(No Model.) 2 Sheets—Sheet 1.

C. MARICK.

MOWING AND HARVESTING REAPER.

No. 420,458. Patented Feb. 4, 1890.

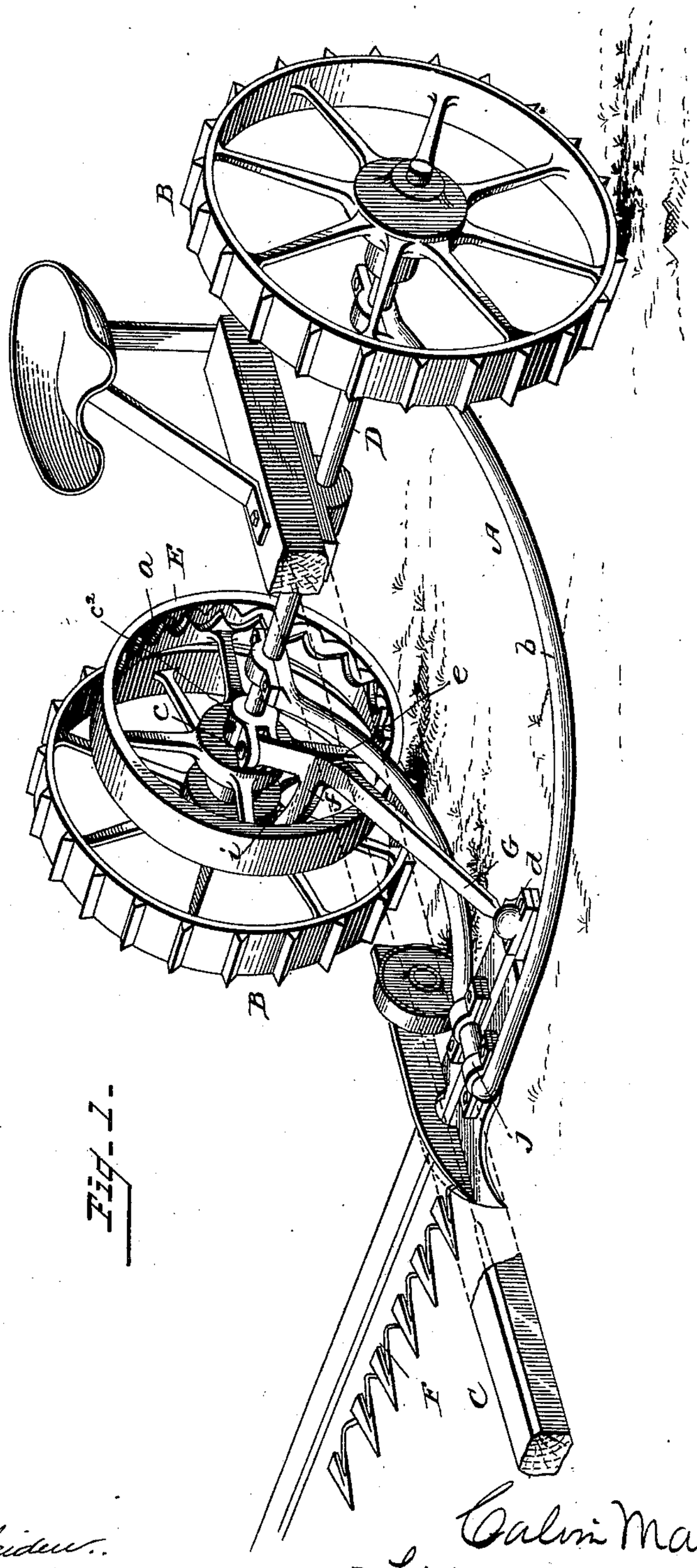

Fig. 1.

WITNESSES

Wm. L. Sheldon.

