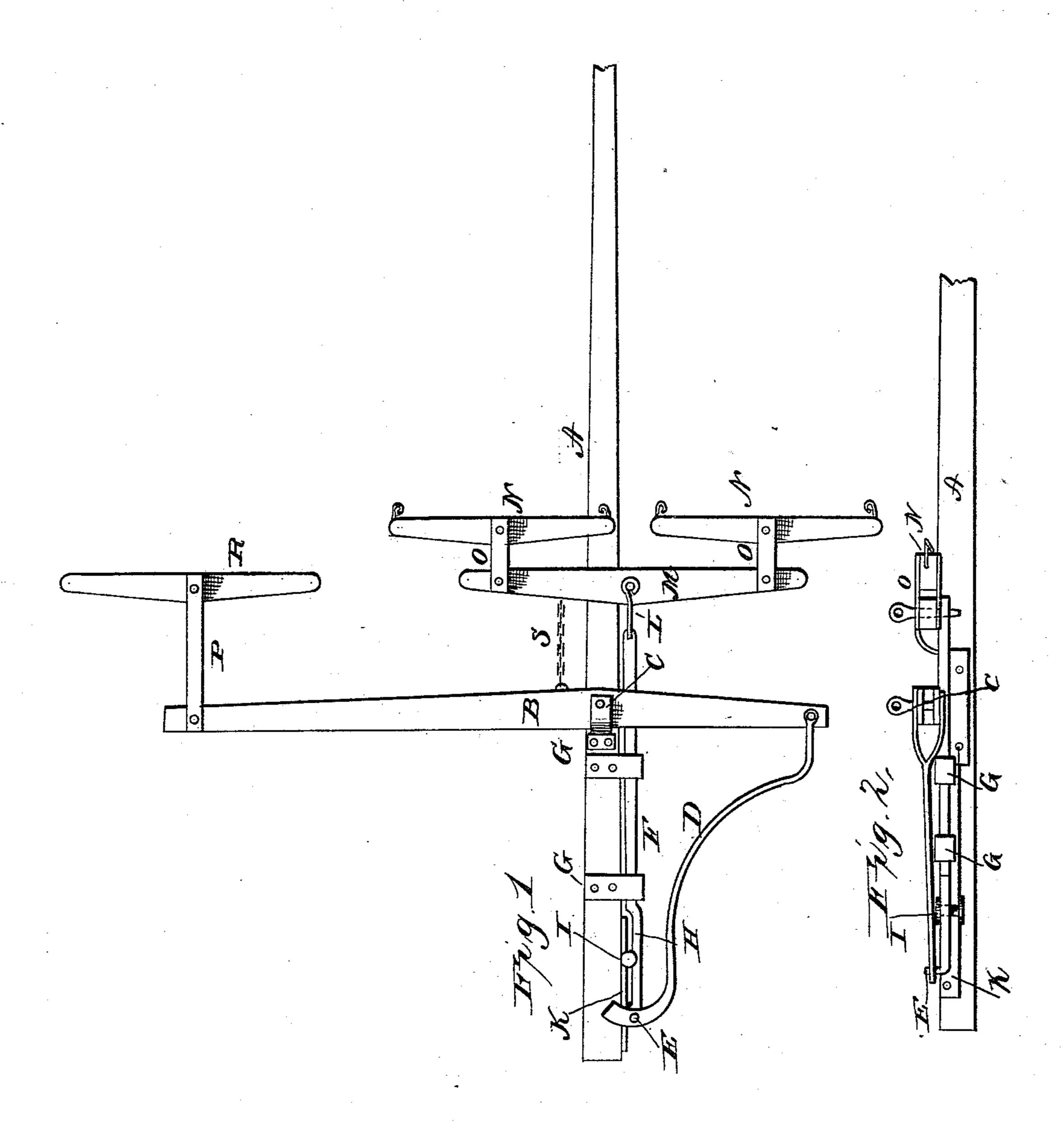
S. GLASSBURN. Draft-Equalizer.

No. 226,305.

Patented April 6, 1880.



Witnesses: P. L. Omand L. Bradbod Sylvister Glassburn By H.F. Euris: Attorney

United States Patent Office.

SYLVESTER GLASSBURN, OF WINDSOR, MISSOURI.

DRAFT-EQUALIZER.

SPECIFICATION forming part of Letters Patent No. 226,305, dated April 6, 1880.

Application filed February 19, 1880.

To all whom it may concern:

Be it known that I, SYLVESTER GLASSBURN, of Windsor, in the county of Henry and State of Missouri, have invented certain new and useful Improvements in Draft-Equalizers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to certain improvements in draft-equalizers; and it is especially designed to be used in connection with mowers, reapers, thrashers, and other similar machines; and the object of my improvement is to provide a uniform draft at each side of such machines where it is necessary to employ an unequal number of horses or other draft-animals at such sides.

I attain these objects by the mechanism illustrated in the accompanying drawings, in which Figure 1 represents a top view of my device, and Fig. 2 a side elevation of the same.

Similar letters refer to similar parts in each

view.

The letter A indicates the tongue of a reaper, mower, thrasher, or other similar machine, 30 which is secured to such machine in the ordinary manner. B indicates a lever attached to said tongue by a pivotal or fulcrum bolt, C. The short arm of said lever has connected to it one end of a curved bar, D, the other end 35 of which is pivoted to a pin, E, secured to the rear end of a sliding bar, F, secured to the side of the tongue A by means of the guides G. The said bar F has formed at its rear end a bearing, H, for a friction-roller, I, which 40 travels between the said bearing and a bearing-surface, K, on the tongue, in order to reduce the friction of said sliding bar to a minimum. To the forward end of the sliding bar is loosely connected, by means of a link, L, a 45 double-tree, M, the ends of which extend lat-

erally to each side of the tongue A, and to which are attached the single-trees N by the connections O. The long arm of the lever B has secured to it by a connection, P, a single-tree, R, similar in all respects to the single-50 trees N.

The letter S indicates a connecting-chain secured to the lever B and to the double-tree M, for limiting the movements of the two re-

spectively.

The operation of my invention will be readily understood in connection with the above description. The draft-animals are secured to the single-trees by traces, in the usual manner. By reason of the difference in length of 60 the two arms of the lever B it will be perceived that the draft of the animals will be equally distributed to the tongue, causing the machine to be carried forward in a straight line, and obviating all tendency of its being carried to 65 one side.

Having thus fully described my invention, what I claim, and desire to secure by Letters

Patent, is—

1. In a draft-equalizer, the combination, with 70 the tongue A, of the lever B, rod D, sliding bar F, and double-tree M, substantially as herein specified.

2. In a draft-equalizer, the combination, with the tongue A, of the lever B, rod D, sliding 75 bar F, double-tree M, and single-trees N and R, substantially as and for the purposes speci-

3. In combination with the tongue A, lever B, bar D, and the double and single trees, the 80 friction-roller I, substantially as and for the purposes specified.

In testimony that I claim the foregoing I have hereunto set my hand this 2d day of De-

cember, 1879.

S. GLASSBURN.

Witnesses:

G. W. GOODLETT, J. C. BEEDY.