J. J. CREEDON.

HAME TUG CLIP.

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994,979.

Patented June 13, 1911.

Fig. 1.

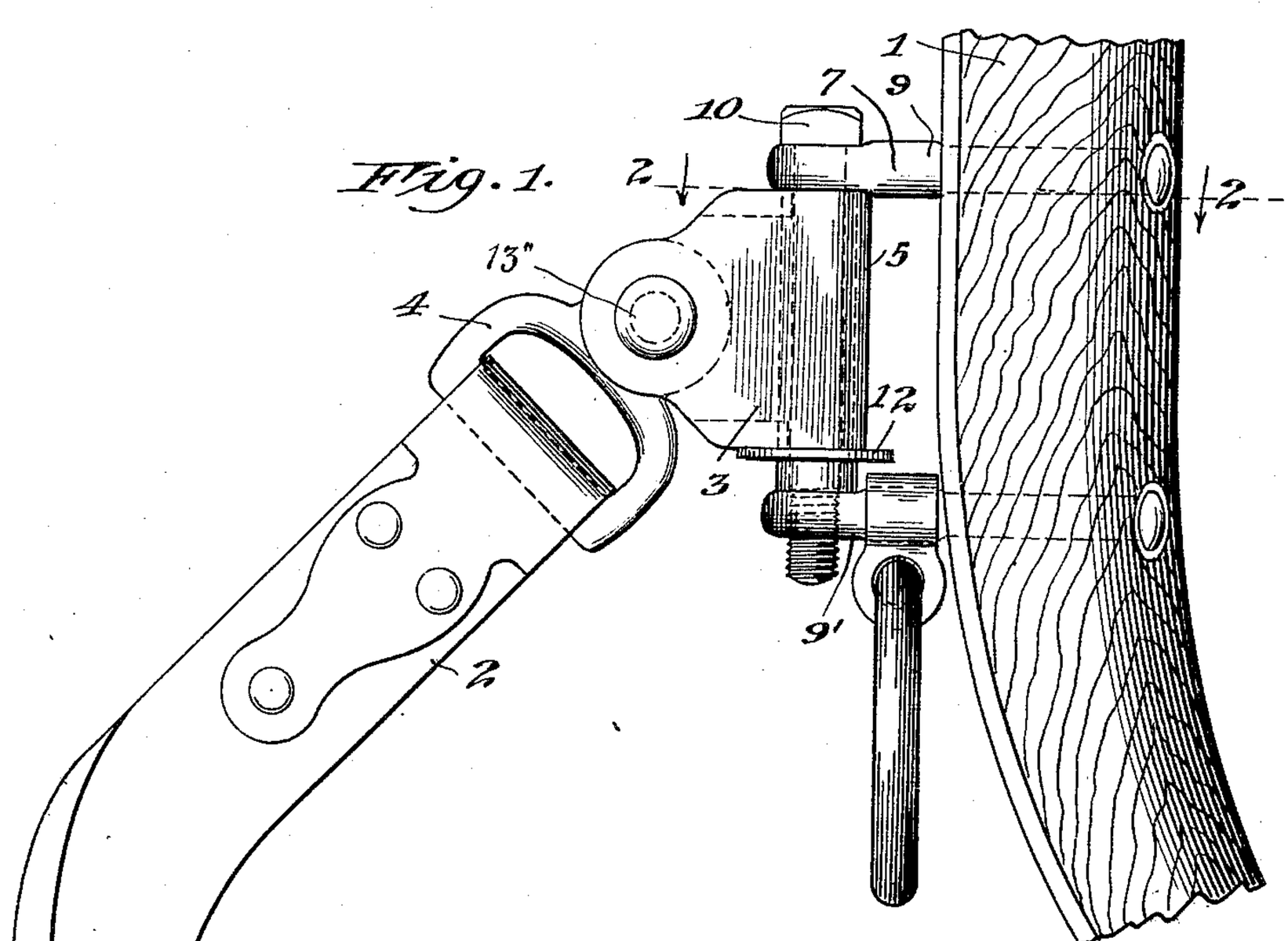


Fig. 2.

