G. M. L. McMillen,

Horse Rake.

No. 87504. Patented Mar. 2. 1869.

Fig. 1.

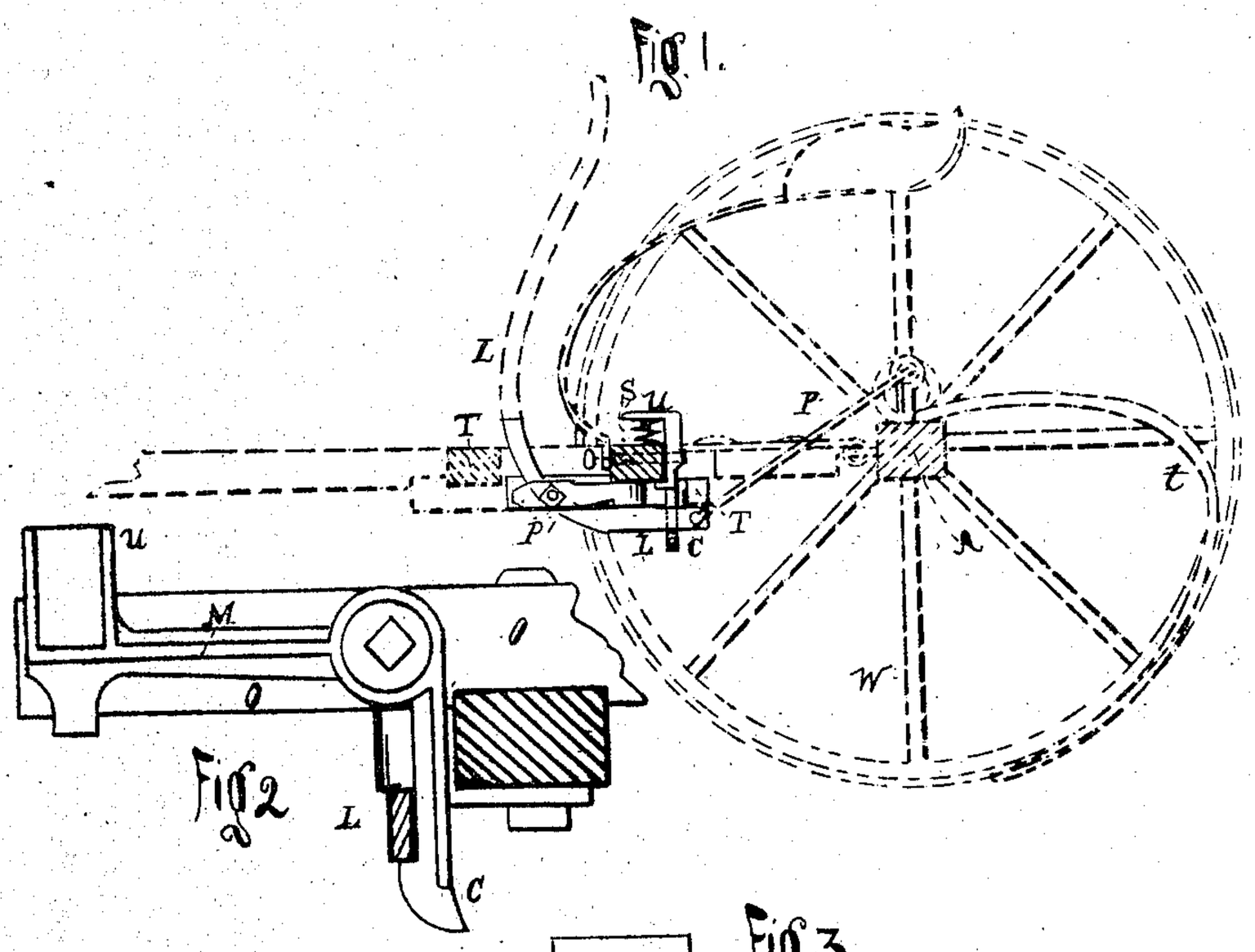
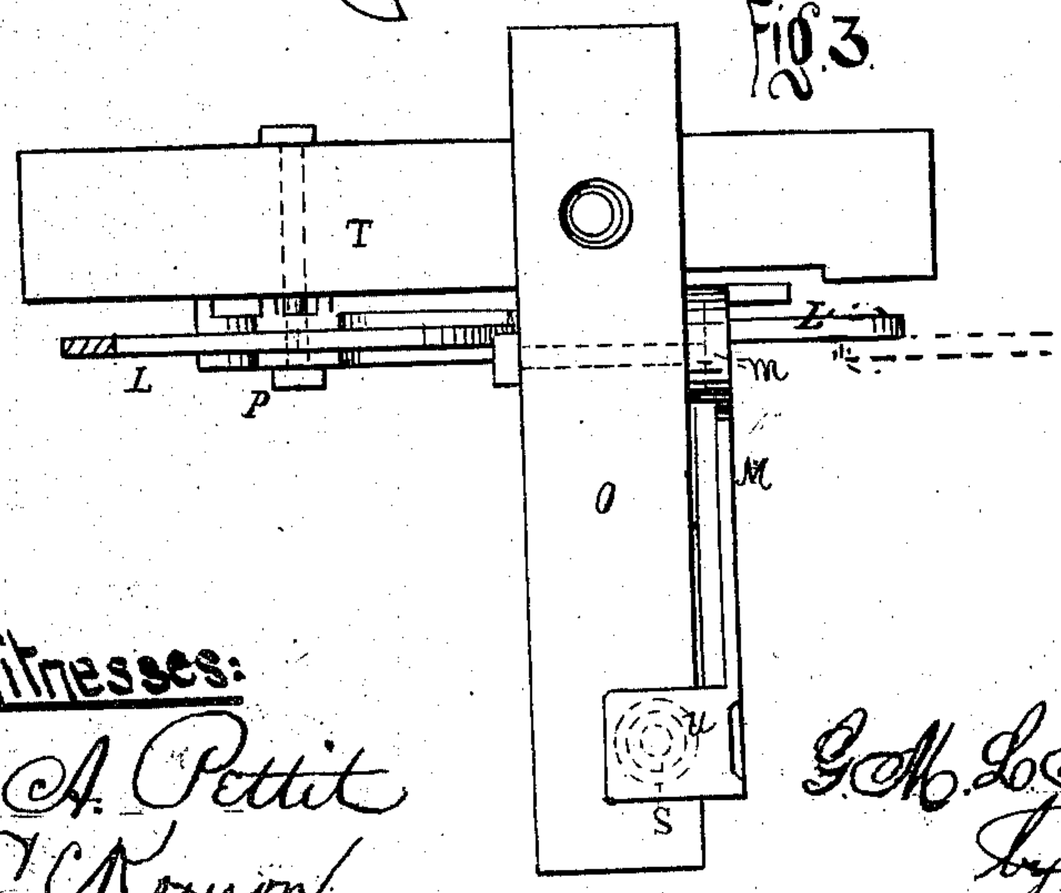


