

E. F. GIBBONS.
DISTRIBUTER FOR ENSILAGE ELEVATORS.
APPLICATION FILED MAY 3, 1904.

FIG. 1.

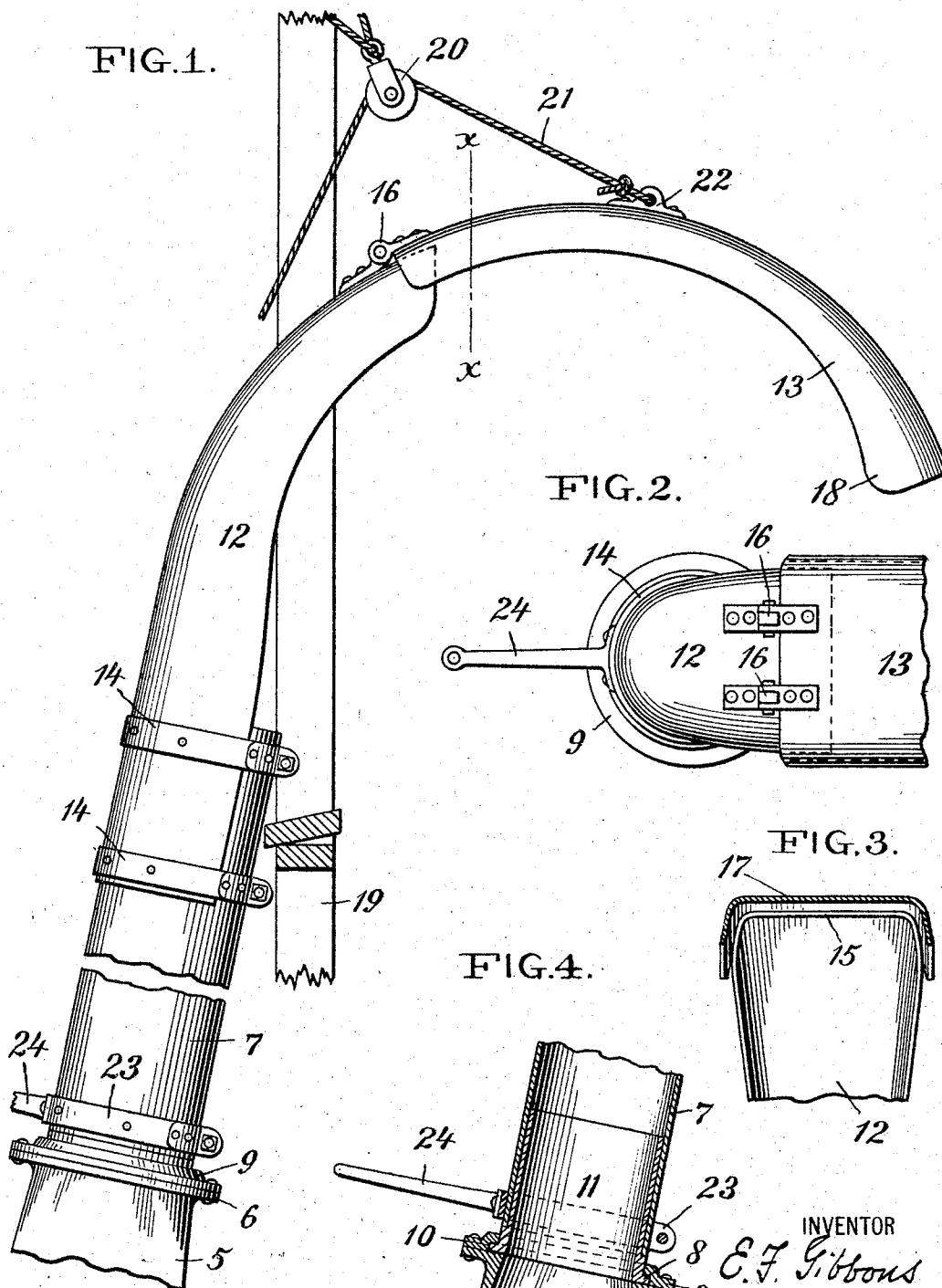


FIG. 2.

