

(No Model.)

E. ALPAUGH.
BIN FOR FLOUR, MEAL, &c.

No. 489,552.

Patented Jan. 10, 1893.

Fig. 1.

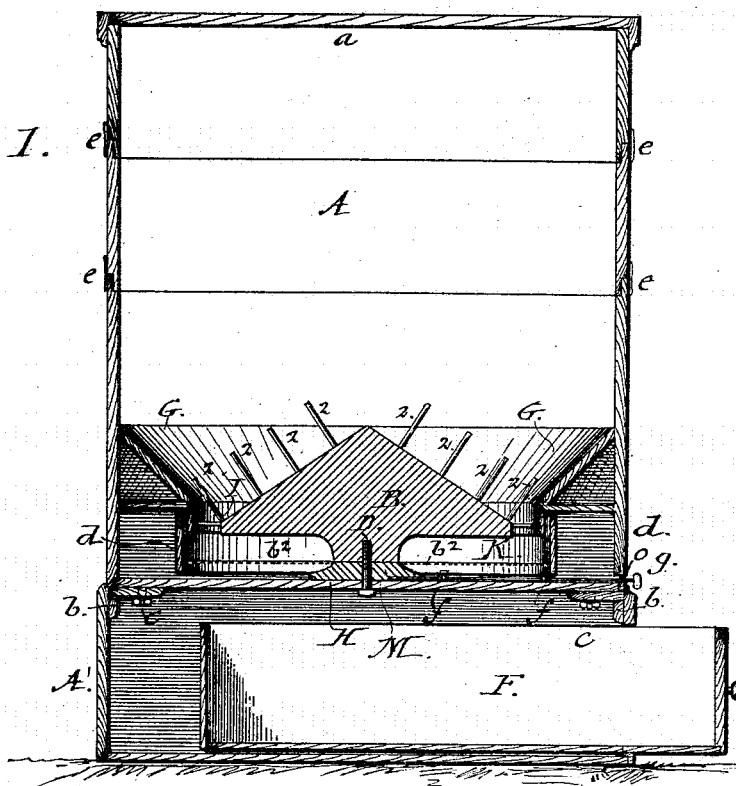
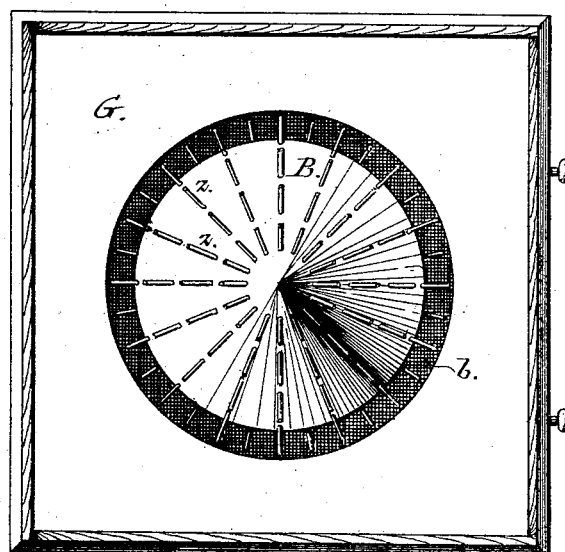


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

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BIN FOR FLOUR, MEAL, &c.

SPECIFICATION forming part of Letters Patent No. 489,552, dated January 10, 1893.

Application filed August 7, 1891. Serial No. 402,046. (No model.)

To all whom it may concern:

Be it known that I, EPHRAIM ALPAUGH, a citizen of Canada, residing at Galt, in the county of Waterloo and Province of Ontario, Canada, have invented certain new and useful Improvements in Bins for Flour, Meal, &c.; 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 an improvement in bins for holding and sifting flour meal or the like, and it has for its object to provide a device which will contain a sufficient quantity of the article for domestic use and protect it from vermin and dirt while, at the same time, it affords means for sifting the holdings at any time and delivering it into a receptacle provided beneath which is in the form of a drawer.

In the drawings illustrating my invention Figure 1 is a vertical sectional view of my bin &c. Fig. 2 is a horizontal section of the same.

Similar reference letters and numerals in the drawings indicate like parts in both the figures.

Referring to the drawings A is the receiving box for the flour, of rectangular form, preferably, made up in sections jointed together with rabbet joints and additionally secured by hoops or bands *e*. Within the receiver or box A, at its base, is the drawer F. Immediately below the holding portion of the receiver is fixed a hopper G which reduces below to form a cylindrical opening I. Immediately above the base of the bin is secured a bar H. B is a pulverizer pivoted to the bar H by a bolt or screw D. The upper surface of the pulverizer is of conical form and it is provided with any required number of spikes, as 2. At the base of the pulverizer a rod *g* is located and held up by loops *f*, secured to bars across the bottom of the sieve band, and a socket formed between the parts H and M. A long slot *o* is cut horizontally from the side of the bin which forms an arc through which said rod may move to agitate the pulverizer and sieve simultaneously giv-

ing to them oscillatory movement to break or crumble up the materials in the bin and sift the same. Cleats *b*, of angular form, are provided and secured to the base A' of the bin to serve as bracket supports to the bar H. The said bar H is provided with screw-threaded studs which fit into openings in the cleats *b*, and nuts *c* serve to hold said bar H firmly to said cleats. The sifter K is of cylindrical form, provided with wire netting of suitable mesh, and it has a center piece M. The screw D which forms the axis of motion for the pulverizer and sieve serves also to hold these two features and the bar H together.

In operating my device to sift the ground material I move the rod *g* to oscillate the pulverizer and loosen up the contents of the bin so that it may readily drop upon the sieve K, and it being rotated simultaneously with the pulverizer the material freed from impurities drops into the drawer F, ready for use.

When it is desirable to separate the parts serving to pulverize and sift the material it is only necessary to withdraw the screw D, to release the pulverizer B which may be lifted upward, and thereafter unbutton the bar H from the cleats *b* in order that said bar and sieve may be dropped and taken out from below through the front opening provided for the drawer.

Having thus described my invention what I claim as new and desire to secure by Letters Patent, is:

1. The combination with the receiver, formed as described, of the oscillatory pulverizer, pivoted in the bar at the base of the bin, having a body or conical form and provided with spikes on its inclined and upright surfaces as and for the purpose specified.

2. The combination with the bin, the pulverizer, as described, and the sieve arranged to oscillate with the pulverizer, of the bar *g* adapted to agitate the said pulverizer and sieve, as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

EPHRAIM ALPAUGH.

Witnesses:

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