

J. V. SWANSON.
DRAWER LOCK.
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1,063,844.

Patented June 3, 1913.

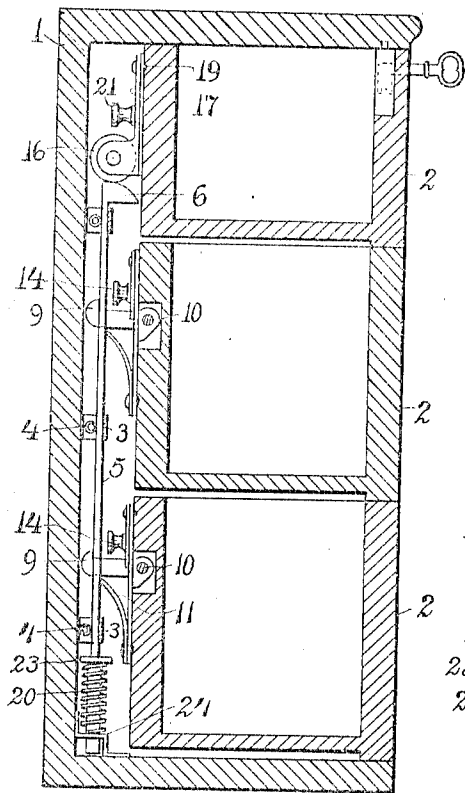


Fig. 1

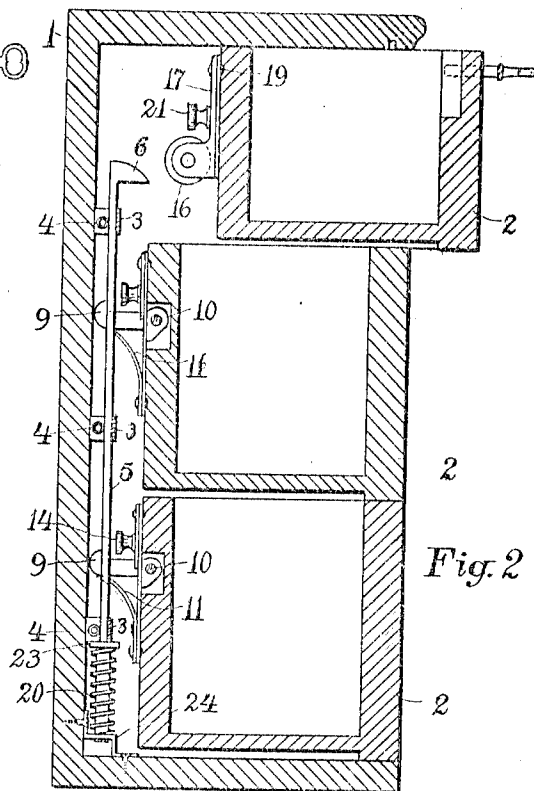


Fig. 2

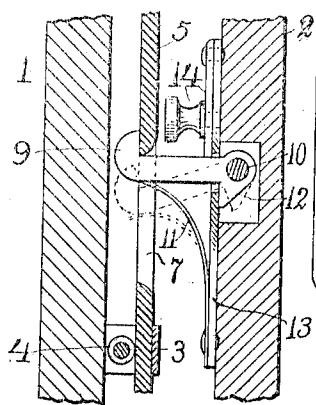


Fig. 3

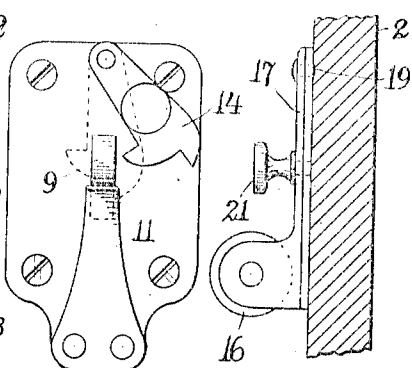


Fig. 4

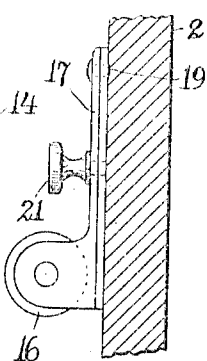


Fig. 5

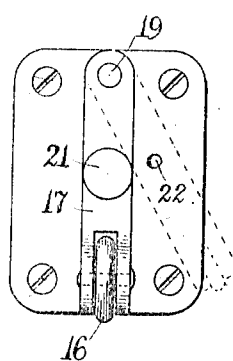


Fig. 6

Witnesses;

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UNITED STATES PATENT OFFICE.

JOHN V. SWANSON, OF BOSTON, MASSACHUSETTS.

DRAWER-LOCK.

1,063,844.

Specification of Letters Patent.

Patented June 3, 1913.

Application filed May 23, 1912. Serial No. 699,223.

To all whom it may concern:

Be it known that I, JOHN V. SWANSON, a citizen of the United States, and a resident of Boston, in the county of Suffolk and Commonwealth of Massachusetts, have invented certain new and useful Improvements in Drawer-Locks, of which the following is a full and exact description.