D. H. Loucks.

INVENTOR

Calvin Marick

By his Attorney

Franklin H. Hough

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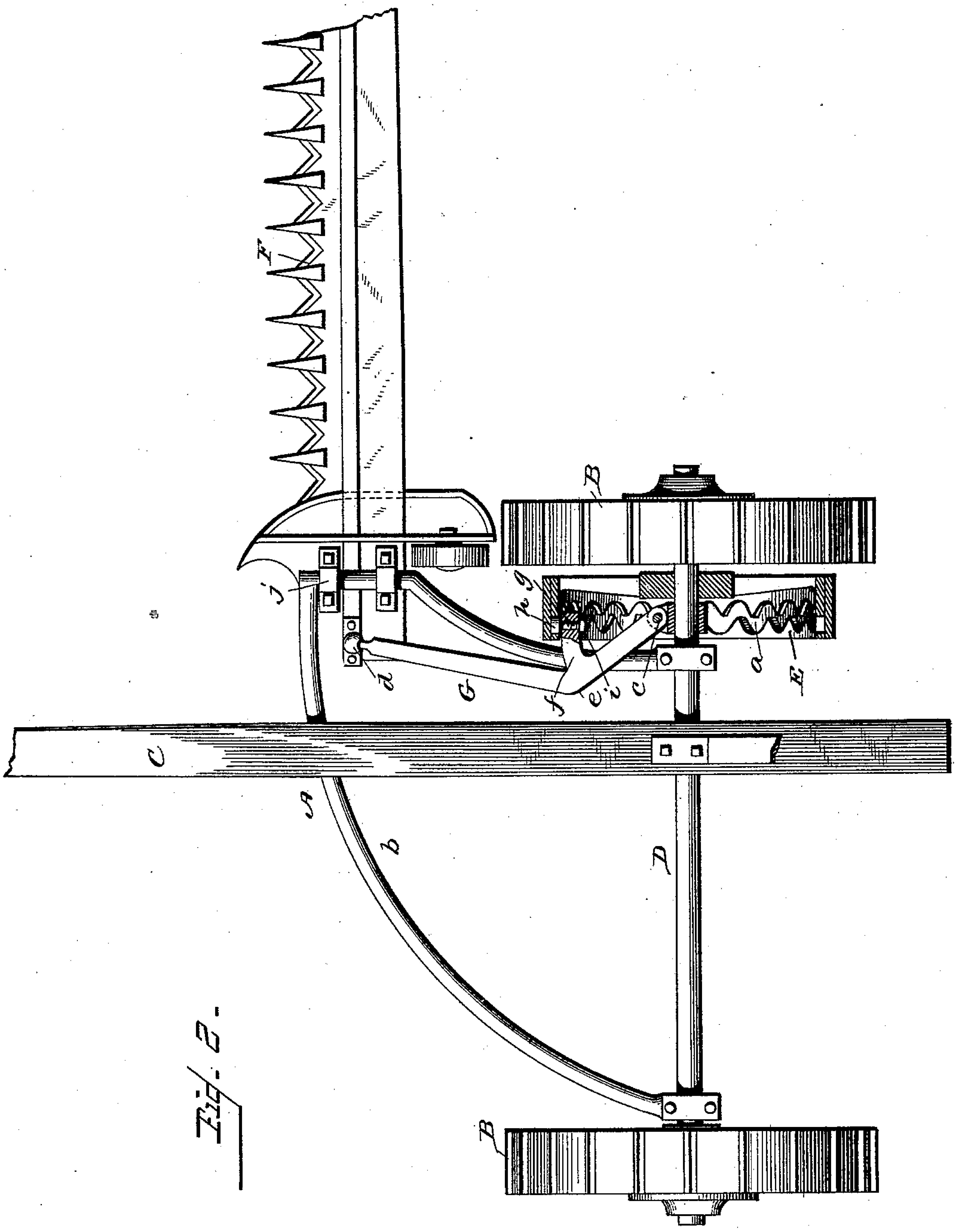

Fig. 2.

WITNESSES

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UNITED STATES PATENT OFFICE.

CALVIN MARICK, OF MOUNT HERON, OHIO.

MOWING AND HARVESTING REAPER.

