M. BOLANZ.

WHIFFLETREES.

No. 179,992. Patented July 18, 1876.

FIG. 1.

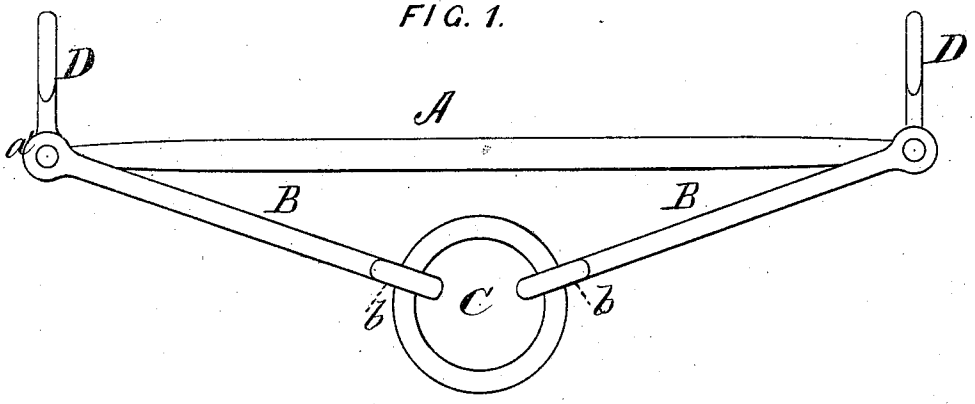


FIG. 2.

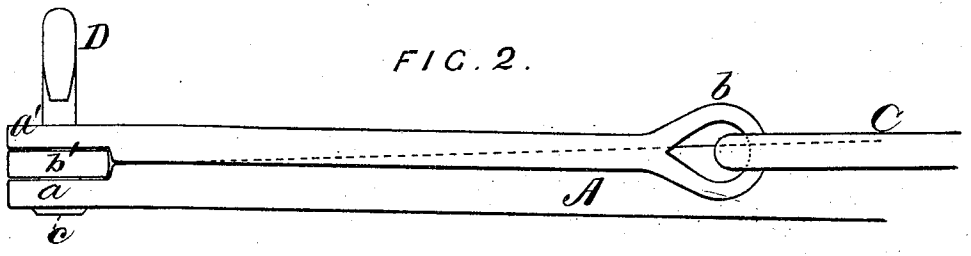
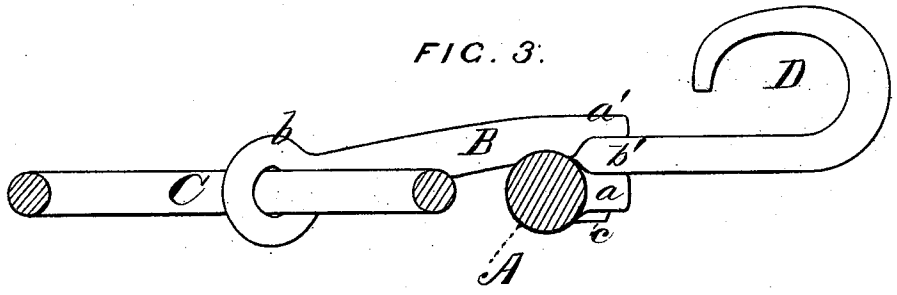


FIG. 3.



WITNESSES

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MATHIAS BOLANZ, OF PITTSYLVANIA COUNTY, VIRGINIA.

IMPROVEMENT IN WHIFFLETREES.

Specification forming part of Letters Patent No. **179,992**, dated July 18, 1876; application filed June 3, 1876.

To all whom it may concern:

Be it known that I, MATHIAS BOLANZ, of the county of Pittsylvania and State of Virginia, have invented a new and valuable Improvement in Whiffletrees; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a plan view of my improved whiffletree. Fig. 2 is a rear view of the same, and Fig. 3 is a cross-sectional view of the same.

This invention has relation to improvement in whiffletrees for vehicles, farming implements, and the like; and it consists in the arrangement and novel construction of the metallic spreader or tree, its draft-hooks, and the rigid metallic rods which connect the said tree to the goose-neck ring, as will be hereinafter more fully explained.

In the annexed drawings, the letter A designates a metallic whiffletree, of the usual length, which is thickest at its middle part, and tapers therefrom outward to its ends, where it terminates in flattened eyes *a*.

B indicates metallic rods, which are connected at one end to a strong metallic ring, C, eyes *b* being formed thereon for the purpose. The remaining ends of these rods are provided with flattened eyes *a'*, the object of which will hereinafter appear.

D represents the draft-hooks, to which the single-trees of the leaders are attached. These hooks are made of metal, and have a flat shank, *b'*, of the same dimensions as eyes *a a'*, above mentioned. They are arranged between the rods B and the ends of the whiffletree, in a recess formed therein by rabbeting the adjacent surfaces thereof, as shown in Fig. 2, the hooks, the whiffletree, and the rods being then connected together by means of a short stout rivet, *c*, passing through eyes *a a'* and a perforation registering therewith in the shank of the hooks.

Ring C is designed to be passed over the hook or goose-neck on the end of a draft-pole of vehicles; or, when the whiffletree is used as a single-tree, as may readily be done, it will be engaged with a clevis on the end of a plow-beam. In this latter case hooks D will be used to engage the cockeyes on the ends of the traces.

Rods B being made of a single piece of metal, and being strongly secured both to ring C and to the whiffletree, will add greatly to the strength of the apparatus. It will also be much lighter, and the disagreeable rattling of the chains in going down hill entirely done away with.

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

1. The rods B, connected to the clevis-ring C by means of eyes *b*, and the draft-hooks D, introduced between the lapped ends of rods B and spreader A, and confined in place by a bolt passing through registering-eyes in the rods, the spreader, and the draft-hooks, substantially as specified.

2. The draft-hooks D, pivoted between the rabbeted ends of the spreader A and rods B, substantially as specified.

3. The whiffletree, consisting of the metallic spreader A, the independent connecting-rods B, the ring C, and the draft-hooks D, pivoted between the rabbeted ends of the spreader and rods, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

MATHIAS BOLANZ.

Witnesses:

R. S. WOODY,

SCOTT CARTER.