

Sept. 15, 1925.

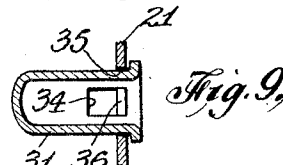
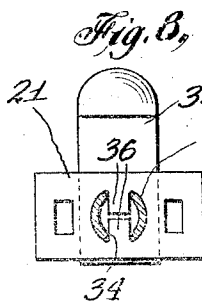
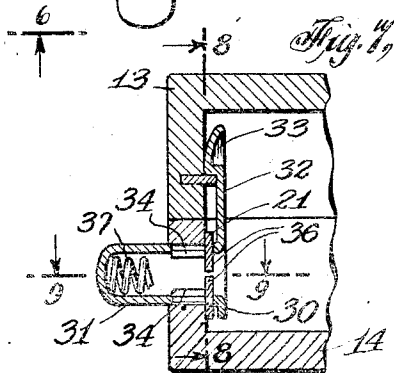
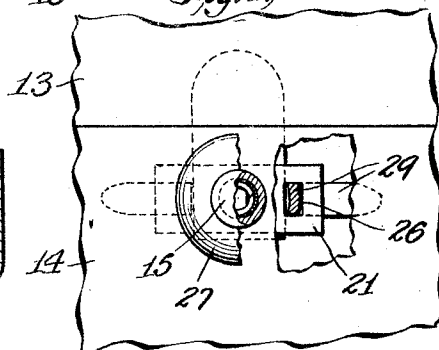
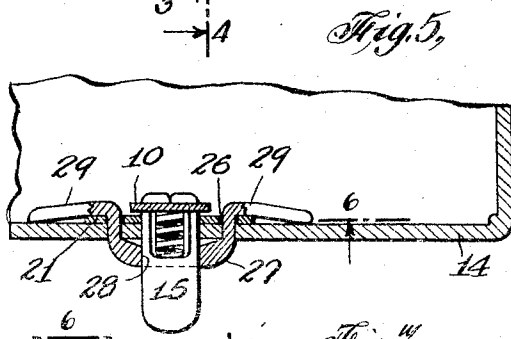
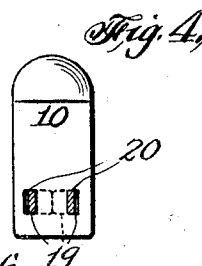
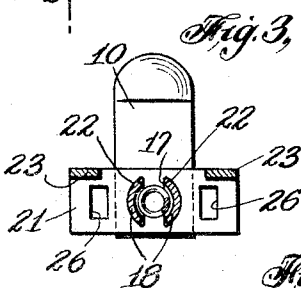
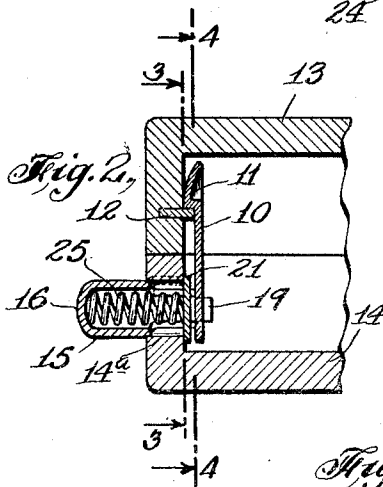
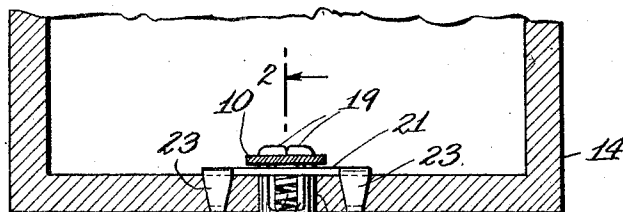
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1,553,339

CATCH DEVICE

Filed Dec. 1, 1924

Fig. 1,



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CATCH DEVICE.

Application filed December 1, 1924. Serial No. 753,230.

