(No Model.)

A. TELFER.

MOWING MACHINE.

No. 251,389. Patented Dec. 27, 1881.

Fig. 1.

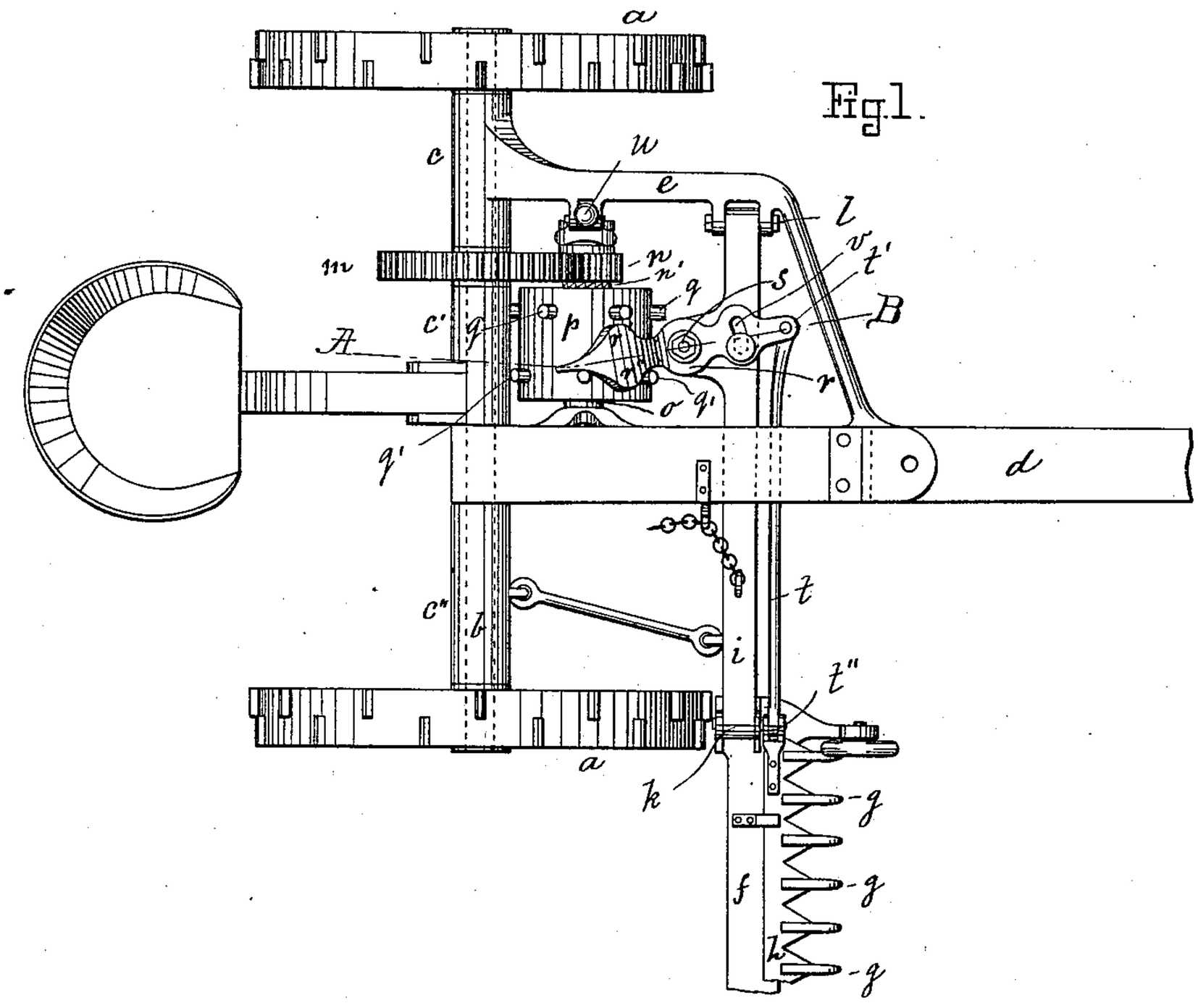
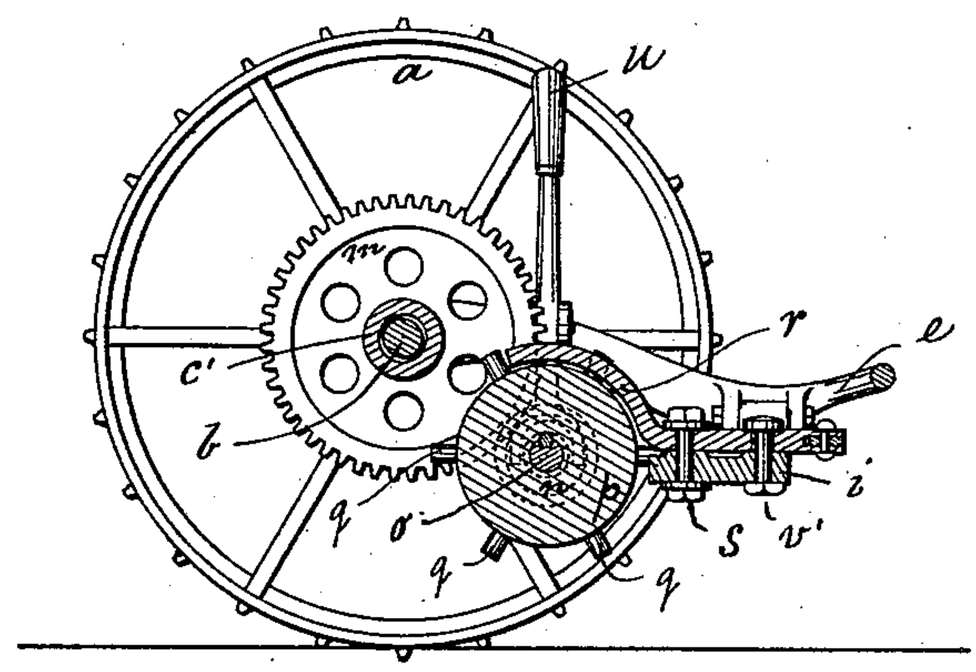


