

(No Model.)

L. KENDLLE.
DRAFT EQUALIZER.

No. 412,263.

Patented Oct. 8, 1889.

FIG. 1.

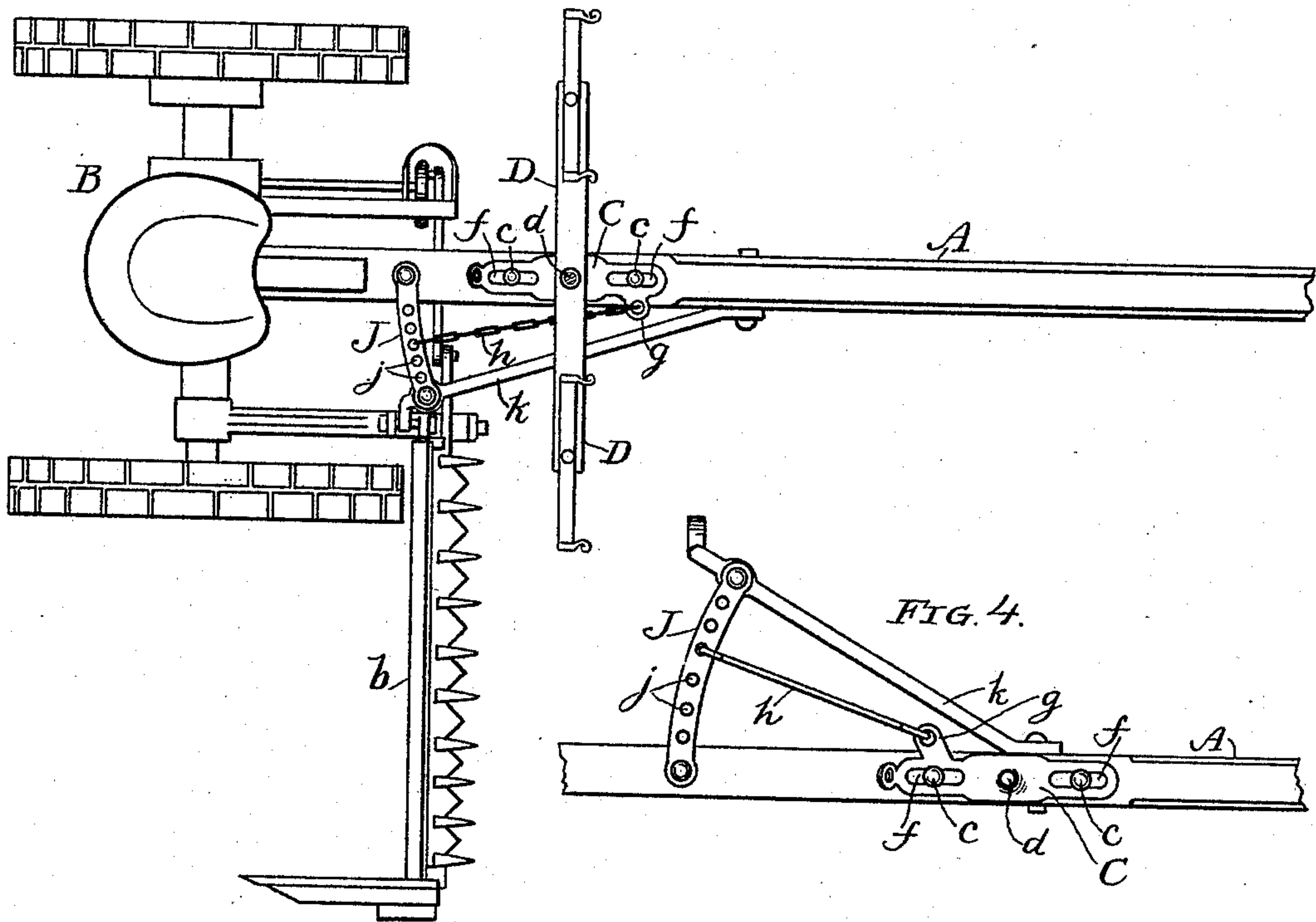


FIG. 2.

