

H. LIVINGSTON.
Draft-Bar for Vehicles.

No. 226,407.

Patented April 13, 1880.

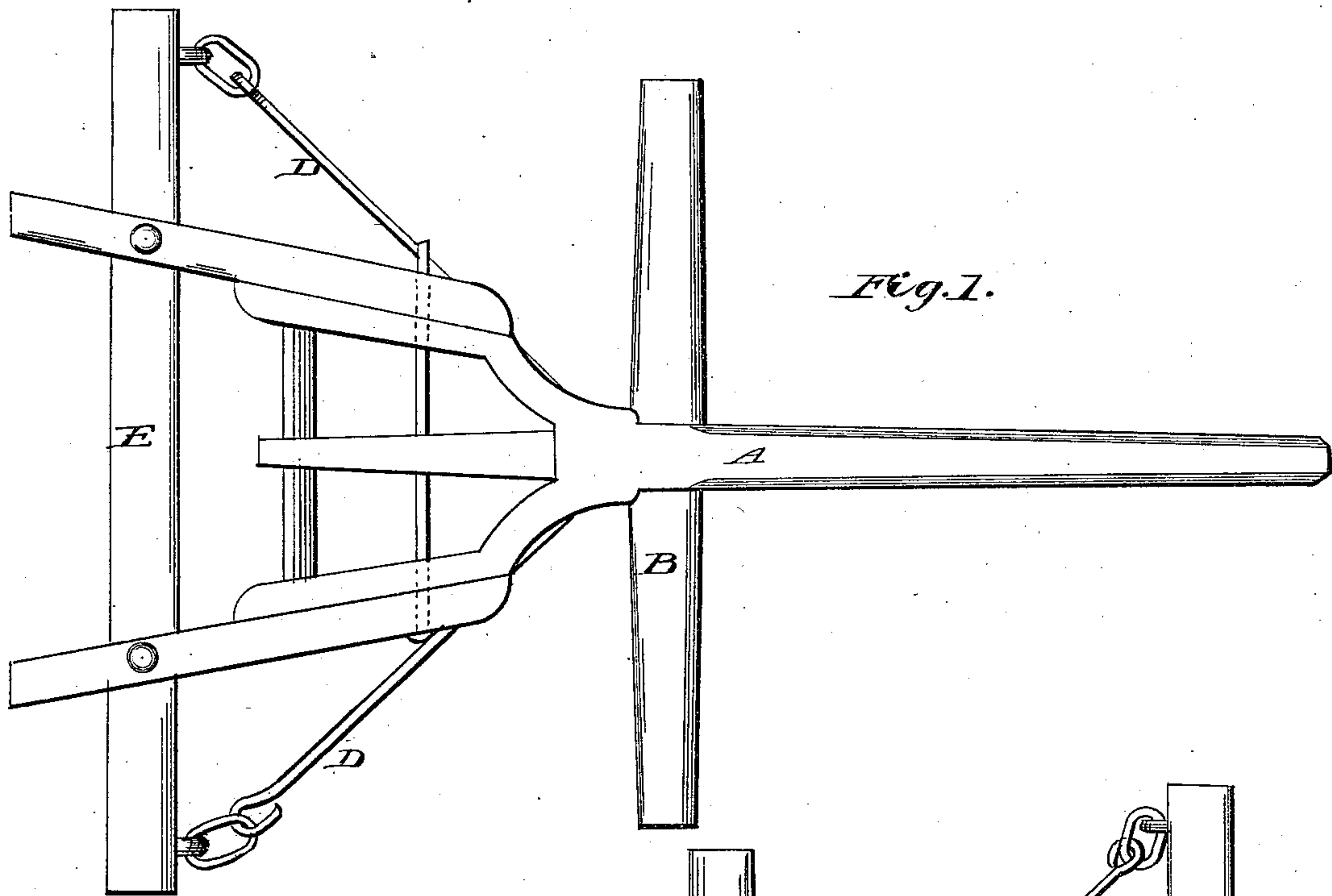


Fig. 1.

