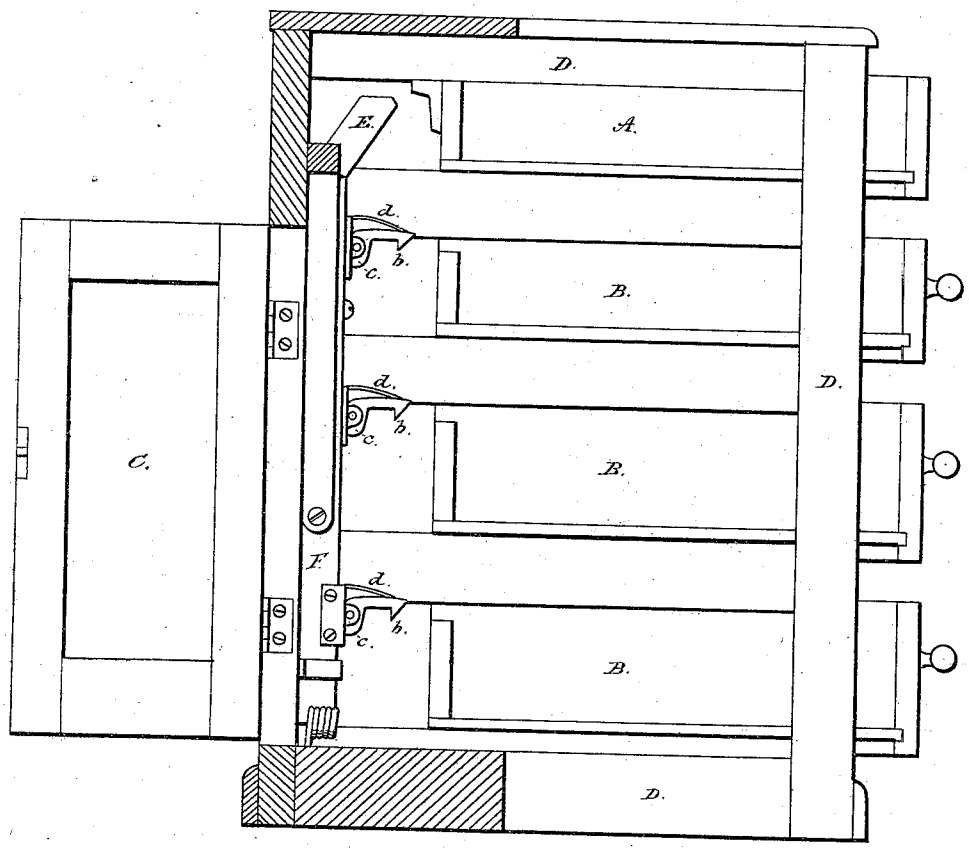
2 Sheets—Sheet 1.

J. H. WILLIAMS.

LOCKING DEVICE FOR DESK DRAWERS.

No. 170,145. Patented Nov. 16, 1875.

Fig. 1.



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A. E. Beecher

Inventor:

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2 Sheets—Sheet 2.

J. H. WILLIAMS.

LOCKING DEVICE FOR DESK DRAWERS.

No. 170,145. Patented Nov. 16, 1875.

Fig. 2.

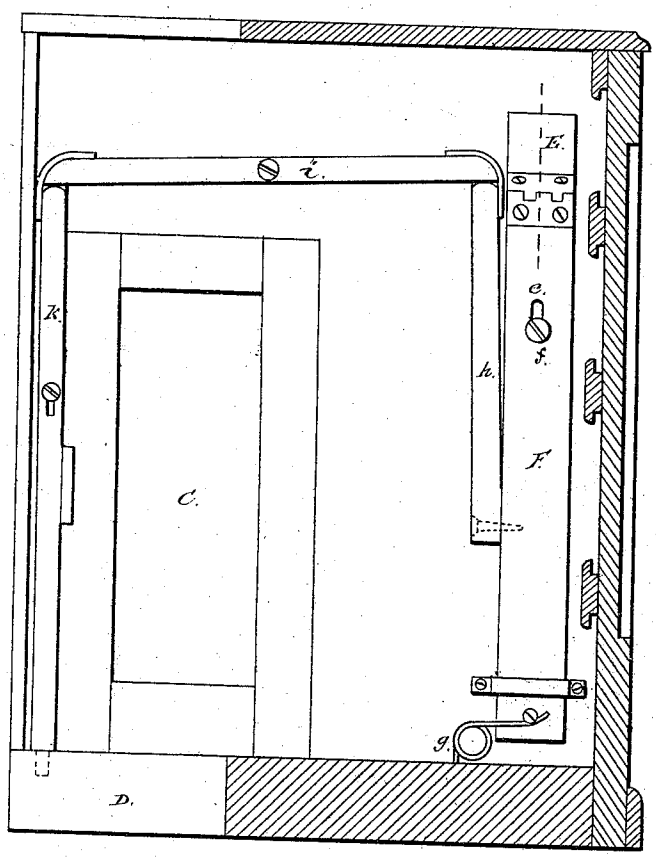


Fig. 4.

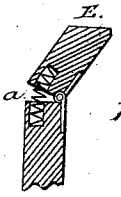


Fig. 3.

