(No Model.)

C. M. CLINTON & G. W. KIRKPATRICK.

GRAIN DRILL.

No. 444,290. Patented Jan. 6. 1891.

Fig. 1.

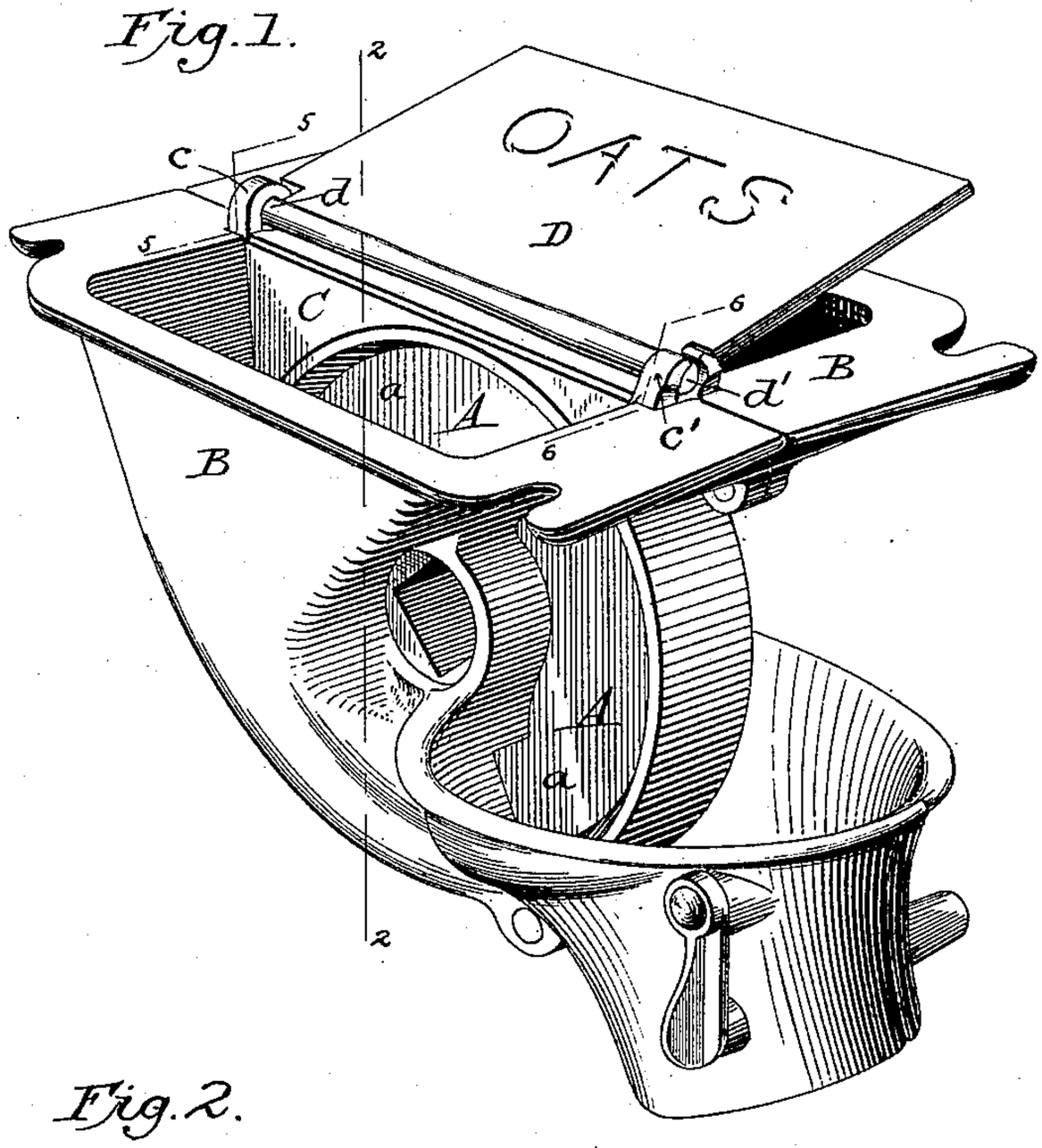


Fig. 2.

