July 26, 1960 A. W. AHLGREN 2,946,612

SELF-ALINING CATCH

Filed Feb. 24, 1958

Fig. 1

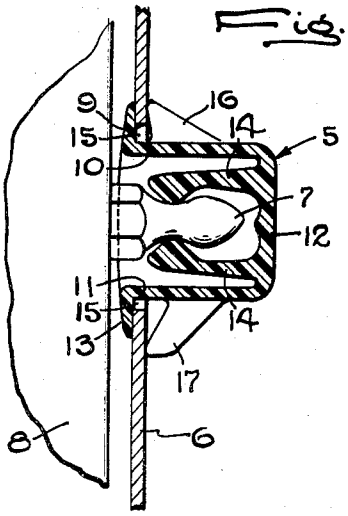


Fig. 2

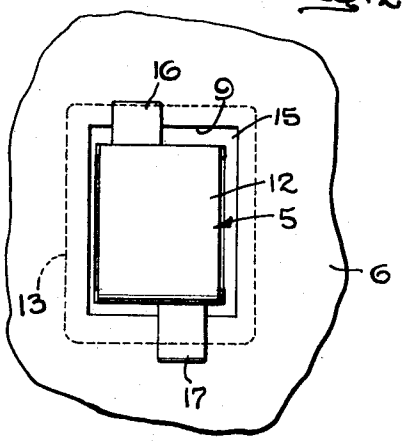
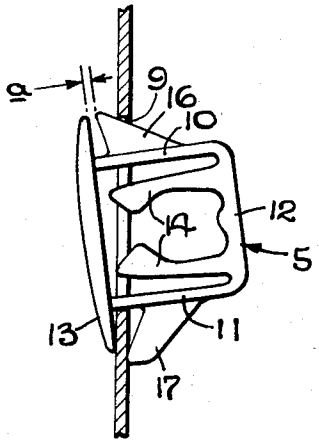


Fig. 3



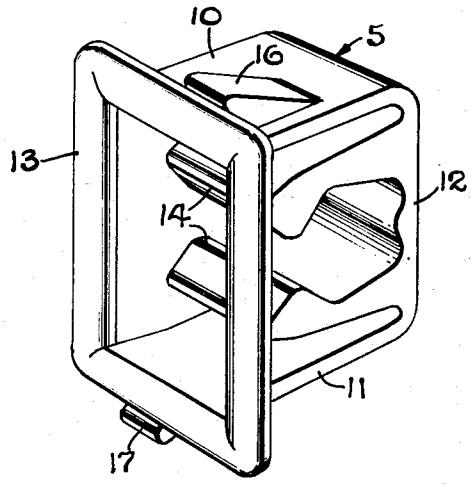


Fig. 4

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SELF-ALINING CATCH

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2 Claims. (Cl. 292—17)

This invention relates to a catch such as may cooperate with a strike to hold a cabinet door closed and, more particularly, to a catch whose body is received in a hole in a panel of the cabinet frame so that the major portion of the catch is behind the panel.

The general object of the invention is to provide a new and improved catch of the above character which automatically alines itself with the strike the first time the door is closed and which, when alined, is held in that position for subsequent closings of the door.

A more detailed object is to make the catch smaller than the hole so the catch may shift laterally relative to the strike and to construct the catch in a novel manner to retain the alined position.

Other objects and advantages of the invention will become apparent from the following detailed description taken in connection with the accompanying drawings, in which:

Figure 1 is a fragmentary vertical sectional view of a cabinet employing the novel catch of the present invention.

Figure 2 is a rear view.

Figure 3 is a side view showing the manner of mounting the catch.

Figure 4 is an enlarged perspective view of the catch.

As shown in the drawings for purposes of illustration, the invention is embodied in a catch **5** which is mounted on a panel or wall **6** of a cabinet and which coacts with a strike **7** mounted on the cabinet door **8** to hold the door closed. Preferably, the catch is formed as a single molded piece of resilient plastic material, such as nylon, and is received in a rectangular hole **9** in the panel **6**.

Herein, the catch **5** is composed of spaced parallel legs or walls **10** and **11** spanned at one end by a crosspiece **12** which with the legs forms a generally U-shaped body. The opposite or outer ends of the legs are joined by a rectangular flange **13** which projects laterally outwardly from the legs to overlap the panel **6** around the hole **9**, the body portion of the catch being disposed behind the outer side of the panel. Projecting forwardly from the crosspiece **12** are two spaced spring fingers **14** which are formed integrally with the crosspiece and which receive the strike **7**. The latter is in the form of a rounded head on the end of a screw (not shown) which is threaded into the door **8**.

