

(No Model.)

E. E. HEATH.  
LOCK FOR SHOW CASES.

No. 470,673.

Patented Mar. 15, 1892.

Fig. 1.

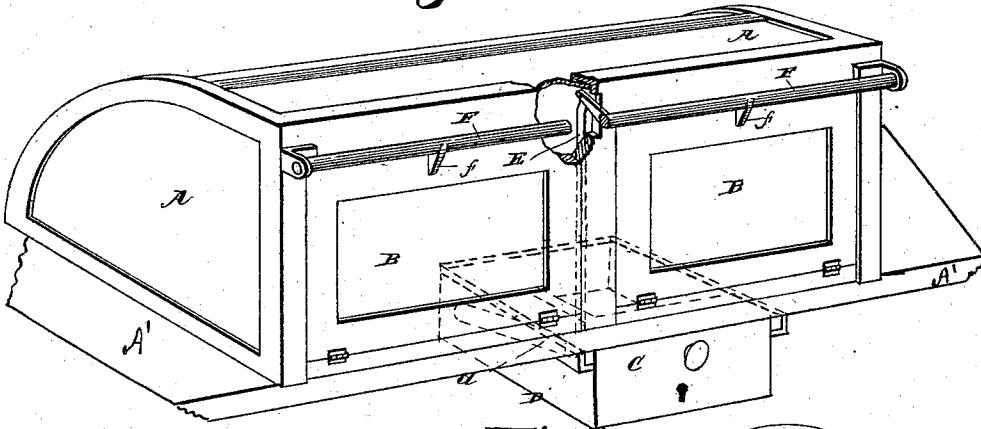


Fig. 4.

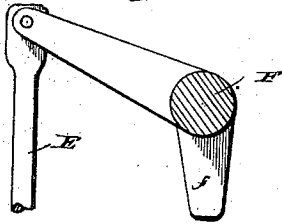


Fig. 2.

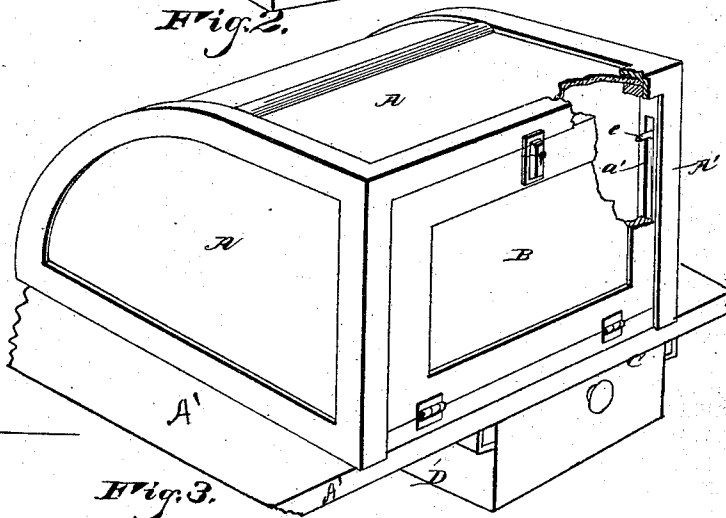


Fig. 5.

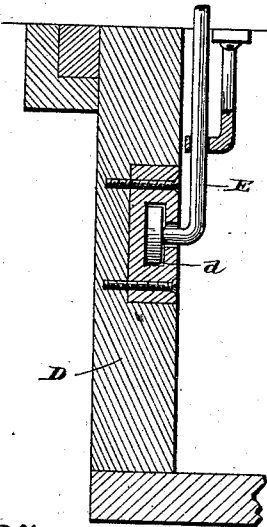


Fig. 3.

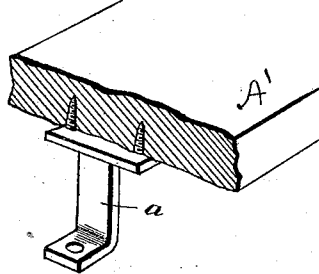


Fig. 6.

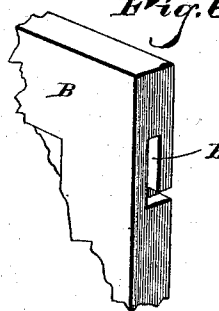
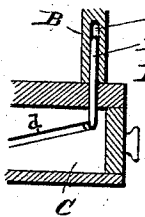


Fig. 7.



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# UNITED STATES PATENT OFFICE.

ELMER ELLSWORTH HEATH, OF ELDRED, PENNSYLVANIA.

## LOCK FOR SHOW-CASES.

SPECIFICATION forming part of Letters Patent No. 470,673, dated March 15, 1892.

Application filed December 20, 1890. Serial No. 375,364. (No model.)

### *To all whom it may concern:*

Be it known that I, ELMER ELLSWORTH HEATH, a citizen of the United States, residing at Eldred, in the county of McKean and State of Pennsylvania, have invented certain new and useful Improvements in Show-Cases, of which the following is a specification, reference being had therein to the accompanying drawings.

The object of this invention is to automatically lock the door of a show-case whenever a sliding drawer is closed by a reciprocating or other movement which is in a plane practically at right angles to the plane of the door.

As ordinarily constructed, the drawer slides horizontally in suitable cleats, while the door swings upon hinges, so that the movable edge of the door travels in an arc of a circle, although practically it moves toward and from the attendant when he stands in front of both the door and the drawer. Therefore under the usual arrangement of parts the locking device must have a movement at right angles to the path of the drawer, so as to be thrust into the path traveled by the door, this movement of the locking device being effected when the drawer is being closed.

