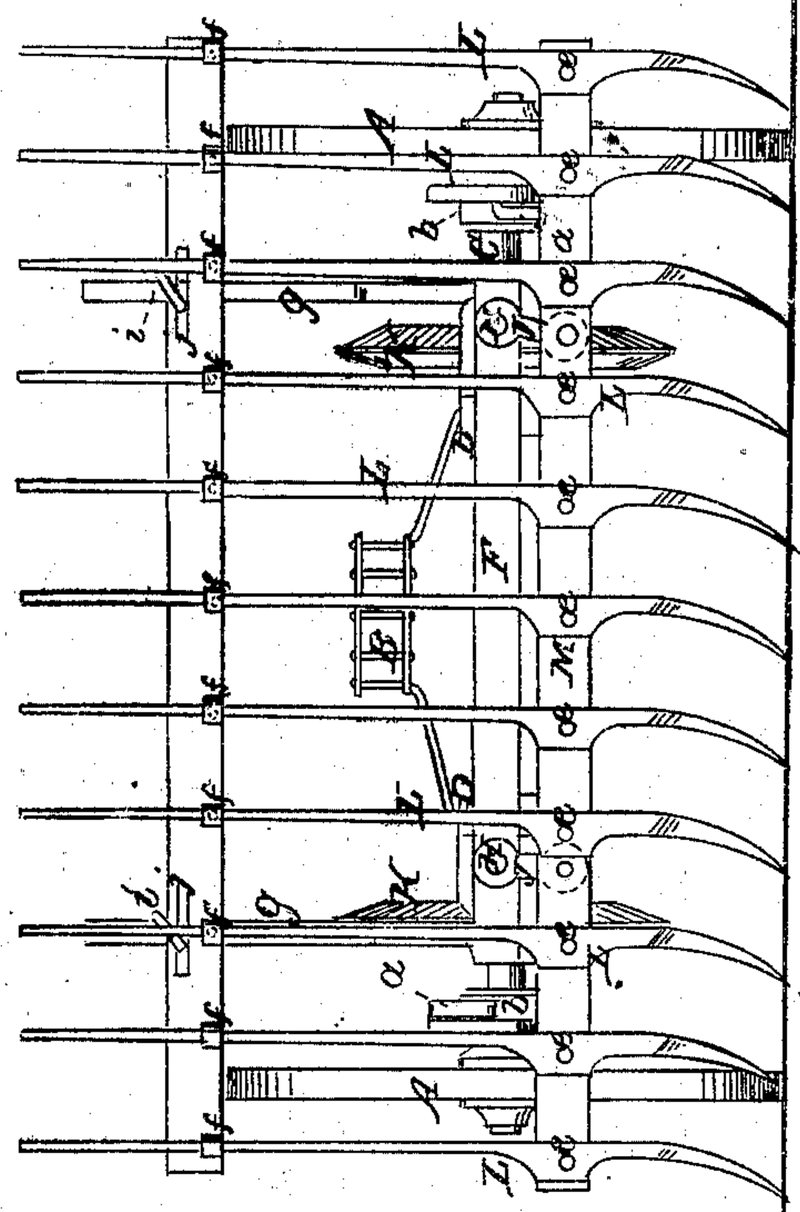
G. Moody.
Hay Spreader.

No. 36791 Patented. Oct. 28. 1862.

Fig: 2.



