

W. T. BURROWS.
Draft-Equalizer.

No. 222,240.

Patented Dec. 2, 1879.

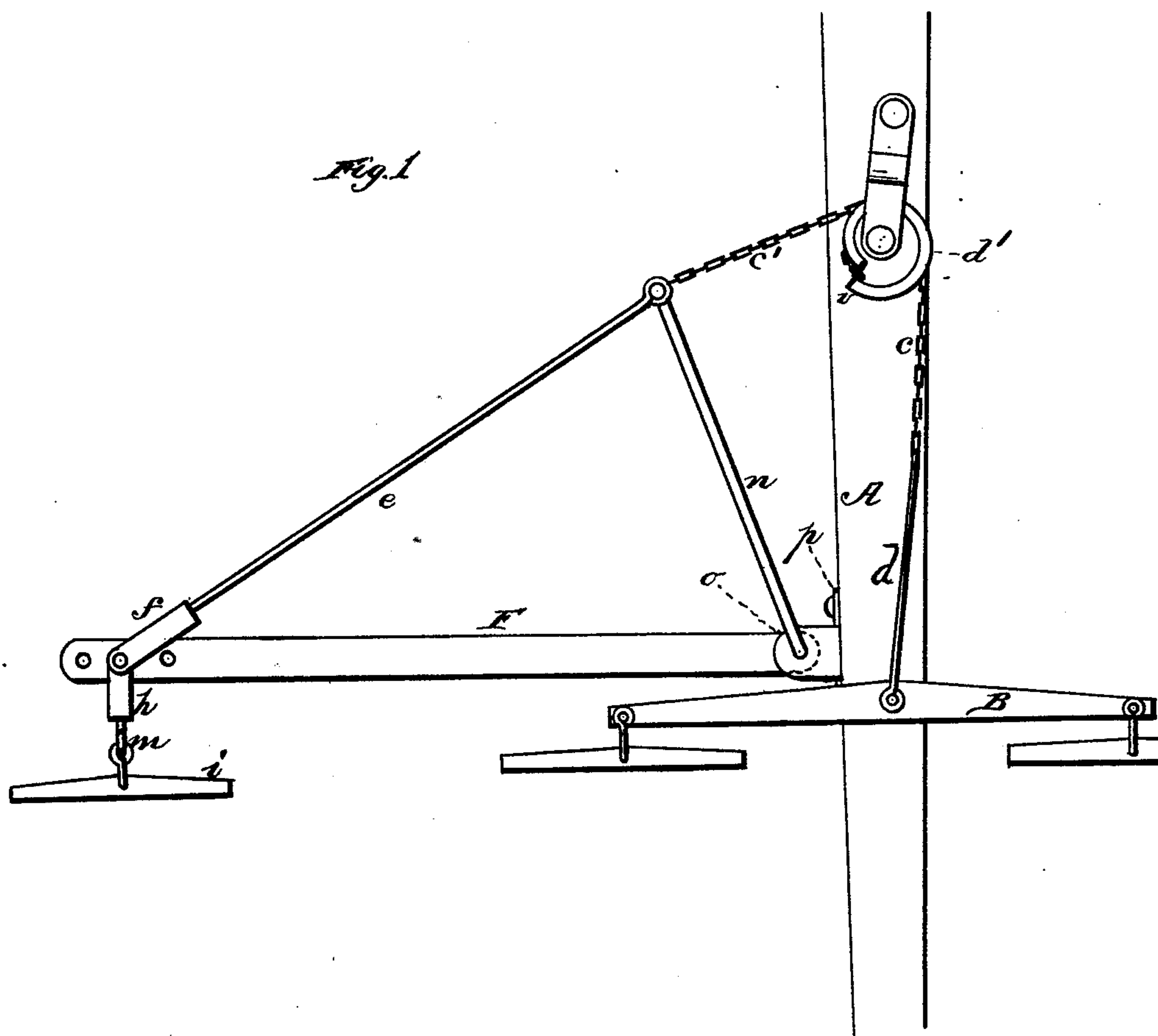
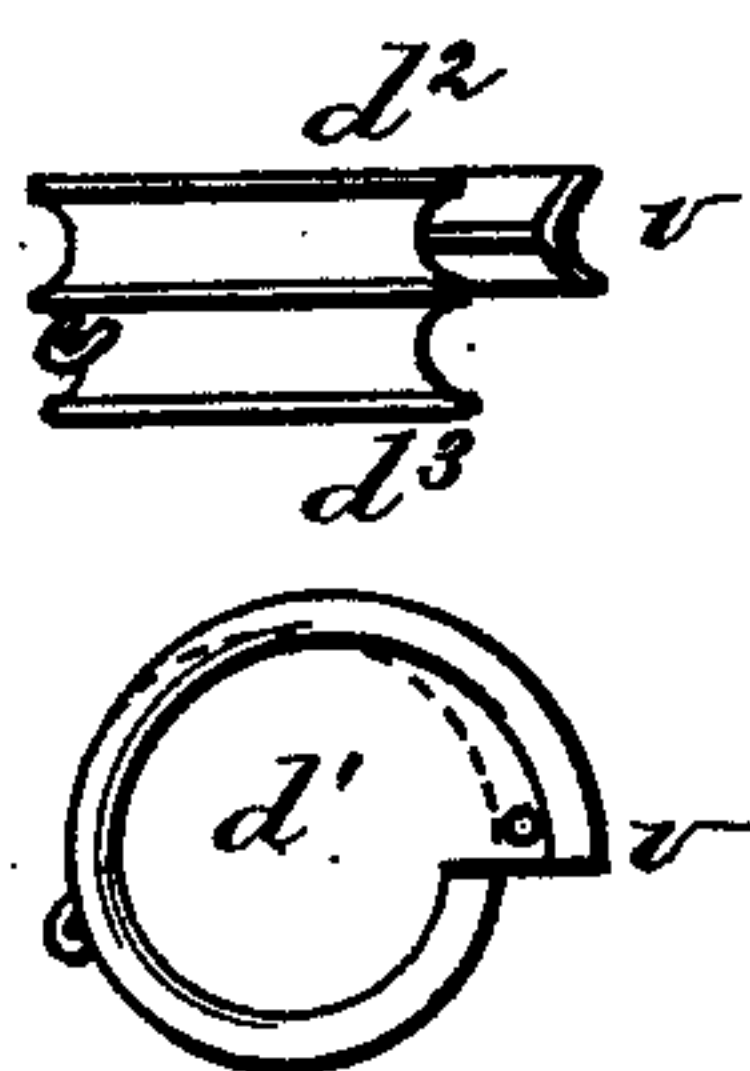


