Jan. 17, 1956 I. W. JACOBS ET AL 2,731,319

UTILITY BIN

Filed April 27, 1953

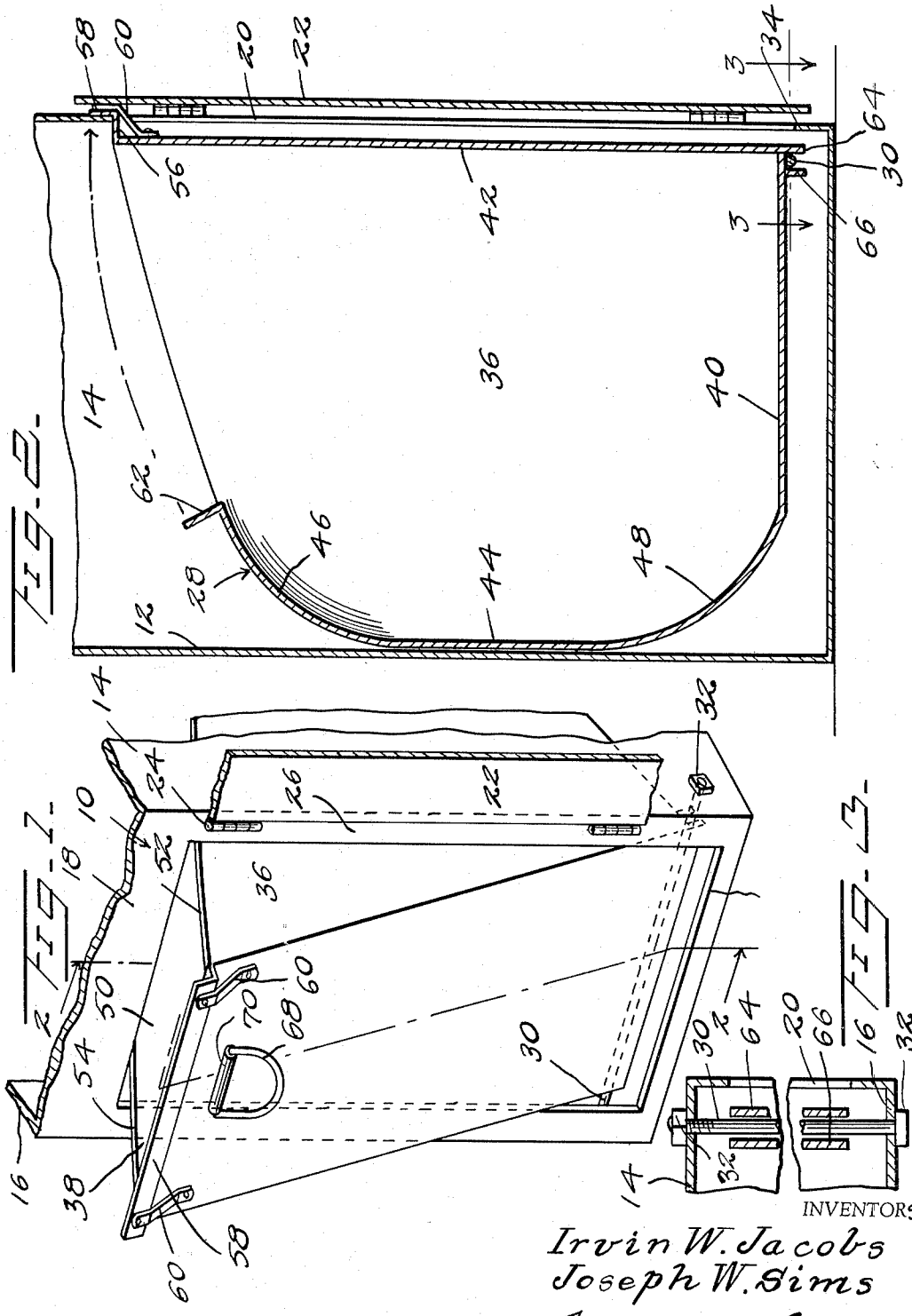


FIG. 2.

FIG. 3.

FIG. 1.

INVENTORS

Irvin W. Jacobs

Joseph W. Sims

BY Kimmel & Crowell

ATTORNEYS

United States Patent Office 2,731,319 Patented Jan. 17, 1956

2,731,319

UTILITY BIN

Irvin W. Jacobs and Joseph W. Sims, Ainsworth, Nebr.

Application April 27, 1953, Serial No. 351,192

1 Claim. (Cl. 312—310)

This invention relates to bin constructions of the type adapted for use in kitchen cabinets and has for its primary object to provide a bin that is removably installed in the base cabinet of a preformed kitchen cabinet unit by a simple modification of the construction of the base cabinet, after it has been built and installed in a kitchen.

Another object of this invention is to provide a pivotally mounted utility bin which is removably installed in the base cabinet of a preformed cabinet unit and which is removable about a transverse axis at a point adjacent its front wall so as to be easily moved to a position outwardly of the cabinet through the opening in the front wall thereof.

Another object of this invention is to provide a bin construction which embodies stop means for locating the bin in its inner position within the base cabinet in such a manner that the door of the cabinet can be tightly closed to conceal the bin.

A further object of this invention is to provide a bin which can be installed in a conventional base cabinet by simply removing the center shelf of the base cabinet and installing a rod transversely between the side walls of the cabinet adjacent their lower edges, the bin having means positionable on the rod, which serve as a support for the bin and about which the bin pivots in moving outwardly and inwardly.

