

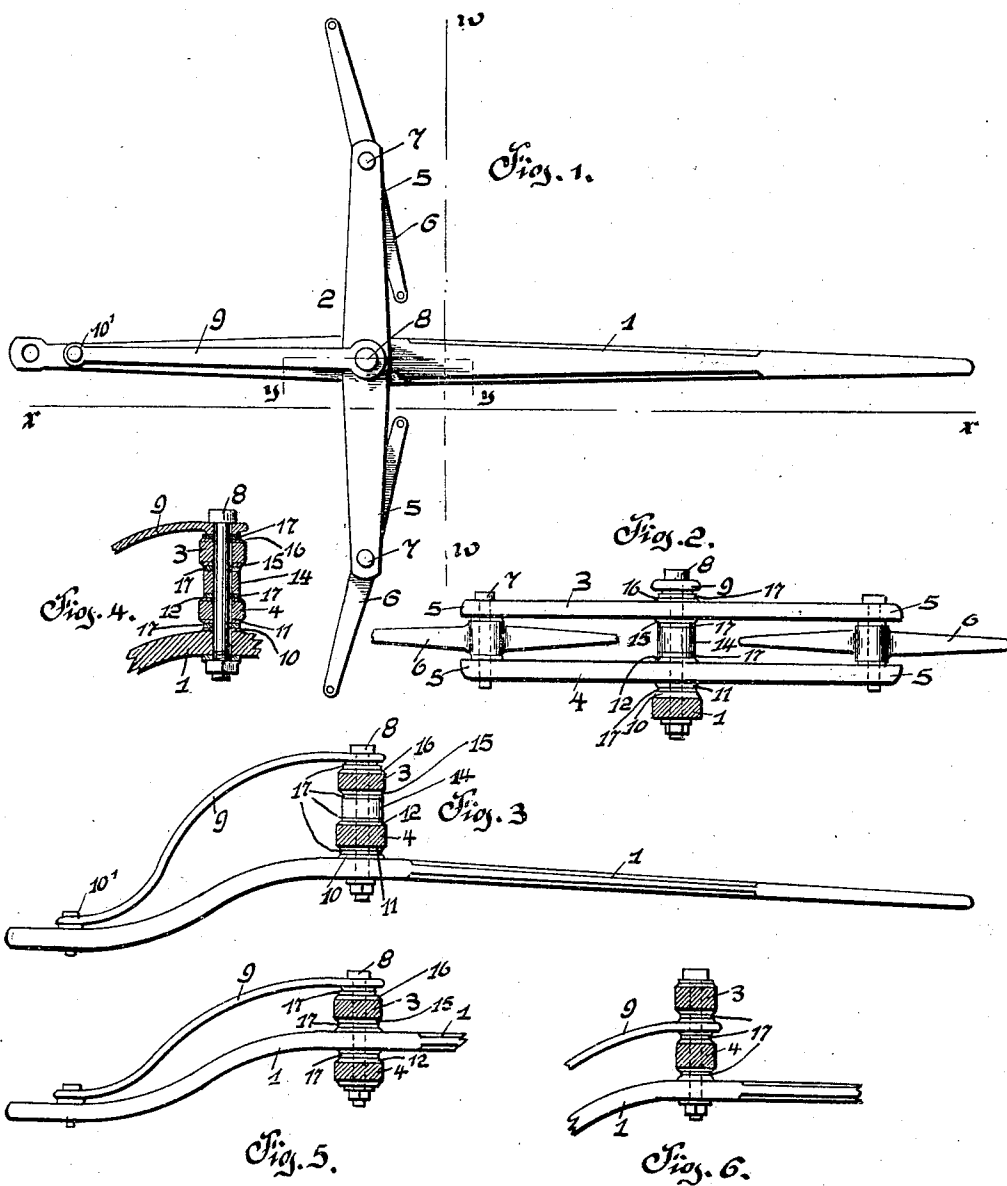
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PATENTED NOV. 6, 1906.

R. L. LAMBERTON.

DOUBLETREE.

APPLICATION FILED NOV. 8, 1905.



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UNITED STATES PATENT OFFICE.

ROBERT LESLIE LAMBERTON, OF SISTERSVILLE, WEST VIRGINIA.

DOUBLETREE.

No. 835,284.

Specification of Letters Patent.

Patented Nov. 6, 1906.

Application filed November 8, 1905. Serial No. 286,369.

To all whom it may concern:

Be it known that I, ROBERT LESLIE LAMBERTON, a citizen of the United States of America, residing at Sistersville, in the county of Tyler and State of West Virginia, have invented certain new and useful Improvements in Doubletrees, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in doubletrees; and the primary object of the invention is to provide a combined draft-equalizer and rein-protector.

My invention aims to provide positive and reliable means for equalizing the draft of horses hitched to my improved doubletree, also means to prevent the reins of a harness from becoming entangled with the swingle-trees of the doubletree, and in this connection the invention is intended to be used in connection with the tongue of the running-gear of the vehicle. To this end I have devised a novel form of doubletree adapted to be pivotally connected to the tongue of a vehicle, and the simple and inexpensive construction which I employ in connection with the doubletree is free from danger of being injured or rendered inoperative when in use, also capable of withstanding the rough usage to which doubletrees are subjected.

