

L. CLINTON.

Horse Rake.

No. 84,090.

Patented Nov. 17, 1868.

Fig. 1.

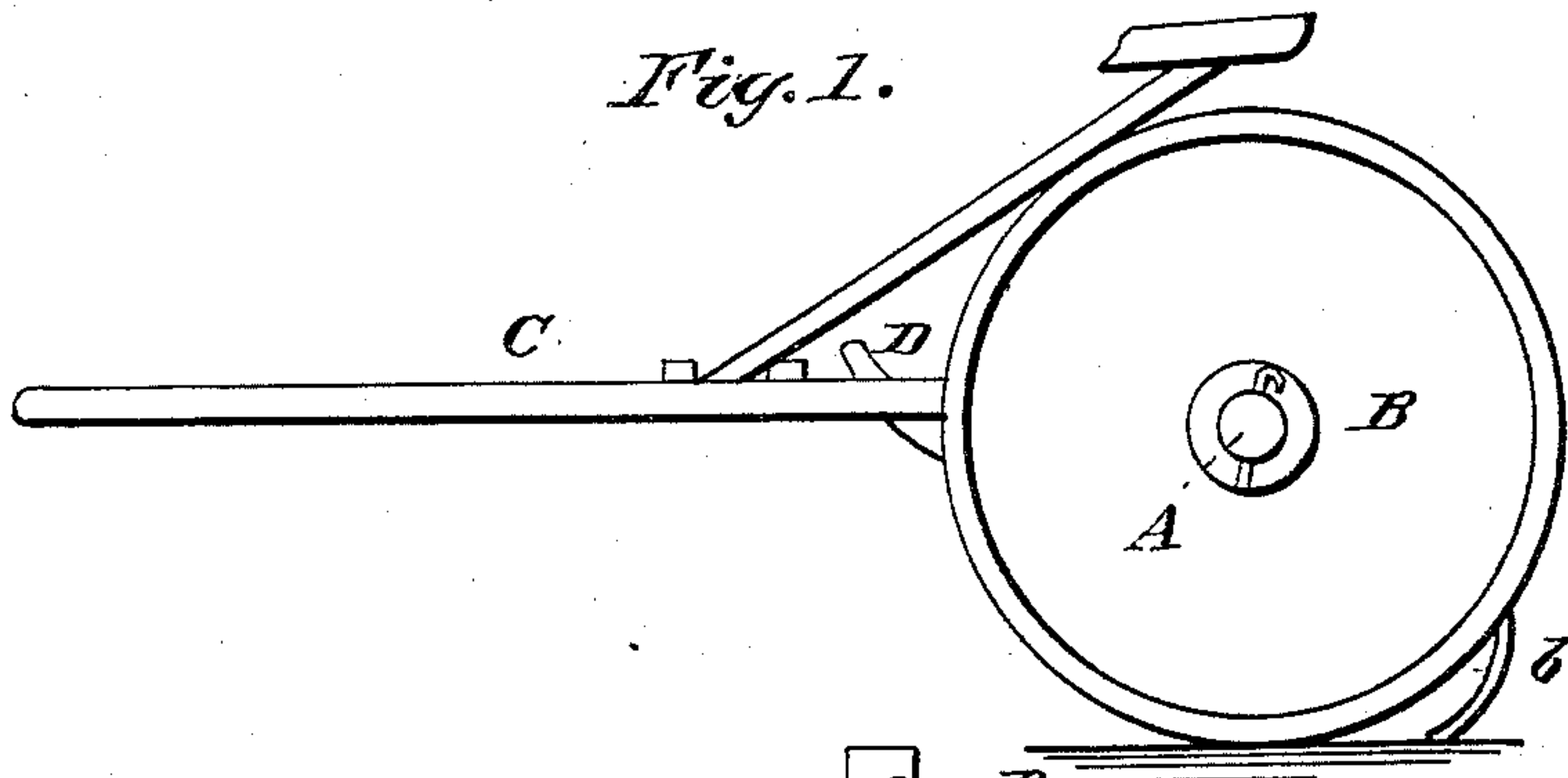


Fig. 2.

