

T. R. PETERSON.
SNAP HOOK.
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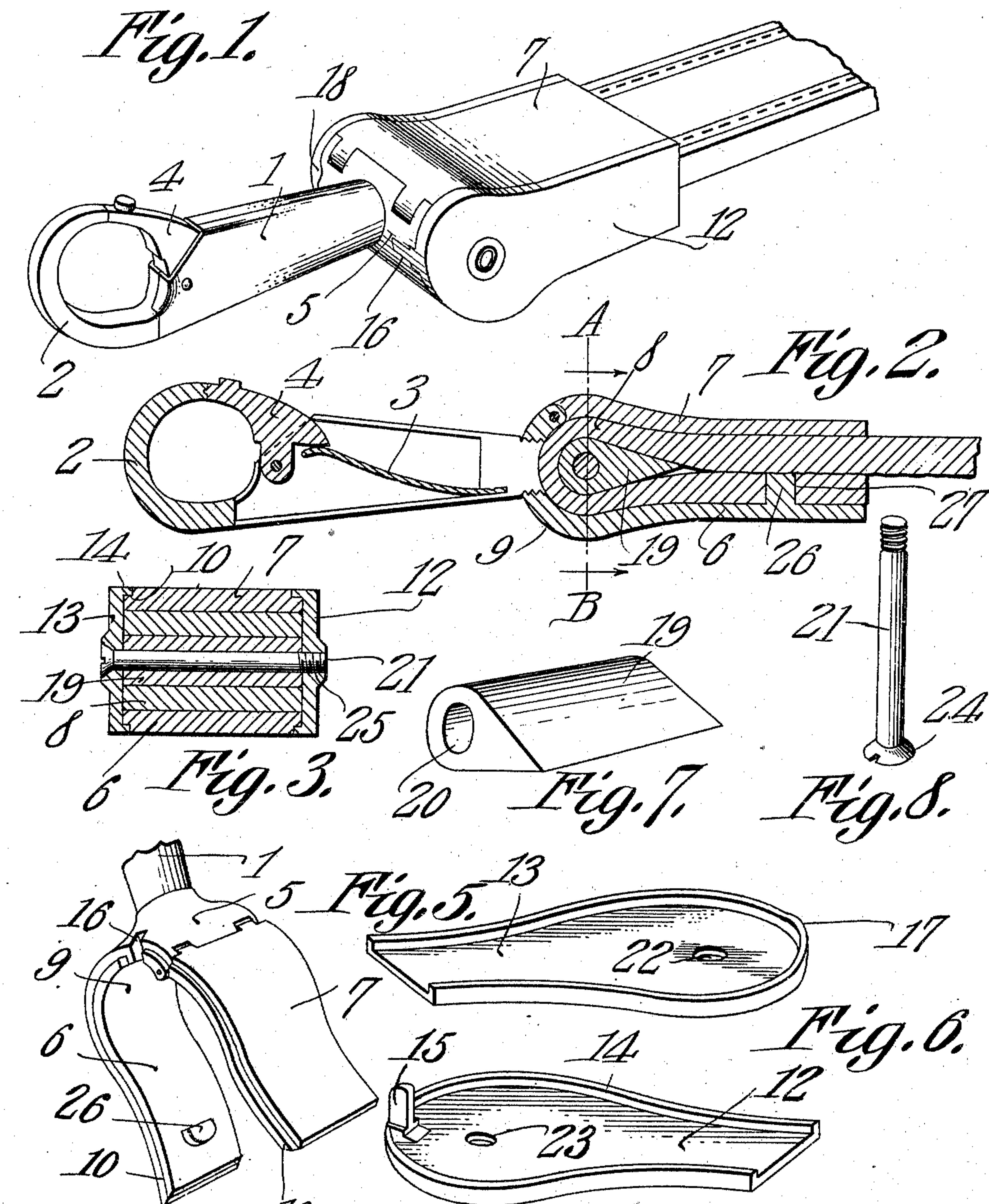


Fig. 4.
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UNITED STATES PATENT OFFICE.

THEODORE R. PETERSON, OF RAY, NORTH DAKOTA.

SNAP-HOOK.

967,664.

Specification of Letters Patent. Patented Aug. 16, 1910.

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To all whom it may concern:

Be it known that I, THEODORE R. PETERSON, a citizen of the United States, residing at Ray, in the county of Williams and State of North Dakota, have invented a new and useful Snap-Hook, of which the following is a specification.

My invention relates to snap-hooks, particularly to snap-hooks for harness and for an object to provide a device of this character which has a pair of hinged clamping elements between which the terminal of the harness strap is looped, the exposed ends of the clamping members being closed by interfitting retaining plates which form a water tight receptacle therebetween and effectively prevent mildew or other destructive agents from gaining access to the strap.

A further object is to provide a device of this character having no rough corners to lacerate adjacent portions of the harness.

A further object is to provide a device of this character having a locking device to engage the harness strap and prevent disengagement of the strap during severe conditions of service.

With the above and other objects in view which will appear as the nature of the invention is better understood, my invention embraces the structure illustrated in the accompanying drawing in which like characters of reference designate similar parts in the view shown.

