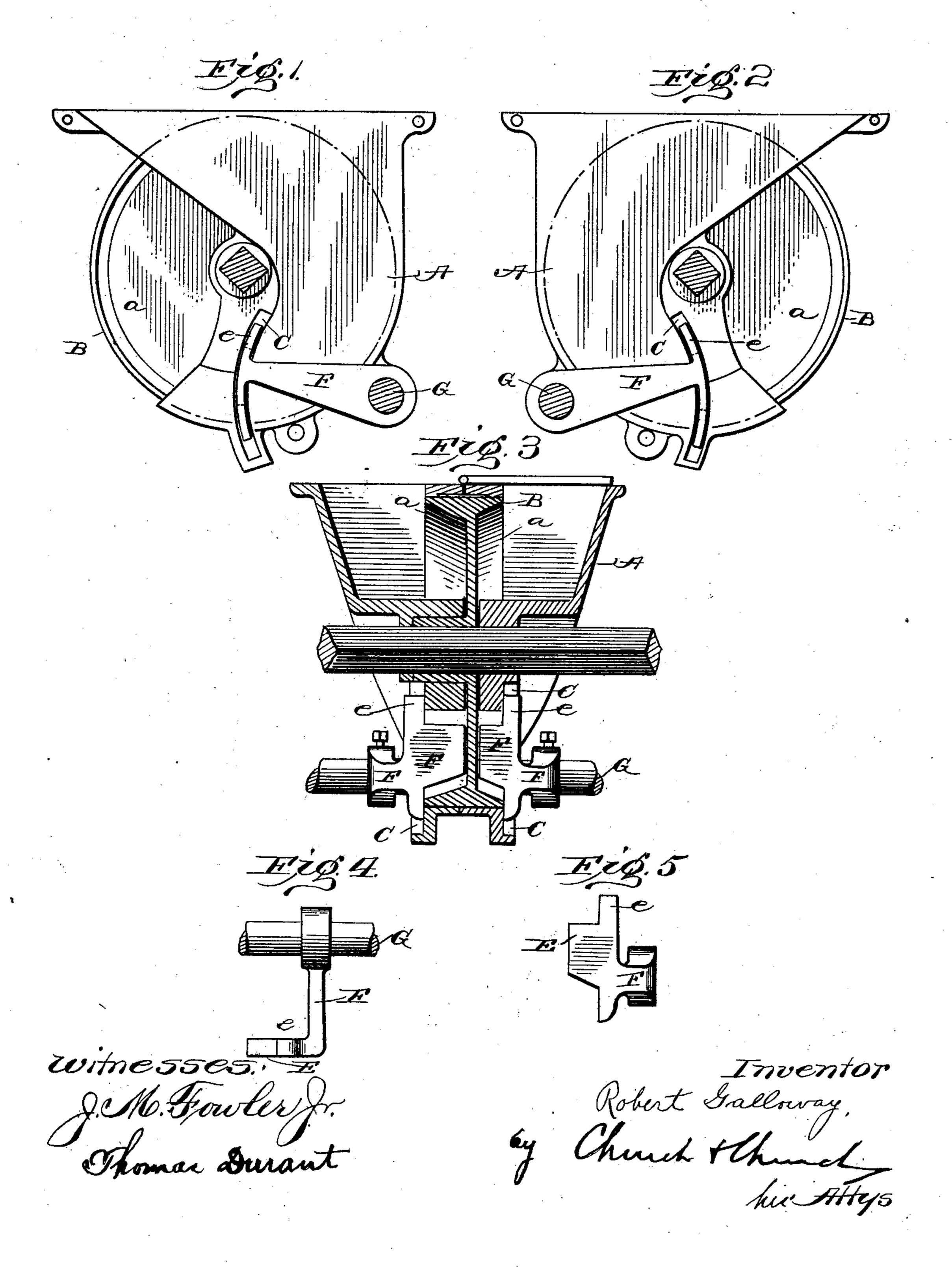
R. GALLOWAY. GRAIN DISTRIBUTER.

(Application filed Sept. 12, 1900.)

(No Model.)



United States Patent Office.

ROBERT GALLOWAY, OF BUFFALO, NEW YORK.

GRAIN-DISTRIBUTER.

SPECIFICATION forming part of Letters Patent No. 672,837, dated April 23, 1901.

Application filed September 12, 1900. Serial No. 29,797. (No model.)

