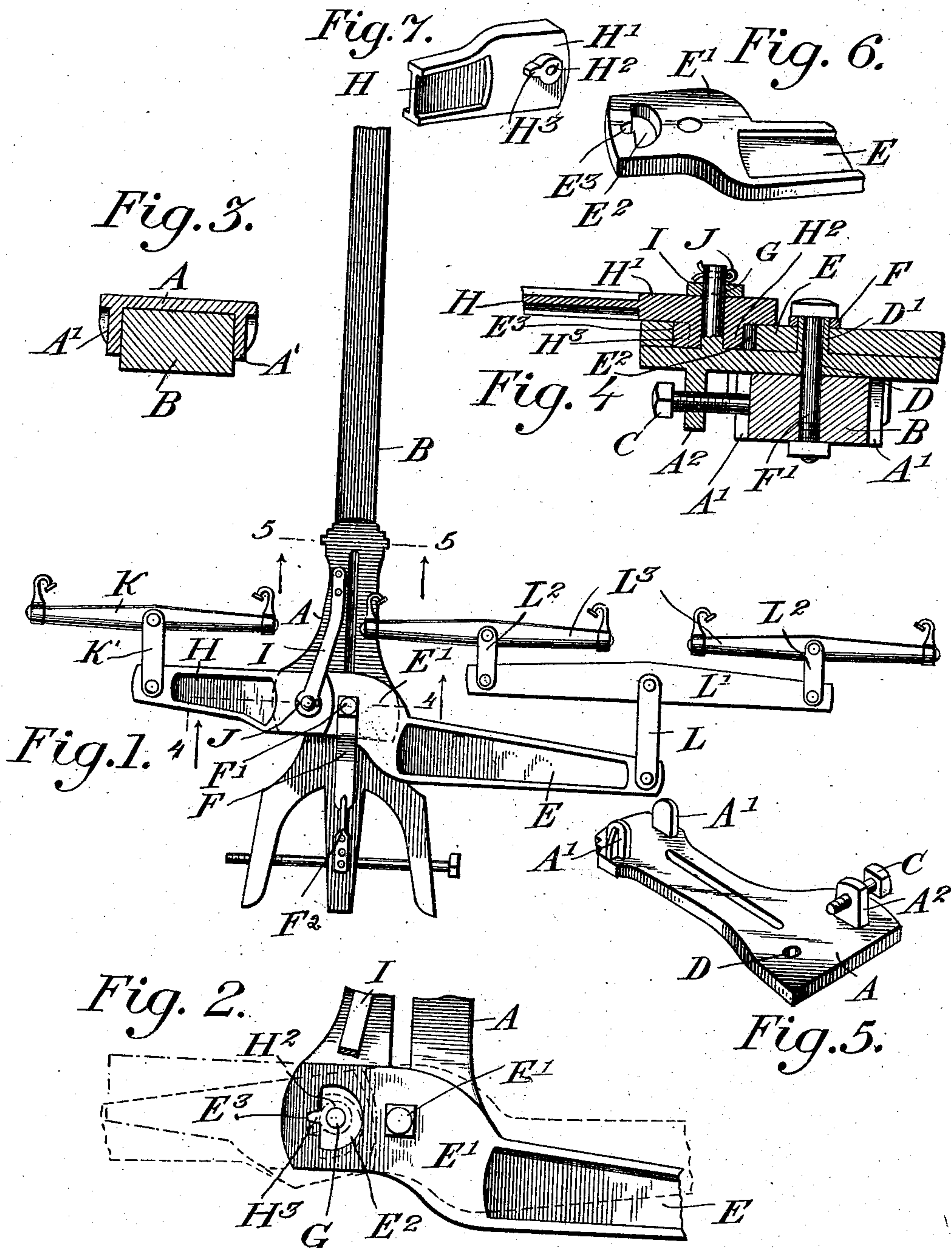


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PATENTED JUNE 23, 1908.

A. L. SIMON.
THREE HORSE EVENER.
APPLICATION FILED JAN. 22, 1907.



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THREE-HORSE EVENER.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ALVIN L. SIMON, a citizen of the United States, residing at Roanoke, in the county of Huntington and State of Indiana, have invented a new and useful Improvement in Three-Horse Eveners, of which the following is a specification.

This invention relates to draft equalizers and more particularly to three horse draft equalizers, the object being to provide an equalizer which can be readily and quickly attached to the pole of a wagon or a machine.

Another object of my invention is to provide the plate carrying the equalizer arms with clamping means so that it will be securely held in place.

With these objects in view, the invention consists in the novel features of construction, combination and arrangement of parts hereinafter fully described and pointed out in the claims.

In the drawing forming a part of this specification:—Figure 1 is a top plan view of my improved draft equalizer attached to a pole. Fig. 2 is a detail plan view showing the arms of the equalizer in dotted lines in different positions. Fig. 3 is a section on the line 5—5 of Fig. 1. Fig. 4 is a section taken on lines 4—4 of Fig. 1. Fig. 5 is a detail perspective view of the plate detached. Fig. 6 is a detail perspective view of the longer arm of the equalizer. Fig. 7 is a detail perspective view of the short arm of the equalizer.