Fig. 2.



WITNESSES
Robert Everett
James J. Pheby

INVENTOR
William T. Burrows
Gilmore, Smith & Co.,
ATTORNEYS

UNITED STATES PATENT OFFICE.

WILLIAM T. BURROWS, OF NASHUA, IOWA, ASSIGNOR OF ONE-HALF OF HIS
RIGHT TO S. H. WADDELL, OF SAME PLACE.

IMPROVEMENT IN DRAFT-EQUALIZERS.

Specification forming part of Letters Patent No. **222,240**, dated December 2, 1879; application filed
August 2, 1879.

To all whom it may concern:

Be it known that I, WM. T. BURROWS, of Nashua, in the county of Chickasaw 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 of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 is a plan view of a draft-equalizer embodying the improvements in my invention, and Fig. 2 is a vertical elevation and a plan view of the double sheave employed therein.

This invention relates to draft-equalizers which are employed in connection with plows, harvesters, and the like.

My improvement consists in the construction and arrangement of certain parts, as will be hereinafter described and claimed.

In the drawings, A represents the tongue of the machine, which is to be drawn by horses. B designates a bar, to each end of which a single-tree is connected by means of the usual clevis, and this bar is connected with chain *c* by the pivoted clevis *d*. This chain passes round and is secured to a wheel, *d'*, which is arranged upon the tongue, as shown, and another chain, *c'*, secured to said wheel, connects with a rod, *e*.

F is a bar or arm pivoted to the side of the tongue between lugs *o o*, and the said rod *e* is connected with the outer end of arm F by means of a clevis, *f*, which passes through an eye upon the end of the rod, and is swiveled upon the end of arm F. The pin or bolt which passes through the eyes upon the ends of said

clevis, also passes through like parts of a clevis, *h*, having a hook, *m*, to which the single-tree *i* is connected.

In Fig. 2 it will be seen that the wheel is composed of two parts, *d² d³*, each grooved for the chain, and each adapted to have the end of a chain, *c c'*, connected with the same. In this instance, also, a rod, *n*, connects with the rod *e* at the end where the chain is linked thereto, and the other end of this rod *n* is bent down so as to be passed through the end of bar F, and also through the lugs *o o* of the metal plate *p*, which is secured to the side of the tongue.

It will be seen that the upper section of the device which I have called a "wheel" is, in fact, not similar to the lower part and not a true wheel, since its periphery from a given point gradually approaches its center until it terminates at *r*, where one end of one of the chains *c* is secured. This construction aids in equalizing the draft, the operation being simply upon the principle of the lever.

What I claim is—

In a draft-equalizer, the arm F, pivoted to the tongue A between the lugs *o o*, in combination with the rods *e* and *n*, connected as described, the chains *c c'*, and wheel having grooves *d² d³*, the clevis *d*, and bar B, as and for the purposes set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

WM. T. BURROWS.

Witnesses:

JOSEPH F. GRAWE,
A. L. MONTGOMERY.