No. 812,019. PATENTED FEB. 6, 1906.

C. COHEN.

BIN.

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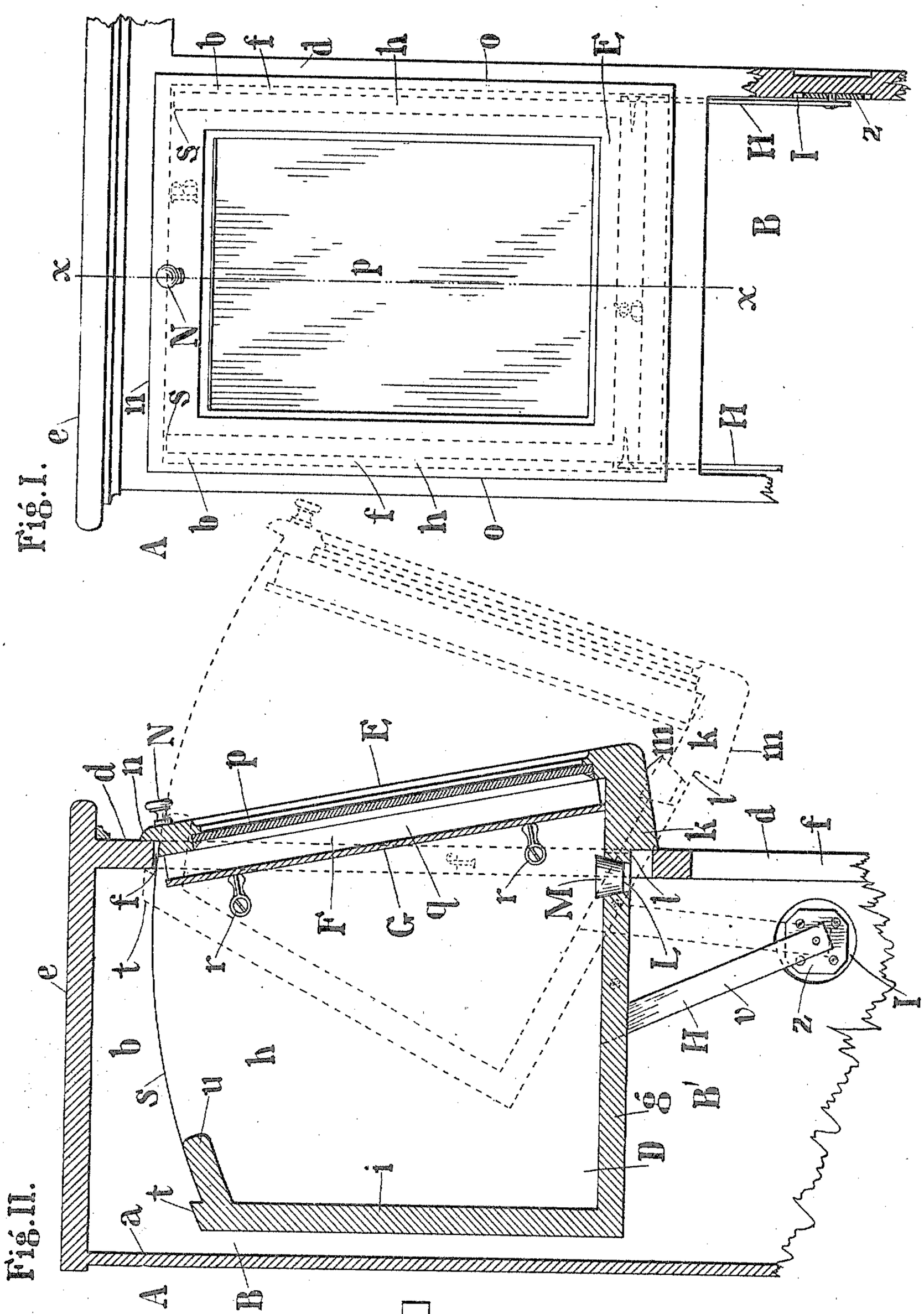

UNITED STATES PATENT OFFICE.

CHARLES COHEN, OF NEW YORK, N. Y.

BIN.

No. 812,019. Specification of Letters Patent. Patented Feb. 6, 1906.

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To all whom it may concern:

Be it known that I, CHARLES COHEN, a citizen of the United States, residing at New York, Manhattan, in the county of New York and State of New York, have invented certain new and useful Improvements in Bins; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in the construction and arrangement of those bins which are inclosed in compartments of a case or under the top of a counter or other suitable places and which are adapted to be opened by turning or swinging them outward to get at the contents and closed by moving them back into the compartments.

The object of the invention is to construct a tilting bin which shall be capable of being opened and closed with but little exertion, also to connect such a bin with its compartments so that it cannot become accidentally detached and displaced.

A further object of the invention is to construct the bin so that the contents cannot be thrown out at the back by the jar when it is closed.

Finally, the object is to pivot the bin so that when tilted outward to open it the bin will be lifted and a stop thereby brought into position to engage the front of the case and limit the opening of the bin.

In the accompanying drawings, Figure 1 represents a front elevation of my improved bin; Fig. 2, a vertical cross-section of the same, taken on line *x x*. Fig. 3 represents one of the pivoted arms by which the bin is supported in the compartment.

