(No Model.)

E. H. TANK.

DRAFT EQUALIZER.

No. 459,026. Patented Sept. 8, 1891.

Fig. 2.

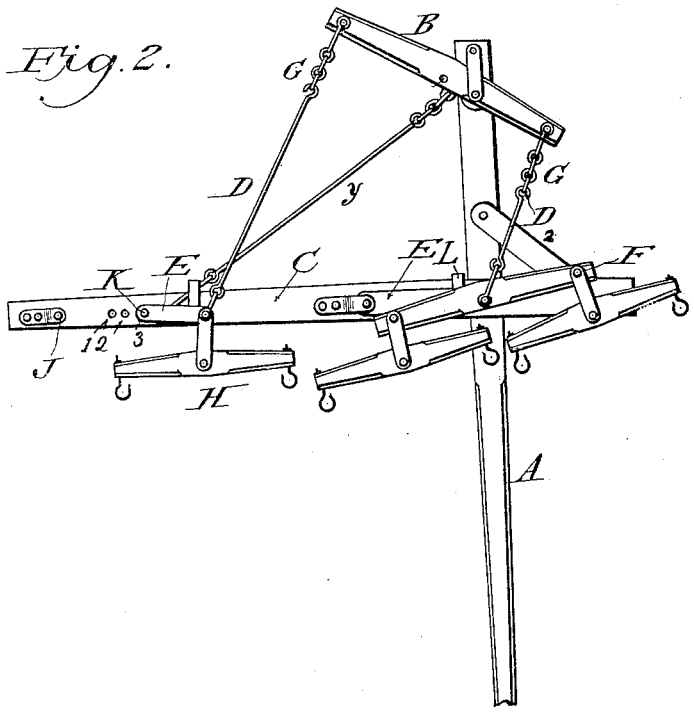
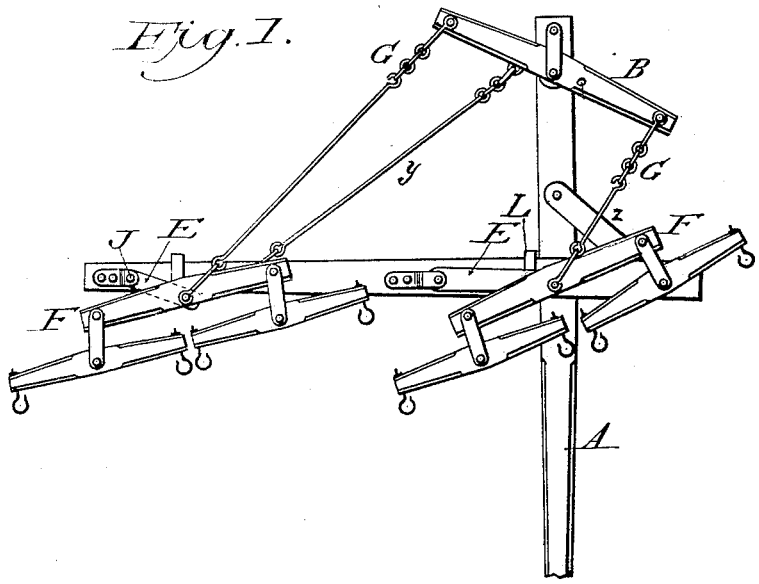


Fig. 1.



Witnesses:

W. A. Hutton

C. Munn.

Inventor:

Ernst H. Tank

UNITED STATES PATENT OFFICE.

ERNST H. TANK, OF HOLSTEIN, IOWA.

DRAFT-EQUALIZER.

SPECIFICATION forming part of Letters Patent No. 459,026, dated September 8, 1891.

Application filed October 10, 1890. Serial No. 367,741. (No model.)

To all whom it may concern:

Be it known that I, ERNST H. TANK, a citizen of the United States, residing at Holstein, in the county of Ida and State of Iowa, have invented a new and useful Reaper-Evener, called and known as the "Tank Reaper-Evener," of which the following is a specification.

My object is to provide a strong, durable, and convenient draft-equalizer adapted for three or four horses and for any wagon, plow, reaper, and binder, or other machine that is to be advanced by horse-power.

My invention consists in the arrangement and combination of operative parts with a carriage-pole, as hereinafter set forth, pointed out in my claim, and illustrated in the accompanying drawings, in which—

Figure 1 shows the complete device adapted to be used as a four-horse evener, and Fig. 2 as a three-horse evener.

A is a pole or tongue, adapted to be fixed to a wagon or other tractable carriage.

B is an evener pivoted at its center to the rear end of the pole.

C is a straight wooden bar fixed to the pole A in advance of the evener B to extend horizontally and at right angles from the pole. Braces *y* and *z*, fixed to the pole and the bar C, aid in retaining the bar firmly fixed to the pole as required to resist the force applied to the free end of the bar.

E are carriers pivoted on top of the bar C to support and carry eveners F and H in such a manner that the carriers and the eveners will have independent motion or vibration.

Perforations 1 2 3 in the bar C and metal plates J, having corresponding perforations placed on top of the bar and bent upward to overlap the ends of the carriers E, and bolts passed through the coinciding perforations in the straps J, carriers E, and bar C, produce a strong hinged connection between the carriers E and the bar C.

D and G are rods and links combined to produce flexible connections between the ends of the evener B and the central portions of the eveners F and H and the ends of the carrier E. The front ends of the flexible connections D G are attached to clevises, and a carrier E and evener jointly connected with each of the clevises by means of a bolt passed through the eyes of the clevis and through perforations in the evener and carrier.

Blocks L, fixed across the bar C and under the pivoted carriers E, serve as bearings to support the free end of the carrier E, elevated, as required, to prevent it from rubbing and wearing the top surface of the bar C.

I claim as my invention—

An improved draft-equalizer comprising a bar C, fixed across the top of a pole A, bars L, fixed across the top of the bar C, evener-carriers adjustably pivoted to the bar C by means of perforated plates J, eveners F, pivoted to the free ends of the carriers E, and an evener B, pivoted to the rear end of the pole and its free ends connected with the eveners F and carriers E by means of rods and links, and all the parts arranged and combined to operate in the manner set forth, for the purposes stated.

ERNST H. TANK.

Witnesses:
JNO. D. GREVE,
I. ROTHSTEIN.