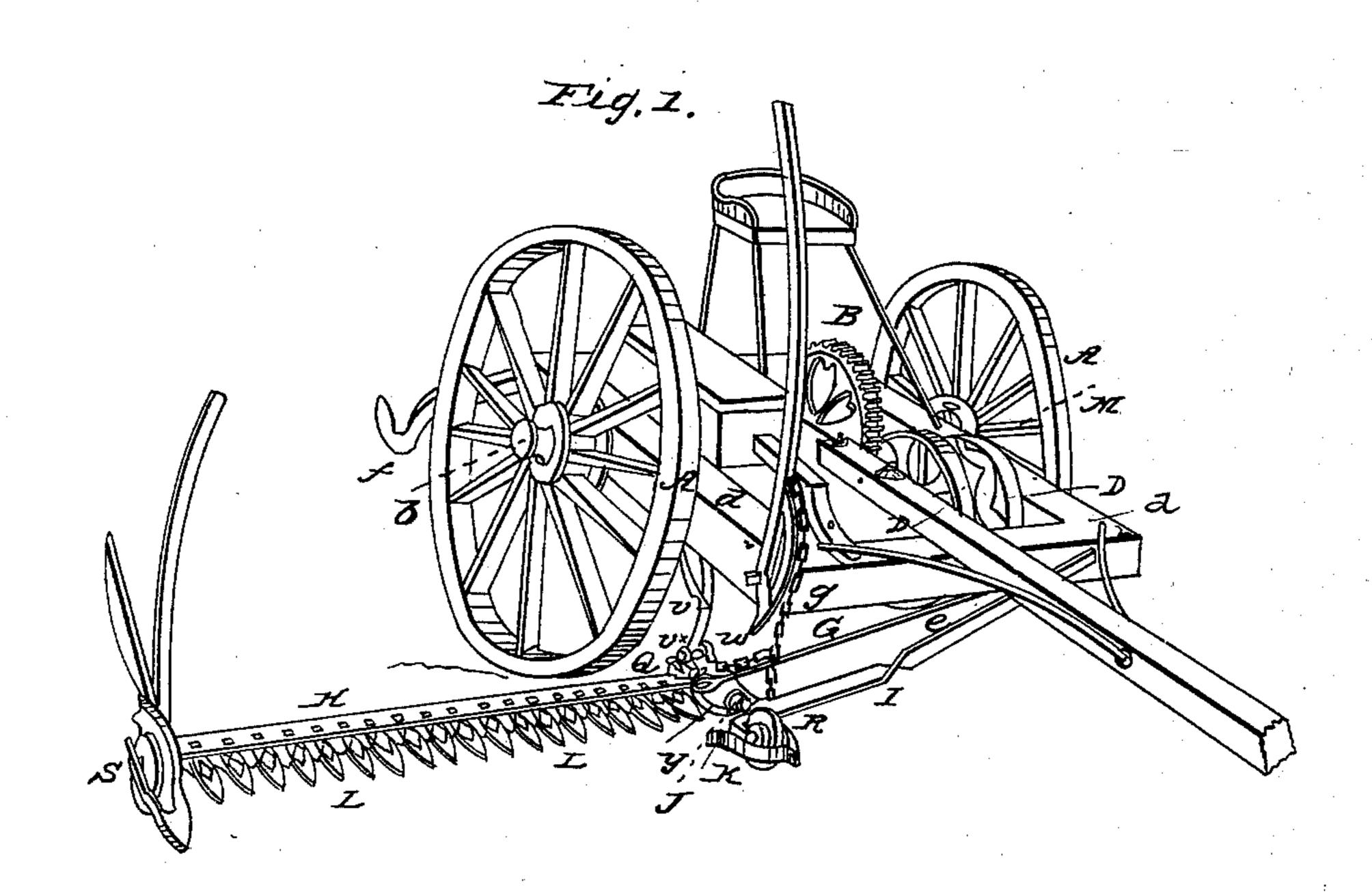
Harvester.

No. 80,272.

Patented July 28, 1868.



