No. 658,124. Patented Sept. 18, 1900.

W. W. SEMPLE.

COMBINED BUCKLE AND SNAP HOOK.

(Application filed Dec. 14, 1899.)

(No Model.)

Fig. 1.

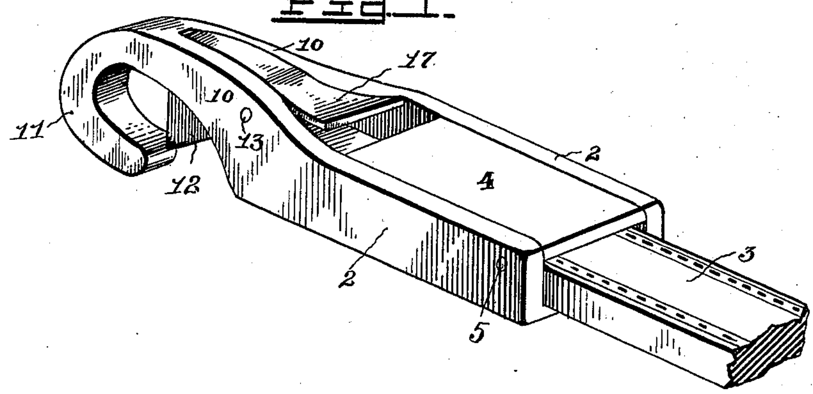


Fig. 2.

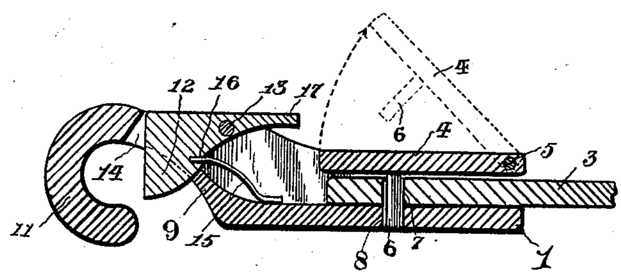
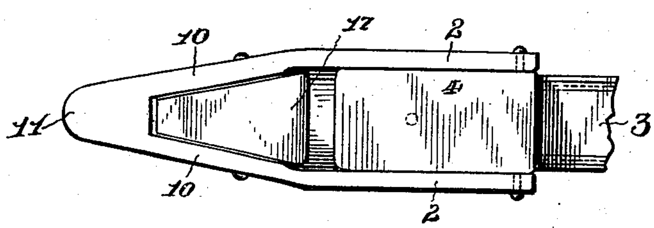


Fig. 3.



Witnesses
Leo S. Bonders
[signature]

William W. Semple. Inventor
By his Attorneys,
C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

WILLIAM W. SEMPLE, OF PENDLETON, OREGON.

COMBINED BUCKLE AND SNAP-HOOK.

SPECIFICATION forming part of Letters Patent No. 658,124, dated September 18, 1900.

Application filed December 14, 1899. Serial No. 740,327. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM W. SEMPLE, a citizen of the United States, residing at Pendleton, in the county of Umatilla and State of Oregon, have invented a new and useful Snap-Hook, of which the following is a specification.

This invention relates to snap-hooks, and has for its object to provide an improved device of this character which is especially adapted for use upon harness and for connecting the driving-reins with the bit or the tugs to the hames. It is furthermore designed to provide a comparatively flat device having no projections to catch in the harness; also, to provide means for detachable application to a strap, so that the latter may rest flat upon the device, and finally to arrange the tongue of the hook in such relation to the means for connecting it to a strap that the operation of the tongue to release the hook tends to prevent accidental detachment from the strap.

To these ends the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the appended claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a perspective view of a snap-hook constructed in accordance with the present invention. Fig. 2 is a longitudinal sectional view thereof. Fig. 3 is a top plan view of the snap-hook.

Corresponding parts in the several figures of the drawings are designated by like characters of reference.

Referring to the accompanying drawings, it will be seen that the body of the snap-hook comprises a substantially-flat plate 1, having the opposite longitudinal flanges 2 extending the entire length of the plate and forming a substantially-rectangular box for the reception of a strap 3.

