Nov. 29, 1960 E. W. NORTH ET AL 2,962,319

CABINET GUIDE AND CATCH ASSEMBLY

Filed Oct. 13, 1958

Fig. 1.

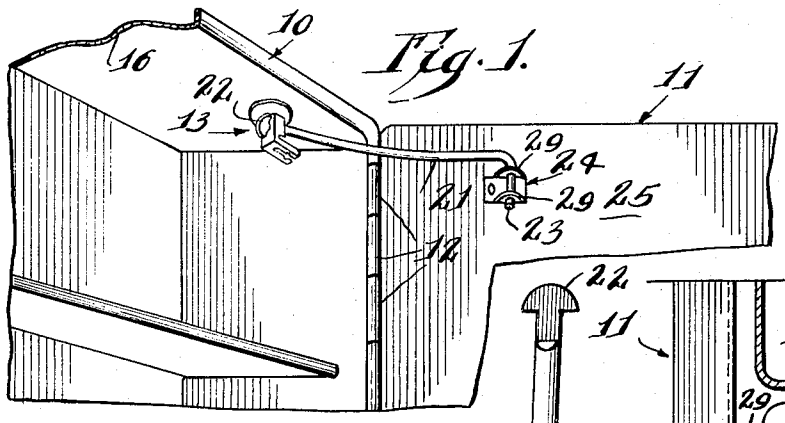


Fig. 3.

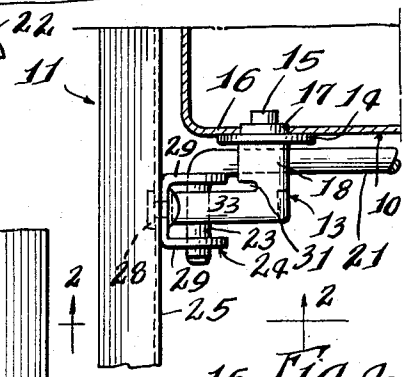


Fig. 2.

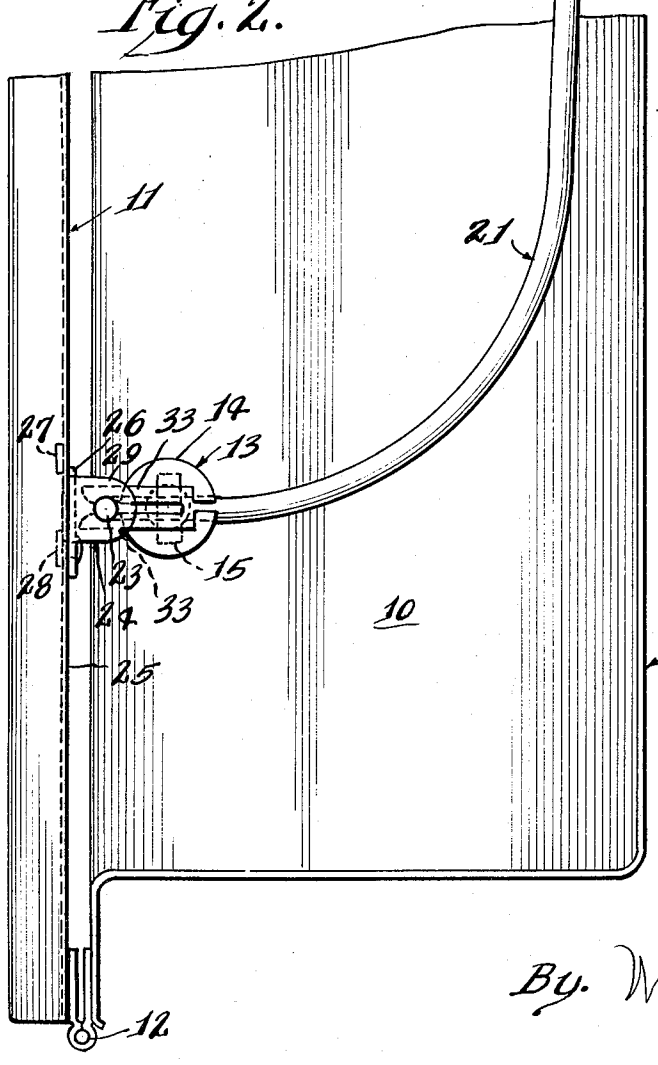


Fig. 4.

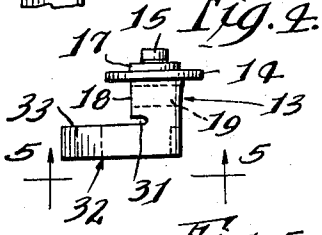


Fig. 5.

