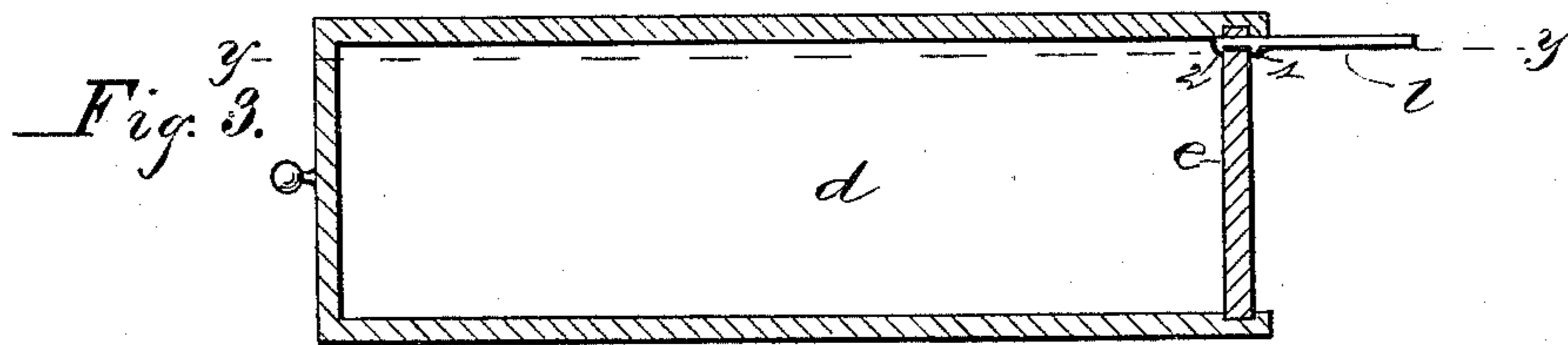
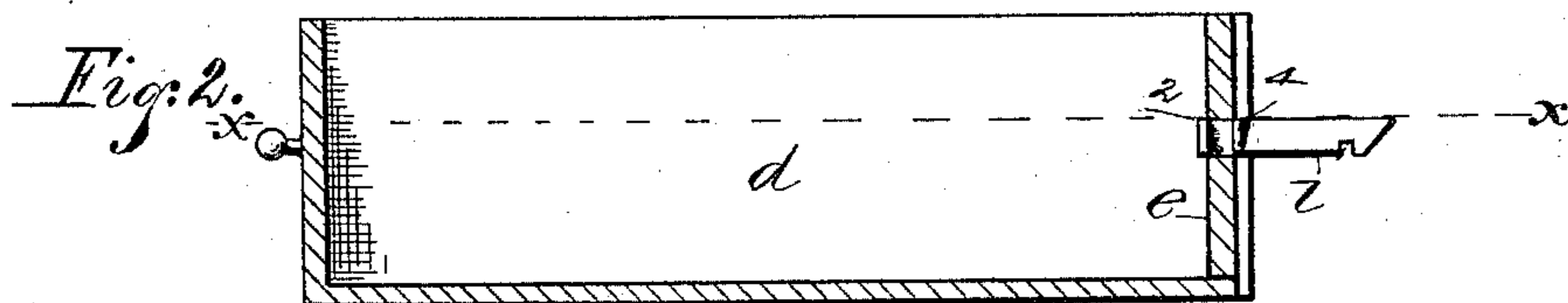
