

S. EBERLY.

Horse Rake.

No. 43,980.

Patented Aug. 30, 1864.

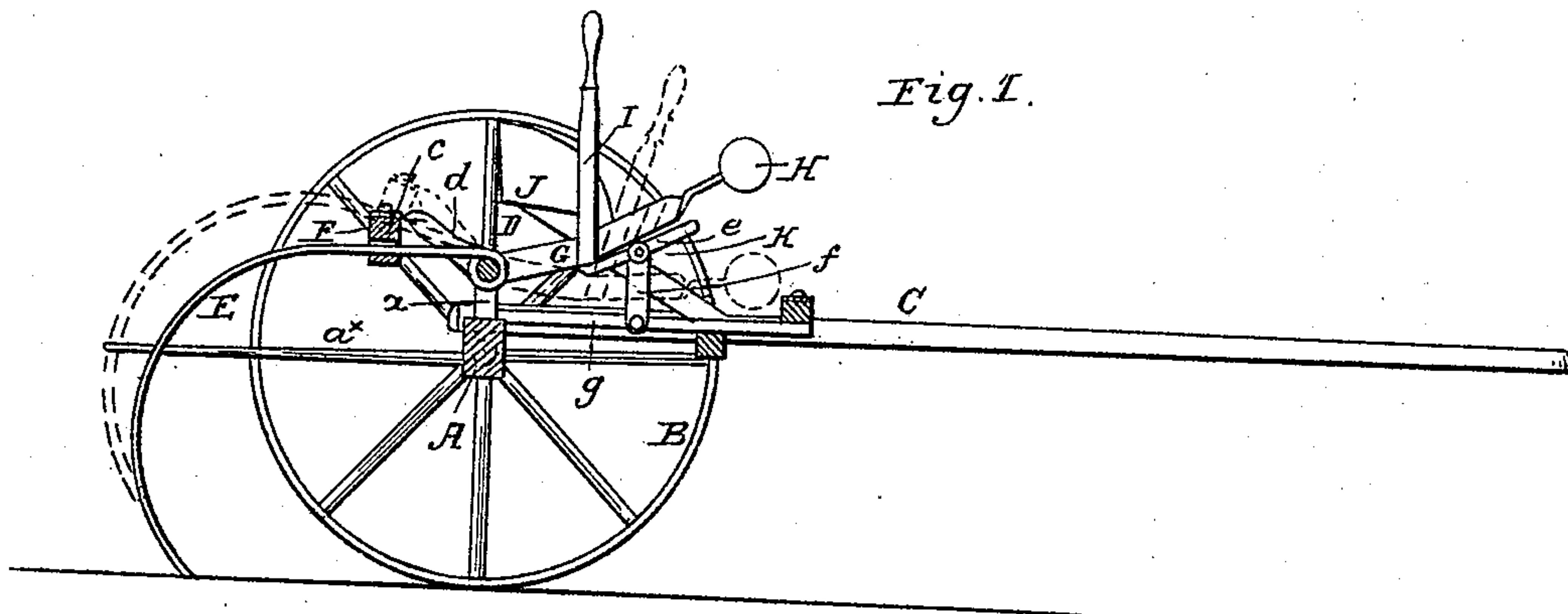


Fig. 1.

