Feb. 7, 1933. O. A. BOESEL 1,896,476

CATCH FOR SUITCASES, BOXES, CHESTS, ETC

Filed Oct. 3, 1932

Fig. 1.

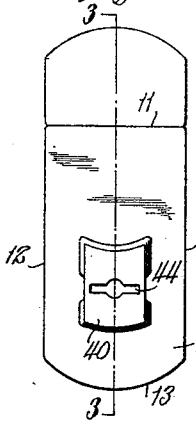


Fig. 2.

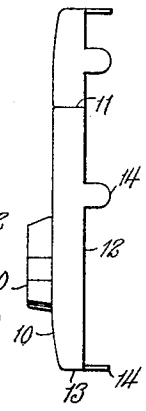


Fig. 4.

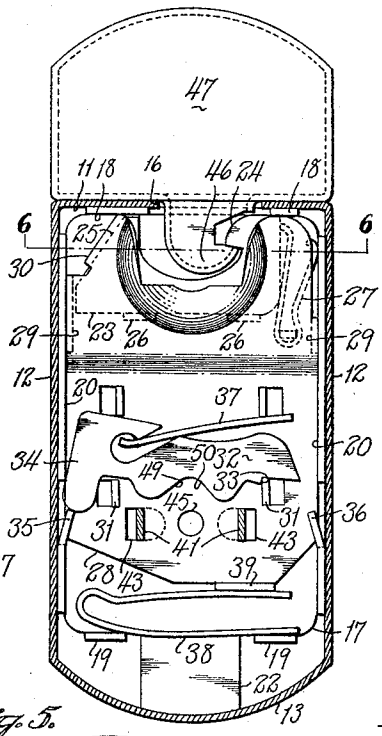


Fig. 3.

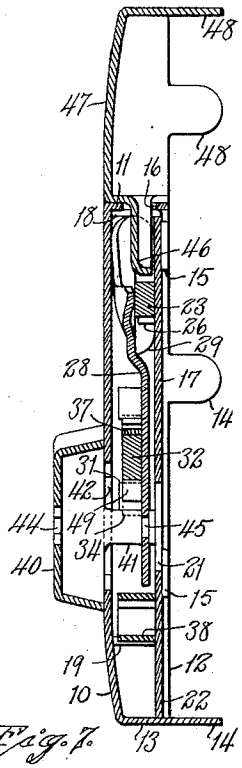


Fig. 6.

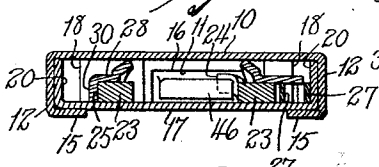


Fig. 9.

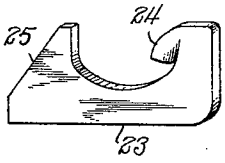


Fig. 5.

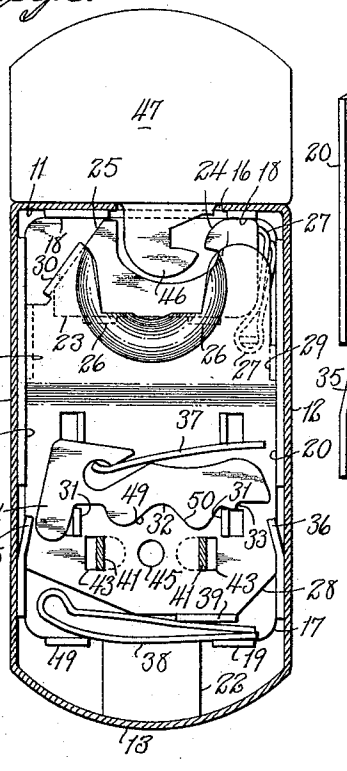


Fig. 7.