The object of my invention is to provide improved means for locking a set of drawers against unwarranted opening, by locking one drawer alone; the improvements relating to means whereby the drawers can at will be rendered incapable of being affected by the said one drawer alone, so that any one or all the drawers can be withdrawn with entire independence of the controlling drawer.

The improvements relate to certain details of construction hereinafter set forth.

In the drawings forming part of this specification, Figure 1 is a side sectional elevation of a set of drawers embodying my improvements, the same being shown as locked in position. Fig. 2 is a similar view, but showing the top drawer partly open and the other drawers unlocked. Fig. 3 is a sectional detail view on a larger scale, of the drawer locking device. Fig. 4 is a face view of parts thereof. Fig. 5 is a side view of the member carried by the top drawer for actuating the locking device. Fig. 6 is a face view of the same.

The case 1 carrying the drawers 2, which are shown as three in number, has fastened to the inner surface of its back three stirrups 3 carrying friction rolls 4. Between said rolls and stirrup-fronts is slidably located a locking bar 5 having an arm 6 at its upper end, and two slots 7 at intermediate points. (Fig. 3.) Into said slots the hooks 9 reaching from the backs of the two lower drawers are adapted to enter and to be locked therein by the engagement of the hooks with the upper ends of the slots, each hook being pivotally held by a drawer at 10, and resiliently pressed upward by a leaf spring 11. When a drawer is pushed in to its limit, its hook is depressed by the meeting of its rounded end with the rounded edge of the slot, until the hook is snapped upward by its spring into engagement with the rear surface of the bar. Each hook is held from rising above its normal horizontal position by means of a lug 12 contacting with the inner face of the plate 13, as shown

in Fig. 3. Should it be desired to have any one of the drawers capable of being pushed into place without its locking, its hook or latch 9 is pressed downward to the position shown in dotted lines in Fig. 3, and secured there by the detent 14; Fig. 4 showing the normal position of said detent in full lines, and its locking position in dotted lines. Thus fastened down, the hook is incapable of engaging the upper end of its slot, and its associated drawer is entirely free to be shut and opened. This is especially valuable where one drawer alone of the two lower ones is to be freely movable, while permitting the other to be under the locking control of the top drawer.

For the control of the lower drawers by the topmost one, the latter is provided with an antifriction roll 16 rotatably supported by the plate 17 pivoted at 19 to swing laterally, as shown in Figs. 5 and 6. When this drawer is pushed in to its limit, said roll rides up on the arm 6 and depresses the locking bar 5, the latter being resiliently supported by a helical spring 20 surrounding its lower extremity. By unfastening the thumb screw 21, and swinging the plate 17 to one side, as shown in dotted lines in Fig. 6, the roll 16 will escape the arm 6 and the locking bar will remain elevated and its slots too high for the hooks 9 to engage the upper ends thereof. The thumb screw 21 being entered into a hole 22 at the proper place to hold the swinging plate and its roll thus laterally displaced, all three of the drawers are as free as those of an ordinary case of drawers. With the roll 16 in its normal position, the closing of the topmost drawer depresses the locking bar so that the other drawers will be automatically locked when they also are closed, and will be released when the top drawer is opened more or less. If either of the lower drawers has its hook fastened down as above described, then it will be unaffected by the action of the top drawer, while the other drawer whose hook is normal will be automatically locked and released by the movements of the top drawer. The spring 20 abuts between the shoulder or collar 23 fixed on the locking bar 5, and the seat 24 through which the extremity of said bar freely slides.

It is, of course, evident that each drawer must be entirely withdrawn before its hooks or its roll can be altered as above set forth.

It is a great bother to have the drawers

always automatically locked whenever the top draw is closed, as in all the other self locking cases with which I am acquainted, as it so often happens that it is desirable thus to shut the drawers to keep out dust and chips—when used in a shop for which I have especially designed it,—and yet any one of them must be free to be opened on the instant in order to get at some tool contained therein. My arrangement is consequently of considerable value, both in having all the drawers free of control at a time, and also in having any one of them free and the others adapted to be automatically locked.

What I claim as my invention and for which I desire Letters Patent is as follows, to wit:—

1. A case having a plurality of drawers slidable therein, in combination with a locking device carried by each of the lower drawers, a vertically slidable locking bar adapted when depressed to engage said locking devices, a plate pivoted to the rear of the topmost drawer to swing in a transverse vertical plane, an anti-friction roll carried by said plate and adapted, when the plate is hanging in its normal position, to engage the upper end of said bar and depress the

same when the topmost drawer is pushed back into place, and means for locking said plate both in the herein described position and also in a position wherein it has been swung to one side for avoiding said bar and thereby leaving the lower drawers unlocked.

2. A case having a plurality of drawers slidable therein, in combination with a vertical slidable bar resiliently supported, and having vertical slots corresponding to said drawers, hooks pivotally carried by said drawers and resiliently pressed upward into engagement with the upper ends of said slots, a slotted plate being provided for each hook, and each hook having a lug adapted by engagement with its associated plate to keep the hook from rising too high to enter its slot, and a detent pivoted to each plate above its hook for locking the latter out of engagement with its slot.

In testimony that I claim the foregoing invention, I have hereunto set my hand this 20th day of May, 1912.

JOHN V. SWANSON.

Witnesses:

A. B. UPHAM,

H. L. WHITTLESEY.