

UNITED STATES PATENT OFFICE.

J. C. MAYBERRY AND C. N. MAYBERRY, OF WHITE ROCK, ILLINOIS.

IMPROVEMENT IN HARVESTING-MACHINES.

Specification forming part of Letters Patent No. 33,748, dated November 19, 1861.

To all whom it may concern:

Be it known that we, J. C. MAYBERRY and C. N. MAYBERRY, of White Rock, in the county of Ogle, and State of Illinois, have invented a new and Improved Harvester; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a side sectional view of our invention, taken in the line *x x*, Fig. 3; Fig. 2, a detached view of the endless apron pertaining to the same; Fig. 3, a horizontal section of the same, taken in the line *y y*, Fig. 1; Fig. 4, a detached view of a portion of the back bar of the frame of the machine.

Similar letters of reference indicate corresponding parts in the several figures.

This invention relates to certain improvements in that class of harvesters in which the team is placed behind the frame of the machine and an endless apron employed for discharging the cut grain.

The object of the invention is to balance the machine more evenly than hitherto, cause the same to work steadier or with less vibration, to equalize the draft, render the cutting device capable of being raised and lowered with facility, and enable the discharging-apron to be adjusted to suit receiving-wagons of different heights.

To enable those skilled in the art to fully understand and construct our invention, we will proceed to describe it.

A represents the frame of the machine, which is of rectangular form, and is supported by wheels B C, B being the driving-wheel and placed at one end of the frame.

D is the draft-pole, which is attached at its front end to the frame A at a point in line with the axle of the wheel B, or nearly so, the pole being attached to the frame by joints *a a*. In order to admit of this attachment, the back rail, *b*, of the frame A is divided and a space left between the ends for the pole to pass through, and the two parts of said rail *b* are connected by a metal plate or bar, E, so bent as to admit of an up-and-down play of the frame A. (See Fig. 4.) On the top of the bar E there is placed a pulley, *c*, over which a rope or chain, F, passes, the front end of which is attached to pole D immediately underneath bar E, said rope or chain also passing underneath

a guide-pulley, *d*, attached to the draft-pole and connected at its back end to a treadle-wheel, G, on the draft-pole, the wheel G being kept in position or prevented from casually turning by means of a stop, *e*, arranged in any proper way. The back end of the draft-pole D is supported by a caster-wheel, H. (Shown in Figs. 1 and 3.)

To the front end of the frame A the sickle I is attached, said sickle being of the ordinary reciprocating kind, and operated from the wheel B in the ordinary way.

From the above description it will be seen that the sickle may be raised and lowered with the greatest facility by simply turning the wheel G, and the sickle retained at any desired height. The frame being nearly balanced on the axle of wheels B C, it may be adjusted with the slightest effort of the driver, whose seat J is directly back of wheel G. This arrangement also admits of the ready turning of the machine and renders the draft easy or light.

On the front part of the frame A an endless apron, K, is placed. This apron, directly back of the sickle I, has a horizontal position, or is in the same plane with the frame; but at the end near the wheel B it is inclined, in order that it may convey the cut grain into a wagon at the side of the machine. This apron works between suitable guides, *f f*, and is arranged in the usual way, with the exception of the inclined part, which has the upper part, L, of its frame connected to the lower part, M, by joints *g'* in standards *g*. In using the machine the frame L M is first adjusted at any suitable height in the standards *g*, its upper portion being supported by cords *g'*, as shown in Fig. 2. The upper part, L, of the frame, by reason of its lightness and the manner in which it is supported, is free to yield readily, if the wagon come in contact with it in passing over uneven ground, and by this means the wagon is preserved from injury. The endless apron, it will be seen, is at the front part of the frame A, and in front or most in front of the wheel B, and is driven from the wheel B, as usual. The whole device is rendered very compact and a machine of light or easy draft obtained.

The reel N has its shaft *h* fitted in proper bearings, and is placed in its usual position over the front part of the frame A, as shown in Fig. 1.

We do not claim, broadly, the use of a jointed apron for conveying and elevating grain in a harvesting-machine; but

We do claim as new and desire to secure by Letters Patent—

1. The elevated yoke E, connecting the linked rear rail, *b*, of the balanced frame A, and employed in connection with the thrusting-tongue D, rope F, and pulleys *c d*, substantially as and for the purposes set forth.

2. The endless conveying and elevating apron K, carried at one end in an inclined frame, L M, jointed midway of its length in standards *g*, in the manner and for the purpose herein shown and explained.

J. C. MAYBERRY.

G. N. MAYBERRY.

Witnesses:

A. I. BILSBOROUGH,

C. A. HEEGAARD.