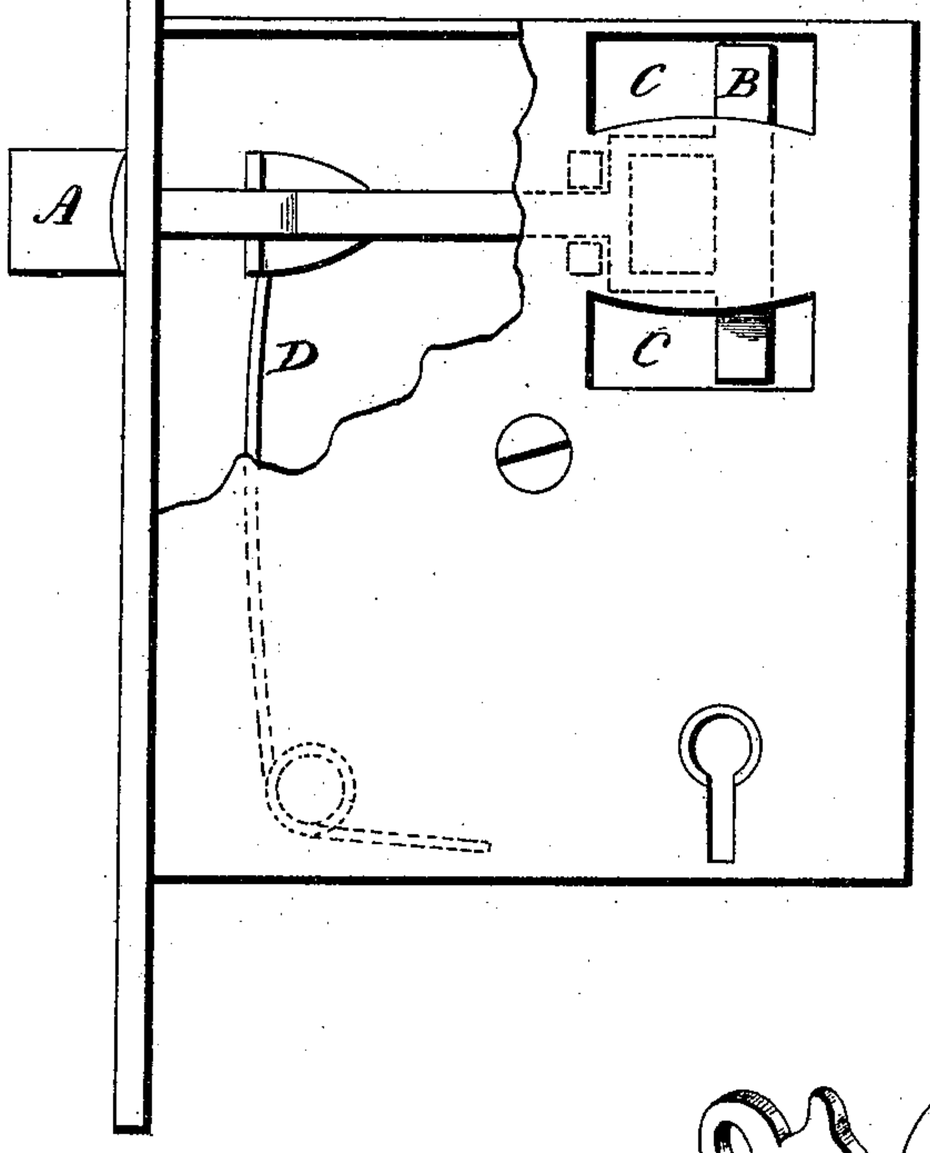


fig 2

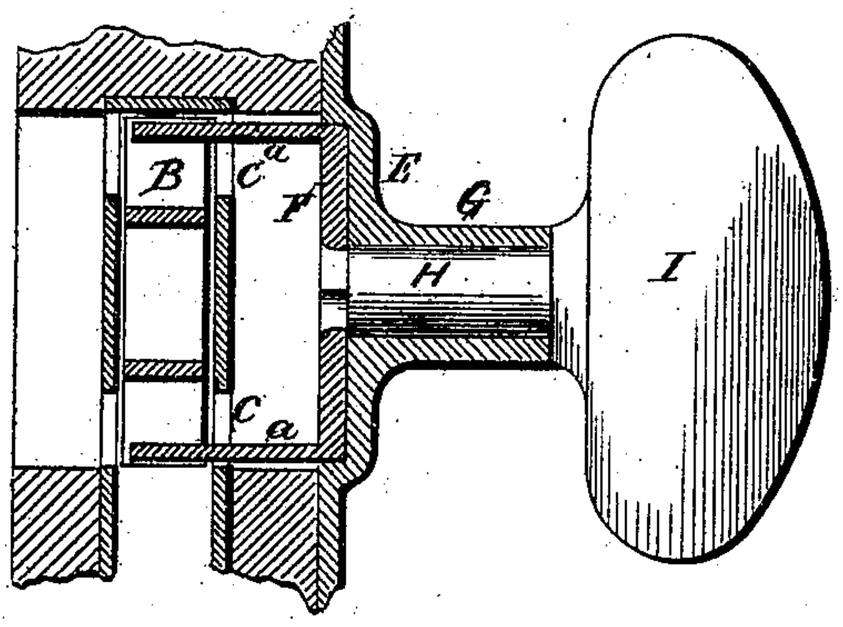
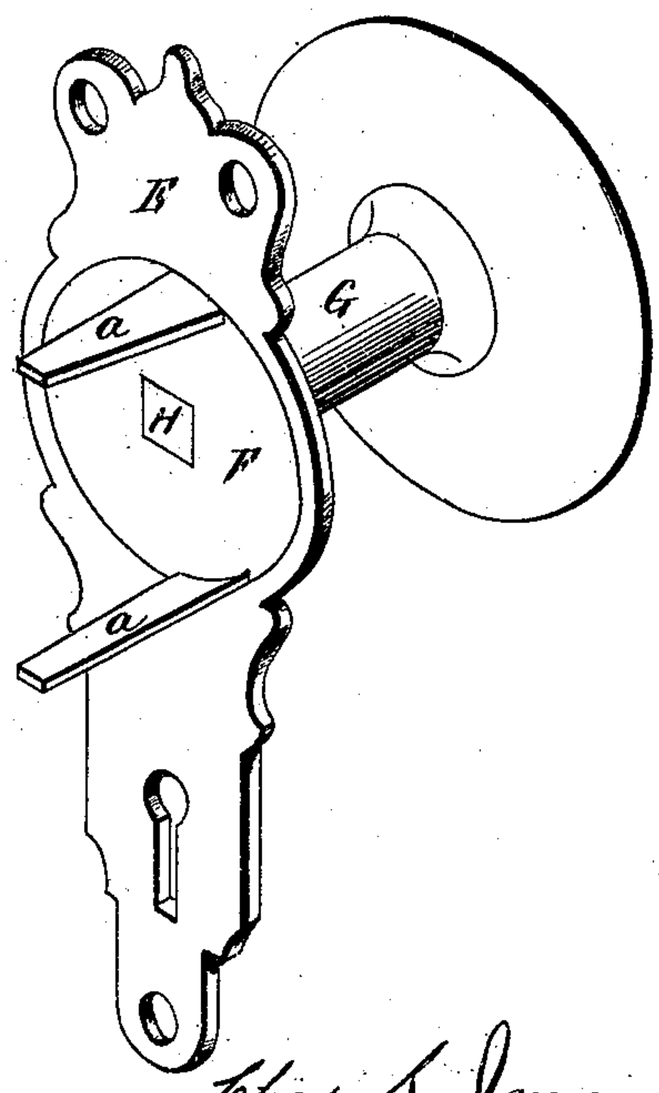


fig 3



Witnesses.

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UNITED STATES PATENT OFFICE.

CHARLES S. JENNINGS, OF NEW HAVEN, CONNECTICUT, ASSIGNOR TO THOMAS KENNEDY, OF NEW YORK.

IMPROVEMENT IN KNOB-LATCHES.

Specification forming part of Letters Patent No. **180,239**, dated July 25, 1876; application filed May 19, 1876.

To all whom it may concern:

Be it known that I, CHARLES S. JENNINGS, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Knob-Latches; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a side view of the latch; Fig. 2, a section through the latch and knob; Fig. 3, a perspective view of the knob and its rose, looking from the rear.

This invention relates to an improvement in what are termed "knob-latches"—that is to say, latches in which the bolt is drawn by the turning of the knob.

In the usual construction of this class of latches the follower or hub which moves the latch has been arranged so as to turn on bearings in the case, the spindle of the knobs passing through the hub of the door, and the knobs secured to the spindle on opposite sides of the door.

A serious difficulty in this class of latches arises from the shrinkage of the door, as well as from the strain which is brought upon the knob, tending to loosen the rose which supports the knob—a fact too well known to require discussion here.

The object of this invention is chiefly to avoid this difficulty; and it consists in combining, with the rose of a door-knob, the knob seated upon the outside of the rose, a disk upon the inside, the two connected through and so as to secure both to the rose, and the said disk provided upon the inside with a pair of fingers, which extend inward, so as to engage with the latch mechanism and draw the latch when the knob is turned in either direction, thereby dispensing with the follower in the usual construction.

