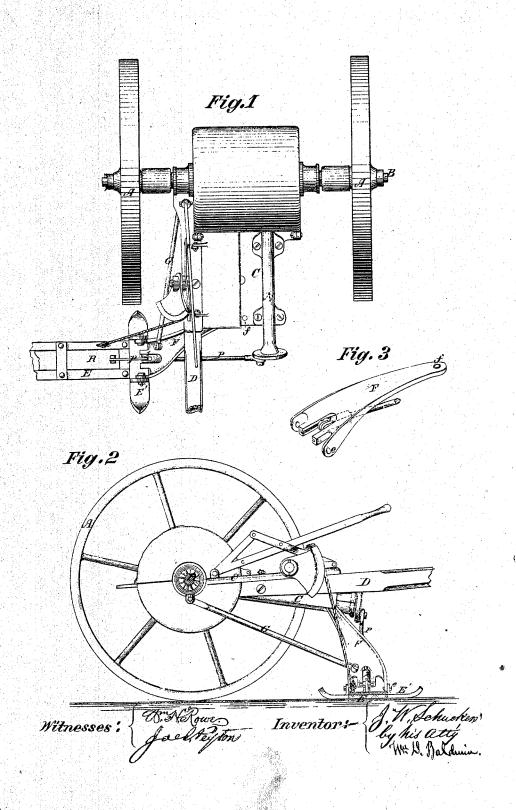
## J. W. Shuchers, Mower.

No. 112.288.

Patented. Teb. 28.1871.



## UNITED STATES PATENT OFFICE.

JACOBS W. SCHUCKERS, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO JONATHAN W. GRUBB, OF SAME PLACE.

## IMPROVEMENT IN HARVESTERS.

Specification forming part of Letters Patent No. 112,288, dated February 28, 1871.

To all whom it may concern:

Be it known that I, JACOBS W. SCHUCKERS, of the city and county of Philadelphia, in the State of Pennsylvania, have invented a new and useful Improvement in Harvesters, of which the following is a specification:

My invention relates to a novel method of connecting the pitman and cutters in twowheeled hinged-joint harvesters, whereby the cutters will work at any angle to which the finger-beam may be inclined in passing over undulations of the ground; and the improvement herein claimed consists in combining a vibrating coupling-frame, a cutting apparatus hinged to said frame, a pitman working in a guideway in said frame, and a link-rod pivoted both to the pitman and cutter-bar, as hereinafter described.

My improvements are to be used in a fullyorganized harvesting-machine. In the accompanying drawing, however, I have shown so much only of the mechanism as illustrates the invention herein claimed, the construction of the other parts being well understood by skill-

ful builders of harvesting machinery.

Figure 1 represents a plan; Fig. 2, a side elevation of the machine; and Fig. 3, an enlarged view, in perspective, of the pitmanguide.

The driving-wheels A A are mounted on an axle, B, which carries a main frame, C. The tongue D projects from the front of the frame. A finger-beam, E, is secured to a shoe, E', having lugs upon it, by means of which it is pivoted to the lower end of a coupling frame

or arm, F, the upper end of which is swiveled to the under side of the frame at f. A bracebar, G, is pivoted at one end to the frame, and at the other to the coupling-arm.

A crank-shaft, N, driven by proper gearing, operates the pitman P, the lower end of which carries a pin, 1, or cross-head, which slides in a groove. A link-rod, p, is pivoted at one end to this pitman, and at the other to the cutterbar R.

By this mode of construction the pitman always reciprocates in a uniform path, while the link-rod p swings around its pivoted connection with the pitman in conformity with the swinging of the finger-beam around its pivots e, and the cutters will continue to run without binding at any inclination to which the outer end of the finger-beam can be raised or lowered in running over uneven ground.

I claim as my invention—
The combination of the coupling-frame, the finger-beam hinged thereto, the pitman working in a guide in the coupling-frame, the cutter-bar, and the link-rod pivoted both to the pitman and cutter-bar, all these parts being constructed and operating as described, to insure the working of the cutters at varying inclinations of the finger-beam, as set forth.

In testimony whereof I have hereunto subscribed my name.

JACOBS W. SCHUCKERS.

Witnesses:

A. H. PIERSON, DANIEL H. PIERSON.