Aug. 27, 1940. C. W. CHENEY 2,212,914

SLIDABLE BOLT FASTENING FOR ATTACHÉ AND SUIT CASES AND THE LIKE

Filed Aug. 17, 1938

Fig. 1.

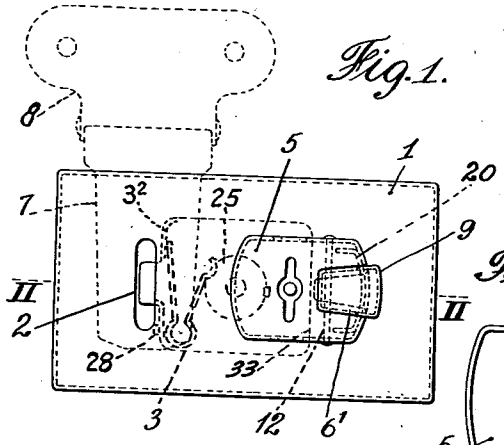


Fig. 3.

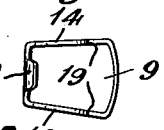


Fig. 4.

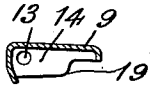


Fig. 5.

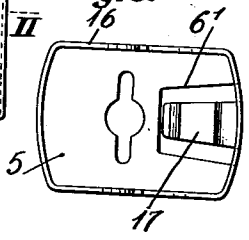


Fig. 6.

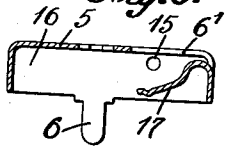


Fig. 2.

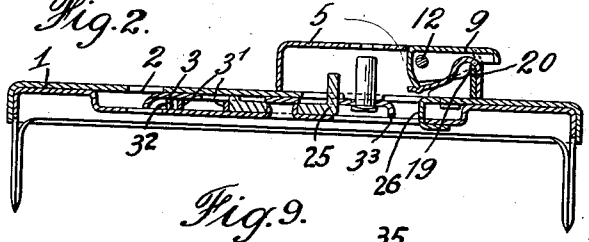


Fig. 7.

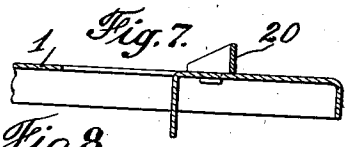


Fig. 8.

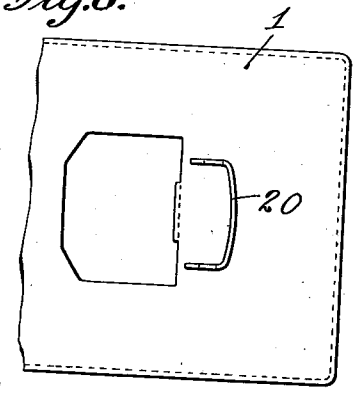


Fig. 9.

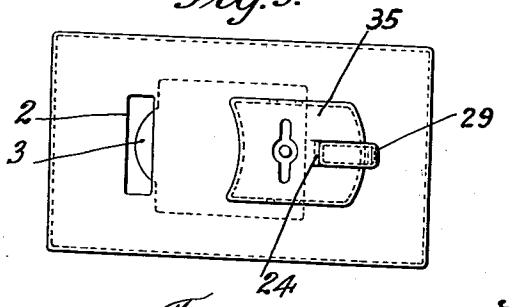


Fig. 10

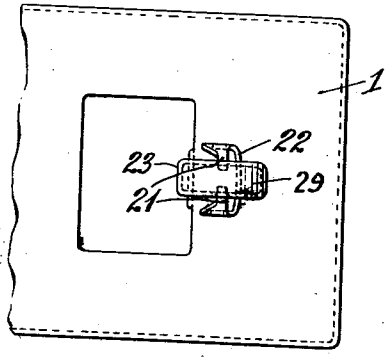


Fig. 12.

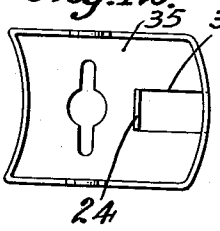


Fig. 13.

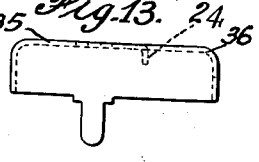
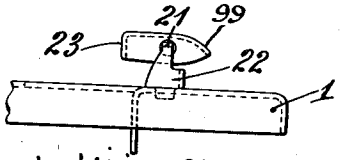


Fig. 11



Charles William Cheney
INVENTOR
By Otto Munn
his ATT'Y.

