

(No Model.)

J. E. MENDENHALL.
MOWING MACHINE.

No. 295,126.

Patented Mar. 11, 1884.

Fig. 1.

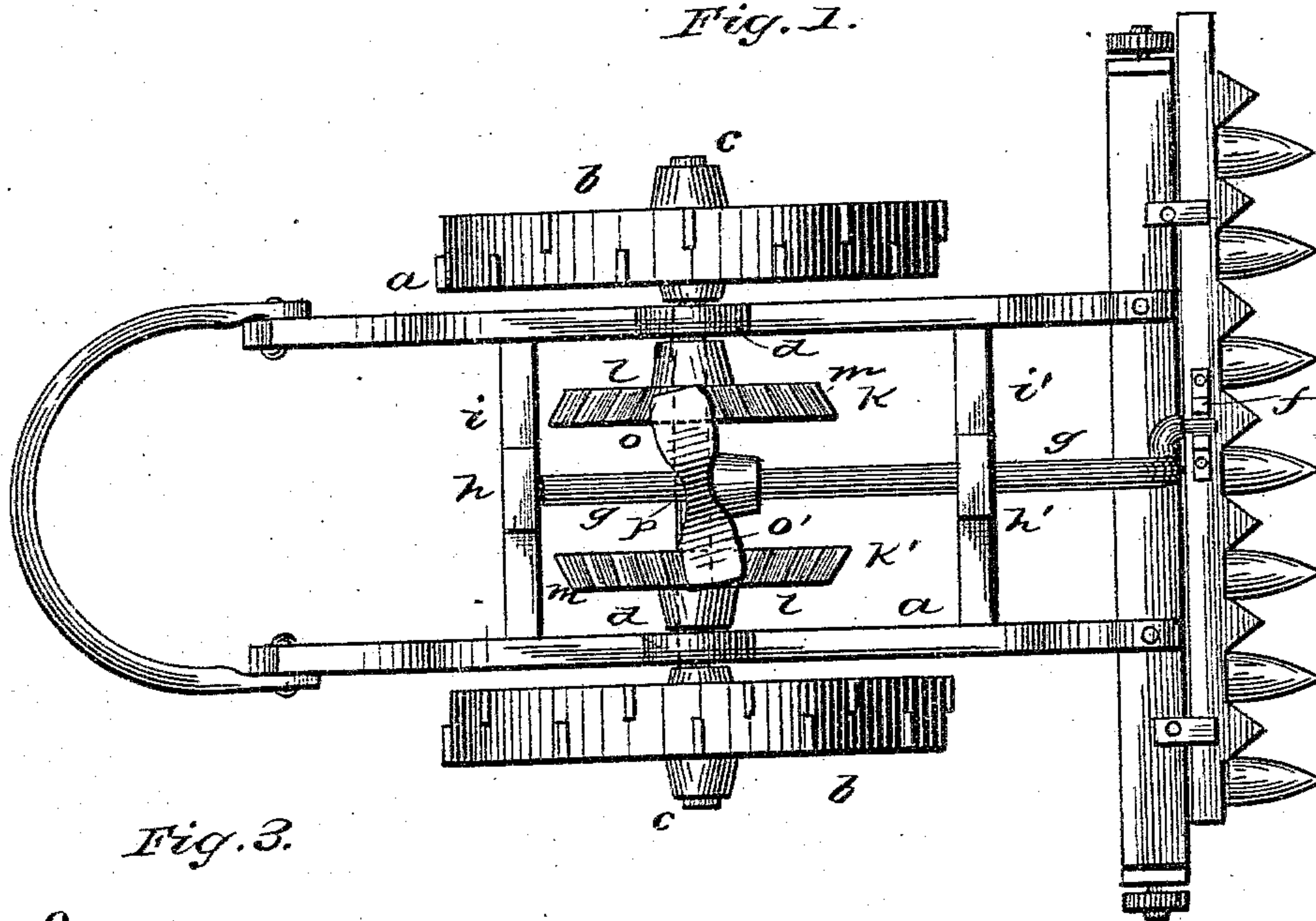


Fig. 3.