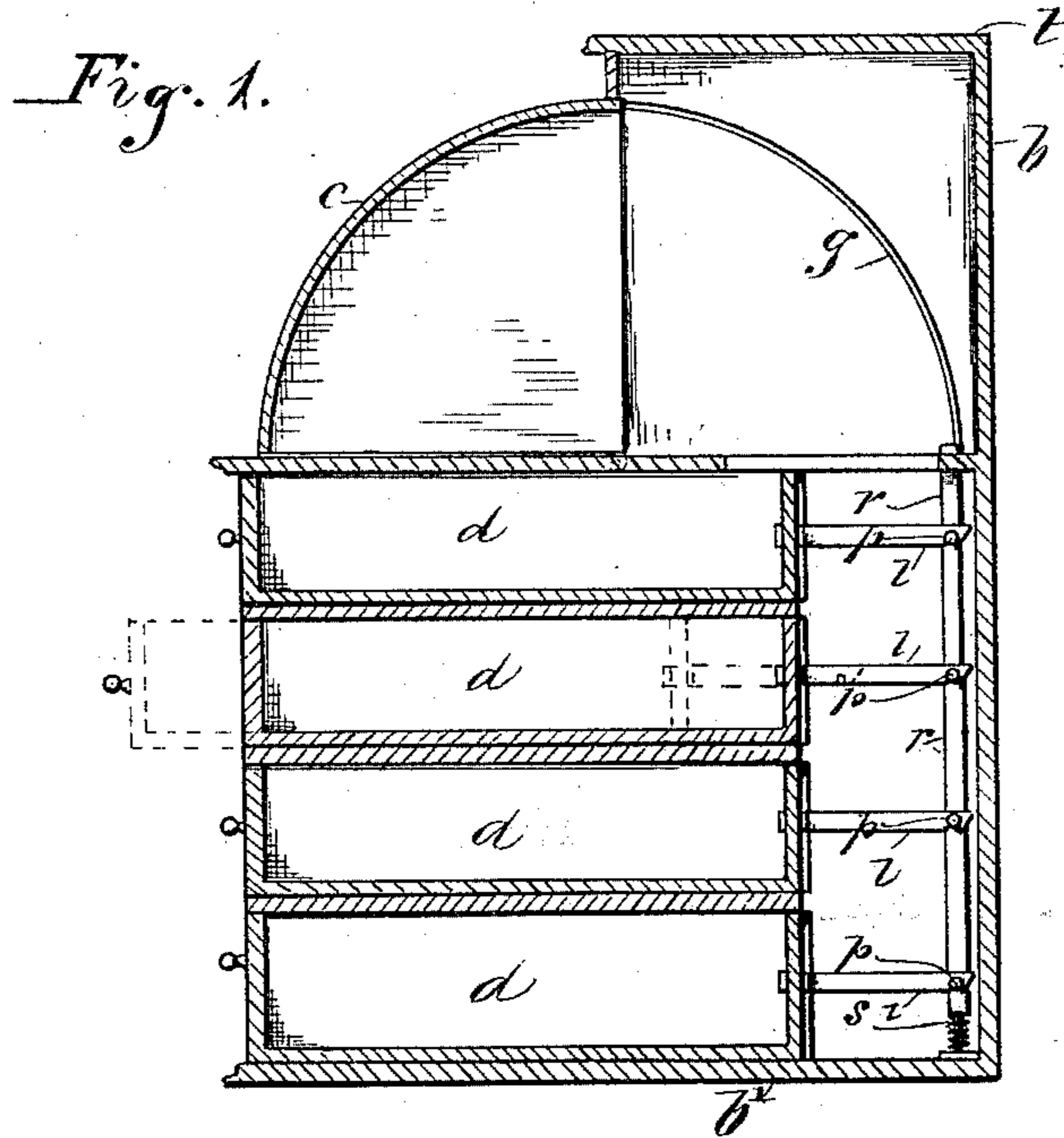


