April 29, 1952 A. LEVINE 2,594,940

COMBINED SIDE CATCH AND LOCK FOR BAG FRAMES

Original Filed July 9, 1947

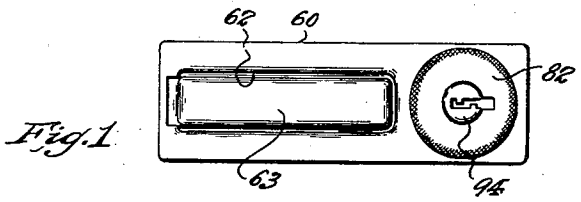

Fig. 1

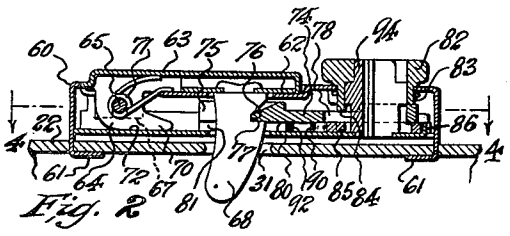

Fig. 2

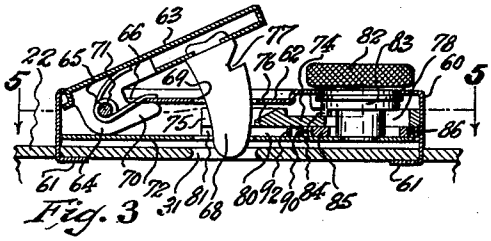

Fig. 3

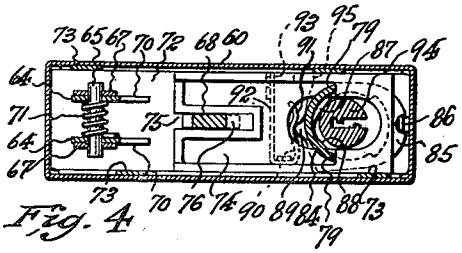

Fig. 4

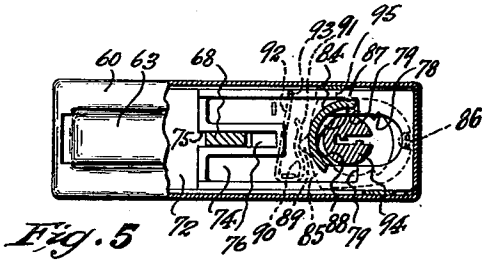

Fig. 5

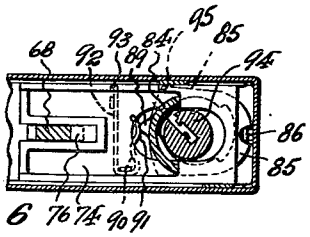

Fig. 6

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COMBINED SIDE CATCH AND LOCK FOR BAG FRAMES

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Original application July 9, 1947, Serial No. 759,729, now Patent No. 2,565,862, dated August 28, 1951. Divided and this application February 28, 1951, Serial No. 213,169

3 Claims. (Cl. 70—66)

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This invention relates to a novel construction of combined side catch and lock for the frames of traveling bags and similar articles of luggage. This application is a division from my copending application Serial No. 759,729, filed July 9, 1947, now Patent No. 2,565,862, dated August 28, 1951.

The invention has for an object to provide a novel side catch means including a movable latch means for holding the same in operative relation to closed bag-frame members served thereby, whereby to secure the latter in closed condition; said latch means having means for manipulating the same to release the side catch means for opening movement, whereby to release the bag frame members so as to permit opening thereof; and said manipulating means including key actuated means for locking the same against operation, thereby to prevent unauthorized release of the side catch means from bag frame securing position.

The invention has for another object to provide a novel combined side catch means and lock characterized as above stated, wherein the movable latch means is spring urged into holding relation to the closed side catch means, and said side catch means is spring urged to its open or bag frame releasing position.

Other objects of this invention, not at this time more particularly enumerated, will be understood from the following detailed description of the same.

An illustrative embodiment of this invention is shown in the accompanying drawing, in which:

Fig. 1 is a top plan view of a form of the combined side catch means and lock according to the invention; Fig. 2 is a longitudinal sectional view of the same in closed condition; Fig. 3 is a longitudinal sectional view of the same in open or released position; Fig. 4 is a horizontal sectional view, taken on line 4—4 in Fig. 2; Fig. 5 is a horizontal sectional view, taken on line 5—5 in Fig. 3; and Fig. 6 is a fragmentary horizontal view, similar to that of Fig. 4, but showing the key actuatable means operative to lock the side catch latch means and manipulating means therefor against operation.

