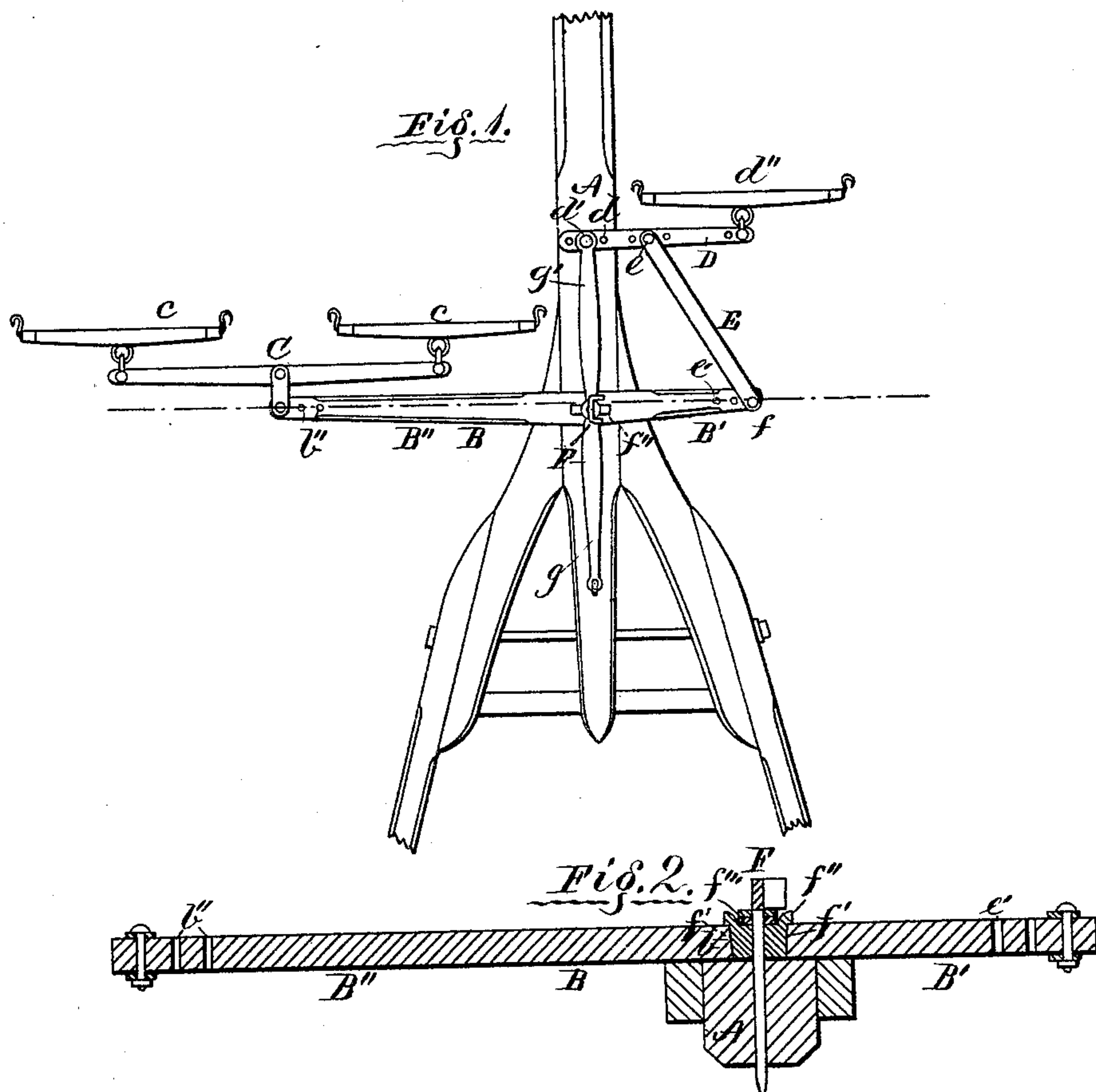


W. HAISTING, Sr.
THREE-HORSE EVENER.

No. 183,922.

Patented Oct. 31, 1876.



Witnesses:
M. H. Barringer.
P. R. Richards.

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UNITED STATES PATENT OFFICE.

WILLIAM HAISTING, SEN., OF FOWLER, ILLINOIS.

IMPROVEMENT IN THREE-HORSE EVENERS.

Specification forming part of Letters Patent No. 183,922, dated October 31, 1876; application filed September 12, 1876.

To all whom it may concern:

Be it known that I, WILLIAM HAISTING, Senr., of Fowler, in the county of Adams and State of Illinois, have invented certain new and useful Improvements in Three-Horse Eveners; and I do hereby declare that the following is a full, clear, and exact description thereof, which 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.

My invention relates to improvements in three-horse eveners, of that class in which the main double-tree is pivoted to a draft-pole; and the invention consists in improvements in the manner of pivoting to the draft-pole, whereby the parts may be adjusted so as to secure more perfect equilibrium of draft. The invention further consists in so constructing the adjusting-keys that they may be held in place by the ordinary hammer-strap, all as hereinafter fully described.

In the accompanying drawings, Figure 1 is a top-plan view of an equalizer embodying my invention. Fig. 2 is a section through that part of Fig. 1 crossed by the line *x x*.

Referring to the parts by letters, A represents an ordinary draft-pole; B, the main double-tree, having a longitudinal slot, *b*, cut so as to leave a short end, B', and a longer end, B'', to the double-tree. C is an auxiliary double-tree, pivoted at its center to the long end B'' of the double-tree B, in either of a series of holes, *b''*, and carries single-trees *c c*, one at each of its ends. D is a lever, pierced with holes *d*, through one of which it is pivoted by a bolt, *d'*, to the draft-pole A, and through another of which a bolt, *e*, connects it to one end of a bar, E, the other end of which extends to and is connected by a bolt, *f*, to the shorter arm B' of the double-tree B in either of a series of holes, *e'*. *d''* is a single-tree carried on the outer end of the lever D. F is the hammer-strap bolt, passing through the slot *b*, and connecting the dou-

ble-tree B and draft-pole A. *f' f'* are keys placed in the slot *b*, one on each side of the bolt F, and may be made of different and various relative sizes, so that by placing a smaller one on one side and a larger one upon the other side of the bolt F, the double-tree B may be adjusted to change the relative lengths of its ends B' B''. The keys *f' f'* have shoulders *f'''*, on which the hammer-strap *g* rests, to retain them in place, and projections *f''*, by which they may be withdrawn. *g'* is a strap connecting the bolts F and *d'*.

The draft may be equalized to ordinary differences in draft-animals by means of the adjustments of parts, effected through the series of holes *e'*, *b''*, and *d*, and their respective bolts, and the keys *f* may be used to regulate the side draft on the draft-pole A, when different adjustments of the said parts are effected.

Having thus described my invention, I do not claim, broadly, the combination of double-tree B with the double-tree C, lever D, and connecting-bar E, and their respective single-trees; but

What I do claim is—

1. The double-tree B, made adjustable, as described, by means of the removable and substitutive wedges *f'*, and operating in combination with the double-tree C and single-trees *c c* and *d''*, lever D, bar E, and draft-pole A, substantially as and for the purpose specified.

2. The keys *f'*, constructed as described, with projections *f''* and shoulders *f'''*, combined with the hammer-strap *g*, hammer-strap bolt F, and draft-pole A, substantially as described, and for the purpose specified.

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

WILLIAM ^{his} X HAISTING, SEN.
mark.

Witnesses:

C. F. HUBERT,
FREDERICK FRIKE.