

R. L. NELSON.

Improvement in Corn-Harvesters.

No. 114,182.

Patented April 25, 1871.

Fig. 1.

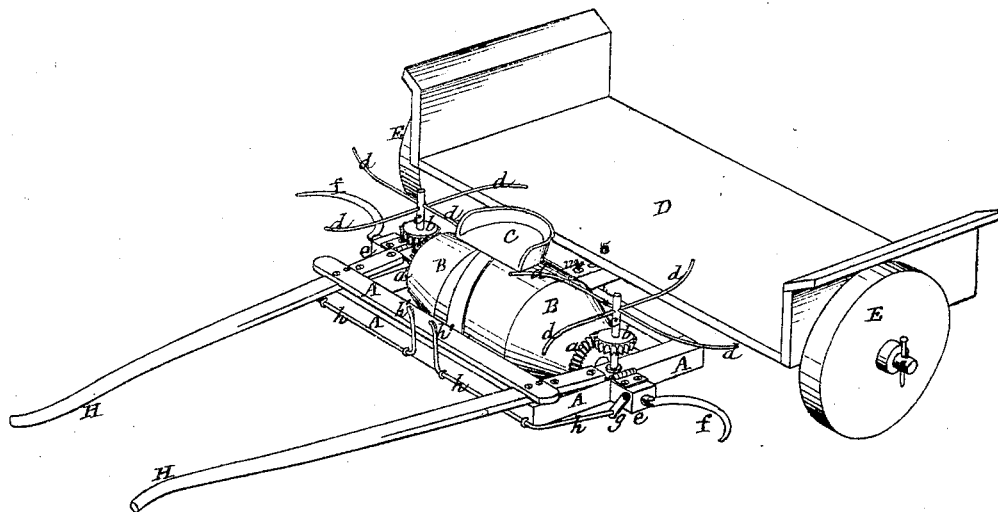
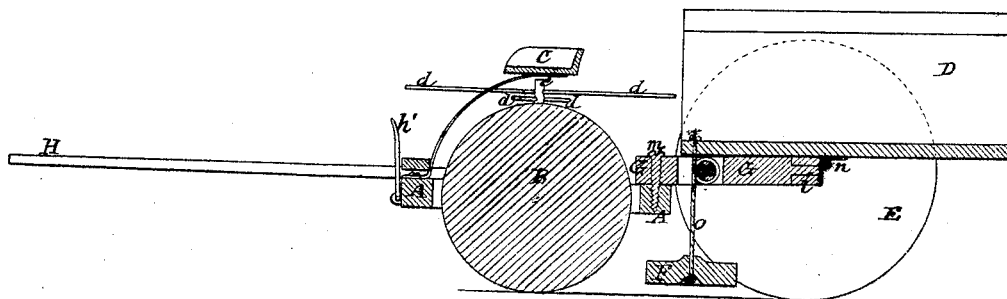


Fig. 2.



Witnesses.  
*W. Henderson*  
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# United States Patent Office.

RICHARD L. NELSON, OF ORANGE COURT HOUSE, VIRGINIA.

Letters Patent No. 114,182, dated April 25, 1871.

## IMPROVEMENT IN CORN-HARVESTERS.

The Schedule referred to in these Letters Patent and making part of the same.

*To all whom it may concern:*

Be it known that I, RICHARD L. NELSON, of Orange Court House, in the county of Orange and State of Virginia, have invented certain new and useful Improvements in Corn, Sugar-cane, and Cotton-stalk Reapers; and that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 represents a perspective view of the machine, and

Figure 2 represents a vertical longitudinal section through the same.

Similar letters of reference where they occur in the separate figures denote like parts of the machine in the drawing.

This invention relates to a machine for gathering, cutting, and delivering onto a dumping-carriage or platform, corn, cane, cotton, or other stalks as they stand in the field, and depositing them in bundles or piles behind the machine as it traverses the field.

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

A represents a tongue or shaft-frame, in which is hung a roller, B, cylindrical in its central portion, and conical at its ends, so as to roll easily in the land between the rows of stalks.

Upon the ends of this roller B are bevel-gear rims, *a*, that take into and turn the pinions *b* on the vertical reel-shafts *c*, supported in said frame A. The reel-arms *d* revolve horizontally, or nearly so, and are of a curved form to better catch and draw in the stalks against the cutters.

Upon or in blocks, *e*, hinged to the frame A, are arranged sickle-shaped cutters, *f*, the shanks of which cutters enter said blocks, and may be held there by means of set-screws and at such adjusted angle as may be required. To the blocks *e* are attached links or crank-arms, *g*, to which, respectively, are secured the end of a bent rod, *h*, which extends around to the front of the frame and terminates in foot-levers *k k'*, which the driver in his seat C may reach, and by them raise up one or both of the cutters to pass any obstruction coming in their plane of action.

The stalks caught and brought in by the reel-arms *d* against the cutters *f* are cut off and fall, or are thrown upon the platform or body D, which is supported on and carried by an axle, *i*, and truck-wheels E. This body and truck are pivoted to the frame A at the point *m*, so that the front and rear portions of the machine may have lateral play independent of each other, and the body D is hinged to the axle *i*, as at *n*, and is overpoised or overbalanced at its front by a weight, F, suspended to a cord, *o*, said cord running against a friction-pulley, *r*, in the coupling-arm G.

When the load in or on the body D, behind the axle, which is its center of dumping motion, is in excess of the weight of the overpoise F, the body will dump and drop its load upon the ground, and the weight will return it to its receiving position again.

The weight F may be increased or diminished so as to regulate the size of the loads to be discharged. The machine may be drawn by a single horse in the shafts H, or by two or more, and with a tongue instead of shafts, if preferred. What I term the roller B may be geared wheels, and carry the front of the machine in the same way, and drive the reels in the same general way. The roller, however, guides as well as carries the front of the machine and its operative parts.

Having thus described my invention,

What I claim is—

1. The combination of the conical roller or conical wheels for guiding the machine between the rows of stalks, the reels driven directly therefrom, and the cutters when arranged and operating as and for the purpose described and represented.

2. In combination with the cutters made adjustable in the blocks *e*, the hinged connection between said blocks and frame A, so that the driver in his seat, by means of the connections therewith, may raise said cutters to pass any obstruction, and lower them again, as described and represented.

RICHARD L. NELSON.

Witnesses:

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EDMUND MASSON.