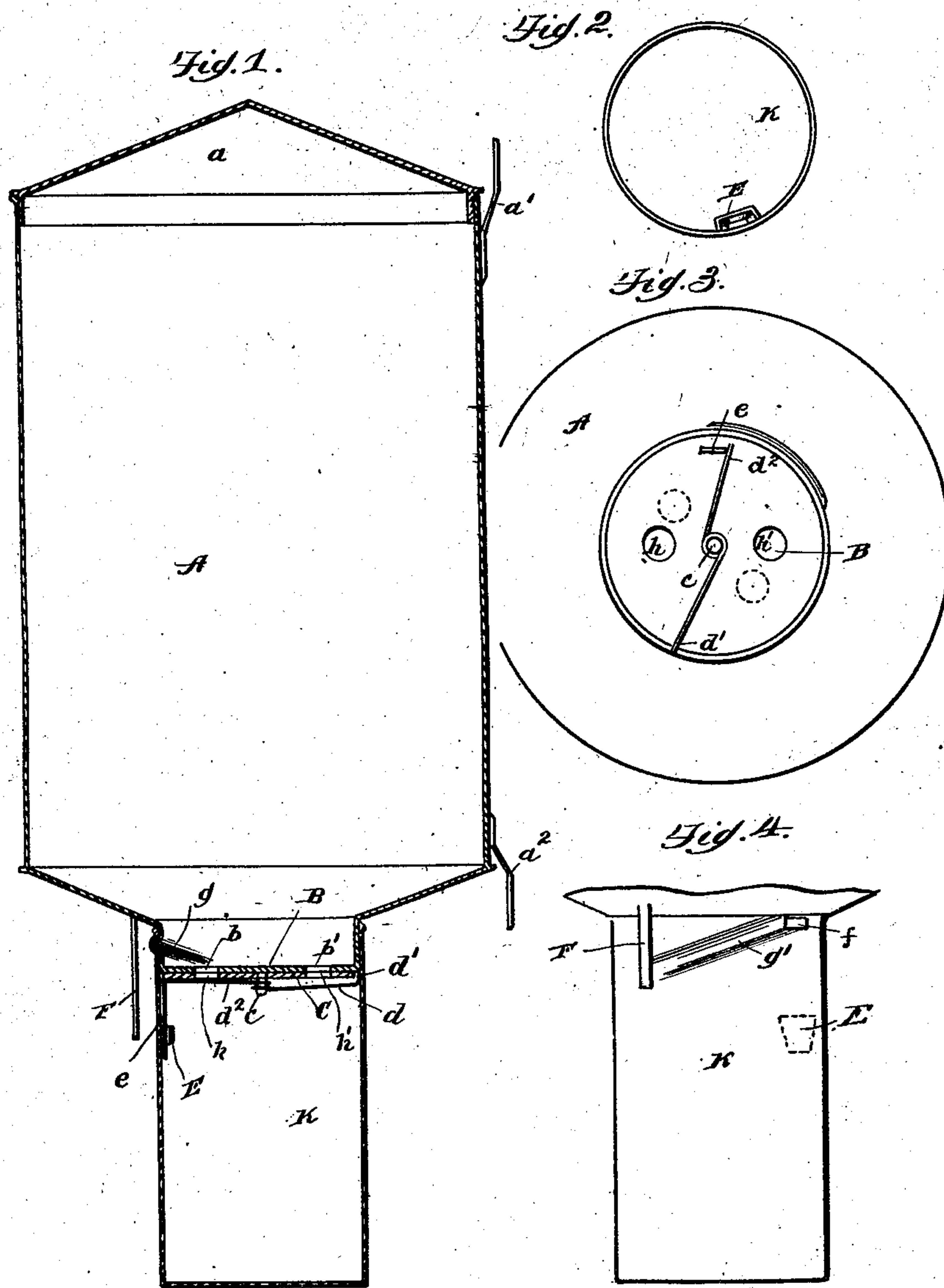


(No Model.)

C. IRISH.  
BIN FOR POWDERED MATERIAL.

No. 604,937.

Patented May 31, 1898.



WITNESSES  
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# UNITED STATES PATENT OFFICE.

CHARLES IRISH, OF TRAVERSE CITY, MICHIGAN.

## BIN FOR POWDERED MATERIAL.

SPECIFICATION forming part of Letters Patent No. 604,937, dated May 31, 1898.

Application filed May 10, 1897. Serial No. 635,867. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES IRISH, a citizen of the United States, residing at Traverse City, county of Grand Traverse, State of Michigan, have invented a certain new and useful Improvement in Bins for Powdered Materials; and I declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to bins or receptacles for dry powdered material—such as sugar, flour, and the like—which it is desirable to preserve from dirt and insects and at the same time to have so arranged that certain definite quantities may be taken from the bin at any time.