In accordance with the present invention, the catch **5** is constructed in a novel manner so that it may shift within the hole **9** so as to aline itself automatically with the strike **7** the first time the door **8** is closed and is arranged to retain this alined position during subsequent opening and closing of the door. To these ends, the spacing between the side walls **10** and **11** is substantially less than the width of the hole **9** so that there are clearances **15** between these walls and the ends of the hole and means is provided for frictionally gripping the panel **6** around the hole to hold the catch in any selected position within the hole.

In the present instance, the means for gripping the

panel **6** includes fingers **16** and **17** which project laterally outwardly from the legs **10** and **11** respectively and are disposed behind the flange **13**. The spacing between the fingers and the flange is correlated with the thickness of the panel so that the latter is frictionally engaged in front by the flange and in back by the fingers. Preferably, as shown in Fig. 2, the fingers are less than half the width of the legs **10** and **11** and, for a purpose to be described later, one finger is disposed along one side of the catch body while the other is adjacent the opposite side. The fingers extend out at least as far as the flange and, herein, the finger **17** projects beyond the flange while the finger **16** is substantially even with the flange.

In order to increase the friction between the catch and the panel **6** so that the catch stays in the adjusted position, the flange **13** is inclined rearwardly and the normal longitudinal spacing *a* (Fig. 3) between the outer edge of the flange and the tips of the fingers **16** and **17** is slightly less than the thickness of the panel. When the catch is in place, the flange and fingers are flexed and press against opposite sides of the panel to grip the latter frictionally.

With the foregoing construction, the catch is mounted on the panel **6** by first tilting the catch and inserting it into the hole **9** so that the panel is received between the flange **13** and the longer finger **17** along one edge of the hole as shown in Fig. 3. Because the finger **17** projects beyond the flange, the spacing between the two at this angle of the catch is as great as the thickness of the panel and the catch, therefore, slips easily into this position. Next, the upper edge of the catch, that is, the portion of the flange opposite the shorter finger **16**, is pushed inwardly. Because the fingers are offset from each other, the catch twists slightly to the left as viewed in Fig. 2 upon the application of pressure. Such pressure also flexes the walls **10** and **11** of the catch so that, in the twisted position of the latter, the finger **16** passes through the hole **9**. Continued pushing flattens the flange to widen the space between it and the tip of the finger **16**. As a result, this finger snaps in behind the panel and, when the pressure is released, the flange and the fingers grip the panel. The catch then may be straightened in the hole.

When the catch is mounted, the spring fingers **14** may not be in vertical alinement with the strike **7**. Should that be the case, the strike will engage only one of the fingers and, as it enters between the fingers, the strike effects a camming action on the finger it engages. This slides the catch up or down as the case may require to aline the catch with the strike. Such sliding is permitted by the hole **9** being larger than the catch body. Once the catch is alined, it is retained in that position by the frictional gripping of the panel **6** by the flange **13** and fingers **16** and **17**.

I claim as my invention:

1. A catch adapted to be mounted in a panel having a hole of predetermined width, said catch being made of a resilient material and comprising a body having two walls laterally spaced apart a distance less than the width of said hole and adapted to be received in the hole, latching means supported by said body, a flange projecting laterally outwardly from one end of each wall and overlapping said panel, a first finger projecting laterally outwardly from one of said walls with its outer end spaced behind said flange a distance less than the thickness of said panel, and a second finger projecting outwardly and forwardly from the other of said walls and terminating at its outer end in a tip spaced behind said flange a distance less than the thickness of said panel, the spacing between said flange and the inner ends of said fingers being greater than the thickness of the panel and said tip being disposed laterally outwardly beyond said flange

to cooperate with the latter in defining an opening wider than the thickness of said paid panel to permit the panel to enter between the flange and the second finger.

2. A catch adapted to be mounted in a panel having a hole of predetermined width, said catch being made of a resilient material and comprising a body having two walls laterally spaced apart a distance less than the width of said hole and adapted to be received in the hole, latching means supported by said body, a flange projecting laterally outwardly from one end of each wall and overlapping said panel, a first finger disposed behind said flange and projecting laterally outwardly from one of said walls, said finger being substantially narrower than and disposed to one side of the center of said one wall, and a second and similar finger projecting outwardly from the other wall and disposed on the opposite side of the center of said other wall whereby the two fingers are offset from each other, said fingers being spaced behind said flange a distance correlated to the thickness of said panel whereby the fingers and the flange frictionally grip the panel and hold the catch in a selected position in said hole.

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