

(No Model.)

C. E. PATRIC.  
FERTILIZER DISTRIBUTER.

No. 564,391.

Patented July 21, 1896.

Fig. 2

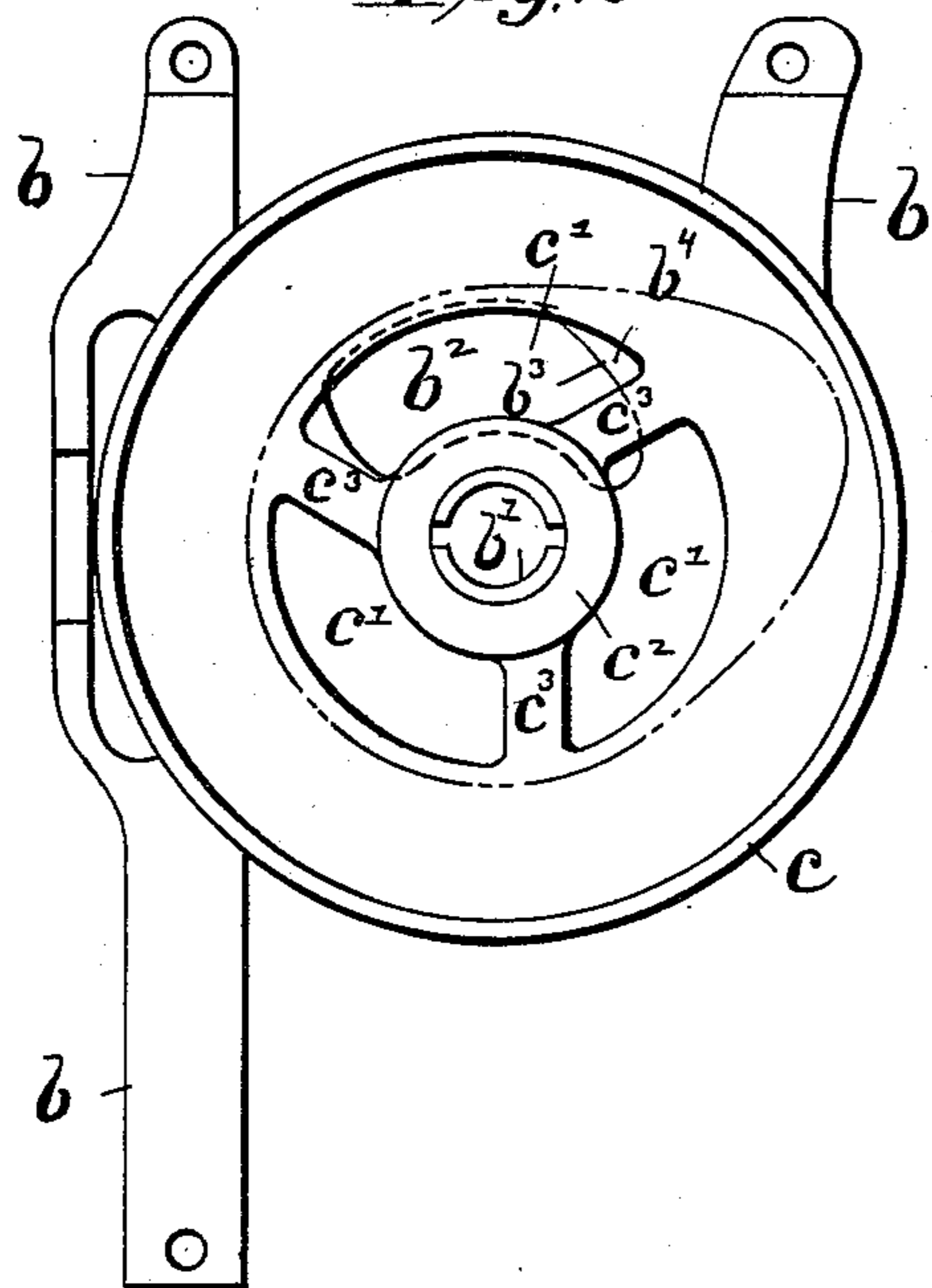


Fig. 1