In the accompanying drawing;—Figure 1 is a perspective view of a snap-hook constructed in accordance with my invention. Fig. 2 is a longitudinal section through the same. Fig. 3 is a cross section through the line A—B Fig. 2. Fig. 4 is a detail perspective view of the shank and clamping elements. Fig. 5 is a detail perspective view of one of the retaining plates. Fig. 6 is a detail view of the other retaining plate. Fig. 7 is a detail view of the hollow wedge. Fig. 8 is a detail view of the locking member.

Referring now to the drawing, 1 designates the shank of the snap-hook which terminates at one end in a hooked portion 2. The shank is preferably formed hollow at its upper end to seat a spring 3 which exerts an upward pressure on a catch 4 that co-operates with the bottom of the hook portion to form an eye for engagement with the ring of a bridle or other portion of the harness in the usual and well known manner.

Suitably secured to the shank 1 is a bifur-

cated clamping head 5, the lateral branches 6 and 7 of which form clamping elements for engagement with the looped terminal of the harness strap 8. The clamping element 7 is hinged to the clamping element 6 so as to facilitate inserting the loop 8 therebetween. Formed upon the upper portion of the clamping element 6 is a rounded head portion 9 which operates in conjunction with the rounded head portion of the clamping element 7 to form an eye which conforms to the contour of the loop 8 of the harness strap as shown. Formed upon the lateral edges of the clamping element is a channel or ledge 10 for engagement with the retaining plates 12 and 13.

The retaining plates are each formed from a flat piece of metal and conform in outline to the contour of the end edges of the clamping elements when the latter are in operative position. The retaining plates are provided with marginal flanges 14 which engage the ledges 10 of the clamping elements and form a water tight joint therebetween.

Projecting from the retaining plate 12 is a lug 15 which engages a correspondingly shaped recess 16 formed in the head portion of the clamping elements and serves to reinforce and strengthen the connection between the retaining plate and clamping elements. For a similar purpose a projection 17 formed upon the retaining plate 13 engages a correspondingly shaped recess 18 formed in the opposite end edge of the said head portion.

A wedge 19 having an annular recess 20 formed transversely its widest portion is loosely engaged in the loop 7 of the harness strap and is sufficient in length to extend the entire width of the loop portion. The function of the wedge 19 is to hold the loop portion spread sufficiently to prevent the accidental disengagement of the strap from the clamping elements during severe conditions of service. Engaged through the bore of the wedge is a locking pin 21, which projects through aligned openings 22 and 23 in the retaining plates.

One end of the pin is provided with a retaining head 24 and the opposite end is screw-threaded to engage with the internal screw threads 25 of the opening 23. When the pin is screwed home the parts are held locked in position and will not be released until the pin is backed out from engagement with the retaining plates by manual opera-

tion. As an additional safe guard for preventing the accidental displacement of the looped terminal 8 of the harness strap, a lug 26 is positioned on the inner face of the clamping element 6, and a recess 27 is formed in the strap for engagement with this lug. As may be seen by referring to the drawing when the lug is engaged in the recess it is impossible for the strap to be pulled over the wedge 19 and free from the clamping elements.

From the foregoing description taken in connection with the accompanying drawings, it is thought that the construction and operation of my invention may be easily understood without a more extended explanation, it being understood that various changes in the form, proportion and minor details of construction may be made without sacrificing any of the advantages or departing from the spirit of the invention as defined by the appended claims.

I claim:—

1. A snap hook having a pair of hinged clamping elements adapted to retain the loop of a harness strap or other fastener, retaining plates engageable with the opposite end edges of said clamping elements and operating to prevent spreading apart of the same, a wedge between said clamping elements for engagement with the eye of said loop, and a locking member projecting through said wedge and engageable with said retaining plates for locking the parts in operative position.

2. A snap hook terminating at one end in a clamping element having a substantially semi-circular head portion, a second clamping element hinged to said semi-circular head portion and coöperating therewith to form an eye, retaining plates attached to the end edges of said clamping elements for limiting the spreading movement thereof, a wedge loosely carried in the eye formed by the clamping elements, and a locking member engaged through said wedge and engageable with said retaining plates for locking the parts in operative position.

3. A snap hook having a pair of hinged clamping elements adapted to conform to the contour of and snugly engage the loop of a harness strap, each of said clamping elements having a channel run around its end edges, retaining plates each having an upstanding flange extending around its marginal edge for engagement with the channeled ends of said clamping elements, an orificed wedge loosely carried between said clamping elements and engageable through the eye of said harness strap loop, and a locking member engaged through the bore of said orificed wedge and through aligned openings in said retaining plates whereby to lockingly hold the parts in operative position.

4. A snap hook terminating at one end in a bifurcated clamping head one of the branches of which is hinged to the other, a lug carried by one of the branches for engagement with a harness-strap engaged between said branches, retaining plates removably secured to the lateral edges of said branches for limiting the spreading movement of the same, a wedge carried between said branches for engagement in the loop of the harness strap clamped therebetween, and a locking member engaged through the bore of said wedge and engageable with said retaining plates whereby to hold the parts locked in position.

5. A snap hook having a pair of hinged clamping elements adapted to retain the loop of a strap, removable retaining plates engageable with opposite edges of said clamping elements to hold the same against spreading, and means connecting the retaining plates for holding the same in engagement with the clamping elements.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

THEODORE R. PETERSON.

Witnesses:

ANDREW WESTMAN,
CHARLEY DELSRUD.