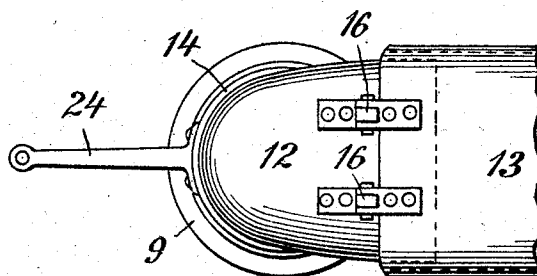


FIG. 3.

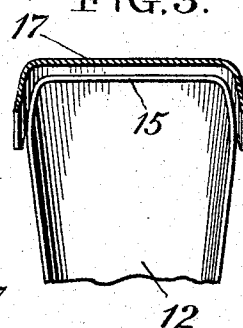
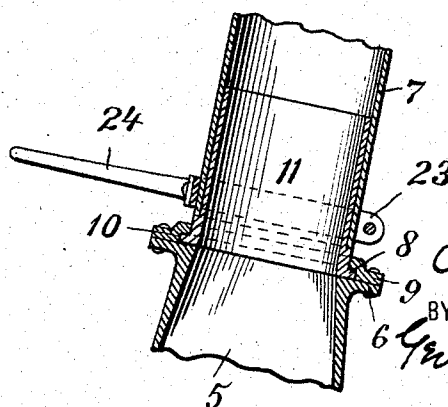


FIG. 4.



WITNESSES:

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DISTRIBUTER FOR ENSILAGE-ELEVATORS.

SPECIFICATION forming part of Letters Patent No. 782,444, dated February 14, 1905.

Application filed May 3, 1904. Serial No. 206,205.

To all whom it may concern:

Be it known that I, EDWARD F. GIBBONS, a citizen of the United States, residing at Salem, county of Columbiana, State of Ohio, have
5 invented a Distributer for Ensilage-Elevators, of which the following is a specification.

My invention consists of a device adapted to be used in connection with an ensilage-cutter and pneumatic elevator, and which has
10 for its purpose to distribute the cut material uniformly into the silo during the process of filling, thus avoiding or lessening the manual labor otherwise required to spread and pack the cut material by hand.

15 The accompanying drawings will serve to illustrate my invention, in which—

Figure 1 is a vertical section showing a portion of the front wall of a silo with the discharge-pipe from an ensilage-cutter, elevator-pipe, and distributer in position, also showing
20 the means employed for raising the top of the distributer. Fig. 2 is a view looking down on the top of the elevator-pipe and distributer with the forward portion of the distributer
25 broken away. Fig. 3 is a section and end view on the line X X of Fig. 1 looking from the right. Fig. 4 is a vertical section through the discharge-pipe from an ensilage-cutter, elevator-pipe, and means employed for connecting these pipes, and also illustrates in
30 elevation the means employed for rotating the elevator-pipe relative to the discharge-pipe from the ensilage-cutter.

In the drawings, 5 indicates the discharge-pipe from the ensilage-cutter. This pipe is
35 provided at its upper end with a flange 6. Situated over and in line with the discharge-pipe 5 is an elevator-pipe 7. The lower end of this pipe is secured over a tubular pipe 11,
40 which at its lower end is provided with a horizontal flange 8. The flange 8 rests upon the top of the flange 6 of the delivery-pipe 5, and situated over the flanges 6 and 8 is an annular ring 9, having an annular recess 10
45 to receive the horizontal flange 8, these parts collectively forming a swivel-joint by reason of which the elevator-pipe 7 may be moved circularly as regards the discharge-pipe 5. Mounted upon the upper end of the elevator-

pipe 7 is the distributer. This distributer is
50 formed of two parts or directing-sections 12 13. The part 12 is secured at its lower end to the top of the elevator-pipe 7 by means of the bands 14. This portion of the distributer is substantially semicircular at the point where
55 it is attached to the elevator-pipe 7, but at its upper end is shaped substantially as shown at 15, Fig. 3—that is, the top is flattened with the edges turned approximately at obtuse angles. The part 13 of the distributer is con-
60 nected to the part 12 by means of the hinge 16, and this part is shaped as indicated in the figure—that is, the end lying over the part 12 has substantially the same shape as the part 12,
65 as shown at 17, Fig. 3. The outer end is spread and shaped substantially as shown at 18, Fig. 1. I do not limit myself in any wise to the particular shape to be given to the parts 12 and 13 of the distributer. That
70 shown, however, has been found to be the best in practice.

