

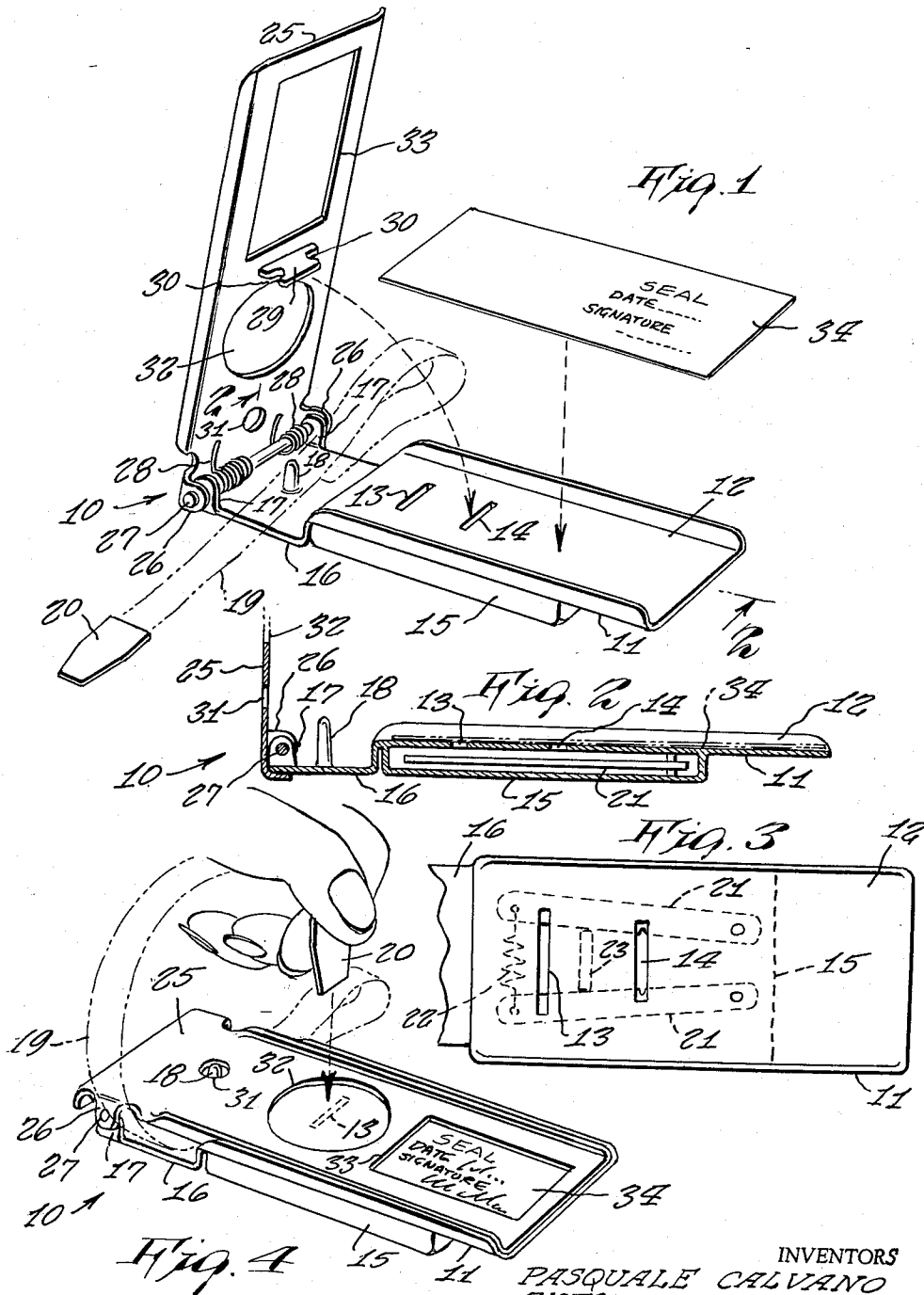
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SAFETY PADLOCK

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SAFETY PADLOCK

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This invention relates generally to lock buckles for containers such as mail bags and the like and particularly to seal means to prevent tampering with the contents of such containers.

Locking buckles, as such, are not new. However, locking buckles presently in use may be tampered with without detection of such tampering. Presently locks are incorporated in or are applied to the buckle. To open these locks, a key or combination is required. However, when the buckle is relocked, there is no indication of unauthorized tampering. Lead wire seals have also been used, but may be cut off and replaced. Even when the seal tool has an identification mark, forged tools have been made to prevent detection of tampering.

Accordingly, an object of this invention is to provide an inexpensive, rugged tamper-proof locking buckle.

Another object of this invention is to provide a tamper-proof locking buckle having inexpensive and personalized seal means.

Still another object of this invention is to provide the above type of locking buckle which may use the tip of a strap held thereby as the key.