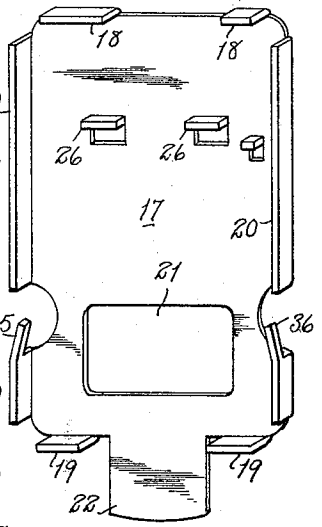
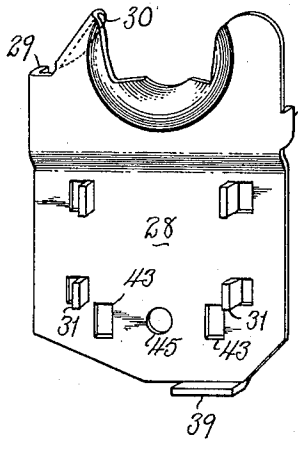


Fig. 8.



Inventor
Otto A. Boesel
by Seymour, Esler & Nichols
Attorneys

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UNITED STATES PATENT OFFICE

OTTO A. BOESEL, OF ANSONIA, CONNECTICUT, ASSIGNOR TO THE H. A. MATTHEWS MANUFACTURING COMPANY, OF SEYMOUR, CONNECTICUT, A CORPORATION

CATCH FOR SUITCASES, BOXES, CHESTS, ETC.

Application filed October 3, 1932. Serial No. 635,955.

This invention relates to improvement in catches for suit cases, boxes, chests, etc., the object being to provide a catch which is provided with a longitudinally movable operating finger piece and with a transversely movable locking dog, together with means for locking the catch in the closed position.

The invention consists in the construction as hereinafter described and particularly recited in the claims.

In the accompanying drawing:

Fig. 1 is a front view of a clasp for suit cases, boxes, chests, etc., constructed in accordance with my invention;

Fig. 2 is a side view of the same;

Fig. 3 is a sectional view on the line 3—3 of Fig. 1, enlarged;

Fig. 4 is a front view with the face of the casing plate cut away, showing the parts in the locked position;

Fig. 5 is a similar view with the parts in the unlocked position;

Fig. 6 is a sectional view on the line 6—6 of Fig. 4;

Fig. 7 is a perspective view of the assembly plate, detached;

Fig. 8 is a perspective view of the sliding plate, detached; and

Fig. 9 is a perspective view of the locking dog, detached.

In carrying out my invention, I employ a front casing plate 10 having its edges struck up to form a top 11, sides 12 and bottom 13. The sides and bottom are formed with fingers 14 and with lugs 15 for the purpose as will hereinafter appear.

The upper wall is formed with a slot 16.

Mounted in the casing is an assembly plate 17 and provided at its upper end are lugs 18 and at its lower end are lugs 19. Its sides are turned up to form flanges 20 and it is also formed, near its lower end, with a clearance opening 21 and at its lower edge, between the lugs 19, with an extension 22 to locate the assembly plate in the casing 10.

Mounted on the assembly plate is a locking dog 23 having a locking nose 24, and at one side formed with a beveled surface 25. This dog rides upon lugs 26 struck from the assembly plate 17 and the dog is adapted to be moved to its locking position by a spring 27. Setting into the assembly plate is a sliding plate 28 formed with spacing lugs 29 and at its top with an inclined cam edge 30 adapted to engage with the beveled edge 25 of the locking dog.

Arranged between lugs 31 is a lock tumbler 32 formed in its lower edge with a locking shoulder 33 adapted to engage one of the lugs 31, and formed at its opposite side with a locking tail 34 adapted to engage with a finger 35 struck inward from the edge of the assembly plate, the opposite edge of which has a finger 36 adapted to extend over the sliding plate so as to provide a guide therefor. This tumbler is held in position by a tumbler spring 37 and the sliding plate is normally forced upward by a spring 38 bearing on a lug 39 on the sliding plate 28 and on the lugs 19 of the assembly plate.

A finger button 40 has prongs 41 which extend through a clearance opening 42 in the case plate, through the clearance opening 21 in the assembly plate, and into engagement with slots 43 in the sliding plate, over which they are turned.

The finger piece has a key slot 44 and the sliding plate is formed with a perforation 45 to support the inner end of a key.

The cover or top of the article on which the device is used is provided with a hook 46 depending from a cap 47 which is provided with locking lugs 48, and follows the design of the lower end of the catch. As the cover is closed, the hook 46 passes through the slot 16 and crowds the nose 24 of the dog to one side against the pressure of its spring 27, and when the cover is closed, the nose of the dog engages with the hook 46.

