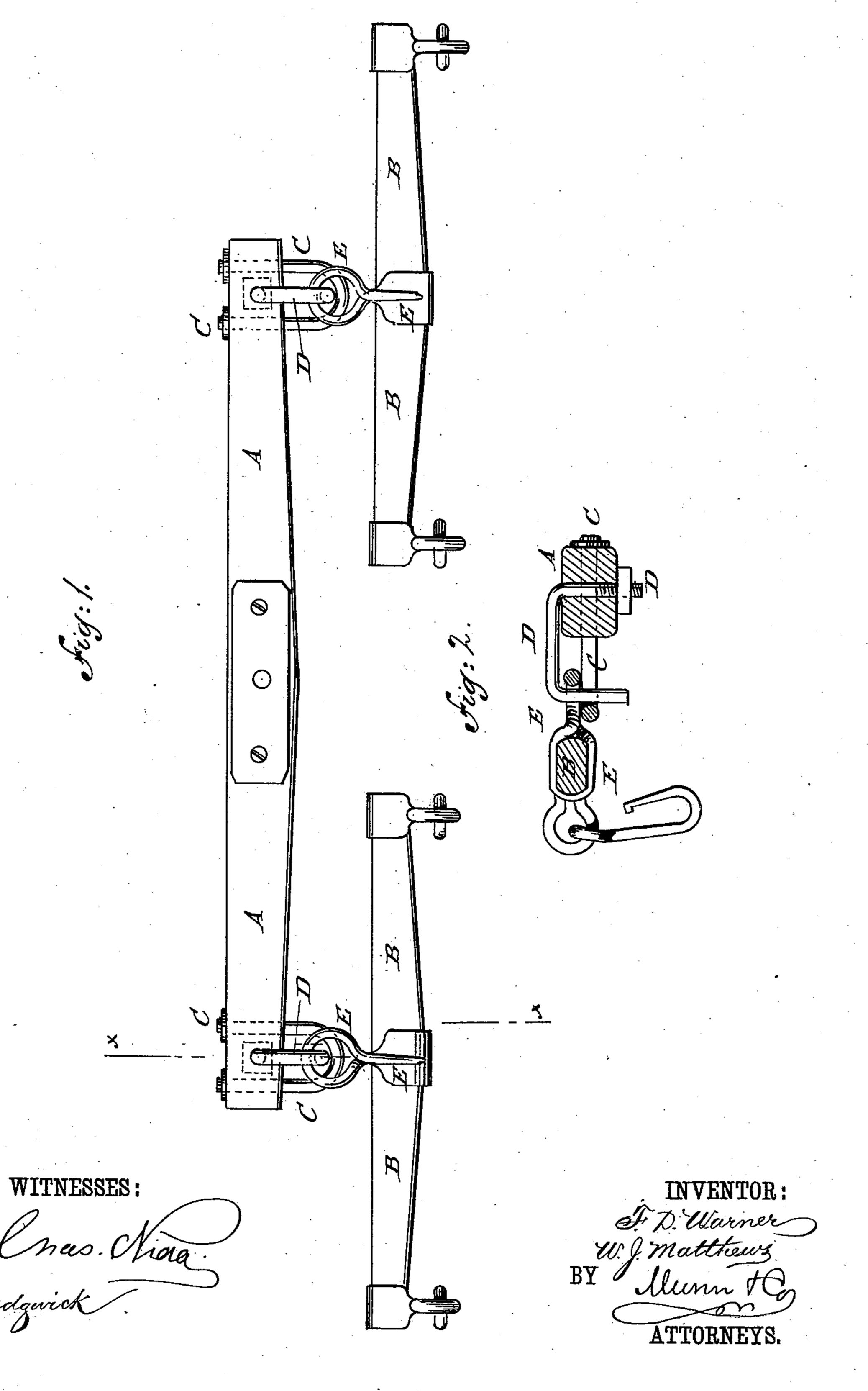
(Model.)

F. D. WARNER & W. J. MATTHEWS.

WHIFFLETREE COUPLING.

No. 329,788.

Patented Nov. 3, 1885.



United States Patent Office.

FRANK D. WARNER AND WILLIAM J. MATTHEWS, OF COLLINSVILLE, ILL.

WHIFFLETREE-COUPLING.

SPECIFICATION forming part of Letters Patent No. 329,788, dated November 3, 1885.

Application filed September 9, 1885. Serial No. 176,593. (Model.)

To all whom it may concern:

Be it known that we, Frank D. Warner and William J. Matthews, both of Collinsville, in the county of Madison and State of Illinois, have invented a new and useful Improvement in Double-Tree and Single-Tree Connections, of which the following is a specification.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a plan view of a double-tree and single-trees to which our improvement has been applied. Fig. 2 is a sectional end elevation of the same, taken through the line x x, Fig. 1.

The object of this invention is to provide double-tree and single-tree connections constructed in such a manner that the single-trees will be supported in the same horizontal plane with the double tree, even when the draft-strain is removed.

The invention consists in the combination, with the double-tree and single-tree, of the staple, the half-staple, and the clip having a quarter-twist, as will be hereinafter fully described, and then claimed.

A represents the double-tree, and B the single-trees connected therewith. To each end of the double-tree A is attached a staple, C, the arms of which are passed horizontally through said end, and are secured in place by heading the said ends down upon washers placed upon them at the rear edge of the said double-tree.

D are the half-staples, the arms of which are passed down vertically through the ends of the double-tree A, midway between the arms

of the staples C, and are secured in place by 40 nuts screwed upon their ends, or by other suitable detachable means. The upper part of the half-staples D are bent downward, so as to pass through the bends of the staples C and through the loops of the clips E, placed upon 45 the said staples C. The clips E pass around the centers of the single-tree B, and a quartertwist is given to them, so that their loops will lie squarely upon the staples C. With this construction the ends of the half-staples D that 50 pass through the clips E and staples C will rest against the bends of the said staples, so that the draft-strain will be sustained by the said staples C, and the said clips will be held between the staples C and the upper part of 55 the half-staples D, holding the single-tree B in the same horizontal plane with the doubletree A, and preventing the said single-tree from swinging downward when the draftstrain is removed.

Having thus fully described our invention, we claim as new and desire to secure by Letters Patent—

The combination, with the double-tree A and the single-trees B, of the staples C and the 65 half-staples D, attached to the double-tree, and the clips E, having a quarter-twist and attached to the single-trees, substantially as herein shown and described, whereby the said double-tree and single-trees will be securely 70 connected, and the single-trees will be held from swinging downward, as set forth.

FRANK D. WARNER. WILLIAM J. MATTHEWS.

Witnesses:

Louis C. Winkler, Louis G. Kluge.