

H. S. G. & H. B. RAY.
 Flour and Meal Chest with Sifting Attachment.

No. 213,069.

Patented Mar. 11, 1879.

Fig. 1.

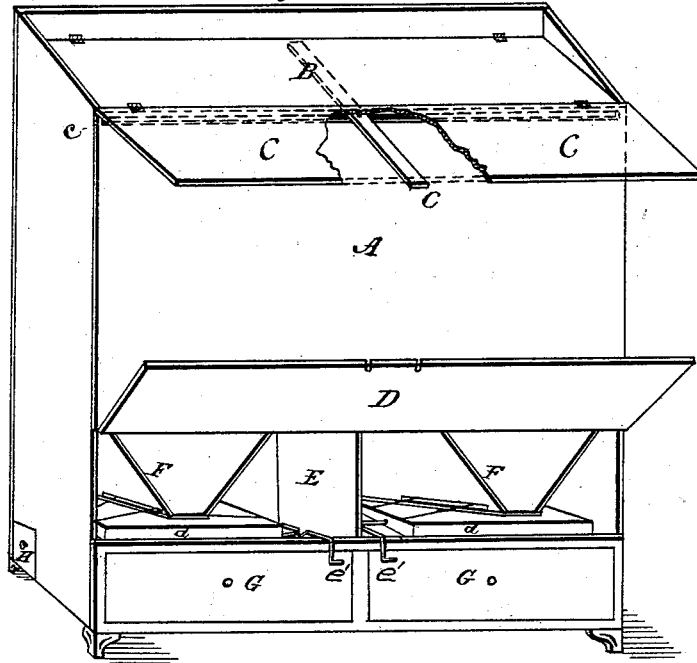


Fig. 3.

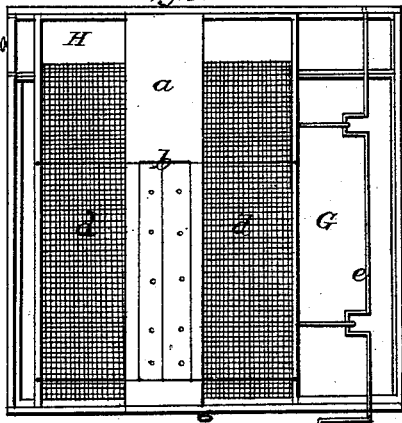


Fig. 2.

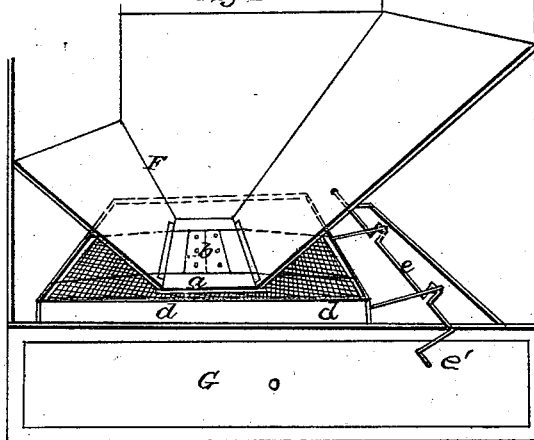
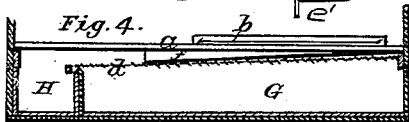


Fig. 4.



WITNESSES:

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H. S. GEYER RAY AND HENRY B. RAY, OF CARTHAGE, MISSOURI.

IMPROVEMENT IN FLOUR AND MEAL CHESTS WITH SIFTING ATTACHMENTS.

Specification forming part of Letters Patent No. **213,069**, dated March 11, 1879; application filed July 23, 1878.

To all whom it may concern:

Be it known that we, H. S. GEYER RAY and HENRY B. RAY, of Carthage, in the county of Jasper and State of Missouri, have invented certain new and useful Improvements in Flour and Meal Chests with Sifting Attachments, of which the following is a true specification:

The invention relates to the construction and arrangement of the several parts of a flour and meal chest.

In the accompanying drawings, which form a part of this specification, Figure 1 represents a perspective view; Fig. 2, a front view of the sifting apparatus; Fig. 3, a cross-section taken near the bottom of one compartment; and Fig. 4, a vertical section, showing the sifting apparatus, taken near the middle of one compartment. In each of the Figs. 2, 3, and 4, the drawings represent but one division, the sifting attachment and arrangement being the same in both.

In the drawings, A represents a rectangular box or chest of suitable size for holding an ordinary quantity of flour and meal, for which purpose it is divided into two equal compartments by a partition, E, and also to contain a sifting apparatus and receiving-drawers, G. By the arrangement of the boards B and C, as shown in the drawings, a convenient kneading or bread board is formed, and, being hinged together, the board C, when not in use for that purpose, folds back, forming an inclined top or cover to the box, and a space is left between the two, which can be economized for containing the bread-pan, rolling-pin, vessels for salt, baking-powders, &c.

The board C, when extended, is supported by a brace, e, provided for that purpose.

When it is necessary to open the chest, the front edge of the cover being raised, the edge of the board C falls behind the box, and B rises on the hinges by which it is hung at its back edge.

The door D is for the convenient construction and inspection of the sifting apparatus.

The flour and meal compartments are each constructed in the shape of a hopper in their lower parts, as shown at F F, and each provided with a horizontal board at its bottom a, which is perforated in a part of its length by

a number of holes, and has attached, near its edges, to its under side, two strips, (seen at *f* in Fig. 4,) so shaped as to fit the surface of the wire-gauze in the sieve. Over this board *a*, and resting lightly thereon, passes an arrangement of wires or other material, *b*, several passing longitudinally and being attached at their ends to two wires placed crosswise, which, passing through openings in the sloping boards of the compartment F, are fastened to the box or frame of a rectangular sieve, *d d*. The wire-gauze in this sieve is so placed as to slope toward the back of the box, and extend far enough back to project partly over the bran-drawer H.

The sieve *d* rests between cleats attached to the inside of the chest, on the back of the box. The sieve and the arrangement of wire *b*, attached thereto, are put in motion by the action of the crank-shaft *e*, which is provided with a crank, *e'*, on one end, by means of which it is turned, when the wires *b* agitate and force the flour or meal through the holes in the bottom *a* and the apertures in the sloping boards of compartment F, when it falls upon the sieve, and the strips *f f*, pressing lightly upon the sieve, crush the lumps, and force the flour or meal through the sieve into the receiving-drawer G, the bran and other impurities passing gradually back over the sloping sieve until it falls into the bran-drawer H.

The advantages of this chest consist in its convenience for the purposes set forth, and in its economy in avoiding waste, and effectually excluding vermin and dirt of all kinds, and in effecting a great saving in time and labor.

What we claim is—

In a flour and meal chest, the combined sieve and feeding apparatus, consisting of wire passing over the perforated bottom of the meal or flour box, and moved by the action of the crank-shaft *e*, the under side of the perforated bottom being shaped to fit the surface of the sieve, substantially as described.

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Witnesses:

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