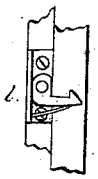
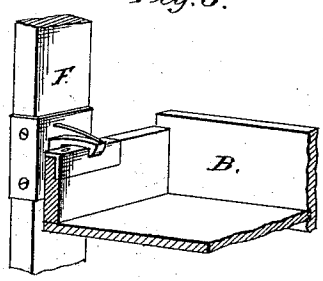


Fig. 5.



Witnesses:
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UNITED STATES PATENT OFFICE.

JAMES H. WILLIAMS, OF WASHINGTON, DISTRICT OF COLUMBIA.

IMPROVEMENT IN LOCKING DEVICES FOR DESK-DRAWERS.

Specification forming part of Letters Patent No. 170,145, dated November 16, 1875; application filed October 25, 1875.

To all whom it may concern:

Be it known that I, JAMES H. WILLIAMS, of Washington, in the District of Columbia, have invented a new and useful improvement, which consists of a device for simultaneously locking a series of drawers and doors in desks, bureaus, sideboards, and other furniture; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings.

My invention consists in an improved means of locking a set or sets of drawers, or drawers and a door or doors, in an article of furniture, by the shutting of one drawer, so that while that one is shut and locked the others cannot be opened; and when the one that has its own lock is closed and fastened, any or all of the others may be closed subsequently, the mere closing causing them to lock automatically, as may readily be understood by reference to the drawings.

Figure 1 is a vertical sectional elevation of a desk or other piece of furniture, showing the drawers partly pulled out, and an open door in the rear thereof. Fig. 2 is a vertical sectional elevation of the back part of a desk, showing the mode of actuating the fastening device, as seen from within. Fig. 3 is an elevation of the spring-catch, which holds the door securely shut. Fig. 4 is a side view of a hinged joint, the upper part thrown forward by means of a spring. Fig. 5 is a sectional view of drawer B and lock-bar F, showing spring-catch and strike-plate.

A represents the upper drawer, which I think the most convenient one to have its own lock and key, and for the purpose of actuating the locking device of the rest of the other drawers and doors, if such there be. B represents the other drawers. C is the door, shown as open in Fig. 1 and closed in Fig. 2. D is the frame-work. E is the hinged joint, which is thrown forward at about the angle of forty-five degrees when released by the upper drawer being drawn out. F is the lock-bar, in which is the slot *e*, through which passes the screw *f* without friction. By means of said slot and screw the lock-bar is held in place and its play regulated. The lower end of the lock-bar is held in place, as shown. Upon the lock-bar are fastened the spring-catches *b*. These catches are hinged at *c*, and are kept at a right angle to the lock-bar by spring *d*, except when the drawer is pushed back against the hook or latch. It is obvious that these spring-catches may be raised or lowered, and brought forward or carried back, to conform with the height or length of the drawer. On the backs of the drawers are strike-plates of metal let into the wood and secured by screws, and the closing of the drawer causes the strike-plate to raise the latch, which falls, and thus secures the drawer. The top part of the lock-bar forms a bent arm when the door is open, the bar being raised by the coiled foot-spring *g*. One end of said spring is inserted in the block or bottom of the case, the other end being bent, as shown in Fig. 1, and passing under a screw or other projection on the lock-bar. The power of the spring may be increased or lessened by altering the degree of curvature thereof between the coil and the lock-bar. This kind of a spring cannot lock or catch, nor get out of order, and I think is the best form that has been devised for such a purpose. Attached to the lock-bar F is a bar, *h*, connected with a balance-lever, *i*, which is also joined to the slotted bar *k*, the foot of which is inserted in a mortise. Upon said bar *k* is the reversed spring-catch *l*, which spring-catch is so constructed that it may quite as well be used instead of the spring-catch shown on the lock-bar in Fig. 1. In case of using such a kind of catch for the drawers, it must be placed on the edge instead of the face of the lock-bar, as may readily be understood without further explanation.

The mode of operating my invention, which is easy to comprehend, is as follows: As the upper or other actuating drawer is pushed back, a projection on the rear of the drawer strikes the arm E, and presses it back to a perpendicular, and thus forces down the lock-bar carrying the spring-catches, and locks all the closed drawers. If any of the drawers are open when the catches shall have thus been forced down, they may be locked by closing, each being to that extent independent of the locked actuating-drawer. The forcing down of the lock-bar F carries down the bar

h, which, in its turn, brings down the pivoted lever *l*, and the latter, at the same time, raises the bar *k*, and places the spring-catch *l* in position to hold the lip of the door C. The opening of the actuating-drawer releases all the other drawers and the door or doors at the same instant. It must be obvious to any person skilled in the art to which this appertains that another series of drawers, or more than one door, may be operated by a simple adjustment of levers upon the principle of my improvement.

What I claim, and desire to secure by Letters Patent, is—

1. The lock-bar F, having arm E, which is thrown forward by a spring, combined with the spring-catches acting at the tops of the drawers, all constructed and operating as described.

2. In a desk or other case, the combination of the lock-bar F, the spring-catches *b*, and the strike-plates on the tops of the backs of the drawers, all constructed and operating as and for the purpose described.

3. In a desk or other case, the spring-catch *l*, in combination with the bar *k*, balance-lever *i*, bar *h*, and lock-bar F, constructed and operating as described.

4. The combination of the slotted and hinged lock-bar F, provided with the spring-catches to hold the drawers, the foot-spring *g*, the rods *h* and *k*, and the lever *i*, all constructed and operating as and for the purpose set forth.

JAMES H. WILLIAMS.

Witnesses:

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