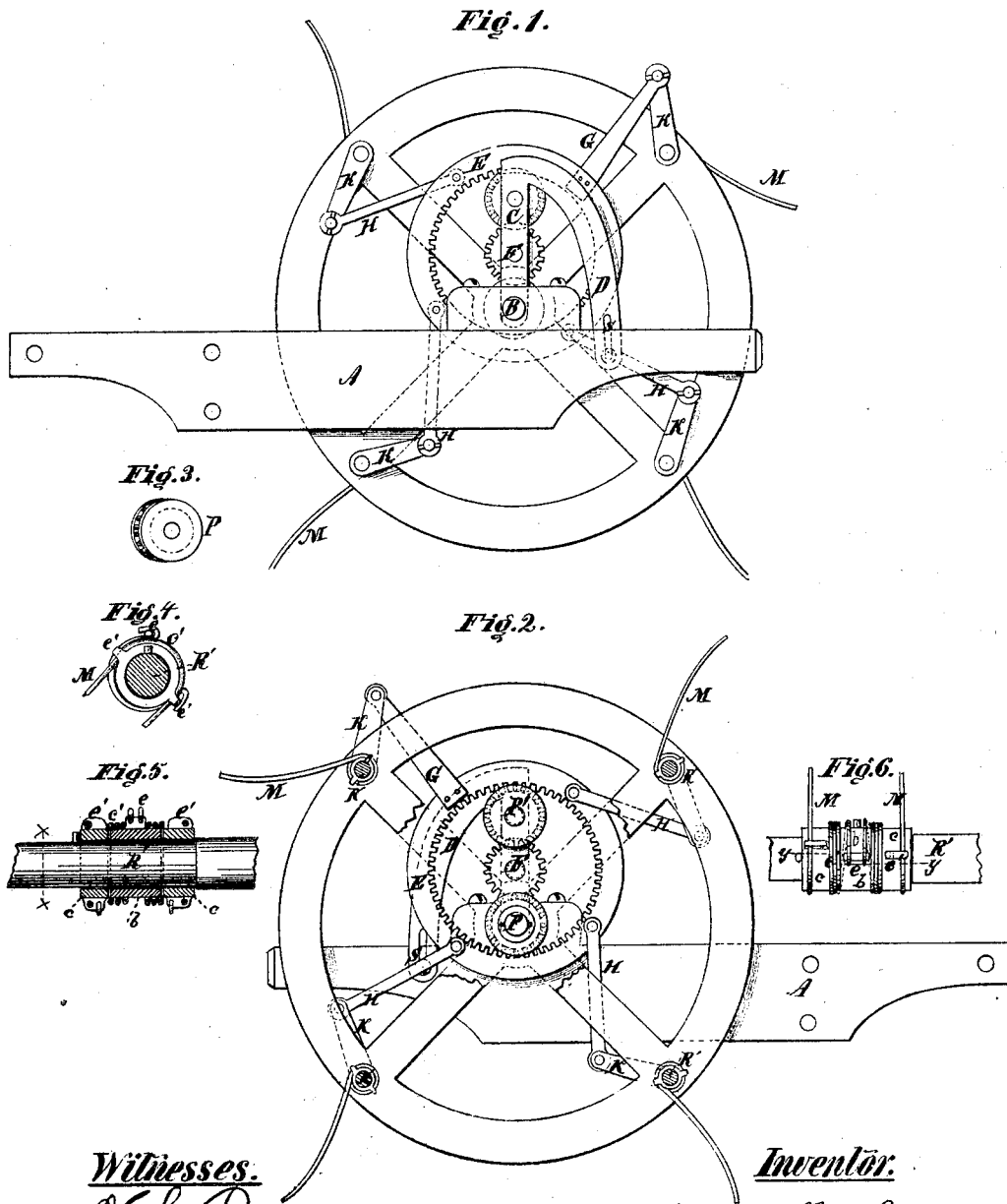


H. M. BURDICK.
HAY TEDDER.

No. 113,848.

Patented Apr. 18, 1871.



Witnesses.

H. L. Perine
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Inventor.

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United States Patent Office.

HIRAM M. BURDICK, OF ILION, NEW YORK.

Letters Patent No. 113,848, dated April 18, 1871.

