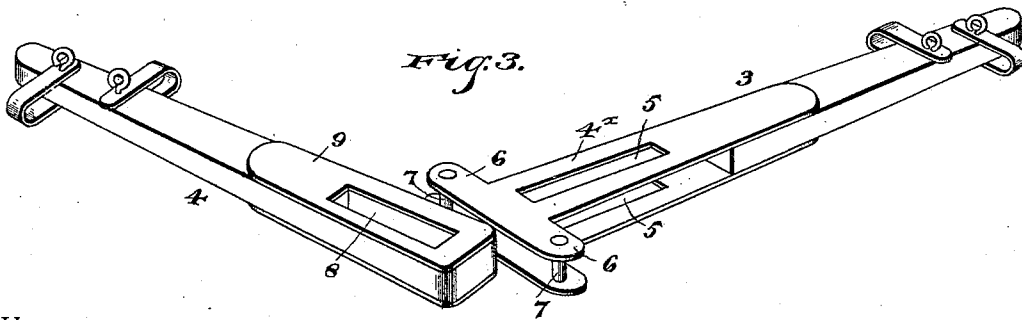
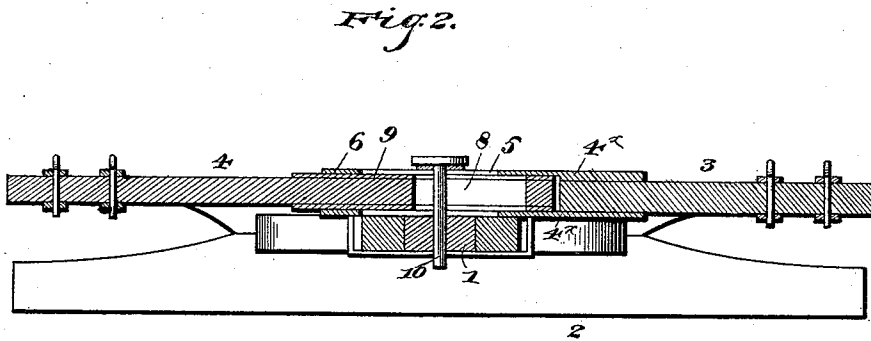
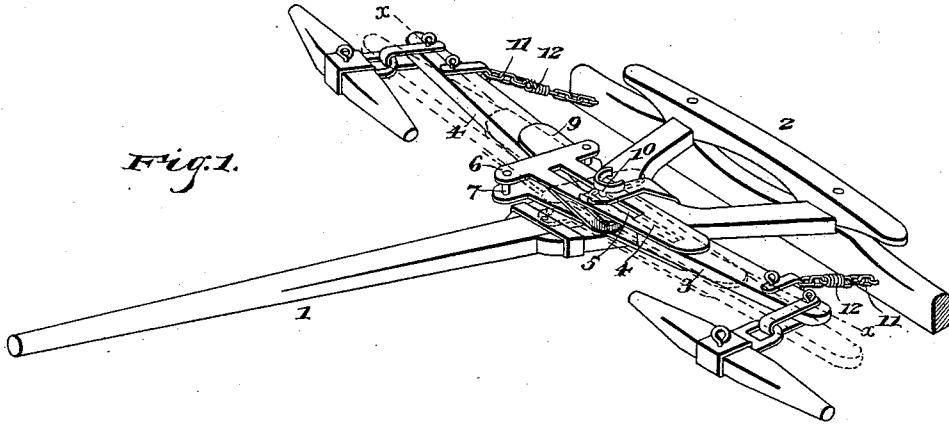


(No Model.)

W. H. H. SPRADLIN.  
WHIFFLETREE.

No. 523,381.

Patented July 24, 1894.



Witnesses

*B. S. Ober,*  
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# UNITED STATES PATENT OFFICE.

WILLIAM H. H. SPRADLIN, OF SOUTH FORK, MISSOURI, ASSIGNOR OF ONE-HALF TO JAMES E. SPRADLIN, OF SAME PLACE.

## WHIFFLETREE.

SPECIFICATION forming part of Letters Patent No. 523,381, dated July 24, 1894.