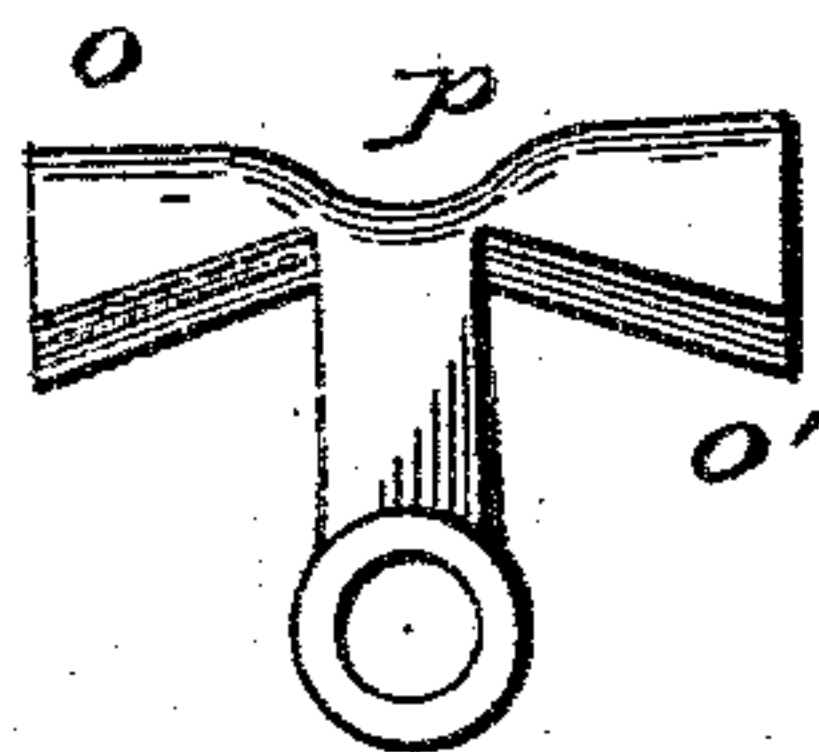
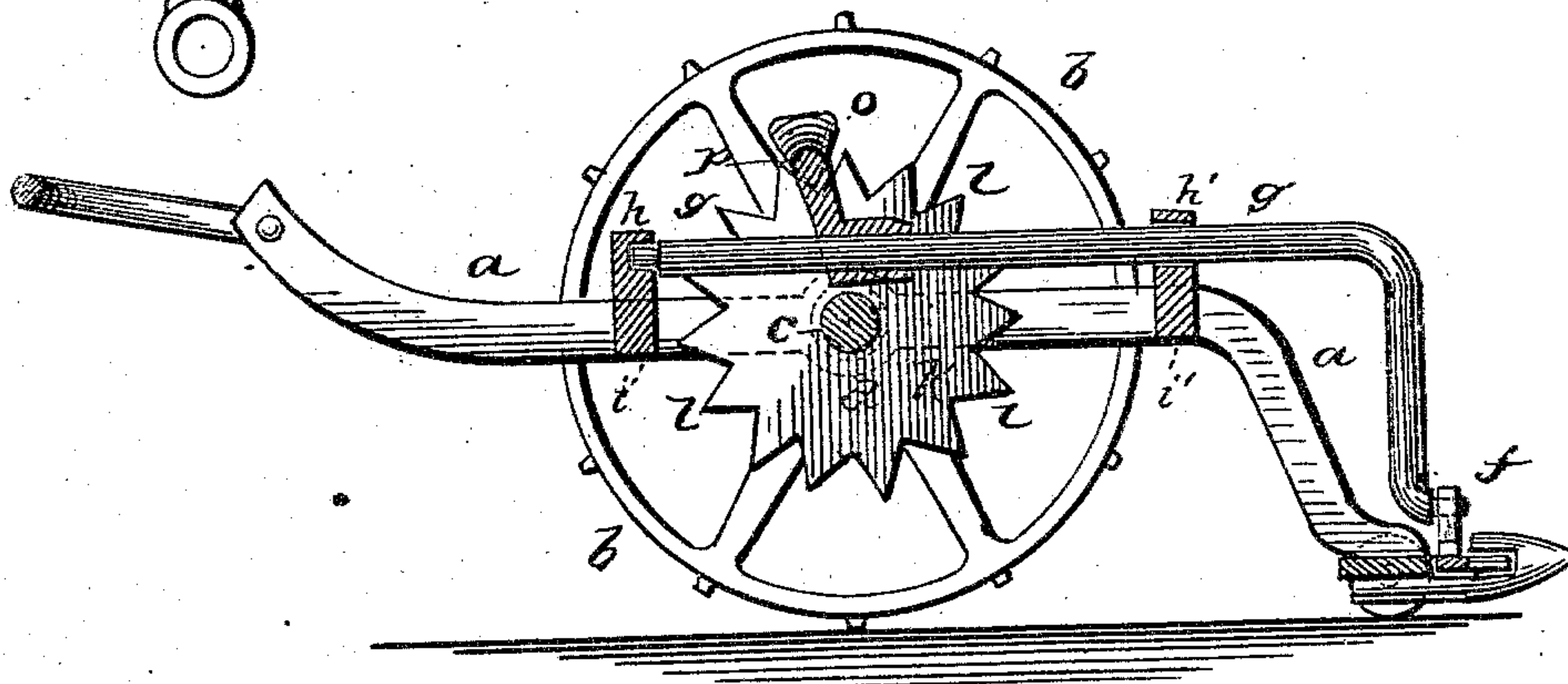


