July 11, 1950 E. VINCENT 2,514,980

LOCK CLASP

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Fig. 1.

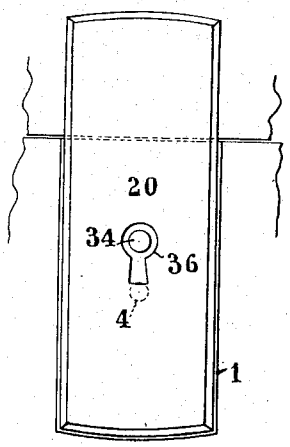


Fig. 2.

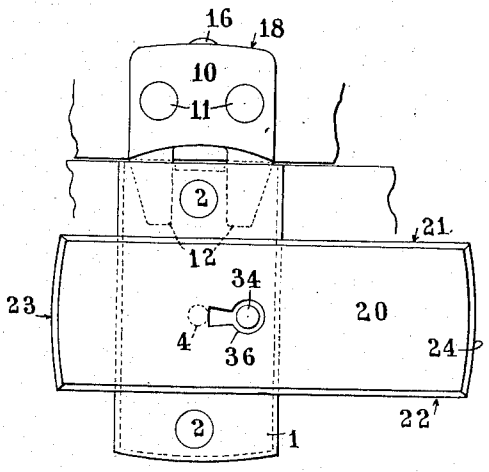


Fig. 3

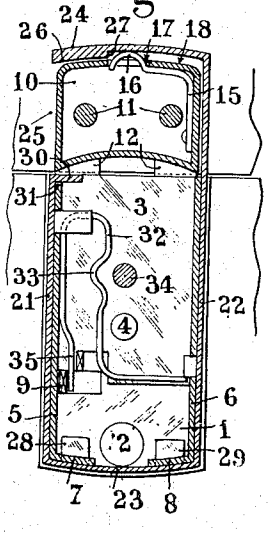
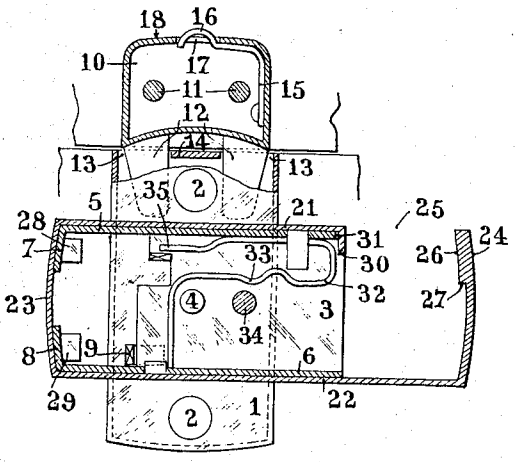


Fig. 4



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LOCK CLASP

Eugene Vincent, Montreuil Sous-Bois, France

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6 Claims. (Cl. 70—70)

1

The present invention has for its object a clasp designed to lock two parts together and applicable more particularly to trunks, portmanteaux, valises, travelling bags, cases and boxes of every description.

The said clasp is characterized primarily in that a pin carried by one of the parts to be locked together and projecting to the outside of the said part at right angles thereto has pivoted thereon a casing provided on one side thereof with an aperture through which said casing is engaged over a fixed dice-shaped member carried by the other part to be locked and provided with a boss adapted resiliently to yield inwards as the dice-shaped member is capped by the casing and to be caught by a shoulder provided on that inner wall of the casing which is adjacent to the dice.

The casing may advantageously comprise a key-actuated lock the latch or bolt of which coöperates with a stop rigid with the casing-carrying part for the purpose of precluding any rotation of the casing.

Further features of the invention will become apparent in the course of the following description.

An embodiment of the clasp according to the invention is shown by way of example in the appended drawing.

Figure 1 is an elevational view of the clasp in its closed position.

Figure 2 is a similar elevational view of the clasp in its open position.

Figure 3 is a sectional view of the clasp in its closed position.

Figure 4 is a sectional view of the clasp in its open position.

In the example illustrated the clasp is assumed to be fitted on a portmanteau comprising a case and a lid and that the said clasp is intended to keep the lid applied upon the case.

A plate 1 is secured by means of a pair of screws, rivets or similar members 2 to the case of the portmanteau. Bearing on the said plate 1 is the bottom 3 of a first casing that is held in engagement with the plate 1 by a rivet 4 which at the same time performs the function of a pivot pin for the bottom 3 of the plate 1. Said bottom 3 is bent at its edges so as to provide the side walls 5 and 6 of the casing. The said side walls extend beyond the bottom 3 on the one side thereof and are bent substantially at right angles at least at one end of the said bottom to provide an end wall or at least portions 7 and 8 of the said end wall. A lug 9 punched substantially

2

at right angles from the plate 1 provides a stop for the side walls 5 and 6 in order to stop the swinging motion of the bottom 3 on the plate in either direction.

Secured by means of a pair of screws, rivets or like members 11 on the portmanteau lid opposite the plate 1 is a hollow dice-shaped member 10. Said dice-shaped member is formed with lugs 12 that project through notches 14 cut in the edge 14 of the plate 1 adjacent to the dice-shaped member 10; in this manner the latter is able to clear the plate in the longitudinal direction of the clasp when it is desired to lift the lid from the case of the portmanteau; however, said dice-shaped member cannot move crosswise with respect to the plate 1.