To open the cover, a downward movement of the finger piece 40 will draw the sliding plate downward, causing the cam 30 to ride over the beveled edge 25 of the dog and so move the dog to one side that it will clear the hook 46 and allow the cover to be raised.

If the locking mechanism is employed, a key will be inserted through the key slot 44 and will engage with the cam edge 49 of the tumbler, and a continued movement of the key will move the tumbler to one side so that

the shoulder 33 engages with the lug 31 and the end 34 engages with the inwardly projecting lug 35, so that downward movement thereof is arrested. In this position, the finger piece cannot be moved.

When, however, the key is turned in the opposite direction so as to engage with the cam edge 50 of the tumbler, the tumbler will be lifted so that the shoulder 33 clears the lug 31 with which it is engaged, and the tumbler is moved away from the lug 35 so as to clear the same, and the dog is free to be moved by the finger piece.

I thus provide in a very simple way a clasp for suit cases, boxes, chests, etc., which provides for a longitudinally movable finger piece and a horizontally movable locking dog which produces means for holding the cover in its closed position and not liable to be disengaged by jarring, etc., and also means which provide for locking the cover in its closed position by means operated only by the holder of a key fitted for the particular lock, it being understood that the cam surfaces 49 and 50 may be variously changed to provide for differently bitted keys.

I claim:

1. A clasp of the character described, comprising a casing adapted to be attached to an article, an assembly plate mounted in the casing, a locking dog horizontally movable in said assembly plate, said locking dog provided with a locking nose and with a beveled edge at one side, a sliding plate arranged on said assembly plate and adapted to be moved vertically thereon, said sliding plate formed at its upper end with a cam edge adapted to engage with the beveled edge of the dog, whereby the downward movement of the sliding plate will move said dog to one side, and means extending through the casing into engagement with said sliding plate.

2. A clasp of the character described, comprising a casing adapted to be attached to an article, an assembly plate mounted in the casing, a locking dog horizontally movable in said assembly plate, said locking dog provided with a locking nose and with a beveled edge at one side, a sliding plate arranged on said assembly plate and adapted to be moved vertically thereon, said sliding plate formed at its upper end with a cam edge adapted to engage with the beveled edge of the dog, whereby the downward movement of the sliding plate will move said dog to one side, means extending through the casing into engagement with said sliding plate, and a cap provided with a hook extending through the upper end of the casing and adapted to be engaged by said locking dog.

3. A clasp of the character described, comprising a casing adapted to be attached to an article, an assembly plate mounted in the casing, a locking dog horizontally movable in said assembly plate, said locking dog provided with a locking nose and with a beveled edge at one side, a sliding plate arranged on said assembly plate and adapted to be moved vertically thereon, said sliding plate formed at its upper end with a cam edge adapted to engage with the beveled edge of the dog, whereby the downward movement of the sliding plate will move said dog to one side, means extending through the casing into engagement with said sliding plate, and a transversely movable key tumbler formed with a shoulder adapted to engage with a lug on the sliding plate and to be moved into engagement with a stop lug carried by the assembly plate.

4. A clasp of the character described, comprising a casing adapted to be attached to an article, an assembly plate mounted in the casing, a locking dog horizontally movable in said assembly plate, said locking dog provided with a locking nose and with a beveled edge at one side, a sliding plate arranged on said assembly plate and adapted to be moved vertically thereon, said sliding plate formed at its upper end with a cam edge adapted to engage with the beveled edge of the dog, whereby the downward movement of the sliding plate will move said dog to one side, means extending through the casing into engagement with said sliding plate, a transversely movable key tumbler formed with a shoulder adapted to engage with a lug on the sliding plate and to be moved into engagement with a stop lug carried by the assembly plate, and a cap provided with a hook extending through the upper end of the casing and adapted to be engaged by said locking dog.

5. In a device of the class described, comprising a casing, an assembly plate mounted in said casing, and formed with lugs, a locking dog resting on said lugs and adapted to be moved transversely thereon, said dog formed with a locking nose and with a beveled edge, a sliding plate setting over said assembly plate and provided with a cam edge engaging with the beveled edge of the dog, a spring normally moving said sliding plate upward, and a finger piece outside the casing and extending into engagement with the sliding plate, whereby it is moved longitudinally.

In testimony whereof, I have signed this specification.

OTTO A. BOESEL.