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SLIDABLE BOLT FASTENING FOR ATTACHÉ AND SUIT CASES AND THE LIKE

Charles William Cheney, Soho, Birmingham, England

Application August 17, 1938, Serial No. 225,308
In Great Britain August 23, 1937

8 Claims. (Cl. 70—67)

This invention relates to a slidable bolt fastening, for attaché and suit cases and the like, of the kind comprising a bolt casing having an opening therein and intended to be secured to the body of the case, a bolt slidable in said casing against spring action, an operating knob slidable on the face of said casing and connected therethrough to the bolt, and a manually operable blocking device for blocking the movement of said bolt. Usually, fastenings of this type include a hinged hasp adapted to be attached to the lid of the case and having a loop or notched peg to enter the opening in said bolt casing for co-operation with said bolt.

The object of the present invention is to provide an improved blocking device which is simple in construction, inexpensive to produce and assemble and yet efficient in action, and further to ensure that the purpose of the device in the unblocking position is readily obvious to the user while when in the blocking position the device is unobtrusive and cannot be inadvertently displaced.

The invention consists in the combination and arrangement of parts to be more particularly described with reference to the accompanying drawing and specifically pointed out in the appended claims.

Two embodiments of the invention are represented in the drawing.

In Figs. 1–8, illustrating the first embodiment, Fig. 1 is an elevation of the bolt and hasp fastening with the blocking or safety device in operative position.

Fig. 2 is a longitudinal section on a larger scale of Fig. 1 taken on the dotted lines II—II.

Figs. 3 and 4 are an underside plan view and a longitudinal section, respectively, of the pivoted lever.

Figs. 5 and 6 are an underside plan view and a longitudinal section, respectively, of the bolt operating knob.

Figs. 7 and 8 are fragmentary views of a portion of the bolt casing, Fig. 7 showing this casing in longitudinal section and Fig. 8 in a top plan view.

In Figs. 9–13, illustrating the second embodiment of the invention,

Fig. 9 is an elevation of the bolt casing showing the blocking device in operative position.

Fig. 10 is a fragmentary view of Fig. 9 on a larger scale with the bolt operating-knob and bolt removed.

Fig. 11 is a fragmentary side elevation of Fig. 10.

Figs. 12 and 13 illustrate in an underside plan and in side elevation, respectively, the bolt operating-knob.

Referring to Figs. 1 to 8, the bolt casing 1, to be fixed to the body of the attaché case or the like, has a hasp opening 2 therein and encloses a slidable bolt 3 pressed into shot position by a U-shaped spring 3'. Operating between the inside of the end wall 3^2 of the bolt and a key-actuated tumbler 25 to normally urge the bolt wall 3^2 against a lug 28 on the back plate 27 of the casing 1. This bolt is retracted until its rear wall 3^3 abuts against a tongue 26 on the casing 1, by means of a knob 5 which slides on the face of the bolt casing and is rigidly connected to the bolt through said casing by clinching ears 6. A hasp 7, provided as usual with a staple, eye, or notched peg to pass through the opening 2 for engagement with the bolt 3, is hinged to an attachment plate 8 to be secured to the lid of said case.

The foregoing is normal practise in the art and applies to both embodiments of the invention.

The knob 5 is provided with a gap 6^1 accommodating a small hand operated lever 9 fulcrumed on said knob to swing forwardly by a pin 12 disposed across the direction of the slidable movement of the knob 5, and passing through openings 13 in side walls 14 and engaging holes 15 in opposite walls 16 of said knob. The knob 5 is also provided with an integral depending spring limb 17 which co-operates with the inner end 18 of the lever 9 whereby a snap action is provided for the lever at the end of either of its hand movements in opposite directions. Each of the side walls 14 of the lever has a cam-like part 19 adapted to co-operate with a rigid abutment 20 upstanding from the face of the casing 1. In the position shown in Figs. 1 and 2 the cams 19 are co-operating with the abutment 20, the lever lying flush with the operating knob surface and blocking its retractive movement and in this position the free end of the lever projects slightly beyond the knob to enable it to be finger lifted into unblocking position although slidable with the knob.

In Figs. 9–13, a small lever 29 is similarly located in a gap 36 in the knob 35 but is fulcrumed on trunnions 21 to swing forwardly on an axis disposed across the direction of slidable movement of the knob 35, said trunnions being integral with lugs 22 rigidly connected to or formed upon the face of the bolt casing 1 so that the knob slides independently of the lever; in the

blocking position the inner end 23 of the lever lies flush with the knob surface and abuts against the end 24 of the gap 36 thus positively resisting movement of the knob and therefore retraction of the bolt.

It will be readily understood from the foregoing description of both embodiments of the invention that the levers swing on a short arc away from the face of the bolt casing permitting free movement of the knob for retraction of the bolt and that in the blocking position, when the levers co-operate either with the casing Figs. 1–8, or with the knob Figs. 9–13, they lie flush with the knob surface and within the boundary or in the precincts thereof, thus providing a neat safety device which will not be inadvertently operated.

