(No Model.)

H. ROGERS.

REVOLVING HORSE HAY RAKE.

No. 282,375. Patented July 31, 1883.

Fig. 1.

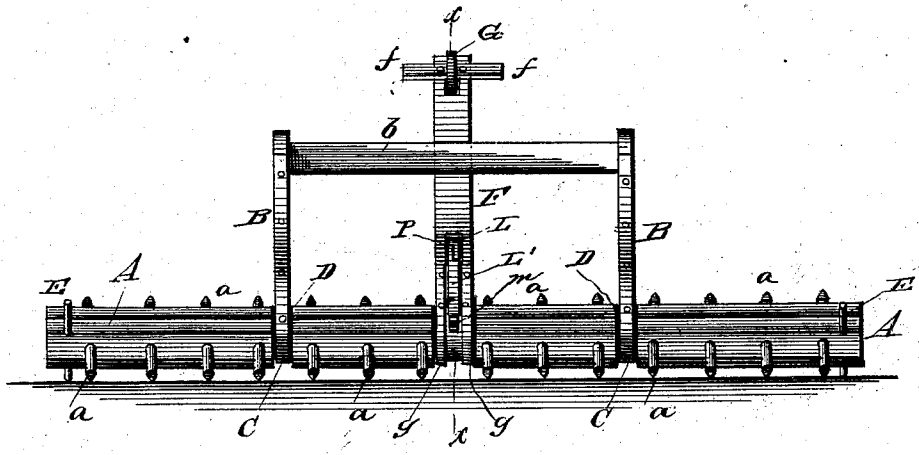


Fig. 2.

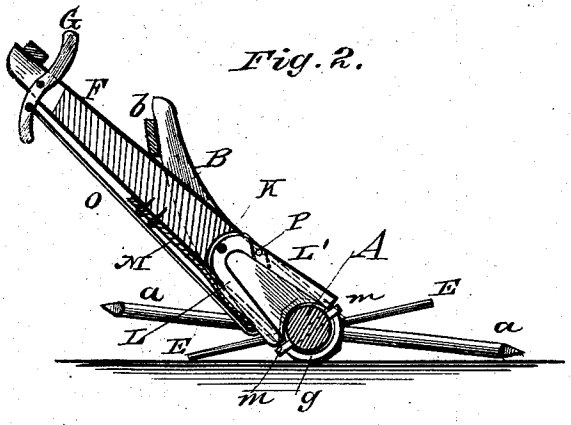
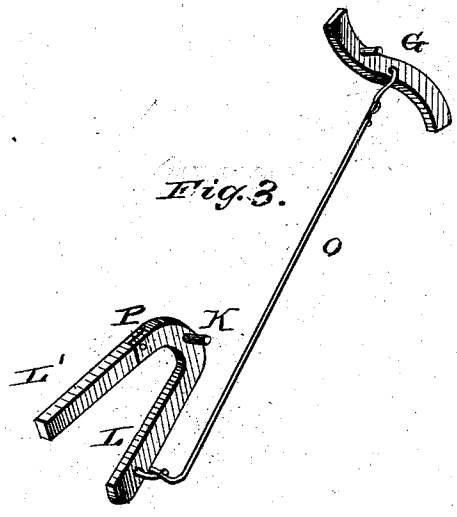


Fig. 3.



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HUGH ROGERS, OF WASHINGTON, INDIANA.

REVOLVING HORSE HAY-RAKE.

SPECIFICATION forming part of Letters Patent No. 282,375, dated July 31, 1883.

Application filed March 12, 1883. (No model.)

To all whom it may concern:

Be it known that I, HUGH ROGERS, of Washington, in the county of Daviess and State of Indiana, have invented certain new and useful Improvements in Revolving Horse Hay-Rakes; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

My invention relates to an improved locking and tripping device for revolving rakes; and it consists in the novel details of construction and arrangement hereinafter described, and pointed out in the claim.

In the drawings, Figure 1 is a front elevation of a revolving rake embodying my improvements. Fig. 2 is a sectional view on the lines *x x* of Fig. 1. Fig. 3 is a detail view of the locking and tripping mechanism.

Similar letters denote like parts.

A represents the rake-head, and *a* are the teeth constituting the rake, and they are arranged to project equally on opposite sides of the head A. The shafts and their cross-bar B B *b* are attached to the rake-head by suitable bands, C, that fit in grooves D in said head, and within which bands the rake can freely revolve when desired.

E E represent metal rods or wood teeth, located one at each end of the rake-head, and being set at a different angle from that of the teeth *a*, they serve to elevate the rake, so that it rests only upon the ends of the teeth *a* and rods E, and by means of which the entire structure can be raised several inches, when desired, by simply depressing the outer end of the handle-bar or other controlling mechanism.

F represents the handle-bar, which is provided with hand-pieces *f f* and a hand-lever, G, for actuating the tripping mechanism, and it is secured to the rake-head A by means of the metallic bands *g g*, within which the rake-head may rotate freely when released.

The locking and tripping device consists of a forked or bifurcated lever, L L′, which is pivoted at the junction of its two arms, as shown at K, and is preferably secured in a mortise or recess in the lower end of the handle-bar F. The upper limb of the fork is divided and provided with a hinge-joint, P, located a short distance from the pivotal point K, and this hinge is provided so that the lower limb, L, of the fork can be raised and lowered without affecting the upper one, L′. The spring M is secured to the handle-bar F in such position as to bear upon the limb L and hold it against the rake-head. The studs *m m* project on opposite sides of the rake-head, and they are located in the plane of rotation, passing between the forks L L′ of the locking and tripping device.

The wire O connects the hand-lever G and lever L, by means of which the said lever can be depressed, so as to release the tappet *m* whenever desired. Upon releasing the locking mechanism, as above described, which will occur each time the lever L is depressed, the rake will ordinarily make a half-revolution, depositing its load and stopping in a similar position as before, with the opposite tappet or stud, *m*, in contact with the end of the lever L, where it will remain, operating to lock the rake in position until the said lever is again depressed, the opposite tappet meanwhile resting in front of the end of the lever L′ and effectually preventing backward motion of the rake. Should the rake fail to turn when the lever L is depressed, it can be readily started by slightly elevating the outer end of the handle-bar F. The lever L′, resting against the tappet *m*, will operate to tilt the rake with the desired effect. By constructing the locking-levers with a hinge in the upper one, the lower one of which can be operated without in any manner affecting the upper one, the tappets can pass freely thereunder, and, being kept in place by its own weight, a single lever and spring are sufficient to operate the combination. The top jointed limb, L′, will rise over the studs *m* and allow the rake to revolve for discharging a gathered load; but this link will prevent the rake from turning backward. By applying the said tripping device or compound pawl within the fork of the hand-bar F, it will not be liable to gather and tangle the hay, nor will it be injured in working the rake.

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

In a revolving horse hay-rake, the combination of a rake-head adapted to revolve in the

end of a forked handle-bar, and provided with studs *m m*, diametrically opposite each other, a pivoted locking and tripping device of U shape applied in the crotch of the forked handle, and having its upper limb jointed at P, a spring, M, acting directly against the lower limb of the tripping device, and a rod connected directly to said lower limb and to a hand-lever, G, pivoted to the handle-bar, all constructed and adapted to operate substantially in the manner and for the purposes described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

HUGH ROGERS.

Witnesses:
DAVID J. HEEFRON,
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