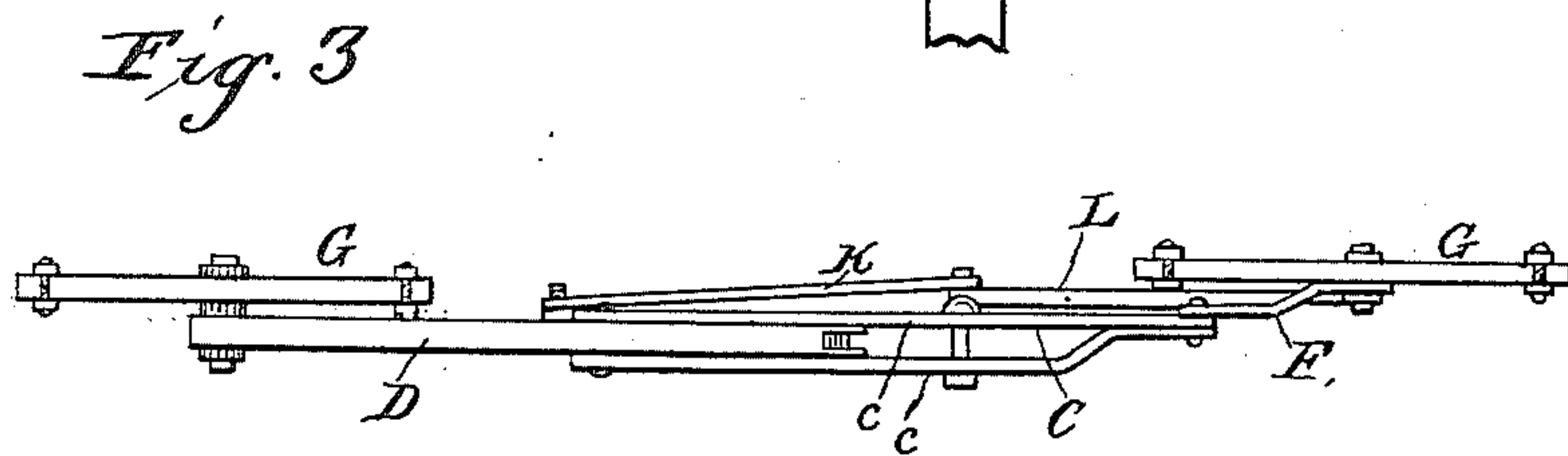
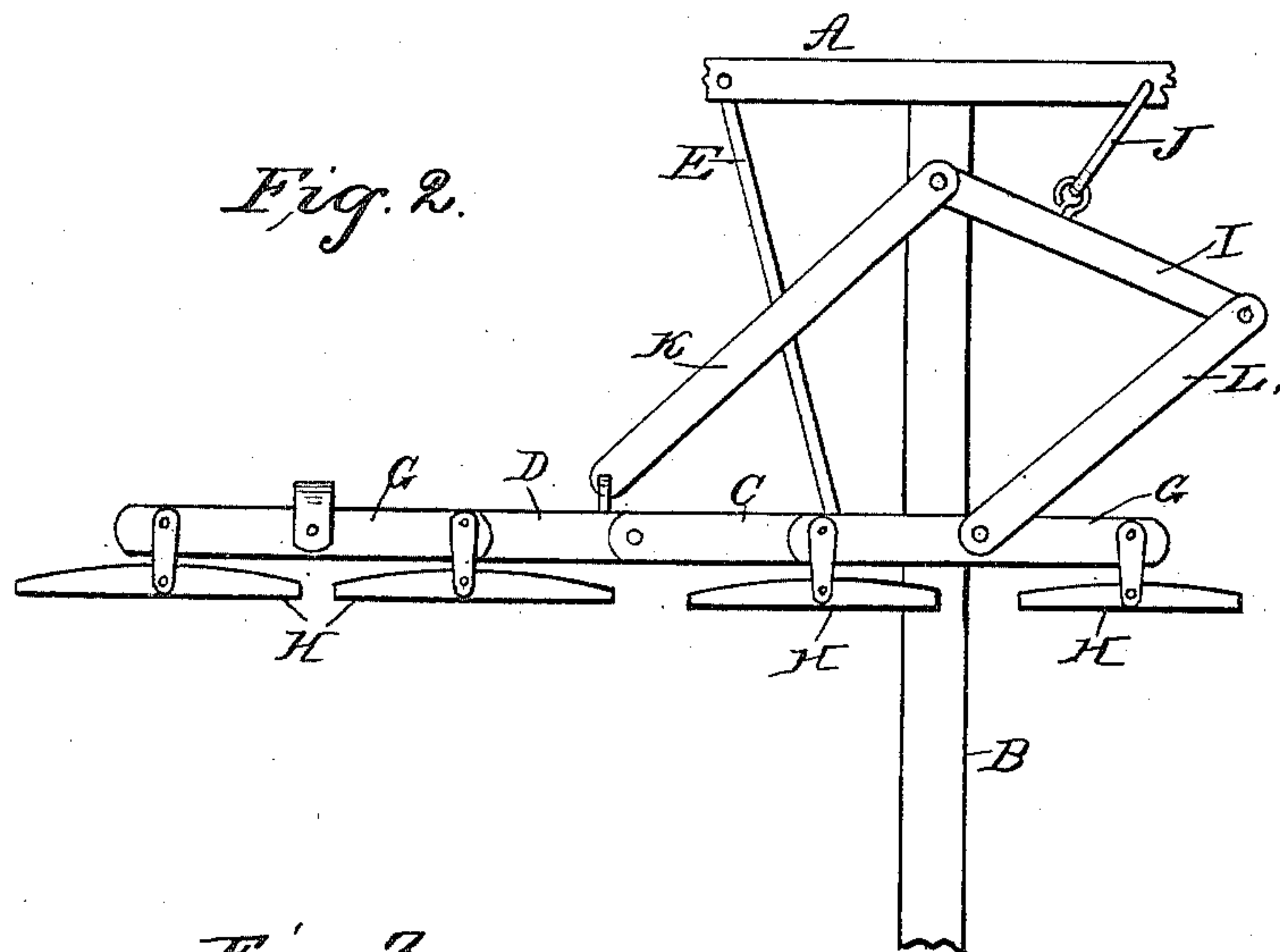