Referring to the drawings, A designates a portion of a case consisting of the back *a*, sides *b b*, front *d*, and top *e*. This case may be a separate construction, as part of the furnishings of a store, or it may be part of one of the fixtures—for example, the counter.

B indicates a compartment in the case which is reached through a rectangular opening *f* in the front. Below this compartment B, which is in the upper part of the case, there is another compartment B′, the walls of which, however, are only partly shown, and which is reached by a similar rectangular opening *f′* in the front. This second compartment is intended to receive a bin also.

D is the bin, the bottom *g*, sides *h h*, and back *i* of which are put together at right angles to each other, while the front E is extended outward at the bottom (the front edges of the sides being correspondingly extended) and joins the bottom *g*, which projects horizontally beyond the front of the case and has a downward projection *k*, beginning at a point *l* in vertical alinement with the front, and its under side *m* more or less inclined upward. The front E is rabbeted at the top, so that it will partly enter the opening *f*, and the upwardly-projecting part *n* bears against the front *d* above the opening *f* and serves as a stop and also as a cover for concealing the opening between the bin and the front of the case. The side edges *o o* of the front also project beyond the edges of the sides of the bin, (see dotted lines, Fig. 1,) thus covering the openings at the sides, while the downwardly-projecting part *k* of the bottom of the bin covers and conceals the opening at this point, which is greater than the openings at the top and sides.

The front of the bin has a rectangular glazed opening or window, in which is fitted a pane of glass *p*. Back of this front is a shallow chamber F, between the front and removable back G, provided with cleats *q*, (one only of which is shown marked,) that separates the back from the front and which is held in place by swiveled stops *r r*. The top edges *s s* of the sides of the bin are shaped to form segments of circles struck from the pivotal points (hereinafter referred to) on which the bin turns when opened and closed, the height of the bin at the sides being such that these edges are just below the top of the opening *f*, so that the bin will swing in and out without touching. By making the tops of the sides of the bin parts of a circle having the pivots as their centers the back of the bin can be made nearly as high as the front. The capacity of the bin is thus greatly increased and the liability of the contents being thrown out over the top of the back is much lessened. As a further precaution a guard *u* is provided that extends inward from the back and from side to side of the bin which prevents the contents from being thrown over the back by the jar produced by the quick closing of the bin. The back *i* is carried up above the sides and forms a stop *t*, which when the bin is opened comes in contact with the rear side of the front *d* above the opening *f* and limits the opening swing of the bin, as indicated by the dotted lines.

The bin is supported in its compartment by means of the arms H H on either side, which are pivoted to the walls of the compartment or space below that in which the bin is housed. Each of the arms consists of a more or less upwardly-inclined part *v* and a horizontal part *w*, the latter fastened to the sides of the bin in line with the bottom and the former pivoted, by means of a rivet, to a plate *z*, screwed in a recess I in the side walls of the compartment B′, or if there is no lower compartment in the extended walls of the bin-compartment. By pivoting the arms to plates and fastening the plates to the walls the bin can be detached and removed when required by unscrewing the plates instead of cutting the rivets that form the pivots; but it cannot become accidentally detached.

In the bottom of the bin near the front there is a tapered hole L, closed by a removable plug M. The tapered hole is located partly within the line of the opening *f*, whereby when the bin is swung out the opening is carried outside of the front of the compartment. When it is desired to cleanse the bin, it can be done by first swinging it out, thereby carrying the opening outside of the case, and then removing the plug and brushing the dust and fragments out through the hole outside of the case into a suitable receptacle.

Normally the bin is inclosed within the compartment and in a horizontal position, as shown by Fig. 2; but when its contents are to be removed it is drawn forward at the top by means of the knob N, whereupon it is moved bodily outward by the pivoted arms H H and also tilted downward until the lip *t* strikes the front, where it is stopped in an inclined position, with its front much lower than when closed and the entire open top outside of the case, where the contents can be easily got at, after which by a slight pressure it is caused to turn backward on its pivots and reenter the compartment. But little force is needed to close it, because when opened the arms H H pass forward of the center of gravity of the bin less than the width of the arms, as seen by their dotted position in Fig. 2, and when pushed back over the center the weight will complete the closing by gravity. Practically the closing of the bin requires no more exertion than in the case of a balanced bin, and it has the advantage that when the contents are being taken out it will not be liable to close by the pressure exerted in scooping up the contents. Furthermore, the bin cannot become displaced and fall out, because its pivots are positively fastened and cannot become detached unless the plates are unscrewed.

I claim—

In bins the combination with a case having an opening in the front and a compartment in the rear of the opening, and a bin housed in the compartment and adapted to be swung in and out of the same, pivoted supports for the bin consisting of arms each of which has a part parallel to and rigidly fastened to the bottom of the bin and a downwardly-inclined part the lower end of which is extended downward below the bottom of the bin and pivotally connected to a plate let into the side of the case below the compartment to facilitate the detachment of the bin from the case and its removal therefrom, substantially as specified.

In testimony that I claim the invention above set forth I have affixed my signature in presence of two witnesses.

CHARLES COHEN.

Witnesses:
ADAM WIENER,
HAROLD B. COHEN.