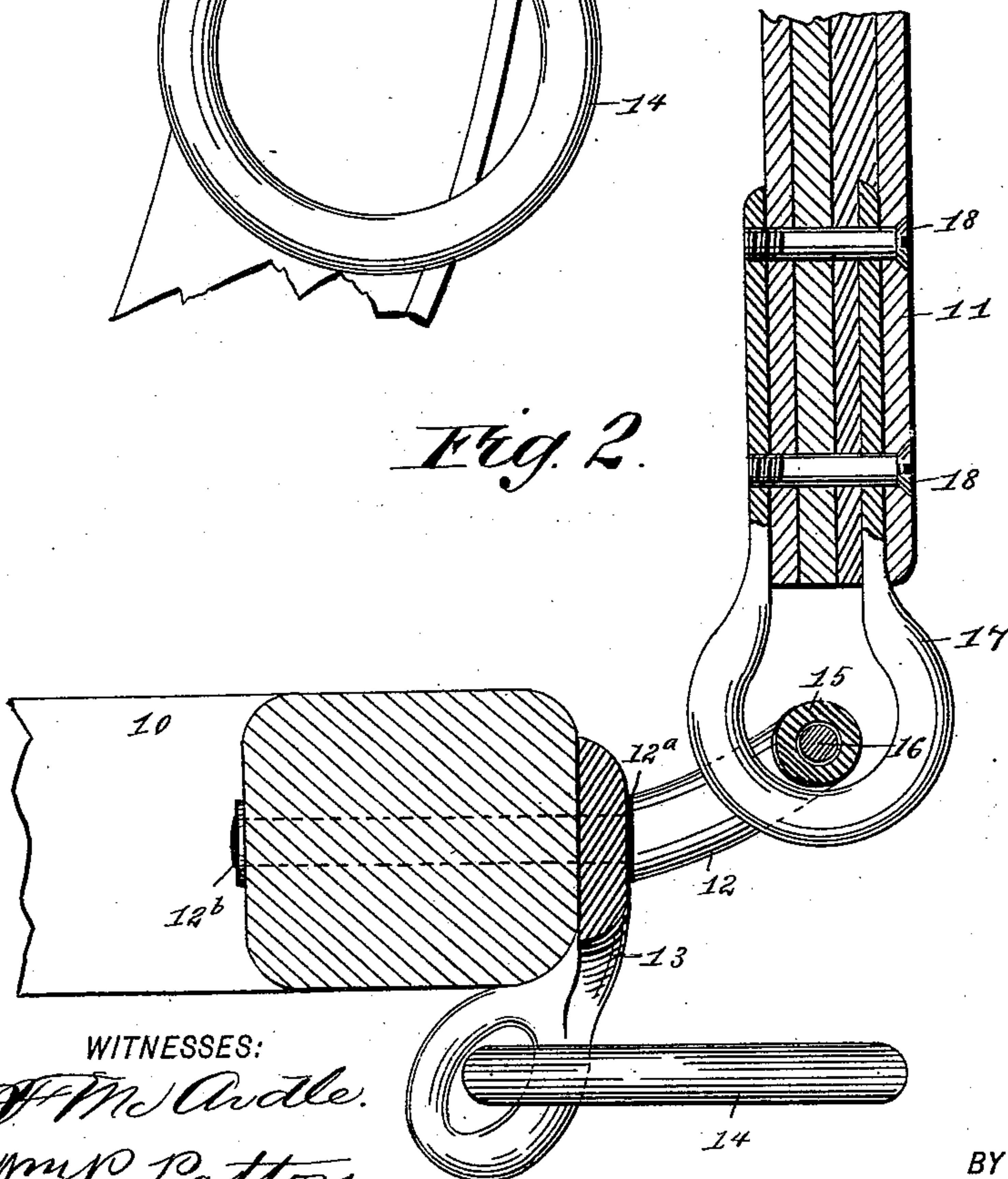