(No Model.)

F. A. COFFIN.
LOCK FOR ROTATING DESKS.

No. 344,943.

Patented July 6, 1886.



WITNESSES.

Jacob W. Cooper

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UNITED STATES PATENT OFFICE.

FRANCIS A. COFFIN, OF INDIANAPOLIS, INDIANA.

LOCK FOR ROTATING DESKS.

SPECIFICATION forming part of Letters Patent No. 344,943, dated July 6, 1886.

Application filed May 29, 1885. Serial No. 167,121. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS A. COFFIN, a resident of Indianapolis, Indiana, have made certain new and useful Improvements in Locks for Rotary Desks, a description of which is set forth in the following specification, reference being made to the accompanying drawings, in the several figures of which like letters indicate like parts.

My invention relates to an improvement in devices for locking a series of drawers in rotary cabinet-desks through a series of fixed hooks attached to the rear portion of the drawers and operating upon stops or pins connected to a vertical spring-rod, and will be understood from the following description.

In the drawings, Figure 1 represents a vertical section of a desk, showing the interior construction and arrangement of parts, including my device. Fig. 2 is a vertical section of one of the drawers on the line yy , Fig. 3; and Fig. 3 is a horizontal section of one of the drawers on the line xx , Fig. 2.

In detail, t is the top, b is the back, and b' the base, of the desk-frame.

c is a flexible curtain, made of slats suitably jointed together, adapted to move in grooves g in the sides of the top, one of the grooves being indicated by the line in Fig. 1. The curtain c , when thrown over to the front, rests upon the table-top, and is shown in that position in Fig. 1. When it is thrown backward in the circular grooves g , the back part of this curtain strikes against the vertical rod r , which has a spring, s , coiled around the shouldered portion near the bottom end, which end enters an opening in the base of the desk. At suitable distances along this rod are driven pins p , which are intended to engage with the hook of the latch l , fastened to the inside end of each one of the drawers. These pins p are driven into this rod so as to be at right angles to the line of these latches, the end of the latches being beveled, so that when it presses against the pin p they will depress the spring-rod as the drawer is pushed inward, so that the pin will pass the point of the hook and enter the notch of the latch, being forced up into such notch by the action of the spring s , locking the drawers. When the curtain c is thrown over back, its rear end will press and

rest upon the top of the rod r , forcing it downward and freeing the pins p from engagement with the notches of the latch l , thus unlocking the drawers, and any one of them may be opened at pleasure. When the desk is to be closed and the curtain is drawn forward, its weight being lifted from the rod r , the elasticity of the spring s immediately lifts this rod with its pins, thus disposing them in position to again engage with the latches l as the drawers are pushed inward.

In Figs. 3 and 4 is shown the peculiar construction of the hook or the latch l and its method of attachment to the rear of the drawer. The outside of this hook is plain, as shown in Fig. 3, while the opposite side is provided with small lugs 1 and 2, forming a groove or channel between them, fitting closely the sides of the end piece, e , of the drawer. This latch is made of cast-iron, and is put in place when the drawer is made, a small opening being made in the side of the end piece to allow it to be fitted in. This construction makes the hook solid in the drawer, and being smooth on one side does not interfere with the operation of the drawer at all, and this smooth side of the latch fits closely against the inside of one of the sides of the drawer, as shown in Fig. 3, so that in effect the hook is as solid as if it were an integral portion of the drawer and cannot get out of place, and all play or lost motion or liability to come loose, and thus avoid engagement with the stops on the rod, is absolutely prevented.

I am aware that vertical rods having stops or hooks connected thereto, for the purpose of engaging with hooks or openings in the drawers of a desk, the rod operated by a spring from the under side, are not new, and do not broadly claim the same as my invention; but in all of these devices the engagement of the hook and catch has been in a different direction and by devices differently constructed from the one shown.

In my device, as will be seen, my latch is firmly attached to each drawer in a peculiar manner, so that the point and notch of the latch pass along the side of the vertical bar and engage with a stop set on the side of that bar at right angles to the line of the hook, thus insuring the certain engagement of the

parts and the secure holding of the latch in one position, and these features constitute my invention.

5 What I claim, and desire to secure by Letters Patent, is the following:

1. The latch *l*, plain on one side and provided with the lugs 1 and 2 on the other, having the channel between them to receive the end board, *e*, between such lugs and in such
10 channel, the same attached to the side of the drawer *d*, in combination with such drawer, substantially as described.

2. The vertical rod *r*, provided with the spring *s*, secured upon the bottom thereof,
15 having pins *p* arranged at suitable distances, to engage with the notches of the latches *l* at

right angles to the line of said latches, said latches secured between the end board, *e*, and the side of the drawer *d*, and provided with lugs 1 and 2, the flexible curtain *c*, adapted to
20 slide in grooves *g*, formed in the sides of the top *t*, and to press down the rod *r*, thus freeing the pins *p* from engagement with the hooks of the latches *l*, when said curtain is allowed
25 to rest on the top of said rod, all combined substantially as described.

In witness whereof I have hereunto set my hand this 13th day of May, 1885.

FRANCIS A. COFFIN.

Witnesses:

C. P. JACOBS,

W. E. BARTON.