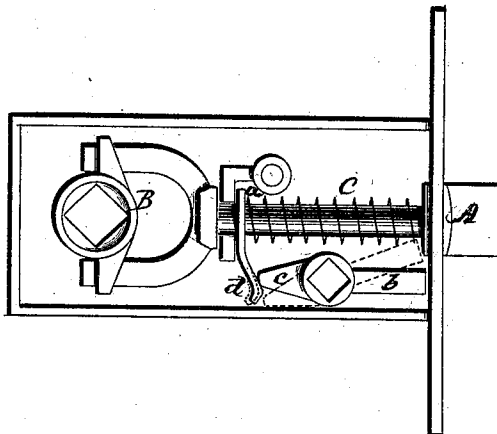


H. H. ELWELL.

KNOB LATCHES.

No. 174,504.

Patented March 7, 1876.



Witnesses.

J. C. Hamming
Clara Broughton

Henry H. Elwell
Inventor

By Atty.

J. H. Emle

UNITED STATES PATENT OFFICE.

HENRY H. ELWELL, OF NORWALK, CONN., ASSIGNOR TO THE NORWALK LOCK COMPANY, OF SAME PLACE.

IMPROVEMENT IN KNOB-LATCHES.

Specification forming part of Letters Patent No. **174,504**, dated March 7, 1876; application filed February 21, 1876.

To all whom it may concern:

Be it known that I, HENRY H. ELWELL, of Norwalk, in the county of Fairfield 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 an interior view of a latch embodying this improvement.

This invention relates to an improvement in knob-latches, the object being to lock the latch-bolt on one side of the door, so as to prevent its movement through the knob on the other, and to take advantage of the spring which throws the bolt, causing it to serve the double purpose of throwing the bolt and holding the lock; and it consists in a cam-lever within the case, so that by turning the said lever it comes into position against the shoulder of the latch-bolt, and its cam held in that or in the unlocked position by means of an extension of the spring collar, as more fully hereinafter described.

A is the latch-bolt; B, the follower; C, the spring; *a*, the collar, the spindle passing through the collar *a*, the said collar serving as a bearing for the spring in the usual manner. *b* is the locking-lever, arranged upon a bearing in the case, and so as to be turned

into position against the shoulder of the bolt, as indicated in broken lines, to lock the bolt, or turn therefrom, also, in the usual manner. The other end *c* forms a cam for the action of the spring. In the usual construction an independent spring has been applied to hold this locking-lever in either of its two positions. To dispense with this spring, the collar *a* is extended to form an arm, *d*, bearing against the cam *c*, and bent so as to form opposite inclines, one of which will bear upon the under side of the cam in its unlocked position, and the other upon the reverse side in its locked position; hence, in turning the cam, the collar extension will be thrown back out of its plane, as indicated in broken lines, its fit on the spindle being sufficiently loose to allow this play. The latch-bolt spring, bearing upon the front of the collar, tends at all times to force this extension against the cam *c*, thus serving a double purpose, and dispensing with the additional spring usually required.

I claim—

In combination with a latch-bolt, its spring and the locking cam-lever *c b*, the collar *a*, with its extension *d* to bear against the cam *c*, substantially as described.

HENRY H. ELWELL.

Witnesses:

WILLIAM T. BONTON,
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