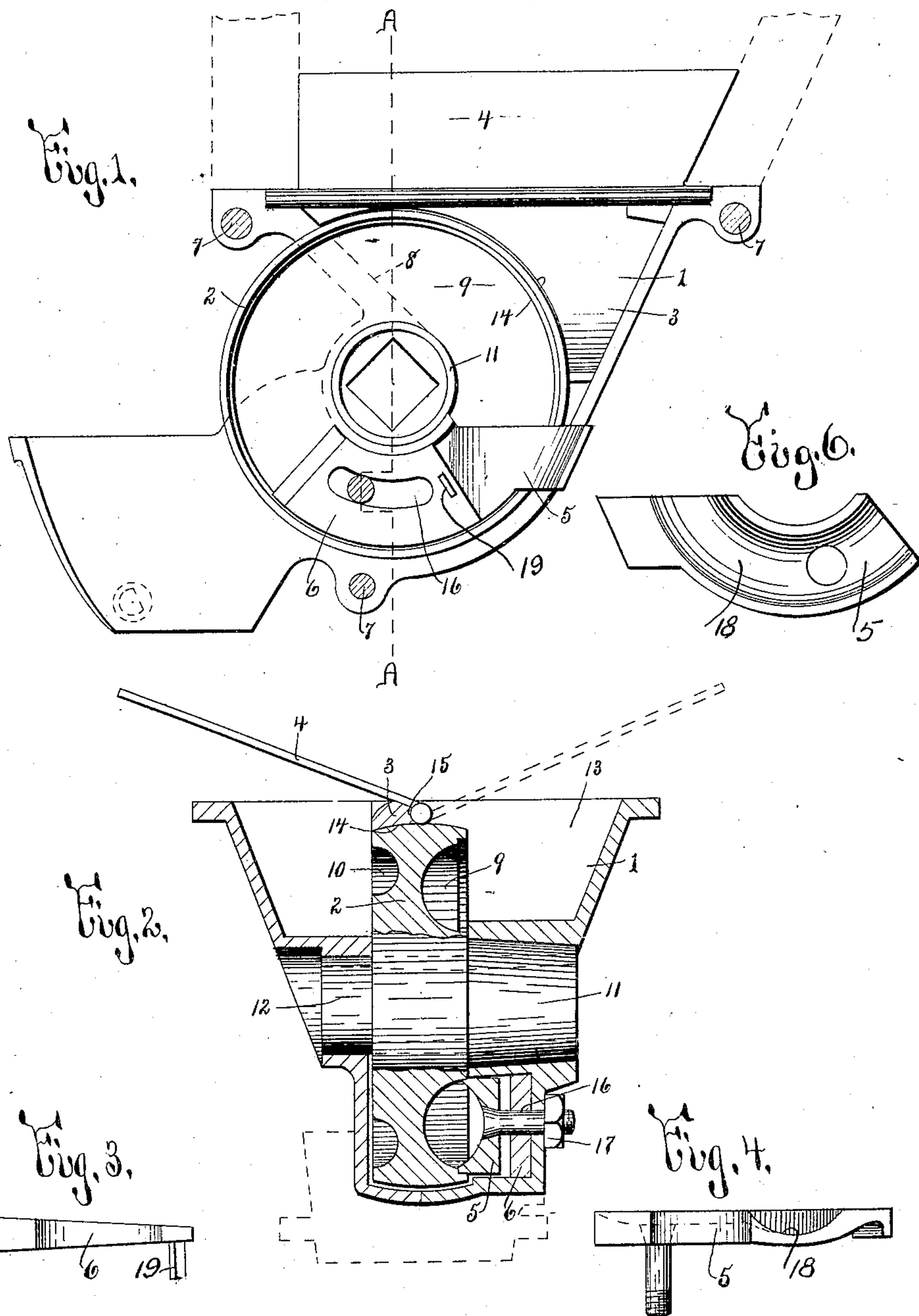


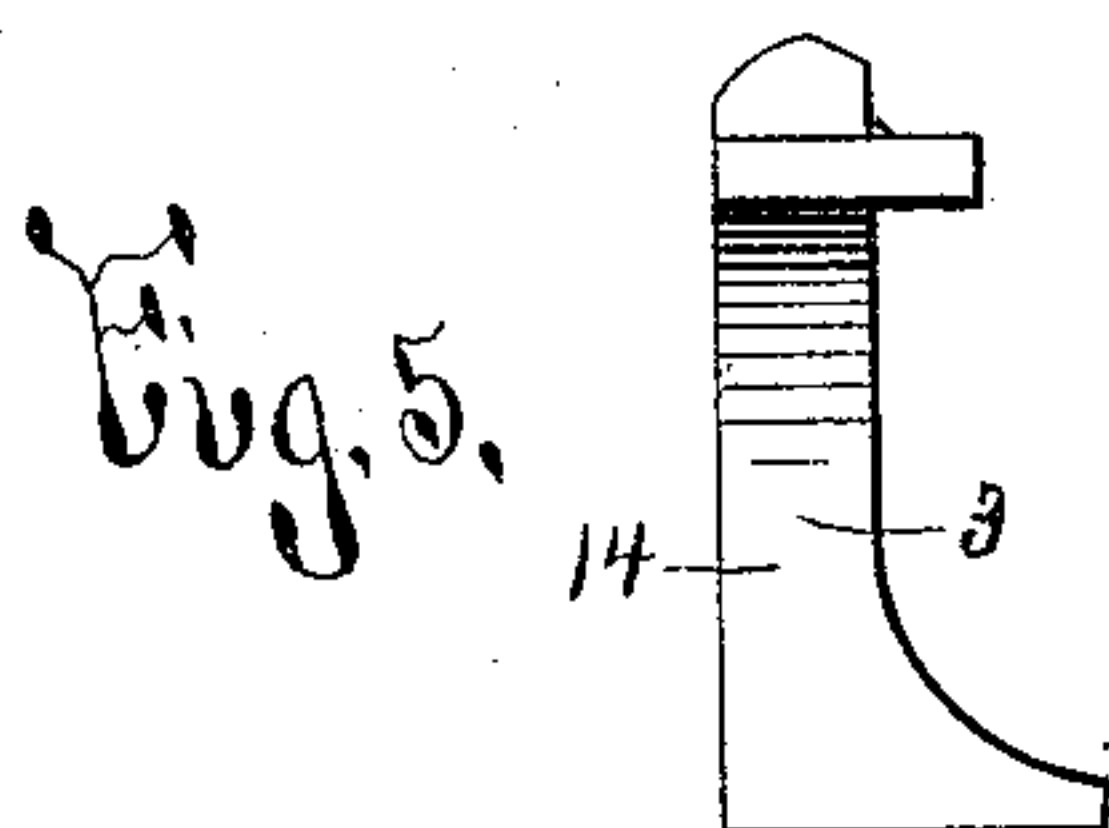
No. 790,995.

PATENTED MAY 30, 1905.

A. ARMITAGE.
FORCE FEED DISTRIBUTER.
APPLICATION FILED OCT. 9, 1902.



WITNESSES:
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ALBERT ARMITAGE, OF FAIRPORT, NEW YORK, ASSIGNOR TO ONTARIO DRILL COMPANY, OF DESPATCH, NEW YORK, A CORPORATION OF NEW YORK.

FORCE-FEED DISTRIBUTER.

SPECIFICATION forming part of Letters Patent No. 790,995, dated May 30, 1905.

Application filed October 9, 1902. Serial No. 126,456.

To all whom it may concern:

Be it known that I, ALBERT ARMITAGE, of Fairport, in the county of Monroe and State of New York, have invented a certain new and
5 useful Force-Feed Distributer, of which the following is a specification.

My invention has for its object the production of a force-feed distributer for grain and other seeds which is particularly simple in
10 construction and is highly efficient in use; and to this end it consists in the novel combinations and constructions hereinafter fully described, and pointed out in the claims.

In describing this invention reference is had
15 to the accompanying drawings, in which like figures indicate corresponding parts in all the views.

Figure 1 is an elevation of a preferable embodiment of my force-feed distributer, one of
20 the halves or sections of the case being removed, a portion of the removed section adjacent to the feed-wheel being shown in dotted lines and contiguous parts of the machine equipped with my invention being shown by
25 dotted lines. Fig. 2 is a sectional view taken on line A A, Fig. 1. Figs. 3 and 4 are plan views, respectively, of the movable members by which the size of the exit-passage of my force-feed distributer is regulated. Fig. 5 is
30 a detail front view of the bridge-piece. Fig. 6 is an inner side elevation of one of the movable members by which the size of the exit-passage of the distributer is regulated.

The illustrated preferable embodiment of