Fig. 2.



Witnesses.

Henry Chadbourn.

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UNITED STATES PATENT OFFICE.

ANDREW TELFER, OF BOSTON, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO A. C. WOODWORTH, OF CHICOPEE, AND ORRAN G. CILLEY AND THEODORE S. VERY, OF BOSTON, MASSACHUSETTS.

MOWING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 251,389, dated December 27, 1881.

Application filed April 29, 1881. (No model.)

To all whom it may concern:

Be it known that I, ANDREW TELFER, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Mowing-Machines; and I do hereby declare that the same are fully described in the following specification and illustrated in the accompanying drawings.

This invention relates to improvements in mowing-machines; and it consists of an improved mechanism for converting the rotary motion of the driving-shaft to a reciprocating motion on the scythe, such mechanism being equally well adapted for horse-clipping and other machines in which it is desired to convert a rotary motion into a reciprocating one, as will now be herein more fully shown and described, reference being had to the accompanying drawings, in which—

Figure 1 represents a plan view of my invention as applied to a mowing-machine, and Fig. 2 represents a cross-section on the line A B shown in Fig. 1.

Similar letters refer to similar parts wherever they occur on the different parts of the drawings.

a a represent the driving-wheels, as usual, secured to the shaft *b*, which latter is made to revolve in the bearings *c c' c''* in the ordinary manner when the machine is drawn over the ground.

d is the draw-bar.

e is a frame uniting the bearing *c* to the draw-bar *d*, as shown.

f is the cutter-bar, with its guard-fingers *g g* and reciprocating scythe *h*, in the usual manner.

i is the bar to which the cutter-bar *f* is jointed at *k*, as shown, the opposite end of the bar *i* being hinged, as at *l*, to the frame *e*, as usual.

m is a spur-wheel secured firmly to the driving-shaft *b*, which spur-wheel is geared into the teeth of the pinion *n*, the latter being loose on the intermediate shaft, *o*, that is journaled in bearings secured to the draw-bar *d* and frame *e*, or other stationary parts of the machine.

To the shaft *o* is secured the drum or cylinder *p*, which is provided on its circumference with two alternating rows of pins or projections, *q q q' q'*, between which is arranged the upper end of the lever *r*, that is provided with cams *r' r''* on its two opposite sides, as shown. The lever *r* is hung on the fulcrum-pin *s* to the bar *i*, as shown, its forward end being jointed at *t'* to the scythe rod or link *t*, the opposite end of which is jointed at *t''* to the inner end of the scythe *h*.

u is a locking-lever for the purpose of connecting or disconnecting the clutch *n'* or similar locking device to and from the drum *p*. A slot-hole, *v*, is made through the forward part of the lever *r*, through which is inserted the guide-bolt *v'*, passing also through the bar *i*, as shown, for the purpose of holding said lever *r* in its proper position on the bar *i* during the reciprocating motion of the said lever *r*.

The operation of the device is as follows: When the machine is drawn forward over the ground a rotary motion is imparted, by means of drivers *a a*, shaft *b*, and spur-gears *m n*, to the drum or cylinder *p*. The alternating rows of projections *q q q' q'* during their rotation cause the lever *r* to be reciprocated on its fulcrum *s* by the cams or inclines *r' r''*, being acted upon respectively by the pins or projections *q q q' q'*, and in this manner a reciprocating motion is imparted to the rod *t* and the scythe *h* without any extra gearings, save the ones, *m* and *n*, heretofore described.

When it is desired to drive the machine on the road without working the scythe, it is only necessary to disconnect the pinion *n* from the drum *p* by means of the hand-lever *u* and clutch *n'*, or similar or equivalent devices, and then to raise the cutter-bar and scythe, as usual.

The device as shown for imparting a reciprocating from a rotary motion, is very simple in construction, is composed of very few parts, has very little frictional resistance, and consequently can be operated with a minimum of power as compared with other devices now in use for this purpose.

I desire to state that I do not claim the particular arrangement of the cutter-bar, its scythe, and connections to the frame, as shown and described, as such are well known in mowing-machines now in use; but

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

In combination, the rotary drum *p*, its alternating pins or projections *q q'*, the curved rocking lever *r*, adapted to fit the surface of the drum *p*, and provided with curved cam-faces *r' r''*, slot-hole *v*, and guide-bolt *v'*, as described, and for the purpose set forth.

In testimony whereof I have affixed my signature in presence of two witnesses.

ANDREW TELFER.

Witnesses:
JAMES FAIRBAIRN,
HENRY CHADBOURN.