H. W. COTTRELL.

DRAWER LOCKING MEANS.

APPLICATION FILED JUNE 3, 1918.

1,299,302.

Patented Apr. 1, 1919.

2 SHEETS—SHEET 1.

FIG. 1.

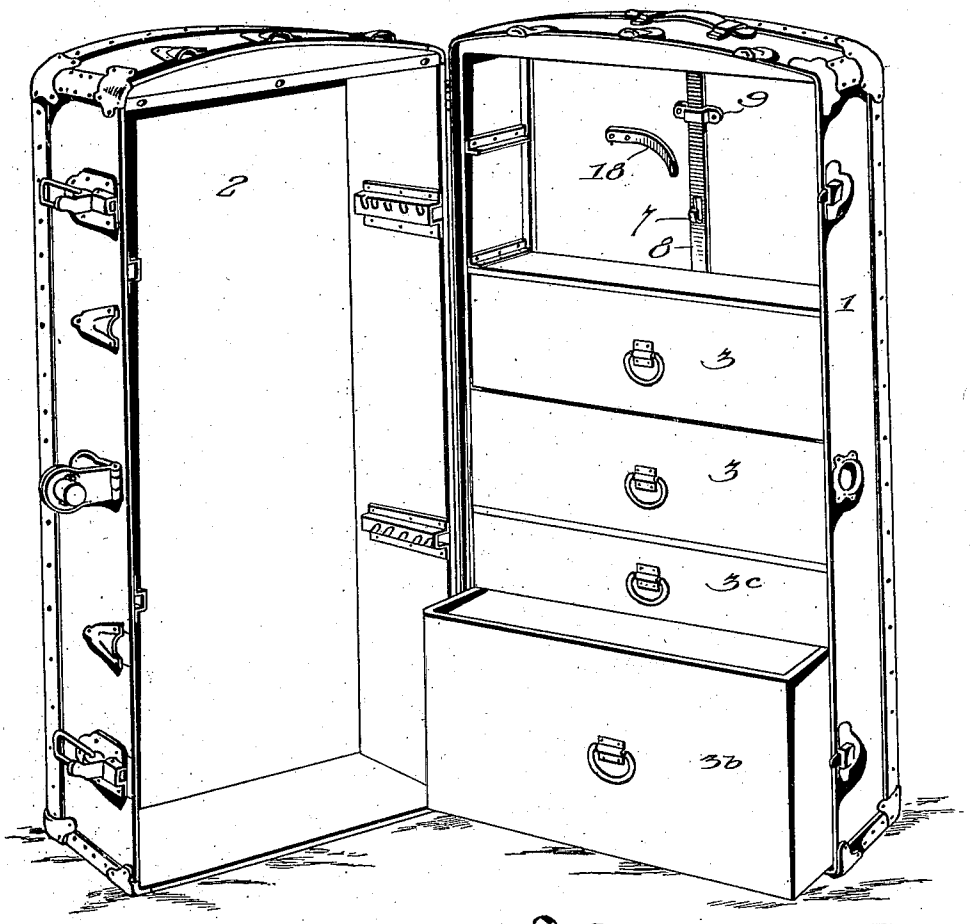


FIG. 2.

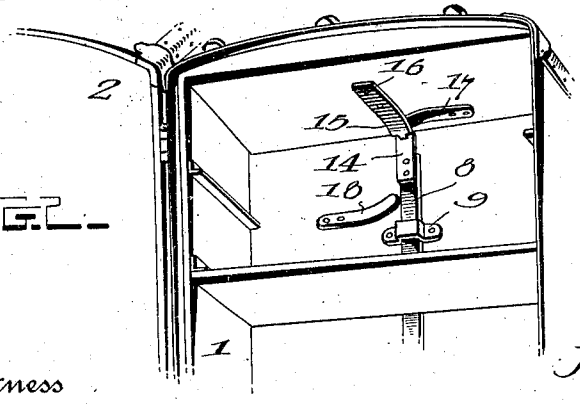
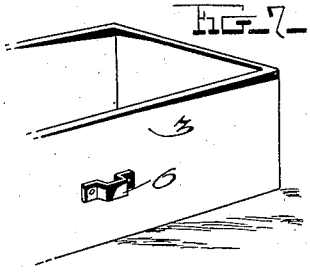


FIG. 7.



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2 SHEETS—SHEET 2.

FIG. 3.

