G. T. Savary,

Mower.

No. 111,258. Patented. Jan. 24. 1871

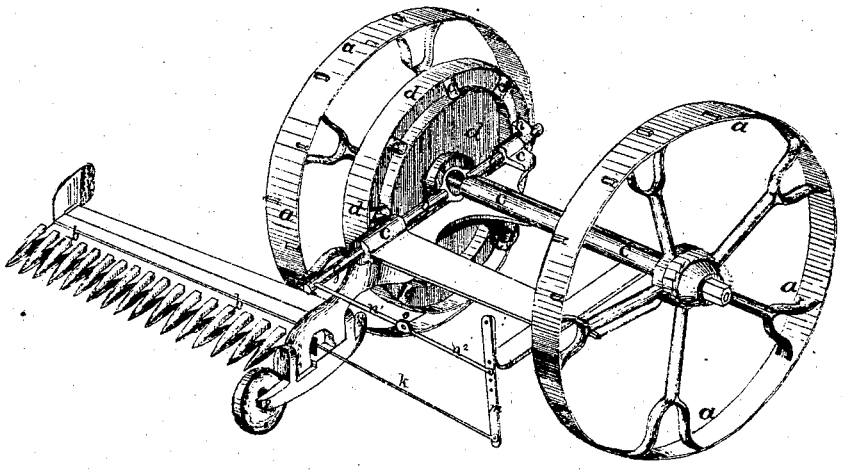

Fig. 1.

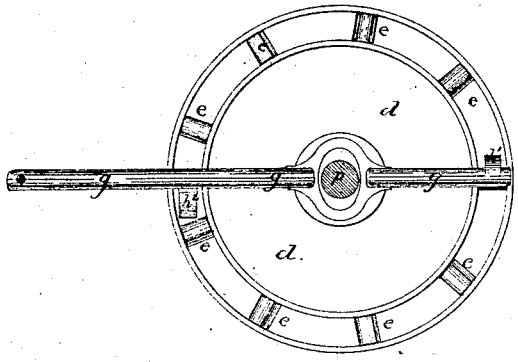

Fig 2.

Witnesses.

E. R. Williams
W. F. Morley

Inventor

Geo. T. Savary
by. B. C. Williams & Son

UNITED STATES PATENT OFFICE.

GEORGE T. SAVERY, DECEASED, OF NEWBURYPORT, MASSACHUSETTS; N. JENNIE SAVERY, ADMINISTRATRIX, ASSIGNOR TO JOHN N. PIKE, OF SAME PLACE.

IMPROVEMENT IN MOWING-MACHINES.

Specification forming part of Letters Patent No. **111,258**, dated January 24, 1871.

To all whom it may concern:

Be it known that I, GEORGE T. SAVERY, of Newburyport, in the county of Essex and State of Massachusetts, have invented a new and useful Improvement in Mowing-Machines, of which the following, when taken in connection with the accompanying drawing, is a full and exact specification.

My invention relates to the combination and arrangement of a driving-wheel, with friction-rollers therein, acting upon an oscillating shaft by means of tappets, and imparting the necessary motion to the cutters by means of a jointed connecting-rod, a vibrating lever, and a pitman, arranged as below described.

The object of my invention is to multiply the motions of the cutters without the use of cogs.

In the accompanying drawing, Figure 1 is a sketch of a mowing-machine embodying my invention. Fig. 2 is a detached view of the driving-wheel, with the oscillating shaft in its place, showing the action of the friction-rollers upon the tappets.

a is the large wheel, constructed as usual. *b* represents the cutters. *c* is the frame of the mower. *p* is the axle. *d* is the driving-wheel, turning with the large wheel *a*. *e e* are friction-rollers in the driving-wheel *d*, set near its edge and at right angles with its circumference. *g* is an oscillating shaft, moving in the frame *c*, and supplied with tappets h^1 h^2. n^1 n^2 is a jointed connecting-rod, with one end set firmly in the oscillating-shaft *g*, and the other end, by means of a pin, in the vibrating lever *m*. The motion is given to the cutters by the pitman *k*. *o* is the joint in the connecting-rod n^1 n^2.

In practical operation my machine works as follows: As the driving-wheel *d* revolves, of course the tappets h^1 h^2 are constantly striking and running over the friction-rollers *e*. When the tappet h^1 is about to strike a friction-roller the joint *o* is elevated by the action of the oscillating shaft *g* to its highest point. As it strikes, the joint *o* is forced down until the jointed connecting-rod forms a straight line, as in Fig. 1, causing the cutters *b* to make one cut. As it runs over the roller the joint *o* is forced down to its lowest point, causing the cutters *b* to make a second cut. The tappet h^2 is now ready to strike a friction-roller. As it strikes, it forces the joint *o* up to the position shown in Fig. 1, causing the cutters *b* to make a third cut. Then, as it runs over the roller, it forces the joint *o* up to its highest point, causing the cutters *b* to make the fourth cut or motion. The tappet h^1 is then ready to strike another friction-roller.

Thus it will be seen that, if I use nine friction-rollers I cause the cutters *b* to make thirty-six motions or cuts, multiplying the motions fourfold without the use of cogs or gear.

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

The combination of the driving-wheel, the oscillating shaft, the jointed connecting-rod, vibrating lever, and pitman, all these parts being constructed, arranged, and operating as described.

GEO. T. SAVERY.

Witnesses:

HENRY W. WILLIAMS,

JOSEPH DILL.