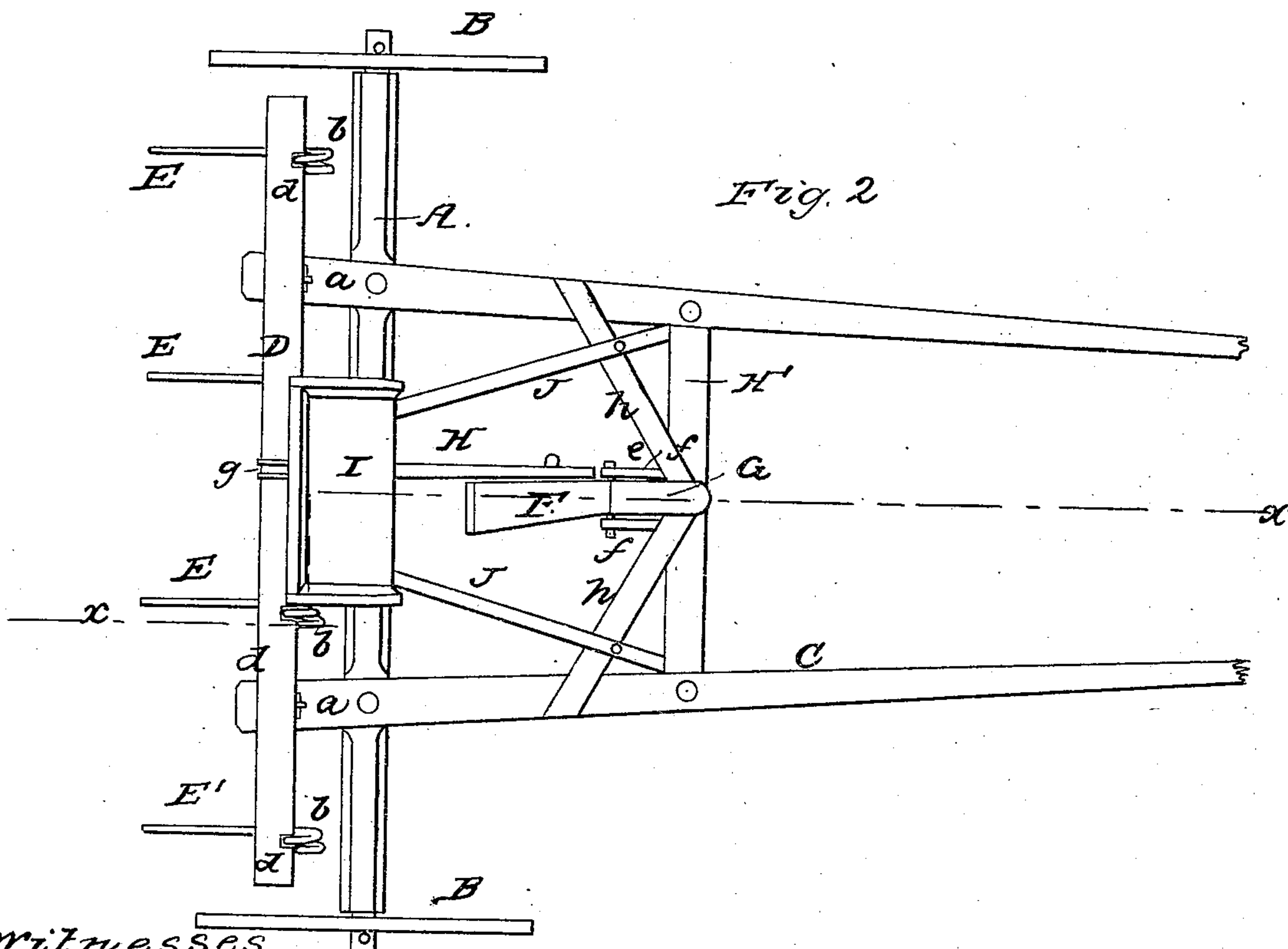
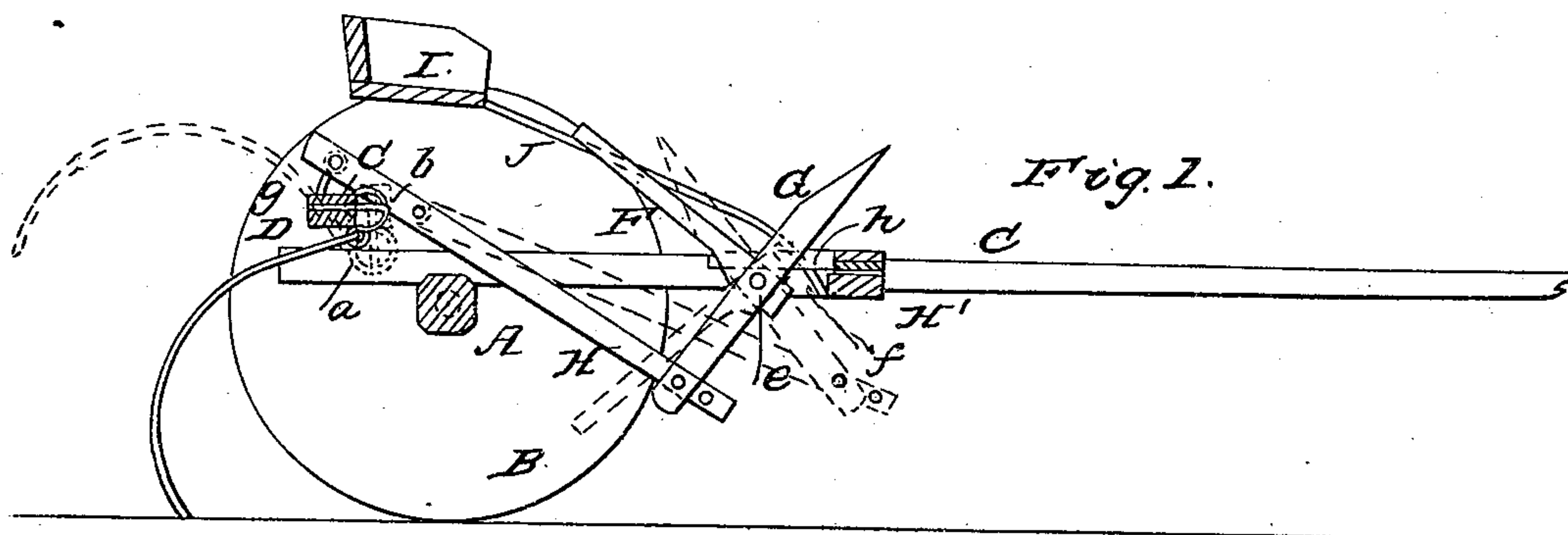


