

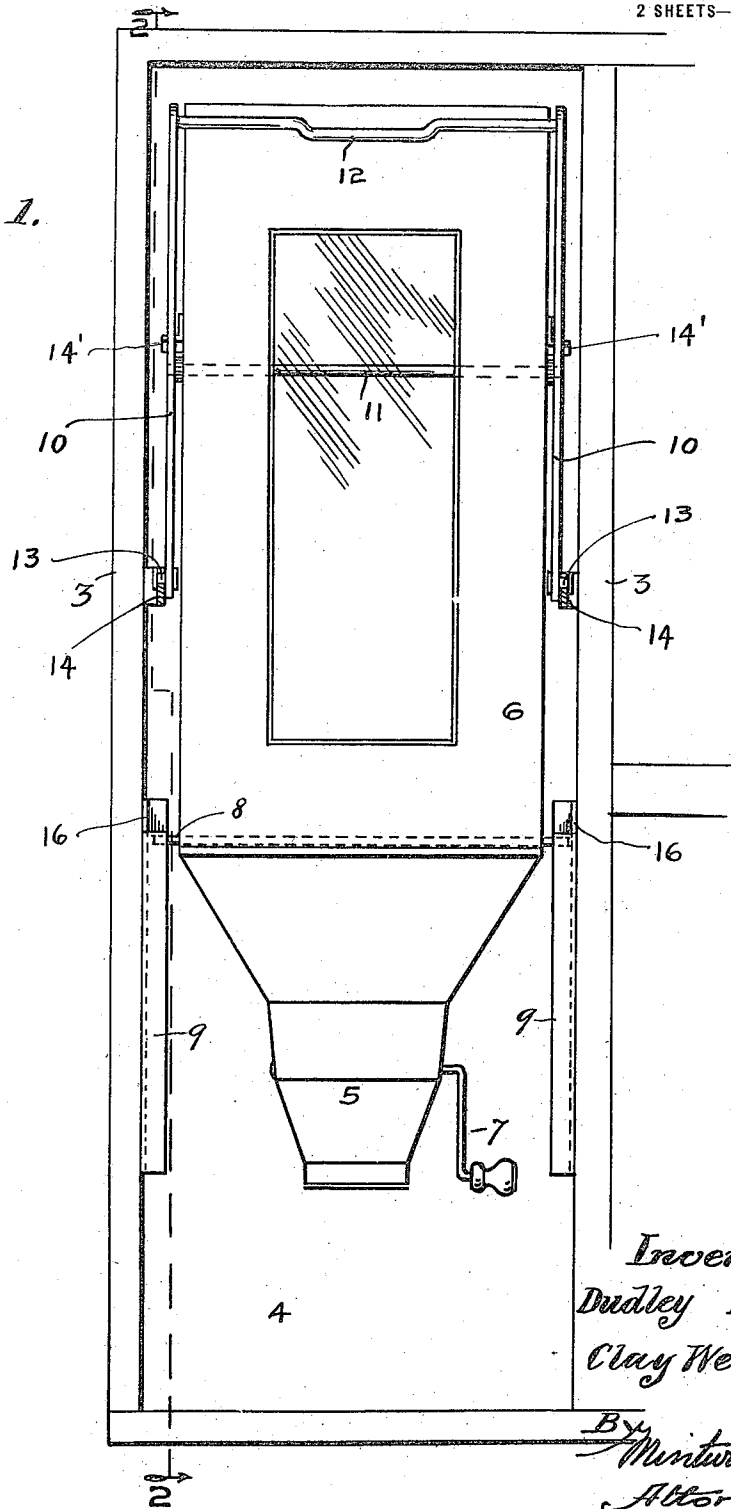
C. WEESNER & D. DAVIS.
 TILTING AND REMOVABLE FLOUR BIN.
 APPLICATION FILED AUG. 18, 1916.

1,243,784.

Patented Oct. 23, 1917.

2 SHEETS—SHEET 1.

Fig. 1.



