F. J. CODDINGTON & H. N. KENNEDY.

HARVESTER ELEVATOR.

No. 189,701. Patented April 17, 1877.

Fig. 1.

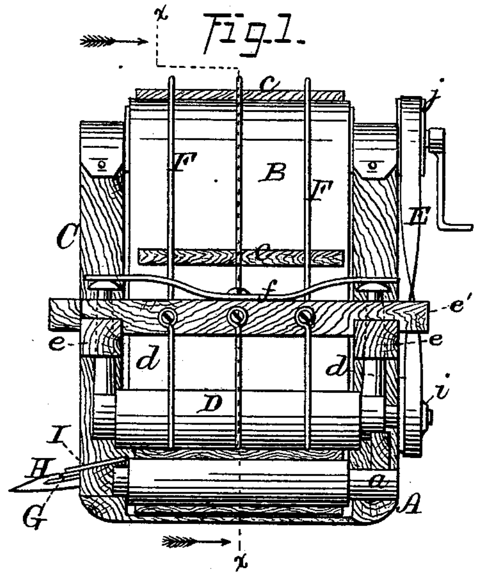
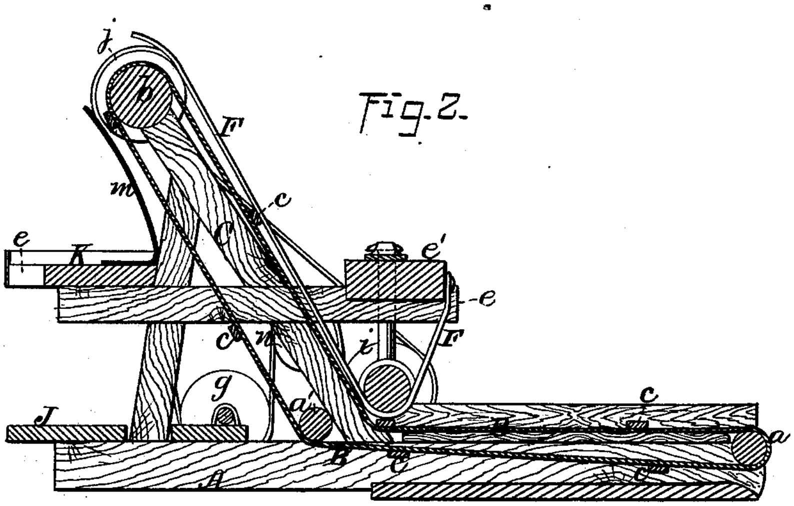


Fig. 2.



WITNESSES=

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UNITED STATES PATENT OFFICE.

FRANK J. CODDINGTON AND HERMAN N. KENNEDY, OF PLANO, ILLINOIS.

IMPROVEMENT IN HARVESTER-ELEVATORS.

Specification forming part of Letters Patent No. **189,701**, dated April 17, 1877; application filed February 23, 1877.

To all whom it may concern:

Be it known that we, F. J. CODDINGTON and H. N. KENNEDY, of Plano, in the county of Kendall and State of Illinois, have invented certain new and useful Improvements in Harvesters; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification, and in which—

Figure 1 is a view, in elevation, of our improved harvester, and Fig. 2 a vertical section thereof through the dotted line *x x* of Fig. 1.

Corresponding parts in the two figures are denoted by like letters.

This invention relates to a certain improvement in harvesters for assisting the ascent of the cut grain up the endless apron or elevator, and conforming the latter to the machine; and to this end it consists of a suspended yielding roller, and of the combination therewith of springs or bars extending beneath the said roller, and reaching up and pressing against the slats or teeth of the elevator or apron, substantially as hereinafter more fully set forth.

In the annexed drawing, A refers to a frame, within which is journaled a roller, *a*, over which passes the lower end of the endless apron or elevator B. The elevator or apron next passes (its lower portion) under a second roller, *a'*, suitably adjusted in place at a point beyond the lower end of the upright frame C, and (its upper portion) under a roller or cylinder, D, which will be further described hereinafter, and thence up over a roller, *b*, journaled in the upper end of the upright frame C. To enable the apron or elevator to elevate the grain, transverse slats or teeth *c c* are affixed thereto. The roller or cylinder D is connected to bars or pendants *d d*, vertically adjustable in beams *e e*, reaching out from the upright frame C, and a transverse beam or board, *e'*, secured to said beams *e e*. The upper or headed ends of the pendants *d d* are pressed downwardly by a spring, *f*, fulcrumed at or about its center upon the board *e'* to permit of its being freed from the said pendants when desired. By means of the spring *f* and the vertically-movable pendants *d d*, the roller or cylinder D is caused to yield to allow the passing grain being elevated by the apron or elevator B to ascend the latter, and, at the same time, to assist its ascent. This roller and the apron or elevator are driven by a belt, or other suitable medium, E, passing around the pulleys *g h i j*, connecting in the usual way with the driving-wheel. F F F are a number of springs or bars secured to the board *e'*, and reaching down beneath and let into grooves in the roller or cylinder D, and extending up to a point a little above the upper or discharging end of the elevator, and pressing against its teeth or slats to assist in elevating the grain. By carrying the bars or springs F F under the roller D the pressure of the latter is exerted thereon to assist their efficiency.

It will be further remarked that the roller or cylinder D forms the angle in the upper surface of the apron or elevator, which conforms the latter to the horizontal and upright frames A C, thus obviating the use of two independent aprons. G is the cutter-bar, which is cushioned, or otherwise disposed in the finger-bar H, at an angle, say, about twelve degrees, bringing it in close proximity with the ground to permit of cutting at the lowest possible point. The fingers of the finger-bar are beveled, and set at a corresponding angle.

Upon the finger-bar, which may be made of wood, or other suitable material, is secured a plate or guard, I, overlapping the cutter-bar G to protect and prevent its knives from clogging, &c.

A platform, J, is provided for the binders to stand on, while the elevated grain is discharged and falls on a second platform or shelf, H, disposed directly above the platform J, and recessed as at *l* to allow the binders to work at and bind the grain upon the said shelf K. To prevent the discharged grain falling in between the elevator-frame C and the shelf K upon the ground a shield, *m*, is fastened to the said shelf, and extending up in proximity with the upper end of the elevator or apron.

Having thus described our invention, what

we claim, and desire to secure by Letters Patent, is—

1. The suspended yielding roller D, in combination with the embracing bars or springs F F F, substantially as and for the purpose set forth.

2. The suspended yielding roller D, embracing bars or springs F F F, and endless apron or elevator B, in combination, substantially as and for the purpose set forth.

3. The roller D, bearing in the rods or bars *d d*, in combination with, and engaged by, a spring, *f*, substantially as and for the purpose set forth.

In testimony that we claim the foregoing as our own we hereunto affix our signatures in presence of two witnesses.

FRANK J. CODDINGTON.
HERMAN N. KENNEDY.

Witnesses:
CHRIS. DIRKS,
A. L. MOORE.