A. F. ANDERSON.

SAFETY SNAP.

APPLICATION FILED MAY 19, 1916.

1,228,513. Patented June 5, 1917.

FIG. 1.

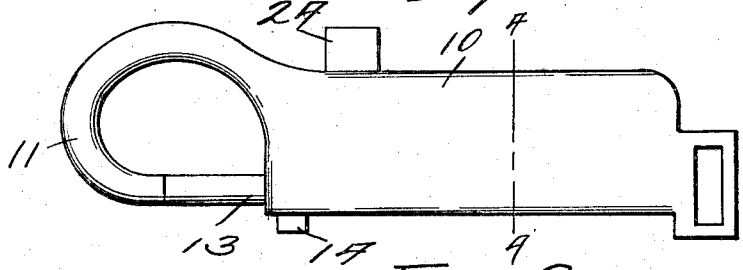


FIG. 2.

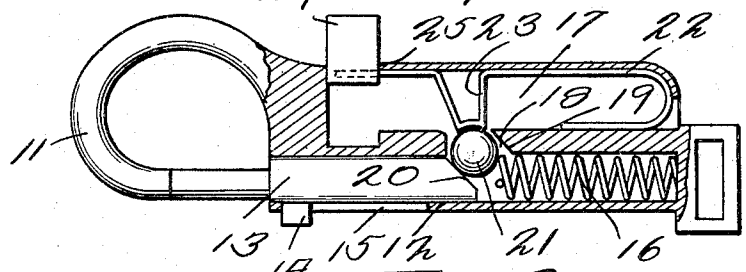


FIG. 3.

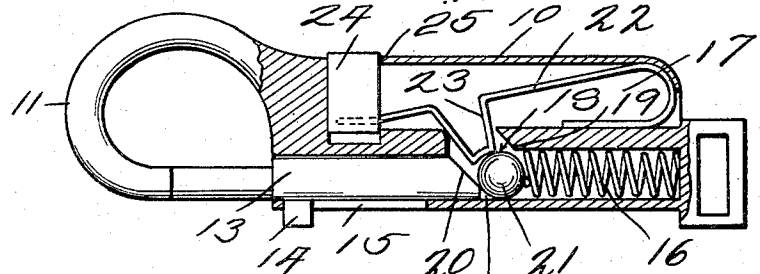
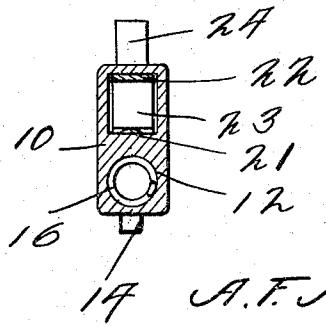


FIG. 4.



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UNITED STATES PATENT OFFICE.

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SAFETY-SNAP.

1,228,513. Specification of Letters Patent. Patented June 5, 1917.

Application filed May 19, 1916. Serial No. 98,668.

To all whom it may concern:

Be it known that I, ADOLPH F. ANDERSON, a citizen of the United States, residing at Conde, in the county of Spink, State of South Dakota, have invented certain new and useful Improvements in Safety-Snaps; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to safety snaps.

The object of the invention is to provide a snap of the type named embodying an improved construction whereby the locking bolt is automatically locked against retraction by means adapted to be released manually.

A further object of the invention is to provide a safety snap of the type named which will be simple in construction, efficient and reliable in use and which can be manufactured at a relatively low cost.

With the above and other objects in view the invention consists in the details of construction and in the arrangement and combination of parts to be hereinafter more fully described and particularly pointed out in the appended claim.

In describing the invention in detail reference will be had to the accompanying drawings wherein like characters of reference denote corresponding parts in the several views, and in which—

Figure 1 is a side elevation of a snap constructed in accordance with the invention;

Fig. 2, a longitudinal section of what is shown in Fig. 1;

Fig. 3, a view similar to Fig. 2 with the releasing spring operated to permit retraction of the locking bolt, and

Fig. 4, a section on the line 4—4 of Fig. 1.

Referring to the drawings the improved snap is shown as comprising a body 10 having a hook terminal 11, the latter being of the usual and well known construction. The body 10 is provided with an axial bolt-way 12 in which is slidably mounted a bolt 13 adapted to close the mouth of the hook terminal 11 as is well known. The bolt 13 is provided with a lateral extension 14 which projects through and slides in a slot 15 in the body 10 and which serves as a finger hold for effecting retraction of the bolt 13 in the bolt-way 12. Mounted in the bolt-way 12 is a spring 16 which serves to normally hold the bolt 13 in the position shown in Fig. 2 and in the manner that will hereinafter appear. The body 10 is also provided with a chamber 17 connected with the bolt-way 12 by means of a passage 18 having a beveled wall 19. It will be noted that the inner end of the bolt 13 is also beveled as at 20 so as to extend substantially parallel to the wall 19. Interposed between the inner end of the bolt 13 and the wall 19 and between the inner end of the bolt and spring 16 is a locking ball 21. Under normal conditions it will be obvious that the spring 16 will operate on the ball 21 to move same to the position shown in Fig. 2 and in which position it will be apparent the ball serves to lock the bolt 13 against retraction. Mounted in the chamber 17 is a leaf spring 22 which carries a projection 23 in line with the passage 18 and a projection 24 operating through a passage 25 in the body 10 and through the medium of which the free end of the spring 22 can be forced in the direction of the bolt-way 12. If it is desired to retract the bolt 13 it is only necessary to force the projection 24 inwardly. The resulting movement of the spring 22 will force the projection into the passage 18 and this will position the ball 21 as shown in Fig. 3 when the bolt 13 can be retracted. Upon release of the bolt 13 the spring 16 will return same to its normal position and the ball 21 will automatically assume the position shown in Fig. 2.

What is claimed is:—

A snap hook comprising a body including a hook and having an axial bolt-way and a chamber connected to said bolt-way by a passage, a locking bolt slidably mounted in the bolt-way, said passage having a beveled wall disposed inwardly of the inner end of the bolt when the latter is in locking position, a locking ball normally interposed between the inner end of the locking bolt and the beveled wall of the passage to lock

the bolt against retraction, a spring in said bolt-way operating on the ball to hold the latter in locking position, and means mounted in the chamber and operable from the exterior of the body to force said ball out of locking position to permit retraction of the bolt.

In testimony whereof, I affix my signature, in the presence of two witnesses.

ADOLPH F. ANDERSON.

Witnesses:
D. ROBERTSON,
L. B. PROUTY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."