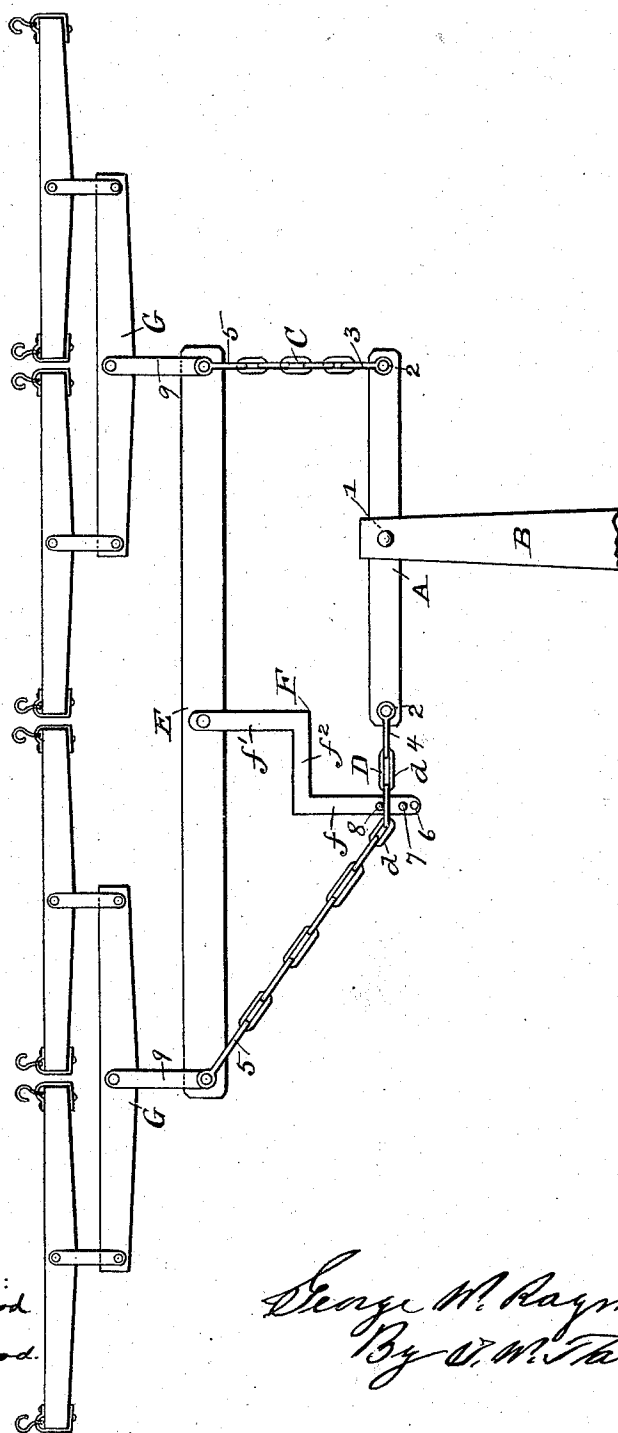


(No Model.)

G. W. RAYMOND.
DRAFT EQUALIZER.

No. 542,599.

Patented July 9, 1895.



Witnesses:
John H. Blackwood
A. B. Blackwood.

George W. Raymond Inventor.
By V. W. Tamm

Attorney.

UNITED STATES PATENT OFFICE.

GEORGE W. RAYMOND, OF SENECA, ILLINOIS.

DRAFT-EQUALIZER.

SPECIFICATION forming part of Letters Patent No. 542,599, dated July 9, 1895.

Application filed February 21, 1895. Serial No. 539,212. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. RAYMOND, a citizen of the United States, residing at Seneca, in the county of La Salle and State of Illinois, have invented a new and useful Draft-Equalizer, of which the following is a specification.

My invention relates to an improved draft-equalizer for use on plows, cultivators, or other like implements.

The invention will first be described in connection with the accompanying drawing, and then pointed out in the claims.

The drawing is a plan view of my improved draft-equalizer, showing it attached to the beam of a plow.

In the drawing, A represents a draft-plate, pivotally secured at its central point 1 to the beam B of a plow in any well-known manner, and provided at each end with a hole 2. In one of the holes 2 is attached, by means of an ordinary clevis 3, a chain C, and in the other hole 2 is secured, by another clevis 4, a similar chain D, this latter chain being somewhat longer than chain C, for a purpose hereinafter described.

E is an evener, somewhat longer than the draft-plate A, and having connected at its respective ends, by means of clevises 5, the outer ends of chains C and D.

F represents an equalizer, comprising two arms f and f' , each at a right angle to the central portion f^2 , the inner arm f having a series of holes 6 therein, for a purpose hereinafter described. The outer end of the arm f' is pivotally secured to the central portion of the evener E, as shown, the inner arm f being adapted to enter one of the links d of chain D, pins 7 and 8 being placed in holes 6 for preventing the link slipping from the arm f when in place. By having chain D longer than chain C, I am enabled to keep the evener E parallel with the draft-plate A.

Ordinary doubletrees G are attached to the ends of the evener E by iron straps 9.

It is well known in plowing that one of the horses in one team—the right-hand team in this instance—works directly in front of the

plow, and therefore the draft exerted by the left-hand team is in excess, and this excess must be overcome in order to draw the plow true. By my invention this excess of draft is compensated for in the following manner: The draft exerted on chain D, instead of pulling directly forward on the draft-plate A, exerts a side pull, which, through the equalizer, acts to move the evener toward the right and through chain C draw the right-hand end of the draft-plate forward, thus giving the right-hand team a greater leverage on the plow, this extra leverage being sufficient to overcome the excess of draft exerted by the left-hand team, it being understood that the end of the arm f of the equalizer F is adapted to enter any of the links d of chain D, thus permitting the operator to adjust the draft-equalizer as required.

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

1. In a draft-equalizer, the combination, with a plow or other like implement, of a draft-plate pivotally secured thereto, an evener, chains connecting the ends of the draft-plate and evener, an equalizer pivotally secured at one end to the evener, its other end being adapted to enter one of the links of one of said chains, and doubletrees attached to the ends of the evener, substantially as described.

2. In a draft-equalizer, the combination, with a plow or other like implement, of a draft-plate pivotally secured thereto, an evener, chains connecting the ends of the draft-plate and evener, a right-angular equalizer secured at one end to the evener, its other end being adapted to enter one of the links of one of said chains, and doubletrees attached to the ends of the evener, substantially as described.

3. In a draft-equalizer, the combination, with a plow or other like implement, of a draft-plate pivotally secured thereto, an evener, chains connecting the ends of the draft-plate and evener, an equalizer comprising two arms each at a right angle to a cen-

tral portion, one of said arms being pivotally
secured to the evener, the free end of the
other arm being adapted to enter one of the
links of one of said chains, means for prevent-
5 ing the link on the arm from slipping from
its position, and doubletrees attached to the
ends of the evener, substantially as de-
scribed.

In testimony that I claim the foregoing as
my own I have hereto affixed my signature in the
presence of two witnesses.

GEORGE W. RAYMOND.

Witnesses:

T. M. DROMGOLD,
G. A. WILLMARTH.