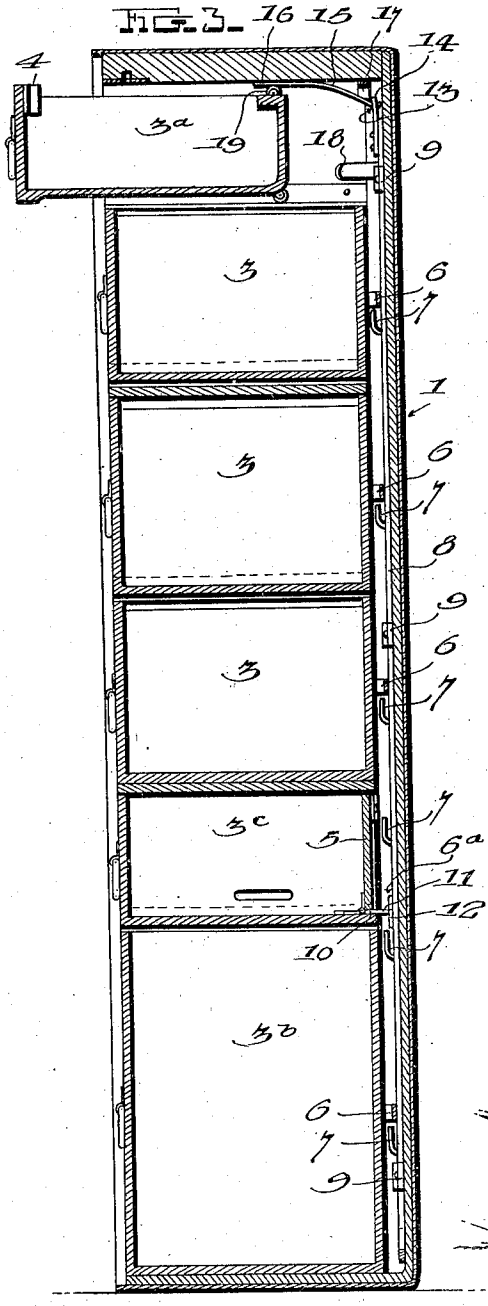

FIG. 4.

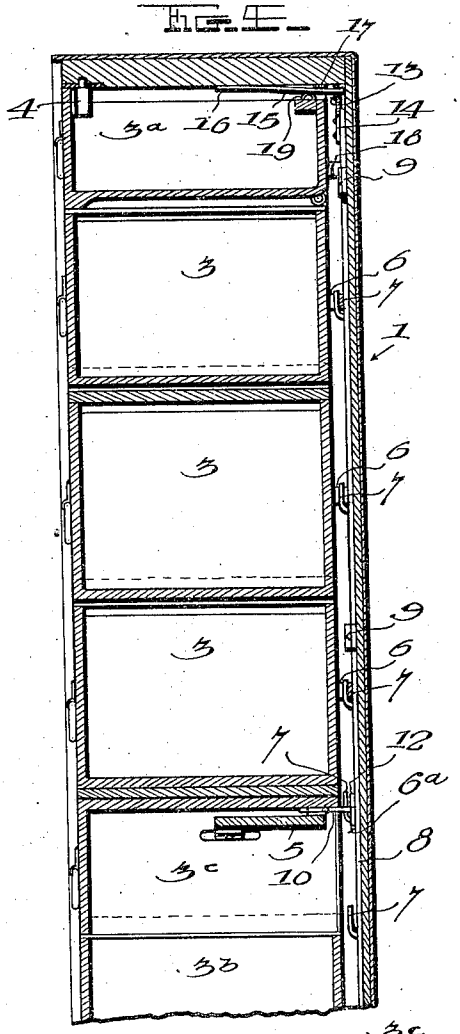

FIG. 5.

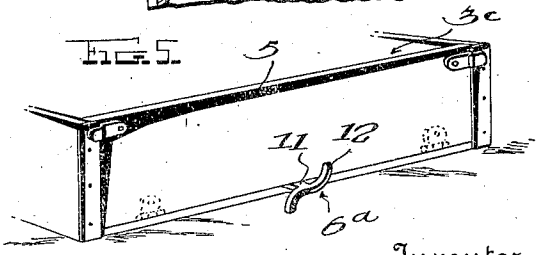

FIG. 6.

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UNITED STATES PATENT OFFICE.

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DRAWER-LOCKING MEANS.

1,299,302. Specification of Letters Patent. Patented Apr. 1, 1919.

Application filed June 3, 1918. Serial No. 237,957.

To all whom it may concern:

Be it known that I, HENRY W. COTTRELL, a citizen of the United States, residing at Richmond, in the county of Henrico and State of Virginia, have invented certain new and useful Improvements in Drawer-Locking Means; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has for its principal object to provide an improved and simplified construction for locking and releasing a plurality of drawers by the movement of one. The invention is particularly well adapted for use on wardrobe trunks and in this connection, a further object is to provide for the locking of an invertible drawer when in either normal or inverted position, said drawer being adapted to be inverted for the purpose of accommodating a hat or other article placed in the drawer below and of such size as to project above the same.

With the foregoing objects in view, the invention resides in the novel features of construction and unique combinations of parts to be hereinafter fully described and claimed, the descriptive matter being supplemented by the accompanying drawings which form a part of this application and in which:

Figures 1 and 2 are perspective views of a wardrobe trunk embodying the improved drawer locking means;

Fig. 3 is a longitudinal section of the trunk with the drawers in released position;

Fig. 4 is a similar view with the drawers locked in closed position;

Fig. 5 is a perspective view of the invertible drawer and its double locking hook;

Fig. 6 is a perspective view of the locking hook attached; and

Fig. 7 is a detail perspective of one of the loops and the drawer carrying the same.

