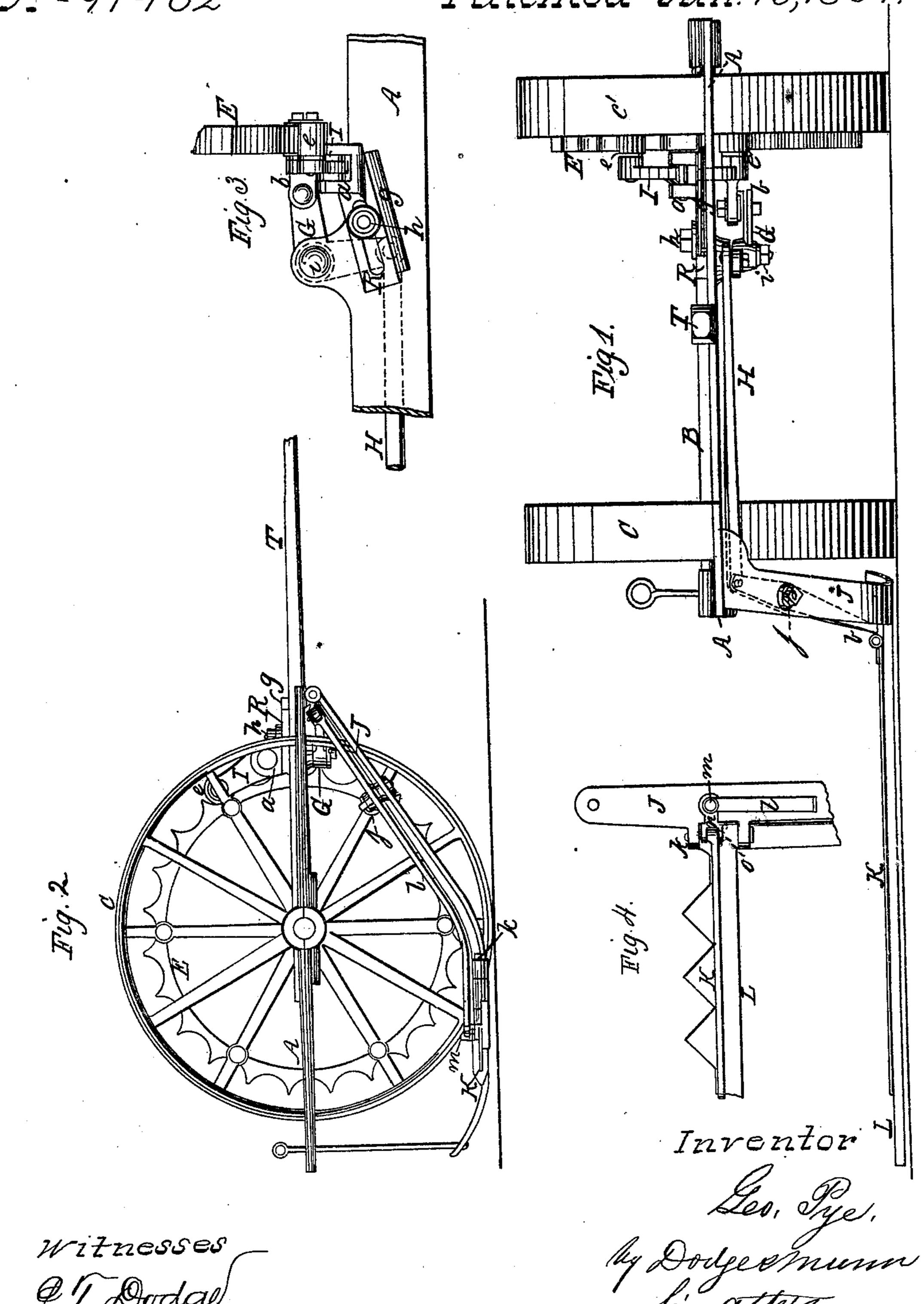
G. Pye.
Mower.

Nº91482

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Anited States Patent Office.

GEORGE PYE, OF BOSTON, MASSACHUSETTS.

Letters Patent No. 91,482, dated June 15, 1869.

IMPROVEMENT IN HARVESTERS.

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, George Pye, of 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 following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, and to the letters of reference marked thereon, like letters indicating like parts wherever they occur.

To enable others skilled in the art to construct and use my invention, I will proceed to describe it.

