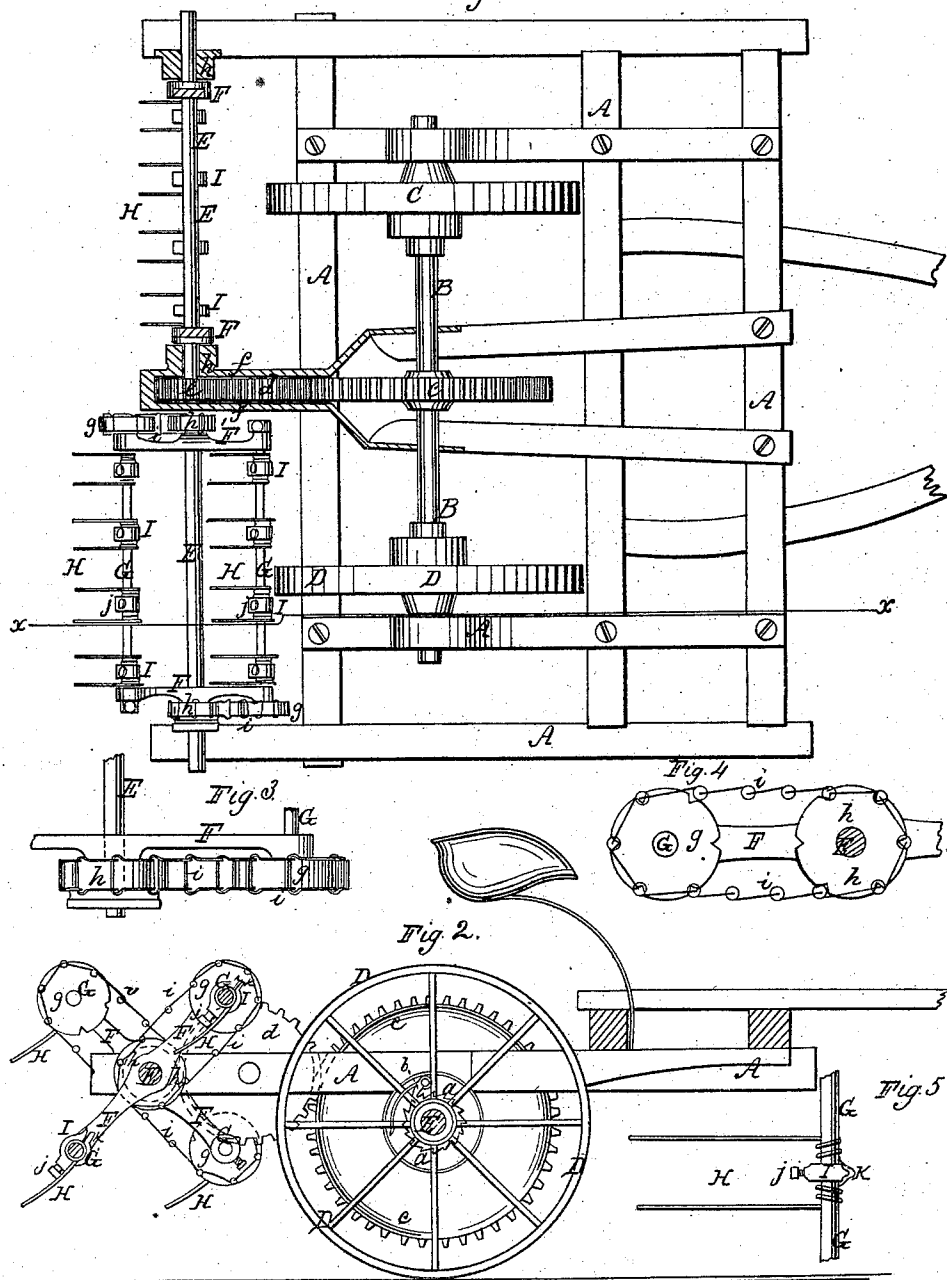


Tedder.

Patented Feb. 9, 1869.

Fig. 1.



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M. D. MYERS, OF FRANKFORT, NEW YORK.