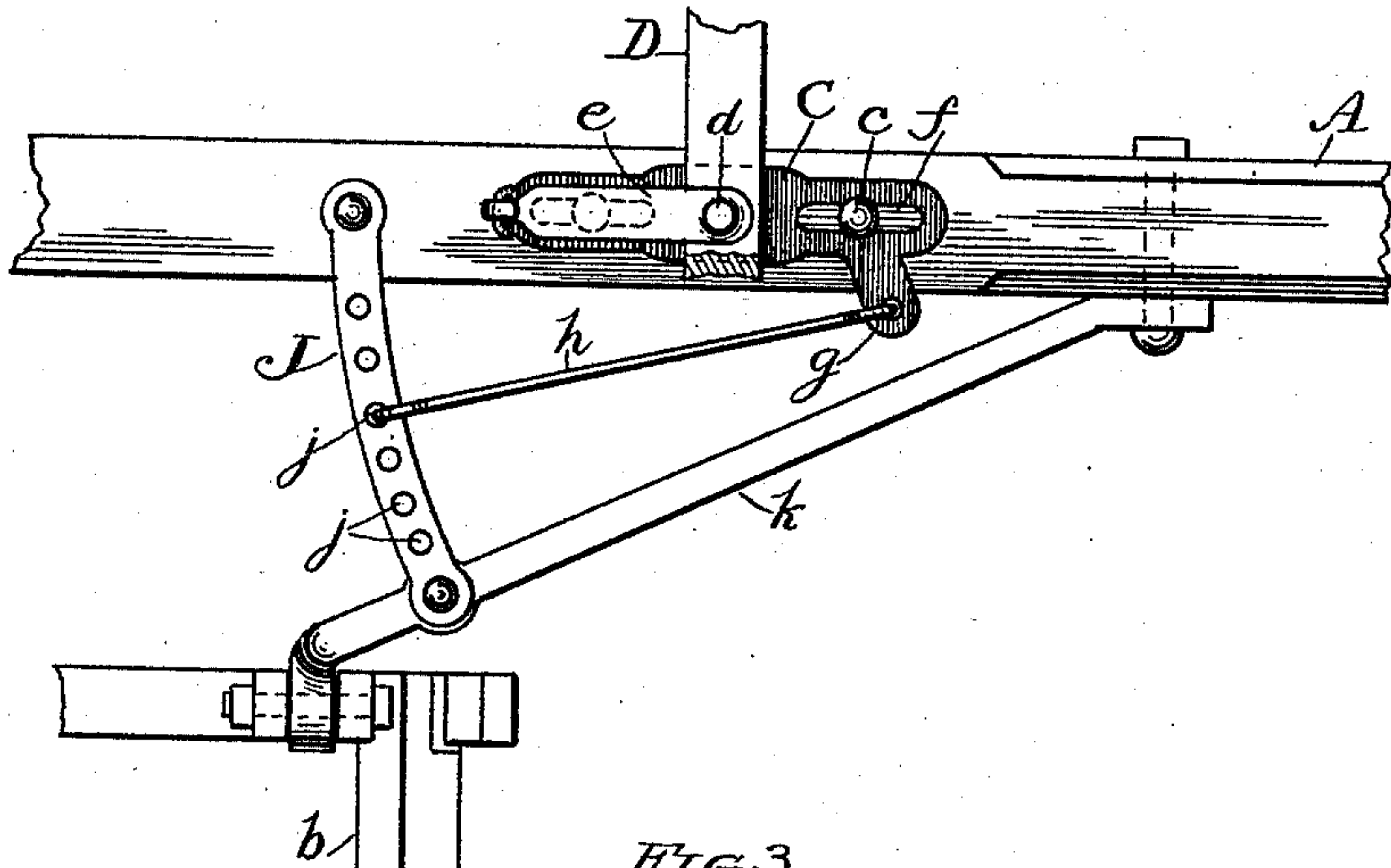
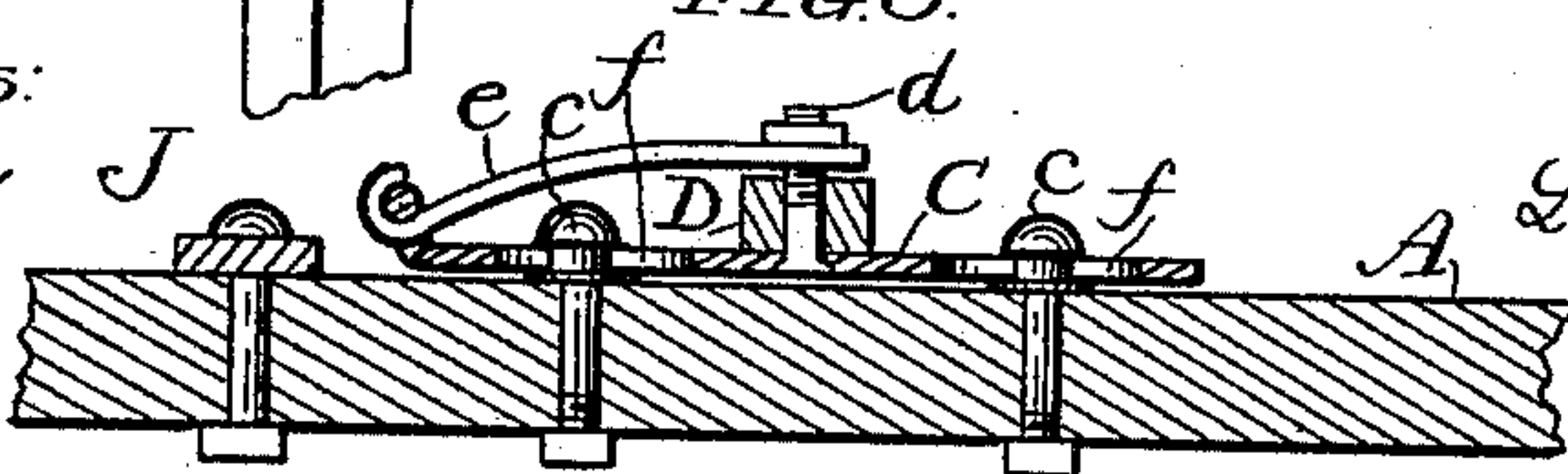


FIG. 3.



