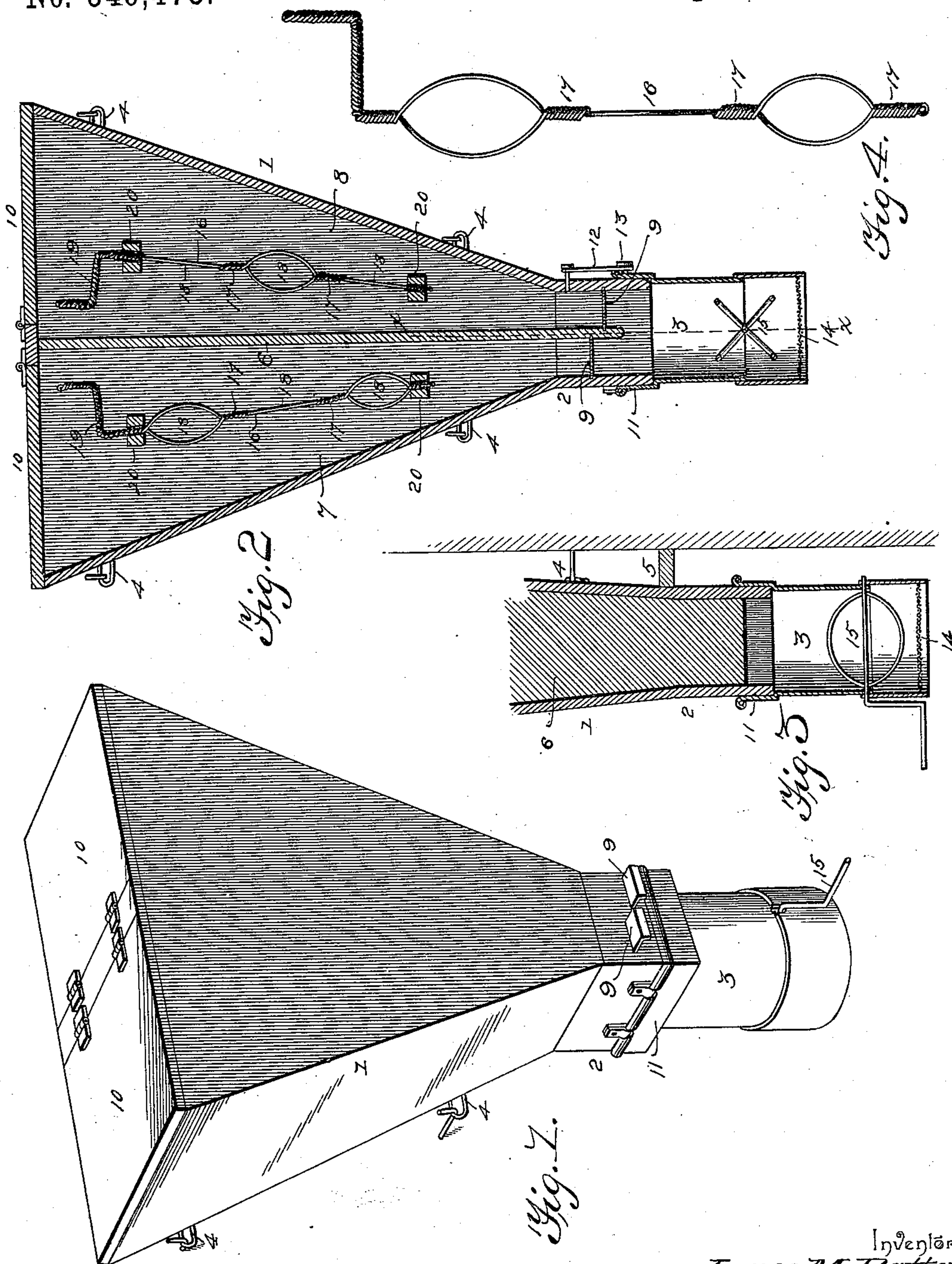


(No Model.)

J. M. PATTON.
FLOUR BIN.

No. 546,473.

Patented Sept. 17, 1895.



Witnesses

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JAMES MONRE PATTON, OF CHICO, TEXAS, ASSIGNOR OF ONE-HALF TO
JOHN M. MCKAY, OF SAME PLACE.

