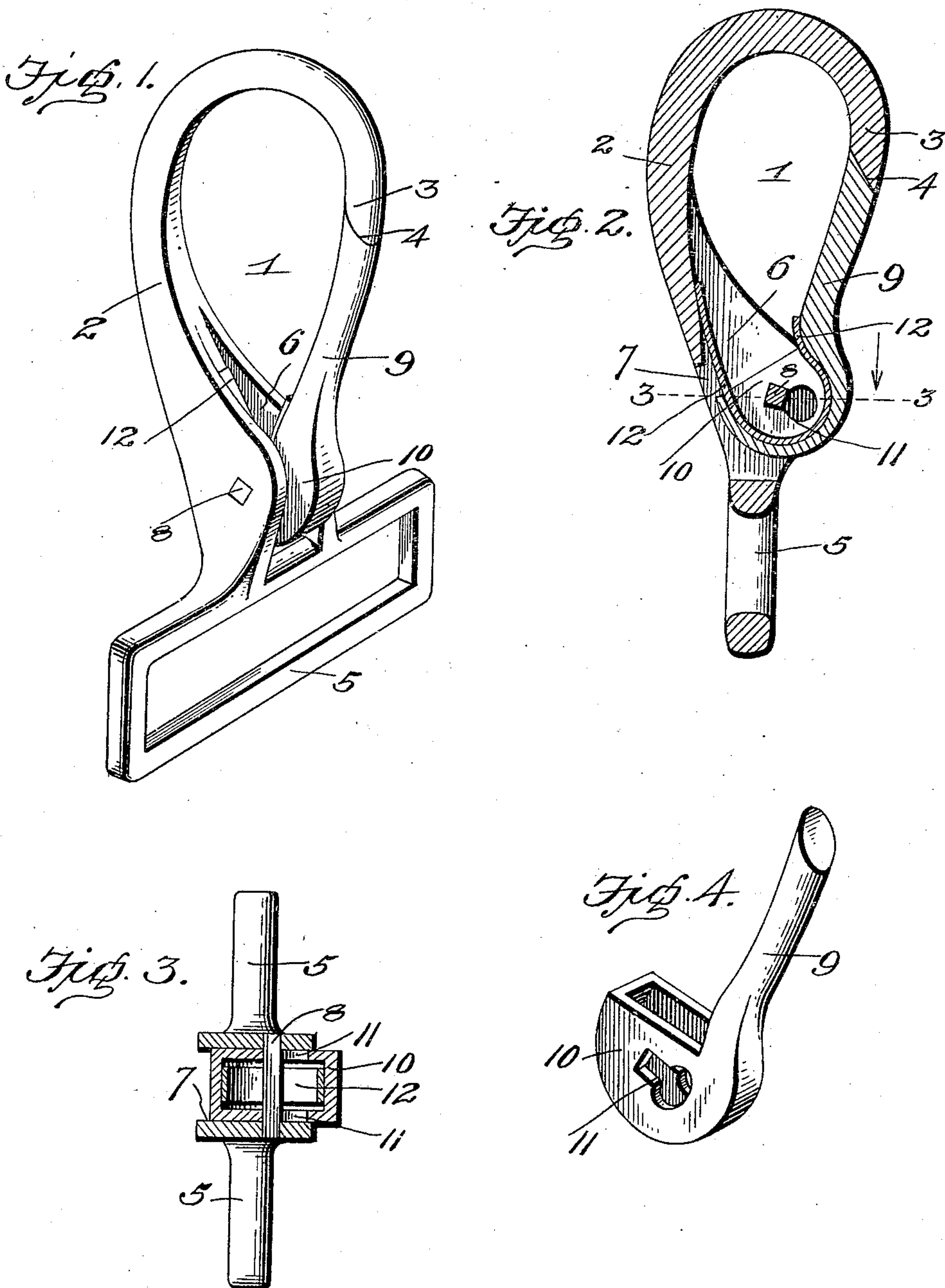


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SELF LOCKING SNAP HOOK.  
APPLICATION FILED JULY 7, 1909.