The latch-bolt A is constructed with a cross-head, B, extending above and below the tail of the latch, and through the case a perforation, C, is made above and below the latch, so as to expose the end of the cross-head, as seen in Fig. 1. The latch-bolt is provided with the usual spring D, the tendency of which is to force the latch-bolt outward.

E represents the rose of the knob, which is chambered out upon its inside, or provided with a disk, F, properly seated on the inside of the rose. Through the neck G of the rose a spindle, H, extends from the disk F to the knob I, securely uniting the knob and the disk, so that by turning the knob the disk will be correspondingly turned.

On the inside of the disk there is made a projecting finger, *a*, from both the upper and under edge, of sufficient length to extend into the perforation C in the case and bear against the cross-head B of the latch-bolt, as seen in Fig. 2, openings being first made through the door for that purpose. A corresponding knob is arranged upon each side of the door, fingers from each bearing in like manner against the cross head. Hence, by turning either knob the upper or lower finger, according to the direction the knob is turned, will bear against the cross-head and draw in the bolt.

This construction affords a strong bearing or support for the knobs independent of each other, and so far independent of the case that the shrinking or swelling of the door has no effect thereon. Again, the usual adjustment of the knobs on the spindle to adapt them to varying thickness of doors is avoided, because of the independence of knobs one of the other.

I claim—

In combination with the rose of a door-knob, the knob arranged upon one side, with a disk, F, upon the opposite side, the two connected, so as to secure both to the rose, and the disk provided with fingers *a a*, substantially as and for the purpose described.

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Witnesses:

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