Letters Patent No. 86,777, dated February 9, 1869; antedated August 29, 1868.

IMPROVEMENT IN HAY-SPREADERS.

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, M. D. MYERS, of Frankfort, in the county of Herkimer, and State of New York, have invented a new and improved Hay-Tedder; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming a part of this specification.

Figure 1 represents a plan or top view, partly in section, of my improved hay-tedder.

Figure 2 is a vertical transverse section of the same, taken on the plane of the line *x x*, fig. 1.

Figure 3 is a detail plan view, on an enlarged scale, of the connecting-chain.

Figure 4 is a detail side view of the same.

Figure 5 is a detail plan view, showing the manner of fastening the tines.

Similar letters of reference indicate corresponding parts.

This invention relates to an improvement in hay-tedding machines; and

It consists in the construction and arrangement of the endless chains, the stationary drums, and the drums affixed to the shafts carrying the tines for spreading the hay, as will be hereinafter more fully described.

A, in the drawing, represents the wooden or other frame of my improved hay-tedder. The said frame is of suitable shape, construction, and dimensions. In it are the bearings of the rotating driving-wheel axle, B, on which the wheels, C and D, are respectively hung, as shown.

The wheels are connected with the shaft B by means of ratchet-wheel *a* and pawl *b*, so as to revolve the shaft when the machine is drawn forward, but to leave it at rest when backing up.

By means of suitable gear-wheels, *c d e*, or equivalent mechanism, the driving-shaft B, or, if desired, one of the driving-wheels C D, is connected with a horizontal shaft, E, which has its bearings in the rear part of the frame A, and which is parallel with the shaft or main axle B, as shown. When the machine is drawn forward, the shaft E turns in the same direction as the driving-wheels.

On the shaft E are mounted four or more, or less, projecting arms, F F, each arm projecting with both ends an equal distance from the shaft, as shown.

When four arms are used, as in the drawing, the shaft E is supported in the middle and at the ends, and there is, therefore, an arm, F, at each end of the shaft, and one on each side of the central support, *f*, as shown.

The ends of each pair of arms, on each side of the support *f*, are connected, by means of horizontal shafts G G, which have their bearings in the arms, and can turn loose therein.

From the shafts G project the tines H H.

On one end of each shaft G is mounted a pulley, *g*, and, in line with each, such pulley is fitted to the frame A, concentrically around the shaft E, a fixed disk or drum, *h*.

An endless-chain, belt, or band, *i*, connects each wheel *g* with its disk *h*, as shown.

As the shaft E is revolved, the tine-shafts G will also be turned, or, rather, swung around the axis of the said shaft E, and they would, during each revolution of the shaft E, make also one revolution around their own axis; but this rotary motion around their own axis is prevented by the chain or band *i*, which keeps them back, so as to keep them from turning at all around their own axis, and to thus keep the tines always in the same relative position to the ground, which position is nearly perpendicular.

As the machine is drawn ahead, the tines are carried around the shaft E, without being turned, and enter the hay in the proper position for turning it without taking it up.

Although the shafts G thus appear to be at rest, they do actually turn in their bearings, or, rather, the bearings turn around them.

In connection with the above-described apparatus, tines, of suitable construction, and attached in suitable manner, may be used, and I do not confine the uses of the said working-mechanism to any particular style of tines.

The tines H H are made in pairs, of suitable wire. This wire is coiled around the shaft G, on each side of a sleeve, I, which is adjustable on the shaft, as shown, and the wire is also fitted into a notch formed on the said sleeve, as shown in figs. 2 and 5.

The sleeve I is adjustable on the shaft G, and can be fastened in any suitable position, by means of a set-screw, *j*, as shown.

It has a projection, *k*, which is grooved, as shown, to admit the wire.

The wire is coiled around G, on either side of the sleeve, as in fig. 5, and its ends form the tines, which are, by this arrangement, made reliable, strong, and elastic.

Having thus described my invention,

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

The construction of the endless chains *i* and the drums *h g*, and their arrangement with relation to each other, the horizontal shaft E, tine-shafts G, arms *f*, and frame, as herein described, for the purpose specified.

M. D. MYERS.

Witnesses:

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