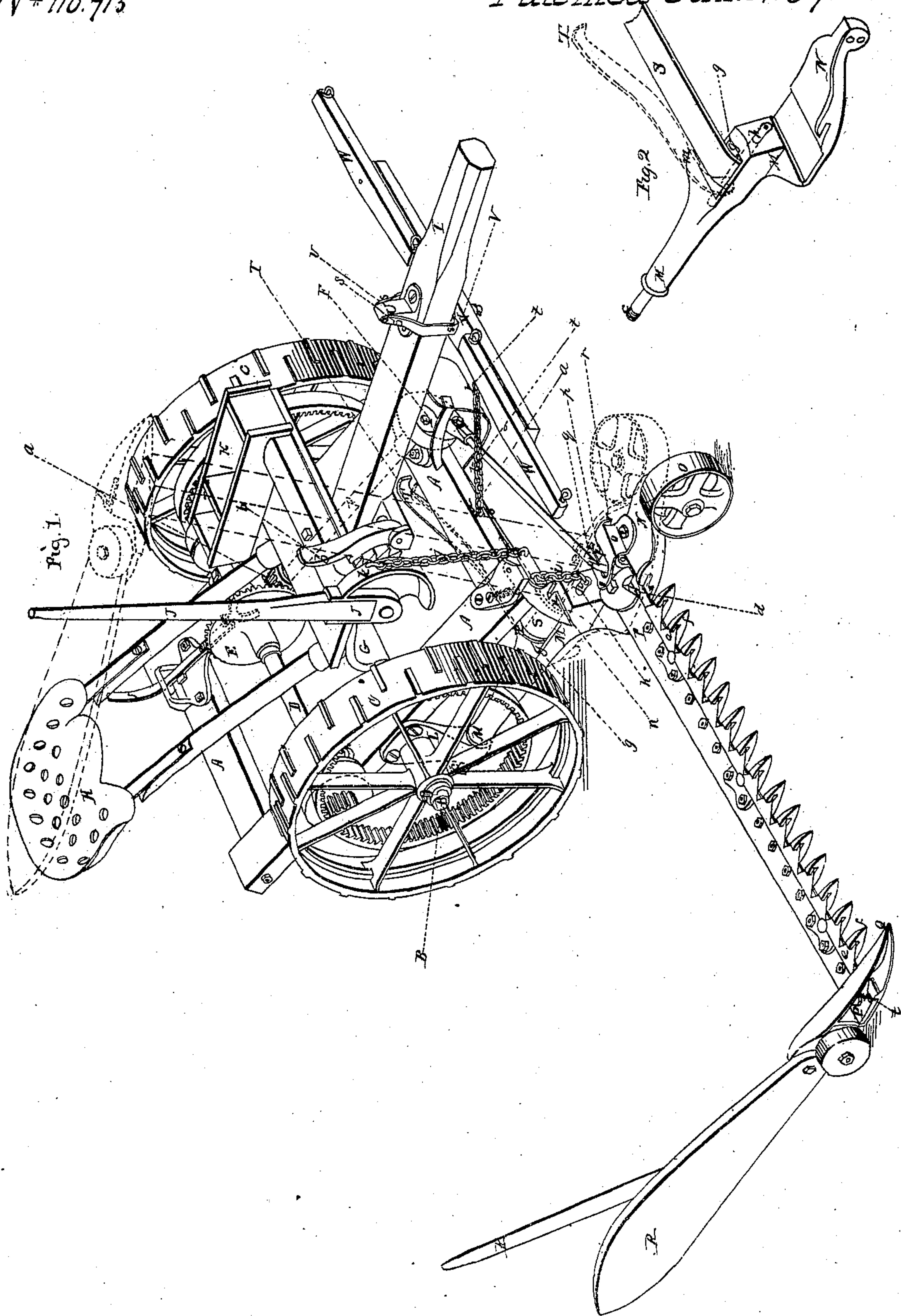


W.A. & W.A. Wood & J.M. Rosebrook.

Harvester.

N^o 110,715

Patented Jan. 3, 1871



Inventors

Walter Alwood Minsou Wood, and John M. Rosebrook
By their Attorney, A. B. Straighten.

Witnesses

Edwin J. McLean

Jno. D. Patton

UNITED STATES PATENT OFFICE.

WALTER A. WOOD, W. ANSON WOOD, AND JOHN M. ROSEBROOKS, OF
HOOSICK FALLS, NEW YORK.

IMPROVEMENT IN HARVESTERS.

Specification forming part of Letters Patent No. 110,715, dated January 3, 1871.

To all whom it may concern:

Be it known that we, WALTER A. WOOD, W. ANSON WOOD, and JOHN M. ROSEBROOKS, of Hoosick Falls, in the county of Rensselaer and State of New York, have invented certain new and useful Improvements in Harvesting-Machines; and that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 represents a perspective view of the machine complete, and showing in red lines how the cutting apparatus may be folded and held up against the frame for transportation. Fig. 2 represents, in perspective, and detached from the machine, the rocking bar, by which the cutting apparatus and its adjacent parts are connected to the main frame, and to which the gag-bar, for raising up the outer end of the cutter and finger-bar, is also attached.