Witnesses: John H. Austin Offmander Street

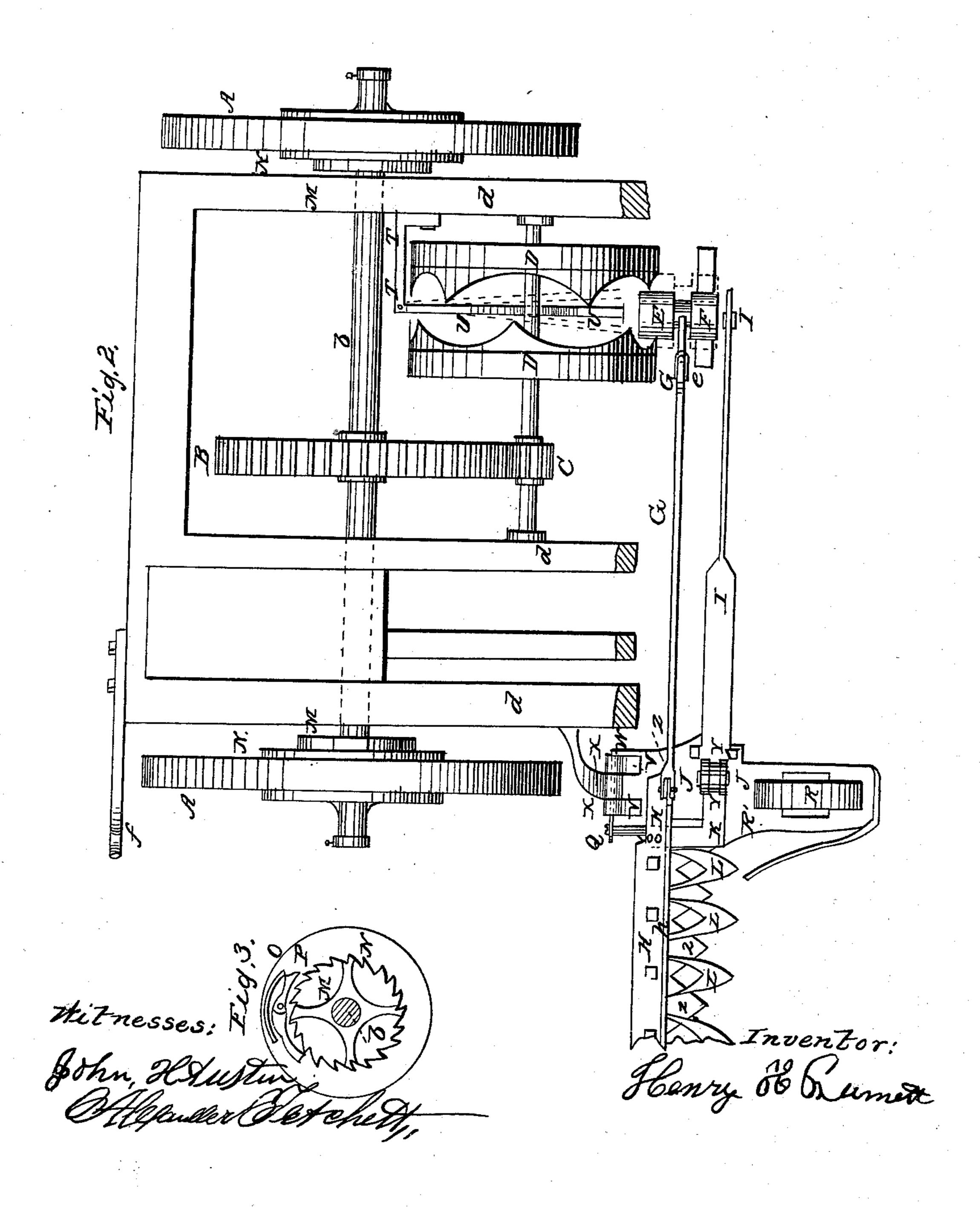
Frenzor. Henry Harmett

## H. K. BURNETT.

Harvester.

No. 80,272.

Patented July 28, 1868.