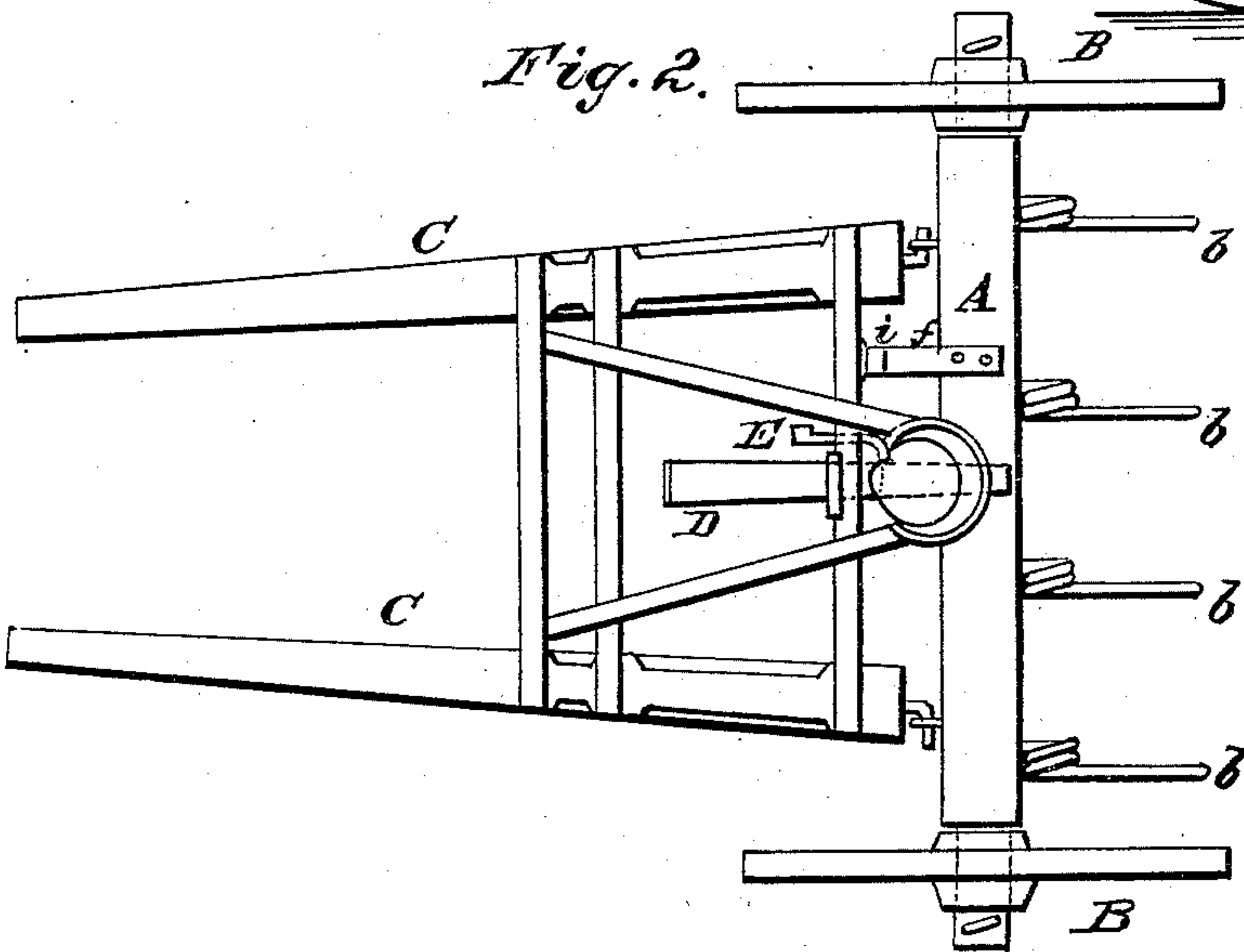
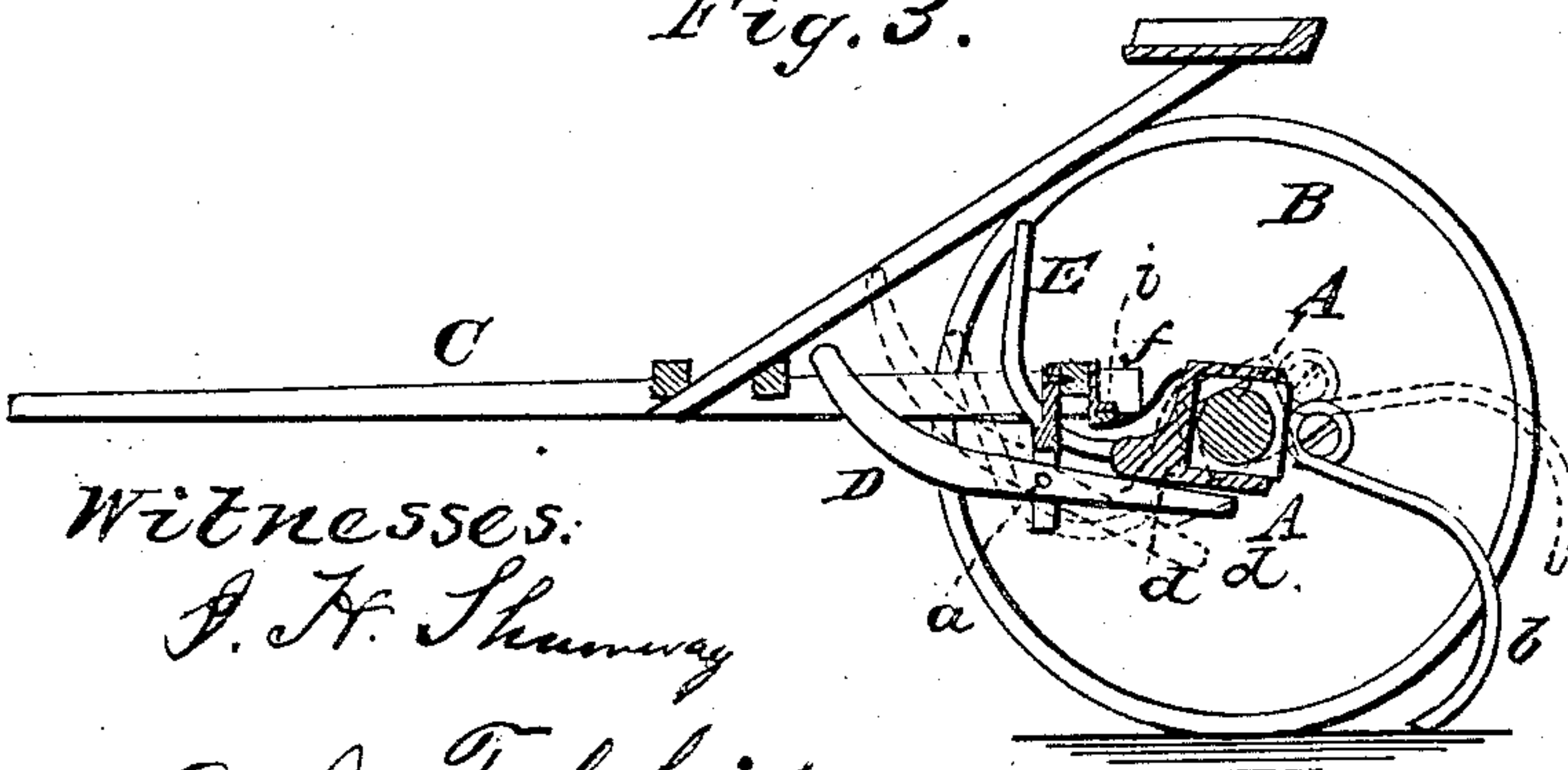


