

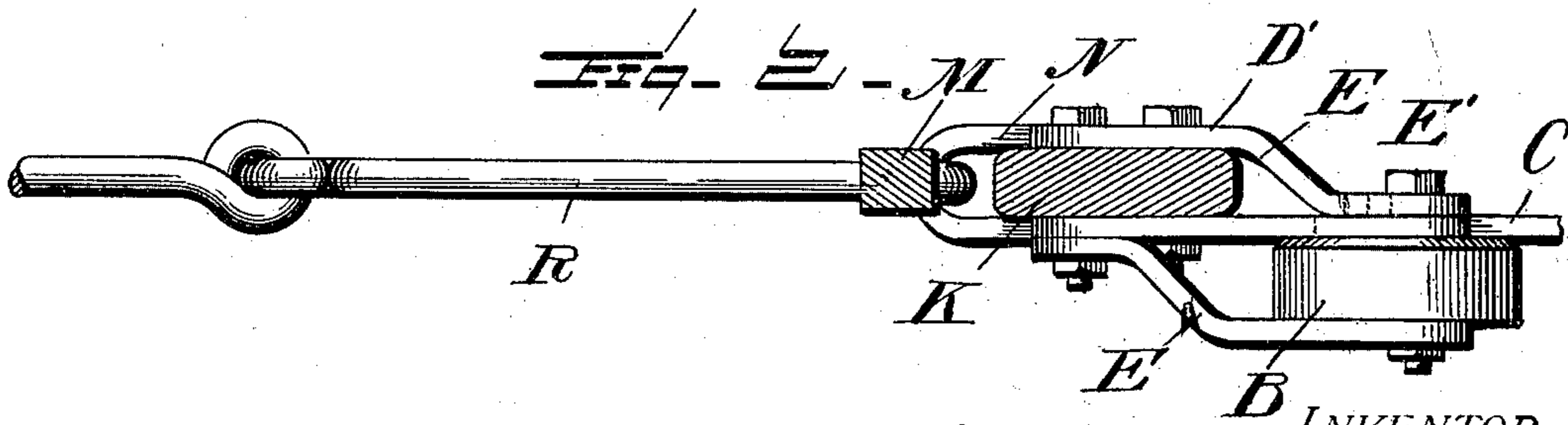
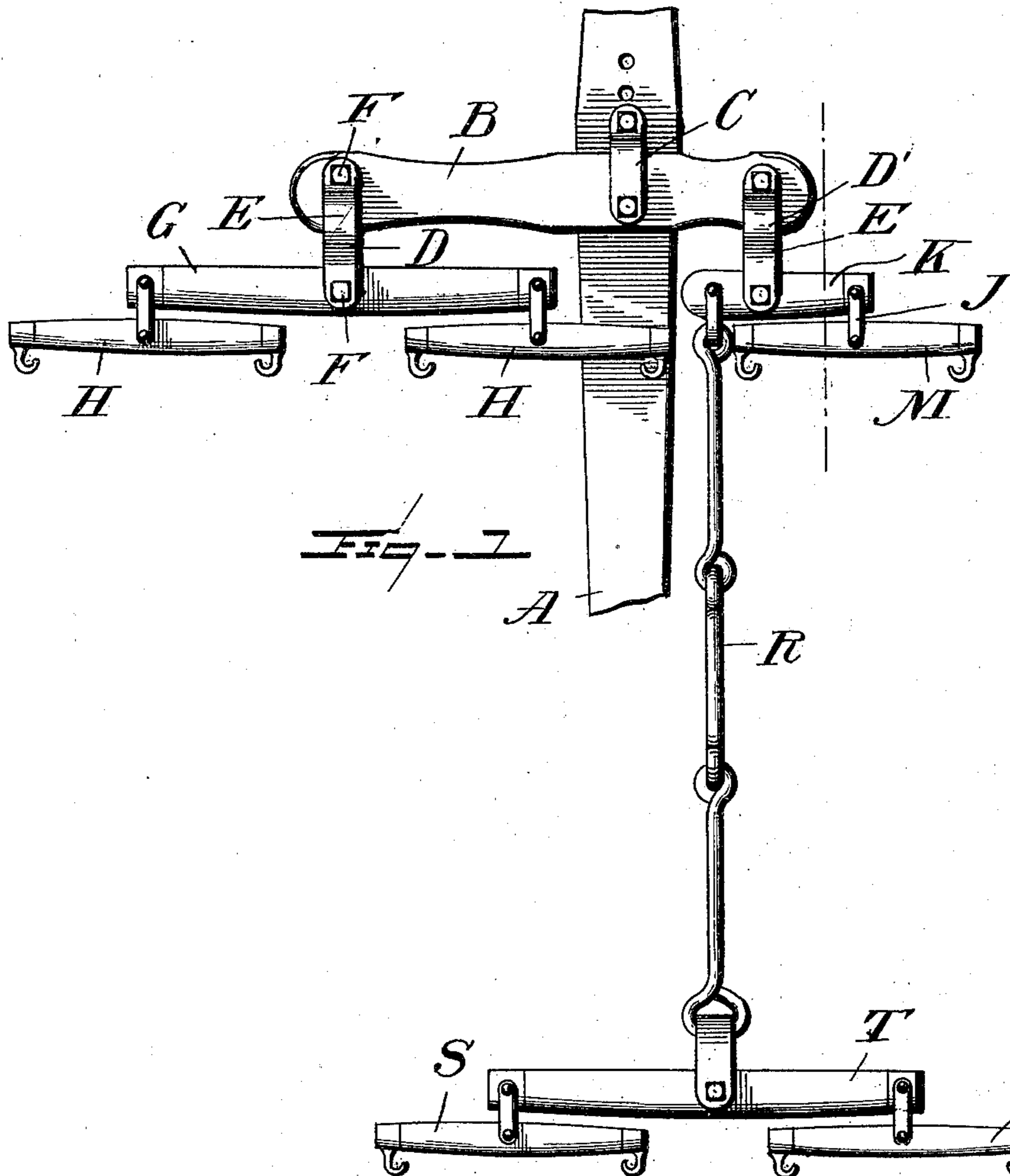
No. 646,945.

