

Horse Rake.

Patented Jan'y 30, 1866.

FIG. 1.

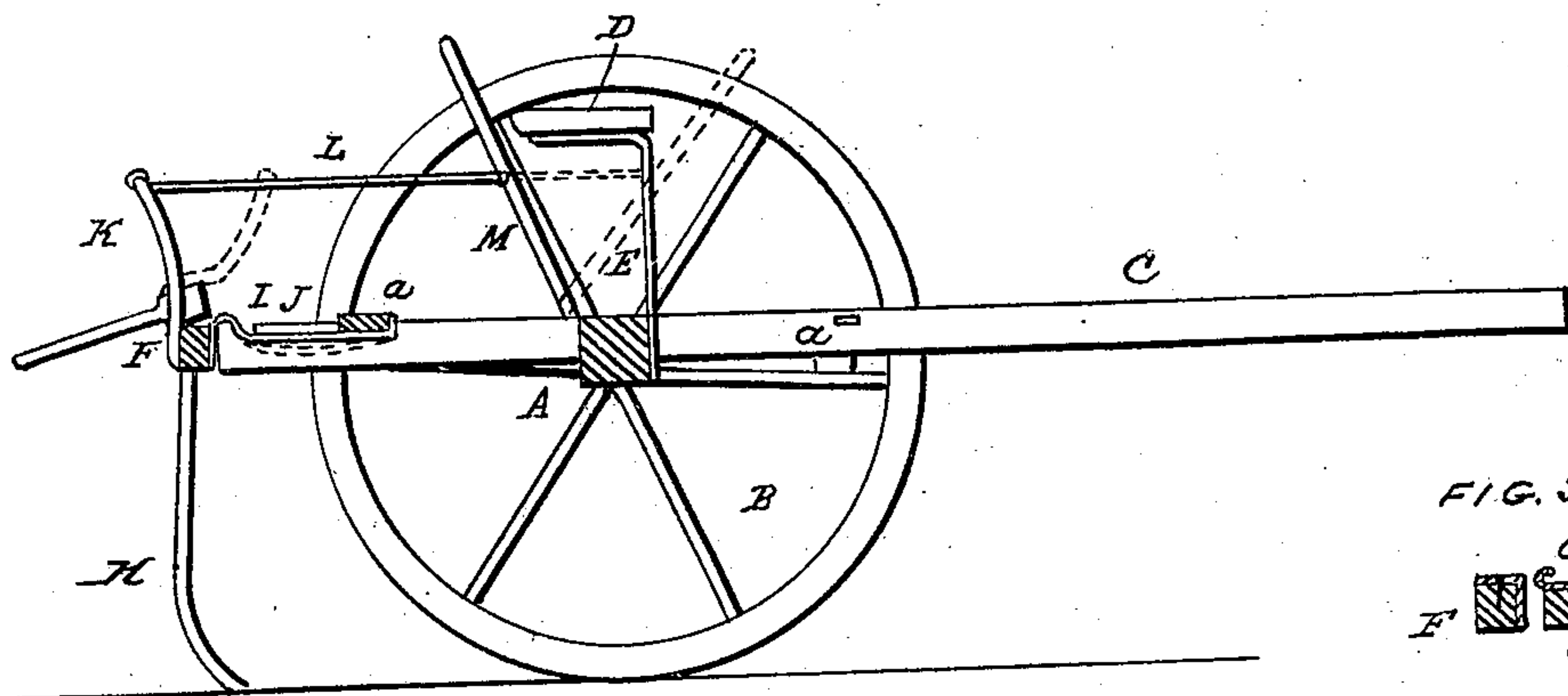
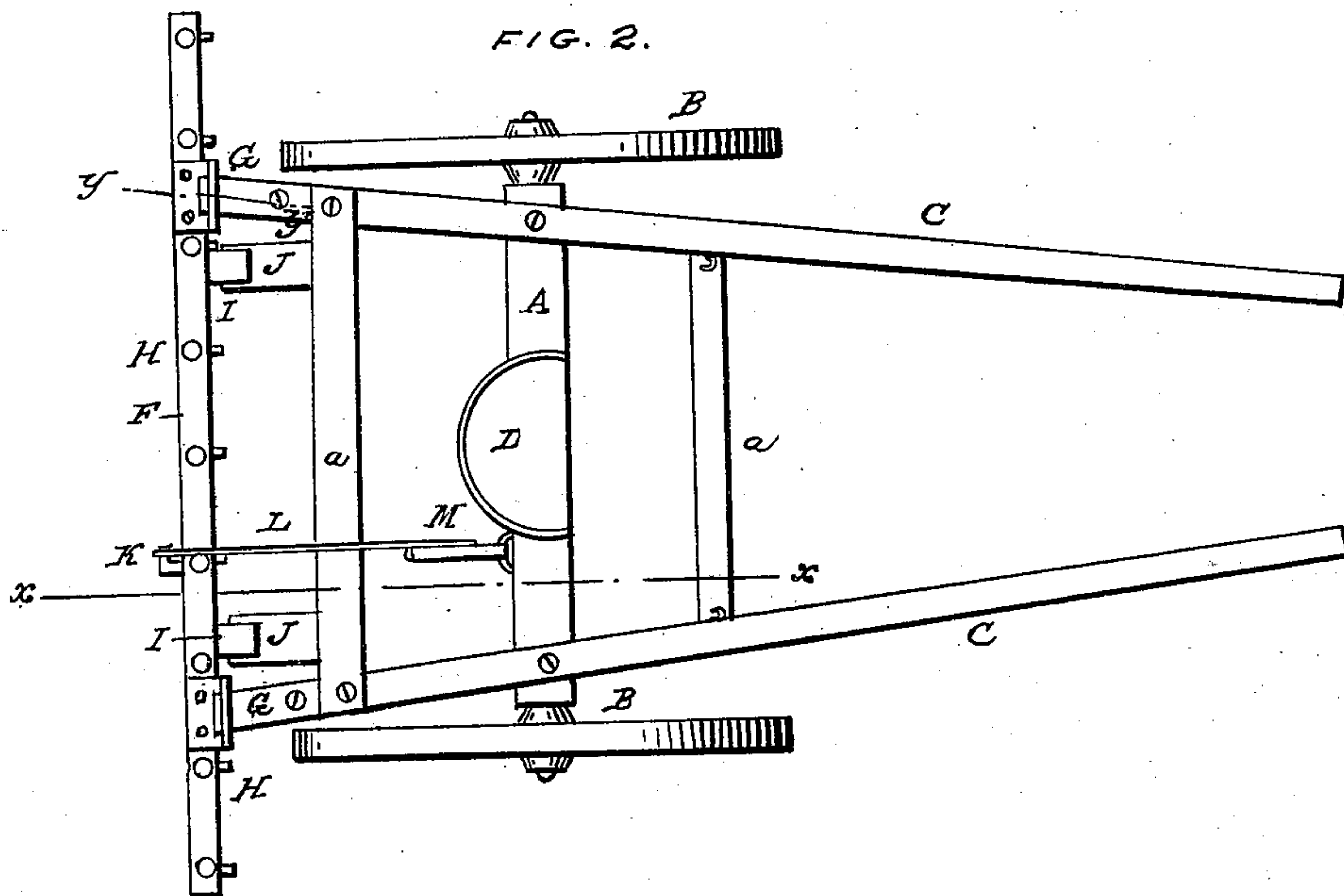


