

L. CLINTON.
Horse Rake.

No. 86,366.

Patented Feb. 2, 1869.

Fig. 1.

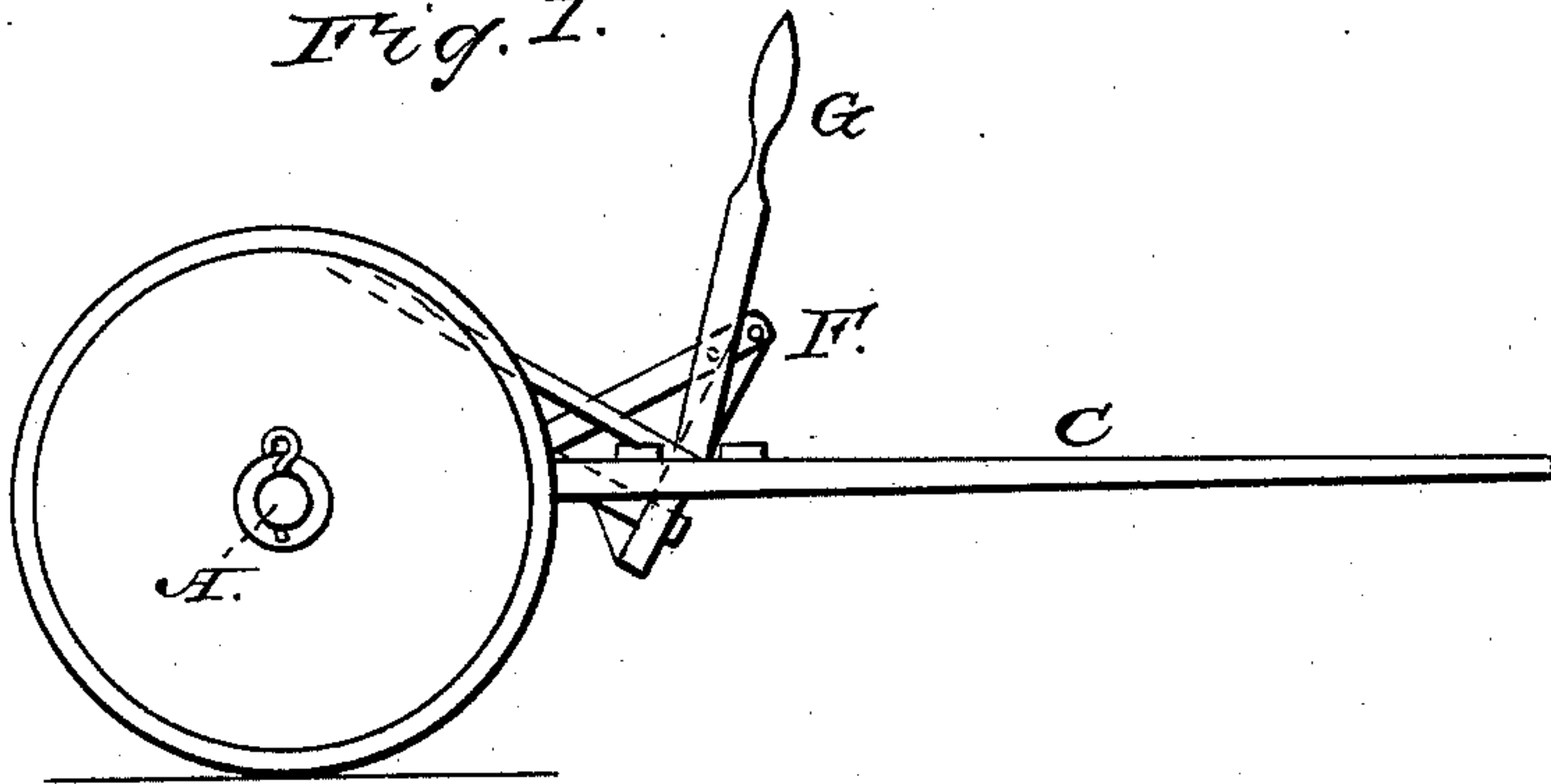


Fig. 2.