Prior to the date of my invention a great variety of devices—some of them including a rock-shaft and locking-spurs—had been employed for locking drawers and other parts of such structures as writing-desks by a single movement of one of the parts; but my invention relates to the locking of the door or doors of a show-case by the closing of a drawer moving below the show-case, and from the fact that a show-case is ordinarily mounted upon and supported by a counter or table, while the drawer is suspended from the lower surface of the counter or table, it is necessary to so construct the parts that the presence of the counter or table between the show-case and door will not interfere with the locking operation.

Having thus indicated the character of my invention I will proceed to describe and illustrate one way which I have devised for carrying it into effect.

Figure 1 is a perspective view of a show-case and drawer having my invention applied thereto. Fig. 2 is a similar view showing a modification adapted for use in connection

with a show-case having but one door. Figs. 3, 4, 5, 6, and 7 are detail views, enlarged, of various parts.

Like reference-letters refer to similar parts wherever used.

A represents, generally, the show-case having a number of doors B B, hinged thereto at their lower edges and each provided, by preference, with a thumb-catch at its opposite edge to hold the door closed when not locked.

C is the front, and D one of the sides, of an ordinary drawer—say, for instance, a money-drawer—supported below the bottom of the show-case in suitable cleats or ways attached to the under side of the counter or other show-case support, so as to slide out and in.

d is a groove or other inclined track formed in or attached to the side D of the drawer, the front end of the track being nearest the upper edge of the drawer. By preference I make this track in the form of a groove in the drawer side.

E is a link or bar supported from the show-case with its lower end entering the groove, the link being supported in such manner that it is free to rise when the drawer is closed and to fall when the drawer is opened.

F is a rock-shaft supported near the swinging edges of the doors and provided with a series of locking-spurs f f, the arrangement of parts being such that when the drawer is closed and the other parts in the position shown in Fig. 1, the spurs are interposed in the paths of the movable edges of the doors, so that they cannot be opened.

It will be readily understood from an examination of the drawings that when the drawer is opened by being moved outward the link E will be moved downward, and as the upper end of the link is attached to the cranked end of the rock-shaft the locking-spurs will be moved out of the paths of the doors, so that they can be opened.

I prefer to support the lower end of the link E against the thrust of the drawer by means of a bracket projecting downward from the bottom of the counter A' or the show-case, substantially as indicated at a, Fig. 3. When, however, it is desired to use this invention for locking a single door, some of the parts above described may be omitted.

Referring to Fig. 2, it will be seen that the link E is arranged in a groove or recess *a'*, formed for its reception in one of the vertical posts A' of the show-case frame, with its upper end *e* bent inward into the path traversed by the door. The door has an L-shaped recess *b*, formed in that edge which is adjacent to the link, the open end of the recess being in such position that when the link is drawn downward, as the drawer is opened, the bent end of the link offers no obstruction to the movement of the door in either direction; but when the door is closed and the drawer afterward closed the bent end of the link is thrust up into the upper end of the recess, thereby locking the show-case door against being opened. When, however, the door of the show-case is hinged by its upper edge or by one end, so that its lower edge swings outward, the locking devices may be simplified by omitting the upper end of the link, so that it shall consist, simply, of a straight bar, as is indicated in Fig. 7, where the upper end of the link enters a recess *b'* in the lower part of the door. By preference I make this recess in the form of a socket in order that when the door is closed the link shall be concealed. Of course the construction of locking devices shown in Fig. 7 may be employed with a door which is hinged at its lower edge, because in such case, when the drawer is closed, the door cannot be opened, except by bending the link, the rigidity of which will under many circumstances resist the opening of the door to a sufficient extent.

I am aware that a great variety of devices have been used for simultaneously locking a series of drawers against being opened and that in some cases an inclined track has been formed in the side wall of a drawer to impart a rising-and-falling movement to a vertical bar; but I believe myself to be the first to mount a rocking device upon a show-case which is provided with a hinged door, such locking device having a vertically-moving bar, with its lower end projecting below the base, which

supports the frame-work and glass of the show-case, in combination with a horizontally-moving drawer engaging with the lower end of such bar.

It is obvious that the show-case may be placed upon the table or counter, the lower end of the bar projecting below the base of the show-case far enough to allow for the interposition of such table or counter between the show-case and the drawer, and many other modifications will suggest themselves to a skilled mechanic without departing from the spirit of my invention.

What I claim is—

1. The combination of a show-case having a swinging door and provided with a vertical opening through the bottom, a support for the show-case provided with a vertical opening, a door-locking device mounted on the show-case and having a vertically-moving bar projecting down through the support and engaging with the wall of the opening, and a horizontally-sliding drawer mounted below the support and engaging with the projecting end of the bar, the wall of the opening preventing sidewise moving of the lower end of the bar, substantially as set forth.

2. The combination of a support for a show-case, a show-case on the support, a locking rock-shaft supported near the swinging edge of the door and having a series of locking-spurs which engage with the outer face of the door and an arm projecting within the show-case, a vertically-moving bar attached to the inner end of the arm within the show-case and projecting below the bottom of the show-case, and a horizontally-sliding drawer supported below the show-case and engaging with the projecting end of the bar to lock the door, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

ELMER ELLSWORTH HEATH.

Witnesses:

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