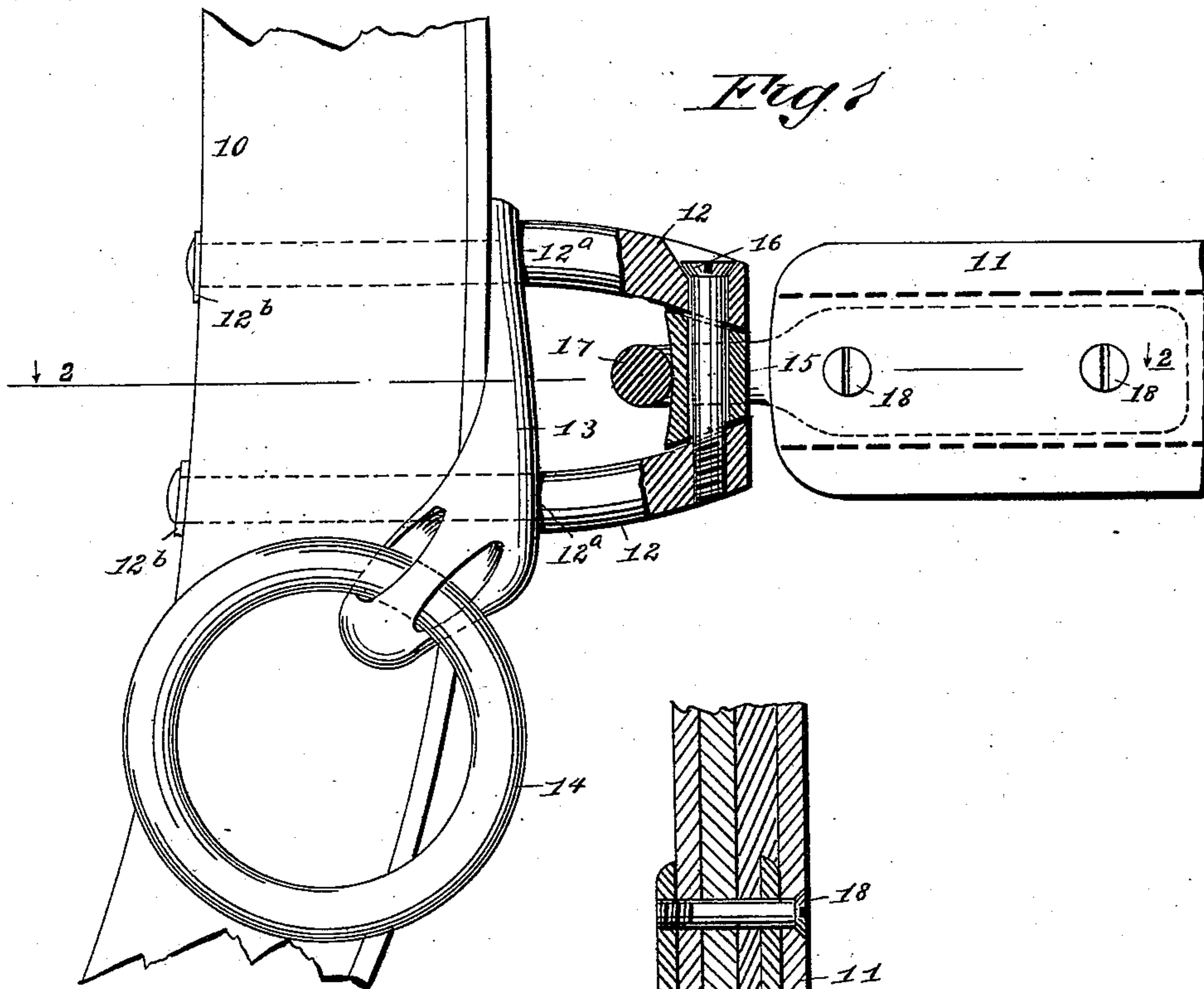


