

B. W. SUTHERLEN.
Three-Horse Eveners.

No. 135,861.

Patented Feb. 11, 1873.

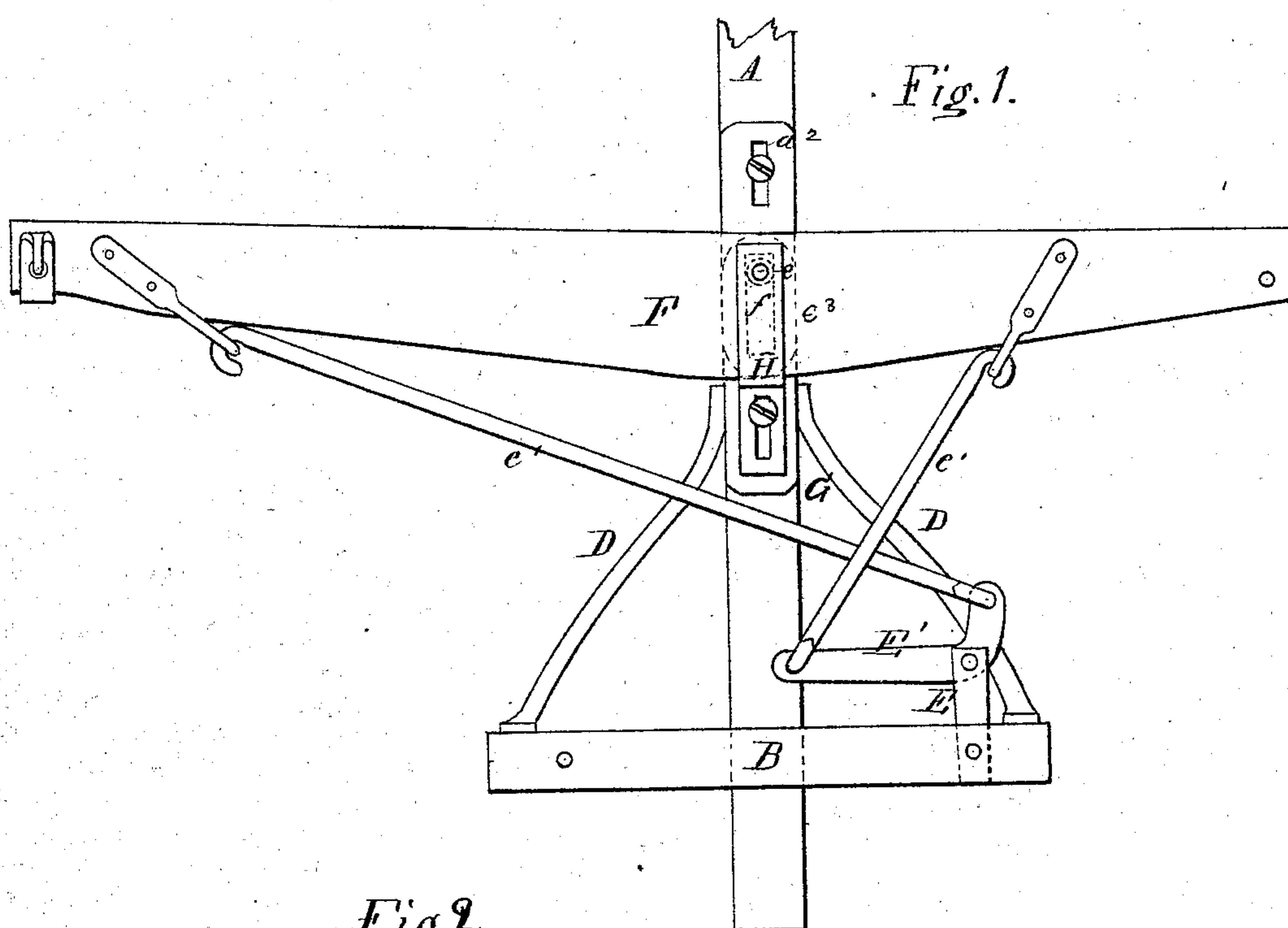
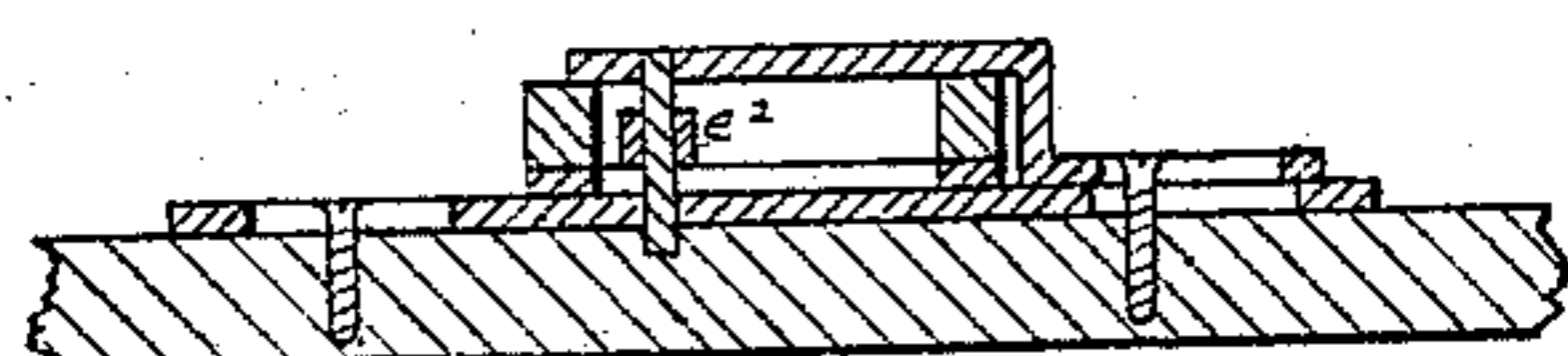


