

(No Model.)

F. W. MIX.
LOCK FOR SLIDING CLOSURES.

No. 563,671.

Patented July 7, 1896.

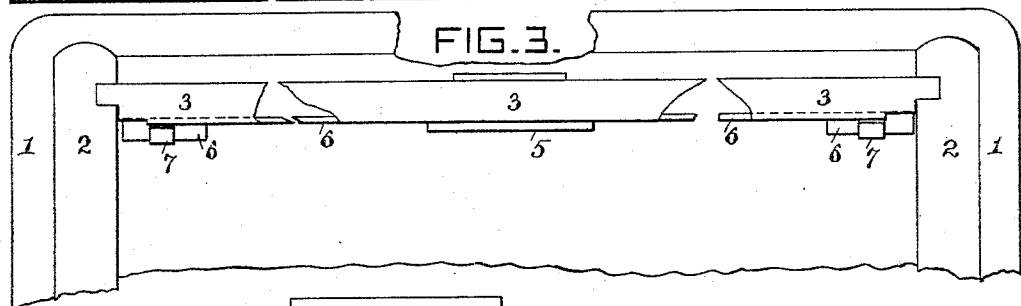
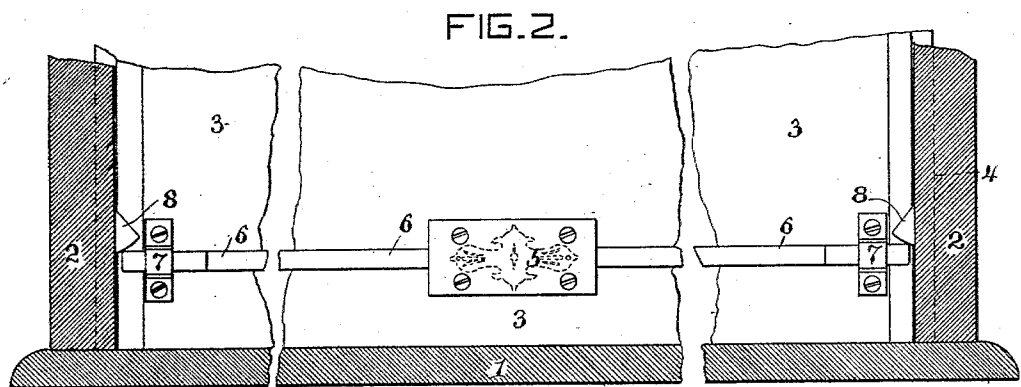
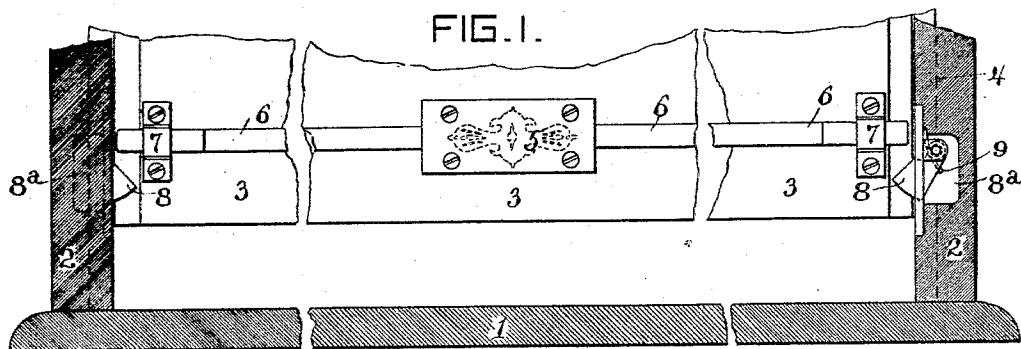


FIG. 4.

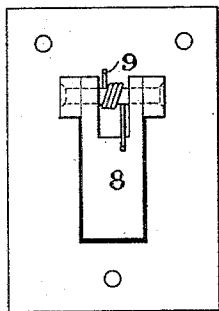
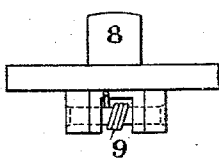


FIG. 5.



Witnesses
Walter E. Allen.
S. Allen.

Inventor.
Frank W. Mix.
By *Knight Bros.*
attorneys.

UNITED STATES PATENT OFFICE.

