

No. 634,992.

J. M. McMANUS.

Patented Oct. 17, 1899.

SINGLE TREE.

(Application filed Jan. 30, 1899.)

(No Model.)

Fig. 1.

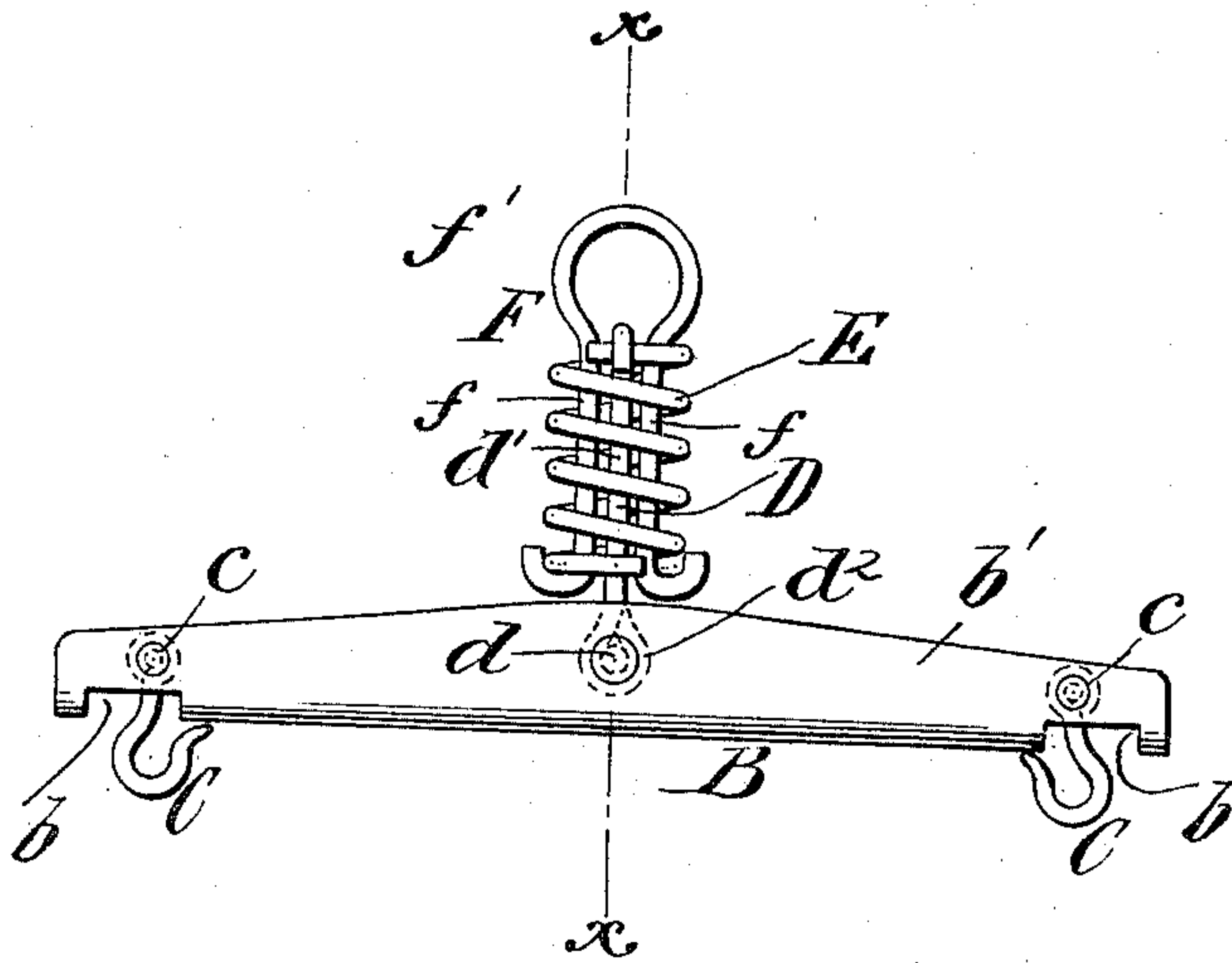


Fig. 2.

