

No. 807,619.

PATENTED DEC. 19, 1905.

W. C. HORNER.
SLIDING BIN.

APPLICATION FILED OCT. 7, 1905.

Fig. 1.

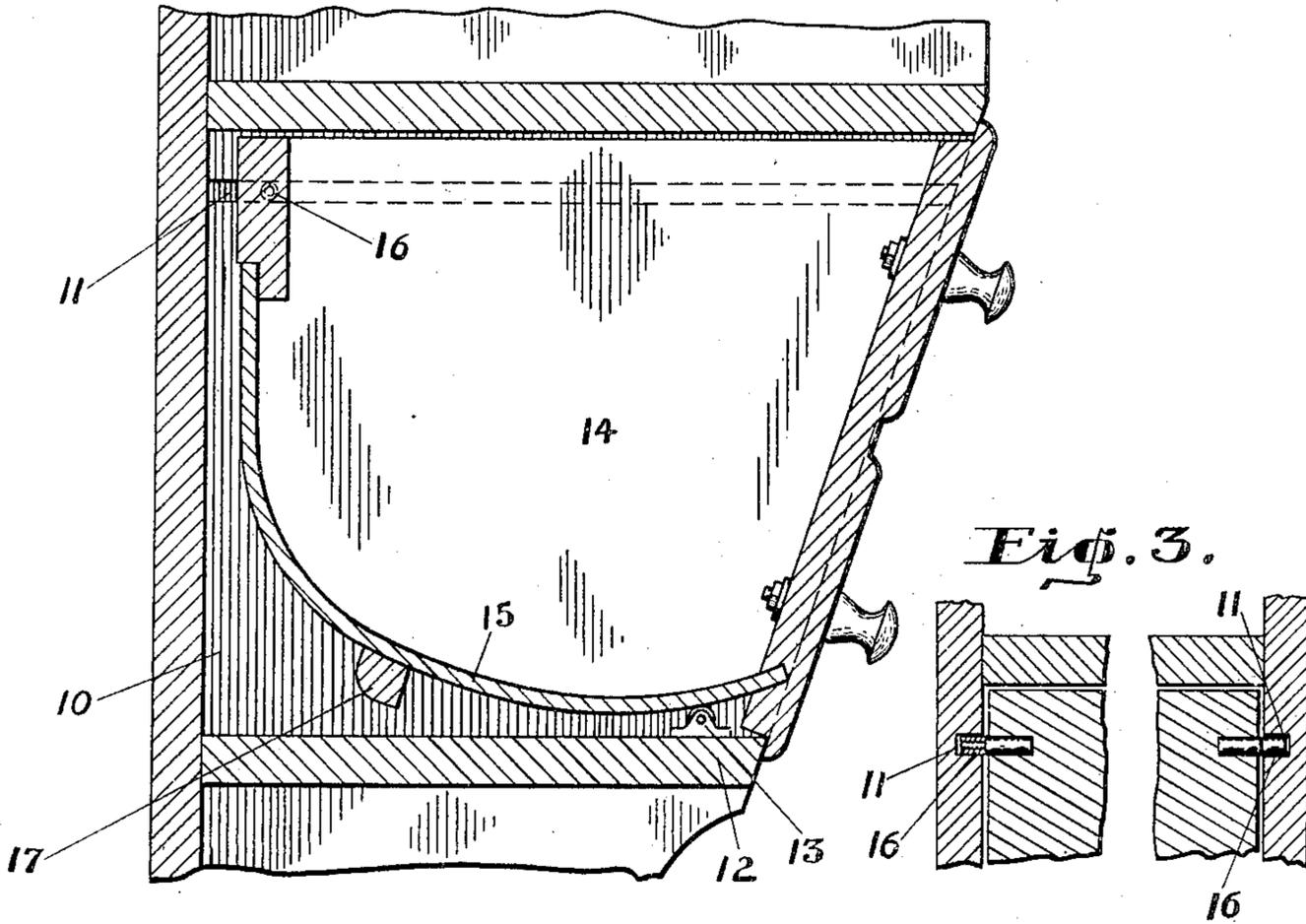


Fig. 3.

