

J. O. BROWN.

HARVESTER.

No. 170,229.

Patented Nov. 23, 1875.

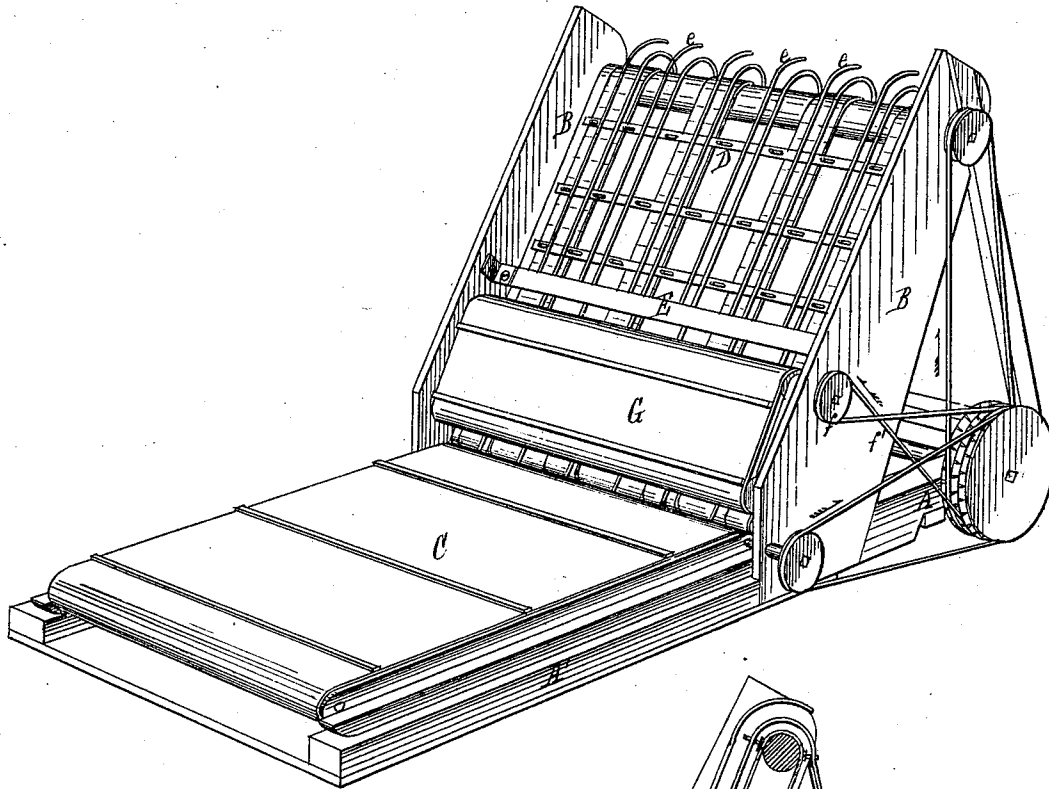


FIG. 1.

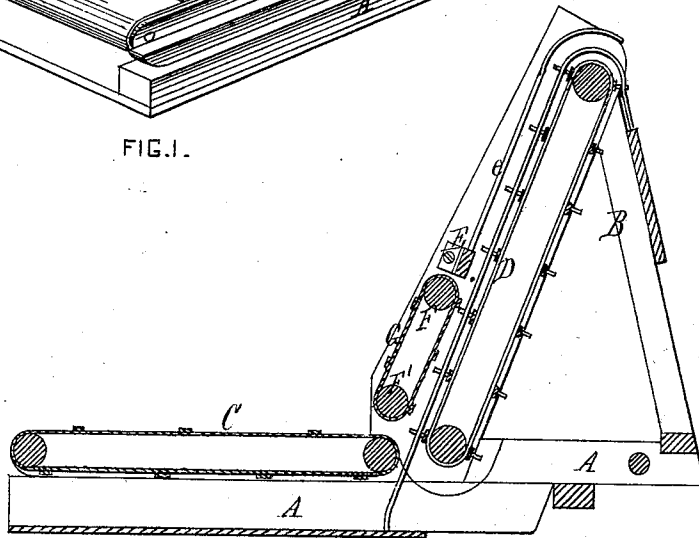


FIG. 2.