35 my force-feed distributer consists, essentially, of a case 1, a feed-wheel 2, a bridge-piece or partition 3, a cut-off or wicket 4, and movable members 5 6. Said case 1 may be of any desirable form, size, and construction and is
40 here shown as composed of complementary halves or sections secured together by suitable fastening means 7 and is formed with an inclined feeding-surface 8, (shown by dotted lines, Fig. 1,) over which the grain or other
45 seeds travel to the feed-wheel 2.

The feed-wheel 2 is journaled in any desirable manner in the case 1 and is here illustrated as having its opposite sides provided with channels 9 10 of dissimilar size and with

hubs 11 12 of unequal diameter. The hub 11
50 of larger diameter projects laterally beyond the plane of the corresponding side of the peripheral face of the feed-wheel 2 across the passage 13, through which the grain is fed,
55 said passage being formed between one of the sides of wheel 2 and the sides of case 1. Said hub 11 also extends through the case 1, thereby preventing the grain from becoming
60 clogged in the bearing of said wheel 2, and the periphery of said hub 11 is substantially tangent to the plane of the inclined feeding-surface 8 of the case 1 for facilitating the
65 movement or feeding of the grain or other seeds. Owing to the projection of the hub 11 within the passage 13, a portion of the periphery of the hub 11 (see Fig. 1) revolves in
70 said passage for undermining the grain or other seeds, and thus adds to the surface of the feed-wheel engaged with the grain or other seeds and augments the efficiency of said feed-wheel. The hub 11 is usually formed integral with the main portion of the feed-wheel; but the opposite hub 12 generally consists of
75 one end of a sleeve, which extends longitudinally within the hub 11 and the main portion of the feed-wheel and is secured in position within the case 1 by the usual or any suitable means unnecessary to illustrate and describe herein.