IMPROVEMENT IN HAY-TEDDERS.

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

To all whom this may concern:

Be it known that I, HIRAM M. BURDICK, of Ilion, Herkimer county, in the State of New York, have invented new and useful Improvements in Hay-Tedders, which are fully described and represented by the following specification and accompanying drawing, in which like letters in the different figures represent like parts of the machine.

Figure 1 is an outside end view of fork-reel with gearing and forks attached.

Figure 2 is an inside or reverse view of the same reel-head with gearing and forks attached.

Figure 3 is a detached view of flanged pinion.

Figure 4 is a transverse section of fork-rod with shell and forks attached, as indicated by line *x x* of fig. 5.

Figure 5 is a longitudinal section of fork-rod with shells, as indicated by line *y y* of fig. 6.

Figure 6 is a top or side view of the outside of fork-rod with shells and forks attached.

Nature.

My invention relates to a hay-tedder having rocking fork-rods by an internal gear-rim arranged eccentrically to the reel-shaft to revolve upon two flanged pinions, one of which is attached to the reel shaft and the other to a standard, a small gear being arranged to revolve between the two pinions, and arms being attached to the rim of the internal gear-rim, and connecting with cranks upon the fork-rods.

It consists—

First, of the gearing device for operating the rocking fork-rods by an internal gear-rim arranged eccentrically to the reel-shaft to revolve upon two flanged pinions, one of which is attached to the reel shaft and the other to a standard, a small gear being arranged to revolve between the two pinions, and arms being attached to the rim of the internal gear-rim, and connecting with cranks upon the fork-rods.

Second, of an adjustable standard with a brace having a slot, for adjusting the gearing so that the forks will dump at any required distance from the ground.

Third, of a fork-rod shell made in two or more sections, one or more of the sections being arranged loosely so as to rock upon the rod, and connected by spiral coils to a stationary section to allow the forks to pass over obstructions without injury to them or the machinery.

A represents the end beam of the tedder-frame, upon the top of which, reel-shaft B has its bearing.

C is a standard attached to the reel-shaft, and provided with a brace, D, having a slot, S, at the end for attaching it to the frame, and for adjusting the position of the gearing so as to have the forks dump at any required distance from the ground.

E is an internal gear-rim, arranged eccentrically to

the reel-shaft, to revolve upon pinion P, attached to the reel-shaft, and pinion P', attached to the standard C. The pinions are made with side flanges, extending beyond the cogs, to hold gear-rim E in place.

F is a small gear, attached to standard C, and arranged to revolve between the pinions.

G is an arm, permanently attached to the rim of gear E; and

H H H are similar arms, loosely attached to revolve upon pins on the said rim, and all of these arms connect with cranks K upon the rods R'.

R' represents a fork-rod, provided with sectional shells, of which *b* is stationary, and *c c* loose and rocking sections, and all are connected together by spiral coils, the ends of which are held in the eyes *e e*, as seen in figs. 4, 5, and 6.

The forks M are attached, through eyes *e e*, to the rocking shells *c c*, which turn upon the rod, to allow the forks to pass over obstructions, and are thrown back in proper position by the spring coils.

The forks are made to dump at any required distance from the ground by the adjustment of the standard C, by means of the slot S on the end of brace D.

Claim.

What I claim, and desire to secure by Letters Patent, is—

1. The gearing device for operating the rocking fork-rods, consisting of an internal gear-rim, E, eccentrically arranged to the reel-shaft to revolve upon pinions P P', and provided with arms G and H, in combination with cranks K upon the rocking fork-rods R', substantially as described.

2. The adjustable standard C, with brace D having slot S, in combination with the gearing and rocking fork-rods, so as to dump the forks at any required distance from the ground, substantially as described.

3. The sectional shell or sleeve *b c c*, connected by spiral coils *c'*, in combination with the fork-rod R', one or more of the sections being arranged to rock upon the rod, substantially as described.

4. The rocking sections *c*, having forks M attached through eyes *e'*, in combination with a stationary section *b*, spiral springs *c'*, and the tedder-rod R', substantially as described.

In attestation of the foregoing specification of my improved hay-tedder I hereunto subscribe my name this day of March, 1871.

HIRAM M. BURDICK.

Witnesses:

J. B. PELTON,
W. J. LEWIS.