

(No Model.)

F. R. SCOFIELD.
HARNESS SNAP.

No. 493,188.

Patented Mar. 7, 1893.

Fig. 1.

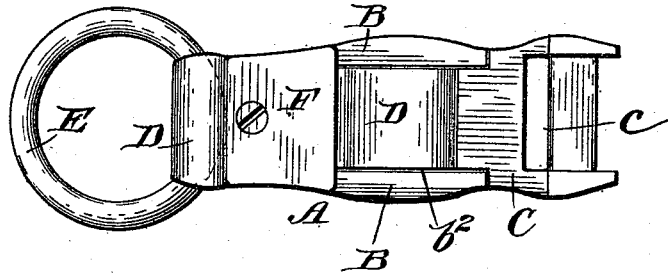


Fig. 2.

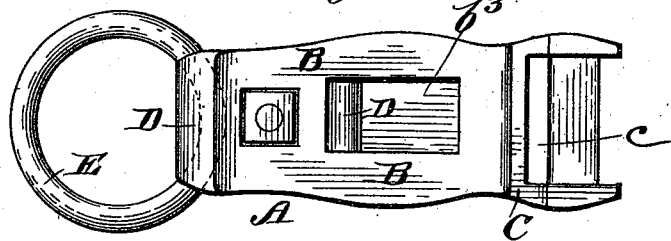


Fig. 3.

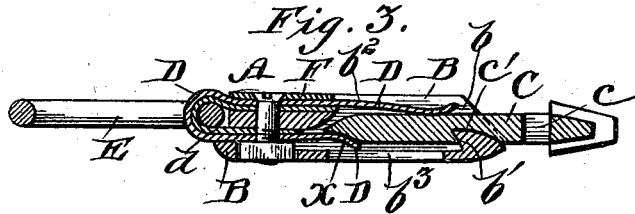
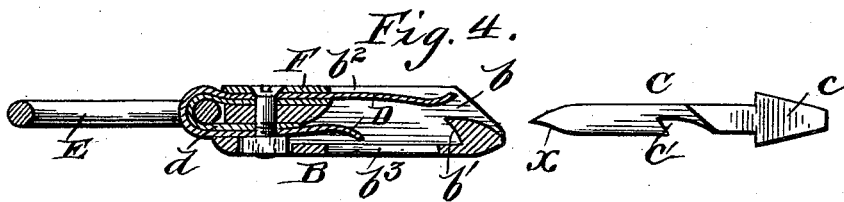


Fig. 4.



Witness:
C. Calvert Niles.

Fredrick R. Scofield
by his Atty
Mason Fenwick Lawrence.

UNITED STATES PATENT OFFICE.

FREDERIC R. SCOFIELD, OF PENFIELD, PENNSYLVANIA.

HARNESS-SNAP.

SPECIFICATION forming part of Letters Patent No. 493,188, dated March 7, 1893.

Application filed November 30, 1892. Serial No. 453,585. (No model.)

To all whom it may concern:

Be it known that I, FREDERIC R. SCOFIELD, a citizen of the United States, residing at Penfield, in the county of Clearfield and State of Pennsylvania, have invented certain new and useful Improvements in Harness-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.

My invention relates to a snap for harness, and consists of two members, one of which is adapted to fit within the other and to be strongly held in such condition and the members readily and quickly separated, whereby a horse can be hitched and unhitched without the necessity of wrapping the backstraps around the shafts and unwinding them when unhitching.

In the accompanying drawings, Figure 1 is a top plan view of my improved harness snap and Fig. 2 is a bottom view of the same. Fig. 3 is a vertical longitudinal section of the snap and Fig. 4 is a similar section, but showing the members separated.

A in the drawings represents my improved harness snap which may be applied to any suitable part of the harness, but is found especially useful in connection with the hold-back strap and the breeching.

