(No Model.)

C. AMMARELL.

WHIFFLETREE.

No. 264,600. Patented Sept. 19, 1882.

Fig. 1

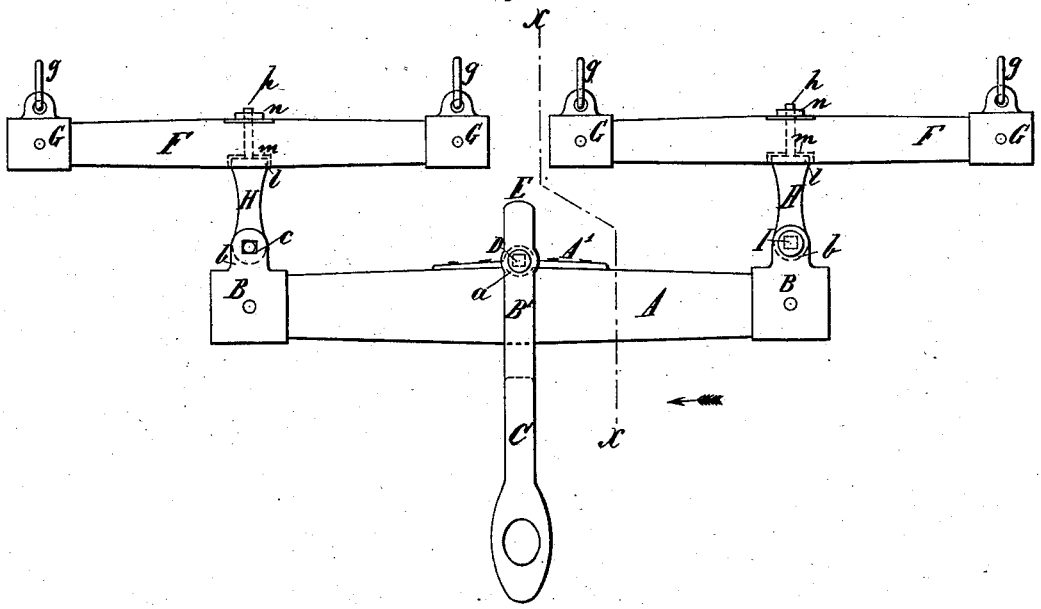


Fig. 2

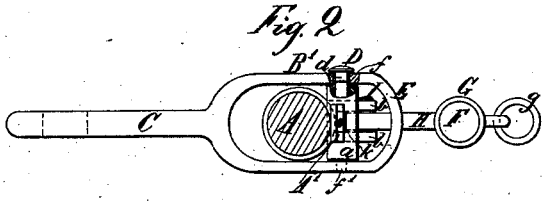


Fig. 3

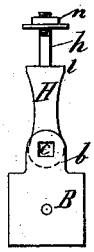
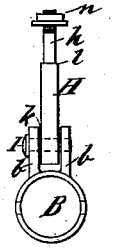


Fig. 4



Witnesses:
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UNITED STATES PATENT OFFICE.

CHRISTIAN AMMARELL, OF BROOKLYN, NEW YORK.

WHIFFLETREE.

SPECIFICATION forming part of Letters Patent No. 264,600, dated September 19, 1882.

Application filed April 21, 1882. (No model.)

To all whom it may concern:

Be it known that I, CHRISTIAN AMMARELL, a citizen of the United States, and a resident of Brooklyn, county of Kings, State of New York, have invented a new and useful Improvement in Whiffletrees, of which the following is a specification.

The object of this invention is to prevent the whiffletrees from moving or tipping in vertical planes.

The invention consists of novel devices for holding whiffletrees in such positions that they can move only in horizontal planes and cannot tip or move vertically to interfere with the horses' legs.

Figure 1 is a plan of my improved whiffletree. Fig. 2 is a sectional elevation of the same on line *x x*, Fig. 1. Fig. 3 is a detailed plan view, showing the connecting-bar of a single-tree inserted in the lugs of the double-tree-end iron. Fig. 4 is a side elevation of the same.

Similar letters of reference indicate corresponding parts.

In the drawings, A represents a double-tree, on the center and front of which is secured a metal plate, A′, having a central vertically-formed eye, *a*, while on each end of said double-tree A is secured an iron ring, B, having forward-projecting perforated lugs *b b*, the hole in each upper lug being preferably square, as shown at *c*, to prevent the turning of the bolt therein. This double-tree A is passed through the fork B′ of the tongue C, by which the device is designed to be attached to a car or other vehicle, and is secured therein by means of a bolt, D, that is passed down through the holes *f f′* in the fork B′ and the eye *a* of the plate A′, the square shoulder *d* of the said bolt D fitting in the square hole *f* in the fork B′ and preventing said bolt D from turning.

It will be observed that the fork of the tongue C is deep enough from rear to front to permit of the free motion of the double-tree A in a horizontal plane, while it is too narrow in the other direction to permit of an appreciable motion of said tree in a vertical plane, which construction is obviously an important improvement over the ordinary whiffletree devices that permit the trees to tip vertically.

The tongue-fork B′ is extended forward in the form of a closed loop, E, that serves for the engagement therein of a car-hook when the operator desires to hold up the whiffletrees for the purpose of attaching or detaching them from a car or other vehicle. This closed loop E possesses great advantages over the hook commonly fixed on the front of the double-tree, because it offers no point for the accidental catching of the traces therein.

The single-trees F F are provided with end irons, G G, having forward-projecting single lugs *m* and rings *g g* for attachment of the traces. (Not shown.)

H is a flat bar or link having one end fashioned into a screw-threaded bolt, *h*, and a square shoulder is formed on said bar H, while in the other end of said bar H is an eye, *k*. This bar H has its screw-threaded end inserted through the center of a single-tree, F, with its shoulder *l* entered into a corresponding socket, *m*, in said tree, and then a nut, *n*, screwed on said screw-threaded end, holds the tree F, so that it cannot turn on said bar H. The opposite end of the bar H is held between the lugs *b b* of a double-tree-end iron, B, preferably by a square-shouldered bolt, I, that serves as a pivot on which the single-tree F can move in a horizontal plane, while the engagement of the end of the bar H between the lugs *b b* prevents any vertical motion of said tree F.

It will be seen, then, that this invention for restricting the motion of whiffletrees to horizontal planes is one of great importance in this class of devices.

I am aware of Patents Nos. 231,381, 151,804, and 130,217, and I do not claim the construction shown in either patent.

What I claim is—

1. The combination, with the double-tree A and the plate A′, having a vertical tube or eye, *a*, of greater length than the diameter of the double-tree, of the tongue C, provided with a loop, B′, fitting closely against the ends of the tube *a*, and having holes *f f′* to allow the passage of a bolt through the loop and tube, the end of said loop being extended at E beyond the tube *a* to leave an opening at that point, substantially as and for the purpose specified.

2. The double-tree A, provided with an end iron, B, having horizontal ears *b b*, in combination with the flat bar H, pivoted at one end

between said ears, and provided at the other end with a shoulder, *l*, and bolt *p*, and the whiffletree F, having a rectangular socket to receive the shoulder *l*, whereby said whiffletree is kept from falling or from turning, except in a horizontal line, substantially as described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 5th day of April, 1882.

CHRISTIAN AMMARELL.

Witnesses:
GOTLIEB GLEICHMANN,
JACOB J. STORER.