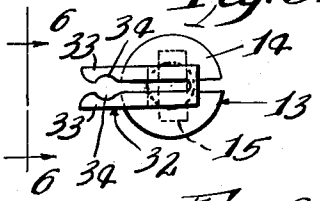
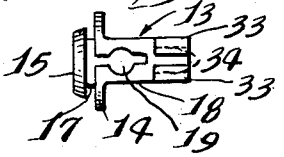


Fig. 6.



Inventors.
Edwin W. North.
Wayne C. Bates.

By. Wilson & Geppert
Attorneys.

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CABINET GUIDE AND CATCH ASSEMBLY

Edwin W. North, and Wayne C. Bates, Rockford, Ill., assignors to National Lock Co., Rockford, Ill., a corporation of Delaware

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5 Claims. (Cl. 292—275)

The present invention relates to a novel guide and catch assembly for controlling the opening and closing of the door of a medicine cabinet or the like.

Among the objects of the present invention is the provision of a novel assembly of a resilient guide and catch member mounted for pivotal or swivel movement in a cabinet, a swivel affixed to the door and an arm pivotally mounted at one end in the swivel and freely slidable through an opening in the guide member and provided with means for limiting the extent of opening of the door, the catch on said guide member adapted to grip and tensionally retain the door in closed position but permit it to be readily opened when the occasion arises.

Another object of the present invention is the provision of a novel assembly comprising a resilient member pivotally mounted in the cabinet and providing a combined guide, slide and a catch for retaining a cabinet door closed, a swivel mounted on the door and an arm connecting these members, said members being so constructed and arranged as to be readily and easily assembled by a snap action.

A further object of the present invention is the provision of a novel guide member and slide having a transverse opening through which projects and is slidably mounted an arm controlling the extent of opening of the door of the cabinet, the guide member and slide being formed of a resilient plastic composition and having means for securely retaining it in the wall of the cabinet but permitting it to swivel therein with movement of the arm.

The present invention further comprehends the provision of a novel resilient catch for engaging and tensionally gripping the pivotal portion of the arm mounted on the door for retaining the latter in closed position.

Another object of the present invention is the provision of a novel swivel on the door for receiving and pivotally mounting one end of the control arm, and novel means for anchoring this swivel on the door.

A further object is the provision of a novel control arm for the door having one end pivotally mounted in the swivel on the door and the other end slidably mounted in the pivotally mounted catch and slide member, the end of said arm extending through said member having a projection for limiting the extent of opening of the door.

Further objects are to provide a construction of maximum simplicity, efficiency, economy and ease of assembly and operation, and such further objects, advantages and capabilities as will later more fully appear and are inherently possessed thereby.

In the drawing:

Figure 1 is a fragmentary view of a medicine cabinet or the like embodying the novel guide and catch assembly and showing the position of the assembly when the door is fully opened.

Fig. 2 is an enlarged fragmentary view of the cabinet with the door closed and showing the relative position of the guide, swivel and rod of the assembly when the door is closed and retained in that position, the view being taken from beneath the assembly and viewed in the direction of the arrows on the line 2—2 of Fig. 3.

Fig. 3 is a fragmentary view in side elevation of the assembly shown in the position of Fig. 2, including the manner of anchoring the swivel in the door and the guide and catch member in the cabinet.

Fig. 4 is a view in side elevation of the disassembled guide and catch member.

Fig. 5 is a bottom plan view of the novel guide and catch, the view being taken in the direction of the arrows on the line 5—5 of Fig. 4.

Fig. 6 is a view in end elevation of the novel guide and catch, the view being taken in the direction of the arrows on the line 6—6 of Fig. 5.

Referring more particularly to the disclosure in the drawing and to the novel illustrative embodiment of the present invention therein disclosed, the novel guide and catch assembly is shown embodied in a cabinet such as a sheet metal medicine cabinet or the like 10 having a door or closure 11 hingedly or pivotally mounted at 12 for swinging movement to open or closed positions.

The novel guide and catch assembly comprises a guide member 13 formed of a resilient or flexible plastic composition, such as nylon, and comprises a radially-slotted base 14, a spaced substantially rectangular anchoring part 15 insertable through the opening and bearing against the exterior surface of the top wall 16 of the cabinet for anchoring the guide member in an opening in this wall, and an intermediate, cylindrical shank portion 17 conformably received and rotatable in the opening in the top wall 16, the base 14 bearing against the interior surface of the wall 16.

The body 18 of the guide member 13 is provided with a keyhole slot 19 extending laterally therethrough to receive one end of a curved arm or rod 21 projecting therethrough, and this end provided with a hook 22 for limiting the arc or extent through which the door 11 may be swung to fully open position. The other end of this arm is bent to provide a depending projection 23 forming a pivotal connection in a swivel or bracket 24 anchored to the interior wall 25 of the door 11.

