

J. S. McQUINN.
FLOUR BIN.

APPLICATION FILED AUG. 30, 1909.

948,703.

Patented Feb. 8, 1910.

Fig. 1.

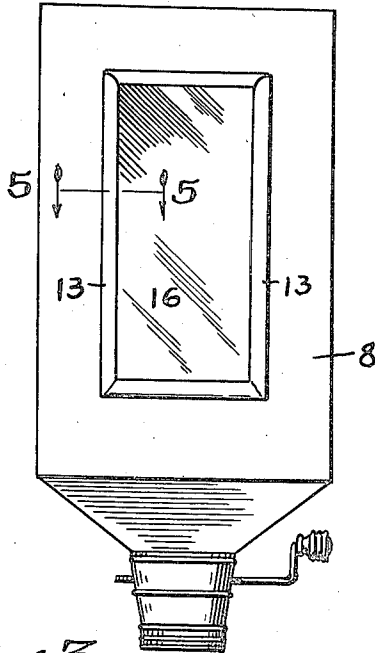


Fig. 2.

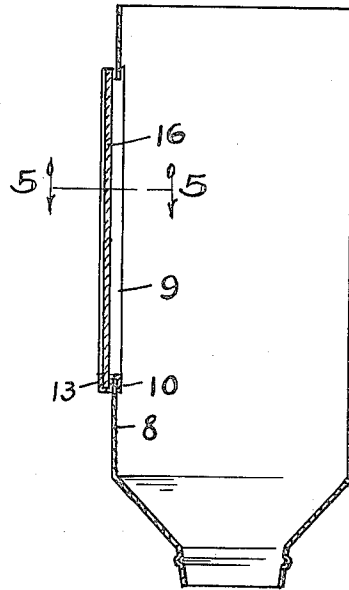


Fig. 3.

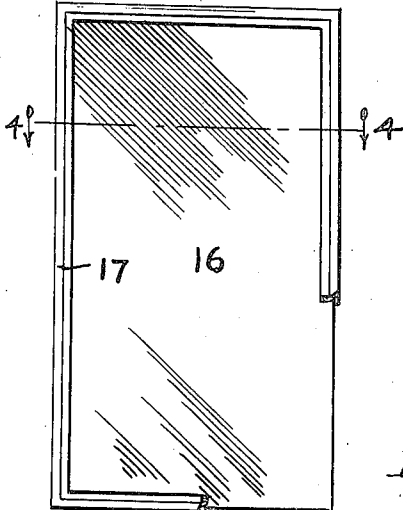


Fig. 4.

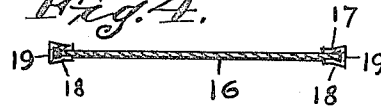


Fig. 5.

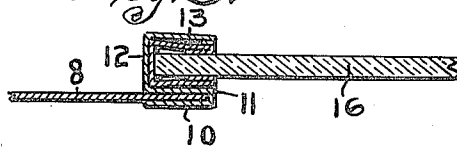


Fig. 6.

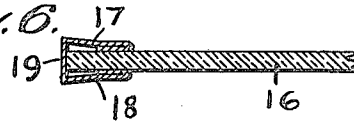
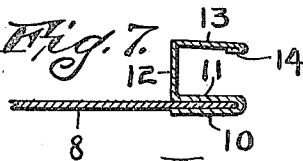


Fig. 7.



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UNITED STATES PATENT OFFICE.

JAMES S. McQUINN, OF NEWCASTLE, INDIANA.

FLOUR-BIN.

948,703.

Specification of Letters Patent.

Patented Feb. 8, 1910.

Application filed August 30, 1909. Serial No. 515,310.

To all whom it may concern:

Be it known that I, JAMES S. McQUINN, a citizen of the United States, residing at Newcastle, in the county of Henry and State of Indiana, have invented certain new and useful Improvements in Flour-Bins, of which the following is a specification.

This invention relates to improvements in bins for holding flour, meal or the like, and is particularly adapted for use in kitchen cabinets.

The object of this invention is to provide a sight opening or window in the front of the cabinet of sufficient size to not only show the state of fullness of the bin but also to afford a large and sufficient opening for the introduction of the hand and arm of a person for purposes of cleaning the interior of the bin and to permit all portions of said interior to be reached by the hand thus introduced.