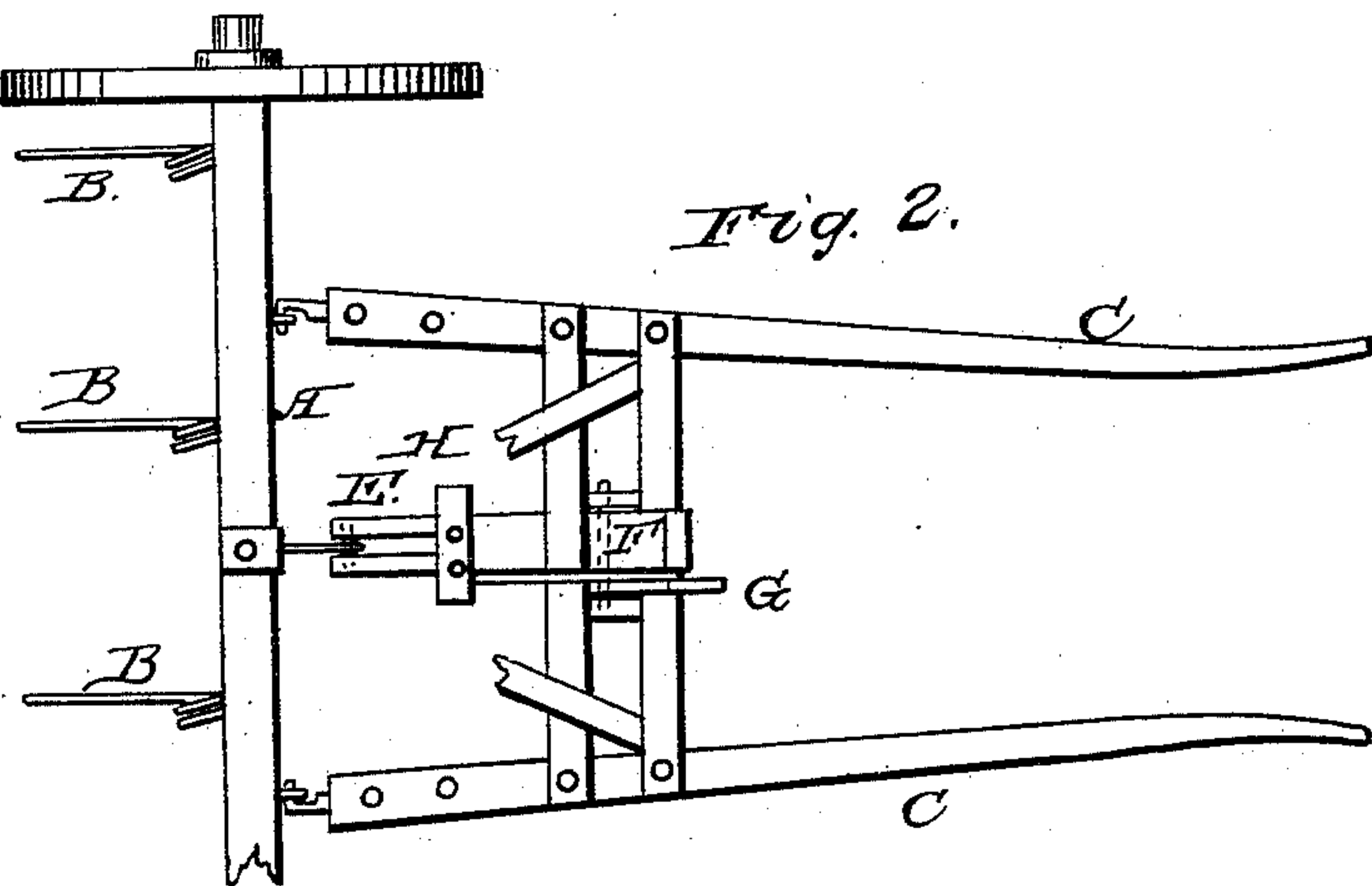


Fig. 5.