In the drawings above briefly described, the numeral 1 designates the bottom section of a wardrobe trunk while 2 has reference to the hinged cover or upper section, the two being of any preferred construction. Slidably mounted in the lower section 1 upon suitable tracks, are a plurality of drawers. The uppermost drawer 3^a is provided with a lock 4 and when secured in closed position, similarly locks the other drawers by the arrangement of parts yet to be described, and also releases the others when it is shifted forwardly to the position depicted in Fig. 3. The lower drawer 3^b is intended primarily as a hat box and the drawer 3^c directly above said drawer 3^b, is capable of being inverted as seen in Fig. 4, in case an unusually large hat or other article is placed in said drawer 3^b and projects above the same. When drawer 3^c is inverted, its rear side 5 may be folded upwardly as illustrated in Fig. 4 to permit free inward and outward sliding without injury to the contents of the drawers.

The drawer 3^b is provided with a loop 6, and the other drawers which are designated by the numerals 3, are provided with similar loops. Since the drawer 3^a is provided with the lock 4, it is not equipped with a loop such as 6, and in view of the fact that the drawer 3^c must at times be inverted, it is provided with a special form of double hook 6^a illustrated most clearly in Figs. 5 and 6. The loops 6 and the hook 6^a all coact with hooks 7 stamped from a locking bar 8 slidably mounted in guides 9 at the bottom of the trunk section 1, all of said hooks 7 facing in the same direction. In order that hook 6^a may properly coact with two of the hooks 7, according to the position of the drawer 3^c, said hook is preferably constructed as detailed in Fig. 6, that is of a metal attaching plate 10 secured to the bottom of the drawer 3^c, a neck 11 integral with and extending from the plate 10, and a T head 12 on the outer end of the neck 11, the ends of said head being bent in opposite directions to engage one hook when the drawer is in its normal position and the next adjacent hook when said drawer is inverted. I provide the double hook 6^a rather than a loop such as 6, since the thickness of the bottom of the drawer 3^c is insufficient to secure one of the loops in place without splitting, it being also impossible to provide one of said loops on the side 5, since this side must at times be folded inwardly and would thus move the loop out of operative relation with the bar 8.

The upper end of bar 8 either has an opening formed directly therein, or such an opening 13 is formed in a short plate 14 riveted to and projecting from said bar. This opening 13 receives therein one end of a spring 15, the other end of said spring being an-

chored at 16 to the end of the trunk which is disposed upwardly when the device is opened. The spring 15 normally inclines downwardly from its anchored end 16 and exerts its tension to lower the locking bar 8 to released position as depicted in Fig. 3, and if desired a second spring 17 may be secured to the trunk end and overlie the spring 15 to exert still more downward stress on the latter. If desired, a third spring 18 may be secured to the bottom of the trunk to force the upper drawer 3^a outwardly as soon as the lock 4 is released.

The upper edge of drawer 3^a is provided with a roller 19 or other preferred shoe adapted to strike the spring 15 when said drawer is closed, whereupon said spring acts as a cam and is raised to the position disclosed in Fig. 4, thus moving the locking bar 8 into engagement with the loops 6 and the hooks 6^a to secure all of the drawers in closed position.

I am aware that numerous kinds of drawer locking mechanisms have heretofore been provided in which the movement of one drawer controls the opening of the others, but it will be obvious that I have greatly simplified and improved the construction of such devices, particularly regarding the combined spring and cam 15 and the double hook 6^a. These features constitute the gist of the present invention and no claim whatever is laid to any of the trunk structure. In fact, it is to be understood that the improved drawer locking means could well be utilized on any form of cabinet or the like in which a plurality of drawers are mounted.

Since probably the best results are obtained from the several details shown and described, they are by preference followed, but within the scope of the invention as claimed, numerous minor changes may well be made.

I claim:

1. In combination with a cabinet and superimposed drawers therein, a locking bar slidable endwise at the inner ends of said drawers and movable upwardly to locking position, locking means on said bar for all of said drawers with the exception of the uppermost, the upper end of said bar having an opening, a flat one-piece spring for coaction with the weight of said bar in shifting the latter downwardly to released position, said spring being received loosely at its rear end in said opening and anchored at its front end to the upper end of the cabinet, said spring inclining downwardly and rearwardly and being located in the inward path of the upper edge of said upper drawer, whereby closing of the latter will raise said spring to similarly raise said bar to locking position, and a lock for said upper drawer.

2. In combination with a cabinet and a plurality of drawers therein, one drawer being invertible, a locking bar for said drawers slidable endwise, a neck secured to and extending from said invertible drawer, said neck having a T head with its ends bent oppositely to form hooks, hooks on said locking bar for coaction with said bent head ends to lock said invertible drawer when in either position, and coacting locking means on said bar and the other drawers.

In testimony whereof I have hereunto set my hand.

HENRY W. COTTRELL.