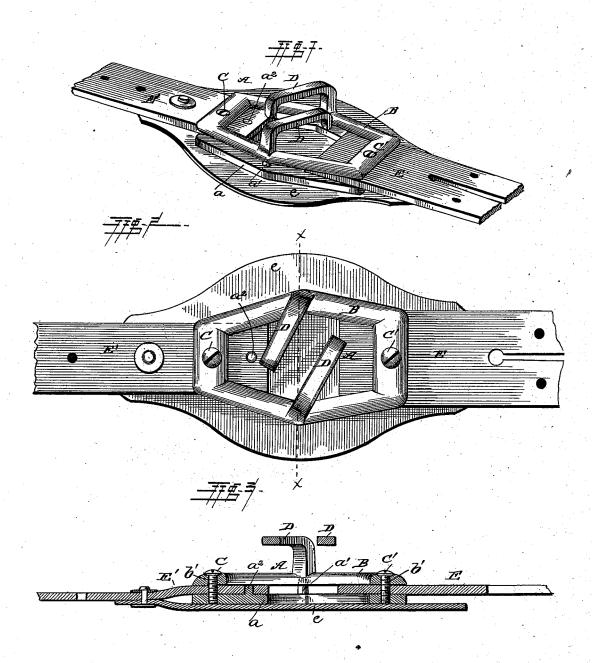
O. I. LANGWORTHY.

TRACE CARRIER.

No. 382,709.

Patented May 15, 1888.



WITNESSES,

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UNITED STATES PATENT OFFICE.

OLIVER I. LANGWORTHY, OF NORTONVILLE, KANSAS.

TRACE-CARRIER.

SPECIFICATION forming part of Letters Patent No. 382,709, dated May 15, 1888.

Application filed February 14, 1888. Serial No. 263,982. (No model.)

To all whom it may concern:

Be it known that I, OLIVER I. LANGWORTHY, a citizen of the United States of America, residing at Nortonville, in the county of Jefferson and State of Kansas, have invented certain new and useful Improvements in Harness Attachments, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention pertains to certain new and useful improvements in harness attachments, having reference more particularly to means for securing holdback and hip straps together, whereby said straps are rigidly secured and 15 held as against displacement, and the quantity of material required in said straps is greatly reduced.

The invention comprises the detail, construction, combination, and arrangement of parts, so substantially as hereinafter fully set forth, and particularly pointed out in the claims, whereby a harness attachment is obtained that embodies advantages in point of simplicity, durability, and general efficiency.

In the accompanying drawings, Figure 1 is a view in perspective of my invention. Fig. 2 is a plan view thereof. Fig. 3 is a longitudinal sectional view. Fig. 4 is a cross-sectional view on the line x x, Fig. 2. Figs. 5 and 6 are views showing the inner faces of the opposite plates of my attachment or securing device. Fig. 7 is a view of a modification.

Referring to the drawings, A designates my improved harness attachment or securing de
yice, which is designed to secure and rigidly hold in position the ends of what are commonly called "holdback" and "hip" straps; and the invention is likewise applicable to other straps of the harness. This securing device comprises a lower or inner plate, a, of any desired shape, but preferably of the skeleton formation shown, and from the upper surface of this plate project a series of short posts or studs, a. A short post or stud, a., projects from the upper side of an inwardly-projecting portion of this lower plate, a, as shown.

B is the upper or outer plate, preferably of the same formation or general outline as the plate a, and in its under side are formed a se-50 ries of grooves or recesses, b, wherein are designed to project the short posts or studs a'. In the ends of these corresponding plates a and B are formed coincident screw holes or apertures b' b', wherein are inserted screws c c', for holding said plates together.

From the upper or outer surface of the plate B project two parallel approximately **U**-shaped inclined hooks, D D, to which is designed to be secured the tugs of the harness.

In practice the strap E is secured between 60 the plates a B by means of the short posts or studs projecting through holes or apertures previously formed in said strap and entering the grooves or recesses b, and by the screw C, inserted through a corresponding hole or aperture in said strap, whereby the two plates firmly hold said strap, which, when desired, can be removed by removing said screw.

The strap E, which is preferably provided with a widened projecting pad-like strap, e, 70 against the outer surface of which the securing device is designed to bear, is secured in position between the plates by means of the short post or stud a^2 , projecting through an aperture thereof, and the screw C inserted in 75 its apertures, whereby said plates at this end firmly hold said strap. This strap E, it is obvious, can be readily removed by simply removing the retaining-screw C'.

In Fig. 7 I have shown a modified form of 80 my invention, which consists simply in dispensing with the hooks D for the tugs, the same to be used when a tug-carrier is not desired.

From the foregoing description it will be 85 seen that by means of my invention the ends of the straps of the harness can be readily and easily secured, and by means thereof the quantity of material necessary in each strap is reduced to a minimum, which is a desideratum 90 in this class of inventions.

I claim as my invention-

1. The combination, with the lower plate having a series of posts or studs, the upper plate provided with coincident grooves or recesses, 95 and the straps secured between said plates, of a pad secured at one end to one of said straps and adapted to rest against the face of the lower plate, substantially as set forth.

2. As an improvement in harness attach- 100

(No Model.)

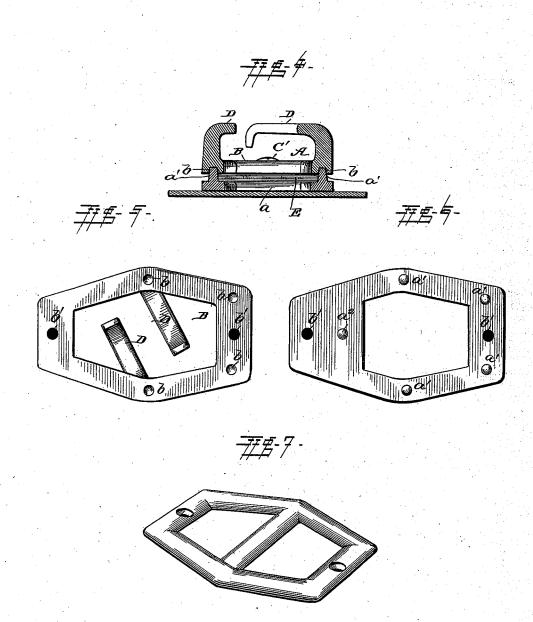
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