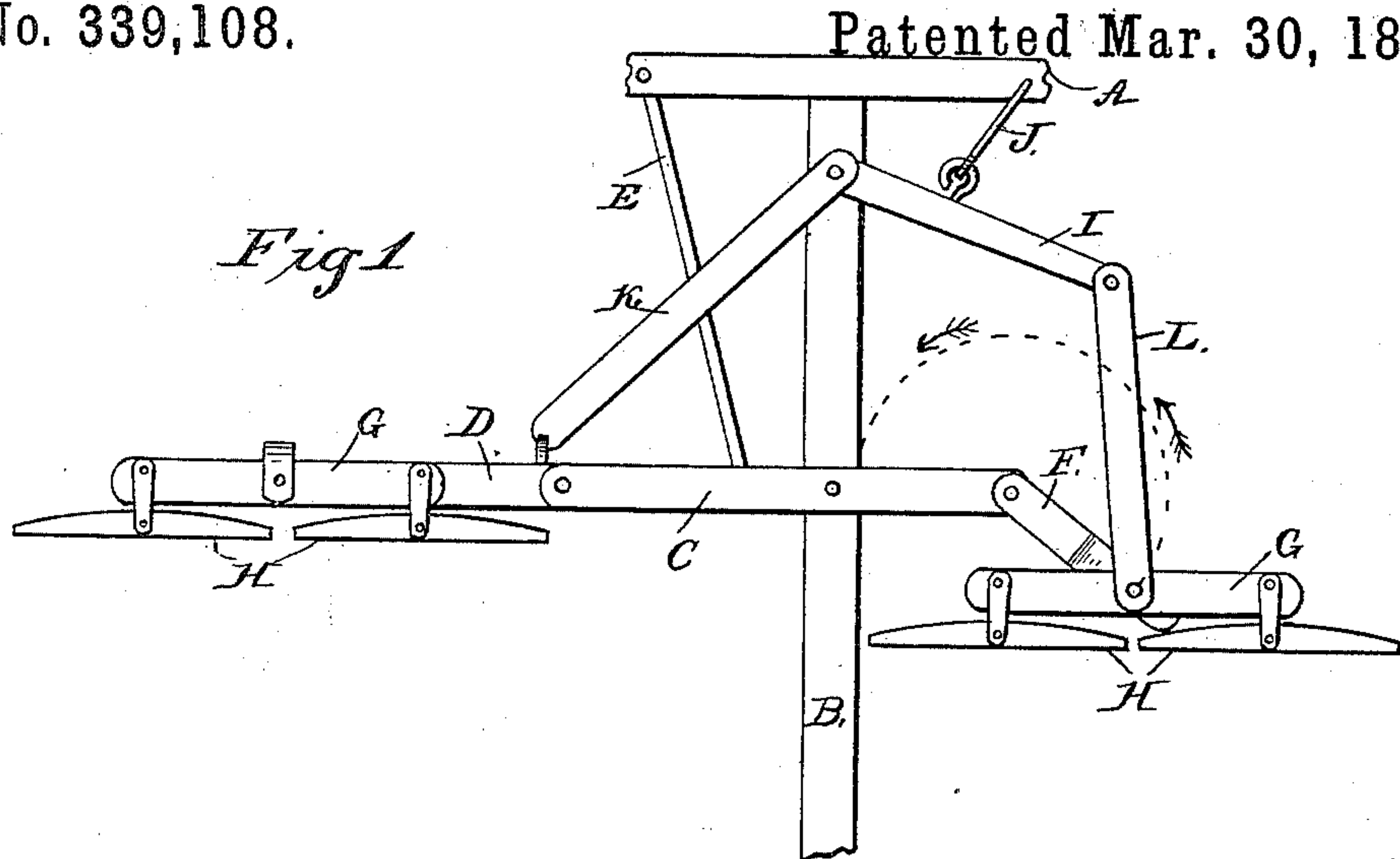