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Dudley Davis,
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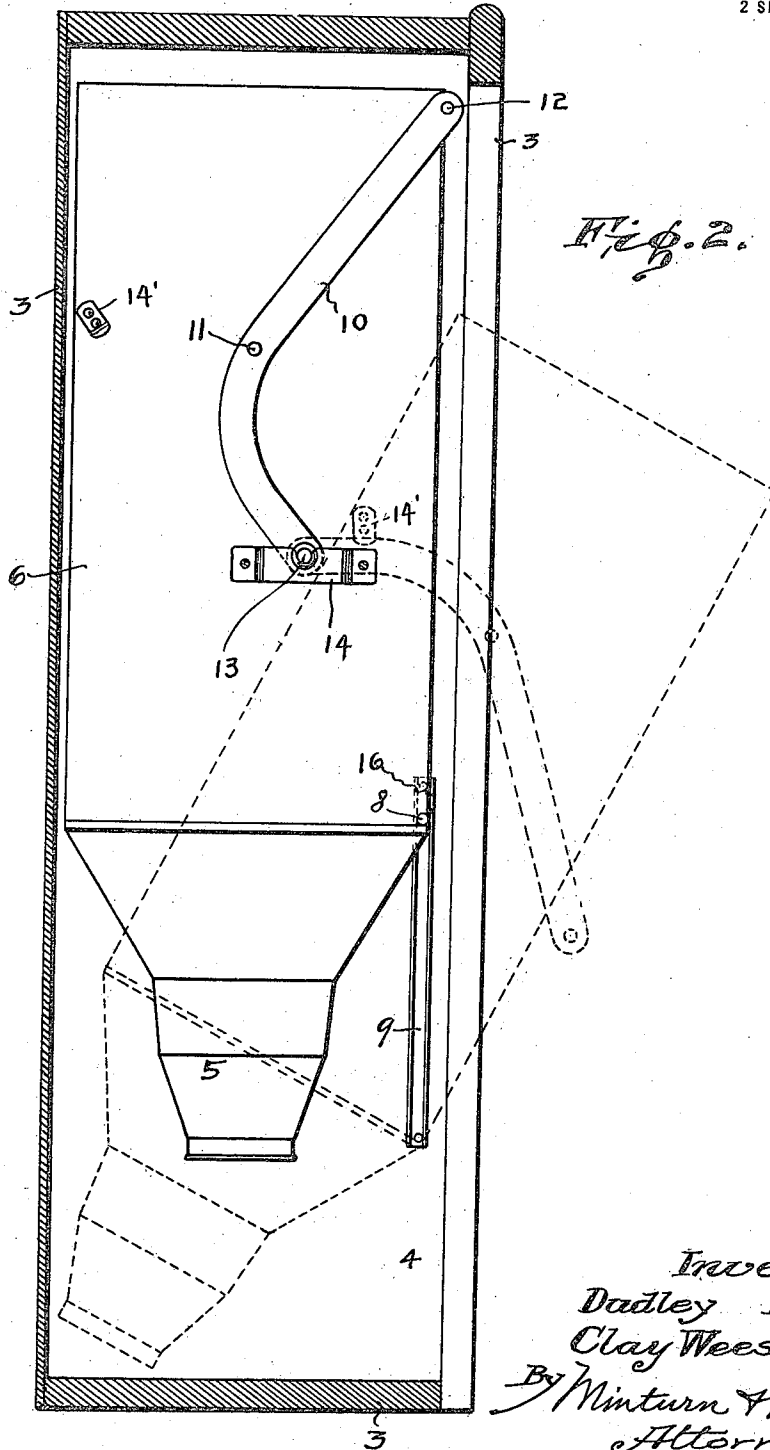
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Inventors,
 Dudley Davis &
 Clay Weesner.
 By Minturn & Warner
 Attorneys.

UNITED STATES PATENT OFFICE.

CLAY WEESNER AND DUDLEY DAVIS, OF NEWCASTLE, INDIANA, ASSIGNORS TO
HOOSIER MANUFACTURING COMPANY, OF NEWCASTLE, INDIANA, A CORPORATION OF INDIANA.

TILTING AND REMOVABLE FLOUR-BIN.

1,243,784.

Specification of Letters Patent.

Patented Oct. 23, 1917.

Application filed August 18, 1916. Serial No. 115,661.

To all whom it may concern:

Be it known that we, CLAY WEESNER and DUDLEY DAVIS, citizens of the United States, residing at Newcastle, in the county of Henry and State of Indiana, have invented certain new and useful Improvements in Tilting and Removable Flour-Bins, of which the following is a specification.

The object of this invention is to provide a bin which is particularly adapted for holding flour in kitchen cabinets, wherein the bin is provided with a flour sifter at its lower and discharge end, operated by turning a hand crank which subjects the bin to considerable strain when the sifter is operated, and a further object of the invention is to provide easy means for lowering the bin and for tilting its upper end outward for easy filling and cleaning of its interior, without sacrificing the strength and rigidity of support needful to withstand said sifting operations.

A further object is to provide means for the ready removal of the bin from the cabinet, which facilitates manufacture and assembly in the first instance, and also affords means for the removal of the bin at any time to the sun and air for sanitary reasons, without moving the cabinet, and for the cleansing of the compartment of the cabinet wherein the bin is contained.

We accomplish the above and other objects which will hereinafter appear, by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a front elevation of that part of a kitchen cabinet having the flour-bin compartment, and showing the bin of our invention assembled therein, in its raised and closed position, and Fig. 2 is a vertical section of same on the line 2—2 of Fig. 1.

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

The cabinet superstructure 3 is of any usual and suitable construction having a compartment 4, in which the bin 6 is mounted. The bin 6 is preferably made out of sheet metal, in the form of a four-sided elongated box, open at the top and having a funnel-shaped bottom to the discharge from which a sifter 5 is fastened. The sifter is operated by the usual crank 7, and is high enough above the bottom of the compart-

ment 4 for the introduction of suitable vessels under it to catch the sifted flour.

