

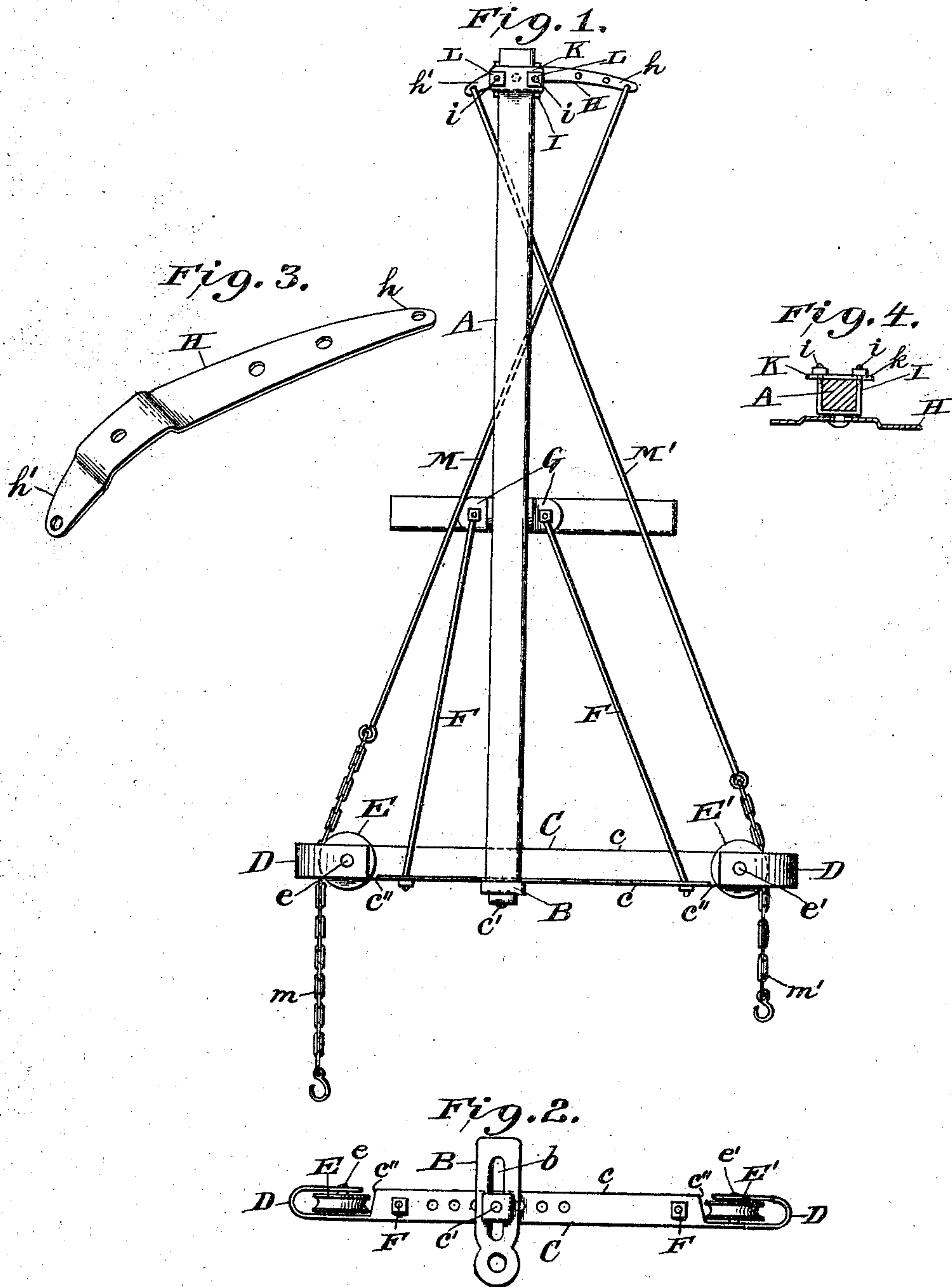
No. 709,092.

Patented Sept. 16, 1902.

J. B. HAYDEN.
DRAFT EQUALIZER.

(Application filed Dec. 31, 1901.)

(No Model.)



Witnesses

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Fig. 5.

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UNITED STATES PATENT OFFICE.

JEFFERSON B. HAYDEN, OF ABILENE, TEXAS.

DRAFT-EQUALIZER.

SPECIFICATION forming part of Letters Patent No. 709,092, dated September 16, 1902.

Application filed December 31, 1901. Serial No. 87,856. (No model.)