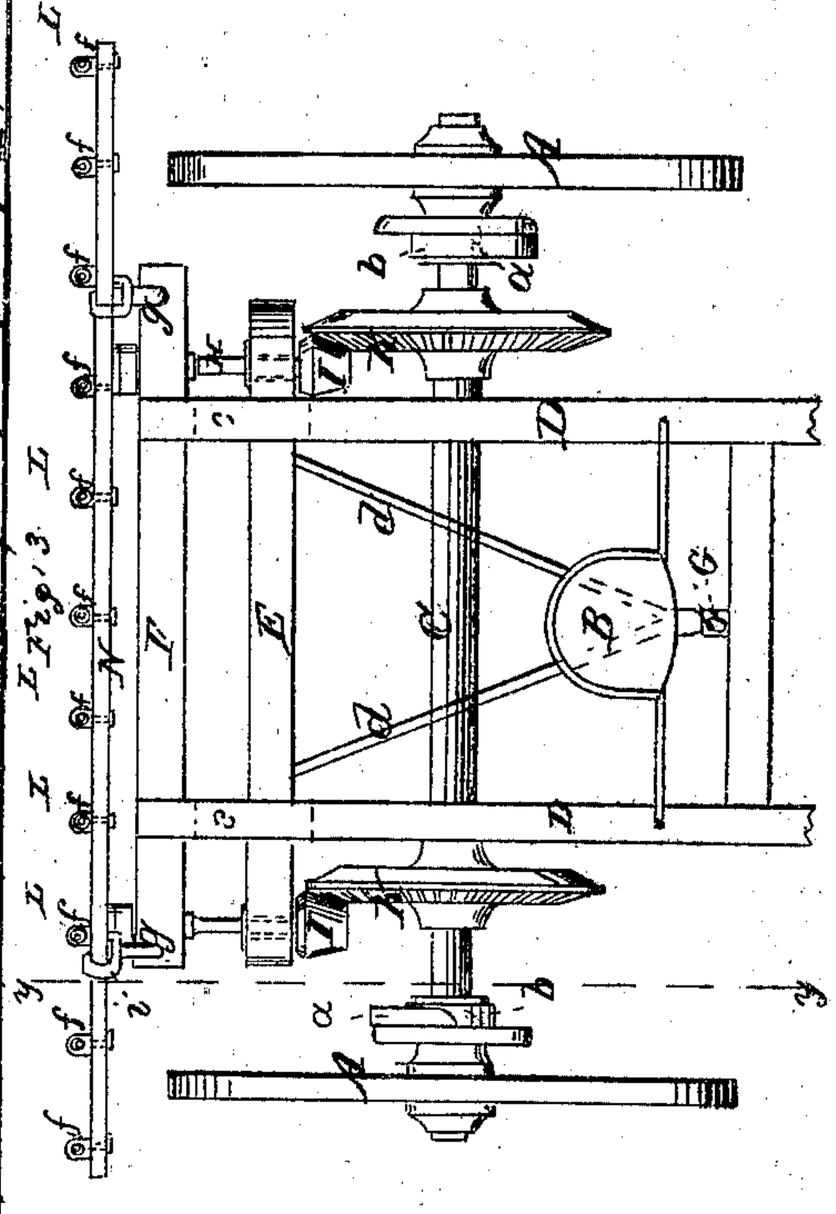
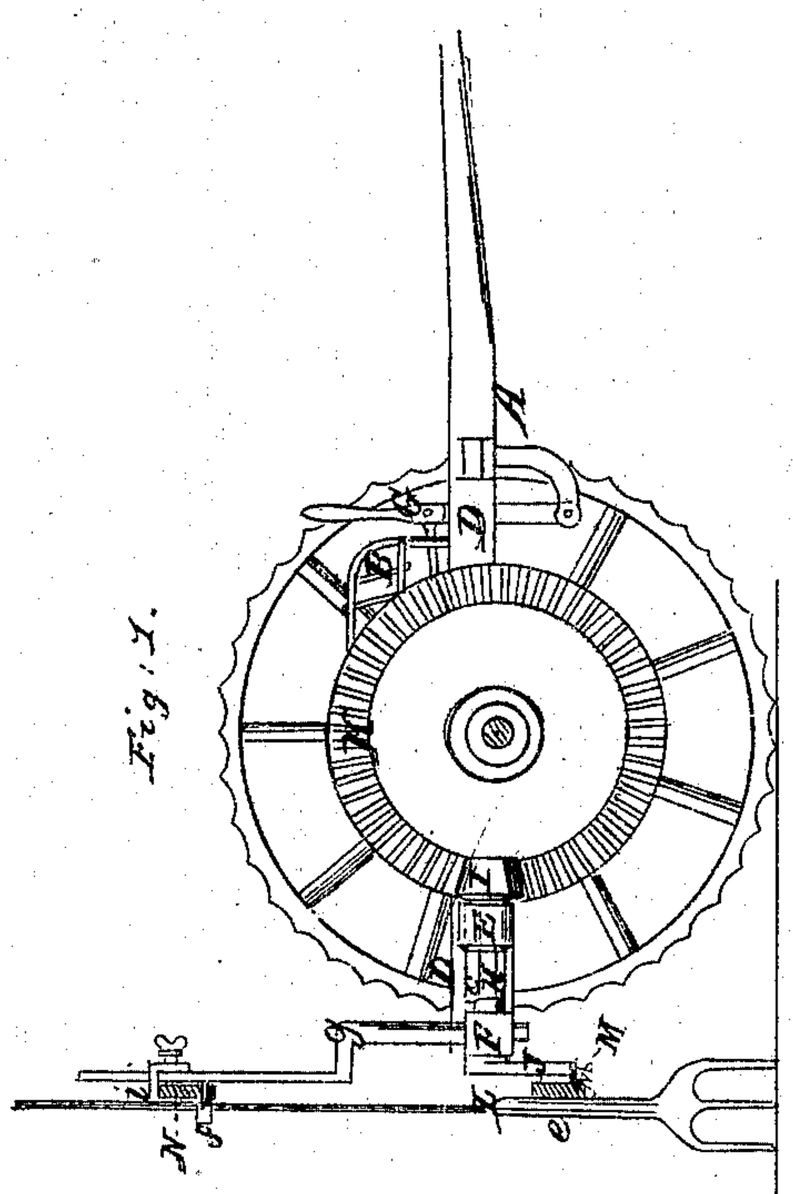


Fig: 1.



Witnesses.
G. Dietrick
E. S. Jacob.

Inventor.
Glendy Moody
by
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Attys

UNITED STATES PATENT OFFICE.