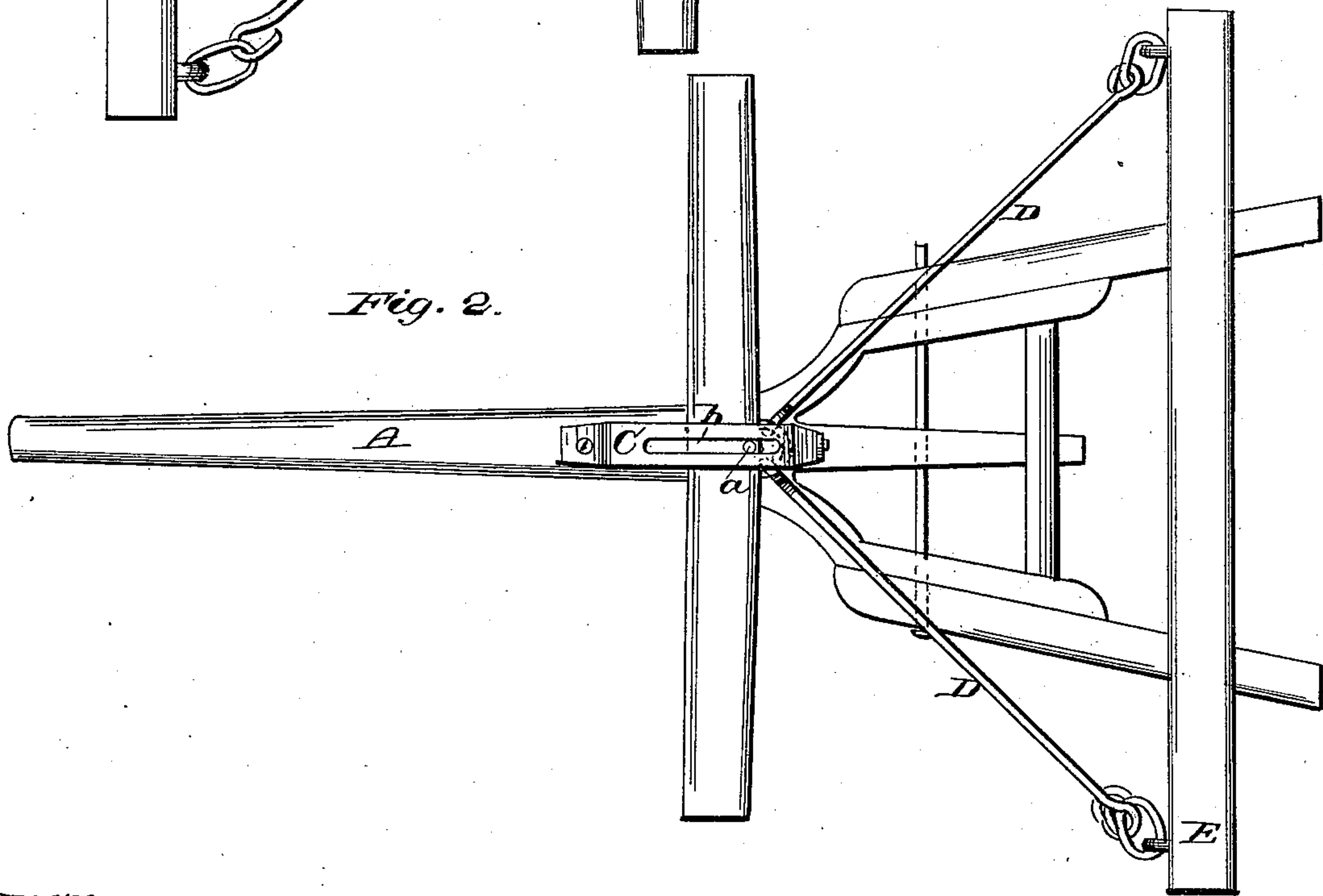


Fig. 2.

Witnesses:
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UNITED STATES PATENT OFFICE.

HERBERT LIVINGSTON, OF QUINCY, ILLINOIS.

DRAFT-BAR FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 226,407, dated April 13, 1880.

Application filed October 23, 1878.

To all whom it may concern:

Be it known that I, HERBERT LIVINGSTON, of Quincy, in the county of Adams and State of Illinois, have invented certain new and useful Improvements in Direct Draft for Vehicles; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

Figure 1 is a top plan of the invention, and Fig. 2 is a bottom plan.

Similar letters of reference indicate corresponding parts in both the figures.

This invention relates to an improved method of connecting the double-tree to the axle in such a manner as to produce a direct draft for vehicles, as will be hereinafter more fully described, and particularly pointed out in the claim.

The tongue A is connected with the axle in the usual manner. The double-tree B is secured to the tongue by a strap, C, having a slot, *b*, to accommodate a pin, *a*, upon the double-tree, which is thus enabled to slide longitudinally, while lateral motion is prevented.

D D are rods, by which the center of the double-tree is connected to the ends of the axle E by means of links or staples, or in any other suitable manner. Chains may, however, be substituted for rods.

I desire it to be distinctly understood that this device does not in any way operate as a

draft evener or equalizer. On the contrary, when a wheel on either side meets with an obstruction or sinks into a rut the draft of both horses is at once thrown on that wheel, thus preventing the pounding of the tongue against the horses and causing the vehicle to be moved with comparative ease.

Although the double-tree may be placed above or below the tongue, I prefer to place it below, because the draft will then tend to lift the tongue, thus taking the weight off the horses' necks.

I am aware of the draft-evener patented by Bunker, April 1, 1873, in which the double-tree is connected by rods to bell-crank levers at the ends of the axle, said bell-crank levers being connected for the purpose of equalizing the draft. This I disclaim.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

In a draft-bar for vehicles, the double-tree B, held upon the under side of the tongue A by the slotted strap C *b* and pin *a*, in combination with chains or rods D D, connected to the outer ends of the axle E, substantially as and for the purposes set forth.

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

HERBERT LIVINGSTON.

Witnesses:

IRA COE,
E. A. ROGERS.