The swivel or bracket 24 has a base 26 provided with an offset anchoring projection 27 at one end insertable into and through a slot in the wall 25 of the door 11 for retaining therein one end of the base and the other end of this base affixed to the wall 25 by a rivet or other attaching means 28. The bracket 24 has spaced outwardly projecting flanges or tongues 29 each provided with an opening and these openings being aligned and receiving therein the depending projection 23 of the arm 21.

The body 18 of the resilient guide member 13 is recessed or reduced at 31 (Figs. 3 and 4), and below said recess is provided with a slotted catch 32 provided with laterally projecting and elongated flexible arms or bifurcations 33 each recessed at 34 adjacent its outer or free end with the inwardly opening recesses adapted to conformably receive therein and resiliently retain the depending projection 23 on the end of the arm 21 when the door 11 is moved to closed position (Figs. 2 and 3).

When the door is opened, the guide member 13 through which projects and slides the arm 21 is rotated in its mounting in the upper wall 16 of the cabinet 10 by the movement of the arm to permit the door to be opened freely. When the door is fully open as disclosed in Fig. 1, the hooked end 22 of the arm 21 contacts the adjacent face of the guide member 13 which forms a stop or abutment and limits the arc of movement of the door.

The guide member 13 being formed or composed of a resilient or flexible plastic composition, such as Nylon, is highly resistant to wear in its pivotal mounting in the wall 16 of the cabinet 10, in its frictional contact with the arm 21 which is slidable therethrough as it is carried

by the door, and in its resilient arms 33 which form a catch for tensionally gripping the depending projection 23 on the arm 21 and retaining the door 11 in closed position but permitting the door to be opened by a slight pull.

The component parts of the present assembly are detachably mounted by a snap action whereby to greatly facilitate their assembly. Unlike prior constructions, the control arm or rod 21 is not affixed to the swivel 24 on the door 11. The latter without the arm 21 attached is secured to the door by a single rivet or attaching means 28 at one end of the base 26, its other end 27 being offset and readily inserted through and anchored in an opening in the interior wall 25 of the door.

The hooked end 22 of the arm 21 is assembled in the guide member by inserting this end through the keyhole slot 19, and when the assembled arm is rotated through approximately 90°, this hooked end retains it against disengagement. The plastic guide member 13 snaps readily into an opening in the cabinet wall 16 and is freely swivelled therein to permit its contained arm 21 to be freely slidable.

With the guide member pivotally mounted in the cabinet and the swivel attached to the door, as above described, the projecting end 23 of the arm 21 is easily and quickly snapped into the aligned openings in the swivel 24 to thus complete the assembly.

Having thus disclosed the invention, we claim:

1. A guide and catch assembly for the door of a cabinet, comprising a guide and slide member of a resilient composition having a body part provided with a keyhole slot projecting therethrough intermediate its ends, an anchoring projection at one end of said body part for pivotally mounting said member in an opening in the cabinet, the other end of said member provided with spaced resilient arms, a swivel mounted on said door and having spaced flanges each having an opening arranged in vertical alignment, and a curved control arm having a depending projection on one end removably and pivotally mounted in the openings in the flanges of said swivel, said arm being slidable through said slot in the guide member and having a lateral projection limiting the extent of opening of the door, whereby the spaced resilient arms on the guide member are adapted to receive therebetween and tensionally retain the depending projection of the control arm mounted in said swivel when the door is closed.

2. A guide and catch assembly for the door of a cabinet as set forth in claim 1, in which each of said resilient arms has an inwardly opening recess adjacent its free end with said recesses being aligned for receiving and tensionally retaining the depending end of the curved control arm.

3. A guide and catch assembly as set forth in claim 1 in which the projection on the end of the curved control arm is so contoured as to pass through said keyhole slot in one position and retain said control arm against disengagement when the latter is rotated from the said one position.

4. In a guide and catch assembly for the door of a cabinet provided with an opening, a member composed of a resilient composition and provided with a body part having a keyhole slot projecting therethrough intermediate its ends, an anchoring projection on one end of said body part for pivotally mounting said member in the opening in the cabinet, and a catch on the other end of said body part for retaining the door closed, a curved arm having one end slidably mounted in the slot in said member and a mounting on the door of the cabinet comprising a bracket with a horizontal flange having an opening, a depending projection on the other end of the curved arm detachably and pivotally mounted in the opening in said flange, said catch having spaced resilient arms for receiving and tensionally retaining the depending end of the arm when the door is closed.

5. In a guide and catch assembly for the door of a cabinet having a rod for limiting the extent of opening of said door, a guide and slide member therefor comprising a body part having a keyhole slot projecting therethrough intermediate its ends, a substantially rectangular anchoring flange on one end of said body part to anchor the member in the cabinet, a bifurcated arm on the other end of said body part and extending parallel to the axis of said keyhole slot with the bifurcations being spaced apart and flexible and having inwardly opening recesses adjacent the free ends of said bifurcations for receiving and tensionally retaining an end of said rod and holding the door of the cabinet closed.

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