

No. 708,822.

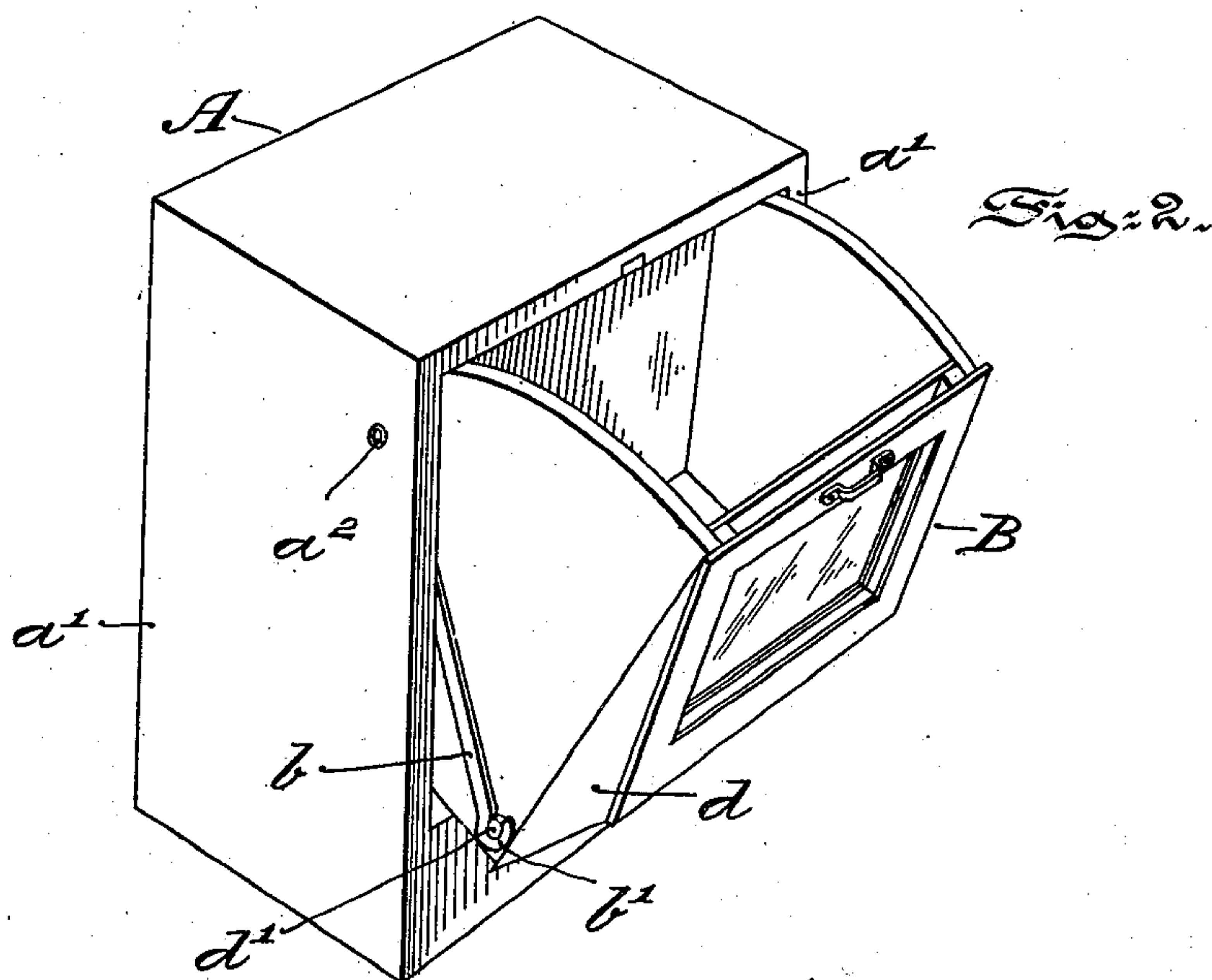