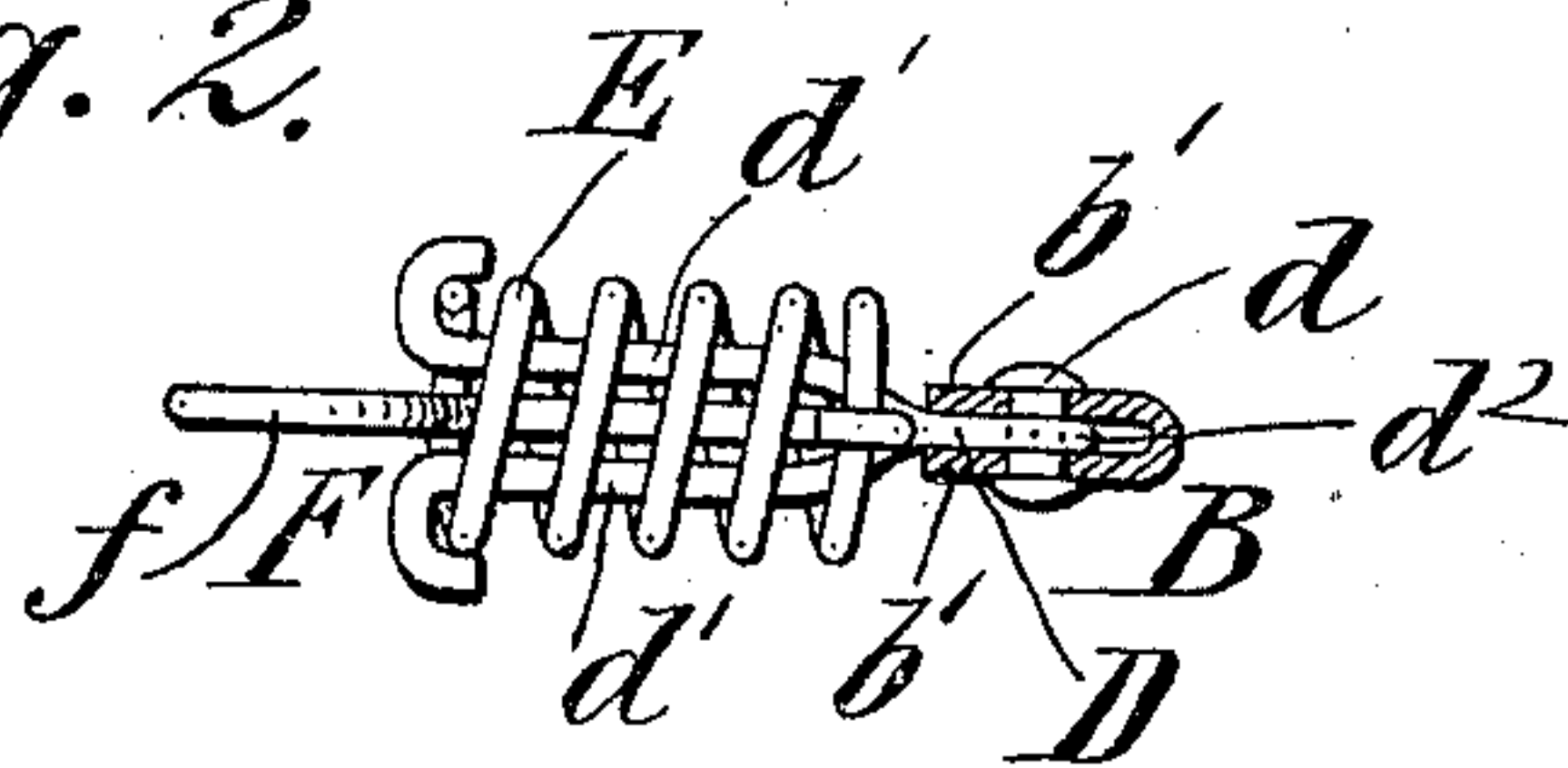
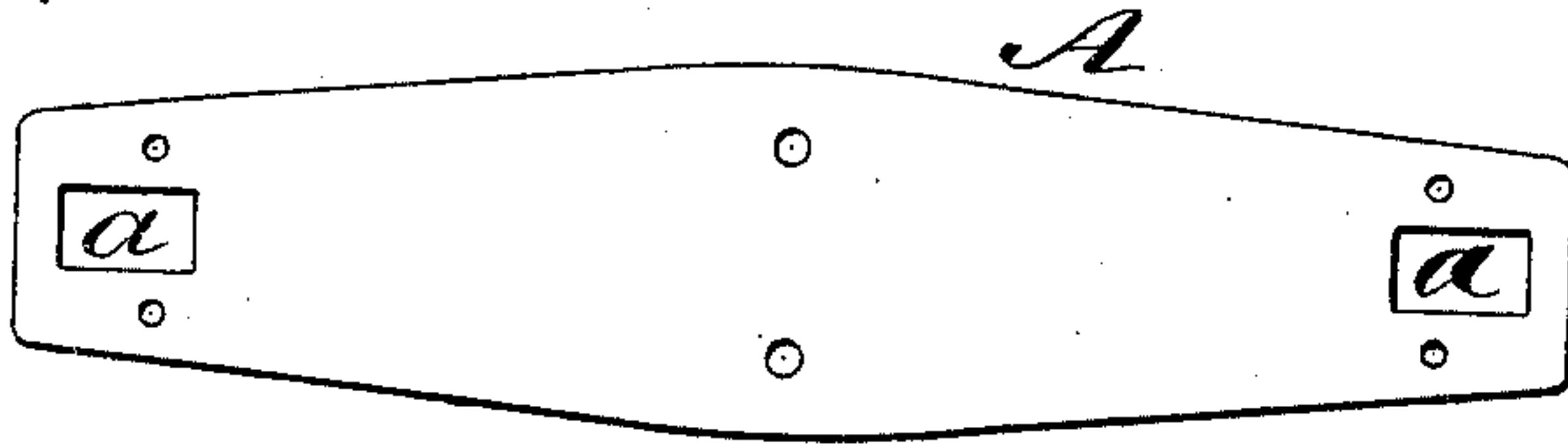