To all whom it may concern:

Be it known that I, HARRY J. W. TRAUMÜLLER, a citizen of the United States, and residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Catch Devices, of which the following is a specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to catch devices and particularly to spring actuated catch devices for use in connection with jewelry cases of various kinds and classes, such for example, as watch cases, ring cases or in connection with pipe cases and other small box members used as containers for small articles for the purpose of retaining a hinged cover in closed position and with means for releasing the catch member to permit of the opening of the cover; and the object of the invention is to provide a device of the class and for the purpose specified which is so constructed as to facilitate the mounting thereof in connection with cases of different size, construction and dimensions whereby the catch device may be universally applied to cases of the class specified; a further object being to provide simple and effective means for securing the catch device in position and further to the provision of means for reinforcing a case where the catch device is secured thereto when the case is composed of cardboard or other light material; and with these and other objects in view, the invention consists in a device of the class specified which is simple in construction and operation, efficient in use and which is constructed as hereinafter described and claimed.

The invention is fully disclosed in the following specification, of which the accompanying drawing forms a part, in which the separate parts of my improvement are designated by suitable reference characters in each of the views, and in which:

Fig. 1 is a sectional view through a portion of a case showing one form of my improved catch device mounted in connection therewith and with part of the construction in section.

Fig. 2 is a section on the line 2—2 of Fig. 1.

Fig. 3 is a section on the line 3—3 of Fig. 2.

Fig. 4 is a section on the line 4—4 of Fig. 2.

Fig. 5 is a view similar to Fig. 1 but showing a different method of securing the catch device in position.

Fig. 6 is a partial section on the line 6—6 of Fig. 5.

Fig. 7 is a view similar to Fig. 2 but showing a modified form of construction.

Fig. 8 is a partial section on the line 8—8 of Fig. 7; and

Fig. 9 is a partial section on the line 9—9 of Fig. 7.

In Figs. 1 to 4 inclusive, I have shown one form of clasp device comprising a clasp arm 10 preferably fashioned from sheet metal and provided at one end with an offset portion 11 adapted to engage a catch plate or the like 12 secured to the cover 13 of a box or case 14 as seen in Fig. 2, and mounted in connection with the lower end portion of the arm 10 is a tubular plunger 15, the outer end of which is closed as shown at 16, and the inner end portion of which is divided by a transverse slide 17 into separate members 18, the reduced ends 19 of which pass through apertures 20 in the arm 10 and are bent upon the outer face of said arm to retain said parts together with the arm 10 extending at right angles to the plunger 15.

Prior to securing the parts 10 and 15 together, a mounting plate 21 is mounted upon the members 18, said members extending through apertures 22 formed in the plate as clearly seen in Fig. 3 of the drawing. The plate 21 is of greater transverse width than the arm 10 and is provided with outwardly directed V-shaped prongs 23 at the upper outer corner portions thereof, which prongs are adapted to be passed into and through the case or box member 14 and the pointed ends of which are riveted or bent over upon the outer face of the case or box 14 as shown at 24 in Fig. 1 of the drawing.

A coil spring 25 is also placed within the tubular plunger 15 before the parts 15 and 10 are connected and this spring bears upon the closed end 16 of the plunger and the plate 21 and the spring normally serves to hold the plunger and arm 10 in extended or foremost position or to hold the arm 10 or the offset portion 11 thereof in engagement with the plate 12 to retain the cover 13 of the box member 14 in closed position.

The attaching or mounting plate 21 is also preferably provided at the opposite side portions thereof with apertures 26 and in Fig. 5 of the drawing, the prongs 23 are omitted. In mounting the plate in connection with the box member and lock, a retaining element 27 is employed, the same being in the form of an eyelet having a central aperture 28 to receive the plunger 15 and provided with inwardly directed fingers 29 adapted to be passed through the box member 14 and the apertures 26 in the plate 21 and to be bent laterally in the manner shown in Figs. 5 and 6 of the drawing for retaining the plate in connection with the box member and for reinforcing the box member at the point of attachment. The construction shown in Figs. 5 and 6 is designed particularly for use in connection with cardboard or other lightly constructed boxes or cases, and in this construction the prongs 23 may or may not be employed.

In the construction shown in Figs. 7 to 9 inclusive, I have shown a slight modification wherein the parts 10 and 15 shown in Figs. 1 to 6 inclusive are formed integral in a part 30, comprising a tubular plunger portion 31 similar to the plunger 15 and a catch arm 32 extending at right angles to the inner end of the plunger 31 and having an offset portion 33, said arm being formed integral with the plunger as clearly seen on a consideration of Fig. 7 of the drawing. With this construction, the plunger 31 is provided adjacent the arm 32 with oppositely disposed apertures 34 and the plate 21 which is similar in all respects to the plate 21 shown in Figs. 1 to 6 inclusive, with the exception of the central formation thereof, is mounted upon the plunger 31 as hereinafter set out.

