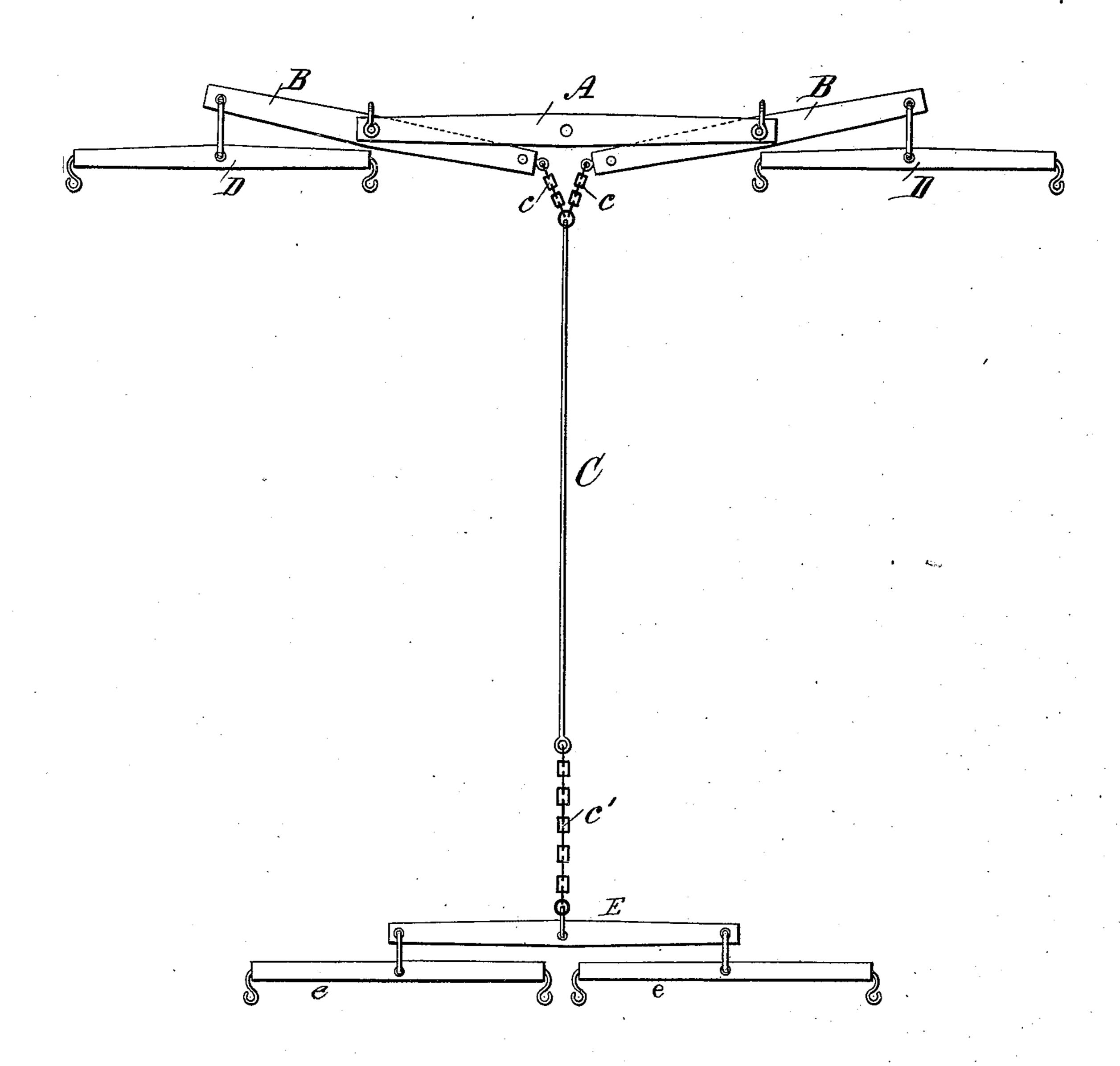
(Model.)

## J. M. LANGSTON.

DRAFT EQUALIZER.

No. 253,071.

Patented Jan. 31, 1882.



WITNESSES:

Theof Mother!

INVENTOR:

M. Langiston

BY Mun Ho

N. PETERS, Photo-Lithographer, Washington, D. C.

## United States Patent Office.

JOSEPH M. LANGSTON, OF WAVERLY, ILLINOIS.

## DRAFT-EQUALIZER.

SPECIFICATION forming part of Letters Patent No. 253,071, dated January 31, 1882.

Application filed June 18, 1881. (Model.)

To all whom it may concern:

Be it known that I, Joseph M. Langston, of Waverly, Morgan county, Illinois, have invented a new and Improved Four-Horse Equalizer, of which the following is a specification.

The object of my invention is to provide an equalizer of simplified construction, and one so arranged that each horse is obliged to do an equal share of work.

The invention consists principally of intermediate bars pivoted centrally upon the ends of the main double-tree, to the inner ends of which bars the lead-horses are to be attached by means of a rod or suitable chains, the wheel-to horses being attached to the outer ends of said bars.

The invention also consists in the construction and combination of parts, as hereinafter described.

In the accompanying drawing, the figure represents a plan view of my invention as it appears when ready for attaching four horses with a set of ordinary whiffletrees attached to the forward end of the rod.

represents the main double-tree; and B B represent the intermediate bars, which are centrally pivoted upon the ends of the double-tree, as shown in the drawing. To the outer ends of the intermediate bars are secured the single-trees D D, to which the wheel-horses are attached. To the inner ends of these bars the lead-horses are attached, preferably by means of the rod C and the rear short chains, c c, which reach from the rear end of the rod to

the inner ends of the bars, and the forward 35 chain, c', which reaches from the forward end of the rod to the forward double-tree, E, to each end of which are attached the single-trees e. By this arrangement, the intermediate bars being centrally pivoted, it will be understood that an equal amount of the load must be drawn by each horse.

I am aware of the patent of Manley, No. 156,805, in which an intermediate bar is pivoted on the upper side, near the end of a 45 double-tree, and one whiffletree attached to the outer end of each bar, and a center whiffletree attached to the inner ends of both bars by chains; but in this case the equalizer is not adapted for two or four horses, for the reason 50 that the said intermediate bars are not centrally pivoted upon the double-tree, neither could it be used for tongued vehicles, whereas my equalizer is equally adapted for two or four horses, and for any and all purposes.

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

The herein-described equalizer, consisting of the double-tree A, the intermediate centrally-pivoted bars B, the single-trees D, the chains 60 cc', the rod C, the double-tree E, and single-trees e, substantially as and for the purpose set forth.

JOSEPH M. LANGSTON.

Witnesses:

W. P. PIERCY, J. M. DEATHERAGE.