The bin which is the subject of this invention is adapted to be hung on the wall and arranged to have a measured quantity deposited in the detachable cup at the bottom of the bin, and the detachable cup with its contents are removable at all times. Simultaneous with the removal of the cup a valve operates to close a passage-way between the main bin and the detachable cup, and simultaneously with the attachment of the cup the valve is actuated and the passage-way opened, so that a portion of the contents is allowed to escape from the bin into the detachable cup.

In the drawings, Figure 1 is a sectional elevation showing the bin and the cup below it. Fig. 2 is a section showing the receptacle or cup on a horizontal plane through the lug E. Fig. 3 is a view of the bottom of the bin with the cup removed therefrom. Fig. 4 is a side elevation of the detachable cup, showing it applied to the bin.

A indicates the main bin, which for ordinary use in the household is made, preferably, in the shape of a round can with a tight cover  $a$  and with a pair of ears  $a'$   $a''$ , by means of which it can be fastened to the wall. The bottom of the bin is preferably conical, and at the central portion of the bottom there is a downward-extending cylindrical ring or neck. This cylindrical extension is closed at the bottom by a plate B, through which there are one or more holes  $b$   $b'$ , and below this

plate, held to it by a pivot-pin  $c$ , is a second plate C, through which there are the same number of holes that there are in the plate B. A spring  $d$ , one end  $d'$  of which is secured to the plate B and the other end of which,  $d''$ , is secured to the plate C, is arranged to hold the two plates normally in a position such that the holes through the two plates do not register, and consequently the passage-way or passage-ways are closed. The spring may be of any approved form. As shown in the drawings, it consists of a short spiral spring turned around the pivot-pin  $c$ . One end of the spiral spring extends out for attachment with the plate B, and the other end  $d''$  extends out for attachment with the plate C. There is a downward-extending arm  $e$  secured to the plate C, and this downward-extending arm  $e$  is adapted to engage against or preferably in a lug E in the removable cup. There is on the collar a short guide  $g$ , that extends diagonally from the lower edge upward to or near to the upper edge, similar in appearance to a short portion of a screw-thread.

K indicates the cup, on the upper edge of which there is a short guide  $g'$ , made to engage with the guide  $g$  on the neck. Otherwise the cup is cylindrical and of a size to engage easily over the neck. On the inside of the cup there is a lug E, properly located with respect to the guide  $g'$  to engage the downward-extending arm  $e$ . On the outside of the cup there is a stop or lug  $f$ , properly located to engage a guide-arm F, that extends downward from the bottom of the bin outside of the neck and far enough removed therefrom to permit the edge of the cup to engage under it and over the neck. The object of this last-mentioned guide-arm is to engage the lug  $f$  of the cup, so as to bring its two ends and the two screw-threads or guides  $g$   $g'$  to the proper position so that the one thread will engage the other when it is desired to attach the cup to the bottom of the bin. The internal lug E is properly located with respect to the external lug and with respect to the arm  $e$  so that when the engagement of the screw-threads is made the arm  $e$  and the lug E engage properly and the motion of the cup as it is pushed up on the neck and turned through a part of a revolution actuates the lower plate



C, turns it on the pivot *c*, brings the holes *b b'* in the plate B and the holes *h h'* in the plate C into register, and allows a part of the contents of the bin to drop by gravity into the detachable cup K.

For domestic uses I prefer to make the cup K of a size to hold about a half-pint or the quantity commonly known to housewives as "a teacupful," that being a convenient quantity for use in compounding cakes, &c., from receipts as commonly worded.

What I claim is—

1. A bin provided with a downward-extending neck having a perforated bottom plate, a perforated plate pivoted to the bottom plate, a spring arranged to normally hold the pivoted plate so that the holes through the bottom plate and the pivoted plate do not register, a cup adapted to engage with the neck with both a sliding and a twisting motion, and a lug on the cup adapted to engage an arm on the pivoted plate and rotate said plate, substantially as described.

2. A bin provided with a downward-extending

neck having a perforated bottom plate, a perforated plate pivoted to the bottom plate, a cup adapted to engage with the neck with both a sliding and twisting motion, a lug on the cup, and an arm on the pivoted plate adapted to engage and cause the plate to rotate with the cup, substantially as described.

3. A bin provided with a downward-extending neck having a spiral guide on the wall thereof and closed by a perforated bottom plate, a rotative perforated plate pivoted to the bottom plate and having a projecting arm thereon, a cup having a guide adapted to engage the spiral guide, and a lug adapted to engage the projecting arm on the pivoted plate, whereby as the cup is pushed onto the neck it is caused to turn, and turns the pivoted plate, substantially as described.

In testimony whereof I sign this specification in the presence of two witnesses.

CHARLES IRISH.

Witnesses:

B. F. HOLCOMB,  
OTTO KYSELKO.