Referring to the drawing A indicates a plate having a reduced centrally ribbed end provided with spaced depending lugs A' adapted to fit over the tongue B of a wagon or machine, as the case may be. A depending lug A² is formed on the plate provided with a threaded opening in which works a set-screw C adapted to engage the pole and securely hold the plate in place thereon. An opening D is formed in the plate provided with an upwardly projecting sleeve D' on which is pivotally mounted the apertured end E' of an arm E. The apertured end of an arm F is arranged over the sleeve on the arm E, the arms being secured thereon by a bolt, F' which passes down through the sleeve and opening of the plate, and through an opening in the pole having an ordinary nut secured on its end. The other end of the arm is secured to a hook F² secured to the pole to the rear of the plate A.

Projecting up from the plate to one end of

the sleeve is a pin G which extends through the half-round opening E² formed in the end E' of the arm E, the straight side of the opening being provided with a notch E³ for the purpose hereinafter fully described.

Mounted on the pin G is the apertured end H' of an arm H which is provided with a boss H² provided with a tooth H³ adapted to fit in the notch E³ of the opening E² of the arm, so that one arm will operate the other. A spring arm I is secured to one side of the reduced end of the plate A and extends rearward having an apertured end which is secured on the pin G by a cotter pin J which passes through an opening formed in the pin adjacent its end, and securely holds the arm H in place. Secured to the free end of the arm H is a link K' carrying a swingle tree K and to the free end of the arm E is a link L to which the double tree L' is connected, which is provided with a link L² at each end carrying swingle trees L³.

From the foregoing description it will be readily seen that I have provided a very novel draft equalizer which can be easily and quickly attached and one which is very effective in use.

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

1. In a draft equalizer, the combination with a pivotally mounted arm provided with a notched opening, of an arm pivotally mounted in said opening provided with a tooth fitting in said notched opening, means for securing said arms to a pole, for the purpose described.

2. In a draft equalizer, the combination with a plate of an arm pivotally mounted on said plate provided with a notched opening, of an arm pivotally mounted on said plate in said opening of the arm, and a tooth carried by said arm working in the notch of the opening, for the purpose described.

3. In a draft equalizer, the combination with a pivotally mounted arm provided with a notched opening, of an arm pivotally mounted in said opening provided with a toothed boss, fitting in the notch of the opening of the arm, and means for locking said boss in said opening, for the purpose described.

4. In a draft equalizer, the combination with a pole, of a plate arranged on said pole, an arm mounted on said plate provided with

a notched opening, an arm mounted on said plate provided with a toothed boss fitting in said opening and clamping means carried by the plate for the purpose described.

- 5 5. In a draft equalizer, the combination with a plate, of a sleeve and a pin projecting up from said plate, an arm mounted on said sleeve provided with a notched opening fitting over said pin, an arm mounted on said
10 pin provided with a toothed boss fitting in said notched opening, and means for securing said plate to a pole, for the purpose described.
- 15 6. In a draft equalizer, the combination with a plate provided with depending lugs, of a pin and a sleeve projecting up from said plate, an arm mounted on said sleeve provided with a notched opening fitting over said pin, a short arm mounted on said pin
20 provided with a toothed boss fitting in said notched opening, and means for securing said arm on said plate together with means for securing said plate on a pole, for the purpose described.
- 25 7. In a draft equalizer, the combination with a pole, of a plate arranged on said pole provided with depending lugs adapted to engage the sides of the pole, an opening formed in said plate provided with an upwardly projecting sleeve, an arm mounted on said
30 sleeve provided with a notched opening, a pin projecting upwardly from said plate through said opening, a shorter arm mounted on said pin provided with a boss having a tooth
35 formed thereon fitting in the notch of said arm, and a swingle tree carried by the shorter

arm and a double tree carried by the longer arm for the purpose described.

8. In a draft equalizer, the combination with a pole, of a plate provided with clamping means for securing said plate on said pole, said plate being provided with an opening having an upwardly projecting sleeve, an apertured arm mounted on said sleeve provided with a notched opening, an arm secured over said sleeve bearing against the first mentioned arm, a bolt extending through said sleeve, and pole, a hook connected to the last mentioned arm, a pin projecting up from the said plate through the opening of said
50 arm, an arm provided with a boss mounted on said pin provided with a tooth fitting in the notch of the opening of the arm, and a spring arm secured to said plate provided with an apertured end fitting over said pin
55 and bearing against the arm.

9. In a draft equalizer, the combination with a pole having a plate detachably secured thereon provided with an upwardly projecting sleeve, and a pin, an arm mounted
60 on the sleeve secured thereon by a bolt passing through the sleeve, plate and pole, said arm being provided with a half-round opening having a notch formed in the square edge, and an arm mounted on said pin provided with a toothed boss fitting into said
65 opening and notch, for the purpose described.

ALVIN LEVI SIMON.

Witnesses:

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