Aug. 24, 1926. 1,597,524

J. A. GUSTAVSON

LOCK

Filed Oct. 9, 1922

FIG. 1

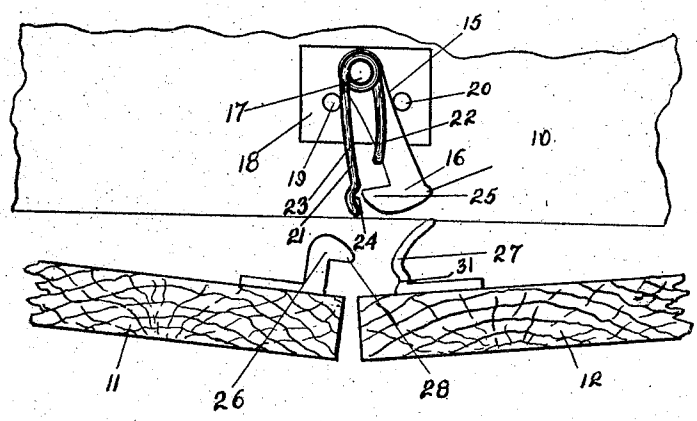


FIG. 2

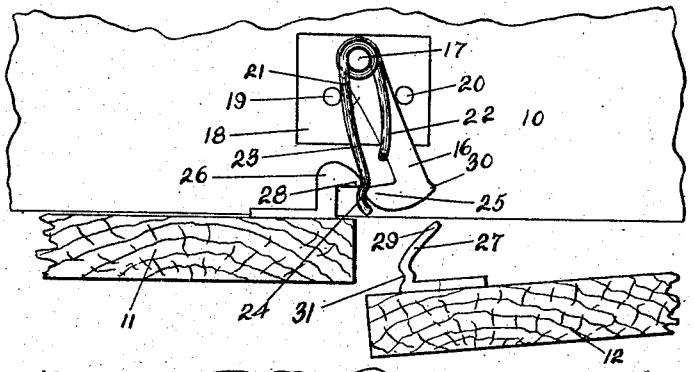
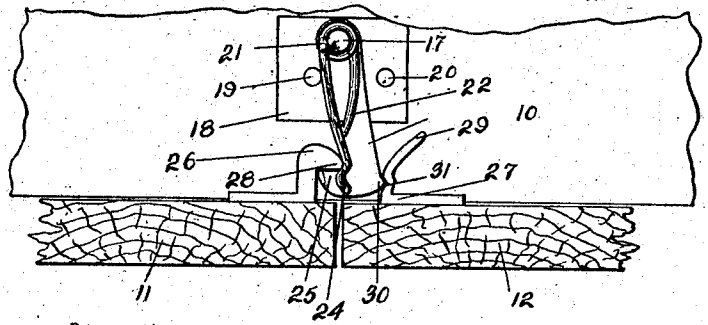


FIG. 3



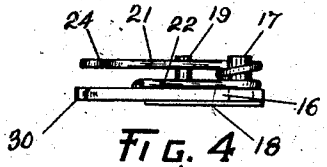


FIG. 4

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LOCK.

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This invention relates to an improvement in locks and more particularly to a combined lock and latch adapted to be used in a cabinet provided with two swinging doors which meet at the center.

In fastening the doors of this type it has been the usual practice to provide a catch for securing the left door and to provide a separate catch or lock for securing the right door to the left door or to the cabinet. The objection to this construction is the fact that while it is easy to open the right door the left door can only be opened by shifting its latch manually and since the left door latches are mounted in various positions, either on one of the shelves, or under one of the shelves, or at the top, or at the bottom, this results in considerable confusion.

The chief object of this invention is to provide a single latch which will yieldingly hold either the left or the right door closed and which will, when both doors are closed, positively lock the left door, so that it cannot be opened until the right door has been opened.

A further object of the invention is to provide a yielding lock which holds the right door closed and which locks the left door closed.

Another object is to provide a lock for the left door which will be actuated by the closing of the right door.