To all whom it may concern:

Be it known that I, ROBERT GALLOWAY, of Buffalo, in the county of Erie, State of New York, have invented certain new and useful 5 Improvements in Grain-Distributers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification, and to the letters of reference marked to thereon.

The present invention relates to that class of force-feed distributers having a vertical feed-wheel rotatably mounted in a seed-cup and provided on its opposite faces with annu-15 lar channels adapted to feed different kinds or sizes of seed, with means for directing the seed into one or the other of said channels at will.

The invention has for its object to provide 20 a convenient and efficient means whereby the sizes of the channels may be varied to feed different quantities of grains, to which end the invention consists in providing cut-off devices operating in unison in both channels to re-25 duce or enlarge the sizes of the channels, and thereby permit a greater or less quantity of grain to be fed.

The invention further consists in certain novel details of construction and combination 30 and arrangement of parts, all as will be now described, and pointed out particularly in the

appended claims. Referring to the accompanying drawings, Figure 1 is a side elevation of a seed-cup and 35 wheel embodying my present improvements. Fig. 2 is a similar view looking at the opposite side of the cup. Fig. 3 is a vertical section showing both cut-off devices with their operating-shaft in elevation. Fig. 4 is a de-40 tail top plan view of one of the cut-off devices. Fig. 5 is an elevation showing the shape of the operative face of the cut-off device illustrated in Fig. 4.

Like letters of reference in all the figures in-45 dicate the same parts.

The letter A indicates the cup or casing, which may be of any usual or preferred form, but is preferably adapted to be secured to the framing or bottom of the hopper and is of 50 such shape as to permit a series of cups to be

drill-teeth. B is the vertical feed-wheel, provided in its opposite faces with independent annular channels a a, in which the seed is conveyed from the bottom of the hopper or 55 entrance of the cup to the discharge side of the cup, where it is received in the usual spout for being conducted to the drill-teeth. The construction and operation of these parts are essentially the same as in similar devices now 60 in common use, and hence further description of them herein is deemed unnecessary.

In accordance with my present invention the cup is provided in each side, and preferably below the axis of the wheel, with arc- 65 shaped slots or guideways C. These slots or guideways pass entirely through the side walls of the cup and are adapted for the passage of what I have heretofore termed the "cutoff" devices. The latter are in the form of 70 gates E, Fig. 5, which substantially fit the channels in the feed-wheel, and are adapted to be raised or lowered, so as to enlarge or reduce the size of the openings through which the seed passes. For convenience and in or- 75 der to prevent the escape of the seed laterally the gates are provided with projections e, which extend down past the rim of the wheel, and a sufficient play is left at the top to permit of the necessary upward movement of the 80 gates. It will be understood that one of these gates extends into the cup on each side, and they are mounted on the ends of arms F, which latter are in turn rigidly connected with a transversely-extending rock-shaft G, 85 provided with suitable means, such as a handle or the like, whereby it may be oscillated or adjusted by the attendant to set all of the gates. One movement of the rock-shaft adjusts all of the gates, and hence with a sin- 90 gle controlling-handle or a single shaft the proper adjustment may be made for feeding the desired quantity of grain regardless of whether it is being fed through the large or the smaller of the two channels in the feed- 95 wheel.

By the construction described it will be observed that the gates may be moved longitudinally of the shaft and the device adapted for use in connection with feed-wheels and 100 cups located any distance apart, and inaslocated side by side for supplying a rank of | much as the carrying-arms for the gates occupy but little transverse space the cups may be located very close together without interfering at all with the operation of the device.

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

1. The combination with a seed-cup and vertically-arranged feed-wheels journaled therein and having seed-channels located in its oppositely-disposed faces, of oppositely-arranged gates extending through the side walls of the seed-cup and into said channels, and a single shaft on which said gates are mounted and by which they are controlled, substantially as described.

2. In a grain-distributer, the combination with the seed-cup, the feed-wheel journaled therein and having annularly-disposed seed-channels in its opposite faces, of gates located in said channels and having projections ex-

tending below the channels at the sides of the feed-wheel for preventing the escape of grain, and a shaft on which said gates are mounted, substantially as described.

3. In a grain-distributer, the combination 25 with the seed-cup having arc-shaped slots in its opposite sides and the feed-wheel journaled in said cup and having seed-channels in its oppositely-disposed faces, of a rock-shaft, arms carried by said rock-shaft and 30 projecting on opposite sides of the cup and gates mounted on said arms and extending inwardly through the arc-shaped slots in the cup and into the channels in the feed-wheel, substantially as described.

ROBERT GALLOWAY.

Witnesses:

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