The bolt casing 1 is preferably provided with suitable mechanism for locking the bolt in its shot position for which purpose the knob is, as shown, provided with a suitable key-hole to enable the tumbler 25 to be key-actuated.

If the bolt's spring should fail in the embodiment Figs. 1–8, the hand movement of the lever 9 to a position flush with the knob surface will cause the cam-like part 19 of said lever to co-operate with the abutment 20 to positively shoot the bolt, while similarly, in the embodiment Figs. 9–13, the end 23 of the lever 29 will act upon the end 24 of the gap 36 for the same purpose.

The essential feature of the invention is the hand operated lever, or arm, constituting part of the blocking device, being workably disposed in a gap in the slidable knob to swing forwardly on an axis disposed across the direction of slidable movement of said knob.

Having now described my invention, what I claim and desire to secure by Letters Patent is:

1. A slidable-bolt fastening comprising in combination a casing, a bolt slidable in said casing against spring action, an operating knob provided with a gap and being slidable on the face of the casing and connected therethrough to the bolt, and a blocking device including a hand operated lever, workably disposed in the gap of the knob to swing forwardly on an axis disposed below the level of and parallel to the surface of said knob, and an abutment with which the lever co-operates in its blocking position, said lever including a plate-shaped top portion which lies flush with the surface of the operating knob in blocking position of the lever.

2. A slidable-bolt fastening comprising in combination a casing, a bolt slidable in said casing against spring action, an operating knob provided with a gap and being slidable on the face of the casing and connected therethrough to the bolt and a blocking device including a hand operated lever pivoted on the knob and workably disposed in the gap of said knob to swing forwardly on an axle disposed across the direction of slidable movement of the knob, and an abutment formed on the casing and with which the lever co-operates in its blocking position.

3. A slidable-bolt fastening comprising in combination a casing, a bolt slidable in said casing against spring action, an operating knob provided with a gap and being slidable on the face of the casing and connected therethrough to the bolt, a spring limb formed integral with the knob, and a blocking device including a hand operated lever pivoted on the knob and workably disposed in the gap of said knob to swing forwardly on an axis disposed across the direction of slidable movement of the knob and adapted to co-operate with the spring limb to provide said lever with a snap action, and an abutment formed on the casing and with which the lever co-operates in its blocking position.

4. A slidable-bolt fastening comprising in combination a casing, a bolt slidable in said casing against spring action, an operating knob provided with a gap and being slidable on the face of the casing and connected therethrough to the bolt, and a blocking device including a hand operated lever, pivoted on the casing and workably disposed in the gap of the knob to swing forwardly on an axis disposed across the direction of slidable movement of said knob, and an abutment formed on the knob and with which the lever co-operates in its blocking position.

5. A slidable-bolt fastening comprising in combination a casing, a bolt slidable in said casing against spring action, an operating knob provided with a gap and being slidable on the face of the casing and connected therethrough to the bolt, and a blocking device including an abutment formed on the casing, and a hand operated lever, pivoted on the knob and workably disposed in the gap of said knob to swing forwardly on an axis disposed across the direction of slidable movement of the knob and to co-operate with the abutment in its blocking position so as to lie substantially flush with the surface of the knob.

6. A slidable-bolt fastening comprising in combination a casing, a bolt slidable in said casing against spring action, an operating knob provided with a gap and being slidable on the face of the casing and connected therethrough to the bolt, and a blocking device including an abutment formed on the knob, and a hand operated lever pivoted on the casing and workably disposed in the gap of said knob to swing forwardly on an axis disposed across the direction of slidable movement of the knob and to co-operate with the abutment in its blocking position so as to lie substantially flush with the surface of the knob.

7. A slidable-bolt fastening comprising in combination a casing, a bolt slidable in said casing against spring action, an operating knob provided with a gap and being slidable on the face of the casing and connected therethrough to the bolt and a blocking device including an abutment formed on the casing, and a hand operated lever pivoted on the knob and workably disposed in the gap of said knob to swing forwardly on an axis disposed across the direction of slidable movement of the knob and to co-operate with the abutment in its blocking position, said lever having a cam face adapted for co-operation with said abutment to positively shoot the bolt if its spring should fail.

8. A slidable-bolt fastening comprising in combination a casing, a bolt slidable in said casing against spring action, an operating knob provided with a gap and being slidable on the face of the casing and connected therethrough to the bolt and a blocking device including an abutment formed on the knob, and a hand operated lever pivoted on the casing and workably disposed in the gap of said knob to swing forwardly on an axis disposed across the direction of slidable movement of the knob and to co-operate with the abutment in its blocking position, said lever having a cam face adapted for co-operation with said abutment to positively shoot the bolt if its spring should fail.

CHARLES WILLIAM CHENEY.