944,546.

Patented Dec. 28, 1909.



Witnesses  
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# UNITED STATES PATENT OFFICE.

ALBERT B. DOERING, OF LE MARS, IOWA.

SELF-LOCKING SNAP-HOOK.

944,546.

Specification of Letters Patent.

Patented Dec. 28, 1909.

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*To all whom it may concern:*

Be it known that I, ALBERT B. DOERING, a citizen of the United States, residing at Le Mars, in the county of Plymouth and State of Iowa, have invented certain new and useful Improvements in Self-Locking Snap-Hooks; and I do 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 improvements in self locking snap hooks.

One object of the invention is to provide a snap hook having an improved construction of locking mechanism whereby the tongue of the hook will automatically lock after being in engagement with the ring or other object, thereby preventing the casual disengagement of the hook.

Another object is to provide a hook of this character in which the tongue may be readily released from its locked position, when it is desired to open the hook.

With the foregoing and other objects in view, the invention consists of certain novel features of construction, combination and arrangement of parts, as will be more fully described and particularly pointed out in the appended claim.

In the accompanying drawings, Figure 1 is a perspective view of a snap hook constructed in accordance with the invention; Fig. 2 is a vertical sectional view; Fig. 3 is a transverse section on the line 3—3 of Fig. 1; Fig. 4 is a detail perspective view of the tongue removed from the hook.

Referring more particularly to the drawings, 1 denotes the hook which consists of a body portion 2 having on one end a bill 3 provided with a beveled end 4. On the opposite end of the body portion of the hook, is formed an eye or loop 5 with which is adapted to be connected a strap or the like.

In the inner side of the body portion of the hook is formed a recess 6 which communicates at its lower end with the slot 7 formed through the body portion, adjacent to the eye or loop 5, as shown. Arranged in the recess 6 is a square pivot bolt 8. On the pivot bolt is pivotally mounted a tongue 9, the outer end of which is beveled to fit the beveled end of the bill of the hook, when the tongue is in a closed position. On the lower end of the tongue is formed a recessed head 10, in the opposite side walls of which

are formed alined key-hole shaped slots 11, the narrow portions of which are squared and adapted to closely fit the bolt 8, when engaged therewith. The larger end of the slots is round and of greater diameter than the bolt, so that when said round and large portion of the slots is in engagement with the bolt, the tongue may be readily moved in and out of engagement with the bill of the hook to close and open the latter.

When the tongue is in operative position, in the hook, the inner end or head of the tongue is forced outwardly by a flat bow spring 12 arranged in the recessed portion of the head and having one of its ends engaging the bottom wall of the recess in the body portion of the hook. When the head of the tongue is thus forced outwardly, the squared ends of the slots 11 in said head will be brought into engagement with the square pivot bolt, thus preventing the inward or pivotal movement of the tongue and thereby holding the tongue in locked position. When it is desired to disengage the tongue from the bill of the hook to open the latter, it is first necessary to press inwardly on the headed end of the tongue thereby moving said head inwardly against the tension of the spring 12 to bring the larger ends of the slots into engagement with the pivot bolt, in which position, the tongue may be forced inwardly against the tension of the spring 12 to open the hook. When the tongue is released after thus being opened, the spring will not only close the tongue into engagement with the bill but will also push the headed end of the tongue outwardly to again bring the squared ends of the slots into engagement with the squared pivot bolt, thus automatically locking the tongue in closed position.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of the invention, as defined in the appended claim.

Having thus described my invention, what I claim is:

A snap hook comprising a body portion, a bill formed on one end thereof, a square

pivot bolt arranged in said body portion, a tongue having formed therein key-hole shaped slots adapted to receive said square pivot bolt, whereby when the larger ends of  
5 the slots are engaged with the bolt, the tongue may be opened and when the squared ends of the slots are engaged with the bolt, the tongue will be locked in a closed position, and a spring to close said tongue and

force the same into locked engagement with 10 said bolt.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

ALBERT B. DOERING.

Witnesses:

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H. O. DOERING.