As best seen in Fig. 2, part of the bridge-
80 piece or partition 3, which is supported at its ends on the forward and rear sides of the casing 1, is arranged directly over the feed-wheel 2, the lower face of said partition 3 being contiguous to the periphery of the feed-wheel 2
85 for preventing entrance of fine grain between said inner face 14 and the wheel 2. Said bridge-piece 3 is of less width than the peripheral face of the feed-wheel and is arranged with one of its longitudinal edges 15 between
90 the opposite sides of said peripheral face, and consequently a portion of the peripheral face of the feed-wheel is exposed for additionally increasing the amount of surface of the feed-wheel engaged with the grain or other seed
95 feeding through the passage 13 and augmenting the efficiency of said feed-wheel.

The cut-off or wicket 4 is of any desirable

construction and, as usual, is journaled in the case 1 and extends at one side of the bridge-piece 3.

The exit or throat of the passage 13 may be adjusted in size to vary the amount of grain or seed discharged by means of the member 5, which is located therein and hinged at one end to the case 1, whereby its other end may be adjusted relatively toward and from the contiguous face of the feed-wheel by means of the member 6. Said member 5 is also shown as having a concave face 18, which is arranged oppositely to the channel 9, forming part of the exit-passage or throat of my distributor.

As best seen in Fig. 2, the member 6 is interposed between opposing faces of the case 1, and the member 5 is provided with opposite converging sides or surfaces and is movable endwise for effecting the desired movement of the free or laterally-movable end of the member 5. As seen in Figs. 1 and 3, the member 6 is provided with a laterally-projecting shoulder 19 for facilitating the endwise movement of said member 6 from the outside of the case. Said member 6 is held in its adjusted position by any desirable means, as an arm projecting from the member 5 through a lengthwise slot 16 in the member 6 and an opening in the case 1 and provided with a nut 17. By loosening the nut 17, moving the member 6 lengthwise, and tightening the nut 17 the exit-passage or throat communicating with the passage 13 may be regulated in size, as desired, thus materially adding to the practicability and efficiency of my invention.

The construction and operation of my force-feed distributor will now be readily understood upon reference to the foregoing description and the accompanying drawings, and it will be obvious that more or less change may be made in the construction and arrangement of the component parts thereof without departing from the spirit of my invention.

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

1. In a force-feed distributor, a case, a feed-wheel having a channel for the passage of the grain or other seeds, a member supported by the case opposite to a portion of the channel and movable toward and away from the opposing part of the feed-wheel for varying the size of the exit-passage for the grain or other seeds, a second member between opposing faces of the case and the first member for varying the position of the first member, and means for holding the second member in its adjusted position, substantially as and for the purpose described.

2. In a force-feed distributor, a case provided with an opening, a feed-wheel having a channel for the passage of the grain or other seeds, a member supported by the case opposite to a portion of the channel and movable toward and away from the opposing part of the feed-wheel for varying the size of the exit-passage for the grain, or other seeds, an arm projecting from said member through the opening in the case, and a second member arranged between opposing faces of the case and the first member and formed with converging surfaces for varying the position of the first member, said second member being formed with a slot extending substantially lengthwise of its converging surfaces for receiving the arm of the first member, and means on said arm for holding the second member in its adjusted position, substantially as and for the purpose set forth.

3. In a force-feed distributor, a case provided with an opening, a feed-wheel having a channel for the passage of the grain or other seeds, a member having one end hinged to the case and its other end arranged opposite to a portion of the channel and movable toward and away from the opposing part of the feed-wheel for varying the size of the exit-passage for the grain or other seeds, an arm projecting from said member through the opening in the case, and a second member arranged between opposing faces of the case and the first member and formed with converging surfaces for varying the position of the first member, said second member being formed with a slot extending substantially lengthwise of its converging surfaces for receiving the arm of the first member, and means on said arm for holding the second member in its adjusted position, substantially as and for the purpose described.

4. In a distributor the combination with a casing having passages for seed therein, a feed-wheel located in the casing having annular channels in its side faces and hubs projecting from said faces and journaled in the casing, one of said hubs projecting into the grain-passage, of a bridge located above the wheel and cut away at one side to expose the periphery of the wheel on the side adjacent the grain-passage into which the exposed hub projects.

In testimony whereof I have hereunto signed my name, in the presence of two attesting witnesses, at Syracuse, in the county of Onondaga, in the State of New York, this 30th day of September, 1902.

ALBERT ARMITAGE.

Witnesses:

D. LAVINE,
F. G. BODELL.