WITNESSES.

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JAMES O. BROWN, OF MASSILLON, OHIO, ASSIGNOR OF PART OF HIS RIGHT
TO EDWIN BAYLISS, PLINY F. HODGES, AND FRANÇOIS T. LOMONT, OF
SAME PLACE.

IMPROVEMENT IN HARVESTERS.

Specification forming part of Letters Patent No. **170,229**, dated November 23, 1875; application filed
August 9, 1875.

No. 2.

To all whom it may concern:

Be it known that I, JAMES O. BROWN, of Massillon, county of Stark and State of Ohio, have invented certain new and useful Improvements in Harvesters, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 represents a perspective view of the frame-work and the raking and elevating mechanism of a harvester, showing my improvements applied; and Fig. 2 is a vertical transverse section through the same.

Similar letters of reference denote corresponding parts in both figures

The invention relates to that class of harvesters in which the grain, as it is cut, is conveyed to and deposited in an elevated receptacle at the outer or stubble side of the machine, moving in its passage up an inclined elevator, having a stationary cover or compressing device, by which the grain is held to the elevator.

The improvement consists in combining a short endless apron with the elevator; and its stationary cover arranged at the lower or receiving end thereof, for starting the grain up the elevator and passing it under the stationary cover, as hereinafter explained.

In the class of elevators referred to, it has been usual to employ a cover composed of a series of elastic rods arranged in lines parallel with each other and with the line of movement of the carrying-surface of the elevator, and attached to a transverse bar or rod near the lower end of the elevator. This bar is found in practice to obstruct the entrance of the grain to the elevator, and an effort has been made to obviate this by the use of a friction-roller in advance of or below the bar referred to; but this roller, while it in a measure diminishes the frictional resistance, yet, being dependent for its motion upon the friction of the grain as it is moved forward by the elevator, of course cannot entirely obviate it, and hence the grain frequently accumulates or piles up at the foot of the elevator, rendering it

necessary for the driver, with his foot or with a stick, to push the grain forward and give it a start upward.

The object of my invention is to obviate this difficulty, and the means by which this object is attained will be readily understood from the following description with reference to the drawings, in which—

A represents the main frame of the machine, A', the platform-frame; B, the elevator-frame; C, the endless platform-apron, and D the elevator, all of which parts may be constructed in any usual or preferred manner. E is a bar extending across the elevator between its front and rear frame bars or guards, and either directly connected therewith at its ends, or suspended by springs in any usual way for adapting it to yield to the varying bulk of the passing grain. To this bar a number of elastic rods or wires, *e*, are attached, extending upward to the upper end of the elevator on lines parallel with each other and with the moving surface of the elevator D, forming the stationary cover or compressing device for holding the grain to and causing it to be carried up by the elevator. Below this stationary cover, and parallel with the bar E, a pair of rollers, F F', are arranged, which have their bearings in the elevator frame or guards, and are covered by an endless apron, G. The shaft of one of these rollers F extends through the frame timber or guard, and has a pulley, *f*, attached, to which motion is imparted by a belt, *f'*, from any convenient driving-shaft; or any suitable arrangement of gearing for the same purpose may be employed, such as will impart an upward movement to the lower portion of the apron G adjacent to the elevator D. By this arrangement it will be seen that the grain falling upon and carried to the elevator by the platform-apron C, as fast as it reaches the elevator, will be grasped by said elevator and the short apron, and, starting upward, will be passed under the stationary cover or compressing device referred to, whence it will be carried upward to and deposited in the usual grain-receptacle, to be disposed of in any usual manner.

Parts of the machine not shown and de-

scribed may be constructed and arranged in any usual or preferred manner.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination, with the elevator and its stationary cover or compressing device, of the short independently-revolving canvas or apron

G, arranged at the lower end of said cover or compressing device, and operating in connection therewith and with the elevator, substantially as and for the purpose set forth.

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Witnesses:

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