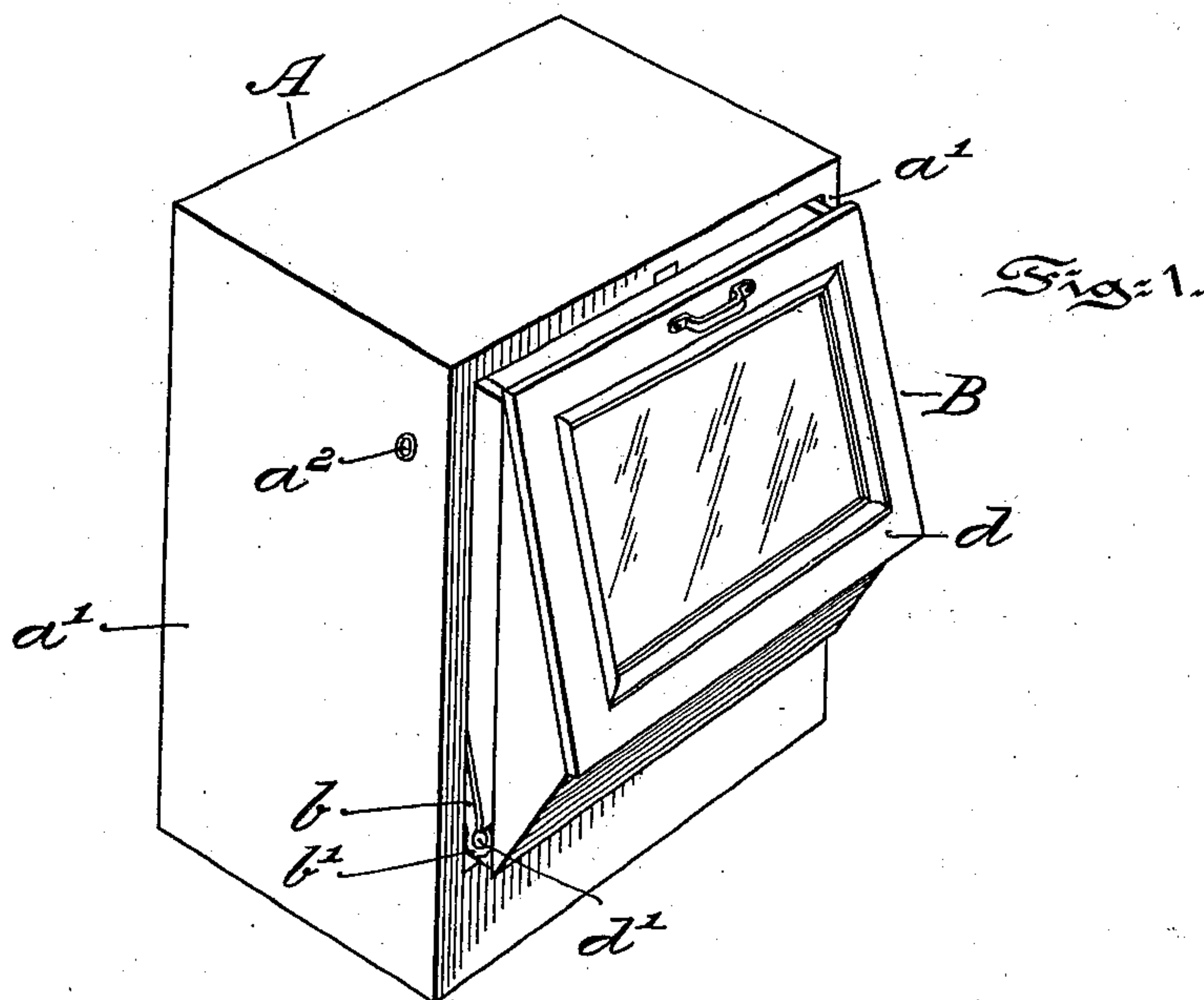
Patented Sept. 9, 1902.