Witnesses:
J. Halpenny
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Inventor:
Lorenz Kendlle
By G. L. Fletcher
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UNITED STATES PATENT OFFICE.

LORENZ KENDLLE, OF CHICAGO, ILLINOIS.

DRAFT-EQUALIZER.

SPECIFICATION forming part of Letters Patent No. 412,263, dated October 8, 1889.

Application filed August 19, 1889. Serial No. 321,193. (No model.)

To all whom it may concern:

Be it known that I, LORENZ KENDLLE, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Draft-Equalizers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a plan view of a mowing-machine, showing my improved draft-equalizer applied thereto. Fig. 2 is an enlarged plan view in detail showing a portion of said machine-tongue with my invention applied thereto. Fig. 3 is a longitudinal vertical sectional view of said tongue, showing the manner of attaching the sliding plate thereto; and Fig. 4 is a plan view showing a modification of said invention.

Like letters of reference in the different figures indicate like parts.

The object of my invention is to construct a draft-equalizer which may be applied to reapers and mowers, or any portable machine or vehicle in which there is a side draft to overcome. Moreover, I desire to provide means by which said equalizer may be readily adjusted to conform to the varying degrees of side draft in the different machines to which it may be attached. I accomplish said object by means of a longitudinal sliding plate loosely secured to the tongue of the vehicle which is to be drawn, and detachably connected by means of a rod or chain to a lateral point of attachment so constructed that the line of draft may be laterally varied, all of which is hereinafter more particularly described, and pointed out in the claims.

Referring to the drawings, A represents the tongue of a mower or reaping machine B, Fig. 1, which is provided with the usual laterally-extended cutter-bar *b*. Loosely secured to the tongue at or near the usual point of draft, by means of headed bolts *c c*, is a metal plate C, to which the doubletree D is attached by means of an upwardly-extended bolt *d*. A strap *e*, Figs. 2 and 3, is loosely connected to said bolt and to the rear end of plate C. The plate C is provided with slots *f f* near its respective ends, through which the bolts *c c* are

loosely inserted in the manner clearly shown in the drawings, so that the plate is free to move back and forth in a straight line, said bolts forming guides to regulate said movement. A laterally-extended lug *g* is preferably formed upon the plate C, and is perforated for the reception of a rod or chain *h*, the opposite end of which is adjustably secured to a bar J or other analogous device, one end of which is rigidly attached to the tongue and the other to some rigid point of attachment—as, for example, the brace *k*, which may serve to hold it in a fixed relation to said tongue. The bar J is preferably provided with a series of holes *j*, which serve as a means of attachment for the rod *h*, whereby the distance of the free end of said rod from the tongue may be graduated and varied at will, in order to overcome the greater or less side draft of the machine. Should the side draft be great it is obvious that said point of attachment should be farther away from the tongue, and should it be small the attachment may be much nearer. The plate C being loose, it is obvious that the line of draft would vary in proportion as the point of attachment is extended laterally from the tongue. It is manifest, therefore, that by means of my improved adjustable device the side draft of different machines may be readily overcome by the lateral adjustment of the rod *h* in the graduated draft-bar J.

Instead of the holes *j* and a hook upon the rod *h* for insertion therein, any other well-known mechanical adjusting device may be employed, and in lieu of attaching the rod *h* to the lug *g*, it is apparent that it might be secured directly to the bolt *d* without changing the result of its action.

In Fig. 4 I have shown the bar J upon the left side of the tongue, and the lug *g* near the rear end of the plate.

Having thus described my invention, I claim—

1. A draft-equalizer for reapers and mowers, consisting of a longitudinally-sliding plate secured to the tongue of the machine, means of attaching a doubletree thereto, a rod attached to said sliding plate and connected with an unyielding point of attachment adjacent to the tongue, and means of laterally

varying the distance of said point of attachment from the tongue, substantially as shown and described.

2. The combination, with the tongue of a
5 reaper or mower, of the sliding plate C, loosely attached to the tongue, means of attaching a double tree thereto, a rigid bar extending laterally from the tongue, a rod or chain for connecting said rigid bar and sliding plate, and
10 means for laterally adjusting the free end of said rod upon said laterally-extended bar, substantially as shown and described.

3. The combination, with the tongue of a reaper or mower, of the sliding plate C, rod h, and graduated bar J, substantially as shown 15 and described.

In testimony whereof I have signed this specification, in the presence of two subscribing witnesses, this 13th day of August, 1889.

LORENZ KENDLLE.

Witnesses:

D. H. FLETCHER,
J. HALPENNY.