FIG. 3.



FIG. 2.



Wm. Brown
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R. M. Ewing
By M. M. Ewing
Att'y.

UNITED STATES PATENT OFFICE.

R. M. EWING, OF CLINTON, ILLINOIS, ASSIGNOR TO HIMSELF AND L. H. COPE, OF SAME PLACE.

IMPROVEMENT IN HORSE-RAKES.

Specification forming part of Letters Patent No. 52,360, dated January 30, 1866.

To all whom it may concern:

Be it known that I, R. M. EWING, of Clinton, in the county of De Witt and State of Illinois, have invented a new and Improved Horse-Rake; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side sectional view of my invention, taken in the line *x x*, Fig. 2; Fig. 2, a plan or top view of the same; Fig. 3, a section of a portion of the same, taken in the line *y y*, Fig. 2.

Similar letters of reference indicate corresponding parts.

The object of this invention is to obtain a horse-rake which will be extremely simple in construction, readily manipulated or operated so that it may discharge its load and the teeth lowered or brought back again to their work, and the teeth allowed to yield or give to obstructions which may be in their path.

A represents an axle having a wheel, B, at each end of it, and C C are the thills, which are framed into the axle and extend beyond its rear side a considerable distance. These thills have cross-bars *a a* attached to them, one in front and the other at the rear of the axle.

D is the driver's seat attached to a standard, E, which is secured to the axle, and F is the rake-head, which is secured to the rear ends of the thills C C by means of hinges G, which admit of the rake-head turning upward, the hinges being secured to the upper surfaces of the thills and rake-head.

H represents the rake-teeth, which may be

constructed of wood and curved forward at their lower ends, as shown in Fig. 1; and I I represent two bars or lips, which are secured to the rake-head and project forward from the front side, said bars or lips having springs J bearing against them to keep the teeth H down to their work. These springs J J are secured to the rear cross-bar *a* of the thills, and they should have sufficient strength to keep the teeth H down to their work and still admit of the teeth yielding or giving to any obstruction which may be in their path.

The rake-head has an arm, K, attached to it, which projects upward a suitable distance, and has a rod, L, connected to it, said rod extending forward and having its front end attached to a lever, M, which is secured to the axle A within convenient reach of the driver on seat D.

When the device is at work and the rake is filled the load is discharged by throwing forward the lever M, thereby raising the rake-teeth, and by slightly jerking the lever M backward the springs J J are made to throw the teeth down to a working position.

The arrangement, it will be seen, is an extremely simple one. There are no parts liable to get out of repair or become deranged by use.

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

The arrangement of the rake-head F, hinges G G, springs J J, lips I I, in combination with the thills C C, in the manner as and for the purpose herein specified.

R. M. EWING.

Witnesses:

HIRAM P. SMITH,
JAMES DELAY.