

J. H. BROWN.
Whiffetree.

No. 162,794.

Patented May 4, 1875.

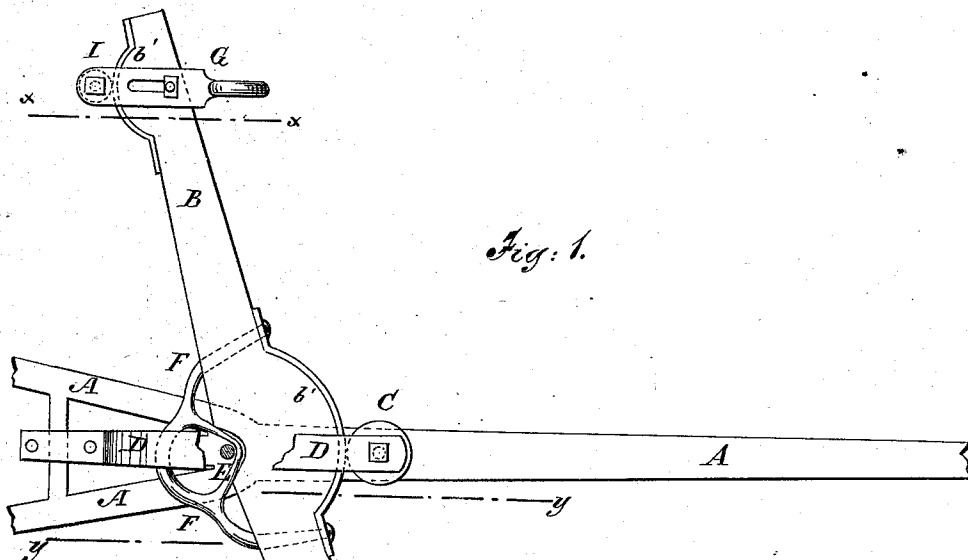


Fig: 1.

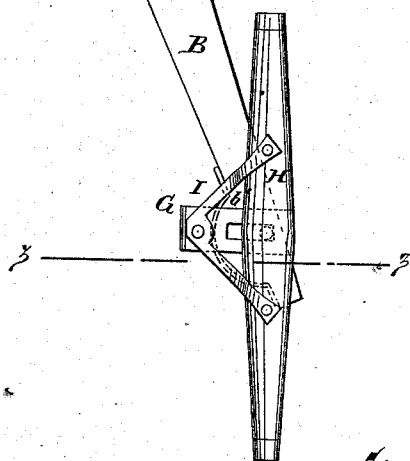


Fig: 3.

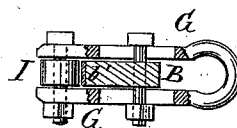


Fig: 2.

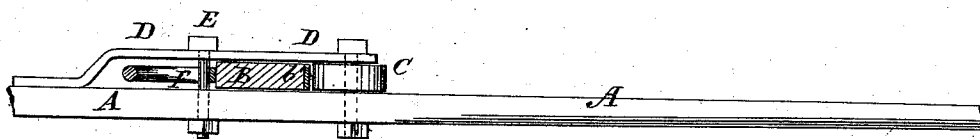
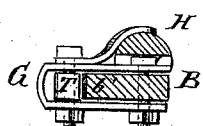


Fig: 4.

WITNESSES:

Chas. N. ...
H. F. Terry



INVENTOR:
James H. Brown
BY
Munn & ...
ATTORNEYS.

UNITED STATES PATENT OFFICE.

JAMES HARDING BROWN, OF PORTER'S MILLS, WISCONSIN.

IMPROVEMENT IN WHIFFLETREES.

Specification forming part of Letters Patent No. **162,794**, dated May 4, 1875; application filed February 20, 1875.

To all whom it may concern:

Be it known that I, JAMES H. BROWN, of Porter's Mills, in the county of Eau Claire and State of Wisconsin, have invented a new and useful Improvement in Draft-Equalizer, of which the following is a specification:

Figure 1 is a top view of my improved draft-equalizer. Fig. 2 is a detail sectional view of the same, taken through the line *x x*, Fig. 1. Fig. 3 is a detail sectional view of the same, taken through the line *y y*, Fig. 1. Fig. 4 is a detail sectional view of the same, taken through the line *z z*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The invention will first be fully described, and then pointed out in the claim.

A represents the tongue of a vehicle. B is the double-tree, upon the forward side of the center, and upon the rear side of the ends, of which are formed half-round projections, *b'*, which are faced with metal to prevent wear. The center projection *b'* rests against a roller, C, pivoted to the tongue A, and to the hammer-strap D. The double-tree B is kept in place by a bolt, E, that passes through the tongue A, the hammer-strap D, and the angular forward part of a large hole formed in the bar F, attached to the rear side of the double-tree B, and which projects into a notch in the rear side of the said double-tree, as

shown in Fig. 1. G are clevises placed upon the end parts of the double-tree B, and pivoted to said ends by bolts passing through slots in said clevises, so that they may move forward to take up the wear. The rear ends of the clevises G project in the rear of the half-round end projections *b'*, and have rollers pivoted or blocks attached to them, as shown at I in Figs. 1, 2, and 4, and which bear against the said half-round projections *b'*. The whiffletrees H are pivoted to the forward part or bow of the clevises G, or are rigidly attached to the upper arm of said clevises.

I am aware that it is not new to provide an equalizer, on its forward side, with a curved convexity bearing against a roller; also, that a retainer consisting of a hammer-strap and long staple passing about the hammer-pin is not new.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The clevis G, slotted on opposite sides and provided with end roll I, in combination with a double-tree having bolt and convexity near the end, as and for the purpose specified.

JAMES HARDING BROWN.

Witnesses:

JOHN J. WYATT,
P. A. PRINCE.