A rod 8, passes through the bin and projects at both ends of the rod to form trunnions at the lower front corners of the bin. These trunnions loosely enter vertical sheet metal channels 9, secured on opposite sides of the bin to the walls of the compartment 4. The channels allow of the vertical adjustment of the bin from the position shown in full lines in Fig. 2 to that shown in dotted lines, without permitting the departure of the trunnions from the channels laterally.

The bin is pivoted to and between a pair of levers 10, 10, by means of a rod 11 which passes through the bin and to and through both levers. The upper ends of the levers are connected by a handle-bar 12, which contacts with the front of the bin to limit the movement of the levers about rod 11, which rod is located midway between the front and rear vertical walls of the bin. The opposite ends of the levers from handle-bar 12 are shorter and are bent as shown, and terminate with outside pins 13, which enter notches in stationary bearing plates 14, secured to the walls of the compartment 4, so located as to bring their said notches considerably in advance of the vertical plane of hinge-rod 11, when the bin is in its closed vertical position as shown in full lines in Fig. 2. By this means the weight of the bin and contents is at one side and to the rear of the pins 13 on which the levers are fulcrumed, and the bin will retain that position until it is forcibly moved forward out of the compartment of the cabinet by power applied to the handle-bar 12. Upon the latter occurrence, the upper end of the bin will swing out, around the trunnions formed by the projecting ends of the rod 8, and will also move down by reason of the vertical channel which restrains the trunnions. This simultaneously tilts the upper open end of the bin outwardly and moves it downwardly to the position shown in dotted lines in Fig. 2. This downward movement is limited by lugs 14', 14', secured to the sides of the bin.

The pins 13 have heads, as shown, to hold them against accidental displacement in the notched plates 14, the latter being bowed inwardly of their supporting walls for clearance. By reason of the open notches

to receive the pins 13, the latter may be lifted therefrom whereupon the bin may be removed from the compartment 4 by raising the tilted bin until the trunnions pass from the tops of the channels 9, the front members of the latter being cut away at the tops 16 for that purpose, while the rear members of the channels are continued above to serve as stops and guides when the trunnions are reinserted for the reassembly of the bin.

The operation of our invention has been so fully explained in connection with its construction, that further description is deemed unnecessary.

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

1. The combination, with a cabinet and a bin movably mounted therein, of means limiting the movement of the lower front corner of the bin to a single vertical plane, and means to move the bin downwardly and that portion above said corner simultaneously in an outward direction, and the reverse comprising a pair of levers to which the bin is pivoted and a handle connecting them for their manipulation.

2. The combination, with a cabinet and a bin movably mounted therein, of fixed vertical channels on each side of the bin and trunnions from the bin entering the channels to limit the movement of the lower front corner of the bin to a single vertical plane, and means to move the bin downwardly and that portion thereof above said corner simultaneously in an outward direction, and the reverse comprising a pair of levers to which the bin is pivoted and a handle connecting them for their manipulation.

3. The combination, with a cabinet and a bin movably mounted therein, of means limiting the movement of the lower front corner of the bin to a single vertical plane, means to move the bin downwardly and that portion above said corner simultaneously in an outward direction, comprising levers fulcrumed to the cabinet and from which levers the bin is suspended and a handle-member connecting the levers by which they are operated to raise and lower the bin.

4. The combination, with a cabinet and a bin movably mounted therein, of a pair of

vertical channels open at their upper ends fixed on each side of the bin, trunnions on the bin entering said channels, and a pair of bent levers by and between which the bin is pivotally supported, said levers being fulcrumed to the cabinet by fulcrums below said pivotal supports and between the latter and the front of the bin and means on the opposite ends of the levers from said fulcrums to limit the movement of the levers.

5. The combination, with a cabinet and a bin movably mounted therein, of a pair of vertical channels open at their upper ends fixed to the cabinet on each side of the bin, trunnions on the bin entering said channels, a pair of bent levers between which the bin is assembled, a handle connecting the upper ends of the levers, the other ends of the levers being removably fulcrumed to the cabinet, pivots suspending the bin from the levers back of the vertical plane of the fulcrums, and stops on the bin to contact the levers and limit the movement of the bin.

6. The combination, with a cabinet and a bin movably mounted therein, of a pair of vertical channels open at their upper ends secured in a fixed manner to the cabinet on each side of the bin, the front flanges of the channels being shorter than the rear ones at the top, a pair of levers, one on each side of the bin between the bin and adjacent cabinet wall, a rod connecting the outer ends of said levers, pivot-plates secured to the cabinet having notches upon their upper edges, fulcrum pins on the inner ends of the levers removably secured in said respective notches, the inner ends of the levers being bent, a rod through the bin having projecting ends passing through the levers and suspending the bin therefrom, a second rod passing through the lower front corner of the bin and having projecting ends entering the channels, and stops on the bin to contact the levers and limit the movement of the bin.

In witness whereof, we have hereunto set our hands and seals at Indianapolis, Indiana, this 27th day of July, A. D. one thousand nine hundred and sixteen.

CLAY WEESNER. [L. S.]
DUDLEY DAVIS. [L. S.]

Witnesses:

C. E. LAMB,
E. RAMSEY, Jr.