F. PASTORIUS.

MOWING-MACHINE.

No. 182,383. Patented Sept. 19, 1876.

Fig. 1.

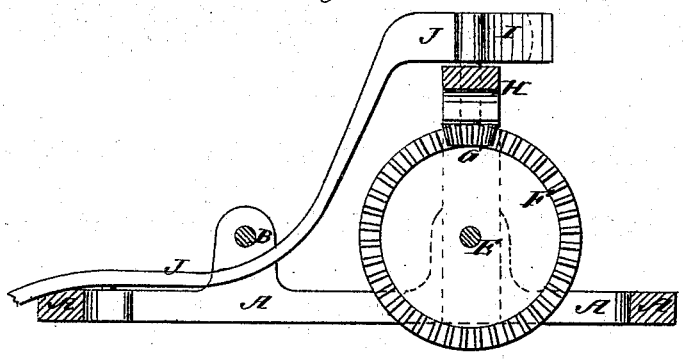
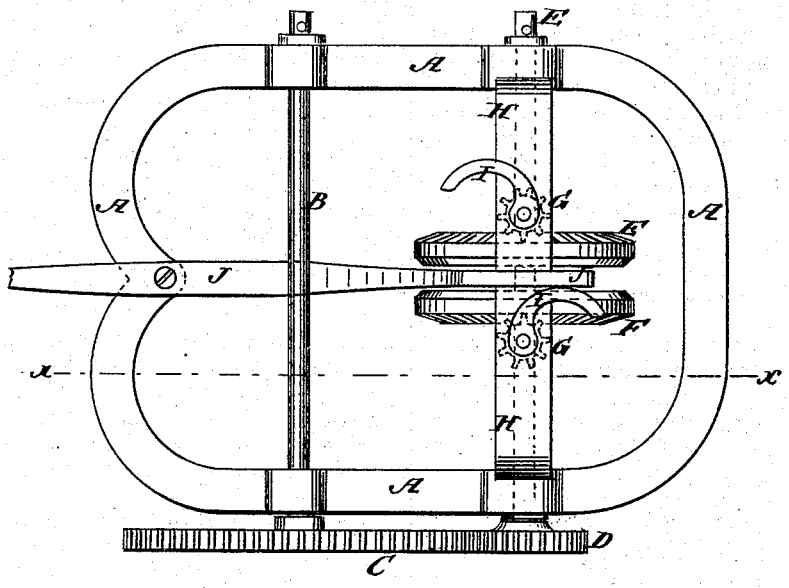


Fig. 2.



WITNESSES:

E. Wolff.

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INVENTOR:

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UNITED STATES PATENT OFFICE.

FRANK PASTORIUS, OF QUINCY, ILLINOIS.

IMPROVEMENT IN MOWING-MACHINES.

Specification forming part of Letters Patent No. **182,383**, dated September 19, 1876; application filed February 14, 1876.

To all whom it may concern:

Be it known that I, FRANK PASTORIUS, of Quincy, in the county of Adams and State of Illinois, have invented a new and useful Improvement in Reapers and Mowers, of which the following is a specification:

Figure 1 is a vertical section of the frame of a reaper or mower, to which my improvement has been applied, taken through the line *x x*, Fig. 2. Fig. 2 is a top view of the same.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved device for giving motion to the sickle-bar of reapers and mowers, which shall be simple in construction, effective in operation, easily driven, and not liable to break or get out of order.

The invention consists in the combination of the two cams, the two pairs of bevel-gear wheels, the shaft, and the pair of gear-wheels with the axle of the drive-wheels, and with the oscillating lever that vibrates the sickle-bar, as hereinafter fully described.

A represents the frame of a reaper or mower. B is the axle, which revolves in bearings attached to the frame A, and to which the drive-wheels are attached. The drive-wheels are not shown in the drawings. To the axle B, or to one of the drive-wheels, is attached a large gear-wheel, C, the teeth of which mesh into the teeth of the small gear-wheel D, attached to the end of the shaft E. The shaft E revolves in bearings attached to the frame A, and to its middle part are attached two bevel-gear wheels, F, which are placed near each other, and back to back, and are rigidly connected with each other and with the shaft E. The teeth of the two large bevel-gear wheels F mesh into the teeth of two small bevel-gear wheels, G, the journals of which revolve in bearings in an upright frame, H, attached to the main frame A. To the upper ends of the journals of the gear-wheels G are rigidly attached two cams, I, set in opposite directions, so as to alternately push against the opposite sides of the end of the lever J, and thus oscillate the said lever. The lever J is curved downward and forward, is pivoted to the frame A, and its other end is designed to be connected with the sickle-bar, so that the said sickle-bar may be vibrated by the oscillation of the said lever J. The friction between the cams I and the lever J may be lessened by a rubber or other roller pivoted to the said lever J. The cams I may also have rollers pivoted to them.

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

The combination of the two cams I, the two pairs of gear-wheels G F, the shaft E, and the pair of gear-wheels D C, with the axle B of the drive-wheels, and with the oscillating lever J, that vibrates the sickle-bar, substantially as herein shown and described.

FRANK PASTORIUS.

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