ON LINE 2-2

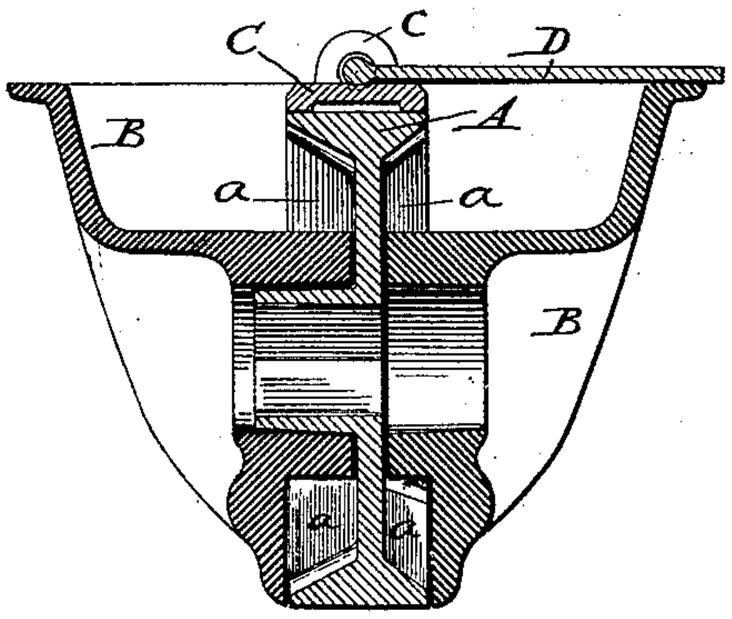


Fig. 3.

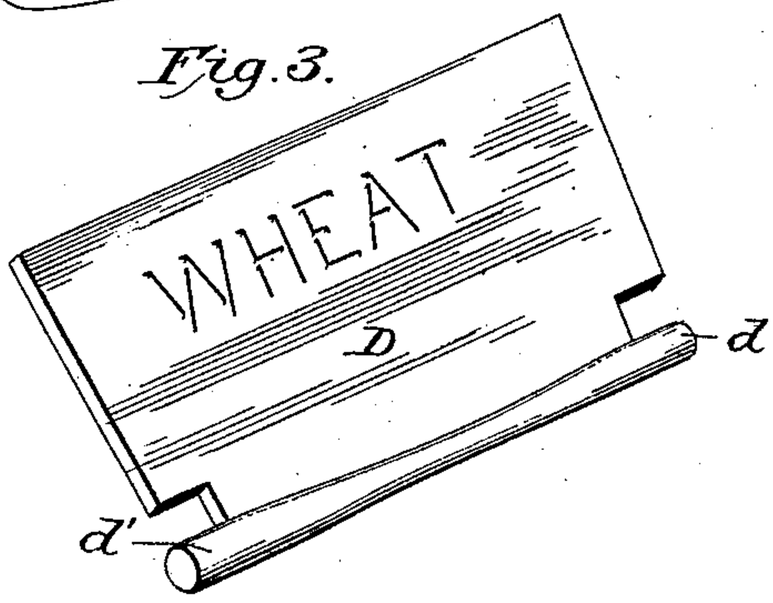


Fig. 4.

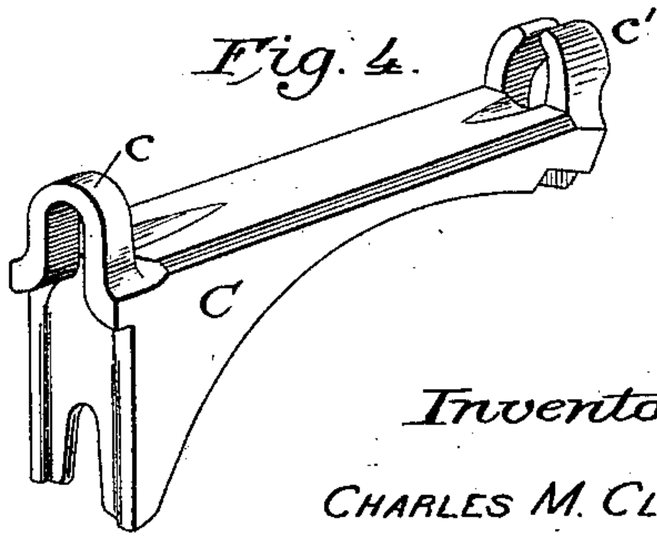


Fig. 6.

ON LINE 6-6

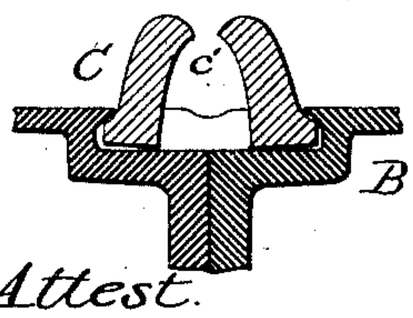
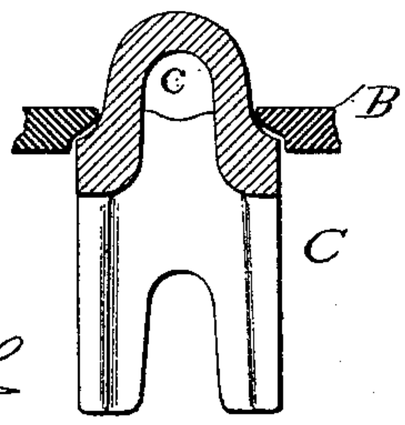


Fig. 5.

ON LINE 5-5



Attest.

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by their attorney

Phil. T. Dodge

UNITED STATES PATENT OFFICE.

