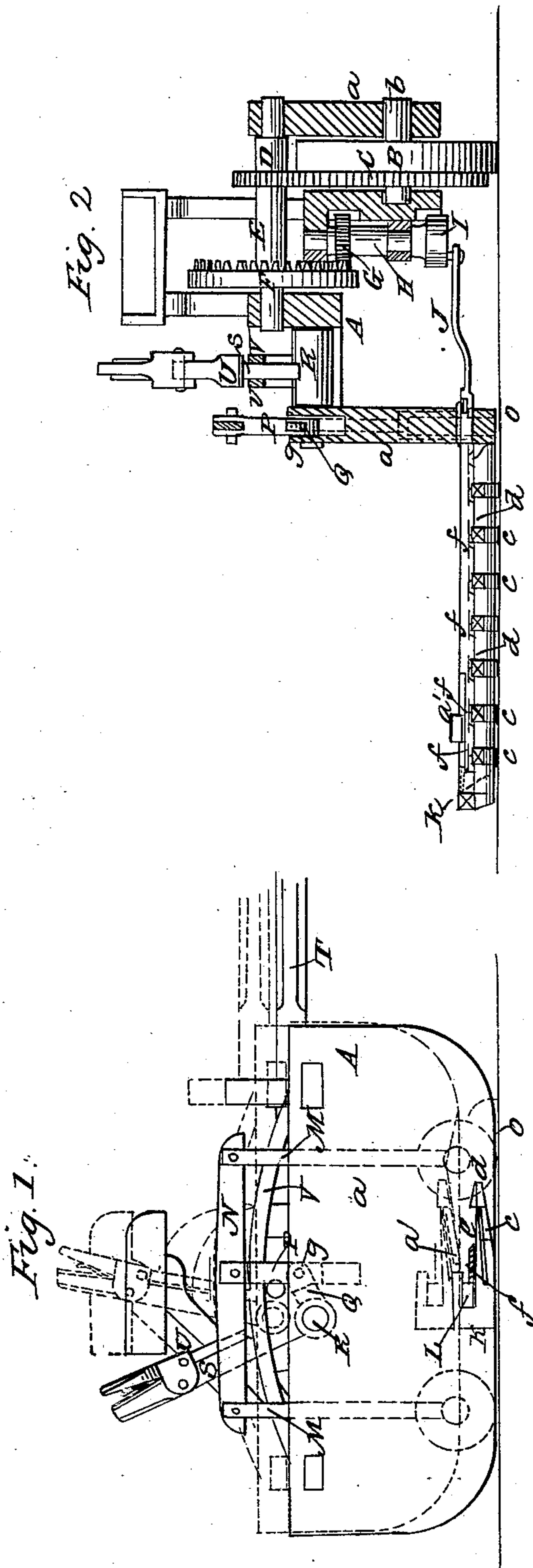


S. ROCKAFELLOW.

Mower.

No. 13,181.

Patented July 3, 1855.



UNITED STATES PATENT OFFICE.

SAMUEL ROCKAFELLOW, OF COATESVILLE, PENNSYLVANIA.

IMPROVEMENT IN MOWING-MACHINES.

Specification forming part of Letters Patent No. 13,181, dated July 3, 1855.

To all whom it may concern:

Be it known that I, SAMUEL ROCKAFELLOW, of Coatesville, in the county of Chester and State of Pennsylvania, have invented a new and Improved Mowing-Machine; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a side view of my improved mowing-machine. Fig. 2 is a transverse vertical section of same, the plane of section being through the center. Fig. 3 is a plan or top view of a portion of the finger-bar and cutters.

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

The nature of my invention consists in the peculiar means employed, which will be hereinafter described, for elevating and depressing the finger-bar and sickle.

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

A represents the frame of the machine, composed of two side pieces, *a a*, and suitable connections to support the gearing by which the sickle is driven.

B represents the driving-wheel having a gear-wheel, C, attached to its inner side. The driving and gear wheels are hung upon an axle, *b*, which has its bearings in the frame A. (See Fig. 2.) The gear-wheel C gears into a pinion, D, on a shaft, E, which works in suitable bearings on the upper part of the frame A. This shaft E has also a toothed wheel, F, upon it, which gears into a pinion, G, hung upon a vertical shaft, H. At the lower end of the shaft H there is a crank-pulley, I, to which one end of a pitman or connecting rod, J, is attached.

K represents the finger-bar attached to one side of the frame A at its lower part. To the lower part or edge of said finger-bar fingers *e* are attached in any proper manner, the outer ends of the fingers being provided with knobs or projections *d*, as shown in Figs. 1 and 3. To the front side of the finger-bar K stationary cutters *e* are attached. The outer ends or points of the cutters *e* are secured in the knobs or projections *d*.

L represents the sickle-bar, to which cutters or teeth *f* are attached in the usual manner. These cutters or teeth *f*, as well as the cutters *e*, are of the usual saw-tooth or triangular form, and have cutting-edges at each side. The cutters or teeth *f* work directly over the stationary cutters *e*. The sickle-bar works in guides *a'*, one or more, attached to the upper surface of the finger-bar. The pitman or connecting rod J is attached to one end of the sickle-bar L, as shown in Fig. 2.

M M are two vertical bars, the upper ends of which are connected by a cross-bar, N. These bars M M work loosely in the inner side piece, *a*, of the frame A, and have each a small wheel, O, at their lower ends.

To the center of the cross-bar N there is attached an arm, P, projecting downward in the side piece, *a*, and to the lower end of this arm the outer end of a lever, Q, is attached by a pin or pivot, *g*. (See Fig. 2, and dotted lines in Fig. 1.) The opposite end of the lever Q is attached to a shaft, R, on the frame A, said shaft having an upright arm, S, attached to it.

T, Fig. 1, represents the tongue attached to the front end of the frame A.

As the machine is drawn along, the wheel B, in consequence of the gear-wheels C F, pinions P G, crank-pulley I, and pitman or connecting rod J, communicate a reciprocating motion to the sickle-bar L, and its cutters or teeth *f* work over the stationary cutters *e*, and the grass is cut between them on both sides of the cutters. The finger-bar and cutters are raised or depressed so as to cut the grass the required distance from the surface of the ground. By operating the arm S the lever Q, of course, will raise or depress the inner side piece, *a*, and also the finger-bar K and cutters attached to it. The arm S may be secured at any desired point by a pawl, U, the lower end of which bears upon curved or segment guides V V on the frame A.

The above invention is extremely simple, and the cutters may be elevated or depressed so as to cut the grass the required distance from the surface of the ground with the greatest facility. By means of the stationary and reciprocating cutters, in connection with the fingers arranged as shown the cutters are prevented from clogging or becoming choked.

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

Raising and depressing the finger-bar K, and consequently the cutters *e f*, by means of the vertical bars M M, having wheels O O at their lower ends, arm P, attached to the cross-piece N of the bars M M, lever Q, and shaft

R, with its arm S attached, the above parts being arranged substantially as herein shown and described.

SAMUEL ROCKAFELLOW.

Witnesses:

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B. WILLIAM MARTIN.