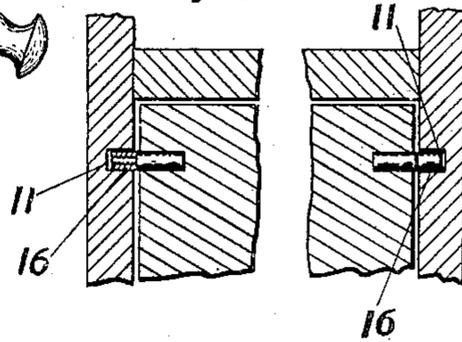
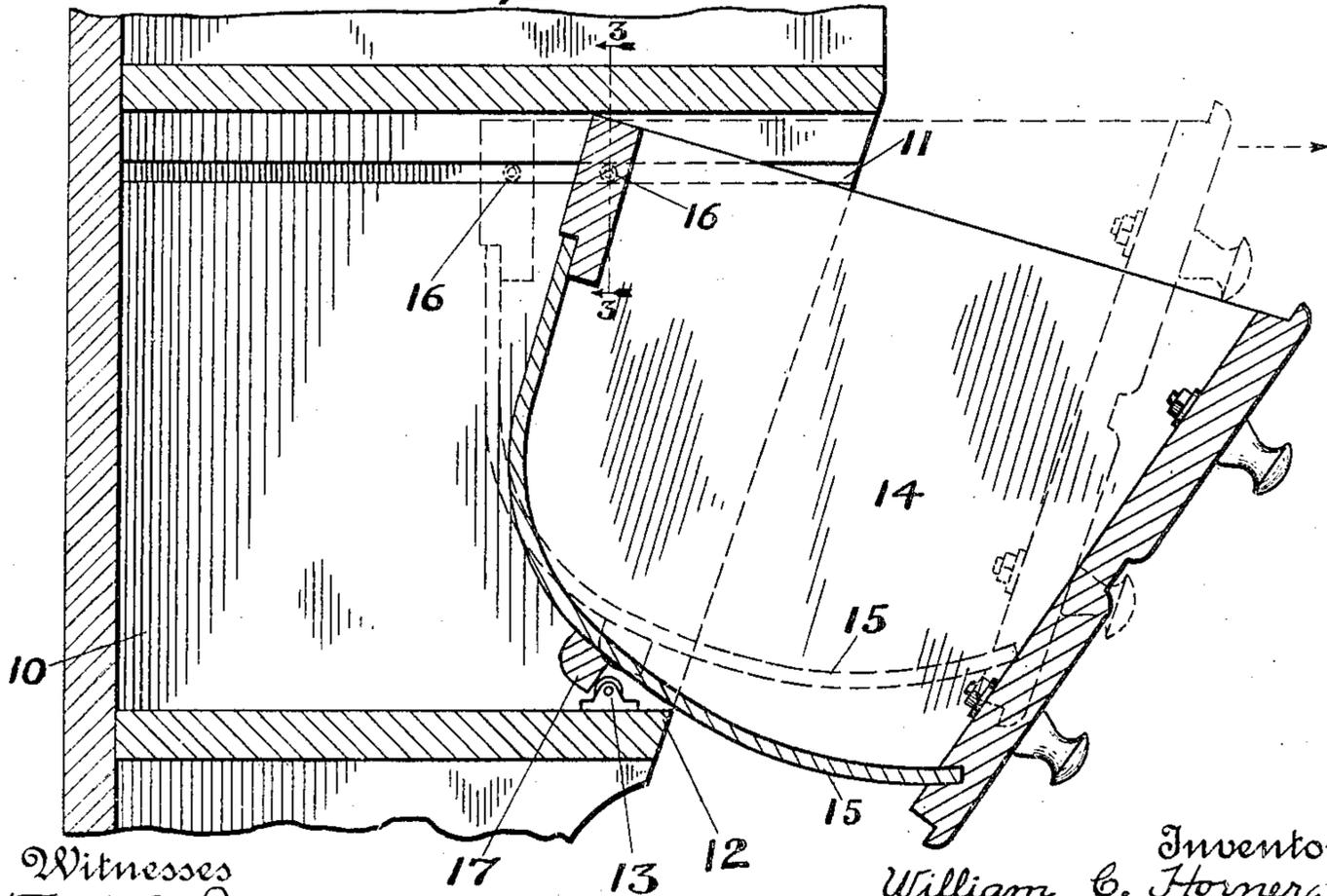


Fig. 2.



Witnesses
Fred A. Duncan
J. A. Walsh.

Inventor
William C. Horner.
By
Bradford & Hood
Attorneys

UNITED STATES PATENT OFFICE.

WILLIAM C. HORNER, OF INDIANAPOLIS, INDIANA, ASSIGNOR TO CHARLES P. McDOUGALL, OF INDIANAPOLIS, INDIANA.

SLIDING BIN.

No. 807,619.

Specification of Letters Patent.

Patented Dec. 19, 1905.

Application filed October 7, 1905. Serial No. 281,851.

To all whom it may concern:

Be it known that I, WILLIAM C. HORNER, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Sliding Bins, of which the following is a specification.

The object of my invention is to produce a very simple sliding-bin construction especially designed for kitchen-cabinets, said construction being such that the opening movement of the bin shall be downward and outward and such that the supporting means for controlling the movement of the bin shall be exceedingly simple and cheap to manufacture and such that while permitting easy withdrawal of the bin when desired will prevent accidental complete withdrawal of the bin from the casing.

The accompanying drawings illustrate my invention.

Figure 1 is a vertical section with the bin closed; Fig. 2, a similar section with the bin open, and Fig. 3 a detail on line 3 3 of Fig. 2.

