

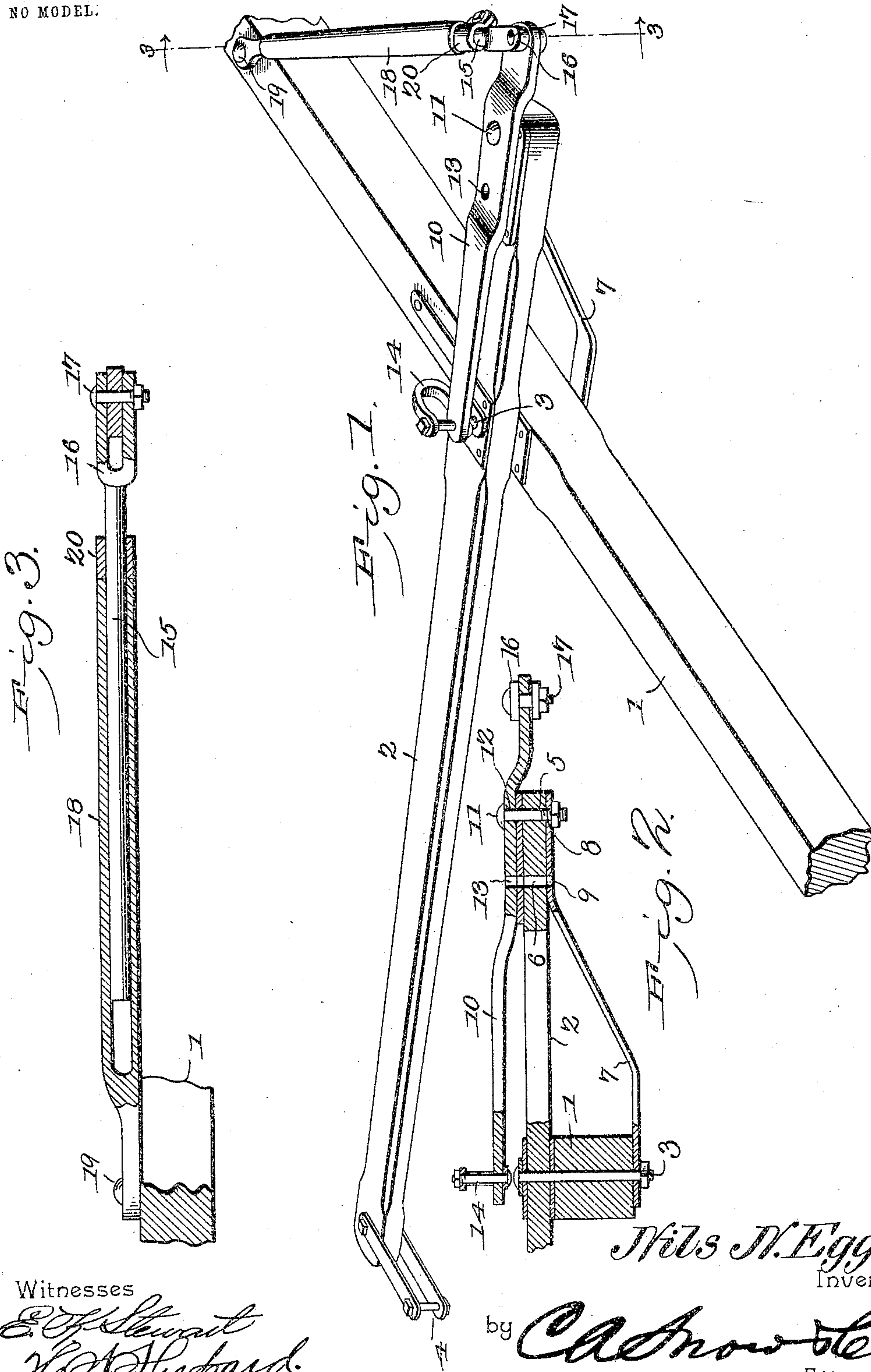
No. 775,748.