To lock the strap to the snap-kook, I have provided a tongue in the form of a flat plate 4, which fits easily between the flanges 2 and has its outer end pivoted to the outer or rear ends of the flanges and near the upper edges thereof, as indicated at 5, and also provided upon its inner face with a lug or spur 6, which is designed to pass through the perforation 7, commonly formed in straps, and also to enter an opening 8, formed in the plate 1. By reference to Fig. 2 it will be seen that in the locked position of the pivoted plate 4 the latter rests upon the top of the strap and is also flush with the outer edges of the flanges 2, whereby the rear portion of the snap-hook is entirely free from projections. Furthermore, the pull upon the strap 3 comes upon the lug or spur 6, and as the latter projects from the inner face of the plate 4 such pull or strain tends to bind the plate more firmly upon the strap, and as the spur enters the opening in the plate 1 it is effectually braced thereby, so as to relieve the strain from the pivotal or hinged connection of the strap-engaging plate or tongue 4.

The forward portion 9 of the plate 1 is inclined laterally and forwardly upon the pivoted-plate side of the snap-hook, and the forward portions 10 of the flanges 2 converge forwardly into the inclined portion of the plate and are then formed into a hook or bill 11, the extremity of which is located upon one side of the device and opposite the pivoted or hinged plate 4.

Located between the convergent portion of the flanges is a tongue 12, which is provided with a pivot 13, the opposite ends of which have a bearing in the flanges 2 and near the inner ends of the convergent portion thereof. As illustrated in Fig. 2, it will be seen that the tongue is in the form of a substantially right-angle triangle and projects through a slot 14, formed longitudinally of the inclined portion 9 of the body of the snap-hook, so as to substantially close the entrance-opening into the bill 11. The tongue is normally held in its closed position by means of a leaf-spring 15, having one end engaging the inner side of the plate 1 and its opposite end fitted into a notch 16, formed in the under side of the tongue and in advance of the pivotal axis thereof, so as to normally bear downward and maintain the tongue in its closed position. By reference to Fig. 3 it will be seen that the upper or outer portion of the tongue substantially fills the space between the convergent portions of the flanges 2, and the comparatively-broad rear portion 17, forming an op-

erating thumb-piece, is located in advance of and adjacent to the inner free end of the pivoted or hinged plate 4, so that when the thumb-piece is depressed the thumb or finger of the operator is directly over and also bears against the free end of the plate 4 and effectually prevents the latter from being accidentally disengaged from the strap during the operation of the thumb-piece. It will also be noted that the outer face of the tongue is substantially flush with the convergent portions of the flanges 2, and therefore does not project sufficiently to be accidentally operated by engagement with any portion of the harness. The shape of the spring 15 is immaterial, as it may be straight instead of bowed; but it should be connected at its forward end to the tongue 12 only, while its rear end is freely slidable upon the plate 1 and is designed to ride forwardly upon the forwardly-inclined end 9 of the plate 1 when the thumb-piece 17 is pressed, thereby exerting an inward tension upon the forward end of the tongue to close the latter after the thumb-piece has been released.

What I claim is—

1. In a snap-hook, a body, having a bill at one end and disposed upon one side thereof, a spring-actuated tongue, coöperating with the bill, and disposed longitudinally of the body, and a strap-engaging tongue pivoted to the opposite end and upon the opposite side of the body, alined longitudinally with the spring-actuated tongue, and having its free end located adjacent to the latter tongue.

2. In a snap-hook, a substantially-flat body, having opposite longitudinal flanges extending the entire length thereof, a bill located at one end of the body, and a flat plate pivoted to the opposite end of the body and located between the flanges, and provided upon its inner side with a strap-engaging lug or spur, and a spring-actuated tongue also pivoted between the flanges, coöperating with the bill, and having an operating thumb-piece arranged in advance of and adjacent to the free end of the pivoted plate.

3. In a snap-hook, a substantially-flat plate, having one end inclined laterally and forwardly, and provided with a longitudinal slot, a bill provided at the forward extremity of the inclined end, longitudinal flanges located at opposite edges of the plate, extending the entire length thereof, and having their front portions converged into the bill, a tongue mounted between the convergent portions of the flanges, projecting through the slot in the plate, to coöperate with the bill, and provided with an operating thumb-piece, and a flat plate located between and pivoted to the outer ends of the flanges and near the upper sides thereof, foldable inward between the flanges, and having a lug or spur provided upon its inner face, the free end of the pivotal plate being located adjacent to the operating thumb-piece of the tongue.

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

WILLIAM W. SEMPLE.

Witnesses:
WM. P. LATHROP,
C. C. BERKELEY.