These and ancillary objects and structural features of merit are attained by this invention, the preferred embodiment of which is set forth in the following description and illustrated in the accompanying drawing, wherein:

Figure 1 is a perspective view of a bin, constructed in accordance with this invention and showing the same installed in a base cabinet,

Figure 2 is a longitudinal vertical sectional view taken on line 2—2 of Figure 1 and showing the bin in its inner and closed position,

Figure 3 is a detailed sectional view of the mounting means for the bin and is taken on line 3—3 of Figure 2.

Referring now more particularly to the accompanying drawing, the base cabinet 10 is of conventional construction and includes a rear wall 12 and opposing side walls 14—16 and a front wall 18. The front wall is formed with an opening 20 and a door 22 is secured by hinges 24 to the side flange 26 of the front wall.

In installing the bin 28, the conventional center shelf of the base cabinet is removed and a rod 30 is mounted transversely between the sides 14—16 of the cabinet by forming openings in the sides to receive the threaded ends of the rod. Nuts 32 are threaded on the projecting portions of the ends exteriorly of the sides 14—16 to fix the rod in position.

As shown in Figure 2, the rod is located approximately

at the level of the upper edge of the bottom front flange 34 and adjacent thereto.

The bin 28 includes opposing side walls 36—38 and a flat bottom wall 40. A straight front wall 42 is integral with the front edge of the bottom wall 40 and the front edge of the side walls 36—38. The bin also includes a straight back wall 44 having curved upper and lower portions 46—48, the lower portions being curved downwardly and inwardly relative to the inner edge of the bottom wall 40. The bin is formed with an open top 50, and the upper edges 52—54 of the sides 36—38 are sloped downwardly and rearwardly relative to the upper curved portion 46 of the back wall 44.

The front wall 42 is provided at its upper edge with an outwardly projecting lateral flange 56 that terminates at its outer edge in an upstanding stop 58 which parallels the front wall 42 and is rigidified by means of brackets 60 that are attached to the front wall and are offset therefrom. The brackets serve to rigidify the stop 58, which is integral with the front wall 42, by supporting the stop on the front wall. An upstanding stop 62 is provided at the inner end of the open top 50 and extends upwardly from the free edge of the upper curved portion 46 of the back wall 44 and serves to arrest the bin in its outward swinging movement.

The front wall 42 extends downwardly below the bottom wall 40 to provide a leg or flange 64, and a similar leg or flange 66 depends from the bottom wall inwardly thereof and is arranged in spaced side-by-side relation with the leg 64. The legs 64—66, together with the portion of the bottom wall 40 lying therebetween, provide a channel, which seats on the rod 30. The rod 30 serves as the support for the bin and the bin pivots about the rod 30 in moving inwardly and outwardly.

To move the bin 28 outwardly a handle 68 is mounted by means of a sleeve 70 to the front wall slightly below the upper edge thereof.

It will be particularly noted, as shown in Figure 2, that the combined thickness of the stop 58 and the upper ends of the brackets 60 is slightly less than the diameter of the barrel hinge 24 so that the door 22 can be tightly closed, when the bin is in its inner position. The bin will not interfere with the opening and closing of the door so that the door conceals the bin, when it is shut.

After the rod 30 is installed between the sides 14—16 of the cabinet, the lower front end of the bin is inserted into the opening 20 in the front wall to seat the bottom wall 40 on the rod and locate the legs 64—66 about the rod. The stop 58 locates the bin in its inner position and holds it in spaced relation to the bottom wall 12 of the cabinet and maintains it erect with the front wall 42 lying in the perpendicular plane. The stop 62 abuts the inner portion of the upper door flange or portion of the wall above the opening 20, when the bin is moved outwardly.

The bin may be conveniently used for storing flour, vegetables, sugar or the like, and numerous other kinds of food items.

While the preferred embodiment of this invention has been illustrated and described, other forms may be realized so that limitation is sought only in accordance with the appended claim.

What is claimed is:

In combination with a base cabinet having opposing side walls and a front wall having an opening formed therein with a door closing said opening, a bin comprising a vertical front wall, an offset stop carried by the front

wall above the upper edge thereof engageable against said front wall of said cabinet to locate said front wall of said bin in a perpendicular plane within said cabinet when said bin is in its innermost position, said bin having an open top and opposing sides having downwardly and rearwardly sloping upper edges and an upstanding stop at the inner end of the open top wall engageable with the front wall of the cabinet above the opening to limit the outward movement of the bin, means pivotally and removably mounting said bin in said cabinet, said means including a bottom wall for said bin, said front wall having an integral lip portion projecting below said bottom wall, a flange depending from said bottom wall and inwardly spaced from said lip, and a rod extending transversely between and detachably supported on the sides

of and within said cabinet, said rod engaging said bottom wall and being embraced on opposite sides thereof by said lip and said flange.

References Cited in the file of this patent

UNITED STATES PATENTS

260,739	Bradish	July 11, 1882
447,532	Bacon	May 3, 1891
509,479	Mayer	Nov. 28, 1893
812,343	Horner	Feb. 13, 1906
892,830	Hobbs	July 7, 1908
1,156,294	Karp	Oct. 12, 1915
1,264,258	Bekkering	Apr. 30, 1918
1,327,489	Matthews	Jan. 6, 1920