Our invention relates to the particular manner of arranging and operating the gag-bar, so that when the cutting apparatus is raised up it will raise up the outer end of said cutting apparatus.

Our invention further relates to a device that holds the connecting-rod to the sickle-bar, and also prevents the cutters from dropping out when the finger-bar is raised up into a vertical, or nearly so, position for transportation.

To enable others skilled in the art to make and use our invention, we will proceed to describe the same with reference to the drawings.

The main frame A is fastened at about its center in length to the axle B, and both are supported in the driving-wheels *c c'*, which, through the usual pinions and ratchet-and-pawl connections, drive the shaft D, and this shaft in turn, through its bevel-gear E and the bevel-pinion *a* on the crank-shaft F, drives the cutters.

The tongue-frame G is hinged to the axle B, and carries the seat H for the driver, the tongue I, the raising and lowering lever J and its top *b*, and the tool-box K.

In a hanger, L, suspended from the grain

side of the main frame, and underneath the axle B, is supported the rear end, *c*, of a roller-bar, M, which bar, from its rear support, extends forward and downward, and its front end terminates in a shoe, N, to which a supporting-wheel, O, is attached.

On the shoe portion or front portion of the rolling or rocking bar M is fastened the finger-bar P, and to the finger-bar is fastened the outside shoe Q and the hinged track-clearer R.

The cutter-bar *d* and its cutters *e* vibrate through the fingers or guards *f*, in the usual well-known way.

In the roller-bar M, and at a point about under the front of the main frame, is formed a recess, *g*, in which are pivoted or secured by a pivot or bolt, *h*, the coupling-bar S and gag-bar T, the pivot or hinge being in the same plane as that of the rear of the roller-bar in the hanger, so that said bar may be free to rock or roll in the line of its length, and to the extent necessary for folding up the finger-bar for transportation, as will be hereafter explained. The pivot-bolt *h*, to prevent its loss should it accidentally drop out, is fastened to the main frame by a chain, *i*.

The main frame A is suspended at its front to the tongue-frame (which latter maintains a position horizontally, due to the necks or height of the team) by a chain, J, connected to it and to the arc *k* of the lever J, and can be raised or lowered on the tongue-frame by said lever, and, when necessary, held at any suitable height by allowing the dog *b* to drop into one of the notches or teeth on the arc *k*.

When the finger-bar is to be folded up against the frame, or into a vertical, or nearly so, position for transportation, as shown by the red lines in Fig. 1, the main frame is first raised up and suspended to the tongue-frame, and in so raising it up the gag-bar T comes against the tongue-frame and acts as a lever to aid in raising up the finger-bar, particularly the outer end of it.

The shoe and heel of the finger-bar being thus raised up by the lever, and fastened up by the dog *b*, and the outer end of the finger-bar gagged up by the bar or lever T bearing upon a projection, *m*, Fig. 2, on the roller-bar, the finger-bar may be raised up into a vertical,

or nearly so, position, as shown in red lines in Fig. 1, and the spring-catch *n* will take and hold it in that position.

There is nothing, of course, to prevent the finger-bar from being raised up into its vertical position from the ground; but it could not be carried in that position, as it would strike the ground or other intervening obstacles. It might, however, be thus raised or folded up, and afterward raised above the ground by raising the main frame.

On the shoe portion *N* there is secured a bent and slotted piece of metal, *o*, that performs several duties. It admits of the removal and replacement of the cutters on the finger-bar; its slot *p* allows the pitman *q* to play, but prevents it from becoming detached from the cutter-bar; and its bent end *r*, when the finger-bar is raised or folded up vertically, or nearly so, prevents the cutters from sliding out or downward.

On the tongue *I* is fastened a pillow-block, *U*, to the top of which is pivoted a stirrup, *s*, that takes in the tongue, and to the under side of which stirrup is pivoted the double-tree *V*, and to the double-tree the single-trees *W* are united in the usual way.

From the stirrup *s* there extends a chain, *t*,

which is fastened to the main frame at *u*, so that the draft is from the main frame in an upward direction, while the guiding is done by the tongue-frame.

v is a shipper for throwing the machine into and out of gear when necessary.

Having thus fully described our invention, what we claim therein as new, and desire to secure by Letters Patent, is—

1. In combination with the roller-bar for carrying and supporting the finger-bar and cutting apparatus, the coupling-bar *S* and the gag-bar *T*, hinged thereto and acting in connection therewith, substantially as described.

2. In combination with the cutting apparatus, the bent and slotted piece *o*, for admitting of the removal and replacement of the cutters, for holding the pitman to the cutter-bar, and for catching and holding the cutters from dropping down when the finger-bar is raised and folded up, substantially as described.

WALTER A. WOOD.
W. ANSON WOOD.
J. M. ROSEBROOKS.

Witnesses:

C. A. CHENEY,
A. C. GREY.