A further object of the invention is to provide a removable window or closure for said opening and to provide a joint between the window and bin sufficiently tight to prevent leakage of the contents of the bin through said joint.

The object also is to provide a simple construction which will be easy to operate and of low cost to manufacture.

I accomplish the objects of the invention by the mechanism illustrated in the accompanying drawing, in which—

Figure 1 is a view in front elevation of my improved bin with the window closed. Fig. 2 is a longitudinal vertical section of the bin shown in Fig. 1 with the sifter at the bottom of the bin removed. Fig. 3 is a view on a larger scale than that shown in Fig. 1 of the window removed from the walls of the bin, a portion of the frame or margin of the window being broken away. Fig. 4 is a cross section of the window on the line 4—4 of Fig. 3. Fig. 5 is a detail in horizontal section on the line 5—5 of Figs. 1 and 2. Fig. 6 is a section on a larger scale than that shown in Fig. 1, of the window, and Fig. 7 is a detail on a larger scale in horizontal section of the front wall showing the metal slides for securing the window in the bin.

Like characters of reference indicate like parts throughout the several views of the drawing.

8 represents the front wall of the bin, and 9 an opening therethrough large enough to

disclose the contents of the bin and also to permit a person to reach all parts of the interior of the bin through said opening.

16 is a window of transparent material, preferably glass, for closing the opening 9, and this invention has special reference to means for removably securing the window and for making the joint between the window and bin sufficiently tight to prevent the leakage of the bin-contents through said joint. To this end I provide the bottom and two vertical edges of the opening with sheet-metal strips bent so as to embrace the edges of the wall at said opening and then bent to form a slideway to engage the bottom and side edges of a window for removably closing said opening when the bin is in use as a container. As the formation for each vertical edge of the opening and bottom edge are alike a description of one will suffice for all of these edges.

10 represents that member of the metal strip above referred to which is on the inside of the bin. The strip is bent around the edge of the wall at the opening and is thence extended in contact with the outer surface of the bin wall to form the member 11. At a suitable distance it is bent outwardly at right angles to form the member 12, and at a suitable distance determined by the thickness of the frame or binding of the window it is bent again approximately at right angles to form the member 13. The extreme edge of the member 13 is folded under to make a finish 14 which will avoid sharp edges. A slideway is thus formed to receive and hold the window 16 which is introduced from the top with a sliding movement.

The window 16 will preferably be of glass, and its edges will be bound with sheet-metal bent in the manner as clearly shown in Figs. 3 to 6, inclusive. This edge-binding or frame will comprise the two members 17 and 18 between which the glass 16 is impinged, and the connecting member 19 which bears directly against the edge of the glass 16 and extends far enough beyond the sides of the glass to permit the frame to be given an outwardly expanded or dove-tailed finish in cross section which, when the glass and frame are forced into the slideway around the bin opening insures a closer fit than would otherwise obtain to prevent the leakage of flour or meal through the joint. The joint between the members 10 and 11 and

walls 8 of the bin prevents leakage of flour or meal on account of the long distance which the material must travel in order to escape through said joint.

5 Having thus fully described my invention what I claim as new and wish to secure by Letters Patent of the United States, is—

1. A bin for the purposes specified, having a clean-out and sight opening through
10 one of its walls, a removable closure for said opening, and slideways at the bottom and side edges of the opening to hold said closure, said slideways being formed of metal strips bent around the edges of the opening
15 to produce inner and outer members which inner and outer members impinge the wall of the bin between them, and said metal strips being then bent outwardly and again at a suitable distance toward the opening to form
20 members to embrace said removable closure at and near its edges.

2. A bin for the purposes specified, having a clean-out and sight opening through

one of its walls, a removable closure for said opening comprising a glass plate and metal
25 bindings for the edges of the plate having oblique side members which increase the outer thickness of said bindings, and slideways at the bottom and side edges of the opening to hold said closure, said slideways
30 being formed of metal strips bent around the edges of the opening to form inner and outer members impinging the wall of the bin between them, said strips being further bent in an outwardly direction and again at a
35 suitable distance toward said opening to embrace the edges of said removable closure.

In witness whereof, I, have hereunto set my hand and seal at Newcastle, Indiana, this 11th day of August, A. D. one thousand
40 nine hundred and nine.

JAMES S. McQUINN. [L. s.]

Witnesses:

GEO. K. GRANT,
WARD HUSTON.