

E. S. BLISS.
Bin for Flour, &c.

No. 214,612.

Patented April 22, 1879.

Fig: 1.

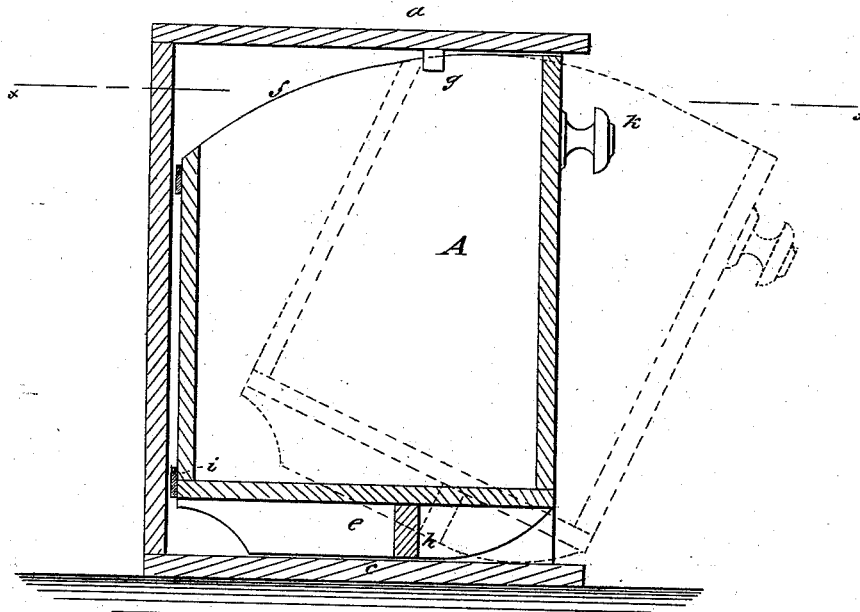
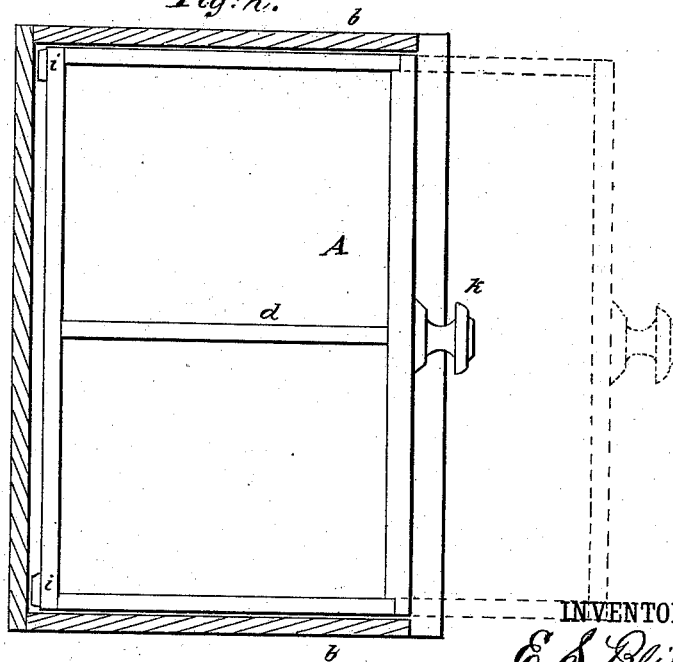


Fig: 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

EDWIN S. BLISS, OF RICHBURG, NEW YORK.

IMPROVEMENT IN BINS FOR FLOUR, &c.

Specification forming part of Letters Patent No. **214,612**, dated April 22, 1879; application filed January 30, 1879.

To all whom it may concern:

Be it known that I, EDWIN S. BLISS, of Richburg, in the county of Allegany and State of New York, have invented a new and useful Improvement in Bins for Flour, &c., of which the following is a specification.

My invention relates to bins or receptacles to contain flour, sugar, and similar articles in bulk for stores and households; and consists in certain features of improvement whereby access to the contents of the bins is more readily obtained than heretofore, and the bin is more easily opened and closed.

In the accompanying drawings, a bin is shown with my improvements applied. Fig. 1 is a vertical section. Fig. 2 is a sectional plan on line *x x* of Fig. 1, the dotted lines showing the position of the bin opened.

Similar letters of reference indicate corresponding parts.

a represents a store-counter or a pantry-shelf, the space beneath which is divided by vertical partitions *b* for the reception of the desired number of bins *A*, of suitable dimensions. The bin *A*, shelf *a*, sides *b*, and bottom *c* may, however, constitute a portable receptacle, such as a flour or meal chest, instead of being fixed.

The bin *A* consists of an oblong box, preferably divided by a cross-partition, *d*, and resting on rockers *e*. The bin fills the space beneath the shelf *a* and between the partitions *b*, and is unattached, so that it can be removed bodily when necessary.

The rockers *e* are curved at the forward part in suitable form for permitting the bin to rock forward from beneath shelf *a*, as shown by dotted lines, and the upper part of the bin is curved, as at *f*, to clear the shelf *a*.

A stop, *g*, attached beneath shelf *a*, catches the back of the bin when it is rocked forward, and prevents it from coming out too far.

A strip, *h*, placed between rockers *e*, closes the space beneath the bin and keeps out dust, and at the back of the bin there are elastic cushions *i i*, to prevent noise.

When the bin is opened or rocked forward, as shown by dotted lines, its contents are easily accessible, and whether the bin be full or only partially full it will require but little effort to open or close it in comparison with bins that turn on a fixed center or bearing-point.

In my bin the bearing-points shift with the center of gravity, which makes it easily moved and prevents it from tipping over.

The bin should fit closely against the under side of shelf *a*, to prevent entrance of dust, and a handle, *k*, will be provided for use in drawing the bin out.

If necessary, in large-sized bins a stop can be placed behind the strip *h* to prevent the bottom sliding back when the bin is open, or in front of strip *h* to prevent the bottom sliding forward when the bin is opened.

I am aware that tilting bins have been used with extended sides and legs as well as with pivots on which they turn; but the sides and legs occupy too much room, and are inconvenient on account of the bin not coming far enough forward to make the contents easily accessible. These difficulties arise from the use of a stationary pivot, the center of gravity being thrown from it by opening the bin, and are obviated by my invention, because my turning-point follows the center of gravity so closely that it only requires about one-third the power to close it, it requiring, by actual experiment with a dynamometer, sixteen pounds for mine and forty-five for the rigid pivot.

I am also aware that it is not new to use a shelf on rolls that must be drawn partially out before it is turned; but

What I claim is—

The bin *A*, having the front curved rocker *e* cut at top on a curve, *f*, and held in position by a stop, *g*, of case, as shown and described.

EDWIN STILLMAN BLISS.

Witnesses:

J. T. KING,
M. D. CRANDALL.