

(No Model.)

F. LEONARD.
WHIFFLETREE CLIP.

No. 532,885.

Patented Jan. 22, 1895.

Fig. 1.

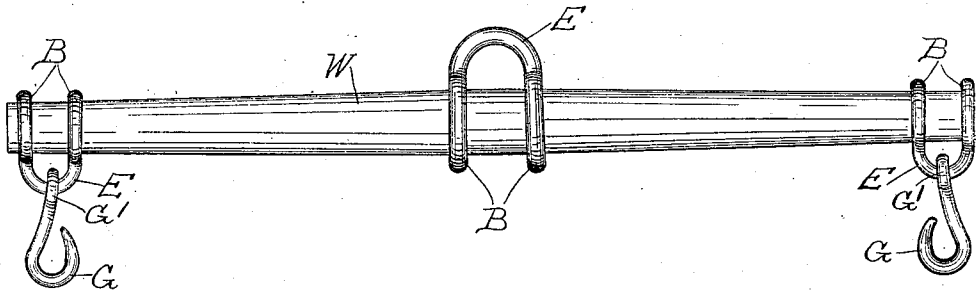


Fig. 3.

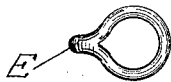


Fig. 2.

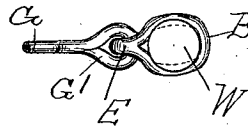
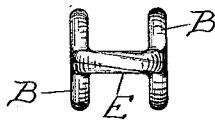


Fig. 4.



Fig. 5.



Witnesses:
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UNITED STATES PATENT OFFICE

FRANKLIN LEONARD, OF BRIDGEWATER, ASSIGNOR OF THREE-FOURTHS
TO FREDERICK A. HOWE AND DANIEL P. McQUEEN, OF SCHENECTADY,
NEW YORK.

WHIFFLETREE-CLIP.

SPECIFICATION forming part of Letters Patent No. 532,885, dated January 22, 1895.

Application filed October 6, 1894. Serial No. 525,063. (No model.)

To all whom it may concern:

Be it known that I, FRANKLIN LEONARD, a citizen of the United States, residing at Bridgewater, county of Oneida, and State of New York, have invented certain new and useful Improvements in Whiffletrees, of which the following is a specification.

The invention relates to such improvements and consists of the novel construction and combination of parts hereinafter described and subsequently claimed.

Reference may be had to the accompanying drawings, and the letters of reference marked thereon, which form a part of this specification.

Similar letters refer to similar parts in the several figures therein.

Figure 1 of the drawings is a top plan view of my improved whiffletree. Fig. 2 is an end view of same. Fig. 3 is a view of one of the whiffletree-irons similar to that shown in Fig. 2, showing the shape of the eyes before they are attached to the whiffletree. Fig. 4 is a plan view of a partly formed whiffletree-iron. Fig. 5 is an end view of the iron shown in Fig. 3, enlarged, or of the middle iron shown in Fig. 1.

The whiffletree-irons are shown made of a single rod or bar A— of metal, so bent as to form the eyes B— and cause the ends C— to lap the middle part D—. The ends are each welded to the middle part and the welded parts bent to form the clevis-loop E—. In welding these parts together, the middle part may be flattened and the ends beveled or tapered, substantially as shown in Fig. 5. Such a form of construction, gives great additional strength and body to the device where the draft-hook G— is connected with it, as shown in Fig. 1, at which place occur the greatest wear and strain.

The body-part of the whiffletree is usually made of wood and circular in cross-section, or approximately so.

To attach my improved irons to the wooden body-part W— it is only necessary to insert the wooden part in the eyes B—, as shown in Fig. 1, and flatten the eyes in a press or

in any known manner to embed the material of the eyes in the wood, the form of the eyes being changed from that shown in Fig. 2 to that shown in Fig. 3. The draft or working strain tends to flatten the eyes and still further embed them in the wood. Such form of construction and method of attachment avoid the necessity of bolts, pins or screws to secure the clevis upon the whiffletree and insure a rigid and permanent connection that will not readily work loose.

Should the parts for any reason become loose, they can be easily tightened by the user of the whiffletree with implements readily obtainable, as with two stones, using one as an anvil and the other as a hammer.

My improved iron has special advantages when applied to the middle part of a whiffletree, where the greatest strength is required, since this part is not required to be weakened by the insertion of one or more holes for a clevis-pin or bolts.

My improved construction has another important advantage in that the plane of the clevis part being horizontal when the planes of the eyes are vertical, the plane of the middle clevis on the whiffletree is at right angles to the plane of the usual clevis on an evener, and the evener clevis can be inserted in the whiffletree clevis without the intervention of the usual connecting link or ring, thereby avoiding the use of an extra part and bringing the whiffletrees nearer to the load to be moved and thereby increasing the efficiency of the animal power employed.

I have shown the irons on the ends of the whiffletree provided with a trace-hook G— connected with the clevis loop of the iron by a ring or loop G'—, the ring or loop being formed by bending the shank end of the hook-portion around the rod forming the clevis loop, and welding it to the body part of the hook.

The hook-ring is prevented from escaping by the eyes or rings B— on either side of the hook-ring or loop.

As thus constructed, the whiffletree-iron and trace-hook or ring can be supplied to the trade as a single device.

What I claim as new, and desire to secure
by Letters Patent, is—

5 A whiffletree-iron formed of a single rod or
bar of metal bent at its middle part in the
form of a loop and at its end-portions in the
form of rings, the ends being welded to and re-
inforcing the loop, substantially as described.

In testimony whereof I have hereunto set
my hand this 25th day of September, 1894.

FRANKLIN LEONARD.

Witnesses:

JAMES S. GREEN,
JOHN DEMPSEY.