It consists of a socketed tongue receiving member B and a tongue member C. The tongue receiving member consists of a suitable light metal recessed housing or frame having rigid side guiding jaws and provided at its front end with an entering passage *b* and an overhanging, retaining shoulder *b'*. The receiving member is cut away on top and bottom at *b²* and *b³* to allow for the insertion and operation of a flat spring D, which latter is passed around the rear end of the receiving member and its outer free end rests in said cut away portions as shown. This spring is held in position by a bolt passing through the upper and lower branches of the spring and held by a nut as shown. When it is desired to attach the tongue receiving member B to a breeching ring E of a breeching, the nut is released, the bolt removed and the ring slipped over one of the ends of the spring and secured in position between the rear end of the tongue receiving member and the spring. A suitable rubber or leather packing *d* may

be interposed between the spring and the rear end of the tongue receiving portion to prevent rattling and friction. The outer free portion of the lower branch of the spring is slightly arched and its end bent downward so as to bear upon the beveled end of the tongue and the outer free portion of the upper branch of the spring is made slightly concave so as to bear firmly upon the tongue when the latter is in position within the tongue receiving portion and also to render it necessary to raise the spring in inserting the tongue into the receiving member. The spring when in use has a double pressure on the tongue, both branches of the spring tending to hold it in position. A plate F bears upon a portion of the spring and is held in position by the bolt and nut which hold the spring D in place.

Instead of using a rubber or leather packing, between the bowed portion of the spring and the breeching ring, I contemplate employing a light metal clip which would be slightly wider than the spring and countersunk, so that where the spring passes around it, the surface of the spring will be flush with the outer surface of the tongue receiving portion. The tongue member C is provided at its outer end with a strap attaching portion *c* and is recessed to form an underhanging shoulder *c'*, whereby, when the tongue is slipped longitudinally past the shoulder *b'*, the spring will force the tongue down so as to bring the shoulder *c'* on an interlocking plane with the shoulder *b'*, and then by a forward pull of the tongue a perfect interlock between the two shoulders can be effected, and by again forcing the tongue backward slightly, so as to have the shoulder *c'* clear the shoulder *b'*, and then prying upward upon the end *c* of the tongue the lower part of the spring serving as a fulcrum, and the upper part of the spring yielding to the pressure, the tongue by a forward pull can be separated from the tongue receiving member. The tongue is beveled at *x*, so that the lower member of the spring resting upon it at this point tends to push the tongue forward and hold it constantly against the shoulder *b'*, so that in order to open the snap it is necessary to push the members slightly toward each other before the tongue can be raised up and over the shoulder or catch *b'*. The tongue is slightly concave on top and

beveled off at its ends to correspond to the shape of the socket formed in the interior of the tongue receiving portion and to fit in a dovetail manner, so that the tighter the strap is drawn the more secure it will hold. The tongue is provided with preferably beveled limitation stop shoulders, which, when the tongue is inserted into the receiving member, abut against the correspondingly beveled ends of said receiving member and prevent the tongue being forced too far into the same.

When the snap is applied to the breeching and is not in use, the tongue receiving portion is left on the breeching strap and the tongue member on the hold back strap.

The snap can be made of iron such as used in the manufacture of other snaps, can be made very light in appearance and at the same time very strong.

What I claim as my invention is—

1. A snap hook comprising a tongue receiving member and a tongue member, the receiv-

ing member having rigid side jaws and a spring top and bottom portion and an overhanging retaining shoulder portion; and a tongue member having an underhanging retaining shoulder, substantially as described.

2. A snap hook comprising a tongue member C formed with an underhanging shoulder C' and a beveled end α , in combination with a receiving member B having the underhanging shoulder b' ; and the spring B having two branches one longer than the other and forming top and bottom portions of the member B and both acting to keep the tongue in engagement with the receiving member, substantially as described.

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

FREDERIC R. SCOFIELD.

Witnesses:

J. H. BROWN,
J. A. NEIMAN.