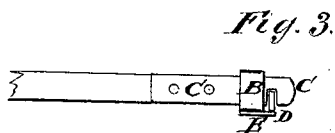
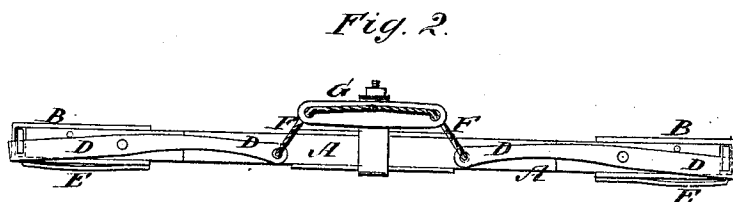
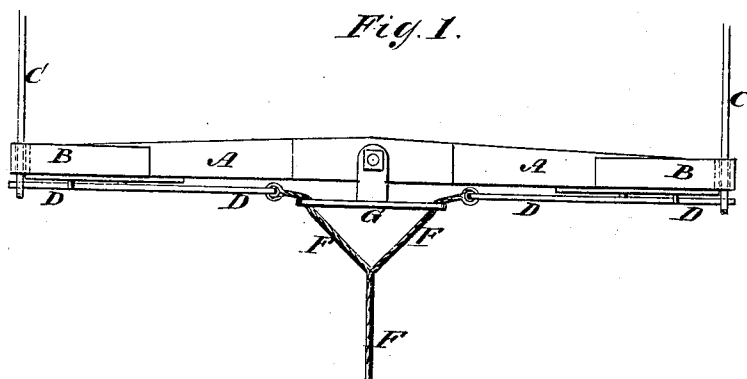


J. L. DARDEN.

Improvement in Whiffletrees.

No. 131,053.

Patented Sep. 3, 1872.



Witnesses:

*E. Wolff.*  
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PER

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# UNITED STATES PATENT OFFICE.

JAMES L. DARDEN, OF COTTON PLANT, MISSISSIPPI.

## IMPROVEMENT IN WHIFFLETREES.

Specification forming part of Letters Patent No. 131,053, dated September 3, 1872.

Specification describing a new and useful Improvement in Single-Tree, invented by JAMES L. DARDEN, of Cotton Plant, in the county of Union and State of Mississippi.

In the accompanying drawing, Figure 1 is an under-side view of my improved single-tree. Fig. 2 is a rear view of the same inverted. Fig. 3 is an end view of the same.

Similar letters of reference indicate corresponding parts.

My invention is an improvement over the trace-detaching apparatus of John Laughlin, patented October 28, 1862, No. 36,786; and consists in constructing and arranging the parts of the apparatus as hereinafter described.

A represents the bar of the single-tree, which is pivoted to the double-tree, to the cross-bar of a pair of shafts, or to any other object to be drawn, in the ordinary manner. B are straps, the end parts of which overlap the upper and lower side of the end parts of the bar A of the single-tree, and which are bent around the ends of said bar so as to leave a space between the bend of the said strap and the end of the said bar to receive the bar C, attached to the end of the tug. The bars C are designed to be riveted to the ends of the tugs, and have notches formed in the edge of their rear end to receive the ends of the levers or bars D, which extend along and are pivoted to the rear side of the end bars of the bar A. The outer ends of the levers D are held down into the notches in the ends of the tug-bars C by springs E, attached to the upper side of the bar A, and the free ends of which rest upon

the edges of the outer ends of the levers D to hold them down in the notches of the tug-bars C. To the inner ends of the levers D are attached the ends of the branches of the cord F, which branches pass through guide-holes in the ends of a short cross-bar, G, attached to the middle part of the bar A, or to the hammer-strap of said bar A. The cord F passes back into such a position that it may be conveniently reached and operated by the driver. The guide or cross-bar G brings the cord F into such a position that when pulled upon the levers D will be raised out of the notches in the tug-bars C, allowing said tug-bars to be withdrawn from the single-tree, thus detaching the horse.

Thus attached to the rear side of the single-tree, the detaching devices are not liable to be injured by contact with any object, and are not noticeably exposed to view, while their efficiency and reliability of action are increased.

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

The levers D D, pivoted to the rear side of the single-tree A, the springs E E applied to the under side thereof, the central elevated cross-bar G, and the cord F, all constructed and arranged as shown and described.

JAMES L. DARDEN.

Witnesses:

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