With the above and other objects in view, which will more readily appear as the nature of the invention is better understood, the same consists in the novel construction, combination, and arrangement of parts to be hereinafter more fully described, and then specifically pointed out in the claims, and referring to the drawings accompanying this application, like numerals of reference designate corresponding parts throughout the several views, in which—

Figure 1 is a plan of a tongue equipped with my improved doubletree. Fig. 2 is a cross-sectional view taken on the line *ww* of Fig. 1. Fig. 3 is a longitudinal sectional view taken on the line *xx* of Fig. 1, illustrating the tongue in side elevation. Fig. 4 is a vertical sectional view taken on the line *yy* of Fig. 1. Fig. 5 is a fragmentary view of the tongue, illustrating a modified form of construction. Fig. 6 is a similar view of a still further modified form of construction.

In the accompanying drawings, the reference-numeral 1 designates a conventional form of tongue, such as is attached to the run-

ning-gear of a vehicle, in order that horses may be hitched to said vehicle.

My invention resides in providing the tongue 1 with a novel form of doubletree 2, said doubletree consisting of two bars 3 and 4, having tapering ends 5 5, between which are pivotally mounted swingle-trees 6 6, said swingle-trees being held in engagement with the bars 3 and 4 by pivot-pins 7 7. The bars 3 and 4 are pivotally connected to the tongue by a bolt and nut 8 and also by a hammer-strap 9. Upon the top face of the tongue is mounted a metallic plate 10, upon which rests the bar 4, said bar having its top and bottom faces provided with metallic plates 11 and 12. To support the bars 3 and 4 intermediate their ends, I employ a metallic sleeve or collar 14, which is mounted upon the bolt 8 to assist in properly spacing the bars 3 and 4, also to support the same. The bar 3 upon its top and bottom faces is provided with metallic plates 15 and 16, and engaging the plates 16 is the hammer-strap 9, which is secured to the tongue, as at 10'. The hammer-strap is adapted to brace the doubletree and assist in equalizing the draft upon the swingle-trees 6. Washers 17 may be interposed between the sleeve 14, the bars 3 and 4 of the doubletree, and the hammer-strap and tongue to provide a metallic bearing for the pivotally-mounted doubletree and relieve the friction incurred by moving the doubletree relative to the tongue 1.

The upper bar 3 of the doubletree serves functionally as a rein shield or protector and prevents the reins of a harness from becoming entangled with the swingle-trees, said swingle-trees having their inner ends housed between the bars 3 and 4, and even should the reins descend low enough to engage the bar 3 it will be impossible for the reins to become engaged with the inner ends of the swingle-trees 6.

In Fig. 5 of the drawings I have illustrated a slight modification, wherein the tongue 1 is employed in lieu of the sleeve 14, the tongue passing between the bars 3 and 4 and serving to properly position the same. In Fig. 6 of the drawings, in lieu of the sleeve or collar 14, the end of the hammer-strap 9 is placed between the bars, and I desire it to be understood that either one of the constructions illustrated in Figs. 5 and 6 of the drawings may be readily employed.

It is a well-known fact that the traces of the harness are generally connected to the

swingletrees and to the collars of a harness, and in the majority of cases the draft upon the swingletrees is generally upwardly, owing to the elevation of the collars of the harness above said swingletrees. Therefore I have employed the hammer-strap 9 and connected it to the tongue and to the doubletree 2, as illustrated in the accompanying drawings, to equalize the draft upon the swingletrees and the tongue, and thereby prevent the tongue or the bolt 8 from bending or breaking when a draft in excess of the tensile strength of the swingletrees heretofore were mounted above the hammer-strap, and when a draft was exerted upon them they had a tendency to turn forward. By placing the hammer-strap above the swingletrees or upper part of the doubletree, the part, together with the swingletrees, is prevented from turning forward, consequently equalizing the draft upon the swingletrees.

I do not care to confine myself to the kind of wood or material from which my improved doubletree is made or to the type of vehicle in connection with which it is used, and such changes in the construction as are permissible by the appended claims may be resorted to without departing from the spirit and scope of the invention.

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

1. The combination with a tongue, of a bolt passing through said tongue, two parallel bars mounted on said tongue, swingletrees pivotally mounted between the extremities of said bars, and a hammer-strap having its one end rigidly attached to the tongue and having its other end projecting between the parallel bars for spacing the same apart, substantially as described.

2. The combination with a tongue, of a bolt passing through said tongue, two parallel bars mounted on said tongue, washers provided on the inner faces of said bars, swingletrees pivotally mounted between the extremities of said bars, and a hammer-strap having its one end rigidly connected to the tongue, and its other end projecting between the said bars and spacing them apart, the washers on the inner faces of the bars forming a bearing for said hammer-strap, substantially as described.

In testimony whereof I affix my signature in the presence of two witnesses.

ROBERT LESLIE LAMBERTON.

Witnesses:

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