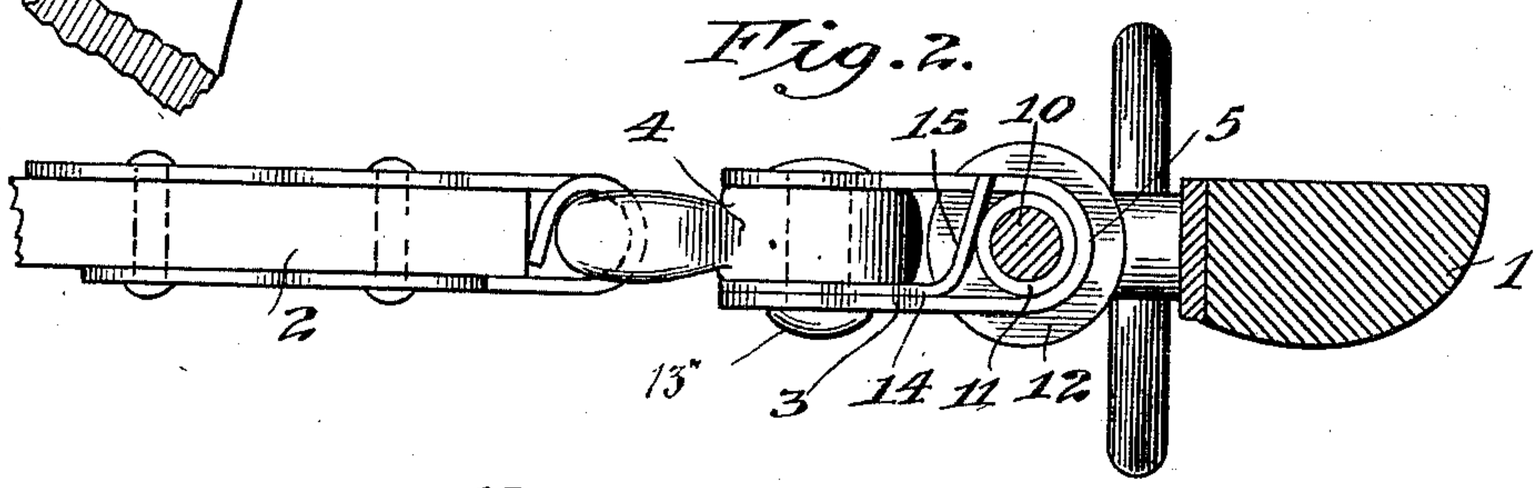


Fig. 3.

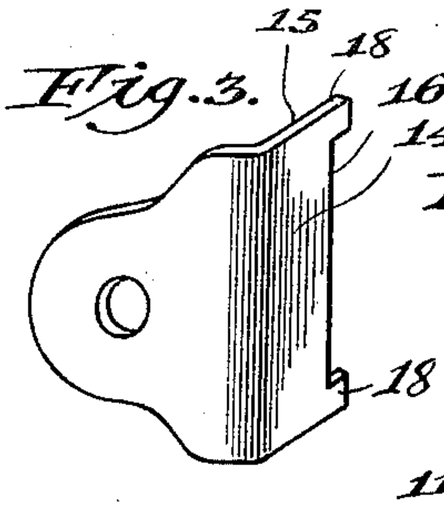


Fig. 4.

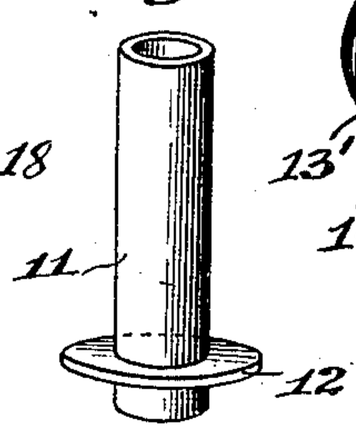
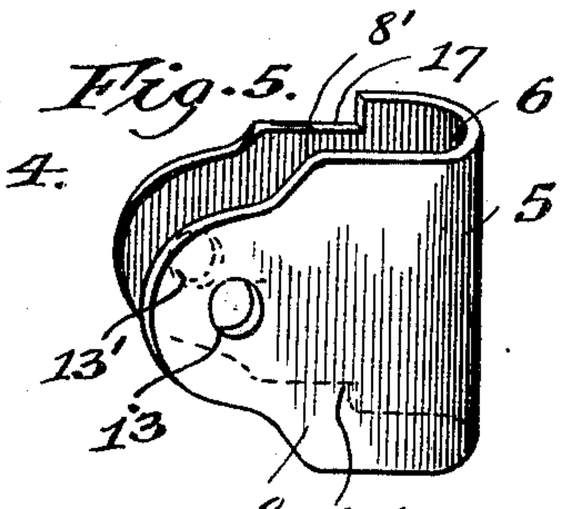


Fig. 5.



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HAME-TUG CLIP.

994,979. Specification of Letters Patent. **Patented June 13, 1911.**

Application filed February 28, 1910. Serial No. 546,334.

To all whom it may concern:

Be it known that I, JOHN J. CREEDON, a citizen of the United States, residing at Moline, in the county of Rock Island and State of Illinois, have invented certain new and useful Improvements in Hame-Tug Clips, of which the following is a specification.

This invention relates to a new and improved tug plate used in connecting the tugs of harness to the hames, and it has for its salient objects to provide a construction which may be very accurately and economically manufactured and which will serve to hold the wear sustaining part of the clip in firm bearing with and proper relation to that part of the hame staple to which it is attached; to provide in such a device a construction which may be readily applied to the hame staple where the latter is of single piece construction and has its legs permanently seated in the hame; to provide a construction which while made of metal of moderate thickness is nevertheless extremely strong and is especially rigid against those stresses which would tend to twist the clip out of its position extending at right angles to the part of the hame staple embraced; to provide a construction which is extremely neat and finished in its appearance; to provide a construction which may be entirely made from sheet metal by means of dies; and in general, to provide an improved device of the character referred to.

