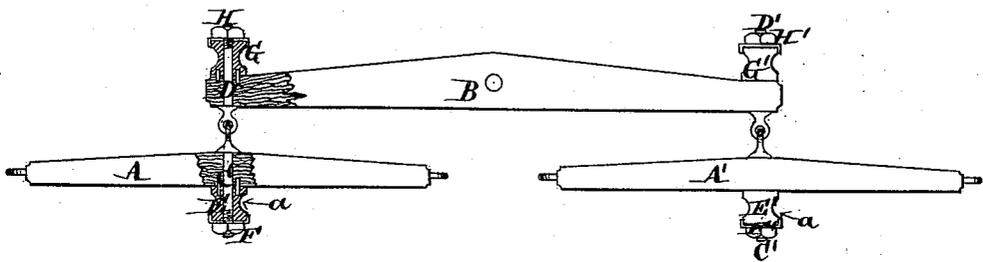


W. O. SHADBOLT.

WHIFFLETREES.

No. 175,512.

Patented March 28, 1876.



Witnesses.

Otto Schufeland
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William Oscar Shadbolt

per

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UNITED STATES PATENT OFFICE.

WILLIAM O. SHADBOLT, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN WHIFFLETREES.

Specification forming part of Letters Patent No. **175,512**, dated March 28, 1876; application filed February 26, 1876.

To all whom it may concern:

Be it known that I, WILLIAM OSCAR SHADBOLT, of the city of Brooklyn, county of Kings and State of New York, have invented a new and useful Improvement in Whiffletrees, which improvement is fully set forth in the following specification, reference being had to the accompanying drawing, which represents a plan view of my improvement, partly in section.

Similar letters indicate corresponding parts.

This invention relates to certain improvements in whiffletrees; and consists of a novel construction and combination of parts, which will be fully hereinafter described, and specifically pointed out in the claims, a preliminary description being therefore deemed unnecessary.

In the drawing, the letters A A' designate two whiffletrees made according to my invention, and which are connected to a double-tree, B. The whiffletrees A A' are provided with transverse links C C', which are connected to corresponding links D D', secured to the end parts of the double-tree B. A portion of the links C C' are made to project beyond the front edge of the whiffletrees, and these projecting parts are surrounded by cushions or springs E E', which, in this example, are composed of a tubular piece of india-rubber. The cushions or springs E E', when made in the form of a tubular piece of india-rubber, are preferably contracted, as seen at *a*, the cushions being thus best adapted to be compressed. When the cushions or springs E E' have been placed around each of the links C C', the nuts F F' are screwed

on the ends of the bolts, so as to hold the cushion in place, the nuts serving also to tighten and retain the links and to regulate the tension of the springs. The links D D' of the double-tree B are encircled by cushions or springs G G', similar to the cushions E E', the last-named cushions G G' being also held in position by screw-nuts H H', by which the links D D' are secured in place.

It is obvious that by the action of the cushions E E' or G G' the whiffletrees and the team are greatly relieved from the strain caused in overcoming the inertia in starting or by the vehicle striking an obstruction, while my improvement, owing to its extreme simplicity, can be applied at a less cost than any similar contrivance heretofore known.

My invention is applicable to a single whiffletree attached to a shaft as well as to the two shown attached to a double-tree.

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

The double-tree B, provided with the links D D' and springs G G', in combination with the whiffletrees A A', provided with the links C C', connected with the links D D' of the double-tree, and having the springs E E', substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 18th day of February, 1876.

WILLIAM OSCAR SHADBOLT. [L. S.]

Witnesses:

W. HAUFF,
E. F. KASTENHUBER.