The discharge-pipe 5, elevator-pipe 7, and distributer 12 13 are shown in the relation
75 which they would bear to a silo in the act of delivering cut material.

In Fig. 1, 19 indicates the front wall of the
80 silo. Secured to such front wall is a pulley 20, through which passes a rope 21, which is secured to the portion 13 of the distributer at 22. The other end of the rope is assumed to
85 be carried down and fastened in the vicinity of the ensilage-cutter. By raising or lowering this rope the end 13 of the distributer may be raised and lowered.

In order to rotate the elevator-pipe and
85 through it the parts 12 13 of the distributer, there is secured to the elevator-pipe 7 a ring 23, to which is fastened a handle 24. By swinging this handle 24 in the arc of a circle
90 horizontal movement may be imparted to the pipe 7 and distributer.

The operation of the device will be readily understood. The cut ensilage is discharged from the ensilage-cutter into the pipe 5, thence to the elevator-pipe 7, through which
95 it is blown by pneumatic pressure against the curved part 12 of the distributer. As the cut ensilage strikes the part 12 of the distrib-

uter it follows the curve of such part, as also that of the part 13, not as a solid body, but as a sprayed body, and is distributed, so to speak, as a shower, first over the bottom of the silo and subsequently as the silo is gradually filled over the superior surface of the material in the silo. To effect uniform distribution over the surface of the material in the silo, the pipe 7 and the distributor-sections 12 13 are gradually rotated or moved from side to side by means of the handle 24, and, further, in order to change the angle of delivery of the cut ensilage the part 13 of the distributor may be raised or lowered, as desired, through the instrumentality of the rope 21.

In practice very excellent results are obtained without the necessity of any manual spreading of the cut ensilage on the interior of the silo.

Having thus described my invention, I claim—

1. A distributor for ensilage, comprising a discharge-pipe from the ensilage-cutter, an elevator-pipe, a swivel-joint introduced between these two pipes, said swivel-joint consisting of a seat formed upon the discharge-pipe, a tubular pipe having a horizontal flange and a recessed ring secured to the discharge-pipe and over the flange of the tubular pipe, a sectional directing-pipe on the top of the elevator-pipe, together with means for rotating the elevator-pipe relative to the discharge-pipe and altering the position of the directing-sections relative to each other.
2. A distributor for ensilage, comprising a discharge-pipe having a horizontal flange at the top thereof, a tubular pipe having a horizontal flange which overlies the flange of the discharge-pipe, an annular slotted ring which overlies the flange of the discharge-pipe and receives the flange of the tubular pipe, an elevator-pipe of larger diameter than the tubular pipe secured over it, a clamping-ring having a handle, surrounding said elevator-pipe, directing-sections secured to the top of the ele-

vator-pipe, together with means for changing the position of the directing-sections relative to each other.

3. A distributor for ensilage, comprising two directing-sections open on their under side and collectively disposed in an arc of a circle in a vertical plane, one of said sections straight over a portion of its length and shaped as an arc of a circle over the remaining portion of its length, the second of said sections shaped as an arc of a circle over its whole length and flared at its delivery end, together with means for altering the position of the second section relative to the first section.

4. A distributor for ensilage, comprising a discharge-section from the ensilage-cutter, an elevator-section swiveled to the top of the discharge-section, means for moving the elevator-section circularly upon the discharge-section, a directing-section open at its under side and rigidly secured to the elevator-section, and a second directing-section open at its under side and hinged at one end to the first directing-section, and means for moving one of said directing-sections relative to the other.

5. A distributor for ensilage, comprising an elevator-pipe, a section of a pipe shaped as an arc of a circle at its upper end and open at its under side and secured to the upper end of the elevator-pipe, and a section of a pipe shaped as an arc of a circle and open at its under side and movably connected at its rear end to the first-named section of pipe, together with means for rotating said elevator-pipe and sections of pipe horizontally, and means for moving one of said sections of a pipe relatively to the other.

In testimony whereof I affix my signature in the presence of two witnesses.

EDWARD F. GIBBONS.

Witnesses:

T. E. WEBB,
P. B. TUCKER.