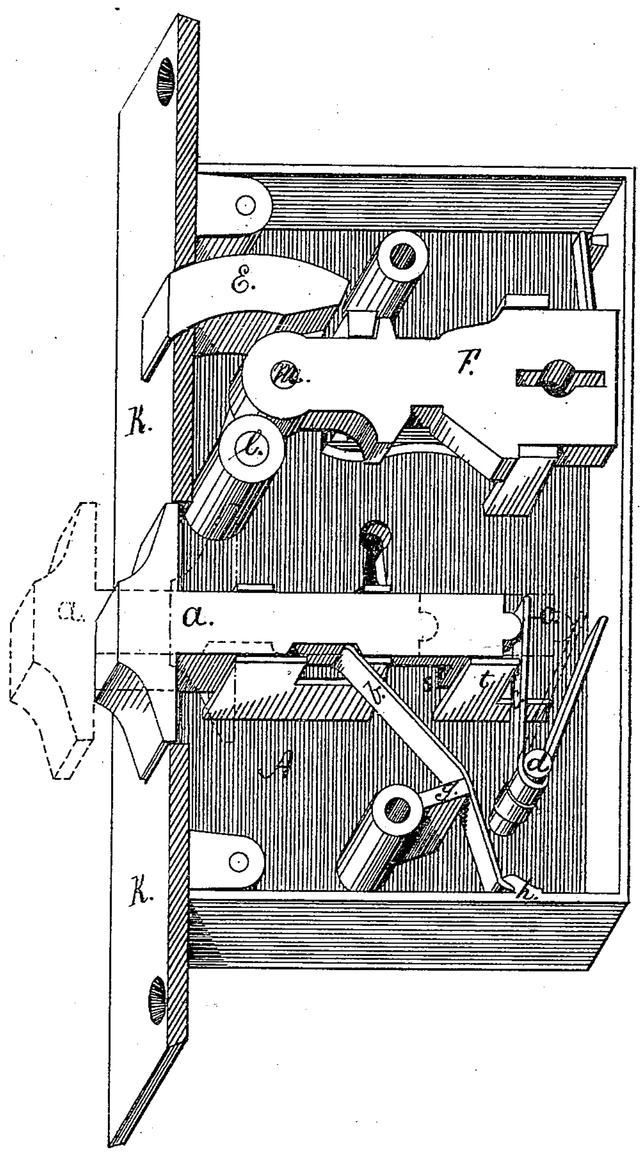
T. LYON & E. PARKER.

Locks for Sliding Doors.

No. 166,470. Patented Aug. 10, 1875.



WITNESSES

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IMPROVEMENT IN LOCKS FOR SLIDING DOORS.

Specification forming part of Letters Patent No. **166,470**, dated August 10, 1875; application filed June 21, 1875.

To all whom it may concern:

Be it known that we, THOMAS LYON, of Hartford, Connecticut, and EMERY PARKER, of New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Locks for Sliding Doors; and we do hereby declare that the following specification, taken in connection with the drawings making a part of the same, is a full, clear, and exact description thereof.

The drawings show the interior of the lock in perspective, the different positions of the draw-bar being indicated in broken lines.

The invention relates to such locks as are used on sliding flush doors, or doors which slide into pockets within partitions flush with their front edges; and it consists in the combination of a draw-bar of peculiar construction with the lock member, or the fellow strike member, for furnishing a means for enabling the door to be drawn out from its pocket.

Referring to the drawings, *a* is a draw-bar, which is furnished with a T-head. This bar is mounted in suitable guides in the lock-case A, as shown, and is arranged to slide back and forth therein. The distance to which the bar can be extended beyond the face of the lock-front is limited by a stop, *s*, on the bar, bringing up against an end of the guide for the bar, or against a stationary lug in the lock-case.

The T end of the draw-bar projects beyond the lock-front, so as to present a sufficient surface to be taken hold of by the thumb and forefinger, in consequence of the pressure upon its rear end from the spring *c'*, which is set on the stud-post *d*, and tends to keep the T-head of the bar projected. It is easy, however, by the application of pressure to the face of the T-piece, to cause the latter to be sheathed within the lock-case, a mortise being cut through the lock-front to permit its passage, and this will be the result whenever the edges of a pair of sliding doors are brought into close contact.

When it is desired to make use of the draw-bar the first operation is to pull it outward to the extent which the stop *s* permits. Its position is then as shown in broken lines in the drawing, and ample room exists between the back of the T-head and the lock-front for the insertion of the fingers to take a firm hold upon the cross-head of the draw-bar to pull the door out from its pocket; the spring *c*, meanwhile, is held in position by a keeper, *t*. The draw-bar *a* has applied to its under side a friction-stop spring, *b*, the office of which is to keep the draw-bar in its normal position, as shown in full-lines, and prevent it from being projected beyond the lock-front to the extent shown in broken lines, except when a positive force is applied to so extend it. The bolt mechanism E F is well known in locks of this class, and constitutes no part of this invention.

The same improvement which we have described is also to be understood as applied to the strike member, which is used on the fellow sliding door, and which is like the lock member shown in the drawing, with the exception that it has no lock, but simply a mortise through the front plate to receive the hook-bolt E. It can also be applied to a case which has neither a lock member or a strike member, and constitute what is known as a flush door-pull.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. In combination with lock-cases for sliding flush doors, an extensible draw-bar, *a*, having its head projected beyond the front plate to form a thumb-piece, by which it can be extended, but arranged to be sheathed within the case when the edges of the sliding doors are brought into contact, substantially as described.

2. The combination, with an extensible draw-bar, *a*, as described, of a friction-stop spring, *b*, substantially as specified.

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Witnesses:
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