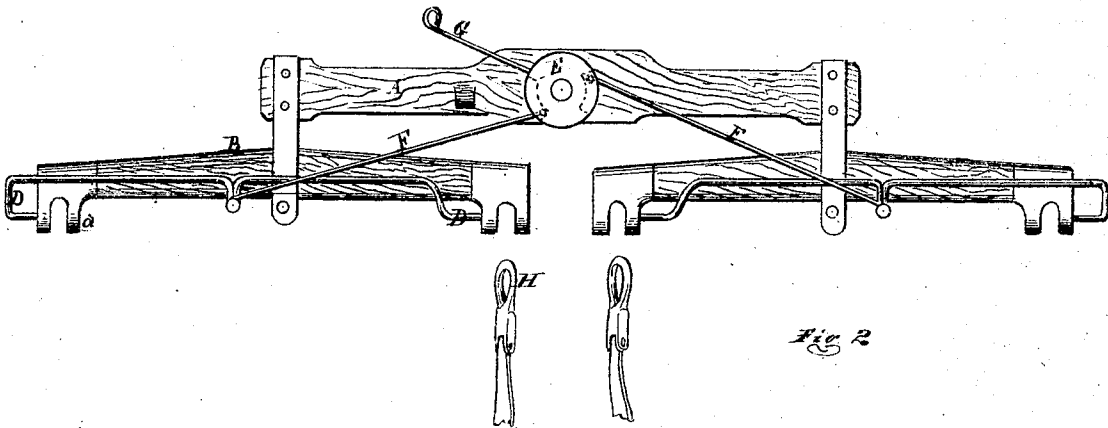
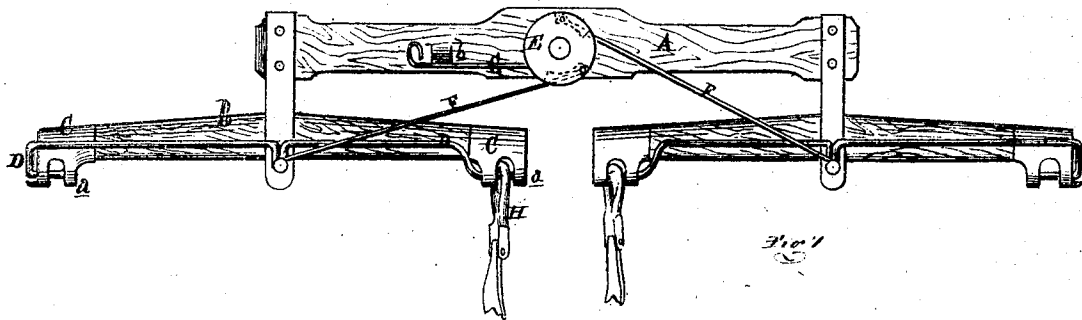


J. BYRD & T. BYRD JR.

118103

SAFETY - WHIFFLETREE

PATENTED AUG 15 1871



ATTEST

H. P. Church.

Myron H Church

INVENTOR

J. Baird Byrd.

Thomas Byrd, Jr.

per. Attorney

Thos S. Sprague

UNITED STATES PATENT OFFICE.

ISAIAH BYRD AND TURNER BYRD, JR., OF CALVIN TOWNSHIP, MICHIGAN.

IMPROVEMENT IN SAFETY-WHIFFLETREES.

Specification forming part of Letters Patent No. 118,103, dated August 15, 1871.

To all whom it may concern:

Be it known that we, ISAIAH BYRD and TURNER BYRD, Jr., of Calvin township, in the county of Cass and State of Michigan, have invented a new and useful Improvement in Safety-Whiffletrees; and we do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon, and being a part of this specification, in which—

Figure 1 is a plan view of our improvement as in ordinary use; and Fig. 2 is a similar view, showing the traces simultaneously detached.

Similar letters of reference indicate corresponding parts in the several figures.

This invention has for its object the construction of whiffletree trace-couplings in such a manner that the team may be instantly detached therefrom without the driver's being under the necessity of leaving his seat for that purpose; and it consists in the peculiar arrangement and method of operating the same, as more fully hereinafter set forth.

In the drawing, A represents a double-tree of a wagon, and B B the whiffletrees pivoted thereto in the usual manner. C are the whiffletree-irons, cast with a socket, to be sleeved over the ends of the whiffletrees, with a projecting lug, *a*, on the front side of each. This lug is slotted vertically, to receive the snap or cockeye at the end of the trace, and further provided with a transverse slot, in which plays one of the rods D lying on the whiffletrees with their ends so bent as to enter the transverse slots in the irons in the same direction. E is a plate pivoted on the double-tree, having the inner ends of the two rods F pivoted to wrist-pins on opposite sides of its pivots. The outer ends of these pivoted rods

F are connected with the rods D, so that in the partial rotation of the plate E the ends of said rods D will be caused to close the vertical slot in the irons or be withdrawn therefrom. The plate E is rotated by a lever, G, extending horizontally along the double-tree, and then up like a crank to the top of the dash-board. When the irons are in the position in Fig. 1 the horizontal portion of the crank-lever G is sprung over a stop, *b*, on the double-tree. In this position the snaps H of the traces engage with the ends of the rods D and secure the team to the vehicle.

To detach the team from the vehicle when in the act of running away, or otherwise, all that is required is to disengage the crank-lever from its stop and draw it back, which withdraws the ends of the rods D from the trace-snaps, which thus detaches the team, (if the neck-yoke have a ring slipped over the end of the pole or tongue, as it ought and usually does,) as shown in Fig. 2.

If desired, the lever G may be made without the crank, in which case it may be operated by a cord led under the box of the vehicle and up the inside of the dash, convenient to the driver's hand.

What we claim as our invention, and desire to secure by Letters Patent, is—

In connection with the double-tree A and whiffletrees B, provided with irons C, the arrangement of the locking-rods D, the connecting-rods F, and the plate E, provided with lever G, all constructed and operated as and for the purpose set forth.

ISAIAH BYRD.
TURNER BYRD, Jr.

Witnesses:

LANSON T. LEE,
HESTER A. LEE.