No. 649,703. Patented May 15, 1900.

R. J. MOULTON.

GRAIN DISTRIBUTER.

(Application filed Feb. 12, 1900.)

(No Model.)

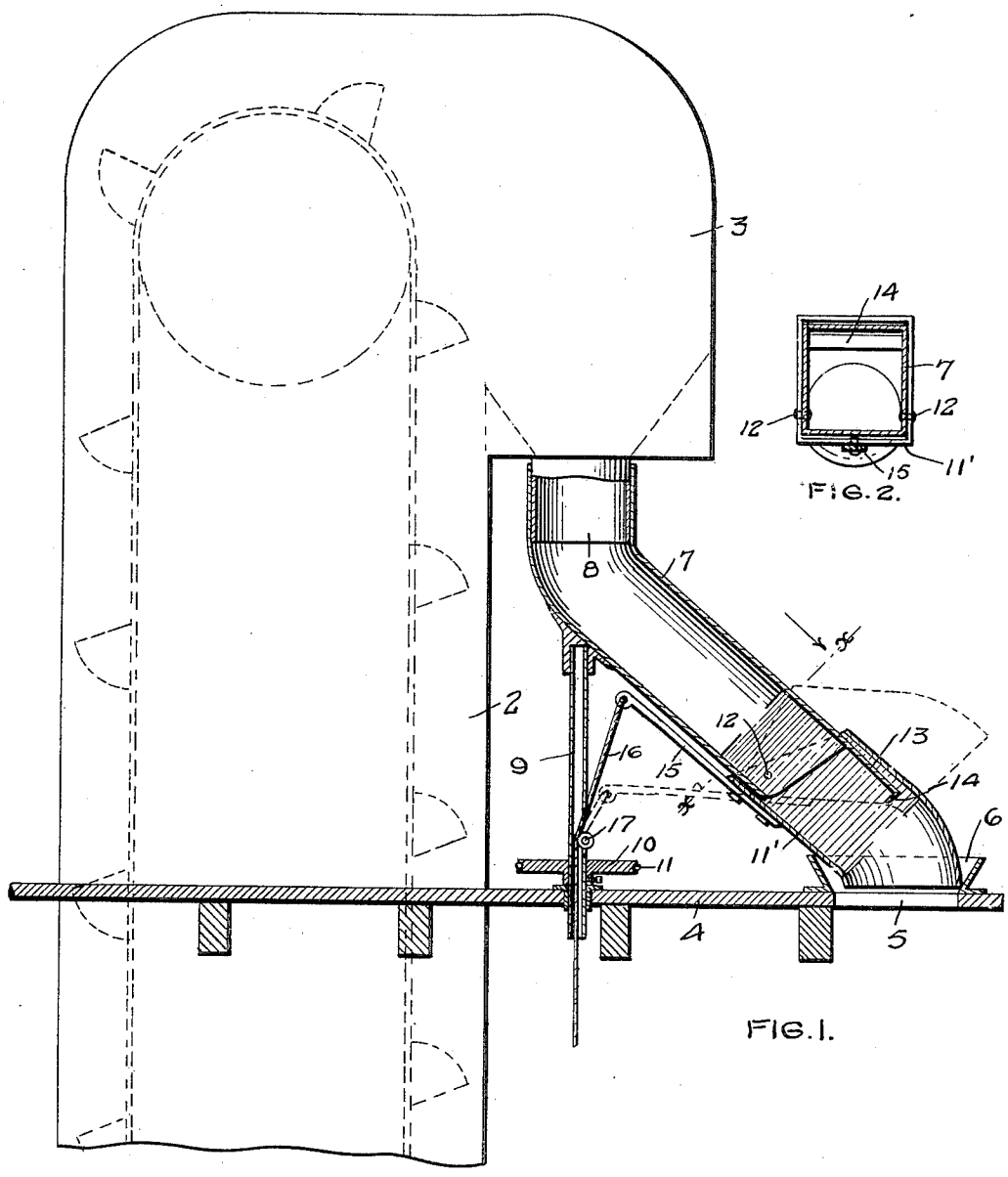


FIG. 1.

FIG. 2.

WITNESSES.
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UNITED STATES PATENT OFFICE.

RANDOLPH J. MOULTON, OF MINNEAPOLIS, MINNESOTA.

GRAIN-DISTRIBUTER.

SPECIFICATION forming part of Letters Patent No. 649,703, dated May 15, 1900.

Application filed February 12, 1900. Serial No. 4,952. (No model.)

To all whom it may concern:

Be it known that I, RANDOLPH J. MOULTON, of the city of Minneapolis, county of Hennepin, State of Minnesota, have invented certain new and useful Improvements in Grain-Distributers, of which the following is a specification.

The invention relates to improvements in grain-distributers designed for use in connection with grain-elevators; and the object I have in view is to provide the distributer with means whereby its lower end may be raised to free it from the opening leading into the bin, or a collar or hopper surrounding said opening, and at the same time cut off the flow of grain through the distributer.

The invention consists generally in various constructions and combinations, all as hereinafter described, and particularly pointed out in the claims.

In the accompanying drawings, forming part of this specification, Figure 1 is a side elevation of a portion of the main elevator-leg and head with my improved grain-distributer shown in section applied thereto. Fig. 2 is a sectional view of the distributer on the line x x of Fig. 1.