Patented Apr. 10, 1900.

J. E. BATTEN.  
DRAFT EQUALIZER.

(Application filed Feb. 23, 1900.)

(No Model.)



WITNESSES:

L. C. Mills.  
J. M. Pfeiffer.

INVENTOR  
James Elmer Batten,  
BY Franklin H. Hough  
Attorney

# UNITED STATES PATENT OFFICE.

JAMES ELMER BATTEN, OF ANNAWAN, ILLINOIS.

## DRAFT-EQUALIZER.

SPECIFICATION forming part of Letters Patent No. 646,945, dated April 10, 1900.

Application filed February 23, 1900. Serial No. 6,278. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES ELMER BATTEN, a citizen of the United States, residing at Annawan, in the county of Henry and State of Illinois, 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 will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in draft-equalizers, and especially to a device of this character in which provision is made for five draft-horses which will pull equally from the same doubletree.

In carrying out my invention I provide a doubletree which is adapted to be secured in the usual manner to the pole of whatever machine the equalizer is used, and to one end of said doubletree being attached a two-horse evener, while at its opposite end is pivotally held an evener, the latter being pivoted eccentrically of its length and having attached to one end a singletree, while at its short end is connected a chain of considerable length, to the end of which is connected a two-horse evener, the pull on which is designed to equalize the pull on the singletree by reason of the evener, which is eccentrically pivoted.

To these ends and to such others as the invention may pertain the same consists, further, in the novel construction, combination, and adaptation of the parts, as will be hereinafter more fully described and then specifically defined in the appended claims.

My invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this application, and in which—

Figure 1 is a plan view of my improved draft-equalizer. Fig. 2 is a sectional view showing the construction of the eccentrically-mounted evener, to one end of which a singletree is designed to be connected, while a two-horse evener is to be connected to its opposite end.

Reference now being had to the details of the drawings by letter, A designates the pole of a machine, to which is pivotally connected the doubletree B, which latter is held by means

of a clevis C, pivoted at one side of its longitudinal center. Held to one end of said doubletree is a clevis D, which clevis comprises the two outer plates E E and a central or middle plate E', the two outside plates being bent so that portions of their length will be in two parallel planes with a diagonally-disposed portion between said parallel portions. Pivotal pins F passing through the ends of said plates hold same together and pass also through said doubletree and evener G, which latter has pivoted to its ends the two singletrees H H, of ordinary construction. To the opposite end of the doubletree B is a clevis of similar construction to clevis D, above described, and to this clevis D is pivoted an evener K, which latter is pivoted eccentrically, as shown in the drawings. To one end of the evener K is pivoted a clevis J, carrying a singletree M, while at the opposite end of said evener K at its short end is mounted a clevis N, to which is connected a chain R, which extends preferably the length of the pole or tongue of the machine, and at its end is connected the two-horse evener T, carrying at its ends the singletrees S.

In constructing a draft-equalizer in accordance with the foregoing description a device is produced which is especially adapted for use in connection with gang-plows, in which side draft is prevented, which cannot be avoided with four-horse eveners.

What I claim to be new, and desire to secure by Letters Patent, is—

1. A draft-equalizer, comprising in combination with a pole, a doubletree pivoted, at one side of its middle portion, to said pole, a two-horse evener pivoted to long arm of said doubletree, a clevis pivoted to the opposite end of the latter, an evener eccentrically mounted on said clevis, a singletree carried at the long arm of said eccentrically-mounted evener, and a chain secured to the short arm of the latter, and a two-horse evener connected to the end of said chain, which latter extends preferably the length of the pole, as set forth.

2. A draft-equalizer, comprising in combination with the doubletree pivoted at one side of its middle portion to a pole, pivotal pins mounted near the ends of said doubletree, the bent plates E, and plate E' mounted

on said pins, the two-horse evener mounted  
between one of said plates E, and plate E', the  
singletrees, the evener eccentrically mounted,  
by similar plates, to the short arm of said  
5 doubletree, the chain secured to said eccen-  
trically-mounted evener, and an evener con-  
nected to the outer end of said chain, said  
eveners being disposed in a plane parallel

with the plane of the doubletree, as shown  
and described. 10

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

JAMES ELMER BATTEN.

Witnesses:

JUDSON PAINE,  
JAMES D. HEATH.