FRANK W. MIX, OF STAMFORD, CONNECTICUT, ASSIGNOR TO THE YALE
& TOWNE MANUFACTURING COMPANY, OF SAME PLACE.

LOCK FOR SLIDING CLOSURES.

SPECIFICATION forming part of Letters Patent No. 563,671, dated July 7, 1896.

Application filed September 12, 1894. Serial No. 522,825. (No model.)

To all whom it may concern:

Be it known that I, FRANK W. MIX, a citizen of the United States, residing at Stamford, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Locks for Sliding Closures, of which the following is a specification.

In locking sliding closures, such, for example, as a sliding desk-cover, it is desirable to lock both sides of the sliding part; and to accomplish this it is customary to have a locking-bolt extend from each side of the lock-case, and adjusted in length to suit the particular object to which the lock is applied. An objection to this form of lock has been the necessity for use of a key in locking, whereas in a desk or similar closure which is opened and closed frequently it is desirable to have the locking effected automatically by the simple act of shutting. My present invention accomplishes this end and obviates the objection by employing, in connection with the laterally normally projected rigid right and left bolts having means whereby they are adapted to be retracted, a pair of right and left spring-keepers past which the rigid thrust-out bolts will snap in the act of closing, and from which said bolts can afterward only be drawn by means of a key. The bolts when shot do not come in contact with the sides or cheeks of the desk. In addition to this, the lock is preferably so constructed that the key cannot be withdrawn except when the bolts are in normal position for locking, so that by this means the proper position of the bolts is insured.

In the accompanying drawings, Figures 1 and 2 are interior elevations of those portions of the sliding cover and guides in a desk to which the lock is applied, the former view showing the parts just before the locking is effected and the latter showing the locked position. Fig. 3 is a plan of the parts shown in Fig. 1. Figs. 4 and 5 are respectively a face and a top view of one of the spring-keepers.

1 represents the desk-table, 2 the sides or cheeks, and 3 the sliding or rolling top, which travels in guides 4 in the sides and has centrally mounted upon it the lock-case 5, which is arranged for the reception of a key from the outside, as indicated by the escutcheon

shown in dotted lines, and from which lock-case extend the lateral normally-projected rigid bolts 6, slidable in straps 7 at the edges of the rolling top. The free ends of the bolts always remain out of contact with the sides or cheeks. Mounted in the sides or cheeks 2, and in position to engage the bolts 6 when the top is closed, are the spring-keepers 8. These keepers 8 are trunnioned in a suitable casing 8^a, mortised into the sides 2, and are made to project normally outward through the face-plate of their casing by means of springs 9.

From the construction and arrangement of parts it will be seen that when the desk-top is forced downward the rigid thrust-out bolts will force the spring-keepers inward in passing, and said keepers will snap out above the bolts, when, owing to the position of the trunnions of said keepers, they will resist upward pressure of the bolts, and the desk-top cannot be raised until the bolts are withdrawn from beneath the keepers by means of a key applied to the lock from the outside of the desk.

For the purpose of illustration I have described my invention as applied to a sliding or rolling top desk; but it will be understood that its application is by no means restricted to this particular use.

I have stated that my invention is preferably used in connection with a lock from which the key cannot be withdrawn except when the bolts are in locking position; but I have not deemed it necessary to show the details of such a lock, because such locks are well known, and also because the invention is not restricted to use in connection with any special form of mechanism for moving the bolts.

I am aware that yielding lock strikes or keepers are not new and that they have been employed in combination with single-bolt locks, and I am also aware that locks having a pair of locking-bolts have been used with rigid keepers; but I am not aware that it has ever been proposed to provide a lock for sliding closures with laterally-projecting normally rigid bolts and a pair of spring-keepers which will allow the bolts to pass in one direction only for automatically locking both bolts at the same time.

Having thus described my invention, the following is what I claim therein as new and desire to secure by Letters Patent:

The combination with the table, the sides
5 and the sliding closure; of the key-lock comprising the normally-projected right and left pendent spring-keepers secured to the sides, and the normally thrust-out and locked rigid right and left bolts secured to the closure

with their ends out of contact with the sides 10 when thrown out and adapted to press in the pendent spring-keepers and then lock therewith; substantially as described.

FRANK W. MIX.

Witnesses:

A. H. COOKE,
EDWD. R. MIX.