Fig. 2.



Witnesses:
E. A. Dates.
Phil. C. Kasi.

Inventor:
B. W. Sutherlen,
Chapman & Co.,
Attorneys.

UNITED STATES PATENT OFFICE.

BENJAMIN W. SUTHERLEN, OF FILLMORE, MINNESOTA.

IMPROVEMENT IN THREE-HORSE EVENERS.

Specification forming part of Letters Patent No. 135,861, dated February 11, 1873.

To all whom it may concern:

Be it known that I, B. W. SUTHERLEN, of Fillmore, in the county of Fillmore and State of Minnesota, have invented a new and valuable Improvement in Three-Horse Eveners; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a top view of my draft-evenner. Fig. 2 is a partial section of same.

This invention has relation to draft-evenners for reapers, plows, and other implements or vehicles; and it consists in the construction and novel arrangement of devices by means of which three horses may be employed abreast with a perfect equalization of draft, substantially as hereinafter more fully described.

Referring to the drawing, A designates the tongue of a reaper or other implement, having secured to its upper side, near its rear end, the short transverse bar B, braced in position by means of the oblique rods D, extending forward and secured to the side of the tongue, as shown. E represents a forked bar inserted in the front of the bar B near one end, and holding the L-shaped lever E', pivoted at its elbow or angle. F designates the whiffletree, consisting of a transverse bar having a slot, f, cut at one side of the middle to receive a pin, e, secured to the tongue, and adapted to hold the evenner in place. The arms of the whiffletree are of unequal length, and are connected by means of oblique rods e¹ to the lever E', the long arm of the whiffletree being coupled to the short arm of the lever, and the short arm of the evenner to the long arm of the lever, the latter being so arranged that the rods e¹ cross each other nearly at right angles as they approach the former. In arranging three horses abreast, two are hitched to the long arm and

one to the short arm of the whiffletree, and thus the draft upon the lever is equal from both sides of the tongue. The object of the slot in the whiffletree is to allow the latter some degree of play lengthwise of the tongue to compensate for the uneven pulling of the team. The pin e holds a roller, e², to reduce the friction against the sides of the slot. A plate, e³, is attached to the under side of the evenner to prevent the wood from wearing. The pin e projects from a plate, G, with which it may be cast. This plate is secured to the top of the tongue by means of screws passing through longitudinal slots a², and is, therefore, adjustable. The upper bearing of the pin e is a bent, slotted, and longitudinally-adjustable plate, H. The object of having the pin e adjustable by means of the slotted plates is to prevent the end of the slot in the evenner from bearing against it when a sluggish horse is used, and one arm of the evenner thereby caused to fall back of the other. The bar B is adapted to receive the equalizing-lever E' near either end so that the evenner may be arranged to suit the position of standing grain, the side upon which turns are made, &c. The forked bar E fits recesses in the bar B, and, having a hole in its shank, is secured by means of a pin or bolt passing through the same.

What I claim as my invention, and desire to secure by Letters Patent, is—

The draft-evenner, consisting of the transverse movable bar F having arms of unequal length, the oblique rods e¹, the bent lever E' having unequal arms, and transverse bar B, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

BENJAMIN WASHINGTON SUTHERLEN.

Witnesses:

MARVIN EGLESTON,
MARCUS ROBBINS.