T. J. PILLIOD.

LOCK.

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1,368,048.

Patented Feb. 8, 1921.

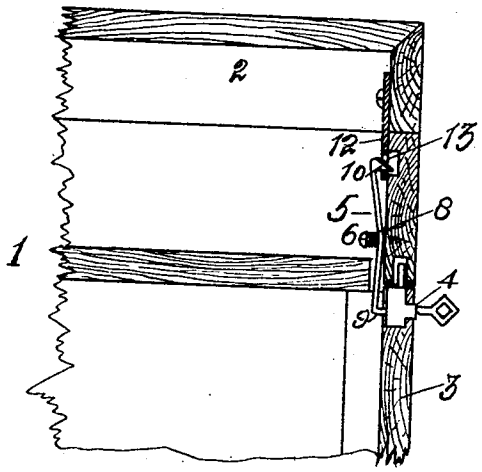

Fig. 3.

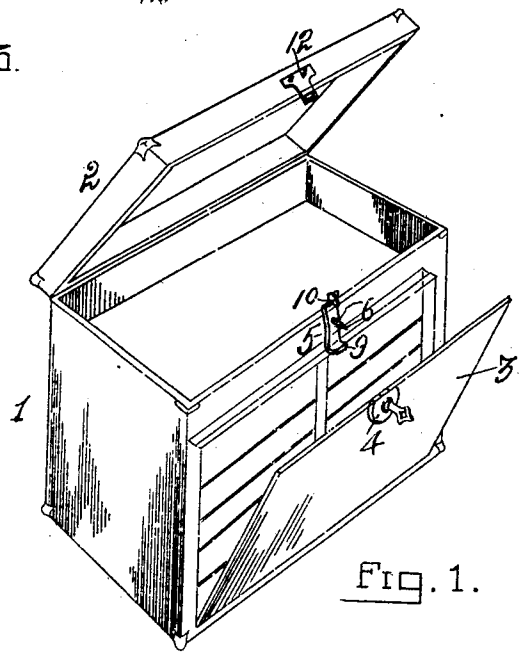

Fig. 1.

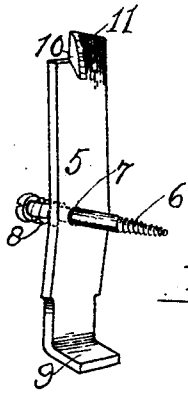

Fig. 2.

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UNITED STATES PATENT OFFICE.

THOMAS J. PILLIOD, OF SWANTON, OHIO.

LOCK.

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To all whom it may concern:

Be it known that I, THOMAS J. PILLIOD, a citizen of the United States, residing at Swanton, in the county of Fulton and State of Ohio, have invented certain new and useful Improvements in Locks; 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, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to a lock especially adapted for use in structures having two closures, and while it is capable of use in a variety of such structures it is, more specifically, intended for use in connection with tool-chests having a front drop-door and a lid. My invention is designed to furnish for the lid of a container of the sort indicated, a fastening device which is controlled by the drop-door and in which the opening or the closing of the drop-door unlocks or locks the lid, thus avoiding the use of two keys, as well as the time and trouble of using the same, also obviating the results of forgetfulness in locking the lid.

To these ends, my invention consists in the devices, construction and arrangement of parts hereinafter described, and illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a chest having upper and lower compartments, the former having a lid, the latter a drop-door, both being open, the upper front part of the chest and lid being shown in skeleton to disclose the position and arrangement of the spring-detent hereinafter referred to and which is shown, on an enlarged scale and detached, in Fig. 2. Fig. 3 is a sectional view of the upper front part of the chest, showing the lid and the door closed and locked.

Like numerals of reference indicate like parts throughout the drawings.

In the drawings, 1 is a tool-chest having an upper compartment provided with a lid 2, and having a lower compartment furnished with sliding drawers or trays and having a front drop-door 3. The drop-door is furnished with a lock and key 4 which may be of any desired sort, and which, since it constitutes no part of the present invention, need not be here further described.

5 is a flat metal bar, slightly bent at or near its middle and secured in vertical position to the inner side of the front wall of the upper compartment by means of a screw 6 which passes loosely through a hole 7 in the bar near its middle. Between the bar and the head of the screw is interposed a coiled spring 8 which holds the bar pressed against the inner side of the upper compartment of the chest. It will be seen that the bar is fulcrumed on the screw and that its upper and lower ends have a limited swing in opposite directions. The lower end of the bar 5 protrudes through the floor of the upper compartment and is turned outwardly, as at 9, in such fashion that the inner plate of the lock 4 will, when the door 3 is closed, press against the part 9. At its upper end the bar has a partly severed portion 10 which is turned forwardly at an angle to the plane of the bar, its front edge being beveled as at 11.

12 is a plate secured to the inner side of the front rim of the lid 2 and having therethrough a hole 13 so positioned that when the lid is closed the hole will coincide with the hook-like projecting part 10—11.

The operation of my device is as follows: When the door 3 is in closed position the metal plate of the lock 4 presses against the outwardly projecting part 9 thus holding the upper part of the plate 5 tilted forwardly. If the lid be also in closed position, the hook-like part 10 will enter the hole 13 thus securing the lid in closed position until the door shall be opened and removed from the part 10. When the door is opened, the bar 5, pressed by the spring 8, will rock on its bent portion, disengaging the part 10 from the plate 12 and permitting the lid to be opened. If the door be closed in advance of the lid, the closing of the lid will cause the lower edge of the plate 12 to strike the beveled edge 11 of the part 10, causing the bar 5 to tilt on the screw 6 so that as the lid passes into closed position the part 10 snaps into engagement with the opening 13. Thus, it will be seen, that when the door and the lid are both closed, the lid will always be locked, and that the lid can be opened only by first opening the door.

Having described my invention, what I claim and desire to secure by Letters Patent of the United States is.—

1. In a device of the described character, a structure having a lid and a drop-door, a spring-controlled detent movable into and

out of operative relation to the lid and adapted for automatic engagement therewith, and means governed by the closing of the door for positioning the detent for such engagement, whereby the locking of the lid may be automatically effected independently of the movement of the door.

2. In a device of the described character, a structure having a door and a lid, a bar fulcrumed between the door and the lid, said bar having at one end a portion which contacts with the door when closed and having at its other end means for engaging the lid when in closed position, the arrangement being such that the closing of the door swings the bar into locking relation with the lid.

3. A device of the described character, comprising a structure having a front drop-door and a lid, a bar fulcrumed between the adjacent free edges of the door and the lid and having at one end a portion which contacts with the door when in closed position and having at its other end means for engaging the lid when in closed position, and a spring arranged to hold the bar disengaged from the lid when the door is open.

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

THOMAS J. PILLIOD.

Witnesses:
MARK WINCHESTER,
JENNIE SAMSEN.