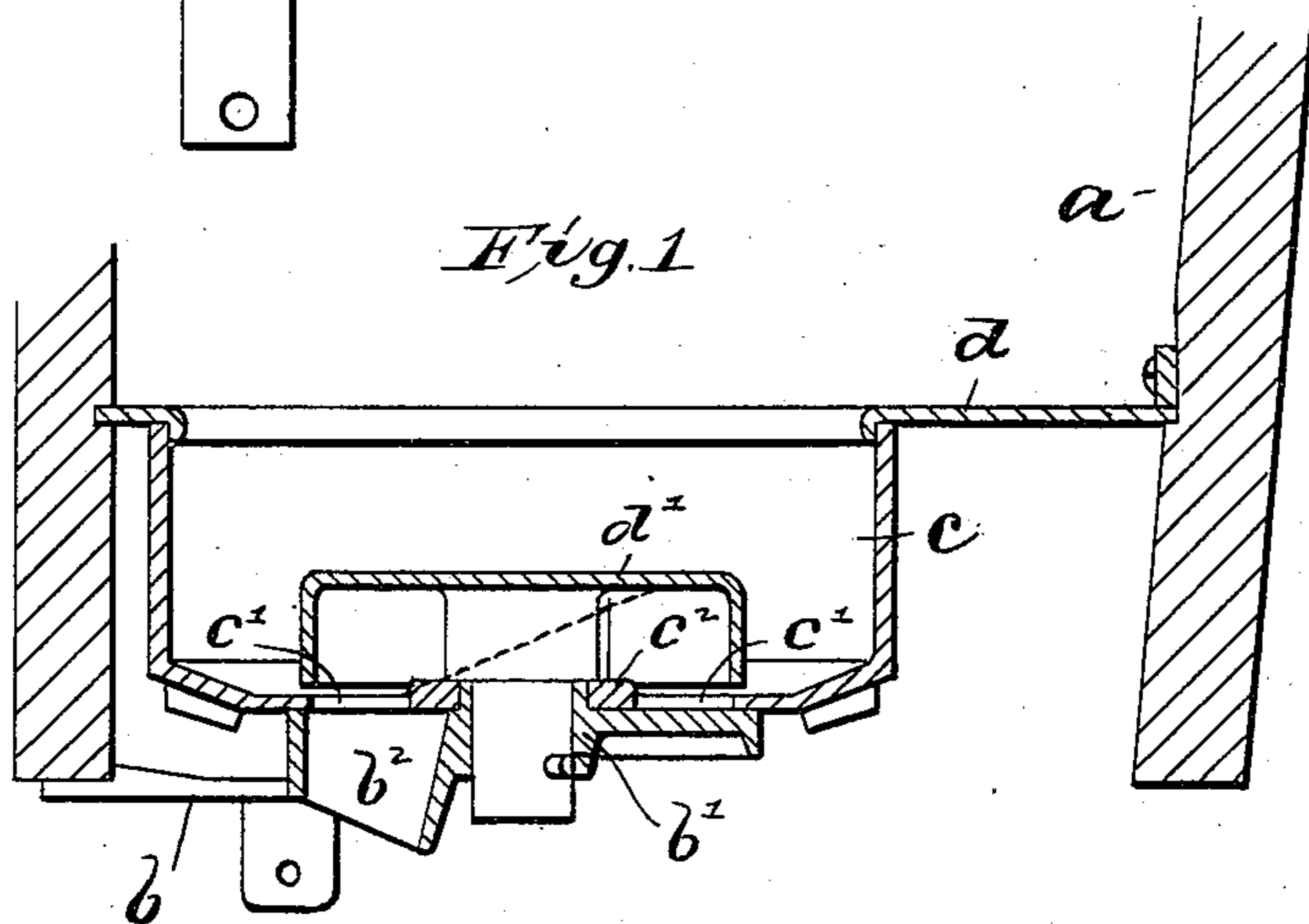
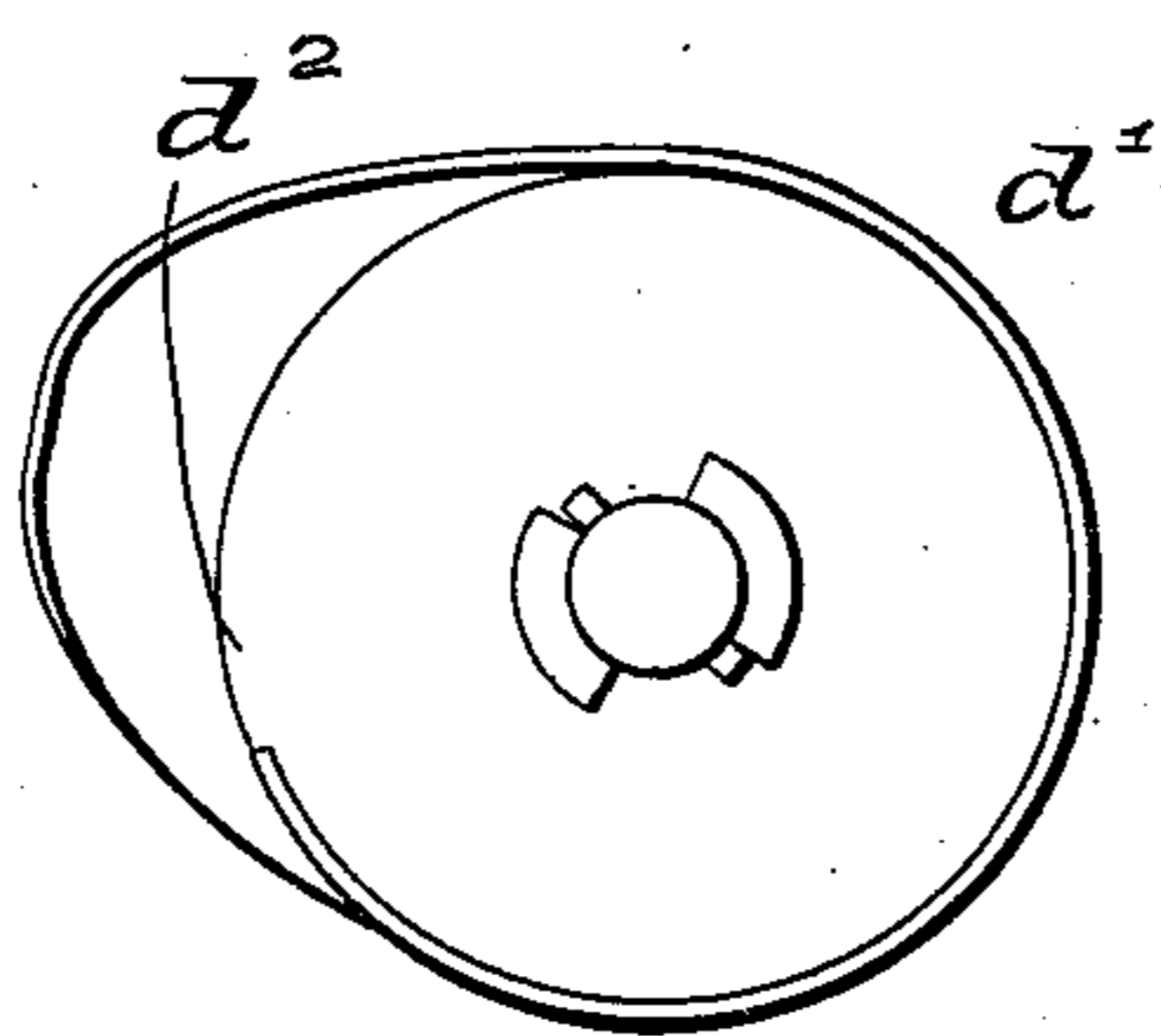