Other objects will appear from a consideration of the following description taken in connection with the drawings which form a part thereof and in which

Fig. 1 is a diagrammatic section showing the position assumed by the parts when both doors are open;

Fig. 2 is a view similar to Fig. 1 the left door, however, being closed;

Fig. 3 is a similar view both left and right doors being closed; and

Fig. 4 is a side elevation of the latch per se.

Referring to the drawings it will be noted that the numeral 10 is used to designate one of the shelves of the cabinet equipped with a latch embodying one form of this invention and having a left door 11 and a right door 12. In the particular embodiment shown, the latch 15 comprises an arm 16 pivoted to a pin 17 which projects from a plate 18. Suitable pegs 19 and 20 also project from the plate 18 parallel to the pin 17 for a purpose to be described later.

A spring 21 which normally tends to hold the arm 16 at all times in contact with the peg 20, as shown in Figs. 1 and 2 is coiled about the pin 17. One leg 22 extends down in front of the arm 16 and functions to hold it normally against the peg 20, as above described, while the other leg 23 of the spring which is provided with a notch or offset 24, substantially in alignment with the hook 25 of the arm 16, normally bears against the peg 19, as shown in Fig. 1.

A hooked plate 26 is mounted on the inner face of the left door 11 and a second plate 27 is similarly mounted on the inner face of the right door 12. The hook 28 of the plate 26 engages the offset 24 of the spring leg 23 so that the spring acts to hold the left door 11 closed (see Fig. 2). When the right door 12 is also closed the curved portion 29 of the plate 27 strikes against the heel 30 of the arm 16 and forces it to swing on its pivot toward the left under the hook 28 of the plate 26, thus locking the left door closed, (see Fig. 3) and holding it so until the right door is opened permitting the arm 16 to resume its normal position in contact with the peg 20. At the same time the heel 30 of the arm 16 enters the notch 31 in the plate 27 and is held there by the acts of the spring leg 22, so that both doors are held closed, the left door positively and the right door yieldingly. Moreover, since the right door is held closed by the inter-engagement of the heel 30 and the notch 31, it obviously follows that the right door will be caught whether the left door be closed or not.

While certain details of construction have been thus disclosed they were selected for the purpose of illustration solely and it will be understood that applicant is not limited to the particular embodiment shown since other embodiments might be made without departing from the spirit and scope of the invention as set forth in the following claims.

I claim:

1. In a cabinet having swinging doors which co-act to close an opening, a latch including a pivoted arm and a spring functioning to hold said arm in a fixed position, a hooked plate on one of said doors adapted to engage said spring when said door is closed, a plate on the other of said doors said second plate serving to shift said arm against the tendency of said spring into engagement with said hooked plate.

2. In a cabinet having swinging doors which co-act to close an opening, a latch including a pivoted arm having a hooked end and a spring functioning to hold said arm in a fixed position, a hooked plate on one of said doors adapted to engage said spring when said door is closed, a curved plate on the other of said doors, said second plate, acting after the first door has been closed, to shift said arm against the tendency of said spring, so that the hooked end of the arm will contact with the hooked portion of said hooked plate to hold said first named door closed positively.

3. In a cabinet having two swinging doors which coact to close an opening, a latch including a pivotally mounted arm, a stop at each side of said arm, a spring, one leg of which yieldingly holds said arm against one of said stops and the other leg of which bears against the other of said stops, a plate on one of said doors which engages the second named leg of said spring whereby said door is yieldingly held closed, and means adapted when the other door is closed, to bear against said pivoted arm and swing it against the action of said spring away from said stop and into engagement with said plate to lock said first door closed.

4. In a cabinet having two swinging doors which coact to close an opening, a latch including a pivotally mounted arm, a stop at each side of said arm, a spring, one leg of which yieldingly holds said arm against one of said stops and the other leg of which bears against the other of said stops, a plate on one of said doors which engages the second named leg of said spring whereby said door is yieldingly held closed and a plate on said second door adapted, when said door is closed, to strike said arm and swing it into engagement with said first named plate to lock said first door closed.

In testimony whereof I have affixed my signature.

JOHAN ARTHUR GUSTAVSON.