Fig. 3.



Witnesses:

J. H. Shumway

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Inventor:

Lyman Clinton

By his Attorney

John E. Earle



LYMAN CLINTON, OF NORTH HAVEN, CONNECTICUT.

Letters Patent No. 84,090, dated November 17, 1868.

IMPROVEMENT IN HORSE-RAKES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, LYMAN CLINTON, of North Haven, in the county of New Haven, and State of Connecticut, have invented a new Improvement in Horse-Rakes; and I do hereby declare the following, when taken in connection with the accompanying drawings, and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a side view;

Figure 2, a top view; and, in

Figure 3, a sectional view.

This invention relates to an improvement in the horse-rake for which Letters Patent were granted to Lyman Clinton and Ezra S. Munson, dated May 22, 1866, the object being to further simplify the mechanism by which the rake is operated.

To this end, the invention consists in combining with the foot-treadle, which bears down the rake-teeth, a second treadle, attached directly to the axle, by which the rake-teeth may be raised; also, in the arrangement of a spring or elastic stop, to arrest the fall of the teeth.

To enable others to make and use my invention, I will fully describe the same, as illustrated in the accompanying drawings.

A is the axle, supported, in the usual manner, in wheels B B; and to the said axle the rake-teeth *b* are fixed; and also to the said axle, shafts C C are fixed, so that the axle may be turned on the shaft-connections, to raise or lower the teeth, as denoted in fig. 3.

D is a treadle or lever, pivoted at *a*, (see fig. 3,) its other end bearing upon a projection, *d*, on the axle, by which means the teeth are pressed downward.

E is a treadle, attached directly to the axle A, and is made a part of the projection *d*, and is placed in

such relative position to the treadle D as to be operated by the same foot which operates the said treadle D, both treadles never requiring to be operated at the same time.

To press down the teeth, place the foot on the treadle D, and hold down, as seen in fig. 3.

To raise the teeth, remove the foot from the treadle D; place it upon and press down the treadle E, as denoted in red, fig. 3. Then the axle will be turned so as to raise the teeth, as denoted in red, fig. 3.

If the teeth were left from the action of either treadle, they would drag upon the ground, and often occasion difficulties by dropping into or striking uneven places on the surface of the ground. To avoid this, I arrange a spring, *f*, upon the axle, and upon the cross-bar, or any convenient point on the shafts, I fix a stop, *i*, against which the said spring will strike, and thus easily arrest and support the teeth in a proper position, but yet so as to yield to the pressure of the treadle D, to allow the teeth to be forced further down, if necessary.

By this arrangement, if the teeth, when in an up position, are entirely freed from contact with the foot, their fall will be arrested by the said spring and stop, and prevent their striking hard into the earth.

Having fully described my invention,

What I claim as new and useful, and desire to secure by Letters Patent, is—

The combination and arrangement of the two treadles D and E with the axle A, the one fixed directly to the axle, and both in relative position to each other, so as to be operated in the manner specified.

LYMAN CLINTON.

Witnesses:

J. H. SHUMWAY,

A. J. TIBBITS.