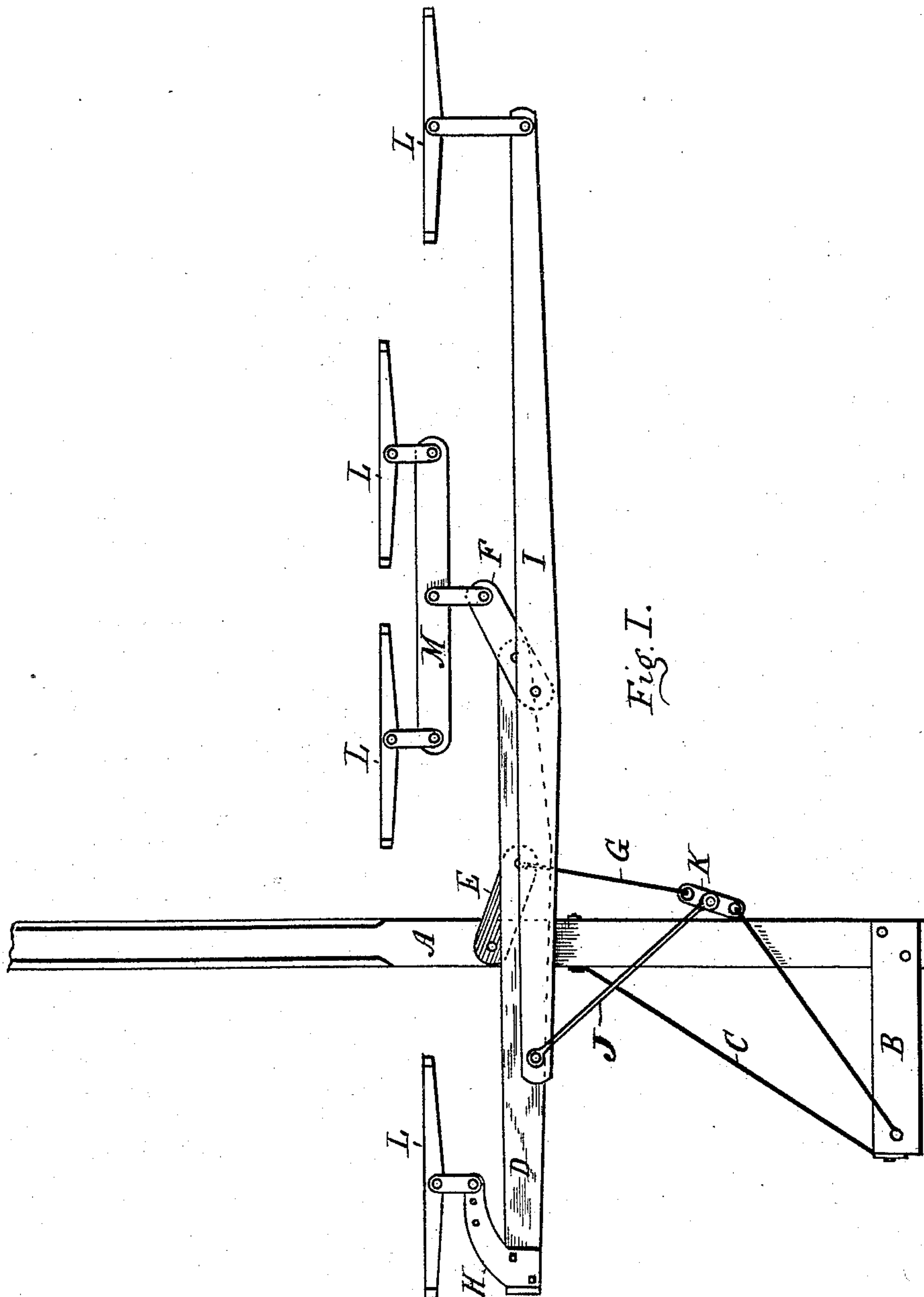


(No Model.)

B. M. CONNOR.
DRAFT EQUALIZER.

No. 421,909.

Patented Feb. 25, 1890.



WITNESSES:

Robt S. Millar
Robert Kirk

INVENTOR

B. M. Connor

$$By$$

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Attorney.

UNITED STATES PATENT OFFICE.

BERNARD M. CONNOR, OF WAUKON, IOWA.

DRAFT-EQUALIZER.

SPECIFICATION forming part of Letters Patent No. 421,909, dated February 25, 1890.

Application filed August 12, 1889. Serial No. 320,491. (No model.)

To all whom it may concern:

Be it known that I, BERNARD M. CONNOR, of Waukon, in the county of Allamakee and State of Iowa, have invented a new and useful Improvement in Draft-Equalizers, which improvement is fully set forth in the following specification and accompanying drawing, in which the drawing shows a plan view of my improved draft-equalizer.

10 My invention relates to improvements in draft-equalizers; and its object is to provide a simple and easily-constructed device by which four draft-animals may be successfully worked abreast, three being on one side of a pole or other central point and one on the other. These positions are often highly desirable, by reason of the peculiar nature of the work to be performed. When this device is attached to a plow, only one animal is com-
15 pelled to travel in the furrow, while the three others have the benefit of the unbroken solid surface of the land.

The apparatus is equally applicable to harvesting machinery, and by a slight modification may be adapted for three animals.

25 The invention consists in the peculiar combination of a series of simple and compound levers, as will be seen by reference to the accompanying drawing, in which—

30 A designates a pole or tongue, having a limb B attached thereto at right angles and secured by a brace C.

The compound lever D is pivoted to the short levers E and F and also to the stay-rod G. The free end of this lever is attached to a singletree by a rigid bent clip H, which is designed to give the desired leverage while permitting the draft-animal to travel near the tongue. The long lever I is pivoted to the

short lever F and also to the brace J. The opposite end of this brace is attached to an intermediate link K in the stay-rod G. The purpose of said link is to render the rod partially flexible under the varying action of the levers D and E and the brace J. The single-
45 trees L are attached to the doubletree M and the levers D and I by clevises or other simple appliances.

What I claim as new is—

1. A draft-equalizer having a main whiffletree I hinged centrally approximately to the rear end of a central pivoted link or lever F, said lever F being centrally pivoted to one end of a lever E, in combination with a lever D, hinged to a link E, which connects it to the tongue A, with the brace C and stay-rod G,
50 substantially as herein set forth.

2. In a draft-equalizer, the combination, with the short lever E, pivoted on the tongue, the long lever D, pivoted on the rear or outer end of the lever E, the short lever F, pivoted on the lever D, and the long lever I, pivoted on the short lever F, the said levers D, E, and I having whiffletrees attached, of the rod G, connected at its front end to the lever E and at its rear end to the limb B of the tongue and provided with the link K at its central portion, and the rod J, connecting the said link and the adjacent end of the lever I, substantially as specified.
60
70

In testimony that I claim the foregoing I have hereunto set my hand, this 11th day of August, 1888, in the presence of witnesses.

BERNARD M. CONNOR.

Witnesses:

H. H. STILWELL,
A. G. STEWART.