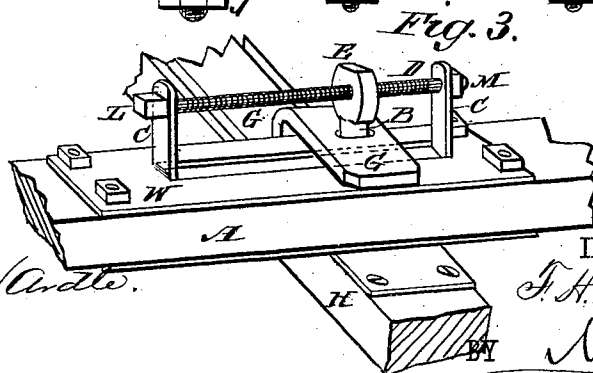
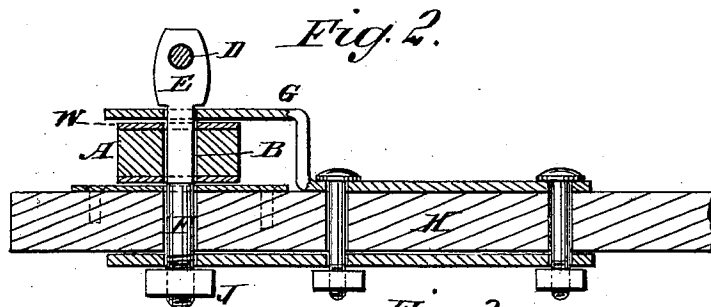
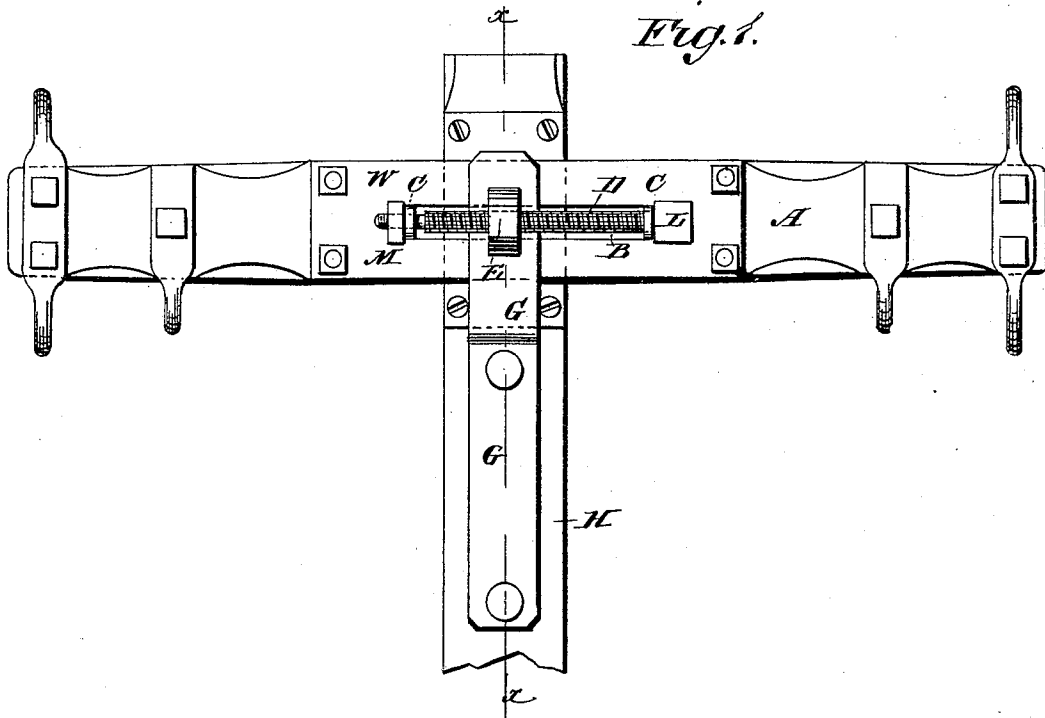


(Model.)

F. H. STANDEFER.
Draft Equalizer.

No. 234,625.

Patented Nov. 16, 1880.



WITNESSES:

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UNITED STATES PATENT OFFICE.

FRANKLIN H. STANDEFER, OF FORT PAYNE, ALABAMA.

DRAFT-EQUALIZER.

SPECIFICATION forming part of Letters Patent No. 234,625, dated November 16, 1880.

Application filed September 22, 1880. (Model.)

To all whom it may concern:

Be it known that I, FRANKLIN HURD STANDEFER, of Fort Payne, in the county of De Kalb and State of Alabama, have invented a new and Improved Draft-Equalizer, of which the following is a specification.

The object of my invention is to provide a new and improved draft-equalizer which is simple in construction, strong and durable, and can be easily adjusted according to the strength of the animals and the resistance of the load.

The invention consists in a double-tree provided with a vertical longitudinal slot, at the ends of which standards are provided to form bearings for a screw that passes through a threaded aperture in the head of the bolt, that connects the double-tree with the tongue and passes through the slot in the double-tree, the arrangement being such that by turning the screw the length of the two arms of the lever is varied.

In the accompanying drawings, Figure 1 is a plan view of my improved draft-equalizer. Fig. 2 is a cross-sectional elevation of the same on the line *x x*, Fig. 1. Fig. 3 is a perspective view of the middle of my improved draft-equalizer.

Similar letters of reference indicate corresponding parts.

The double-tree A is provided with a longitudinal vertical slot, B, in the middle, the length of this slot being equal to about one-fourth to one-third of the length of the double-tree A.

Small standards or ears C C are bent out of the slotted plate W on the top of the double-tree and form bearings for a screw, D, arranged parallel to the double-tree, and are provided at the ends of the slot B.

The screw D passes through a threaded aperture in the head E of a pin or bolt, F, which passes through an aperture at the end of a clip, G, attached to the tongue, and below which the double-tree passes through the slot B, through the tongue H, and is held by a nut, J, screwed upon its lower threaded end, or by a wedge key or pin, or similar device.

One end of the screw D is provided with a squared head, L, and the other end is provided with a threaded end, upon which a nut, M, is screwed.

The double-tree and the tongue may be plated with metal to prevent the rapid wearing off, and the hooks for the single-trees may be attached in the ordinary manner.

The operation is as follows: The single-trees having been hooked in the proper hooks of the double-tree, the driver can adjust the double-tree—that is, he equalizes the draft by turning the screw D, and if the horse on one side is weaker than the other the double-tree must be so adjusted that the weaker horse has the longer end of the lever. The double-tree is to be adjusted in a similar manner in regard to the load. By turning the screw D from left to right the double-tree will be moved from right to left, and an inverse movement of the screw will produce an inverse movement of the double-tree. The double-tree can turn freely on the pin or bolt F.

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

1. A draft-equalizer made substantially as herein shown and described, and consisting of a double-tree provided with a longitudinal slot, over which a screw is mounted that passes through a threaded aperture of a bolt passing through this slot and into or through the tongue, as set forth.

2. In a draft-equalizer, the combination, with the longitudinally-slotted double-tree A and screw-threaded connecting-pin F, of the adjusting-screw D, substantially as herein shown and described.

3. In a draft-equalizer, the combination, with the slotted double-tree A, the adjusting-screw D, and the pin F, of the slotted plate W, provided with ears C and secured to the said double-tree, substantially as herein shown and described.

FRANKLIN HURD STANDEFER.

Witnesses:

L. A. DOBBS,
D. WHEELER.