

*B. S. & J. Mellinger,
Horse Rake*

No. 36961

Patented. Nov. 18. 1862.

Fig: 1.

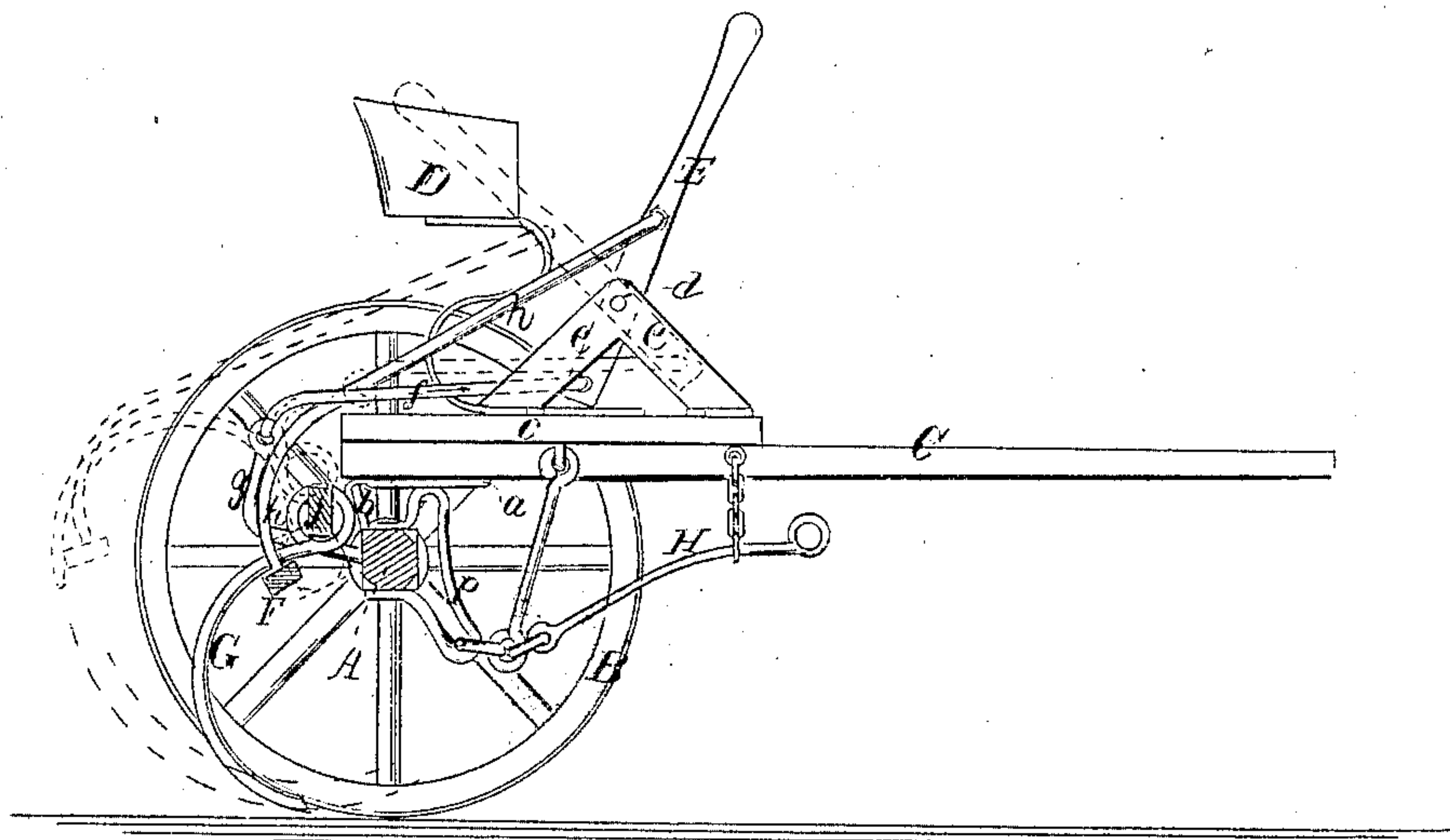
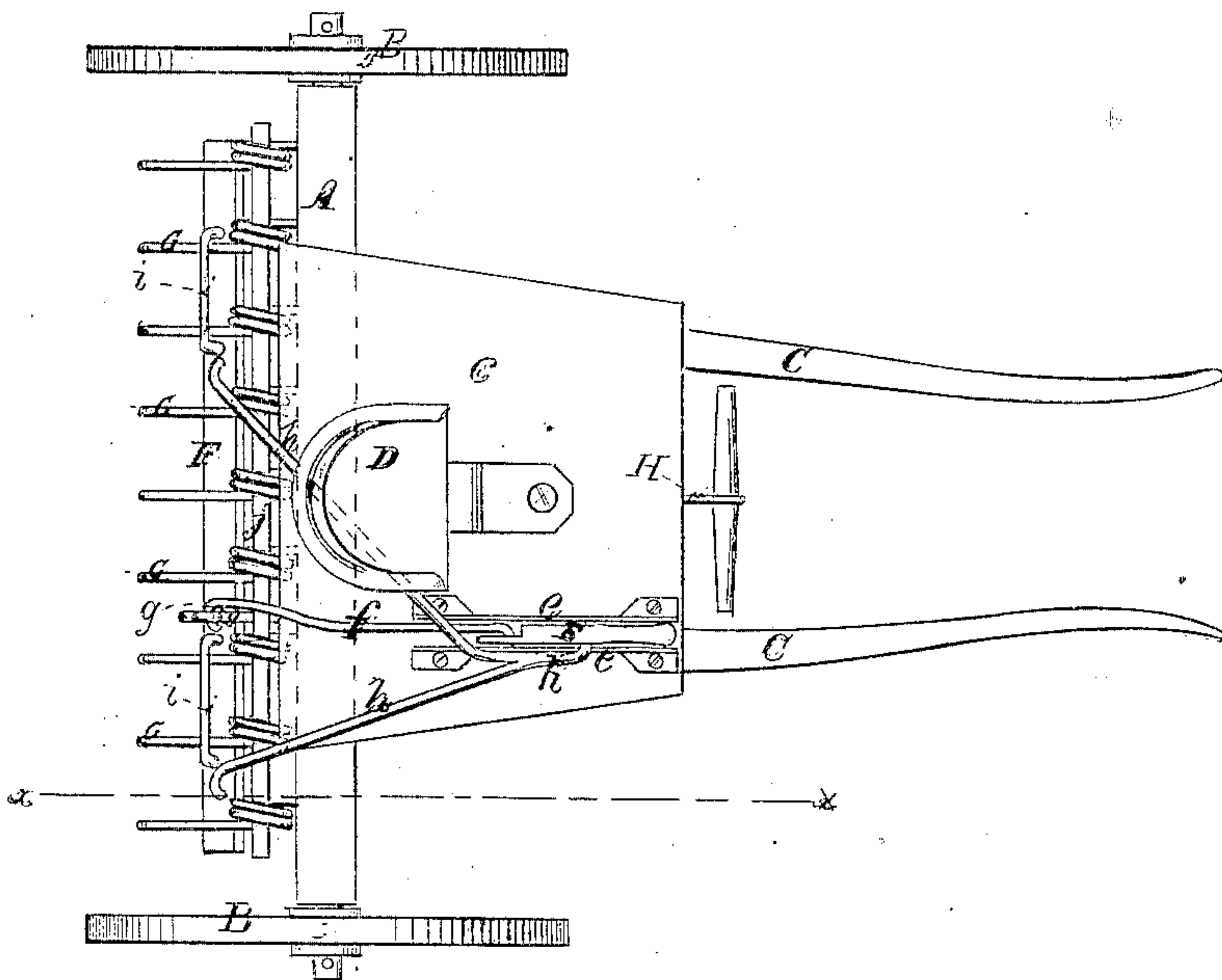