(No Model.)

R. STONER.  
HAME STAPLE.

No. 532,608.

Patented Jan. 15, 1895.



WITNESSES:

*J. McArdle.*  
*Wm. L. Patton*

INVENTOR

*R. Stoner*

BY

*Munn & Co.*

ATTORNEYS.



# UNITED STATES PATENT OFFICE.

RILEY STONER, OF GRAND JUNCTION, COLORADO.

## HAME-STAPLE.

SPECIFICATION forming part of Letters Patent No. 532,608, dated January 15, 1895.

Application filed August 10, 1894. Serial No. 519,974. (No model.)

*To all whom it may concern:*

Be it known that I, RILEY STONER, of Grand Junction, in the county of Mesa and State of Colorado, have invented a new and Improved Hame-Staple, of which the following is a full, clear, and exact description.

My invention relates to improvements in draft staples for the connection of harness hames, with tug straps or the traces of the harness; and has for its objects to provide novel and useful features of construction for a device of the character mentioned, which will render the staple strong, permit it to be made light, and adapt the staple portion that receives wear for ready removal and replacement of said worn part with a new piece, thus obviating the need for a detachment of the staple limbs when the bow portion is worn out.

A further object is, to provide a composite hame staple, that is so constructed as to obviate an abrasive wear on the body of the screw bolt, which connects the limbs of the staple with the sleeve block that forms the bight of the latter.

To these ends, my invention consists in the peculiar construction and combination of parts, as is hereinafter described and indicated in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar numerals of reference indicate corresponding parts in both of the views shown.

Figure 1 is a partly sectional side view of the improvements in connection with a hame in part, and a front end portion of a tug strap or trace; and Fig. 2 is a transverse sectional view of parts shown in Fig. 1, on the line 2—2 in said figure.

The hame 10, and the tug strap 11, are of the ordinary construction for such parts of harness when complete, a sufficient portion of each being shown to illustrate the application of the improvement thereto.

The improved hame staple comprises two similar limbs 12, that are reduced in diameter at 12<sup>a</sup> affording a shoulder on each limb that is designed to bear upon the exterior face of a bracket plate 13, which is suitably perforated and imposed on the rear edge of the hame, and loosely sustains the ring 14 which

in service is engaged by the pole strap of the vehicle to which the harnessed team is hitched.

The reduced portions of the staple limbs 12, are driven through two spaced perforations transversely formed in the hame 10 and also through the bracket plate, thus disposing the slightly bent, thicker portions of the staple limbs at the rear side of the hame with their terminals inclined toward each other, as shown in Fig. 1.

The front ends of the limbs 12, are preferably riveted down on washers as at 12<sup>a</sup> so as to clamp the bracket plate 13, on the hame, and rigidly fasten the limbs of the staple in the latter.

A sleeve block 15 is provided to fill the space between the bent end portions of the staple limbs 12, said block comprising an axially perforated substantially cylindrical piece of metal, which has its end walls equally sloped toward a point at the front, that is coincident with a transverse center line, represented by the line 2—2 in Fig. 1.

The inclination of the inner sides on the terminals of the thicker portions of the staple limbs 12, is the same in degree with that given to the ends of the sleeve block 15, and the length of the latter is proportioned so as to adapt said block to fit closely between the limbs at their bent ends, as shown in Fig. 1.

The inclined ends of the limbs 12, are perforated to align said holes with the axial perforation of the sleeve block that they equal in diameter, one limb being threaded in its perforation to permit the threaded end of the clamping screw 16, to engage with it when said screw-bolt is inserted through the opposite limb, and also through the block. The screw-bolt 16, is headed and kerfed in said head as shown in Fig. 1, the head engaging a countersink of the perforation in the staple limb, so that the screw when fully inserted, will bind the end portions of the limbs 10, on the sloped ends of the sleeve block 15.

By the construction and arrangement of parts as described, the sleeve block 15, that affords the wearing surface for the hame staple, is rendered readily removable when worn out, for the insertion of another similar block, which can be effected in a few moments, thus furnishing in effect a new staple.



As it is essential that the body of the clamping screw-bolt 16, be prevented from receiving abrasion, the block 15, and limbs 12 are shaped to prevent a rotation of the latter, which being fixed in place is only subject to wear on the side that is in contact with the tug staple 17. Preferably the part 17, is secured in place on the end of the tug-strap 11, by transverse screws 18, as indicated in Fig. 2, which screws being removable, permit the replacement of a worn out tug staple with a new one in a few minutes, so that a teamster can at will, remove the worn out portions of harness such as have been described, and insert new parts without loss of time, and at but slight expense for the duplicate pieces which have been supplied.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. A staple for hames, comprising two independent limbs converged on inner faces at the same ends, a sleeve block sloped on the ends to fit between the converged faces of the limbs, said limbs and the sleeve being perforated, and a clamping bolt engaging said perforations, substantially as described.
2. A staple for hames, comprising two inde-

pendent limbs sloped toward each other on inner faces at the same end of each limb, an intervening sleeve block inclined on its ends to mate the inclined faces of the limbs, and a clamping screw bolt passing through one limb, then through the sleeve block, and having a threaded engagement with the threaded perforation of the other limb, substantially as described.

3. The combination with a hame piece having spaced perforations, of two staple limbs shouldered intermediately of their ends, passing through the perforations of a bracket plate, and secured at ends in the hame piece, opposite ends of the limbs having converged inner faces, a sleeve block having sloped ends that fit between the inclined faces of the limbs which ends are oppositely perforated and one perforation screw-threaded, and a clamping bolt adapted to engage the limbs and sleeve and bind them together so as to prevent the rotation of said sleeve, substantially as described.

RILEY STONER.

Witnesses:

WILLIAM H. BERGEN,  
DAVID R. CROSBY.