SPECIFICATION forming part of Letters Patent No. 420,458, dated February 4, 1890.

Application filed September 9, 1889. Serial No. 323,445. (No model.)

To all whom it may concern:

Be it known that I, CALVIN MARICK, a citizen of the United States, residing at Mount Heron, in the county of Darke and State of Ohio, have invented certain new and useful Improvements in Mowing and Harvesting Reapers; 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 the letters of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in mowing and harvesting machines of that class in which spur and chain gearing is dispensed with; and it has for its object to improve upon prior constructions of this character and to simplify and cheapen the device.

To these ends and to such others as the invention may pertain the same consists in the peculiar combinations and the novel construction, arrangement, and adaptation of parts, all as more fully hereinafter described, shown in the drawings, and then particularly pointed out in the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a perspective view of a machine embodying my invention. Fig. 2 is a horizontal section with parts in plan.

Like letters of reference indicate like parts in both figures of the drawings.

Referring to the details of the drawings by letter, A designates the frame, B the wheels, C the tongue, and D the axle, all of which are of known construction, and in which I claim nothing new.

E is a wheel on the axle and rotating therewith, and on the inner face this wheel is provided around the inner circumference of its rim with a serpentine groove *a*, as shown more clearly in Fig. 2. The spokes, which connect the rim of this wheel with its hub, are arranged to one side, so as to not interfere with the movement of the parts in the groove, as hereinafter more fully set forth.

b is the coupling-frame forming a support for the finger-bar. It is sleeved at its ends on the axle, as shown in Fig. 2. The finger-bar is supported as usual, and the cutter-bar F slides thereon in any well-known manner.

G is a lever, pivoted at its inner end upon the vertical pivot *c*, said end being arranged between the bifurcated extension of the sleeve or collar c^2 upon the axle, and at its other end this lever is connected with the end of the cutter-bar by means of a ball-and-socket swivel-joint, as at *d*. This lever is formed with an angle, as at *e*, and at this angle, or between the same and its pivot end, the lever has formed integral therewith or rigidly attached thereto a lateral curved arm *f*, as shown best in Fig. 2, which at its free end is formed with a bearing for a pintle *g*, the outer end of which carries a roller *h*, designed to travel in the cam-groove in the wheel E. The pintle of the roller is made adjustable in the direction of its length in its bearing by means of the nut *i*, so as to make up for wear or to provide for ready adjustment of the roller to the groove.

It is deemed especially important that the groove in the wheel E be upon the inner face of the rim thereof, where it is protected and prevented from being easily clogged.

The operation is apparent and will be readily understood. The rotation of the wheel E causes a vibratory movement to be given to the lever G, which reciprocates the cutter-bar in the usual manner.

The finger-bar is hinged to the coupling-frame *b*, as at *j*, to allow of necessary movement thereof.

The mechanism is composed of few parts, the groove and roller are protected in a great measure from injury in the ordinary running of the machine, and the mechanism as a whole has proved very efficient and not liable to get out of order.

What I claim as new is—

1. The combination, with the cutter-bar, coupling-frame, and the axle of a mower, of the wheel on the axle and provided upon the inner face of its rim with a cam-groove, the vibratory lever pivotally connected at one end with the axle and at the other connected with the cutter-bar by a ball-and-socket joint,

the lateral arm on the lever, and the roller carried by an adjustable pintle on the said arm and arranged to engage the groove in the wheel, substantially as shown and described, and for the purpose specified.

2. The combination, with the cutter-bar, coupling-frame, and the axle of a mower, of the wheel on the axle, provided upon the inner face of its rim with a cam-groove, the vibratory lever pivoted at one end with the axle and at the other end connected with the cutter-bar by a ball-and-socket joint and provided with an angle, as shown, the lateral arm rigid with the lever between said angle and the pivoted end of the lever, and the roller carried by a pintle adjustable in a bearing in the free end of the said arm and arranged to travel in the said groove, substantially as shown and described.

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

CALVIN MARICK.

Witnesses:
JOHN T. MARICK,
JESSE FOLKESTH.