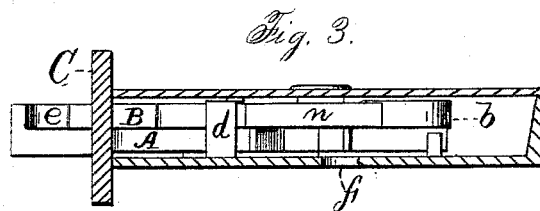
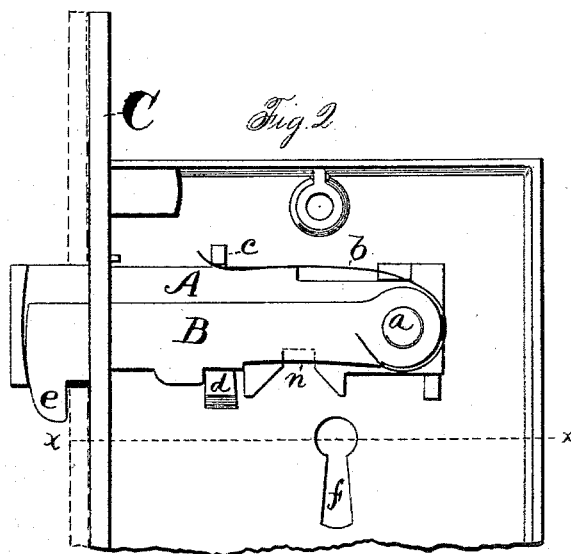
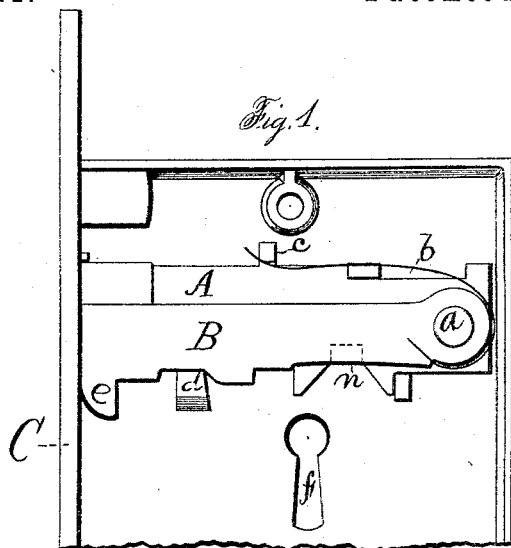


(No Model.)

W. E. SPARKS.
LOCK FOR SLIDING DOORS.

No. 304,041.

Patented Aug. 26, 1884.



Witnesses.
John Edwards Jr.
Fred A. Mory Jr.

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UNITED STATES PATENT OFFICE.

WILLIAM E. SPARKS, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO
P. & F. CORBIN, OF SAME PLACE.

LOCK FOR SLIDING DOORS.

SPECIFICATION forming part of Letters Patent No. 304,041, dated August 26, 1884.

Application filed November 8, 1881. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM E. SPARKS, of New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Locks for Sliding Doors, of which the following is a specification.

My invention relates to locks; and the objects of my invention are to provide a simple and efficient lock for sliding doors at a moderate cost, and to give the face-plate of the lock an improved appearance when the edge of the door is exposed. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a front elevation with cap-plate removed, showing the bolts unlocked or within the case. Fig. 2 is a like view showing the bolts in their position for locking; and Fig. 3 is a sectional view on line *x x* of Fig. 2, showing the under side of the bolts.

A designates a straight and sliding lock-bolt, made substantially in ordinary form, except that it is recessed upon one side for the greater portion of its length to receive the swinging hook-bolt B, the two together being of such thickness laterally as to fill the mortise in the face-plate C, while the extreme outer end of the bolt A completely fills said mortise when the bolts are unlocked or withdrawn from the keeper into the case, as represented in Fig. 1. The bolt B is pivoted to the bolt A by means of pin *a*, so that they must move longitudinally together. The bolt B is provided with a spring, *b*, one end of which rests under a stud, *c*, formed on the bolt A, so that the spring has a constant tendency to force the outer end of the bolt B downward. Shoulders are formed upon the under side or edge of the bolt B, at points which engage the stationary fence *d* and operate in connection therewith like the tumblers and fence of ordinary locks. The outer end of the bolt B is provided with a hook, *e*, the inner face of which, when the bolts are thrown outward, is a distance from the face-plate C equal to the thickness of the keeper-plate. Said plate is like the keeper for ordinary locks—that is, a plate with a mortise through it large enough

to let pass the head or outer end of the bolt A—said keeper being indicated by broken lines in Fig. 2.

To throw the bolts outward for locking, an ordinary key is inserted in the key-hole *f* and rotated, when the bit engages the under edge or lifting-face, *n*, of the bolt B, and lifts it far enough to let the hook *e* pass through the face-plate and keeper. The key then acts upon the bolt A to throw both bolts outward, and so soon as the hook *e* has passed through the keeper the spring *b* throws the bolt B into the position in which it is represented in Figs. 2 and 3. In unlocking, the bolt B is first lifted by the key and then the key engages the bolt A and throws both bolts inward and leaves them in the position in which they are represented in Fig. 1.

It will be seen that pushing upon the end of the bolt or pulling the doors apart when locked will not lift the bolt B or unlock the lock, as the doors can be unlocked only by first lifting the bolt B, which lifting is done by the key. When the door is open and the face-plate of the lock exposed, the outer end of the bolt completely fills the mortise in the face-plate, thereby presenting a neat appearance or finish, and also wholly concealing the hooked bolt from view, so that no idea of the internal structure can be gained when thus viewed. Even if access should by any means be gained to the extreme end of the bolt, it is solid, and no access would thereby be gained to the end of the hooked bolt for lifting said bolt.

The parts are few and simple, so that the lock can be made at a very small cost.

I am aware that a prior patent for a sliding-door lock shows the combination of a straight sliding bolt and a hooked bolt pivoted thereto and alleged to be operated by the movement of the straight bolt, and which hooked bolt is so pivoted to the straight bolt that it cannot be made to engage the key which operates the main bolt. Said lock is hereby disclaimed. I also disclaim the locks shown and described, respectively, in English Letters Patent No. 8,903 of 1841 and No. 1,221 of 1871.

I claim as my invention—

In a lock for sliding doors, the combination of a case having a mortise in its face-plate C, the swinging hooked bolt B, having an edge bearing or lifting face, *n*, for being acted upon
5 by a key, and the longitudinally-sliding bolt A, having its outer end fitted to fill said mortise in the face-plate C when the bolts are withdrawn, and a slatted portion to receive the

bolt B, said bolts being connected so as to move longitudinally simultaneously, substantially as described.

WILLIAM E. SPARKS.

Witnesses:

CHARLES PECK.

CHAS. H. PARSONS.