H. L. HOPKINS.

MOWER.

No. 193,250. Patented July 17, 1877.

Fig. 1.

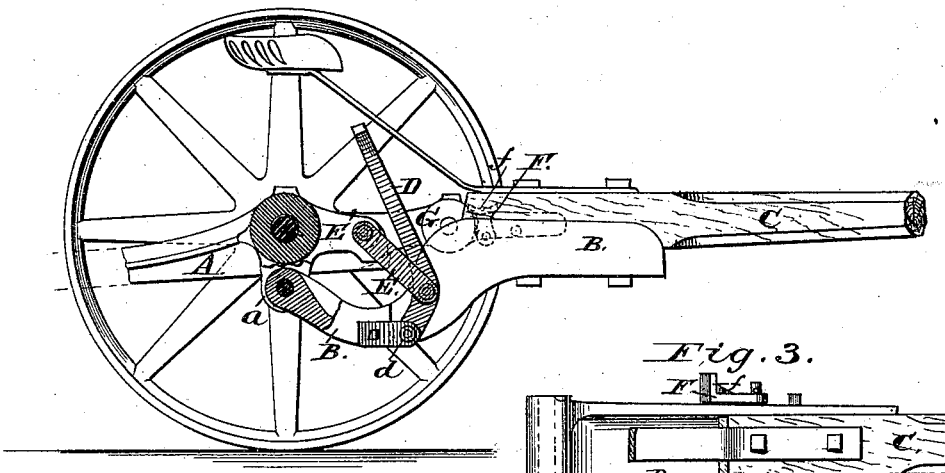


Fig. 3.

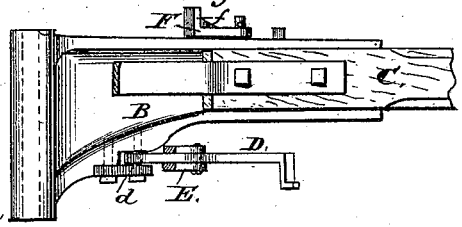
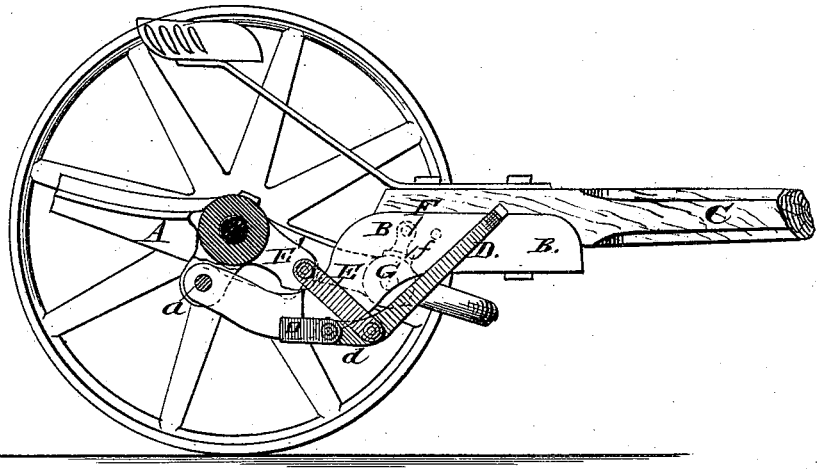


Fig. 2



Attest:
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UNITED STATES PATENT OFFICE.

HARVEY L. HOPKINS, OF MANCHESTER, IOWA.

IMPROVEMENT IN MOWERS.

Specification forming part of Letters Patent No. **193,250**, dated July 17, 1877; application filed April 24, 1877.

To all whom it may concern:

Be it known that I, HARVEY L. HOPKINS, of Manchester, in the county of Delaware and State of Iowa, have invented a new and useful Improvement in Harvesters, of which the following is a full, clear, and exact description.

This invention relates more especially to a mowing-machine such as described in my United States Letters Patent No. 121,784, granted to me December 12, 1871, and has reference to the mechanism for tilting the frame and supporting it on the tongue in an elevated position. The mechanism for this purpose shown in my said patent is obnoxious to certain objections. The use of a crank-shaft turning in bearings in the tongue and its socket involved not only considerable expense in the manufacture, but materially weakened the tongue, and the detent for locking the frame on the tongue, as there shown, was unreliable in its operation and inconvenient of access.

My improvement consists in linking the frame directly to a foot-lever fulcrumed on the side of the tongue-socket, and in using a pendulous detent pivoted on the side of the tongue-socket, and adapted to act as a brace on the top of the forward end of the frame to hold it down after it has been tilted by the foot-lever to the required extent for transportation.

In the annexed drawing, Figure 1 is a longitudinal section of so much of a harvester as is necesary to illustrate my invention. Fig. 2 is a similar section, showing parts in a different position. Fig. 3 is a plan view, showing in detail the foot-lever mechanism and the detent.

The same letters of reference indicate like parts in all the figures.

The frame A of the machine is pivoted on the axle thereof, and has downwardly-projecting lugs *a a* directly under the axle, to which lugs the tongue-socket B is pivoted, the tongue C being rigidly secured to said socket. A foot-lever, D, is pivoted at *d* to one side of the tongue-socket, and connected by links E to an arm, E′, projecting forward from the frame A. By operating the foot-lever the frame can be readily tilted on the axle for the purpose of elevating the cutting apparatus, whenever required. A pendulous detent, F, is pivoted on the other side of the socket, terminating in a curved foot, *f*, adapted to rest on the curved upper surface of the adjacent box G of the frame A, in which one end of the counter-shaft has its bearing.

When the machine is arranged for transportation from place to place, the detent is thrown down to brace against this box G of the frame A to prevent the latter from tilting backward. When not in use, the detent is thrown back, and rests against a stop-pin, *f′*, on the socket.

It will be observed that the detent, as here arranged, can be readily operated by the left foot of the driver, while his right foot controls foot-lever D; also, that, by reason of the curved foot of the detent partially encircling the bearing G, the detent is not liable to be knocked out of position by the joltings of the machine.

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

The combination, substantially as specified, of the pivoted tongue, the foot-lever fulcrumed on a stud on one side of the tongue-socket, the link for connecting the foot-lever to an arm of the frame, and the pendulous detent for bracing against the forward end of the frame, to hold it down after it has been tilted.

In testimony whereof I have signed my name to the foregoing specification in the presence of two subscribing witnesses.

HARVEY L. HOPKINS.

Witnesses:

MARTIN CONNOLLY,

CHAS. A. NEALE.