My invention relates to moving-machines; and it consists in a novel construction and arrangement of the operating-mechanism, whereby the use of gearwheels is dispensed with, and a very simple and cheap machine is produced.

Figure 1 is a front elevation of the machine, complete;

Figure 2 is a side elevation of the same; and

Figures 3 and 4 are views of portions shown more in detail.

In constructing my improved machine, I provide a rectangular frame, A, which may be cast in a single piece, and mount it on two wheels, C, with an axle, B, extending crosswise about midway of the frame, the wheels being placed inside the frame, as shown in Figures 1, 2, 5, and 6.

At the front corner of the frame A, I hinge a dragbar, J, which extends back to near the rear end of the frame, as shown in fig. 2, to which is hinged the finger-bar L, by a joint, k, as shown more clearly in fig. 4.

To the wheel C, on the opposite side, I secure a cam-wheel, E, as shown in fig. 2; and upon the frame, near the corner on that side, I place a slotted plate, R, which has ears, a, projecting upward at its inner

end, as shown more clearly in fig. 3.

Between these ears, a, I pivot a rocking-lever, I, to each end of which is secured a friction-roller, e, bearing against the face of the cam-wheel E, as shown in figs. 1 and 2, the length of the lever I being so proportioned to the size of the depressions on the face of the wheel E that when one of the rollers, e, rests in one of the depressions, the other roller, e, will come opposite the point between two adjoining depressions, so that, as the wheel rotates, the lever I will have imparted to it a constantly rocking motion, in a manner well understood by mechanics.

In order to hold the plate R firmly in place, and prevent it from slipping, the frame A has a lug, g, cast on its upper side, in the proper position for the plate R to bear against, as shown in fig. 3, and a strong bolt, h, is inserted through the slot in the plate and the frame.

From the inside of the lever I, at its lower end, there projects a lug, or short arm, b, as shown in figs. 1 and 3; and to this is pivoted one end of an elbow-lever, G, which latter is pivoted on a bolt, i, to the under side of the frame. To the other end, or arm,

of the elbow-lever G is pivoted a rod, H, which extends across the front end of the frame, as represented in fig. 1, and has its opposite end pivoted to a lever, *l*, which is pivoted by a bolt or stud, *j*, upon the dragbar J, as represented in fig. 2; this lever *l* being bent to conform to the curve of the drag-bar, and having its lower end connected to the sickle K by means of a piece, *n*, as shown in fig. 4; this piece *n* being pivoted to the lever *l* at *m*, so as to form a horizontal joint, and to the sickle at *o*, so as to form a vertical joint, which latter joint comes in line with the joint *k* of the finger and drag-bar, thereby permitting the sickle and drag-bar to be folded up against the side of the frame.

By this mode of constructing and arranging the parts, it will be seen, that as the wheel C revolves and carries with it the cam-wheel E, the latter imparts to the lever I a rocking motion, which in turn imparts a reciprocating motion to the elbow-lever G, and that, through rod H, conveys the same to lever l, which in turn imparts motion to the sickle.

To throw the parts out of operation, it is only necessary to release the bolt h, when the plate R can be slipped back, thus moving the rocking lover exercises

be slipped back, thus moving the rocking-lever away from the cam-wheel E. As will be observed in fig. 3, this plate R is set inclined on the frame, so that while having a firm bearing against the lug g, on its edge, it can be adjusted so as to compensate for any wear

of the wheel E or of the rollers e.

When thus constructed, it forms a rear-cut machine; but it is obvious that the parts may be reversed, and, by locating the rocking-lever and the parts connected thereto at the rear end of the frame, instead of the front, the same devices will answer for a front-cut machine.

I am thus enabled to produce a very simple and compact machine, and to mount it on large wheels, whereby it runs steadier and easier.

Any suitable device may be used for raising the sickle from the ground.

Having thus described my invention,

What I claim, is—

- 1. 'A mowing-machine, having a cam-wheel, E, attached to one of the driving-wheels, in combination with the rocking-lever I, elbow-lever G, rod H, and lever l, all constructed and arranged as herein described.
- 2. The drag-bar J, hinged to the main frame, and having the lever l, that operates the sickle, pivoted thereon, and the finger-bar L hinged thereto, as herein set forth.
- 3. The slotted plate R, set at an angle on the frame A, and held in place by the lug g and bolt h, for holding and adjusting the rocking-lever I, as herein described.

GEORGE PYE.

Witnesses:

Jos. P. Waterhouse, Chs. French.