Mounted within the hollow dice-shaped member is a spring strip 15 pressed with a boss 16 that projects through an aperture 17 in the side wall 18 remote from the plate 1. Due to the resiliency of the strip 15 the boss can be cammed clear into the dice-shaped member.

An additional casing arranged reversedly with respect to the first one and the bottom 20 of which faces the swingable bottom 3 bears with its side walls 21 and 22 against the outsides of the side walls 5 and 6 and with one of its end walls 23 against the outside of the end wall 7—8 of the first casing. The end wall 24 remote from wall 23 engages the wall 18 of the dice-shaped member 10 in the closed position illustrated in Fig. 1. In order to enable the second casing 20—21—22—23—24 to clear the dice-shaped member 10, an aperture 25 is cut to the size of said member in the side wall 21 of the said second casing. In the closed position of the clasp as shown in Figs. 1 and 3, the wall 5 of the first casing engages the stop 9. As the structure composed of the first and the second casings is swung clockwise, the aperture 25 moves clear of the dice-shaped member, and the wall 6 of the first casing will come into engagement with the stop 9 to limit the displacement to the open position shown in Figs. 2 and 4.

The wall 24 of the second casing is formed on its inside adjacent to the aperture 25 with a portion 26 of increased thickness which in the displacements of the casing will slide on the wall 18 of the dice-shaped member 10. With the clasp in the position shown in Fig. 2 and as the casing is swung anticlockwise, the second casing with the aperture 25 therein will cap the dice-shaped member 10 and the thicker portion 26 will slide on the wall 18 until the aperture 25 engages the resilient boss 16. As the movement proceeds the

latter is cammed clear inwards by the thicker portion up to the end of the same, when the boss 16 will snap again out of the dice-shaped member and preclude any backward movement of the casing owing to its engagement with the step 27 in the thicker portion 26. The clasp is thus in its closed position.

It is of course possible, instead of using a spring strip 15 provided with a boss 16, to provide a stamped or a turned member or a ball pressed by a spring through the aperture 17 in the dice-shaped member.

In order to keep the first and the second casings assembled, lugs 28 and 29 providing extensions of the wall 23 are bent twice at right angles into straddling engagement with the portions 7 and 8 of the first casing. Likewise, a lug 30 punched from the wall 21 of the second casing is received in a notch 31 in the wall 5 of the first casing.

The clasp may advantageously be complemented with a lock of any suitable type. In the example shown a bolt 32 constituted by a spring strip is arranged in the first casing and is formed with a bend 33 to be engaged by a key to be inserted through a hole 36 provided in the bottom 20 of the second casing and guided on a pin 34 carried by the bottom 3 of the first casing. By turning the key in the one direction, the end 35 of the bolt is moved into engagement with that side of the stop 9 which faces the wall 5, with the result that the latter together with said bolt 32 will prevent the casing from being swung; turning the key in the reverse direction will lift the end 35 of the bolt clear of the stop 9, with the result that the clasp can be manipulated as described hereinbefore.

The embodiment and details of construction described above are given only by way of example and modifications may be made therein without thereby departing from the scope of the invention.

What I claim is:

1. A clasp for locking two parts together comprising a pin carried by one of the parts to be locked together and projecting to the outside of said part at right angles thereto, a casing pivoted on said pin and adapted to assume one position in which said casing extends partly over the other part to be locked and another position in which said casing extends wholly over the first part carrying said pin, said casing being provided with a shoulder on the inner face of its end wall adapted to be moved over said second part, and one side wall of the portion adapted to extend over the second part to be locked has an aperture therein, a dice-shaped member carried by the second part to be locked and adapted to be engaged in said casing through said aperture when said casing is moved about its pivoting pin, and a spring actuated retaining member projecting out of said dice-shaped member and adapted to yield inwards when said end wall of said casing moves over said dice-shaped member and to snap against said shoulder when said casing covers said dice-shaped member.

2. A clasp according to claim 1, further comprising a plate secured to the outside of said first part to be locked and carrying said pivot pin.

3. A clasp according to claim 1, in which said casing comprises two topless housings engaging each other by their side walls, one of said housings having its bottom pivoted on said pin and extending only over said first part to be locked, while the second housing reversed with respect to the first housing extends beyond said first housing and is provided with said aperture and with said shoulder.

4. A clasp according to claim 1, further comprising a fixed stop member carried on said first part to be locked and adapted to cooperate with the side walls of said casing so as to limit the amplitude of the angular displacements of said casing.

5. A clasp according to claim 1, in which said retaining member is a spring strip secured on said dice-shaped member and having a boss adapted to cooperate with said shoulder.

6. A clasp according to claim 1, further comprising a fixed stop member carried on said first part to be locked, and a bolt slidingly mounted in said casing and adapted to be moved out of or into engagement with said stop member when said casing is engaged over said dice-shaped member so as to allow or to prevent pivoting of said casing.

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No references cited.