The invention will be readily understood from the following description, reference being had to the accompanying drawings showing preferred embodiments thereof.

In said drawings—Figure 1 is a view in side elevation of fragmentary portions of a tug and hame connected by means of my improved clip; Fig. 2 is a horizontal sectional view taken on line 2—2 of Fig. 1 and looking downwardly; the fragment of the tug being, however, extended at right angles to the hame in this view; Figs. 3, 4 and 5 are separated details of the clip proper shown in Figs. 1 and 2.

Referring first to Figs. 1 to 5, inclusive, 1 designates an ordinary harness hame, 2 the attached end of a tug, and 3 the clip as a whole. The end of the tug is, for convenient attachment to the clip, provided with a terminal loop or cock-eye 4 in a usual manner.

Describing now more particularly the clip, 5 designates the main clip body which is bent upon itself to form a loop portion 6 adapted to embrace the upright part of the hame staple, designated as a whole 7, and to form two parallel ears 8, 8′ between which the end of the cock-eye is inserted and secured.

In the preferred harness construction shown in Fig. 1 the hame staple is of four-part construction, comprising two legs 9, 9′ secured in the body of the hame and terminating at their outer ends in eyes, a screw-bolt 10 extending through the two eyes and threaded into the lower one, and a wearing sleeve 11 which fits upon the bolt between the legs of the staple, and is of a length equal to the distance between said legs. This wearing sleeve is provided near its lower end with a radial flange 12 which spaces the lower edge of the clip 3 away from the lower leg of the staple, and said flange serves as a support or confining member which not only holds the clip up close to the upper leg of the staple but also aids in preventing the clip from tilting with reference to the screw-bolt. The chief functions of this sleeve are to reinforce the bolt and provide for distributing the wear due to the swiveling movement of the clip upon the bolt over the greater area and more uniformly.

The maximum width of the clip is equal to the distance between the flange 12 and the upper leg of the staple 9. The two ears 8 and 8′ of the clip are apertured, as indicated at 13, 13′, to receive a rivet 13″ which passes through these clips and the embraced cock-eye.

In order to hold the clip in proper relation to the bearing sleeve 11 and inclosed screw bolt, a confining tongue 14 is provided, which tongue, as best seen in Fig. 3, has one of its end portions constructed to conform to the shape of the outermost ear 8 of the clip and its inner end 15 bent at an angle to the main body, as seen clearly in Fig. 2. The confining tongue is interposed between the outer ear 8 and the cock-eye, and its angular end 15 extends obliquely across the space between the ears in position to fit snugly against the nearer side of the confining sleeve, thus the clip is in definite relation to the sleeve and contained part of the staple. In order that this angular extension 15 of the confining tongue may have more strength and rigidity in so confining the clip upon the staple it is desirably made of the full width of the clip and forked at

its extremity, as indicated at 16; the edges of the clip body being reduced in width, as indicated at 17, 17′, so that the arms 18 of the tongue straddle the inner ear of the clip. The end margin of the tongue between the fork arms lies firmly against the inner face of the inner ear 8′ of the clip, and by reason of the oblique disposition of the part 15 it follows that any stress brought upon the clip tending to impart to it a vertical oscillatory movement and therefore to cause the vertical part of the staple and bearing sleeve to bear upon the part 15 causes the latter to bite against the inner face of the inner ear 8′ of the clip, and so resist such movement practically as though the part 15 was a solid bridge piece permanently attached at both its ends to the inner sides of the clip.

The parts composing the clip are obviously easily made by being struck out of sheet metal by suitable dies, and it is obvious that they can be assembled with the greatest facility. In the construction shown in Fig. 1, the clip can be applied to or disconnected from the staple of the hame at any time by simply removing the screw bolt 10, or the rivet 13″.

I claim as my invention:

1. In combination with a tug terminating in an eye, a connecting clip comprising a main strap-like body bent upon itself to form a loop adapted to embrace a hame staple and two opposed ears between which the eye of the tug is inserted, a confining tongue fitted between one of said ears and the side of the tug-eye and provided with an angular extension extending across the space between the ears, the free end of said angular extension and the opposed ear of the clip being provided with interengaging parts adapted to lock said confining tongue against angular movement, and a rivet extending through both ears of the clip and the interposed confining tongue and eye of the tug.

2. In combination with a tug terminating in an eye, a connecting clip comprising a main strap-like body bent upon itself to form a loop adapted to embrace a hame staple and two opposed ears between which the eye of the tug is inserted, a confining tongue fitted between one of said ears and the side of the tug-eye and provided with an angular extension extending obliquely across the space between the ears and forked to straddle the edges of the opposed ear of the clip, and a rivet extending through both ears of the clip and the interposed confining tongue and eye of the tug.

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."