The plate 21 is provided centrally thereof with an aperture 35 to receive and permit of the passage of the plunger 31 therethrough, said plate having oppositely disposed tongue members 36 integral therewith and adapted to be bent inwardly and to extend into the aperture 35 as seen in Figs. 7 and 8 of the drawing to form a seat for the coil spring 37 in the plunger 31, and the tongue members 36 are movable through the apertures 34 of the plunger 31 as will be apparent. It will be understood that the spring 37 must first be placed in the plunger 31 and the tongue members moved inwardly when the spring is held in a compressed position.

It will be understood that with the construction shown in Figs. 7 to 9 inclusive, the entire device is composed of two main parts and a spring, instead of three main parts and a spring as shown in Figs. 1 to 6 inclusive, and it will also be apparent that the structure shown in the latter figures may be mounted as in the manner shown in Figs.

5 and 6 of the drawing or in any other desired manner within the scope of the invention.

With all of the forms of construction shown, the distinctive feature of my invention resides in the fact that the catch device of one form and construction will be suitable for use in connection with jewelry cases and the like, regardless of their shape, form and construction, the only essential feature being that the case or box member be provided with an aperture 14^a through which the plunger 15 passes, which aperture will be arranged in predetermined relation with reference to the lock plate 12 secured to the cover member 13 of the case or box. With the aperture 14^a, and plate 12 in predetermined spaced relation on the separate members of the case, my improved catch device may be readily mounted in position without any change in the construction thereof or without necessitating the manufacture of the same in numerous sizes as is the present custom in devices of this class, and while I have shown and described certain details of construction for carrying my invention into effect, it will be understood that I am not necessarily limited to the constructions herein shown and described and various changes therein and modifications thereof may be made within the scope of the appended claims without departing from the spirit of my invention or sacrificing its advantages.

Having fully described my invention, what I claim as new and desire to secure by Letters-Patent, is:—

1. A catch device of the class described comprising a mounting plate, a tubular plunger part and a catch arm extending radially from said plunger part adjacent one end thereof, the other end of said plunger part being closed, a coil spring mounted in said plunger part and cooperating with a portion of said mounting plate extending into said part and serving to normally hold the catch arm in operative position when the device is in use.

2. A catch device for boxes and cases of the class described comprising a mounting plate adapted to be secured to one part of a box or case in predetermined position, a tubular plunger part mounted in connection with said plate and adapted to project through one wall of the box or case and movable inwardly and outwardly with reference thereto and to said plate, the inner end of said plunger being provided with a radially extending catch arm having an offset portion adapted to engage a catch plate on the cover member of said box or case, and tensional means for normally holding said catch arm in operative position and said plunger in extended position.

3. A catch device for boxes and cases of

the class described comprising a mounting plate adapted to be secured to one part of a box or case in predetermined position, a tubular plunger part mounted in connection with said plate and adapted to project through one wall of the box or case and movable inwardly and outwardly with reference thereto and to said plate, the inner end of said plunger being provided with a radially extending catch arm having an offset portion adapted to engage a catch plate on the cover member of said box or case, and a coil spring mounted in said plunger and cooperating with said mounting plate for normally holding said catch arm in operative position and for automatically moving the catch arm into operative position in the operation of closing the cover of said box or case.

4. A catch device of the class described comprising a plunger part thimble-shaped throughout, a catch arm projecting radially from one end of said part, and means mounted on and extending into said plunger part for retaining the same and said arm in connection with a predetermined support.

5. A catch device of the class described

comprising a mounting plate, means for securing said plate to a suitable support, a catch arm provided with a tubular plunger part which passes through and is adapted to operate in said mounting plate, and a spring in said plunger part and cooperating with said plate for normally holding said catch arm in operative position.

6. A catch device of the class described comprising a mounting plate, a tubular plunger mounted to move inwardly and outwardly through an aperture in said plate, said plunger being apertured to receive parts on said plate projecting into said plunger, one end of the plunger being closed and a spring mounted between the closed end of the plungers and the parts of said plate projecting thereinto to normally hold the plunger in projected position with reference to said plate and a catch arm projecting radially from the other end of said plunger.

In testimony that I claim the foregoing as my invention I have signed my name this 26th day of Nov. 1924.

HARRY J. W. TRAUMÜLLER.