GLENDY MOODY, OF FALMOUTH, MAINE.

IMPROVEMENT IN MACHINES FOR SPREADING AND TURNING HAY.

Specification forming part of Letters Patent **36,791**, dated October 28, 1862.

To all whom it may concern:

Be it known that I, GLENDY MOODY, of Falmouth, in the county of Cumberland and State of Maine, have invented a new and useful Improvement in Machines for Spreading and Turning Hay in the Field; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a vertical longitudinal section of my invention applied to a carriage. Fig. 2 is a view of the rear of the same. Fig. 3 is a plan or top view of the same.

Similar letters of reference in each of the several figures indicate corresponding parts.

The nature of my invention consists in the combination, with a carriage provided with suitable actuating mechanism, of a series of independently-reciprocating forks which receive their united reciprocating motion from a series of cranks or equivalent eccentric means.

To enable others skilled in the art to make and use my invention, I will proceed to describe the construction and operation of the same in connection with drawings.

A represents a two-wheel carriage, with driver's seat mounted upon it just forward of the axle C. The wheels of this carriage are both fitted loosely upon the axle, but are provided with a ratchet and pawl, as at *a b*, so that they shall revolve with the axle as the carriage moves forward, but not when the carriage is backed. The thills D D of the carriage are boxed loosely on the axle, and extend back some distance therefrom, so as to swing freely independently of the axle. On the rear extensions two cross-bars are arranged, as at E F. The cross-bar E is fitted to oblong horizontal slots *c c* of the thills, and has hounds *d* extending forward from it and attaching to a vertical lever, G, which is located in front of the driver's seat. The bar F is a fixture to the thills. Through the extending ends of these bars short shafts H H extend longitudinally with the motion of the machine. The front ends of these shafts have small bevel-wheels I I keyed on them, so as to slide freely, and on the rear ends thereof crank-arms J J are formed or attached. The small bevel-wheels gear with larger bevel-wheels K K of the axle of the carriage whenever the lever G is so adjusted as to bring them in gearing position. By means of the lever G and sliding cross-bar E the connection and disconnection of the gearing is regulated at the will of the driver.

L L represent a series of hay-forks connected together by means of two cross-bars, M N, so as to have a movement together, and also to move independently of one another. The forks just above their prongs are pivoted, as at *e*, to the lower cross-bar, M, and their handles extend up through swiveling eyes *f* on the upper cross-bar, N, as represented. The series of forks are hung in rear of the carriage on the pins of the crank-arms J J by means of the lower cross-bar, and are sustained and guided by means of the upper cross-bar, which is clamped to upright standards *g g* of the carriage by means of loops *i i* and slots *j j*, which allow it to be adjusted either to the right or left and higher or lower, as occasion may demand.

It will be observed that the lower cross-bar, M, reciprocates, while the bar N remains stationary, and also that the handles of the forks play on the pivots *e* and up through the swiveling eyes *f*, and that said eyes shift or turn to accommodate the angles assumed by the handles of the forks in their movements. The forks are not necessarily arranged to work at right angles to the direction of the movement of the carriage. They might be arranged to work parallel with said movement—turning the hay toward the rear of the machine—by attaching the forks to a shaft consisting of a series of cranks and worked by pulleys and belt or gearing. In this modification the forks would have the same motion as in the plan represented, except in a different direction.

The operation of the machine represented is as follows: The carriage being propelled forward, the large bevel-wheels, revolving with the axle of the carriage-wheels, impart a rapid rotary motion to the cranks through the small bevel-wheels. This motion of the cranks causes the bar M, with the forks, to reciprocate across the direction of movement of the carriage, and while this is occurring the swiveling eyes of the bar N cause each of the forks to reciprocate on their own pivot, and thus operate upon the hay on the ground, so as to spread and turn it in about as perfect a manner as when the hay is operated upon by a fork in hands of a farmer, and with great expedition and ease. Should it be necessary to

have the forks assume a greater or less angle with respect to the horizon in the movement, the cross-bar N is adjusted to the right or left and higher or lower, as required, by means of the loops *i* and slots *j;* and should it be necessary to stop the motion of the forks while the machine is moving forward, the driver lays hold of the lever G and draws it toward him far enough to throw the small bevel-wheels out of gear with the large bevel-wheels.

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

1. A reciprocating bar, M, with forks L pivoted to it, and operated by means of cranks or other equivalent eccentric movement, substantially as and for the purposes set forth.

2. The combination of a carriage, A, with suitable actuating gearing and a series of independently-reciprocating forks, L, which receive a united reciprocating motion from a series of cranks or equivalent eccentric means, substantially as and for the purposes set forth.

3. The cross-bar N, with its slots *j* and loops *i*, or equivalent means, in combination with the uprights *g g*, for the purpose of adjusting the forks, substantially as described.

4. The swiveling eyes *f*, in combination with the bar N and pivoted forks L, substantially as and for the purpose set forth.

GLENDY MOODY.

Witnesses:
M. D. L. LANE,
H. P. DEANE.