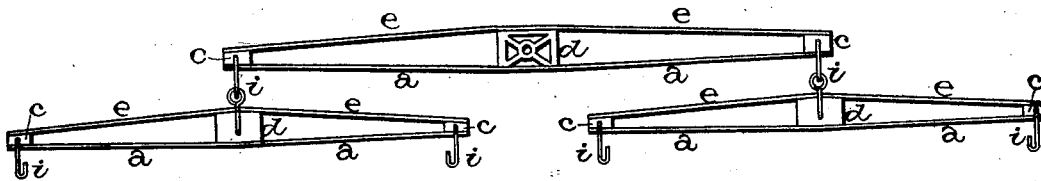


R. R. BEAVERS.
Whiffletree.

No. 199,894.

Patented Feb. 5, 1878.



WITNESSES.

J. W. Garner
William S. O'Connell

INVENTOR.
R. R. Beavers,
per
J. A. Lehmann, atty

UNITED STATES PATENT OFFICE.

RICHARD R. BEAVERS, OF HUMBOLDT, ILLINOIS.

IMPROVEMENT IN WHIFFLETREES.

Specification forming part of Letters Patent No. **199,894**, dated February 5, 1878; application filed December 21, 1877.

To all whom it may concern:

Be it known that I, RICHARD R. BEAVERS, of Humboldt, in the county of Coles and State of Illinois, have invented certain new and useful Improvements in Whiffletrees; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawing, which forms part of this specification.

My invention relates to an improvement in whiffletrees; and it consists in the peculiar construction of parts, that will be more fully described hereinafter, whereby a cheap, simple, and durable whiffletree is produced.

The accompanying drawing represents my invention.

a represents the front plate of a single or double tree, which is made of a strip of metal of any desired length or width. To each end and the middle of this plate are secured, in any suitable manner, the three metallic blocks, *c c d*. The two blocks *c c* are much narrower, and have their rear sides somewhat inclined from their inner ends outward, as shown. The central block *d* is much thicker than the other two, and may be made solid or hollow, as preferred, according as it is desired to lighten the construction. The rear plate *e* is secured over the rear side of the three blocks by bolts, which pass through both plates and the blocks.

Through the blocks are made suitable holes, in which the hooks or other fastening devices *i* are secured.

By the use of the two thin elastic plates, not only is a very light whiffletree produced, but one that will spring sufficiently to prevent a sudden jar or collision from being felt so severely by the horses.

Another advantage gained is, that the plates and blocks can be fastened together by a single small bolt or rivet for each block, thus doing away with all castings or fastenings which must be finished in the lathe, or fastening devices which must be formed in two pieces and then bolted together.

I am aware that whiffletrees have been formed of round iron bars and tubes, as shown in the patent to Eddy, April 25, 1876, and this I disclaim.

Having thus described my invention, I claim—

A single or a double tree formed of the two plates *a e* and blocks *c c d*, the parts being bolted or riveted together, substantially as shown.

In testimony that I claim the foregoing I have hereunto set my hand this 13th day of December, 1877.

RICHARD R. BEAVERS.

Witnesses:

D. A. BOWMAN,
J. M. HAGAN.