(No Model.)

M. LYNDE.
DRAFT EQUALIZER.

No. 339,108.

Patented Mar. 30, 1886.



Witnesses

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UNITED STATES PATENT OFFICE.

MYRON LYNDE, OF GRUNDY CENTRE, IOWA.

DRAFT-EQUALIZER.

SPECIFICATION forming part of Letters Patent No. 339,108, dated March 30, 1886.

Application filed February 12, 1886. Serial No. 191,709. (No model.)

To all whom it may concern:

Be it known that I, MYRON LYNDE, a citizen of the United States, residing at Grundy Centre, in the county of Grundy and State of Iowa, have invented certain new and useful Improvements in Draft-Equalizers; and I do declare the following to be a full, clear, and exact description of the invention, such as it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to draft-equalizers of that class particularly designed to be applied to agricultural implements; and it consists in the novel details of construction shown and more fully described and claimed.

In the drawings, Figure 1 is a plan view of a portion of the front beam of an implement having the pole or tongue attached and provided with my improved equalizer. Fig. 2 is a similar view with the parts in a different relative position. Fig. 3 is a front detail view of the evener-bar and the draft-arms pivoted to each end thereof.

The tongue B is attached at its inner end to the sill A of any implement in the usual manner. Pivoted to the tongue in advance of the sill is an evener-bar, C, which is projected on one side of the tongue more than on the other. This evener-bar is composed of two plates, c—one above, the other below the tongue. A draft-arm, D, is pivoted near its middle between the ends of the lower portion of the evener-bar, and works between the plates. A brace, E, unites the inner end of the draft-arm D with the sill A at a point removed from the junction of the tongue therewith. A second draft-arm, F, is pivoted at one end to the opposite end of the evener-bar. Double-trees G are connected with the free ends of the draft-arms, and each double-tree is provided with single-trees H. An equalizing-lever, I, is flexibly connected with the sill by a link, J. The point of connection between the link and sill is at a distance from the heel of the tongue equal to the distance between the point of connection of the brace E and said tongue, as clearly shown.

The equalizing-lever has a longer and shorter arm, reckoning from its connection with the link J as the fulcrum. A rigid connection or rod, K, unites the shorter arm of the equalizer with the middle of the draft-arm D, and a similar connection or rod, L, joins the long arm with the free end of the draft-arm F, which spot also coincides with the point of connection of the double-tree; hence a single bolt is used to connect the three parts, as shown.

It will be noticed that the longer arm of the equalizing-lever extends in the direction of the shorter part of the evener-bar, while the shorter arm of said lever extends in the direction of the longer portion of said bar.

The parts are so proportioned that when used, as shown in Fig. 2, with three horses on one side and one horse on the opposite side of the tongue, the bars or connections K and L are nearly parallel with each other, and the force exerted by the three animals is counterbalanced by that of the one.

In the position shown in Fig. 1 the parts are relatively changed in such a manner that two horses may work on each side of the tongue, one pair being nearer the tongue than the other. This arrangement may be found of advantage in some classes of machines, and is simply shown and referred to as illustrating the manner in which the equalizer may be used.

The peculiar arrangement of the brace E relative to the sill and the draft-arm D prevents any side-draft, as will be readily understood by reference to the drawings.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination, with the tongue, the evener-bar, and a draft-arm pivoted between its ends to one end of the evener-bar, of a brace-bar connecting the inner end of the draft-arm with the tongue-supporting sill, substantially as shown, and for the purpose set forth.

2. The herein shown and described equalizer, consisting of the following elements, in combination: the tongue, the evener-bar, draft arms pivoted to each end of the bar, the one between its ends, a brace-bar connecting the

inner end of such arm with the tongue-supporting sill, an equalizing-lever flexibly connected with the sill, and connections uniting the ends of said lever with the middle of the draft-arm connected with the sill by the brace and with the free end of the other draft-arm, substantially and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

MYRON LYNDE.

Witnesses:

J. MORRIS REA,
S. HAYES.