Fig: 2.



WITNESSES.

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UNITED STATES PATENT OFFICE.

B. MELLINGER, S. MELLINGER, JR., AND J. MELLINGER, OF MOUNT PLEASANT,
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IMPROVEMENT IN HORSE-RAKES.

Specification forming part of Letters Patent No. 36,961, dated November 18, 1862.

To all whom it may concern:

Be it known that we, B. MELLINGER, S. MELLINGER, Jr., and J. MELLINGER, all of Mount Pleasant, in the county of Westmoreland and State of Pennsylvania, have invented a new and Improved Horse-Rake; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a longitudinal vertical section of our invention, the line *xx*, Fig. 2, indicating the plane of section. Fig. 2 is a plan or top view of the same.

Similar letters of reference in both views indicate corresponding parts.

The object of this invention is to obtain a simple and efficient horse-rake, which may be constructed at a small cost and by any one of ordinary ability familiar with mechanics' tools, and at the same time be capable of being operated—that is to say, have its teeth raised and lowered for the purpose of discharging the load and adjusting them again in proper working position with the greatest facility.

Our present invention is intended as an improvement on a horse-rake on which a patent has been granted to us, May 13, 1862; and it consists in the arrangement of a double-armed lever, in combination with the axle to which the rake-teeth are secured and with a clearer suspended by means of staples from said rake-teeth in such a manner that by the action of said lever the rake-teeth can be raised, and at the same time the clearer is made to slide out toward the points of said teeth whenever it is desired to discharge the load gathered up by them.

To enable those skilled in the art to make and use our invention, we will proceed to describe its construction and operation with reference to the drawings.

A represents the axle, which has the wheels B B placed loosely on it, and C C are thills, which are connected to the axle by straps *a* and staples *b* in such a manner that said thills are allowed to rise and fall independent of the axle. On the thills rests the platform or foot-board *c*, which supports the driver's seat D.

E is a double-armed hand-lever, which has its fulcrum on a pivot, *d*, in standards *e*, which rise from the platform *c*. The lower end of this hand-

lever connects by a rod, *f*, with a curved or angular arm, *g*, which is firmly inserted into the axle A in such a position that by exerting on the rod *f* a strain in the direction of the arrow marked upon it in Fig. 1 the axle is turned and brought in the position shown in red outline in the same figure. The upper arm of the hand-lever E connects by a rod, *h*, with the clearer F, which is constructed of a bar of wood or other suitable material suspended by means of staples *i* from the rake-teeth G. These teeth are made of metal wire, and they are inserted into the axle A in the usual manner, and strengthened in their positions by a notched bar, *j*, passing through and attached to the several coils formed at the upper extremities of said teeth.

H is the draft-bar, which is secured to a curved loop or clevis, *k*, secured directly to the axle A, as described in our Letters Patent mentioned above.

The operation of this horse-rake is as follows: The rake is drawn over the field, and by the strain of the draft-bar H on the clevis *k* the teeth G are held down on the ground, so that they readily gather up hay or straw or whatever substance it may be intended to collect. During this operation the hand-lever E assumes the position shown in black outlines in Fig. 1. If it is desired to discharge the load gathered up by the teeth, the lever E is turned back to the position shown in red outlines in the same figure, and by this motion and by the action of the connecting-rods *f h* the teeth are raised and at the same time the clearer F is pushed out close to the points of the teeth, and thereby the operation of discharging the load that may have been gathered up by the teeth is considerably facilitated, and not a particle of grass, hay, or other substance constituting said load is allowed to remain on or between the same. After the teeth have thus been cleared the lever E is turned back to its original position, and by this action the teeth are turned down again, so that their points bear on the ground, and the operation of raking is proceeded with the same as before. Thus by this simple arrangement it will be seen that the teeth may be raised and lowered with the greatest facility, and also the clearer or bar F, both being moved simultaneously and without the aid of any special device other than the lever E.

This invention may be constructed at a small cost. An axle and wheels of an ordinary old vehicle will admit of being readily converted into a rake like the one described.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

The arrangement of the double-armed lever E and connecting-rods *f h*, in combination with

the axle A, rake-teeth G, and clearer F, all constructed and operating as and for the purpose shown and described.

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Witnesses:

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