Fig. 3.



WITNESSES
M. G. McLean.
Geo. E. Barrett

INVENTOR
John Manly McManus,
BY
Charles Deemer & Co.
ATTORNEYS

UNITED STATES PATENT OFFICE.

JOHN MANLY McMANUS, OF DECATUR, GEORGIA, ASSIGNOR OF ONE-THIRD
TO CHARLES E. GIBBS, OF SAME PLACE.

SINGLETREE.

SPECIFICATION forming part of Letters Patent No. 634,992, dated October 17, 1899.

Application filed January 30, 1899. Serial No. 703,795. (No model.)

To all whom it may concern:

Be it known that I, JOHN MANLY McMANUS, a citizen of the United States, and a resident of North Decatur, county of De Kalb, and State of Georgia, have invented certain new and useful Improvements in Singletrees, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar letters of reference indicate corresponding parts.

This invention relates to improvements in singletrees; and the object is to provide a device of this class adapted to facilitate the movements of a horse and to relieve the strain upon his shoulders while hauling a vehicle over rough ground, the invention being also applicable for plowing.

The device is simple in construction and much more durable than the ordinary singletree, and it is susceptible for use in connection with any adapted class of vehicles.

The invention will be hereinafter fully described, and specifically set forth in the annexed claim.

In the accompanying drawings, forming part of this specification, Figure 1 is a plan view of my improved singletree. Fig. 2 is a cross-sectional elevation taken on the line x of Fig. 1, and Fig. 3 is a plan view in blank of the major portion of the tree.

In constructing my improved singletree I employ primarily a blank A, formed from a single sheet of metal of a malleable nature, preferably steel. This said blank is provided at each end thereof with an opening a , and it is bent over upon itself, into the shape illustrated by Figs. 1 and 2 of the drawings, to form the tree proper, B, the apertures a of the blank forming recesses b in the front of the tree and located at each end thereof. Back of these said recesses and between the two plates b' of the tree I swivel hooks C by means of rivets c , which pass through the respective upper and lower plates of the tree. These said recesses admit of readily attaching the traces to the hooks C, and they will admit of lateral movement of such traces without danger of having them become accidentally disengaged from the hooks. Secured centrally of the tree between the two plates thereof by

means of a rivet d is a draw-bar D, which comprises oppositely-located arms d' , having hooks on the ends thereof, and a loop d^2 . Engaging the hooks of these said arms is a spiral spring E, and the inner end of this said spring engages hooks formed upon the respective arms f of a draw-bar F, the said draw-bar having a loop f' , forming part thereof for engagement with the vehicle to which the device is adapted to be attached.

It is obvious that this tree may be attached to the shaft of a single-horse vehicle, to the clevis of a plow, or it may form part of the doubletree of a two-horse vehicle.

In use the traces are attached to the hooks C, and it is obvious that any back pull incidental to rough roads will be taken up considerably by the spring E, thus greatly relieving the strain on the shoulders of the horse.

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

An improved singletree mechanism of the class described, comprising, in combination with the singletree formed of a sheet-metal blank bent over upon itself into approximately \mathcal{D} shape and carrying devices for the attachment of draft connections, a draw-bar attached to said singletree by means of an end loop which is pivotally mounted between the wings of the singletree and carries the oppositely-located rearwardly-projecting arms d' , having the end hooks, a supplementary draw-bar having an end loop carrying the oppositely-located forwardly-projecting arms f , having the end hooks, and a spiral spring mounted around said arms between the respective end hooks, whereby a light and strong singletree mechanism is produced and the shoulder strain upon the draft-animal is effectually relieved, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 19th day of January, 1899.

JOHN MANLY McMANUS.

Witnesses:

WILLIAM HILLIARD WRIGHT,
BENJAMIN FRANKLIN BURGESS.