Fig 2

Fig. 3.



Witnesses:

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G. M. L. McMILLEN, OF DAYTON, OHIO.

Letters Patent No. 87,504, *dated March* 2, 1869.

IMPROVEMENT IN HORSE-RAKES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, G. M. L. McMILLEN, of Dayton, in the county of Montgomery, and State of Ohio, have invented a new and improved Horse Hay-Rake; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which

Figure 1 is a longitudinal vertical section.

Figure 2 is a detached side view, a portion in section.

Figure 3 is a top view.

This invention is a simple, cheap, convenient, and effective device for automatically locking down the teeth so as to hold them in contact with the ground, while allowing them to be easily raised by the attendant when occasion may require.

In the drawings—

T T indicate the thills;

W, the wheels;

A, the axle; and

t t, the rake-teeth, the latter being attached to a rocking beam, (or to a rocking axle, if such a construction is preferred,) in such a manner that they can all be raised or depressed by a single movement of a lever.

L is the lever employed for that purpose, and

R, the connecting-rod, through which the movement is communicated from the lever to the rake-head, rocking beam, or axle.

The lever is bent in the form clearly shown in fig. 1, so as to apply the power properly to the rake-head, while adapting the lever to the spring-catch and lever hereinafter described.

Thus constructed, the lever is pivoted, at *p*, to one of the thills, behind the whiffle-tree, or to a supporting-bar provided for the purpose; and a right-angled lever, M, pivoted at *m* to a supporting-bar O, is employed in connection with it, in the manner which I will now describe.

Said lever M combines in itself a spring-catch and a treadle, the catch or latch being shown at *c*, the spring at *s*, and the treadle at *u*.

The function of the catch is to lock under the short arm of the lever, and prevent the latter from being depressed, and the teeth from being raised.

The spring is to operate the catch automatically, so that the attention of the driver will not be required to lock the teeth down.

The treadle is to enable the driver to conveniently disengage the latch from the lever by a single movement of his foot, thereby leaving the teeth free to rise.

By a slight pressure upon the lever M at the point *u*, the lever is rocked on its axis *m*, the catch *c* is withdrawn from the lever L, and the teeth *t t* can be raised at will.

Upon removing the root from the part *u*, the spring *s* operates to restore the lever M to its former position, and when the lever L resumes its place, it is locked automatically by the spring-catch, in a manner that can be clearly understood from figs. 1 and 2.

The whole apparatus is very simple, cheap, and convenient of operation, and can readily be applied to nearly every kind of horse hay-rake now in use, without any change in their construction.

I do not claim the use of a spring-catch to lock the lever of a horse hay-rake, for I am aware that such a device has been heretofore employed; neither do I claim the combination of such spring-catch with a treadle, and with the lever by which the teeth of a horse hay-rake are raised and depressed, when constructed in any other manner than as herein shown; but

What I do claim as my invention, and desire to secure by Letters Patent, is—

The device herein shown and described, consisting essentially of the right-angled lever M, having a spring, *s*, under its flange at one end, and a snap-catch, *c*, at the other end, when constructed and applied to a rake in connection with the lever L, rod R, and teeth *t t*, as shown, and employed for the purpose herein set forth.

G. M. L. McMILLEN.

Witnesses:

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