In the drawings, 10 indicates a suitable inclosing casing, the side walls 11 of which are each provided near the upper end with a shallow groove 11, while the bottom 12 is provided with a projecting rib or roller 13, which lies slightly to the rear of the forward edge of the bottom 12. The bin 14 is provided with an inclined or curved bottom 15, which inclines upwardly from an intermediate point toward the rear and front, this bottom being adapted to slide upon the roller 13. Projecting from each side of bin 14 near its upper inner corner is a roller 16, which projects into the adjacent groove 11. Secured to the bottom 15 of bin 14 at an intermediate point in its length is a rib or finger 17, which is adapted to engage the roller 13 when the bin is pulled to the position shown in Fig. 2.

In operation when the bin is in the closed position (shown in Fig. 1) the weight of the bin is so distributed that it is supported by the wheels 16, resting upon the lower sides of the grooves 11, and the forward end of the bottom 15 resting upon the roller 13, and said roller being in front of the lowest point of the bottom, so that so soon as this point passes over the roller the bin will automatically move to closed position by its own weight and will be held against accidental opening. When the bin is pulled forward toward the

position shown in Fig. 2, the bottom of the bin rides upon roller 13, and owing to the upward and rearward inclination of the rear part of said bottom the front of the bin drops downward as it moves outward until finally the weight of the bin is supported by the roller 13, and the wheels 16 engaging the upper edges of the grooves 11. As the bin is drawn outward the cross-bar 17 moves downward and engages the roller 13, thus preventing any further outward movement, the dimensions of the bin from the point 12', Fig. 2, and the inner upper corner of the bin being greater than the total height of the chamber within which the bin is arranged.

The bin may be entirely withdrawn from the casing, however, by swinging the forward end of the bin upward to the position indicated in dotted lines in Fig. 3, so that the bar 17 will miss the roller 13.

I claim as my invention—

1. The combination, with a suitable inclosing casing, of a sliding bin mounted therein and provided at its upper rear corners with a sliding connection with the casing, and having an upwardly and rearwardly inclined bottom adapted to rest upon a portion of the casing, and a stop member normally serving to limit the outward movement from the bin.

2. The combination, with a suitable inclosing casing having a longitudinal groove formed near the upper end of each side wall, of a sliding bin mounted in said casing and having an upwardly and rearwardly inclined bottom adapted to rest upon a portion of the casing, a pair of pins carried by the bin and each projecting into the adjacent groove of the casing-wall, and a stop member carried by the inclined bin-bottom to engage a portion of the casing to limit the normal outward movement of the bin, said stop member bearing such relation to the supporting-pins that it may be caused to miss the casing by an abnormal outward movement of the bin.

3. The combination, with a suitable inclosing casing having the grooves 11, of a sliding bin having an upwardly and rearwardly inclined bottom, parts 16 carried by the bin near the upper inner corner and projecting into the adjacent grooves 11, and stop members 17 carried by the bin-bottom, substantially as and for the purpose set forth.

4. The combination, with a suitable inclosing casing having the grooves 11, of a sliding

bin having an upwardly and rearwardly inclined bottom, parts 16 carried by the bin in the upper inner corner and projecting into the adjacent grooves 11, stop member 17 carried 5 by the bin-bottom, and the member 13 carried by the casing and adapted to cooperate with said stop member.

5. The combination, with a suitable inclosing casing, of a sliding bin mounted therein 10 and provided at its upper rear corners with a sliding connection with the casing, and having a bottom inclined upwardly toward the front and rear from an intermediate portion, said bottom being adapted to rest upon a support 15 carried by the casing, which, when the bin is closed, engages the forwardly and upwardly inclined portion of the bin-bottom, and a stop member normally serving to limit the outward movement of the bin.

20 6. The combination, with a suitable inclosing casing having a longitudinal groove formed near the upper end of each side wall, of a sliding bin mounted in said casing and having a bottom inclined upwardly toward the front 25 and rear from an intermediate portion, a support carried by the casing and adapted to be engaged by the bin-bottom, said support being so arranged that, when the bin is closed, it will be engaged by the forward upwardly- 30 inclined portion of the bin-bottom, a pair of

pins carried by the bin and each projecting into the adjacent groove of the casing-wall, and a stop member carried by the inclined bin-bottom to engage a portion carried by the casing to limit the normal outward movement of 35 the bin, said stop member bearing such relation to the supporting-pins that it may be caused to miss the said portion carried by the abnormal outward movement of the bin.

7. The combination, with a suitable inclosing casing having the grooves 11, of a sliding 40 bin having a bottom inclined upwardly toward the front and rear from an intermediate portion, rollers 16 carried by the bin near the upper inner corner and projecting into the ad- 45 jacent grooves 11, the roller 13 arranged within the casing to be engaged by the bin-bottom and in such position that, when the bin is closed, it will be engaged by the forward upwardly-inclined portion of the bin-bottom, and 50 a stop member 17 carried by the bin-bottom and adapted to engage the roller 13 to limit normal outward movement of the bin.

In witness whereof I have hereunto set my hand and seal, at Indianapolis, Indiana, this 55 27th day of September, A. D. 1905.

WILLIAM C. HORNER. [L. s.]

Witnesses:

ARTHUR M. HOOD,
JAMES A. WALSH.