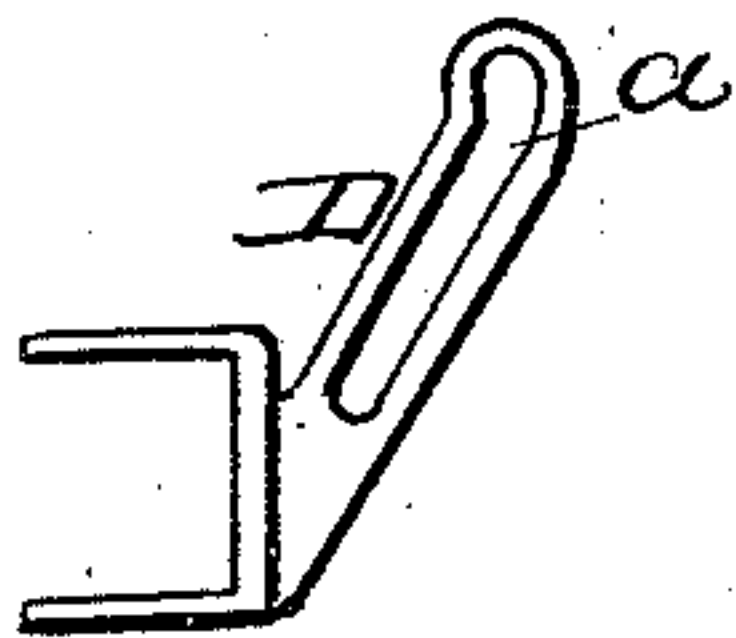


Fig. 3.

