

Woodard & Bruen.

Harness Snaps.

N^o 11,710.

Patented Feb. 7, 1871.

Fig. 1.

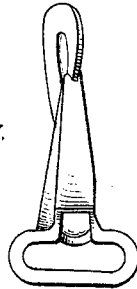


Fig. 2.

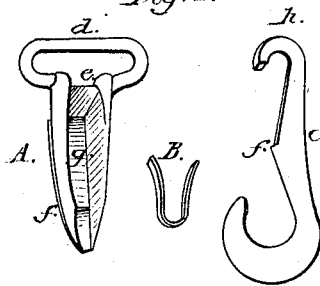
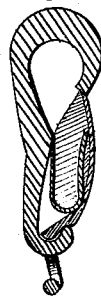


Fig. 3.



Witnesses:
Peter Gerner
Wm. H. H. H.

Inventors:
Alonso B. Woodard,
William T. Bruen.

United States Patent Office.

ALONZO B. WOODARD, OF ALFRED CENTRE, NEW YORK, AND WILLIAM BRUEN, OF NEWARK, NEW JERSEY; SAID BRUEN ASSIGNS HIS RIGHT TO SAID WOODARD.

Letters Patent No. 111,710, dated February 7, 1871; antedated January 28, 1871.

IMPROVEMENT IN HARNESS-SNAPS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that we, ALONZO B. WOODARD, of Alfred Centre, in the county of Allegany and State of New York, and WILLIAM BRUEN, of Newark, in the county of Essex and State of New Jersey, have invented a new and useful Improvement in the Manufacture of Snap-Hooks for Harness; and we do hereby declare the following to be a full, clear, and exact description thereof sufficient to enable those skilled in the art to which our invention appertains to fully understand and to make and use the same, reference being had to the accompanying drawings forming part of this specification, and in which—

Figure 1 is a perspective view;

Figure 2, a view of the parts detached; and

Figure 3, a longitudinal central section.

This invention consists in the peculiar construction of parts, as hereinafter described, the hook and tongue being cast without a core, and put together without drilling or boring of any kind, or the use of a rivet, whereby additional strength is obtained and the cost of the article greatly reduced.

Our improved snap-hook is composed of three parts, viz., the tongue A and part C, both cast, and the spring B.

It will be seen that the rein-loop *d* is cast with the tongue A instead of with the part C, as usual.

By this construction only can the use of a core in casting be dispensed with.

We wish it understood, however, that we do not claim broadly the casting of the loop with the tongue, as this is not new.

The part C is cast with two hooks, *h i*, one at each end, the larger hook, *i*, being the one which is caught into the bridle-ring, while the smaller hook receives the part *e* of the tongue A.

The tongue is of peculiar form, as shown in sectional view, fig. 3, and detached view, fig. 2, being cast

so as to receive, inclose, and protect the spring B. In addition to this peculiarity of construction it has the loop *d*, and rounded bearing surface *e*.

The spring is of flat metal in U-shape, as clearly shown, and it is almost entirely inclosed by the tongue. Its ends bear against shoulders *f f*, on the inner surfaces of the tongue and part C.

The tongue and part C are fitted together and held securely without a rivet or other fastening of the kind, the hook *h* receiving the part *e* and the spring entirely preventing displacement. In fact, when the parts have been put together it is impossible to separate them without first breaking the spring, and the latter is fully protected from accident by the inclosing tongue.

We are aware that snap-hooks have been made in which the rein-loop is attached to the tongue portion, but in that case, besides differing entirely from ours in construction, the parts were held together by a rivet, which necessitated drilling and boring.

Our device is superior on account of the protection of the spring and consequent increased strength and durability; and besides it can be manufactured much cheaper, for we dispense not only with a core in casting, but with the cost of drilling and riveting in putting the parts together.

Having thus described our invention,

What we claim as new, and desire to secure by Letters Patent, is—

The recessed tongue A, cast with loop *d* and bearing *e*, and the part C, with hooks *h i*, for the purposes set forth, when said tongue and part C are fitted together, as shown, and held in contact by the inclosed spring B, all substantially as herein described, and forming an improved harness-snap.

A. B. WOODARD.

WILLIAM BRUEN.

Witnesses:

RALPH W. PAINE,
PETER GINNER.