These and other objects and advantages will become apparent to those skilled in the art by referring to the following description and the accompanying drawings wherein:

FIGURE 1 is a perspective view of an open locking buckle made in accordance with the invention,

FIGURE 2 is a sectional view of a portion of the novel buckle taken on line 2-2 of FIGURE 1,

FIGURE 3 is a plan view of the base portion of the buckle of FIGURE 1,

FIGURE 4 is a perspective view similar to FIGURE 1 with the novel buckle closed, locked, and sealed.

The novel buckle made in accordance with the invention is used with a strap made of leather, a synthetic, metal or any applicable flexible material. The strap may be attached to the buckle as shown in the drawings, or may be attached to one part of a container while the novel buckle is attached to another part.

Referring now to the drawings, the novel buckle 10 has a base portion or flap 11 and a cover portion or flap 25. The base 11 is flanged and forms a receiver 12 with a pair of spaced slots 13 and 14. Slot 13 is a key slot for opening the lock, while slot 14 is for the latch portion 29 on the cover 25. The base 11 has housing portion 15 which encloses a pair of arms 21 that are pivoted at their corresponding ends. The free ends of the arms 21 are connected to and biased toward each other by a spring 22. A spacer 23 limits the closure of the arms 21 so they overlie the ends of the slots 13 and 14. The base 11 has an offset portion 16 with hinge ears 17 at its end and a pin 18 fixed thereto.

Ears 26 at the end of cover 25 cooperate with ears 17 to receive a pin 27 to form a hinge which has at least one spring 28 to bias the cover 25 away from the base 11. Cover 25 has spaced holes 31, 32, and 33, holes 31 and 32 aligning with pin 18 and slot 13, respectively, when the cover 25 is swung to a closed position. A latch 29 enters slot 14 and has recesses 30 that are engaged by arms 21 to lock cover 25 in position.

Strap 19 is connected to the portion 16 of base 11 and is looped with pin 18 being inserted therethrough. When

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the loop is made, cover 25 is swung to the closed position. The tip 20 of belt 19 may be formed as the lock key which is inserted through opening 32 and slot 13 to cam the arms 21 against the spring 22 to release latch 29.

A seal 34 of paper, plastic or other suitable material is placed in receiver 12 and as cover 25 is moved to locked position covers the seal which is pierced by latch 29 as it enters slot 14. Window or opening 33 provides means for personalizing seal 34. Thus, the seal 34 must be pierced to unlock and open buckle 10.

While this invention has been described with particular reference to the construction shown in the drawing, it is to be understood that such is not to be construed as imparting limitations upon the invention, which is best defined by the claims appended hereto.

Having thus described our invention, we claim as new and desire to secure by Letters Patent:

1. A locking buckle for a strap comprising an elongated base having a transverse strap receiving portion and an elongated seal receiving portion, said strap receiving portion being positioned below the plane of said seal receiving portion, an upstanding retaining flange at each longitudinal side of said seal receiving portion, and parallel to each other, a housing beneath said seal receiving portion fixedly secured thereto and having its bottom substantially in the plane of said strap receiving portion, a pair of upstanding laterally opposed ears at the free terminal end of said strap receiving portion, an elongated cover provided with an upstanding flange along each longitudinal side edge thereof and of a width such as to fit between the flanges of said seal receiving portion, a pair of laterally opposed depending ears at one end of said cover arranged to overlap the ears on said strap receiving portion, a hinge pin interconnecting said pairs of ears whereby to provide for hinged movement of the cover on said elongated base, spring means on said hinge pin for normally urging said cover to open position, an upstanding pin centrally positioned on said strap receiving portion for engagement with a strap seated thereon having an opening through which said pin projects, an opening in said cover for receiving the end of said pin when the cover is closed, a spring pressed latching means within said housing, a latch carried by said cover, a latch opening in said seal receiving portion, said latch when said cover is closed extending through said latch opening into said housing to be engaged by said latching means to lock said cover to said elongated base, a key receiving opening in said cover, a key slot in said seal receiving portion aligned with said key receiving opening when said cover is closed, a puncturable seal sheet placed in said seal receiving portion held in place by said latch inserted therethrough when said cover is closed thereon by said cover, and by the flanges of said seal receiving portion, said seal sheet being exposed to view through the key receiving opening in said cover and being punctured by the insertion of a cam key therethrough and into said key slot for disengaging said latch means from said latch to unlock said cover whereby to permit opening of said buckle.

2. The locking buckle of claim 1, wherein said latching means comprises at least one latch bar pivoted within said housing, a stop within said housing for limiting movement of said latch bar in one direction, spring means within said housing connected to said latch bar for urging the same against said stop, said latch having a detent for receiving said latch bar to lock said latch when the cover is closed, said latch bar extending across an end portion of said latch opening and said key slot, whereby movement of said latch bar is effected by the engagement therewith of said latch in the closing of said cover

and by said key when inserted into said key slot to unlock said cover.

3. The locking buckle of claim 2, including a window opening in said cover adjacent the free end thereof to permit personalizing of said seal sheet and viewing thereof, said key receiving opening being positioned between said window opening and said pin receiving opening, and said key being affixed to a terminal end of said strap.

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