Similar characters of reference are employed in the hereinabove described views, to indicate corresponding parts.

The construction shown comprises a hollow casing 60 having clenching lugs 61 to affix the same to the external frame member 22 of a bag frame. The top wall of the casing 60 is preferably countersunk in part to provide a seat 62 for a superposed, longitudinally extending catch

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member or plate 63. Dependent from the sides of said catch plate 63 at one end thereof (in this case the outer end thereof) are laterally spaced hinging knuckles 64, through which extends a transverse hinge pin 65. The bottom of the seat 62 is cut away to provide an opening 66, dependent from side margins of which are laterally spaced bearing lugs 67 in which said hinge pin is journaled. Suitably affixed to the catch plate 62, to depend from the underside thereof, is a catch tongue or horn 68 for cooperation with closed bag frame members in substantially the manner hereinbefore set forth as to the first described construction of combined side catch and lock. The bottom of said seat 62 is provided with an opening or slot 69 to pass said catch tongue or horn 68. The hinging knuckles 64 are provided with stop projections 70 which, by abutment upon the casing top wall, limit the out swinging movement of the catch plate 63 from closed operative position to open or released position. Said catch plate 63 is yieldably urged to out swung open or released position by the torsion spring 71.

Fixed within said casing 60 is a frame plate 72 having side flanges provided with portions 73 to bear against the top wall of said casing 60. Slidably supported by said frame plate 72 is a latch plate 74 which is provided in its forward end portion with an indenting longitudinal slot 75 which straddles the catch tongue or horn 68, and at the inner end of said slot with a latching member 76 which is adapted to enter and engage in a latching notch 77 with which the catch tongue or horn 68 is provided, whereby to interlock with the latter when said latch plate is in its forward latching position and the catch plate 63 disposed in operative bag frame securing position. Said latch plate 74 is provided in its rearward end portion with a central longitudinally extending elongated opening 78, through which may pass a key barrel as herein later described. Said latch plate is further provided, on its upper side or face, and disposed to intersect said opening 78, with transverse cam engageable shoulders 79. The medial longitudinal portion of the underside of the latch plate 74 is cut away to provide a chamber 80 extending longitudinally and intermediate side runner flanges 81 by which the latch plate is slidably supported upon the frame plate 72.

Mounted on the top wall of the casing 60 adjacent the rear end thereof, is an external rotatable finger piece 82, the shank 83 of which is journaled in said casing wall so as to enter the casing interior above the latch plate 74. At its lower or inner end, said finger piece shank

83 terminates in a substantially semi-circular or arcuate cam flange 84, the respective ends of which normally abut the cam engageable shoulders 79 of said latch plate 74 (see Fig. 4).

Supported on the rear end portion of the frame plate 72, so as to lie in the chamber 80 with which the under side of the latch plate 74 is provided, is a tumbler bolt 85. The rear end of said tumbler bolt is pivotally supported by an upstanding fulcrum post 86 with which the frame plate 72 is provided, whereby to be capable of lateral swinging movements. The central portion of the tumbler bolt 85 is cut away to provide an opening shaped at its forward end to provide oppositely extending key bit engageable cam portions 87 and 88. The lock tumbler bolt 85 is provided at its forward end with a detent nosing 89. A substantially U-shaped spring member is mounted on said frame plate 72 in front of said tumbler bolt 85. Said spring member provides a rearward arm 90, shaped at its free end to provide a keeper nosing 91 for cooperation with said detent nosing 89 of the tumbler bolt 85. Said spring member further provides a forward arm 92, the free extremity of which is disposed to engage a shoulder 93 with which one of the runner flanges 81 of the latch plate 74 is provided, whereby to exert a yielding forward thrust upon said latch plate. Mounted in the finger-piece 82—83, to extend axially therethrough and into the opening of said tumbler bolt 85, is a rotatable key barrel 94. One of the runner flanges 81 of the latch plate 74 terminates in a lock or stop shoulder 95, with which the tumbler bolt 85 may be engaged.

In the use and operation of this form of combined side catch and lock, when the catch plate 63 is down-swung, the catch tongue or horn 68 is disposed to engage the bag frame members so as to secure the same against relative opening movement, and said catch tongue or horn 68 is held in such position by the forwardly moved latch plate 74, the latching member 76 being thereby engaged in the latching notch 77 of said catch tongue or horn (see Figs. 2 and 4). To release the catch plate and catch tongue or horn, the latch plate 74 is retracted against the tension of the spring arm 92. Such retractive movement of the latch plate is effected by turning the finger piece 82 in either direction, whereby to thrustingly engage an end of the cam flange 84 with a shoulder 79 of said latch plate (see Figs. 3 and 5).

