

UNITED STATES PATENT OFFICE.

HARRY CLOUGH, OF FACTORYVILLE, PENNSYLVANIA.

IMPROVEMENT IN ATTACHING WHIFFLETREES TO VEHICLES.

Specification forming part of Letters Patent No. 131,850, dated October 1, 1872.

To all whom it may concern:

Be it known that I, HARRY CLOUGH, of Factoryville, in the county of Wyoming and State of Pennsylvania, have invented a certain new and useful Improvement in the Method of Attaching Whiffletrees to Vehicles; and the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 represents a front view of the whiffletree-bar and the cross-bar which connects the thills together, showing my improved clip-iron attachment, the double spiral ledge or screw just entering to turn once round to form the attachment; Fig. 2 shows an underside view of the whiffletree-bar and the spiral ledges for connecting it with the under or cross-bar clip-iron; Fig. 3 shows a top view of the cross-bar and corresponding spiral ledges to hold the whiffletree to the bar; and Fig. 4 is an end sectional view of the whiffletree and cross-bar, showing a cross-section of the connecting-plates and clip-irons as they are secured together on the vehicle.

My invention relates to a new and improved method of attaching whiffletrees to vehicles; and it consists in the construction of the double-ledged or screw-cap plate and a corresponding double-ledged clip-iron secured to the cross-bar, and the cap-plate also secured to the whiffletree-bar with a clip-iron which surrounds it, thereby entirely dispensing with a bolt or any holes in or through either the cross-bar or whiffletree to wear or weaken the bars, and the whiffletree is put on or removed by turning it once round.

To more fully describe my invention, referring to the drawing, A is the whiffletree-bar, and B is the cross-bar that connects the thills,

on the center of which is placed the circular open center-ring clip-iron C, which is provided with inner and outer spiral or inclined ledges, *a* and *b*, the ring C resting firmly on the top of the cross-bar B, clamped on by the straps or clip *c c* and screw-nuts *d d* under the plate D. The whiffletree-bar A has secured on the under side of its center the cap-fastening E, which is an iron plate that overlaps the ring C, and is provided with a separate central-projecting boss or plate, F, on which is a spiral ledge, *f*, to fit in the corresponding ledge *a* in the ring C. The cap-plate E has on one-half or the rear side an overlapping flange, G, which is provided with an inclined ledge, *e*, to fit onto the corresponding ledge *b* on the outside of the ring C. The plate E and its center-piece F are firmly secured on the bar A by a clip-iron, H, and screw-nuts *h h* in the hollow *g* of the piece F, so that when the inclined ledges are placed together, and the whiffletree-bar A is turned end for end clear or once round, the double-inclined ledges bring the cap E down to the ring C, and make a most secure, durable, noiseless, and substantial attachment.

What I claim as my invention is—

The cap-plate E with the flange G, and the double-inclined ledge *e* with an open center to receive separate central-projecting boss or plate F having a spiral ledge, *f*, and clip H, in combination with the ring-clip C having inner and outer spiral or inclined ledges *a* and *b*, substantially as herein set forth.

In testimony whereof I hereunto subscribe my name.

HARRY CLOUGH.

Witnesses:

GEO. C. GREEN,
D. D. GARDNER.