Nov. 10, 1931. W. L. CLARK 1,831,588

FASTENING DEVICE

Filed Dec. 5, 1929

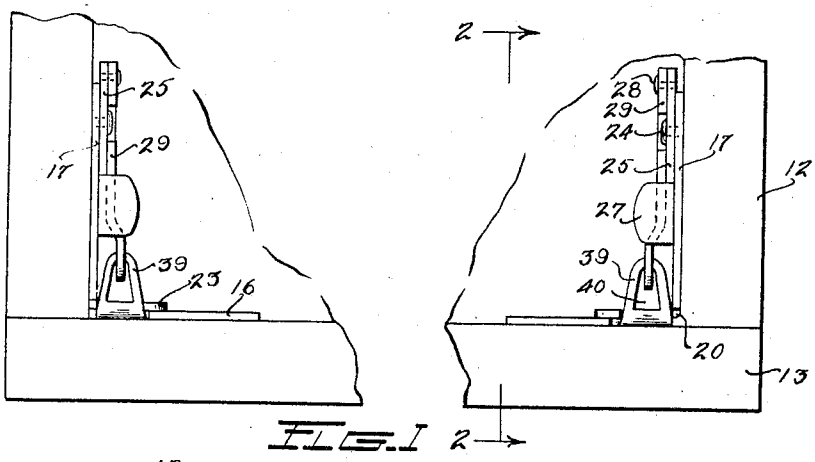


FIG. 1

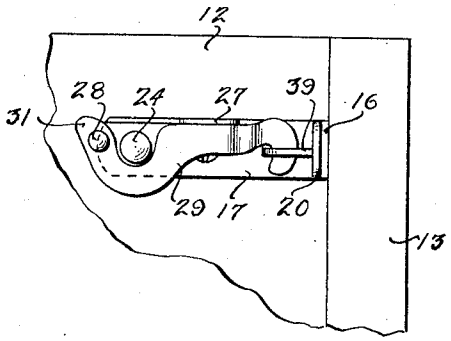


FIG. 2

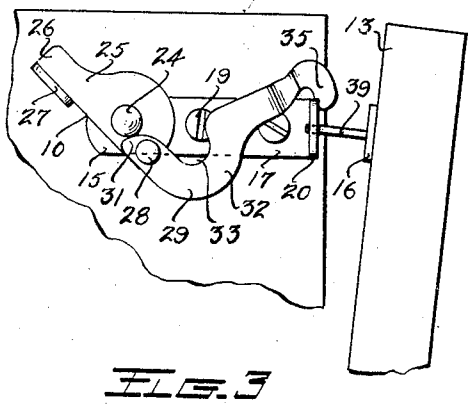


FIG. 3

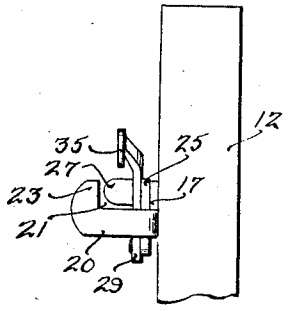


FIG. 4

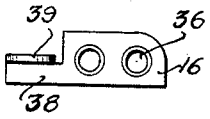


FIG. 5

Inventor

Wycliffe L. Clark

By Clarence A. Walker

His Attorney

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UNITED STATES PATENT OFFICE

WYCLIFFE L. CLARK, OF JAMESTOWN, NEW YORK

FASTENING DEVICE

Application filed December 5, 1929. Serial No. 411,843.

This invention relates to an improvement in fastening devices and more particularly to one of the type wherein an extendible hook element engages an eye element.

In its preferred embodiment this invention is directed to the provision of a latching member capable of engaging and securing a cover against both vertical and lateral movement.

While it is true that many fastening devices of this general class are now in use, it is believed none of these structures are adapted to accomplish that to which the present invention is directed, namely, securing covers of any size against movement in either a horizontal or vertical direction.

Devices of this general class are frequently used to fasten casket covers and drop fronts therefore and when thus employed must be capable of preventing any lateral play of the cover or drop which, when said casket is moved about, is likely to occur.

The principal object of this invention lies in the provision of a device of this class by which both lateral and vertical movement of a receptacle cover is prevented.

Another object of this invention lies in the provision of a device of this class which, when operated to secure a cover or drop front upon a receptacle, will lock itself against inadvertent opening which may occur by reason of mishandling of the receptacle.

A further object of this invention lies in the provision of a device comprised of few working parts which may be readily installed without previous preparation of receptacle for the installation of said device.

Other and further objects of the invention will appear from a consideration of the following specification which is taken in conjunction with the accompanying drawings, and in which

Fig. 1 is a fragmentary plan view showing one modification of this invention in position of use to join a drop front to a receptacle;

Fig. 2 is a fragmentary sectional view taken substantially on the line 2—2 of Figure 1 showing the device in engaged position;

Fig. 3 is a view taken in the same plane as Figure 2, showing the latching device disengaged from the drop front;

Fig. 4 is an end view of the latching device; and

Fig. 5 is an elevation of the hook member which is attached to the drop front.

Referring to the drawings and more particularly to Figures 1 and 3, this device, generally indicated by the reference numeral 10, is shown mounted upon the end wall of a receptacle 12 and adapted to secure a cover or drop front indicated at 13.