Application filed February 18, 1893. Serial No. 462,836. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM H. H. SPRADLIN, a citizen of the United States, residing at South Fork, in the county of Howell and State of Missouri, have invented a new and useful Whiffletree, of which the following is a specification.

This invention relates to whiffletrees, and it has for its object to provide means for lightening the draft, permitting a team to work apart and pass over or around bad places or obstructions in the road, and to obviate friction of the team against each other, and also to favor sore shoulders.

With these ends in view, the invention consists of the construction and arrangement of the parts thereof as will be more fully hereinafter described and claimed.

In the drawings: Figure 1 is a perspective view of a tongue and a portion of running-gear, showing the improved whiffletree in connection therewith and the adjustable operation thereof shown in dotted lines. Fig. 2 is a transverse vertical section on the line  $x-x$ , Fig. 1. Fig. 3 is a detail perspective view of the two parts of the whiffletree disconnected from each other.

Similar numerals of reference indicate corresponding parts in the several figures of the drawings.

Referring to the drawings, the numeral 1 designates a tongue, which is connected to a running-gear 2, and is of any preferred form of construction. On the top portion of the said tongue is adjustably mounted the improved whiffletree that is formed of two independent sections 3 and 4. The section 3 has a socket at the inner portion thereof which is formed by upper and lower plates 4<sup>x</sup>, of similar contour, that are spaced apart and have aligned slots 5 therein, and at the inner ends of the same constructed with right-angularly extending ears or lugs 6, through which are passed vertically-positioned bolts 7. The formation of the ears or lugs 6 broadens the bearing surface at the inner end of the section 3, and within the said socket is adjustably and removably mounted the inner end of the section 4 of the whiffletree, which is provided with a vertical slot 8 of elongated

form that is adapted to align with the slots 5 in the plates 4<sup>x</sup>, and over the said inner end of the said section 4 are secured wear-plates 9 that take up the frictional wear of the plates 4<sup>x</sup> bearing thereagainst. The two parts of the whiffletree as thus formed are connected by a bolt 10, that is passed through the slots 5 and 8 and through an opening in the tongue that is adjacently situated. By this construction it will be seen that the whiffletree can be adjusted freely by the movement of the animals and a team can thereby relieve itself in various ways or be permitted to pass around obstructions in the roadway, or an animal having a sore shoulder can be readily favored.

The inner extended portion of the socket of the section 3 provides for the segmental movement of the inner end of the section 4 therein and takes the wear off of the rear portion of the pole and its connections.

The singletrees are connected to the outer ends of the whiffletree, and at the rear portion, inside of the said outer ends of the said whiffletree, are secured the stay-chains 11, having interposed therein intermediate of the ends thereof coiled springs 12, that will give with the movement of the team and lighten the draft, and furthermore, said springs will tend to cause the sections of the expanded whiffletree to assume their normal closed position, and also draw the same rearward, which will be a matter of considerable advantage when a team is at rest and not sustaining the load. Thus it will be seen that the improved whiffletree is longitudinally extensible, being composed of sections which are capable of relative adjustment; that said sections are independently adjustable; and that the sections are pivotally connected together and to the tongue and that the forward strain upon the extremities of the sections is resisted by the springs, which also serve to retract the members of the whiffletree after they have been extended and return them to their normal relative positions.

The advantages of the construction heretofore set forth are manifold and will become readily apparent to those skilled in the art in using the device; and it is obviously appar-

ent that changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having described the invention, what is claimed as new is—

1. A whiffletree comprising pivotally and slidably connected members capable of independent extension, and resilient means for retracting the members longitudinally and resisting the forward strain upon the outer terminals thereof, substantially as specified.
2. The combination with a draft-tongue, of

a sectional whiffletree having its members pivotally connected to the tongue and slidably connected to each other, whereby they are capable of relative longitudinal extension, and retracting springs for returning the members to their normal positions, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

WILLIAM H. H. SPRADLIN.

Witnesses:

D. T. BROWN,

W. H. THRELKELD.