G. HAZLEWOOD, Jr. & J. REAGIN.
Trace and Hame Tug-Coupling.

No. 204,324. Patented May 28, 1878.

Fig. 2

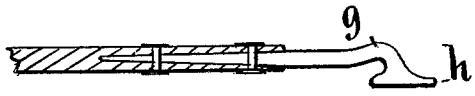


Fig. 1

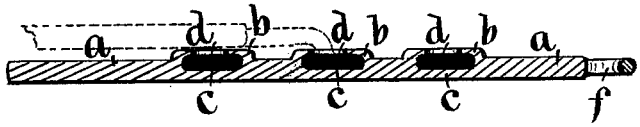
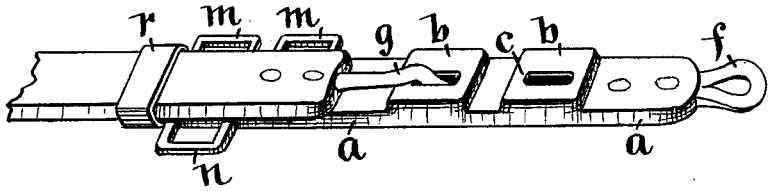


Fig. 3



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UNITED STATES PATENT OFFICE.

GRIENVILLE HAZLEWOOD, JR., AND JAMES REAGIN, OF BLOOMFIELD, IOWA.

IMPROVEMENT IN TRACE AND HAME-TUG COUPLINGS.

Specification forming part of Letters Patent No. **204,324**, dated May 28, 1878; application filed January 5, 1878.

To all whom it may concern:

Be it known that we, GREENVILLE HAZLEWOOD, Jr., and JAMES REAGIN, of Bloomfield, in the county of Davis and State of Iowa, have invented an Improved Coupling for Connecting Traces and Hame-Tugs and other adjustable parts of Harness, of which the following is a specification:

Our invention is an improvement in the class of devices designed to be used in place of buckles in connecting traces and hame-tugs and other overlapping and adjustable straps, and to prevent the punching, bending, weakening, and breaking of traces and straps incident to the use of harness that has parts connected by means of buckles and other attachments that require the leather to be perforated.

It consists in forming a series of projecting eyelets integral with a metal strap-form base, to which adjustable and removable parts may be readily attached by means of hooks and loops, as hereinafter fully set forth.

Figure 1 of our drawing is a longitudinal central section view of our strap-form base, having eyelets formed integral therewith. Fig. 2 is a corresponding view of a hook designed to enter the eyelets. Fig. 3 is a perspective view, showing a hame-tug and trace connected by means of our strap-form base, having eyelets formed integral therewith. Together these figures illustrate the construction, application, and operation of the complete invention.

a a represent our metal strap-form base, which may vary in size as desired. *b b* represent a series of eyelets projecting on the top side of the strap *a a*, and formed integral therewith by casting in a mold, or in any suitable way. They have elongated cavities *c* and slots *d*, of diminished length, opening outward and upward from the cavities.

f represents an eye on the front end of the strap-form base *a a*. It is designed to receive a staple, loop, or link, by means of which it is flexibly connected with a harness-hame or other rigid object. This eye *f* may be formed integral with the strap *a a*, or attached in any suitable way.

When our strap-form base *a a*, having eyelets, is used as a hame-tug, as shown in Fig. 3, it may be covered with leather; or it may be plated with silver, nickel, or any other suitable material by which it can be protected from corrosion and made to present a finished surface and artistic appearance in the complete harness.

g represents a hook adapted to enter the eyelets *b c d*, and having a flat shank, by means of which it is riveted to the end of a trace, as shown by Fig. 2. The hook has a point, *h*, extending forward, so that the complete device presents a T-shaped end in parallel line with the body and shank.

m and *n* in Fig. 3 represent loops, which may be formed integral with the metal strap and hame-tug *a a*, or attached thereto in any suitble way to connect the straps passing over and under the horse.

By having two or more loops *m* on the hame-tug the harness-saddle can be readily adjusted relative to the collar and hames to fit horses or mules differing in length of body by simply changing the connecting-strap from one loop *m* to another.

r is a loop connected with the rear end of the hame-tug, to retain the adjustable and overlapping trace in a flat and straight position relative to the hame-tug.

In the practical operation of our invention, when the strap-form base *a a*, having eyelets *b c d*, and the hook *g h* are each fixed to separate parts of a harness, the two parts can be readily connected by simply bringing the point *h* of the hook into an angling position relative to the strap *a a*, and then inserting the hook into one of the projecting eyelets *b c d*. After the hook is inserted and the two overlapping parts brought into parallel positions, the points of the hook will extend in front and rear of the slot *d*, through which they entered the cavity *c*, and consequently cannot escape from the eyelet until the hook is again brought into an angling position relative to the strap-form base *a a*, having the eyelets *b c d*.

We are aware that metallic plates having perforations in their centers and oblique slots extending from said perforations have been fixed to a hame-tug to receive the correspondingly-shaped end of a catching and coupling device fixed to the front end of a trace.

We are also aware that a flat metal strap

having perforations has been combined with a hame-tug and a trace having a T-shaped hook on its end in such a manner as to form a lap-joint coupling; but by our manner of forming a series of projecting eyelets, *b*, having elongated cavities *c* and slots *d* of diminished length integral with a metal strap-form base, *a a*, adapted to be used in combination with a hook having a T-shaped end, produces an improved, strong, and durable coupling, that can be advantageously used in connecting, adjusting, and disconnecting at pleasure a trace and hame-tug, and the weakening and breaking of tug straps or irons occasioned by the perforations made therein to admit rivets in attaching eyelets are thereby avoided.

We claim as our invention—

In a hame-tug and trace coupling, the metal strap-form base *a a*, having eyelets formed integral therewith, said eyelets consisting of projections *b*, elongated cavities *c*, and openings or slots *d*, leading to the cavities *c*, substantially as shown and described, for the purposes specified.

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