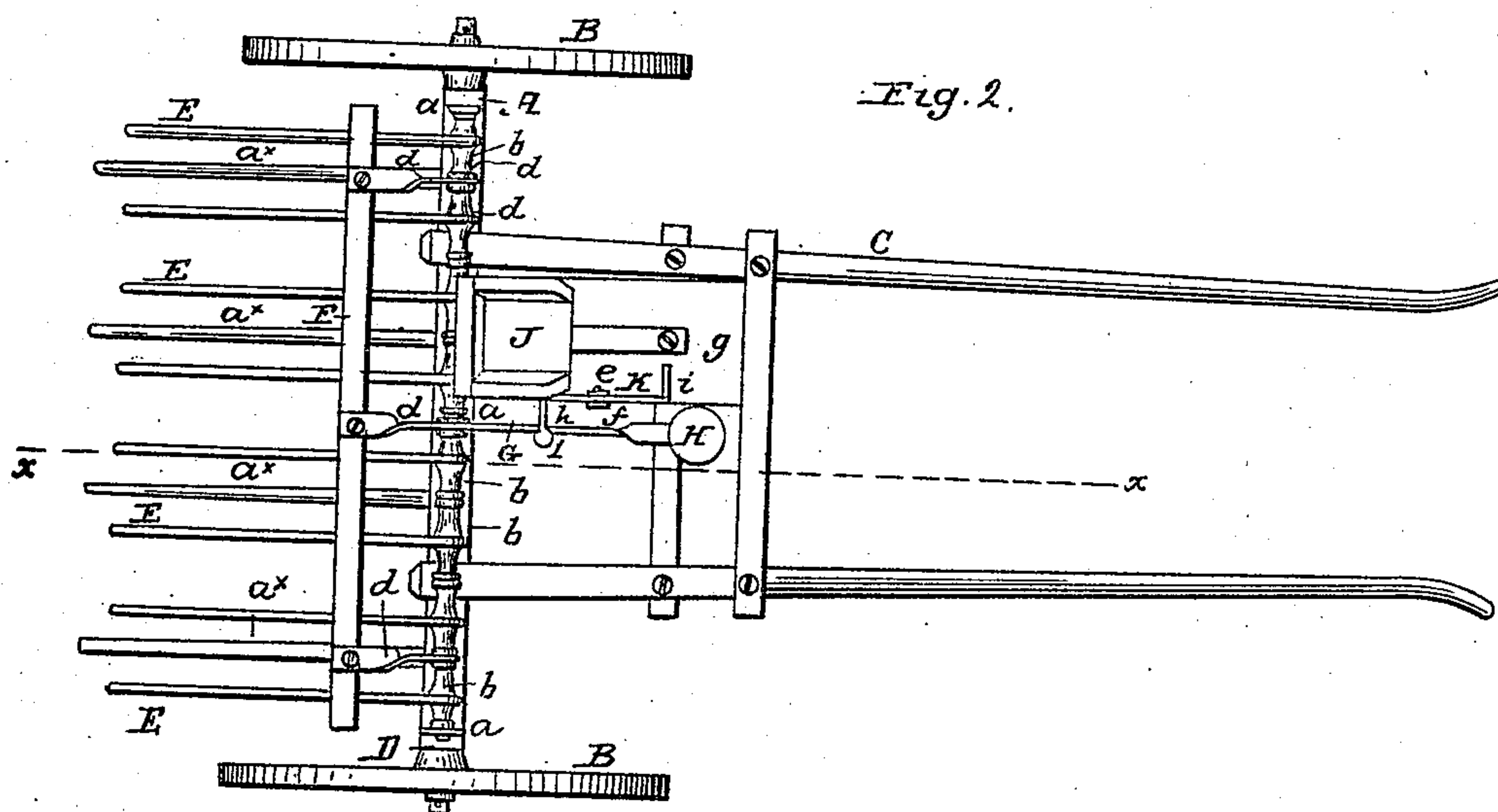


Fig. 2.

Witnesses:  
J. M. Brown  
Henry Morris

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per *James H. [unclear]*  
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# UNITED STATES PATENT OFFICE.

S. EBERLY, OF MECHANICSBURG, PENNSYLVANIA.

## IMPROVEMENT IN HORSE-RAKES.

Specification forming part of Letters Patent No. 43,980, dated August 30, 1864.

*To all whom it may concern:*

Be it known that I, S. EBERLY, of Mechanicsburg, in the county of Cumberland and State of Pennsylvania, have invented a new and Improved Horse-Rake; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

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

Similar letters of reference indicate corresponding parts in the two figures.

This invention relates to a new and improved horse-rake of that class in which wire teeth are used; and it consists in an improved mode of operating the rake—that is to say, raising and lowering it so that it may discharge its load, and keeping it in proper position while performing its work.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents an axle having a wheel, B, on each end of it, and thills C attached to its front side. These parts may be constructed in the usual way, and therefore do not require a minute description.

D represents a shaft, which is supported by uprights *a* on the axle A; and on this shaft there are placed a series of hubs, *b*, which are allowed to turn freely thereon, and have each a wire rake-tooth, E, attached to them. These rake-teeth are curved and constructed in the usual way, and each tooth passes through a hole, *c*, in a bar, F, which has arms *d* attached to it, the front ends of said arms being fitted loosely on the shaft D. One of these arms *d*—the central one—is attached to a bar, G, which projects in front of the shaft D, and has a weight, H, on its front end, said weight serving as a counterpoise for the rake, so that the latter may be readily raised in order to discharge its load and gradually or gently low-

ered to its work, the bar F serving to connect the rake-teeth with the said bar G.

I is an upright lever, the lower end of which is attached to the bar G. This lever extends upward by the side of the driver's seat J, within convenient reaching distance of the driver.

K is a lever, which has its fulcrum *e* at the upper end of an upright rod, *f*, the lower end of which is attached to one side of a platform, *g*, at the back part of the thills C. The back end of this lever K is bent, as shown at *h*, and projects underneath the bar G; and its front end is also bent, as shown at *i*, to serve as a foot-piece for the driver.

The rake-teeth, it will be seen, are elevated by shoving forward the lever I and lowered by drawing it back or pressing down the front end of the lever K with the foot. This lever K, however, is chiefly designed for keeping the rake-teeth down to their work, so as to insure the same being properly done. The weight H causes the rake to be operated with the greatest ease and facility, and hence the necessity for the foot-lever K, for, in consequence of the rake being nearly balanced, it might casually rise or be thrown upward by slight obstructions or inequalities in the surface of the ground. The usual rake-cleaning arms, *a*<sup>x</sup>, are attached to the axle A.

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

The bar F, provided with holes *c* for the rake-teeth E to pass through, and connected by arms *d* to the shaft D, on which the hubs *b* of the rake-teeth are fitted or placed loosely, in combination with the bar G, provided with the weight or counterpoise H, the upright lever I, and foot-lever K, all arranged and applied to operate substantially in the manner as set forth.

SAMUEL EBERLY.

Witnesses:

GEORGE BOBB,  
JOSEPH LEAS.