A. H. MILLER & F. A. ENGLAND.
GROCER'S BIN.

(Application filed Jan. 6, 1902.)

(No Model.)

2 Sheets—Sheet 1.



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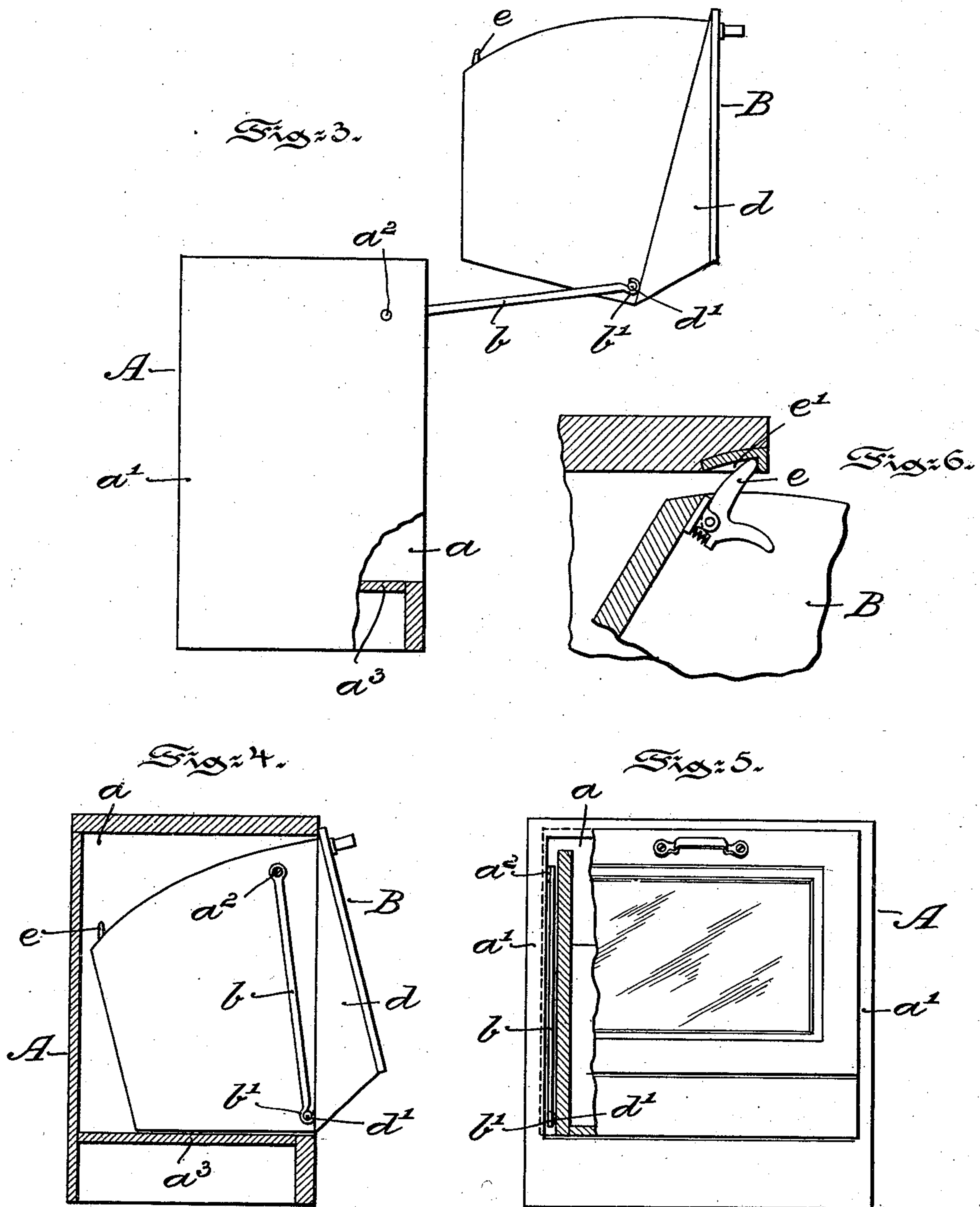
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(No Model.)

2 Sheets—Sheet 2.



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UNITED STATES PATENT OFFICE.

ALEXANDER H. MILLER AND FRANK A. ENGLAND, OF PHILADELPHIA,
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GROCER'S BIN.

SPECIFICATION forming part of Letters Patent No. 708,822, dated September 9, 1902.

Application filed January 6, 1902. Serial No. 88,543. (No model.)

To all whom it may concern:

Be it known that we, ALEXANDER H. MILLER and FRANK A. ENGLAND, citizens of the United States, residing at the city of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have jointly invented certain new and useful Improvements in Grocers' Bins, of which the following is a specification.

Our invention has relation to bins adapted to receive groceries—such as flour, sugar, crackers, and the like—which bins have a display-front and are adapted to be swung into and out of the bin-chamber formed in the stationary fixture or casing, and in such connection it relates to the construction and arrangement of the bin and the means for supporting it in the casing.

Heretofore grocers' bins have generally been of the tilting or pivoted type, with a projecting or counterbalancing front, wherein the base of the bin has been hinged or pivotally connected in some manner with that part of the casing forming the floor of the bin-chamber. In such a construction the bin simply has an oscillatory movement in and out of its chamber and must be wholly separated from the casing to expose the bin-chamber whenever cleaning or the removal of overflowing merchandise is necessary.

The principal object of our invention is to support a bin having a counterbalanced front in a bin-chamber by means of straps or links each pivoted at one end to the sides of the bin-chamber and at the other end to the front of the base of the bin, so that said links lie in a plane in front of the center of gravity of the bin when the bin is in its chamber and substantially in the plane of the center of gravity when the bin is tilted in its chamber, said links constituting the sole support for the bin in the bin-chamber and being so arranged with respect to the bin and chamber as to readily permit the bin to oscillate in said chamber, as well as to be wholly withdrawn from the chamber without disengaging the bin from the links.