To all whom it may concern:

Be it known that I, JEFFERSON B. HAYDEN, a citizen of the United States, residing at Abilene, in the county of Taylor and State of Texas, have invented certain new and useful Improvements in Draft-Equalizers, of which the following is a specification.

My invention relates to devices for equalizing the draft where three or more draft-animals are used on sulky-plows and other machinery and may be applied to carriages and wagons; and the object is to provide a device of the class described that will be substantial in character, easy to apply to the mechanism to be drawn, and that will effectually prevent any side draft. This object I obtain by the mechanism shown in the accompanying drawings, in which—

Figure 1 is a plan view of my equalizer in position on the beam of a sulky-plow; Fig. 2, a front view of the invention; Fig. 3, a perspective view of the equalizing-lever; Fig. 4, a detail view of the equalizing-lever and means of attaching it to the plow-beam, and Fig. 5 a cross-section through the spreader.

Referring to the drawings, in which similar reference characters indicate corresponding parts throughout the several views, A represents the plow-beam of a sulky-plow; B, a metal plate bolted or otherwise secured to the front of the beam A and having the longitudinal slot *b* in the portion below the lower edge of the beam.

C represents the spreader employed in my equalizer, which is made of angle-iron, having one of its flat sides *c* secured to the plate B through the slot *b* by means of the bolt *c'*, which permits of a vertical adjustment of the spreader C. The front *c* is cut down near each end, as shown at *c''*, and the horizontal portion turned back on itself, as shown at D, to form bearings for the grooved pulleys E E', journaled therein by means of the bolts *e e'*.

F represents stay-rods secured to the front *c* of the spreader C and bolted to brackets G, secured to the sides of the beam A.

H represents the equalizing-lever I employ, which is pivoted to the U-shaped plate I and has its ends reduced and screw-threaded, as shown at *i*.

K represents a metal plate having holes *k* to fit over the screw-threaded ends *i* and held

in place by means of the nuts L in securing the lever H to the beam A. The lever H is made, preferably, angular, with its bent ends extending toward the front and also bent downward, the longer end *h* being bent more than the shorter end *h'* to permit the draft-rods M M', pivoted to the ends of the lever *h* and *h'*, respectively, to cross, the rod M crossing below the rod M' and having a chain *m* passing over the pulley E, while the draft-rod M' has a chain *m'*, that passes over the pulley E'. The chains *m* and *m'* are provided with suitable hooks or other means for attaching them to the whiffletrees. The purpose of bending the ends of the draft-lever toward the draft is to prevent a side draft in case the lever should be drawn too much on one side, as would be liable to happen if the arm is made straight, and cause the animals attached to the other arm to draw more than their share of the load. More than one hole may be provided in the longer arm to change the number of draft-animals to be attached thereto.

Having thus described my invention, what I claim is—

1. In a draft-equalizer, a spreader-bar made of angle-iron having the upright side cut down near each end of the bar, and the end turned back on itself to form bearings for pulleys, substantially as shown and described.

2. In a draft-equalizer, a spreader-bar made of angle-iron and adjustably secured to the front of a plow-beam, the upright side of said angle-iron cut down near the ends thereof, the end turned back on itself, and a pulley journaled at each end in the loop formed by said turned-back portions, substantially as shown and described.

3. In a draft-equalizer, a slotted plate secured to the front of a plow-beam, a spreader-bar secured to said plate through the slot therein, a pulley journaled at each end of said spreader-bar, an equalizing-lever having its ends bent toward the draft, and rods attached to said lever having flexible ends passing over said pulleys, substantially as shown and described.

4. In a draft-equalizer, a slotted plate secured to the front of a plow-beam, a spreader-bar made of angle-iron adjustably secured through the slot in said plate, brace-rods con-

necting brackets on said beam and said spreader-bar, the front side of said angle-iron cut down near its ends and having its flat portion bent back on itself, a pulley jour-
5 naled in the loop formed by said turned-back portion, an equalizing-lever pivoted to a U-shaped clamp, the ends of said clamp cut down and screw-threaded, a plate perforated to fit over said threaded portions and fas-
10 tened by nuts, the ends of said equalizing-lever bent toward the draft and downward, a draft-rod attached to each end of said lever

and having a flexible end to pass over a pulley at the end of the spreader-bar, and means attached to said flexible ends to attach thereto 15 a whiffletree, substantially as shown and described.

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

JEFFERSON B. HAYDEN.

Witnesses:

T. H. ALEXANDER,
S. R. SMITH.