PATENTED NOV. 22, 1904.

N. N. EGGE.
DRAFT EQUALIZER.

APPLICATION FILED SEPT. 30, 1904.

NO MODEL.



Witnesses

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DRAFT-EQUALIZER.

SPECIFICATION forming part of Letters Patent No. 775,748, dated November 22, 1904.

Application filed September 30, 1904. Serial No. 226,680. (No model.)

To all whom it may concern:

Be it known that I, NILS N. EGGE, a citizen of the United States, residing at Joice, in the county of Worth and State of Iowa, have invented a new and useful Draft-Equalizer, of which the following is a specification.

This invention relates to draft-equalizing devices, and is particularly designed for use in connection with harvesting-machines, so as to admit of the use of swingletrees of the usual size without interfering with the reel of the machine.

A further object of the invention is to provide for readily changing from a four-horse evenner to a three-horse evenner, and vice versa, by a very simple arrangement of the device and without altering the mounting of the evenner.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings, Figure 1 is a perspective view illustrating a draft-equalizer of the present invention mounted upon a tongue or pole. Fig. 2 is a detail sectional view taken longitudinally through the inner end portion of the evenner-bar. Fig. 3 is a detail sectional view taken on the line 3-3 of Fig. 1.

Like characters of reference designate corresponding parts in each and every figure of the drawings.

The device of the present invention is supported upon a pole or tongue 1 and includes an evenner-bar 2, disposed transversely across the top of the pole and fulcrumed thereon adjacent its inner end by means of a removable bolt or fulcrum-pin 3. At the outer end of the evenner-bar there is a clevis or other suitable device 4 for the connection of a draw-bar, while the inner end of the evenner-bar is provided with two longitudinally-alined per-

forations 5 and 6. A brace-link 7 has one end applied to the under side of the tongue or pole 1 and is pierced by the lower end of the bolt 3, so as to swing thereon, while its outer end is extended upwardly to engage the under side of the inner end portion of the evenner-bar and is pierced by two openings 8 and 9, registered with the openings 5 and 6 of the draw-bar.

Upon the inner end portion of the evenner-bar 2 is supported a lever 10, which projects at the inner end of the evenner-bar and is fulcrumed thereon by means of a removable bolt 11, passing through one of the two openings 12 and 13 in the lever and engaging in one of the pair of registered openings in the evenner-bar and the link 7. A clevis or other device 14 is carried by the inner end of the lever for the connection of a suitable draw-bar. The outer end of the lever 10 is guided by means of a rod or bar 15, having its forward end bifurcated or forked, as at 16, so as to straddle the outer end of the lever 10, to which it is pivotally connected by means of a bolt 17, while its rear portion telescopes within a tubular member 18, fulcrumed or pivotally connected at its rear end to the top of the tongue or pole 1, as indicated at 19. Upon the rod 15 is an adjustable clip 20, capable of being fixed upon the rod at different points between the forward end of the tubular member 18 and the fork 16, so as to form a stop for contact with the forward end of the member 18, and thereby limit the telescopic movement of the rod within the tubular member.

The arrangement of the device as shown in Figs. 1 and 2 of the drawings is for four horses, one team being connected to the lever 10 with an animal at each side of the pole, while the other team is connected to the outer end of the evenner-bar 2 through the medium of the clevis or connection 4, the arrangement of the evenner-bar and the lever 10 being such as to equalize the pull of the team connected to the outer end of the bar 2, and thereby apply the power of the combined teams directly in line with the pole. It will here be explained that by the present arrangement of the lever 10 having its inner end working over the center of the pole the draft-animals which are

connected to the lever are located at opposite sides of the pole and adjacent the same, so as to support the pole in an effective manner, which is an important advantage over equalizing devices wherein all of the draft-animals are located remote from the tongue or pole, for in this latter arrangement the pole hangs down close to the ground and is liable to strike obstructions.

