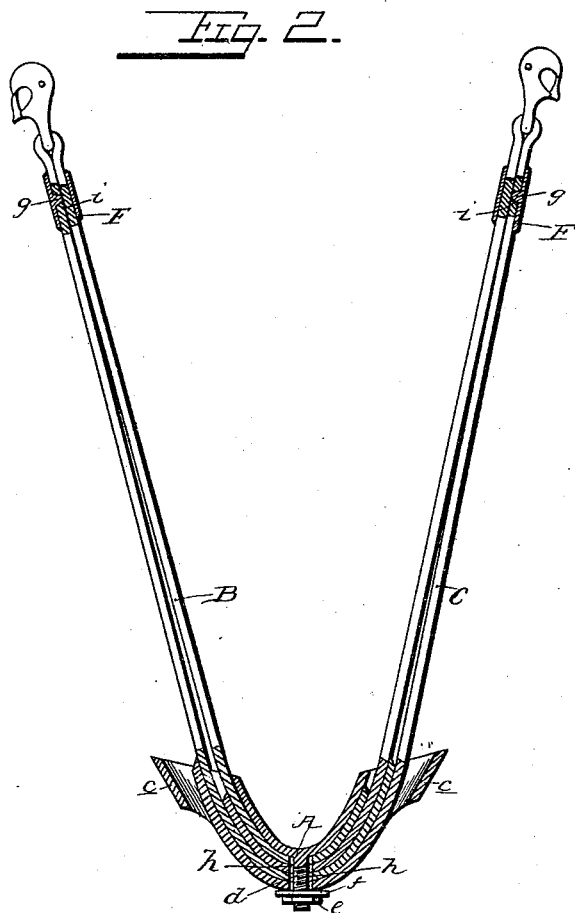
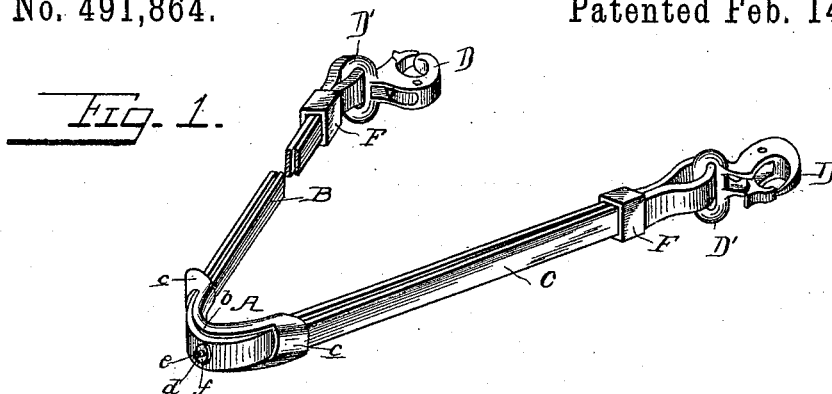


(No Model.)

H. D. STODDARD.
BREAST STRAP.

No. 491,864.

Patented Feb. 14, 1893.



Attest:
Walter Fumariss,
E. H. Blackman

Inventor:
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UNITED STATES PATENT OFFICE.

HIRAM D. STODDARD, OF BINGHAMTON, NEW YORK.

BREAST-STRAP.

SPECIFICATION forming part of Letters Patent No. 491,864, dated February 14, 1893.

Application filed October 22, 1892. Serial No. 449,708. (No model.)

To all whom it may concern:

Be it known that I, HIRAM D. STODDARD, a citizen of the United States, residing at Binghamton, in the county of Broome and State of New York, have invented certain new and useful Improvements in Breast-Straps for Harness; 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.

This invention has relation to harness breast straps, and it consists in certain peculiarities in the construction and arrangement of parts substantially as hereinafter described and particularly pointed out in the subjoined claims.

The object of my invention is to provide, at a minimum expense, a breast strap which will last for a maximum length of time. This object is accomplished by the construction illustrated in the accompanying drawings, in which:

Figure 1 is a perspective view of a breast strap constructed in accordance with my invention, and Fig. 2 is a side view, partly in section, of the same.