C. JENNINGS.

Horse Rake.

No. 42,664.

Patented May 10, 1864.



Witnesses

*Thos H. Douglas*  
*Geo W. Reed*

*Inventor*  
*Charles Jennings*  
*per Munn Ho*  
*attorneys.*

# UNITED STATES PATENT OFFICE.

CHARLES JENNINGS, OF EASTON, CONNECTICUT.

## IMPROVEMENT IN HORSE-RAKES.

Specification forming part of Letters Patent No. 42,664, dated May 10, 1864.

*To all whom it may concern:*

Be it known that I, CHARLES JENNINGS, of Easton, in the county of Fairfield and State of Connecticut, 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 is a plan or top view of the same.

Similar letters of reference indicate corresponding parts in both figures.

To enable others 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, fitted loosely on each end of it, and C C are thills which are permanently attached to the axle and extend a short distance behind it.

D is the rake-head, which is attached to the back end of the thills C C by joints *a a*.

E represents wire-teeth, which may be of the usual curved form, as shown in Fig. 1. The inner ends of these teeth are bent or curved, so as to form two or more convolutions, *b*, and terminate in straight parts *c*, which are inserted into the front side of the rake-head, one of the convolutions of each tooth fitting in a groove or recess, *d*, made in the rake-head. By this mode of attaching the teeth to the rake-head it will be seen that a firm connection is obtained, for the rake, as it is drawn along, has a tendency to force the inner ends of the teeth more firmly into the head, while at the same time the teeth may, when desired, be readily drawn from the rake-head. In consequence of having one of the convolutions of each tooth fitted in a groove or recess, *d*, in the front side of the rake-head, the teeth are protected from lateral strain and prevented from being bent

or turned laterally out of their proper position.

F G represent two levers, which work on a common fulcrum, *e*, fitted in projections *ff*, attached to a cross-piece, H', of the thills C C. These levers F G are at right angles to each other, and one of them, G, extends down some distance below the other, F, and is connected by a rod, H, with an arm, *g*, at the upper side of the rake-head D. The levers F G are operated upon by the feet of the driver and the rake-teeth raised or lowered thereby. When the lever G is pressed forward the rod H presses the rake-head D down upon or toward the upper surfaces of the thills, and the teeth E are consequently forced down toward the earth, and by pressing down the lever F the rake-teeth are raised, as shown in red. Thus by this simple arrangement the rake-teeth may be readily raised to discharge their load, kept down upon the earth with any requisite degree of pressure, or temporarily raised to clear obstructions which may be in their path.

I is the driver's seat, which is attached to spring-bars J J, the front ends of which are secured to braces *h h*, attached to the thills C C and the cross-piece H' thereof. The seat I is at such a distance from the levers F G that the latter may be actuated by the feet of the driver.

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

The arrangement of the rocking levers F G and rod H with each other, and with the rake-head D and seat I, in the manner herein shown and described.

CHAS. JENNINGS.

Witnesses:

J. SHERWOOD ADAMS,  
NILO HALL.