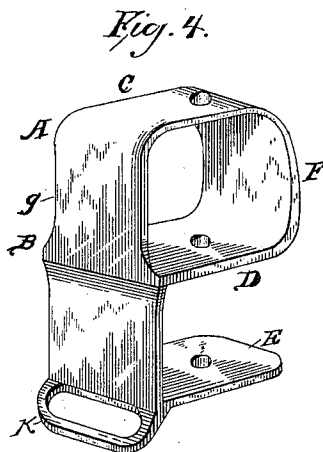
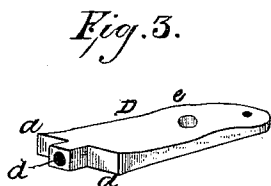
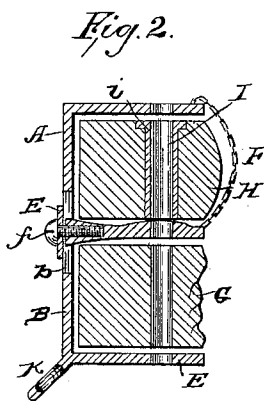
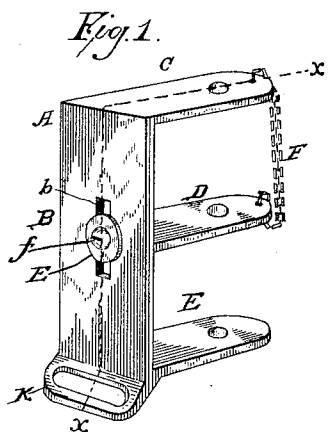


(No Model.)

A. J. MARTIN.
WHIFFLETREE IRON.

No. 366,966.

Patented July 19, 1887.



Witnesses.
Preston Phelps.
O. Wallace.

Inventor.
Aaron J. Martin
By his Attorney.
M. D. Peck

UNITED STATES PATENT OFFICE.

AARON J. MARTIN, OF EVANSVILLE, INDIANA.

WHIFFLETREE-IRON.

SPECIFICATION forming part of Letters Patent No. 366,966, dated July 19, 1887.

Application filed December 2, 1886. Serial No. 220,501. (No model.)

To all whom it may concern:

Be it known that I, AARON J. MARTIN, a citizen of the United States, residing at Evansville, in the county of Vanderburg and State of Indiana, have invented certain new and useful Improvements in Whiffletree-Irons; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in single and double tree irons constructed in such a way as to securely hold the two whiffletrees together in operation, the irons being made to fit over and around the singletree and upon the doubletree, and the object being to secure safety in the event the bolt should be lost or broken, and also to provide a suitable adjustment in the iron, adapting it for use of singletrees and doubletrees of various thickness; and it consists in the construction herein-after described, and more particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a perspective view of my improved iron, showing its adjustable feature. Fig. 2 is a vertical section of Fig. 1 on the line *x x*, showing the whiffletrees therein. Fig. 3 is a detailed view of the adjustable bar separated from the iron. Fig. 4 is a modified form of my device, showing the iron cast in one piece.

Like letters of reference refer to corresponding parts in each figure of the drawings.

A represents my E-shaped whiffletree-iron, which is of malleable or other suitable iron or brass, having a vertical standard, B, provided with arms or bars C and E at its top and bottom projecting at substantially right angles to the standard.

Within the standard B there is a vertical slot or mortise, *b*, for the purpose of securing an adjustable arm or bar, D, between the bars C and E. This bar is thickened at its standard end and provided with a tenon, *d*, adapted to receive a screw and to fit into and be adjustable up and down in the slot *b*, while the shoulders *a* rest against the side of the standard. The forward portion, *c*, of the bar D is

slightly raised or thickened at the pivotal point where the singletree rests upon it, to enable a free and easy turning back and forth of the singletree to conform to the movement of the body of the animal in operating it. The tenon of the bar is of such length as to nearly reach through the slot *b*, and is secured therein by a screw, *f*, through a washer, E, which adapts the bar D to be moved up or down to fit the thickness of the singletree by slightly loosening the screw and again drawing it up or tightening it by the same means.

To the front end of the bar C and adjustable bar D a safety-guard, F, is secured for the purpose of holding the whiffletree should the bolt holding it be removed or broken, and thereby prevent a serious accident. In Figs. 1 and 2 this guard is made to consist of a strong chain, secured in holes in the ends of the bars, of sufficient length to admit of adjustment. This guard may, however, consist of a rigid bar and be cast integral with the bar C, and its lower end made to extend down to meet the end of bar D when at its highest adjustable point, having its lower end and the end of bar D secured together by a slack chain, to admit of the adjustment of the bar downward to the extent of the slot *b* in the standard.

In Fig. 2 of the drawings the doubletree G and singletree H are shown in cross-section with bolt-holes through each of them and the bars, as they appear when in position for use. The hole through the singletree for the retaining or draft bolt is made sufficiently large to admit of a cast-metal thimble, I, which is inserted therein to prevent wear of the bolt directly upon the material of the whiffletree. This thimble is provided with a flange, *i*, at one end, and is driven down into the hole of the whiffletree until the flange rests in a seat in its upper side, its top surface being flush with the upper side of the whiffletree, in which position it is prevented from further insertion therein.

Projecting backward and downward from the lower end of the standard B there is a loop, K, cast integral with the standard. This loop is a strap-hold for attaching the whiffletrees to a cross-bar in the rear portion of the pole, or to the axle, to regulate the forward movement

of the animals when one is more spirited than the other, and also to secure safety from serious accident in case the pole should be strained and broken at the point of attachment of the doubletree, as is frequently the case.

In Fig. 4 of the drawings there is shown a modified construction of my device, which is intended for use when the single and double trees are made of substantially the same thickness of material. In this form the safety-guard F and bar D are cast in one and the same piece and of the same width with the standard B and bar C. The bar D and lower portion of the guard are made slightly thicker and stronger than the other bars to adapt them for use in heavy-draft work. The standard B is slightly reduced in width on each side in its upper portion, *g*, to enable the singletree to have a greater swing backward without coming in contact or striking the standard.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. A whiffletree-iron consisting of a standard and having three arms, one above the other, at substantially right angles thereto, the upper arms being united at their front ends by a safety-guard, as set forth.

2. A whiffletree-iron consisting of a standard and having arms at substantially right angles thereto, the middle arm being adjustable to

the thickness of the whiffletrees, as and for the purpose set forth.

3. The combination, with a whiffletree-iron having a standard provided with arms at substantially right angles thereto, of a middle arm adjustable up and down in the standard and united at its front end to the upper arm by a safety-guard, as set forth.

4. The combination, with a whiffletree-iron having a standard provided with a vertical slot and arms at right angles thereto, of a middle arm having a tenon at one end adapted to fit within the slot and to be retained by a screw in any desired position of adjustment, as set forth.

5. The combination, with a whiffletree-iron having a standard provided with a loop at its lower end projecting backward, and arms at right angles thereto extending forward, of a middle arm adjustable up and down in the standard, and a singletree having a thimble with a flanged head in its pivotal hole adapted to fit between said arms, as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

AARON J. MARTIN.

Witnesses:

J. McDONALD,
J. M. HINSON.