Fig. 2.



Witnesses:
E. H. Bates
John T. Morrow.

Inventor:
James E. Mendenhall,
by Anderson & Smith
his Attorneys.

UNITED STATES PATENT OFFICE.

JAMES EDWARD MENDENHALL, OF SPRINGFIELD, OHIO, ASSIGNOR OF ONE-HALF TO SALATHIEL H. KNOX, OF SAME PLACE.

MOWING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 295,126, dated March 11, 1884.

Application filed May 19, 1883. (No model.)

To all whom it may concern:

Be it known that I, JAMES E. MENDENHALL, a citizen of the United States, residing at Springfield, in the county of Clarke and State of Ohio, have invented certain new and useful Improvements in Mowing-Machines; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a top view of the machine. Fig. 2 is a longitudinal vertical section of the same, and Fig. 3 is a front elevation of the T-shaped arm.

This invention has relation to mowing-machines; and it consists in the construction and novel arrangement of devices, as will be hereinafter fully described, and particularly pointed out in the appended claim.

Referring by letter to the accompanying drawings, *a* designates the frame of the mower, mounted on the wheels *b b*, fixed to the axle *c*, which has its bearings in boxes *d d* in the side bars of the frame. The forward ends of the frame *a* are curved downward and forward, as shown, and to these ends the cutter-bar and finger-guards are connected in the usual manner. The sickle itself is provided with a central vertical stud, *f*, which is pivoted to the forward bent arm of the longitudinal rock-shaft *g*, which reciprocates the sickle when the mower is in operation. The rock-shaft has its bearings in boxes *h h'* on the cross-bars *i i'* of the frame, and is arranged to convert the rotary motion of the gearing, through a T-lever secured to said rock-shaft, into a reciprocating movement of the sickle. Vertically-parallel cam-wheels *k k'*, having star-pointed cam-teeth *l*, beveled laterally from their inner to their outer faces at their extreme points, as at *m*, are fixed to the axle *c'* in such a manner that the point of each tooth of one of these cam-wheels is directly opposite the

space between two of the teeth on the other wheel. The T-shaped arm *p*, fixed to the rock-shaft between these two cam-wheels, has arms *o o'*, their lower surfaces being V-shaped in cross-section, corresponding to the shape of the spaces between the cam-teeth on the wheels *k k'*. The under surfaces of these arms are also inclined downward toward their outer ends, to correspond with the outward bevel of the cam-teeth on the wheels *k k'*. The cross-arm of the T-shaped arm is out of parallel with the main axle *c*, over which it is fixed, between the cam-wheels, at an angle of about ten degrees, so that the under bevel on one arm will rest on the point of the tooth on one cam-wheel, while the other under bevel will be between two of the teeth on the other cam-wheel. When the mover is moved, the rock-shaft will be caused to rock, and will impart a reciprocating motion to the sickle.

I am aware that it is not new, broadly, to provide a harvester with two star-shaped wheels arranged upon its main axle, to communicate a vibratory motion to a lever connecting with the cutting apparatus, the star-wheels being so arranged upon the axle as to have the points in one relatively opposite and in line with the spaces between the points on the other.

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

The combination, in a mowing-machine, of the main driving-axle, the cam-wheels secured thereon, and having star-pointed outward-beveled cam-teeth, the rock-shaft, the T-shaped arm secured to said shaft, and having arms inclined both vertically and transversely, as described, and the cutter-bar, all substantially as set forth.

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

JAMES EDWARD MENDENHALL.

Witnesses:

EDWARD S. WALLACE,
LEWIS E. STALEY.