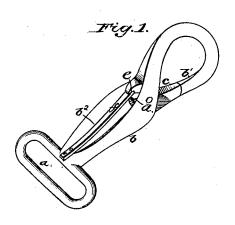
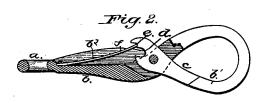
E. KEMPSHALL. Harness-Snap.

No.166,783.

Patented Aug. 17, 1875.





Witnesses:

John Pollitt George E. Nolaw. Invertor:

Eleazer Tumpshall

By

W- 2. Simonds

Atty

UNITED STATES PATENT OFFICE.

ELEAZER KEMPSHALL, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO WILLIAM J. PHELPS AND WILLARD P. ABERNETHY, OF SPRINGFIELD, MASSACHUSETTS.

IMPROVEMENT IN HARNESS-SNAPS.

Specification forming part of Letters Patent No. 166,783, dated August 17, 1875; application filed May 4, 1875.

To all whom it may concern:

Be it known that I, ELEAZER KEMPSHALL, of New Britain, in the county of Hartford and State of Connecticut, have invented an Improved Harness-Snap, of which the following is a specification, reference being had to the accompanying drawings, where—

Figure 1 is a perspective view of the same. Fig. 2 is a view showing a part of the same in

section.

My invention is a snap-hook for use in and about the harness of horses and other animals

The letter a denotes the ring into which the harness-strap is fastened; b, the body of the snap, terminating in the hook b^1 . In the body b is hung and pivoted the pawl c, so hung that its longer end swings inward to open the snap, and be so constructed and combined with the other parts of the snap that no pressure put upon it, or any part of it, in any direction otherwise than through the medium of the piece f, can avail to open it. In the butt end of the pawl c is a mortise, d, in the upper part of which is the shoulder e. To the body b, and lying within the pocket b^2 , is riveted, at one end, the spring f, its other end entering the mortise d. By pressing down on this spring with one's thumb the longer end of the pawl is swung inward and the snap opened. When the pressure is taken off the spring the spring closes the pawl upon the hook b^1 , and, abutting against the shoulder e, holds the pawl locked in its closed position so that the snap cannot be opened by accident. The piece f is at once a spring and a locking piece for the pawl c. The hanging of the pawl c so that it swings inward to open the snap is an important feature, in combination with the lock-spring f, for the ring or snap upon which the device is snapped never presses inward upon the pawl, but always outward, when it

presses on the pawl at all, and outward pressure only closes the pawl more securely. Not only this, but a person, in snapping the device upon a ring or strap, must necessarily use both hands if the pawl swing outward to open, one hand to hold and enter the strap or ring, and the other hand to work the snap, as a person can readily satisfy himself by trial, while, if the pawl swing inward to open, but one hand is necessary, and that the hand to manipulate the snap.

I am aware that previous to this invention of mine various harness snaps have been made and used in which the swinging tongue has been locked in position when shut, and I do not intend to cover or claim herein broadly a snap, the tongue of which locks when closed, but only the construction and combination herein shown and described, the essential features of which are, first, that the swinging tongue shall swing inward to open the snap; second, that the piece f shall lie within the pocket b^2 so that it cannot be operated on save by design; third, that the piece f shall be at once a spring to close the tongue and a locking support for the tongue when closed; fourth, that the tongue c shall have the peculiar mortise d, containing the shoulder e, against which the end of the piece f abuts when the tongue is closed, so as to lock it in place.

I claim as my improvement—

A snap-hook, having the hook b^1 , the inwardly-swinging tongue c, having at its rear end the mortise d, with shoulder e, and the spring f lying within the pocket b^2 , all constructed, combined, and arranged substantially as shown and described.

ELEAZER KEMPSHALL.

Witnesses:
Wm. Edgar Simonds,
George E. Nolan.