E. PARKER.

KNOB-LATCH.

No. 188,258. Patented March 13, 1877.

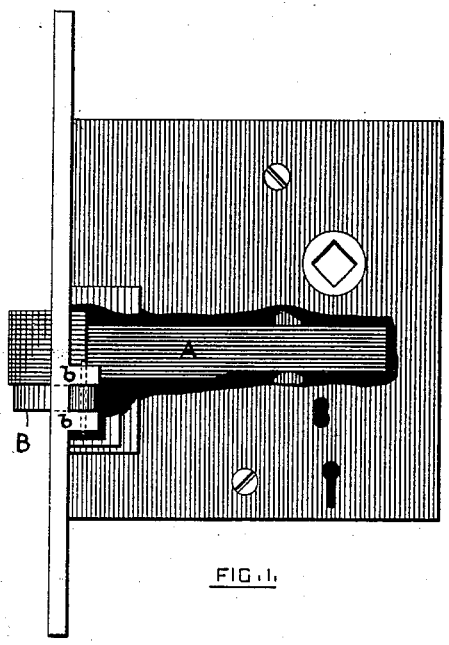

FIG. 1.

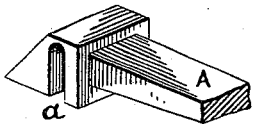

FIG. 2.

FIG. 3.

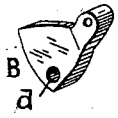

FIG. 4.

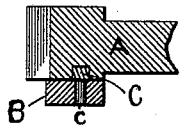

FIG. 5.

WITNESSES.

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EMERY PARKER, OF NEW BRITAIN, CONN., ASSIGNOR TO THE RUSSELL AND ERWIN MANUFACTURING COMPANY, OF SAME PLACE.

IMPROVEMENT IN KNOB-LATCHES.

Specification forming part of Letters Patent No. **188,258**, dated March 13, 1877; application filed February 10, 1877.

To all whom it may concern:

Be it known that I, EMERY PARKER, of New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Latches; and I do hereby declare that the following specification, taken in connection with the drawings furnished and forming a part of the same, is a clear, true, and complete description thereof.

My said improvements relate to that class of latches which embody, with the latch-bolt, a lever, which, on being brought into contact with the striker, before contact of the latter with the inclined face of the latch-bolt, causes the latter to be easily and smoothly forced backward into the lock-case.

The object of my invention is to provide a durable connection between said lever and the latch-bolt, and one which will enable the lever to easily control the bolt.

My invention consists in the combination, with the latch-bolt and its controlling-lever, of a pin and a sliding block, which unite the lever and latch-bolt.

To more particularly describe my invention, I will refer to the accompanying drawing, in which—

Figure 1 represents a lock with a portion of its case broken away so as to disclose the latch-bolt and lever in side view. Fig. 2 represents the latch-bolt, in perspective, detached from the case. Fig. 3 represents, in perspective, the detached sliding block and pin. Fig. 4 represents, in perspective, the controlling-lever. Fig. 5 represents, in lateral longitudinal section, the latch-bolt, lever, pin, and sliding block, these parts occupying the same positions with relation to each other as if they were within the lock-case and ready for service.

A denotes the latch-bolt. It is provided with a rectangular recess, as at *a*, which is located at one side of the head of the latch-bolt, as clearly shown in Fig. 2.

The line occupied by this recess is at right angles to the line in which the latch-bolt moves to and fro.

B denotes the controlling-lever, which is pivoted to the case at *b*, beneath the head of the latch-bolt, and in contact with its side. C denotes a sliding block, which is so shaped and fitted that it will occupy the recess *a* in the latch-bolt, and freely slide therein. It is provided with a round pin at *c*, which is fitted to a hole, *d*, in the lever B.

It will be seen when these parts are connected, as illustrated in Fig. 5, that if the bolt be moved in and out of the case, the sliding block will travel to and fro in the slot or recess *a*, and it is obvious that, by means of this sliding connection of the lever and bolt, the latter is moved by the lever much more easily and smoothly than would be the case with a simple slot-and-pin connection, as heretofore employed in this class of locks.

While I prefer that the bolt be recessed, as shown, it is obvious that analogous results would be attained if the lever should be recessed for the reception of the sliding block, and the bolt were provided with a hole for the reception of the pin.

In very heavy latch-bolts, sliding blocks may be applied both to the lever and the bolt, in which case the pin may be rigidly attached to either of the blocks, or so fitted thereto that it may rotate in both of them.

Having thus described my invention, I claim as new, and desire to secure by Letters Patent—

The combination, with a latch-bolt and a controlling-lever, which is operated by the striker, of a pin and a sliding block, by which the lever and latch-bolt are connected, substantially as described.

EMERY PARKER.

Witnesses:
H. E. RUSSELL, Jr.,
M. S. WIARD.