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GRAIN-DRILL.

SPECIFICATION forming part of Letters Patent No. 444,290, dated January 6, 1891.

Application filed June 12, 1890. Serial No. 355,234. (No model.)

To all whom it may concern:

Be it known that we, CHARLES M. CLINTON, of Ithaca, in the county of Tompkins and State of New York, and GEORGE W. KIRKPATRICK, of Macedon, in the county of Wayne, and State of New York, respectively, have invented certain Improvements in Grain-Distributers, of which the following is a specification.

Our invention has reference to that class of force-feed distributers in which a vertical feed-wheel revolving in a seed-cup is provided in its opposite sides with two annular channels adapted to feed different kinds or quantities of seed, and combined with a cut-off device by which either of the channels may be brought into use at will.

The improvement consists in the peculiar construction and arrangement of the cut-off or wicket which we hinge to a bridge or division plate in the cup overlying the wheel, so that the wicket may be turned from one side to the other in order to cover one or the other of the throats or seed-inlets.

In the accompanying drawings, Figure 1 is a perspective view of our improved feeder. Fig. 2 is a vertical cross-section of the same on the line 2 2 of Fig. 1. Fig. 3 is a perspective view of the wicket or cut-off. Fig. 4 is a perspective view of the bridge to which the wicket is hinged. Figs. 5 and 6 are vertical cross-sections on the lines 5 5 and 6 6 of Fig. 1, showing the manner in which the bridge-piece is secured in position.

Referring to the drawings, A represents the vertical feed-wheel, provided in its opposite faces with the two independent annular channels *a a*.

B is a feed cup or case consisting of two complementary halves fastened together and adapted to confine the feed-wheel between them, the form of the cup being such that the seed entering at the top may pass downward on opposite sides of the wheel into its respective channels, through which it is carried by the rotation of the wheel and continuously delivered at the rear. The construction and operation of these parts are essentially the same as in the feeders now in general use, and being familiar to those skilled in the art and foreign to our invention need not be further described herein.

C represents a stationary bridge-piece or casting fixed centrally within the cup, its lower edge being curved to closely encircle the upper side of the wheel, so that it serves as a division between the two sides of the cup.

D represents the wicket or cut-off to which our invention relates. This wicket is hinged at one edge to the top of the bridge-piece, so that it may be turned from right to left to cover and close either side of the feed-cup at will. The two channels of the feed-wheel are of different sizes or forms and are adapted for the feeding of different kinds of grain or the same grain at different rates of speed, so that by turning the wicket from one side to the other we may permit the passage of the grain through either side of the wheel at will, at the same time preventing its passage through the opposite side.

The bridge is cast complete in one piece, with a perforated ear *c* at one end and with a slotted ear *c'* at the opposite end, and is held immovably in place between the two sections of the feed-cup B. The bridge is inserted before the sections of the cup are fastened together, and the sections recessed in their approximate faces to receive and interlock with the ends of the bridge, as shown in Figs. 5 and 6. The parts may be constructed in any suitable form, provided only the sections of the cup are adapted to hold the bridge in place

The wicket or cut-off is formed, as shown, with journals or trunnions *d d'* at opposite ends and of appropriate size to enter the ears of the bridge. The wicket is marked on each side with the name of the seed or grain which the machine is adapted to distribute when that side of the wicket is uppermost, so that the attendant observing the name which is exposed to view on the plate is prevented from accidentally adjusting the wicket in an improper position. The trunnions of the wicket differ in size and the ears in which they are entered are made of corresponding size, so that in assembling the parts the workman is compelled to place the wicket in the proper position—that is to say, in position to

expose the names in the proper relation to the seed-cup. The wicket is inserted into its place by sliding it endwise through the slotted ear. When turned to either side its escape is impossible.

Having thus described our invention, what we claim is—

1. In combination with the duplex feed-wheel, the divided cup, the bridge confined between the two parts of the cup and provided with ears, and the reversible wicket or cut-off provided with journals seated in said ears.

2. In combination with the feed-wheel and cup, the bridge provided with the perforated and the slotted ear, and the reversible cut-off plate provided with journals and adapted for insertion in an endwise direction through the slotted ear.

3. In a duplex seed-distributer, the reversible wicket marked to indicate different seeds and having variant journals, in combination with a support having corresponding ears, whereby the application of the wicket in an improper position is prevented.

4. In combination with the feed-wheel and feed-cup having variant passages therethrough, the hinged reversible wicket bearing on opposite sides the names of different grains, so that the adjustment of the feeder to distribute a given grain is attended by the exposure of its name and the concealment of the other.

In testimony whereof we hereunto set our hands this 27th day of May, 1890, in the presence of two attesting witnesses.

CHARLES M. CLINTON.
GEORGE W. KIRKPATRICK.

Witnesses:
LEROY H. VAN KIRK,
A. E. BALL.