Fig. 3



Witnesses  
G. M. Gridley  
Chas. J. Mehl

Inventor  
Charles E. Patric  
By his Attorney  
Paul A. Stahly

# UNITED STATES PATENT OFFICE.

CHARLES E. PATRIC, OF SPRINGFIELD, OHIO, ASSIGNOR TO THE SUPERIOR  
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## FERTILIZER-DISTRIBUTER.

SPECIFICATION forming part of Letters Patent No. 564,391, dated July 21, 1896.

Application filed May 25, 1896. Serial No. 593,017. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES E. PATRIC, a citizen of the United States, residing at Springfield, in the county of Clark and State of Ohio, have invented certain new and useful Improvements in Fertilizer-Distributers, of which the following is a specification.

My invention relates to improvements in fertilizer-distributers, and it especially relates to improvements on that class of fertilizer-distributers in which a revolving cup or hopper is adapted to operate in connection with a central stationary cam-shaped cap or cover arranged over the feeding-opening.

My invention consists in the constructions and combinations of parts hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a sectional elevation of a device embodying my invention. Fig. 2 is a plan of the same with the central cap or cover removed. Fig. 3 is a bottom plan of said cap or cover.

Like parts are represented by similar letters of reference in the several views.

In the said drawings, *a* represents a suitable hopper, having at the bottom thereof and secured thereto a supporting-frame *b*, provided with a hollow-hub or sleeve *b'*. On this hub or sleeve is mounted a rotating cup or hopper *c*, which projects into the main hopper *a*, a false bottom *d* being interposed at the top of said rotating hopper or cup *c*, all of these parts being of the usual construction.

The frame *b* is provided with a feeding-opening *b<sup>2</sup>*, and the cup *c* is provided at the bottom with openings *c'* about the hub *c<sup>2</sup>*, the main body of the cup or hopper *c* being connected to its hub *c<sup>2</sup>* by arms *c<sup>3</sup>*. The stationary cam-shaped cap or cover *d'* is arranged centrally over and covers the openings *c'* as well as the feeding-opening *b<sup>2</sup>*, the fertilizer being adapted to be drawn inwardly by the cam-shaped lip or opening *d<sup>2</sup>* in the side thereof as the cup is revolved. In feeding devices of this character a great deal of trouble has been experienced by the intermittent manner in which they feed, which is caused by the passing of the arms *c<sup>3</sup>* over the opening *b<sup>2</sup>*. These arms have usually been made radial and the sides of the feeding-opening *b<sup>2</sup>* have been substantially of the same shape. The cups or

hoppers necessarily rotate slowly. The result is that as each arm approaches the feeding-opening *b<sup>2</sup>* all the fertilizer carried in the opening *c'* is discharged as soon as the front edge of the arm coincides with the front edge of the feeding-opening, and the feeding stops until the rear side of the arm has passed the front side of the opening, at which point the feeding will again be resumed from the next succeeding opening *c'*. This was partially overcome by making the arm *c<sup>3</sup>* quite narrow, but when so constructed many breakages would occur, and even then the intermittent feeding was not entirely overcome.

In my present form of feeding device I construct the arms *c<sup>3</sup>* at an angle to the radius of the cup, and the front or feeding side of the feeding-opening *b<sup>2</sup>* I also construct at an oblique angle, as shown at *b<sup>3</sup>*, so that the parts cross each other something near a right angle, leaving a retaining-ledge *b<sup>4</sup>* in front of each arm *c<sup>3</sup>*, which retains a certain amount of the fertilizer to be fed gradually therefrom until the feeding-opening *b<sup>2</sup>* begins to open at the rear of the arm, so that there is no intermission at all in the distribution of the fertilizer from the openings *c'* into the opening *b<sup>2</sup>*, the front edge of the arm being adapted to travel across the front edge *b<sup>3</sup>* of the feeding-opening with a shearing or drawing action, so that all the fertilizer from one opening *c'* in the cup is not discharged from the feeding-opening *b<sup>2</sup>* until the fertilizer from the next succeeding opening also begins to discharge. The same result may be accomplished, though to a less degree, by making only one of the parts at an angle or oblique to the radius of the cup.

Having thus described my invention, I claim—

1. In a fertilizer-distributer having a retaining-cup and a central stationary cam-shaped cap or cover, the part on which said cup revolves having a feeding-opening therein, and openings in the bottom of said cup adapted to pass over said feeding-opening, with intermediate arms as described, said arms being formed at one side oblique to the radius of said cup and adapted to cross the front edge of said feeding-opening at an angle whereby the material from one opening in said cup is

not discharged through the feeding-opening until the next succeeding opening comes partially opposite the same, substantially as specified.

- 5 2. The combination with the rotating cup having the feeding-openings therein, a base having a feeding-opening as described, and a central cam-shaped cap or cover extending over the same, intermediate arms between the  
10 openings in the bottom of said rotating cup, the front edge of said arms and the front edge

of said feeding-openings being formed oblique to the radius of said cup and at an angle to each other, substantially as and for the purpose specified.

In testimony whereof I have hereunto set my hand this 11th day of May, A. D. 1895.

CHARLES E. PATRIC.

Witnesses:

OLIVER H. MILLER,  
CHAS. I. WELCH.