The combined buckle and wear iron A used in my improved breast strap was patented to me June 14, 1892, and consists of the continuous convex portion A, the downwardly projecting side pieces *b*, the end loops *c*, the vertical, centrally located, threaded pin *d*, the burr or nut *e*, and the washer *f*.

D designates snap hooks having rings *D'*, and F designates loops for keeping the snap hooks from riding on the straps, said loops having inwardly projecting pins *g*, engaging the straps.

The strap portion proper, of my improved device, instead of being made of a single piece of leather about four feet six inches, more or less, in length, is made of two separate pieces B and C, each about two feet, more or less, in length. Each of these pieces B and C is formed near its end with perforations *h*, designed to engage the threaded pin *d*, and near its center with a perforation *i* designed to engage the pin *g* of the loops F.

The above constitutes my improved breast strap, and the parts are put together as follows: after the straps have each been prop-

erly bent upon itself and the snap hooks and loops engaged therewith, one end of the strap B is engaged with the pin *d*, an end of the other strap, C, is then similarly engaged with said pin, the other free end of said strap B is then engaged with said pin, after which the remaining free end of strap C is engaged with the pin, the washer *f* placed in position around said pin in contact with the end of the outer strap, and the nut *e* screwed up to confine the straps. Thus, it will be seen that the ends of the straps are laid alternately and from opposite sides on each other and over the pin, said pin thereby engaging the strap at four places.

By constructing the straps of two separate pieces of leather instead of but a single piece I am enabled to utilize short lengths of straps which might otherwise be wasted, and thereby materially reduce the cost of manufacture of the strap, and, consequently, the cost of replacing a worn strap by a new one and by bending each length of strap upon itself at its center and engaging their free ends with a pin projecting from the breast strap slide, the strap can be used much longer than those made of a single piece because when one end of the respective straps becomes worn thin from constant use, the position of the straps can be reversed and the other free ends thereof, which have been protected by being inside, made to take the place of the other or worn ends, thus making a comparatively new strap. By this construction and arrangement of parts I am also enabled to dispense with the necessity of duplicating the means for securing the ends of the straps together, and of employing snap hooks of special construction.

It will, of course, be obvious that the ends of the straps may be provided with a series of perforations so that the breast straps can be lengthened or shortened at pleasure. The integral lugs or pins *g* of the loops F are no longer than the thickness of the leather and project from one side only of their respective loops. This is an important advantage in that it permits the straps to be adjusted without necessitating disengagement of the loops therefrom. It will be observed that stitching of the leather is not necessary.

I do not wish to be understood as claiming

broadly a harness breast strap in which two short lengths of strap are employed instead of a single long strap, nor do I wish to be understood as claiming broadly a harness
5 breast strap in which the strap portion is bent upon itself and engages at its ends projections from the breast strap slide, nor do I wish to be understood as claiming broadly a
10 a strap, said loop serving to fasten together two portions or ends of a strap, as I am aware that such constructions, separately considered, are not broadly new with me, but

What I do believe to be new and desire to
15 secure by Letters Patent and what I therefore claim, is

1. A breast strap, comprising two separate bands or straps, each having a snap hook attached centrally thereto, the ends of said
20 straps being perforated, and a wear iron having a central pin adapted to be passed through the perforations in said bands or straps, for

connecting the latter together, substantially as described.

2. A breast strap, comprising two separate
25 bands or straps, each having a snap hook attached centrally thereto, the ends of said straps being perforated, a wear iron, having a central pin adapted to be passed through the perforations in said bands or straps, for
30 connecting the latter together, and a loop for each of said bands or straps, each of said loops engaging its strap contiguous to the snap hook and having projecting inward from one of its sides a pin received by a perfora-
35 tion in the strap, said pin being of no greater length than the thickness of the strap, substantially as described.

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

HIRAM D. STODDARD.

Witnesses:

ROBERT H. REY,
ISAAC DAVIDSON.