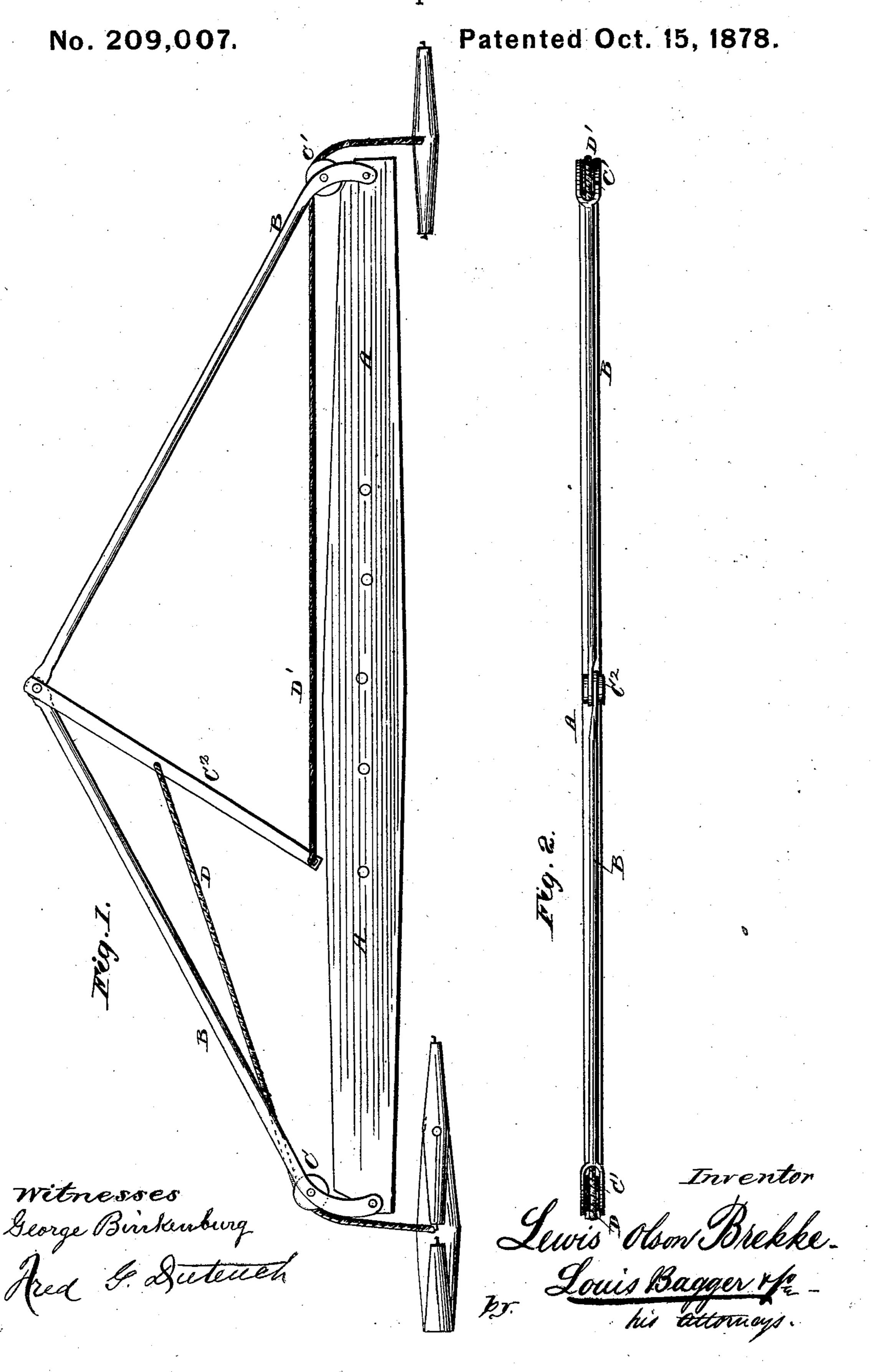
L. O. BREKKE.
Draft-Equalizer.



## UNITED STATES PATENT OFFICE

LEWIS O. BREKKE, OF DECORAH, IOWA, ASSIGNOR OF ONE-HALF HIS RIGHT TO WILLIAM H. MANNING, OF SAME PLACE.

## IMPROVEMENT IN DRAFT-EQUALIZERS.

Specification forming part of Letters Patent No. 209,007, dated October 15, 1878; application filed August 10, 1878.

To all whom it may concern:

Be it known that I, L. O. BREKKE, of Decorah, in the county of Winneshiek and State of Iowa, have invented certain new and useful Improvements in Draft-Equalizers; and I do hereby declare that the following is a full, clear, and exact description thereof, 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, and in which—

Figure 1 represents a plan view of my improved draft-equalizer, and Fig. 2 is a rear view thereof.

Corresponding parts in the two figures are denoted by like letters.

This invention appertains to certain improvements in draft-equalizing attachments for vehicles, for use where the pulling-power of the team is unequal upon the sides of the tongue or pole of the vehicle, and it combines simplicity, cheapness, and easiness of manufacture.

The nature of this invention consists in the pivoting of a lever to the apex of two uniting bars or braces, or to a bow, to which lever are connected two draft chains or ropes passing over pulleys bearing in the inner ends of the meeting braces or bow, to which ropes or chains are attached the whiffletrees, substantially as hereinafter more fully set forth.

In the drawing, A refers to a bar rigidly secured to the inner end of the tongue or pole. B B refer to two bars or braces, fastened at their inner ends to the extremities of the bar A, and united together at outer ends in any suitable way. The inner ends of these bars, in lieu of which a bow may be used with the

same effect, are bifurcated or otherwise so constructed as to embrace pulleys CC<sup>1</sup>, the axes of which are hung in the said bifurcated portions or frames of the bars or bow.

C<sup>2</sup> is a lever pivoted to the apex or meeting points of the braces or bow, and having connected thereto two ropes or chains, D D', one of which is attached to or near its middle and the other to its free end, and passing over the pulleys C C'. The rope D is secured at its opposite end to a double-tree, or to one adapted for two horses, and the rope D' is secured at its other end to a one-horse whiffletree, the rope D' having double the leverage of rope D, thus equalizing the draft between the pulling-power, which upon one side of the pole is twice that upon the other side of the pole.

This invention is extremely simple, easily made, and can be manufactured at a very small cost.

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

of the United States—

In a draft-equalizer, the combination, with the bar A, of the meeting braces or bars B B, having the pulleys C C<sup>1</sup>, and provided at their apex with a lever, C<sup>2</sup>, to which are attached ropes D D', as shown and described, one passing over the pulley C and the other over the pulley C<sup>1</sup>, substantially as and for the purpose specified.

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

LEWIS OLSON BREKKE.

Witnesses: C. C. Cook, OLE LOUND.