In the drawings, 2 represents a portion of a grain-elevator leg, and 3 the head through which the grain is delivered into a swiveled distributing-spout. The distributing-spouts are usually located near the top of the elevator building and are arranged to conduct the grain from the elevator-head to openings in the floor leading to the various bins. In the drawings I have shown a floor 4, provided with an opening 5, over which a hopper 6 is preferably arranged. There are as many of these openings in the floor as there are bins, and they are usually arranged on the arc of a circle around the elevator-leg, and in country elevators it is necessary to provide but a single joint or section of spout in order to distribute the grain from the elevator-leg to any of the bins.

7 represents a distributing-spout whose upper end telescopes with and turns freely on a sleeve 8, secured to the head 3 over the discharge-opening therein. The spout is supported on the hollow upright standard 9, provided with an indicator-wheel 10, and a cable 11 passes around said wheel and extends down to the lower floor or some other convenient point, and is so arranged that the operator can move the spout from one bin to another or determine the position of the spout without ascending to the floor where it is located. The standard 9 is rotatable in its supports and permits the spout to be swung back and forth over the bin-openings.

In order that the operator may be able to disengage the spout from the bin-opening preparatory to swinging it over another bin, I prefer to provide a spout-section 11′, of sheet or cast metal, as preferred, having a curved lower end to fit over a bin-opening and an upper end that is preferably rectangular in cross-section telescoping with the correspondingly-shaped lower end of the spout 8 and connected thereto by a pivot or pivots 12. The rectangular lower end of the spout 8 is beveled or cut away on the under side to permit the section 11′ to be swung on its pivots up away from the bin-opening, and the overhanging part 13, formed by the bevel on the upper side of the spout, terminates in an inwardly-turned lip 14, which engages the bottom of the section 11′ when it is tilted.

When the pivoted lower section of the spout is lifted to the position indicated by dotted lines, it will clear the bin-opening and hopper and permit the spout to be swung on its support over either one or the other of the bin-openings. At the same time the lower end of the spout will be closed and the flow of grain stopped until the section is allowed to drop back to its normal inclined position.

To lift the pivoted section, I prefer to provide a lever 15, secured, preferably, to the under side of the section and provided with a cord or wire 16, that extends, preferably, over a roller 17, through an opening in the standard down through its hollow interior to a lower floor or other convenient point. When a bin is full or if for any other reason it is desired to stop the flow of grain or direct it to another bin, the operator grasping the cord depresses the lever and tilts the spout-section up to a horizontal position away from the bin-opening, stopping the flow of grain. When the spout has been adjusted over another bin, the operator releases the cord and the pivoted section returns by gravity to its inclined position, permitting the grain to

again flow through the spout. I am thus able, by providing the pivoted section on the lower end of the distributing-spout, to disengage it from any of the bin-openings without ascending to the floor where the spout is located and at the same time shut off the flow of grain and prevent it from being scattered over the floor while the spout is being shifted from one bin to another.

In various ways the details of construction may be modified by any one skilled in the art without departing from my invention.

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

1. A grain-distributer, comprising a swinging spout having its upper end supported beneath a grain-discharge opening and provided at its lower end with a rectangular portion, a section having a rectangular upper end telescoping with said rectangular portion and pivotally connected thereto, the lower end of said section fitting over a bin-opening, a lever provided on said pivoted section, and a cord connected to said lever to permit the operator stationed at a distance to tilt said pivoted section up away from the bin-opening and shut off the flow of grain through the spout and permit it to be swung over another bin-opening, substantially as described.

2. The combination, with a swinging grain-distributer, having its upper end supported beneath a grain-discharge opening and provided with a rectangular lower end cut away or beveled on its under side, of a section having a rectangular upper end telescoping with the said rectangular lower end and pivotally connected thereto, the lower end of said pivoted section fitting a bin-opening, and means for swinging said section on its pivots up away from the bin-opening to close the lower end of the distributer and permit it to be swung to another bin, substantially as described.

3. The combination, with a grain-elevator leg and head provided with a grain-discharge opening, of a distributing-spout adapted to receive the grain from said discharge-opening, a rotatable standard 9 whereon said spout is supported and adapted to swing horizontally, said spout being provided at its lower end with a rectangular portion, a section having a rectangular upper end telescoping with said rectangular portion and pivotally connected thereto, the lower end of said section fitting over a bin-opening, and a cord connected with said pivoted section to permit the operator stationed at a distance to lift said pivoted section out of a bin-opening and allow said spout to be swung over another bin, substantially as described.

4. The combination, with an elevator-leg having a grain-discharge opening, of a distributing-spout 7 adapted to receive the grain from said discharge-opening, a rotatable standard 9 whereon said spout is supported and adapted to swing horizontally, a section having one end fitting over a bin-opening and its opposite end pivotally connected to the lower end of said spout and forming a continuation of the same, said section being adapted to tilt on its pivots to permit its lower end to be disengaged from the bin-opening, a lever 15 secured to said pivoted section, and a cord connected to said lever to permit the operator at a distance to operate said section, substantially as described.

5. The combination, with an elevator-leg having a grain-discharge opening, of a distributing-spout 7 adapted to receive the grain from said discharge-opening, a rotatable standard 9 whereon said spout is supported and adapted to swing horizontally, a section having one end fitting over a bin-opening and its opposite end pivotally connected to the lower end of said spout and forming a continuation of the same, said section being adapted to tilt on its pivots to permit its lower end to be disengaged from the bin-opening, and a cord connected to said pivoted lower section to permit the operator stationed at a distance to lift said section out of a bin-opening and allow the spout to be swung over another bin, substantially as described.

In witness whereof I have hereunto set my hand this 9th day of February, 1900.

RANDOLPH J. MOULTON.

In presence of—
RICHARD PAUL,
A. C. PAUL.