10 To accommodate the device to three animals, the fulcrum-bolt 11 is shifted to the opening 13 of the lever and the openings 6 and 9 of the evener-bar 2 and the link 7, one animal being connected to the outer end of
15 the evener-bar 2 and two animals connected to the lever 10. When the bolt 11 has been shifted inwardly, as described, the power of the evener-bar 2 is increased, while that of the lever 10 is decreased, the proportions of
20 increase and decrease being sufficient to offset the greater power applied by the team at the pole, thereby effecting a direct draft in alignment with the pole or tongue.

It will here be explained that the fulcrum
25 of the evener-bar 2 is the bolt or pin 3, while the fulcrum of the lever 10 is its pivotal connection with the rod 15, wherefore it will be understood that the fulcrums of the evener-bar and the lever are not shifted, but the connection between the evener-bar and the lever
30 is shifted, so as to vary the power of these members in accordance with the arrangement of the draft-animals.

Having fully described the invention, what
35 is claimed is—

1. In a draft-equalizer, the combination of an intermediately-fulcrumed evener-bar, a lever pivoted intermediate of its ends to the inner end portion of the evener-bar, a draft
40 connection at the inner end of the lever, and a fulcrum-support for the outer end of the lever consisting of an endwise-slidable member having a pivotal support.

2. In a draft-equalizer, the combination of
45 an intermediately-fulcrumed evener-bar, a lever having an intermediate pivotal connection with the inner end portion of the evener-bar, said pivotal connection being shiftable longitudinally of the lever and the bar, and a fulcrum-support for the outer end of the lever
50 consisting of a slidable member having a pivotal support for its rear end.

3. In a draft-equalizer, the combination of an intermediately-fulcrumed evener-bar having its inner end portion provided with a longitudinal series of openings, a lever applied to the inner end portion of the bar and provided with a longitudinal series of openings, a pivot device for interchangeable engagement
55 with the openings of the lever and the bar, and a fulcrum-support for the outer end of

the lever consisting of a slidable member connected to the lever and having a pivotal support for its rear end.

4. In an equalizing device, the combination
65 of an intermediately-fulcrumed evener-bar, a lever pivoted intermediate of its ends upon the inner end portion of the evener-bar and provided at its inner end with a draft connection, a rod pivoted to the outer end of the lever, and a tubular member telescopically receiving the rod and provided at its rear end with a pivotal support.

5. In a draft-equalizer, the combination of an intermediately-fulcrumed evener-bar, a lever pivoted intermediate of its ends upon the inner end portion of the evener-bar and provided at its inner end with a draft connection, a rod pivoted to the outer end of the lever, a tubular member telescopically receiving the
80 rod and provided at its rear end with a pivotal support, and a stop device adjustable longitudinally of the rod between the lever and the tubular member for contact with the latter to limit the telescopic movement of the rod.

6. The combination with a draft-pole, of an evener-bar fulcrumed intermediate of its ends upon the pole and provided at its outer end with a draft connection, a lever pivoted intermediate of its ends upon the inner end portion
90 of the evener-bar and provided at its inner end with a draft connection, and a telescopic device pivoted to the outer end of the lever and pivotally supported upon the pole.

7. The combination with a draft-pole, of an evener-bar fulcrumed intermediate of its ends upon the pole and provided at its outer end with a draft connection, the inner end portion of the bar being provided with a longitudinal series of openings, a lever applied to the inner end portion of the bar and provided with a longitudinal series of corresponding openings, a pivot-pin for interchangeable engagement with the corresponding openings in the lever and the bar, a brace-link extending between the fulcrum of the evener-bar and the pivot-pin and provided with a longitudinal series of openings corresponding to those of the bar and the lever, a draft connection for the inner end of the lever, a rod pivotally connected to the outer end of the lever, a tubular member telescopically receiving the rod and having its rear end pivotally supported upon the pole, and a stop-clip adjustable upon the rod between the tubular member and the lever.

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

NILS N. EGGE.

Witnesses:

ANDREW MILLER,
ELLA STEFFENSEN.