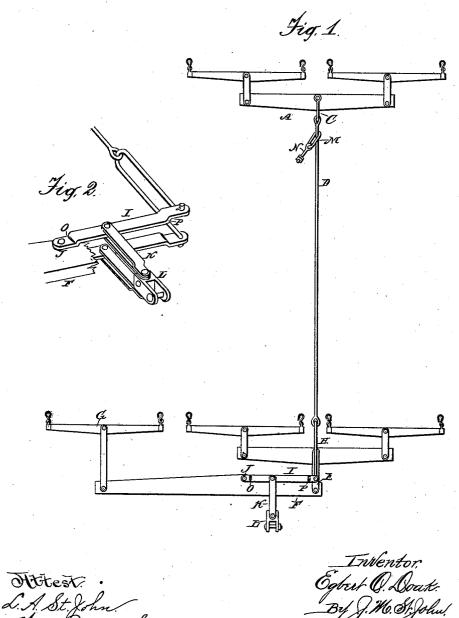
E. O. DOAK. FIVE HORSE EQUALIZER.
APPLICATION FILED JUNE 27, 1906.



## UNITED STATES PATENT OFFICE.

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## FIVE-HORSE EQUALIZER.

No. 856,193.

Specification of Letters Patent.

Patented June 4, 1907.

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To all whom it may concern:

Be it known that I, EGBERT O. DOAK, a citizen of the United States, residing at Cedar Rapids, in the county of Linn and 5 State of Iowa, have invented certain new and useful Improvements in Five - Horse Equalizers, of which the following is a specification.

The object of this invention is to provide a five-horse equalizer for gang-plows, and the like, arranged for four horses in double tandem, two in the furrow, and a fifth horse at the left abreast of the rear team.

The nature of the invention is fully disclosed in the description and claims following, reference being had to the accompanying drawings, in which—

Figure 1 is a plan view of an equalizer embodying my improvements. Fig. 2 is a frag20 mentary view in perspective, showing the construction of levers and links connecting with the three-horse evener.

In the drawing, A and B denote a pair of whiffletrees of the ordinary type. The front ones connect, as by a clevis C with a draft-rod D. The other whiffletrees connect by straps E with a three-horse evener F, having a fulcrum at one third its length. To its longer arm is attached in the same manner a swingletree G. The rear end of the draft-rod connects by a stirrup H with a pair of levers I pivoted at the fulcrum point J, and free to swing back and forth with respect to the evener. These levers connect by links K with a clevis L adapted to connect with the plow, or other implement, not shown. A link M on the draft-rod is adapted to connect with the tongue of the implement, when it has one, by a suitable eye-

40 bolt N.

It will be noted that the links K are doubled, so as to give a straight, central pull on the levers. The latter are offset at O to make room for the inner links, and again at 45 P both to make room for the stirrup H, and

to bring the pull thereof practically in line with the fulcrum and the points of connection with the links K.

As will be seen, the links K connect with the levers I at two fifths of their length, thus 50 equalizing the draft as respects the lead team and the three wheel-horses. As regards the latter the load is equalized by the fulcrum at one third its length, as above noted.

The clevis L has holes by which it may connect with the links either in the position shown, or at right angles thereto, according to the nature of the implement to which it may be attached.

Having thus described my invention, I

1. In a five-horse equalizer, the combination of a three-horse evener, a pair of levers pivoted thereto at the fulcrum point, links 65 pivoted to said levers at two fifths their length, and means for connecting said links with the load, a stirrup connecting with the longer arms of said links a draft-rod extending forward from said stirrup, and a pair of 70 whiffletrees attached to the front end thereof.

2. In a five-horse equalizer, the combination of a three-horse evener, a pair of levers pivoted thereto, with offset ends, double 75 links connecting with each lever, a clevis at the other ends of said links, a stirrup attached to the free ends of said levers, a draft-rod connecting with the stirrup, a supporting link for the draft-rod, adapted for at-80 tachment to a tongue, and a pair of whiffle-trees coupled to the front end of the draft-rod.

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

EGBERT O. DOAK.

Witnesses:

J. M. St. John, L. A. St. John.