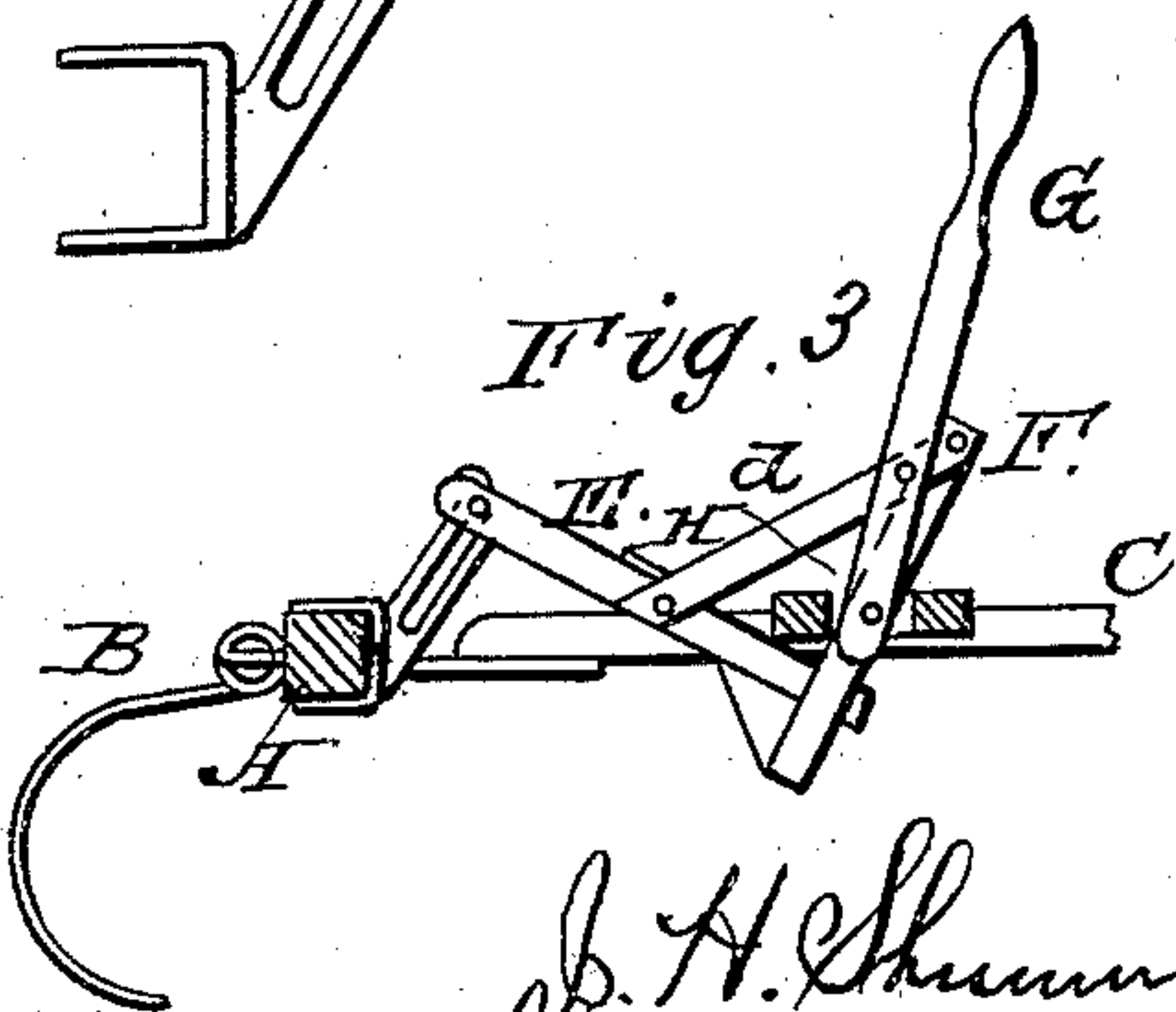
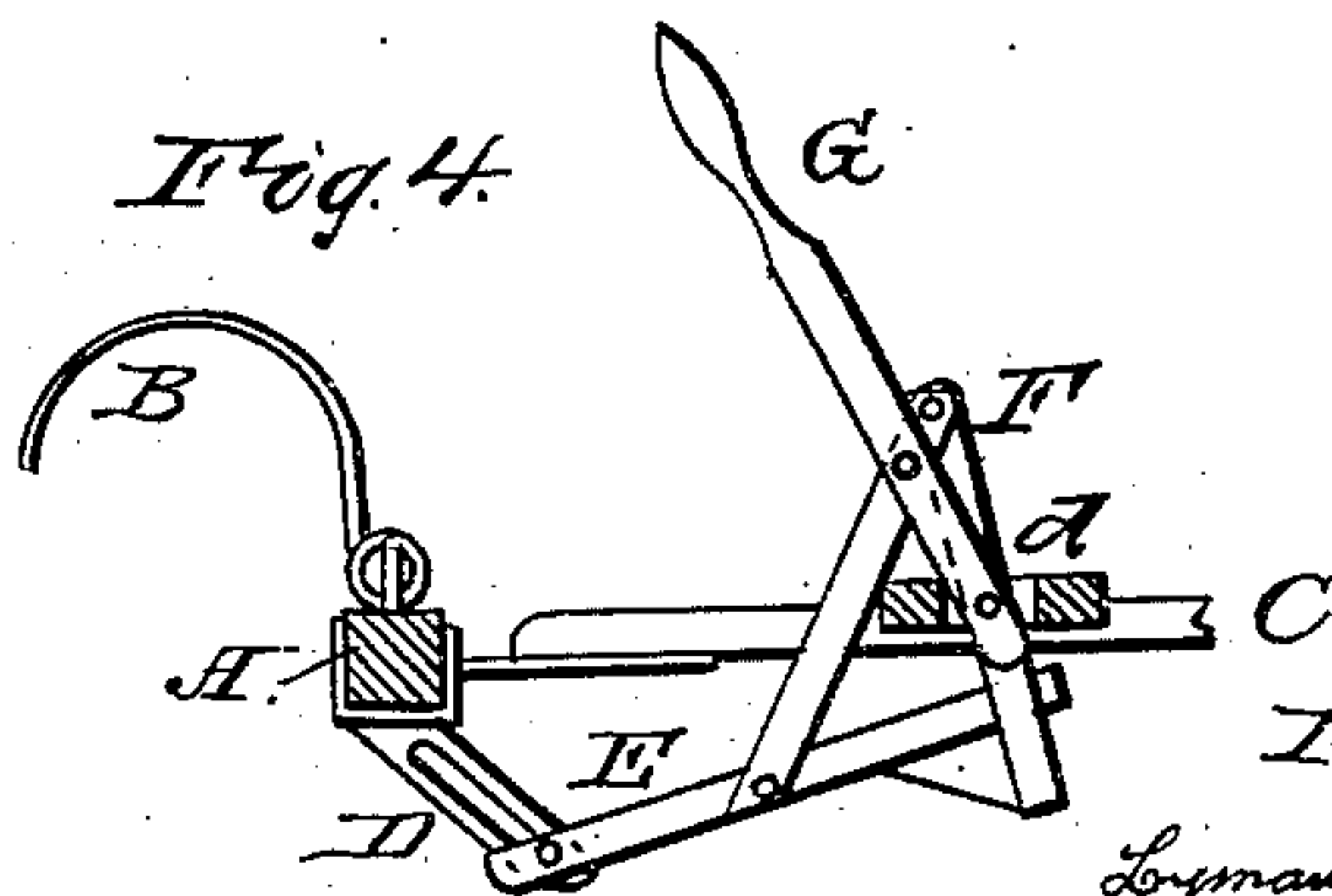