The nature and scope of our invention will be more fully understood from the following description, taken in connection with the ac-

companying drawings, forming part hereof, in which—

Figure 1 is a perspective view of a bin and a bin-chamber embodying main features of our invention, the bin being shown partly swung out from the bin-chamber. Fig. 2 is a similar view showing the bin swung sufficiently out of the bin-chamber to expose the contents of the bin. Fig. 3 is a side elevational view of the bin and bin-chamber, showing the bin wholly withdrawn from the bin-chamber. Fig. 4 is a vertical sectional view of the bin and the bin-chamber. Fig. 5 is a front elevational view, partly sectioned, of Fig. 4; and Fig. 6 is an enlarged detail view illustrating a preferred form of stop to limit the normal outward swing of the bin.

Referring to the drawings, A represents the casing forming a bin-chamber a . To the sides a' of the bin-chamber a are pivotally secured, as at a^2 , one end of each of the straps or links b , the lower end of each strap or link b being hook-shaped, as at b' , and extending downward toward, but clearing, the floor a^3 of the bin-chamber a . The bin B proper has a swell or display front d of ordinary construction and is provided at its lower and forward end with a pin or rod d' , adapted to be engaged by the hooks b' of the straps or links b , so that said links b may support the bin B by a double pivotal connection. The bin B may swing upon the pins or rods d' in the straps or links b , and said straps or links b may swing about their pivots a^2 in the sides a' of the casing A. The straps or links b are arranged in a plane in front of the center of gravity of the bin when said bin is within its chamber, (see Fig. 4,) whereas when the bin is tilted in its chamber the plane of the links is substantially through the center of gravity, (see Fig. 2,) and thus permit of a ready oscillation or tilting of the bin in the bin-chamber a . As clearly shown in Fig. 4, the base of the bin B is some distance above the floor a^3 of the bin-chamber a , and the straps or links b support the bin B above said floor a^3 . The rear wall of the bin B is provided with a spring-controlled catch e , adapted as the bin B is swung outward from the bin-chamber a to engage a notch or recess e' , formed in the

roof of the chamber *a*, as clearly shown in Fig. 6. The engagement of the stop *e* with the recess *e'* limits the normal withdrawal of the bin B from the bin-chamber *a*. When, however, the interior of the bin-chamber *a* is to be cleaned or exposed to permit of the removal of the overflowing merchandise, the straps or links *b* and the bin B may be raised to a horizontal position, as illustrated in Fig. 3, and in this instance the spring-catch *e* is withdrawn from the notch *e'* to permit the bin B to be wholly withdrawn from the bin-chamber *a*. From the foregoing description it will be understood that the bin B, which usually is heavily loaded, can be quite easily manipulated, since it is supported by the links *b* and has two pivots or points of oscillation. One of these points of oscillation *d'* is located at the base of the bin at the point where the swell or counterbalanced front *d* merges into the bin proper. The construction described is thus manifestly superior to that class of bins wherein the floor of the bin is pivoted to the floor of the casing and has but one center of oscillation. If the bin B is to be withdrawn from the straps or links *b*, it is easily accomplished by detaching the pins or rods *d'* from the hooked ends *b'* of the links *b*, and the bin B can be just as easily returned to its connection with said links.

Having thus described the nature and object of our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The combination of a bin having a counterbalanced front, with a bin-chamber and straps or links each pivoted at one end to the sides of the chamber and at the other end to the front of the base of the bin so that said

links lie in a plane in front of the center of gravity of the bin, said straps or links constituting the sole means of support for the bin in said bin-chamber.

2. In combination, a bin having a counterbalanced front and flat base, a bin-chamber, the floor whereof is located parallel with but below the flat base of the bin, and two links or straps each pivoted at the upper end to a side of the bin-chamber and at the lower end to the base of the bin adjacent to the counterbalanced front, said straps or links constituting the sole means for supporting the bin within the bin-chamber and above the floor of said bin-chamber, and said straps or links arranged in a plane substantially through the center of gravity of the bin, when said bin is tilted in said chamber.

3. In combination, a bin, a bin-chamber in which the bin may swing or from which it may be wholly withdrawn and two straps or links constituting the sole means of support and connection between the bin and bin-chamber, said links swinging at their upper ends upon pivots projecting from the sides of the bin-chamber, and said bin swinging in pivots at the lower ends of said links, and both sets of pivots arranged normally in a plane in front of the center of gravity of the bin, when said bin is in its chamber.

In testimony whereof we have hereunto set our signatures in the presence of two subscribing witnesses.

ALEXANDER H. MILLER.
FRANK A. ENGLAND.

Witnesses:

J. WALTER DOUGLASS,
THOMAS M. SMITH.