When the catch plate and catch tongue or horn are down swung to bag frame securing positions, the same may be locked against release by key actuating the tumbler bolt 85. To accomplish this, a key (not shown) is inserted in the key barrel 94, and then turned clockwise, whereby the operative bit of the key will engage and thrust against the cam portion 87 of the tumbler bolt 85, thus swinging the latter in clockwise direction about its fulcrum post 86. As said tumbler bolt is thus moved, its detent nosing 89 rides over the keeper nosing 91 of the spring arm 90, thus holding the tumbler bolt 85 in said clockwise projected position, in which position, the end of the latter is disposed behind the lock or stop shoulder 95 of the latch plate 74 so that, by abutment thereupon, to thereby obstruct and prevent rearward sliding movement of the latch plate 74, and consequently also obstructing and preventing manipulation of the finger piece 82 and its cam flange 84. To release the tumbler bolt 85 from its described locking position, the actuating key must again be inserted in the key

barrel 94 and turned counter clockwise, whereby the operative bit of the key will engage and thrust against the opposite cam portion 88 of the tumbler bolt, thereby swinging the latter counter clockwise back to normal initial position, wherein its end is withdrawn from the path of movement of the lock or stop shoulder 95 of the latch plate 74, and thus freeing said latch plate for retractive side catch releasing movement, when the finger piece 82 is thereafter turned.

Having now described my invention, I claim:

1. A combined side catch and lock for bag frames comprising a casing, a spring released catch plate pivotally connected with said casing, said catch plate having a bag frame engaging catch tongue dependent therefrom through said casing interior, a latch plate slidably mounted within said casing, said catch tongue having a latching notch engageable by said latch plate when said catch tongue occupies bag frame engaging position, spring means for yieldably holding said latch plate in engagement with said catch tongue, a finger piece rotatably mounted on said casing, said finger piece and latch plate having cooperative means for converting rotative movement of the former to sliding movement of the latter, whereby to release said latch plate from holding engagement with said catch tongue, a key barrel rotatably mounted in said finger piece, and a locking mechanism responsive to a key entered in and turned with said key barrel, whereby to lock said latch plate and finger piece against catch tongue releasing manipulation.

2. A combined side catch and lock for bag frames comprising a casing, a spring released catch plate pivotally connected with said casing, said catch plate having a bag frame engaging catch tongue dependent therefrom through said casing interior, a latch plate slidably mounted within said casing, said catch tongue having a latching notch engageable by said latch plate when said catch tongue occupies bag frame engaging position, spring means for yieldably holding said latch plate in engagement with said catch tongue, a finger piece rotatably mounted on said casing, said finger piece and latch plate having cooperative means for converting rotative movement of the former to sliding movement of the latter, whereby to release said latch plate from holding engagement with said catch tongue, a key barrel rotatably mounted in said finger piece, a pivoted laterally swingable tumbler bolt, said tumbler bolt having means engageable by a key entered in and turned with said key barrel whereby to shift said tumbler bolt to and from locking position, and means on said latch plate engageable by said tumbler bolt when the latter is moved to locking position, whereby to lock said latch plate and finger piece against catch tongue releasing manipulation.

3. A combined side catch and lock for bag frames comprising a casing, a spring released catch plate pivotally connected with said casing, said catch plate having a bag frame engaging catch tongue dependent therefrom through said casing interior, a latch plate slidably mounted within said casing, said catch tongue having a latching notch engageable by said latch plate when said catch tongue occupies bag frame engaging position, spring means for yieldably holding said latch plate in engagement with said catch tongue, a finger piece rotatably mounted on said casing, said finger piece and latch plate having cooperative means for converting rotative movement of the former to sliding movement of the

latter, whereby to release said latch plate from holding engagement with said catch tongue, a key barrel rotatably mounted in said finger piece, a pivoted laterally swingable tumbler bolt, said tumbler bolt having means engageable by a key entered in and turned with said key barrel whereby to shift said tumbler bolt to and from locking position, means on said latch plate engageable by said tumbler bolt when the latter is moved to locking position, whereby to lock said latch plate and finger piece against catch tongue releasing manipulation, and detent means for yieldably holding said tumbler bolt selectively in locking or non-locking position.

ABRAHAM LEVINE.

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The following references are of record in the file of this patent:

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Number	Country	Date
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