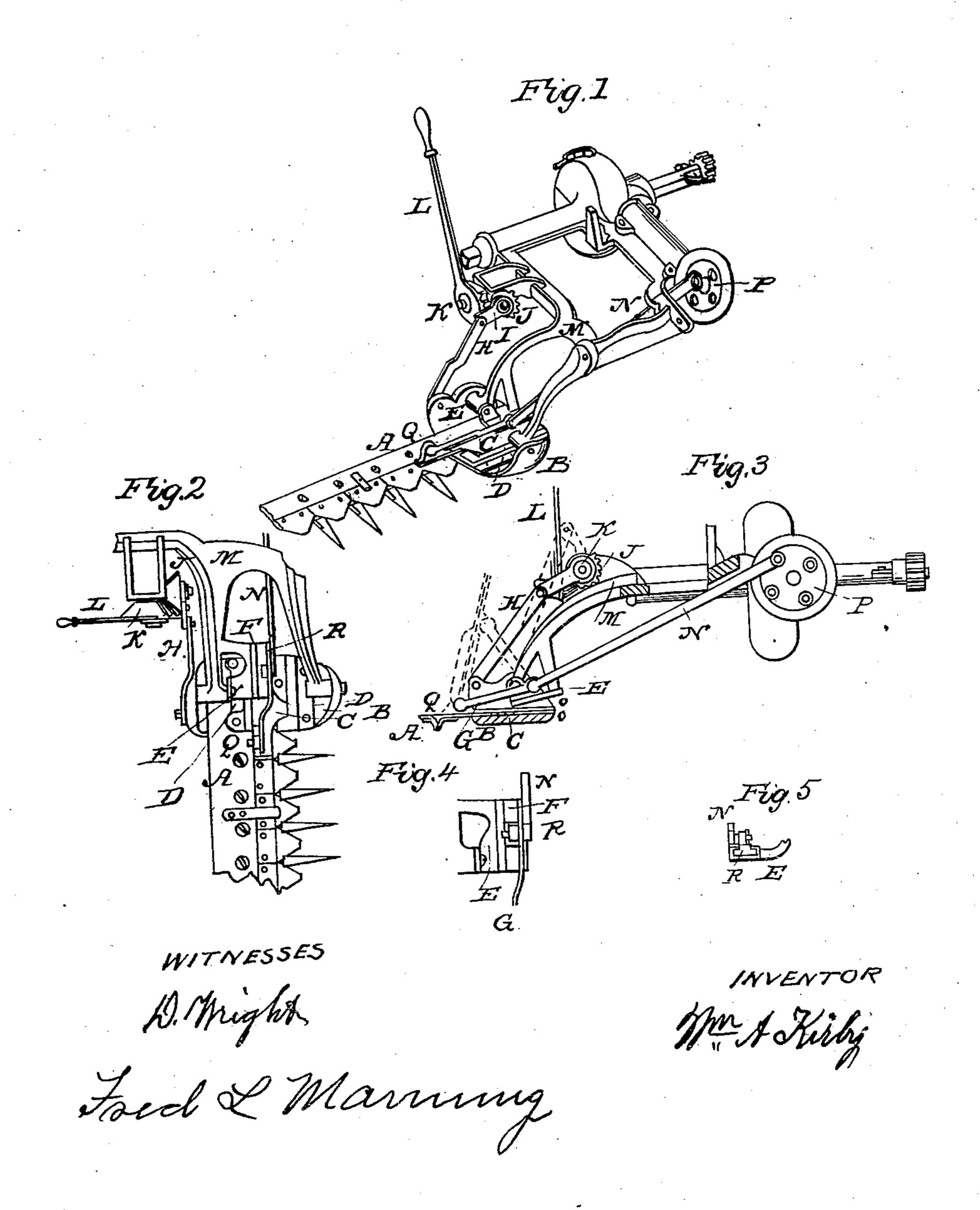
## W. A. KIRBY.

Harvester.

No. 102,131.

Patented April 19, 1870.



## UNITED STATES PATENT OFFICE.

## WILLIAM A. KIRBY, OF AUBURN, NEW YORK.

## IMPROVEMENT IN HARVESTERS.

Specification forming part of Letters Patent No. 102, 131, dated April 19, 1870.

To all whom it may concern:

Be it known that I, WILLIAM A. KIRBY, of the city of Auburn, in the county of Cayuga and State of New York, have invented a certain new and useful Improvement in Harvesting-Machines, of which the following is a specification:

Figure 1 represents a perspective view of that portion of the harvester to which the invention relates. Fig. 3 represents an elevation of the same parts shown in Fig. 1. Fig. 2 is a plan view of portions of the same parts. Fig. 4 is a plan view of the improvement claimed, with parts immediately connected therewith. Fig. 5 is a sectional view of the same parts represented by Fig. 4.

Similar letters of reference, where they occur in the separate figures, denote like parts

of the machine in all the drawings.

My invention consists in providing a slide and attaching the same to the pivot connecting the two parts of the pitman, and in providing a guideway to receive and hold the same, and control the lateral movement and vertical position thereof.

It is not deemed necessary to particularly describe those parts of the harvester not directly connected with the improvement intended to be patented, inasmuch as said improvement may be applied to all the variously. arranged machines used as harvesters which have a jointed or hinged cutter-bar.

To enable others skilled in the art to make and use my invention, I will proceed to describe the same, with reference to the draw-

ings.

P is the crank-wheel, which receives its motion through gearing from the driving-wheel.

The pitman N is connected by a wrist to the crank-wheel P; but, instead of extending thence directly to the cutters, it is made in two pieces, N and G, which are hinged to. gether, and the part G extends from the hinge to the cutters.

Attached to this pitman, at the hinged part thereof, is a slide, R, which plays backward and forward in the slotted guideway F, which

is made with flanges upon its sides, so as to hold and govern said slide, and to keep it at all times in the direct line of motion between said wrist and the end of the pitman which

is pivoted to the cutters.

The guideway F is attached to, or may be cast with and as a part of, the main frame, and is so located as to range lengthwise in line with the motion of the pitman. It is made of sufficient width and depth to receive and hold the slide R below the flanges upon the sides thereof, and of a length corresponding with the distance traversed by the pivoted part of the pitman, and is made open at both ends.

The advantage of this guideway F is, that it sustains the two parts of the pitman-connections at all times in line, and in the direct line of motion of those parts; and it also holds the pivoted ends where the two portions of the pitman meet, at all times in the same position vertically in regard to the main frame.

The advantage of this arrangement of the pitman-connection is, that the finger-bar and its appliances (the cutters) may be raised and folded up, and again lowered to the ground, without disconnecting any of the gearing; and when the cutter-bar is raised to a position a little beyond a right angle, and so as to lean toward the main frame sufficiently so as not to fall back upon the ground, although the gearing and the main part of the pitman N continue their motions, yet the cutters when in that position have no motion, as it is all taken up in the two hinged pitmen N and G.

Having thus fully described my invention, and the operation thereof, what I claim therein as new, and desire to secure by Letters Patent, is—

The guideway F, slide R, hinged pitman N Ouniting the crank-shaft and cutter-bar, combined and arranged substantially as described.

WM. A. KIRBY.

Witnesses:

DAVID WRIGHT, FRED. L. MANNING.