The device 10 is comprised of two co-acting elements, namely, engaging element 15 and eye element 16. The plate 17, forming part of the engaging element 15, is formed with openings by which it is secured to the wall 12 through the use of screws 19. The right angle flange 20 of the plate 17 is formed with a vertical recess 21 which is defined by the end of the plate 20 and shoulder 23.

Secured by a pivot pin 24 upon the end of the plate 17, remote from the flange 20, is the latch actuator 25. The member 25 is formed with an arm 26 which is terminated on one edge by a flange 27 by means of which the device may be operated from one position to the other. The actuator 25, through the pin 28, has pivotally joined thereto a hook 29. The end of the hook, adjacent the pin 28, is formed with a sloped shoulder 31 which, when said hook is in inoperative position, (see Figure 3) engages the pin 24 and prevents disarrangement of said hook relative to said actuator. The body portion 32 of the hook 29 is shaped to provide a recess 33 into which, when the device is actuated, the pin 24 is adapted to move (see Figure 2). Continuing from the body portion 32, the hook is formed with a laterally offset engaging finger 35.

The eye element 16 is provided with openings 36 through which screws (not shown) pass to secure said element to the front wall 13. A projecting portion 38 extends from one end of the element 16 and is formed with an angularly disposed tongue 39. An opening 40 is made in the tongue 39 by which it

is adapted to be engaged by the finger 35 of the hook 29.

After securing the element 15 to the wall 12, and the element 16 to the wall 13, said last wall may be moved into proximity with the wall 12 to substantially the position shown in Figure 3 of the drawings. The arm 26 is moved in a clock-wise direction to lower the hook 29 and cause the finger 35 to enter the opening 40 in the tongue 39. When the tongue 39 is engaged by the finger 35, the arm 26 is further rotated in a clock-wise direction, thus causing the pivoted end of the hook 29 to move inwardly, drawing with it the element 16 and wall drop 13. When the arm 26 is moved until the flange 27 thereof strikes the hook 29, the elements 15 and 16 of the device have been brought into complete engagement with each other.

Attention is directed to the fact that through the latter part of movement of the arm 26, by which to cause engagement of the element 16 with the flange 20 and finger 35, there is required a certain amount of force for the reason that the pin 28 must pass beyond a center line of the pin 24 and finger 35. Once past said center line the spring strain placed upon the elements prevents inadvertent disengagement of the finger 35 from the tongue 39. However, to release the wall drop 13, the arm 26 is moved in a counter clock-wise direction and the elements again assume the position shown in Figure 2 of the drawings.

Further attention is directed to the fact that when the elements 15 and 16 are drawn into close engagement with each other, the portion 38 of the element 16 abuts the flange 20 and since the tongue 39, at its base, is approximately the width of the recess 21, lateral movement of the wall 13 relative to the wall 12 is impossible. Should this invention be applied to fasten a cover on a receptacle it would then prevent horizontal as well as vertical movement of the cover in a manner identical with that described in the present showing.

While applicant has shown and described but one modification of this invention, he does not intend to be limited thereto since it is obvious that other modifications or adaptations may be made without departing from the spirit and scope of the invention as set forth in the hereunto annexed claims.

Having thus set forth my invention what I claim as new and for which I desire protection by Letters Patent is:

1. A fastening device comprising in comprising in combination an engageable element, an angularly disposed tongue on said element, walls defining an opening in said tongue; with an engaging element having a recessed flange in which to receive said tongue, an actuator, a hook mounted on said actuator and adapted to enter the opening in said tongue whereby to secure said elements together.

2. In a fastening device, a flanged plate, walls defining a recess in the flange of said plate, a hook, an engageable element, and means adapted to align said element with said flange, said means being engaged by said hook.

3. In a fastening device, a flanged plate, an actuator mounted on said plate, a hook pivotally joined to said actuator, a shoulder formed adjacent the pivotal end of said hook and adapted to prevent full rotation of said hook relative to said actuator, an engageable element, and co-acting means on said engageable element and said plate adapted to align said engageable element for engagement with said hook.

4. In a device of the class described, a flanged plate, walls defining a recess in the flange of said plate, an engageable member, a wedge shaped tongue on said engageable member, said tongue being adapted to closely engage the walls of said recess by which to prevent lateral movement of said engageable member relative to said plate.

5. In a device of the class described, an engageable element having an angularly disposed wedge shaped tongue thereon, a flanged plate supporting an engaging element, and means on said plate adapted to engage said tongue and prevent lateral movement thereof relative to said plate when said engageable member has been actuated.

6. In a device of the class described, a flanged plate, an actuator pivotally mounted on said plate, a hook pivotally joined to said actuator, an engageable element, a tongue projecting at right angles to said element, means on said plate adapted to receive said tongue and further means on said tongue adapted to co-act with said plate means whereby to align said engageable element with said hook.

7. In a fastening device, a flanged plate, an actuator mounted on said plate, a hook pivotally joined to said actuator, a shoulder formed adjacent the pivotal end of said hook, means constituting a pivot for said actuator and engageable by said shoulder, said means being adapted to prevent full rotation of said hook relative to said actuator.

In testimony whereof I have affixed my signature.

WYCLIFFE L. CLARK.