Fig. 4.



Witnesses
J. H. Shumway
A. J. Tibbits.

Inventor.
Lyman Clinton
By his Attorney
John E. Earl

UNITED STATES PATENT OFFICE.

LYMAN CLINTON, OF NORTH HAVEN, CONNECTICUT.

IMPROVEMENT IN HORSE-RAKES.

Specification forming part of Letters Patent No. 86,366, dated February 2, 1869.

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; Fig. 2, a top view; Figs. 3 and 4, sectional views; and in Fig. 5, a side view of the adjusting-guide detached.

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 simplify the adjustment or working of the rake; and the invention consists in combining the lever which operates the rake with the axle by means of a slotted slide fixed to the axle, and in which slot the lever operates, so that by turning the lever the rake is raised or lowered.

To enable others to construct and use my improvement, I will proceed to describe the same as illustrated in the accompanying drawings.

A is the axle; B B, the rake-teeth, fixed to the axle; C C, the shafts, pivoted to the axle in like manner as in the patent before referred to. Onto the axle is fixed a slotted slide, D, (shown detached in Fig. 5,) into which slot one arm, E, of a lever works by a friction-roll in the slot, or other suitable connection, the said lever pivoted at *d*, the other arm, F, of the lever extending up in front of the driver, so that he may place his foot thereon; or there may be attached to the said lever a handle, G, so as to operate the said lever by the said handle.

In Fig. 4 the rake-teeth are represented as

raised, as when not in use. To turn the axle so as to throw the teeth down, as in Fig. 3, place the foot upon the arm F of the lever, forcing it forward to the position denoted in Fig. 3. This raises the arm E of the lever, and consequently the axle, through connection with the axle, by means of the slotted guide D, until the teeth are sufficiently depressed to gather the grass or grain; or this operation may, if preferred, be performed by hand, in connection with the lever G. To raise the teeth, place the foot upon the lever E, or the cross-bar H thereon, and depress the said arm E, and the lever-connection will pass down through the slot in the guide D and turn up the rake, as in Fig. 4. Thus the construction is very much simplified, and in no way liable to get out of repair.

The upper end of the slot in the guide D, I turn up, as at *a*, Fig. 5, so that when the rake-teeth are depressed to a level the connection between the said guide and arm E will pass up into the said curved end of the slot, which by its curvature brings the two into such position that the slot little more than passes a right angle into the lever, so that the connection, resting in the upper end of the said slot, will hold the rake in a depressed or level position without the assistance of the hand or feet of the driver, thus making the rake, to a certain extent, automatic in its adjustment.

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

In combination with the lever, axle, and slotted guide, constructed as described, the curvature *a* of the slot, so as to operate substantially as set forth.

LYMAN CLINTON.

Witnesses:

J. H. SHUMWAY,
A. J. TIBBITS.