## UNITED STATES PATENT OFFICE.

HENRY K. BURNETT, OF POUGHKEEPSIE, NEW YORK.

## IMPROVEMENT IN HARVESTERS.

Specification forming part of Letters Patent No. 80,272, dated July 28, 1868.

To all whom it may concern:

Be it known that I, Henry K. Burnett, of Poughkeepsie, in the county of Dutchess and State of New York, have invented and made a certain new and useful Improvement in Mowing-Machines; and I do hereby declare the following to be a full, clear, and exact description of the said invention, reference being had to the annexed drawing, making part of this specification, wherein—

Figure 1 is a perspective view of the said mowing-machine. Fig. 2 is a plan of the same, with the tongue, seat, and part of the frame removed; and Fig. 3 is an elevation of the ratchet-wheel and spring-pawl upon the axle.

Similar marks of reference denote the same

parts.

In my mowing-machine, a reciprocating movement is given to the cutter-bar by a vibrating lever-arm between zigzag cams, that face each other, and are revolved by gearing to the axle of the main wheel. The shoe at the inner end of the finger-bar runs upon a wheel, and the finger-bar is hinged to the same in such a manner that the said finger-bar can be turned over and lie parallel, or nearly so, to the face of the wheel.

In the drawing, A A are the main wheels upon the axle b, but loose thereon, and M M are ratchet-wheels fastened on the axle b; and P is a pawl on the hub-plate N, acted upon by the spring O, (see Fig. 3,) so that the machine may be turned around or backed, as usual, but that the axle b will be rotated when the

machine is drawn forward.

Upon the axle b is a wheel, B, gearing into the pinion C, the shaft of which is supported in the frame d, and upon said shaft are the cylindrical cams D D, with scalloped edges, sitting opposite to each other, the undulation on one cam coming opposite the projection upon the other, so that a zigzag opening is produced, and in this lies the roller E upon the arm U that has its fulcrum in the standard T. The distance between the cams D D is such that the arm U lies freely between said cams, and is rapidly vibrated by their action upon the roller E.

The outer end of the arm U is supported by a friction-roller, F, against the under side

of the frame d.

G is the pitman, extending from the vibrating arm U to the cutter-bar h and cutters i.

H is the finger-bar having the fingers L L. S is a shoe and track-clearer at the outer end of

the finger-bar H, as usual.

The inner end of the finger-bar H rests upon and is bolted to the right-angle bar K, the forward part of which is united to the shoe R' by means of a joint formed by the flanges or ears Y Y and pin T. The shoe R' runs upon the wheel R, and the back end of the shoe R' is connected by the joint ears V V and pin W to the arm X that extends below the frame d, and the bar K is united at its back end by an eye to an eye on the end of the pin W, so as to form a swivel-joint, as at Q.

The shoe R' and cutter-bar move upon the joint V W to accommodate inequalities in the

surface of the ground.

The pitman G is formed with a joint at e that connects the same with the outer end of the arm U, and the joint l to the cutter-bar h is provided with a removable pin, which is to be taken out, and also the pin J, when the finger-bar is swung around upon the joint Q and laid into the crotch-bar f that extends from the back part of the frame d, and supports said finger-bar at the side of the wheel A.

The shoe R' and finger-bar H may be raised, if desired, by the lever-segment and chain g, Fig. 1. The brace I, extending from the frame d to the shoe R', steadies that shoe, and a slot in said brace, at the point where it is bolted to the frame, allows the shoe R' to be lifted.

What I claim, and desire to secure by Let-

ters Patent, is—

1. The cams D D rotated by the gearing B C, in combination with the arm U, roller E, and jointed pitman G, connecting the arm U to the cutter-bar a, substantially as set forth.

2. The bar K at the end of the finger-bar H, and jointed at Q to the shoe R' and arm

X, as and for the purposes set forth.

3. The shoe R' jointed to the arm X, in combination with the slotted brace I, finger-bar H, and cutters i, arranged and operating as and for the purposes set forth.

HENRY K. BURNETT.

Witnesses:

JOHN H. AUSTIN, ALEXANDER FITCHETT.