FLOUR-BIN.

SPECIFICATION forming part of Letters Patent No. 546,473, dated September 17, 1895.

Application filed April 11, 1895. Serial No. 545,343. (No model.)

To all whom it may concern:

Be it known that I, JAMES MONRE PATTON, a citizen of the United States, residing at Chico, in the county of Wise and State of Texas, have invented a new and useful Flour-Bin, of which the following is a specification.

This invention relates to bins for storing flour and meal for domestic purposes, and has for its object the construction of a bin in which the flour and the meal can be kept in separate compartments and be let into a sifter common to each compartment, so that either the flour or the meal may be sifted separately or a proportionate quantity of each at the same time, as required.

The improvement consists, primarily, of a novel formation of stirrer to prevent the banking of the flour or meal in the bin, and which can be cheaply manufactured and when in use will offer a minimum amount of resistance to the contents of the bin agitated thereby.

A further purpose of the invention is to devise a bin which will obviate the lodgment of the flour or meal therein and which will have a sifter common to each compartment and separate means for regulating the supply of the meal or flour to the said sifter, the latter being readily accessible for cleaning or other desired purposes.

For a full understanding of the invention reference is to be had to the following description, taken in connection with the drawings hereto annexed, in which—

Figure 1 is a perspective view of the improved flour-bin. Fig. 2 is a central vertical section of the same. Fig. 3 is a section of the lower portion of the bin on the line X X of Fig. 2. Fig. 4 is a detail view of the improved stirrer.

The bin 1 comprises sloping sides and a neck portion 2, the latter being at the lower end and having its walls forming a continuation of the said sides. Loops or rings 4 are provided on the rear side of the bin to form means of suspension, and are adapted to be engaged with nails, hooks, or other sustaining means provided on a wall or other support to which the bin may be attached. A block 5 is located near the lower end of the bin, on the rear side, to bear against the wall or support from which the said bin is suspended to

serve as a means to hold the neck portion sufficiently far from the said wall or support to enable a vessel or bowl being placed beneath the sifter, so as to receive the meal or flour. A vertical partition 6 divides the bin into two compartments 7 and 8, which receive, respectively, the flour and the meal. The lower end of the partition 6 terminates a short distance above the plane of the lower edge of the neck 2 to facilitate the entrance of the flour or meal into the spout 3. Cut-offs or slides 9 are adapted to operate across the spaces provided in the neck 2 on each side of the lower end of the partition 6, so as to regulate or shut off the supply of the flour or meal to the sifter. These cut-offs operate through slots formed in the front side of the bin and in grooves provided in the opposing sides of the partition 6 and the outer walls of the neck. The upper ends of the compartments 7 and 8 are closed by doors 10.

The spout 3 is cylindrical in form and has a square portion 11 at its upper end to embrace the sides of the lower end portion of the neck 2 and is hinged at one side to the latter and is held in operative position by means of a hook 12 and a pin or stud 13. The sifter 14 is applied to the lower end of the spout and may be held in place by friction or in a positive manner by any of the ordinary fastening means usually employed in this class of devices. The sifter 14 is of usual construction and has an agitator 15 for the well-known purpose to facilitate the sifting of the flour and meal. By having the spout 3 hinged to the neck portion of the bin it can be turned to one side when it is required to gain access thereto or to the interior of the neck for cleaning or any required purpose.

The stirrers 16 are formed from two wires, which are twisted together at intervals, as shown at 17, and which have the intermediate portions between the twisted parts 17 oppositely bowed to form loops 18, which engage with the flour or meal and prevent the latter from choking in the bin. The twisted portions 17 are in alignment, and the loops 18 gradually grow smaller from the upper to the lower end of the stirrer to correspond with the decreasing size of the bin-compartments. These loops 18 occupy different relative angles

and extend in different directions, so as to insure a thorough movement of the flour or meal and prevent any tendency of the latter to bank up in the bin. The crank 19 at the upper end of each stirrer is formed by twisting the wires together and bending them in the required shape. These stirrers are journaled in suitable cross-bars 20, extending crosswise of the bin-compartments and supported by the sides thereof. A stirrer of this construction is light and will pass through the flour readily and can be easily kept clean and will perform the required work in an efficient and satisfactory manner.

The bin may be constructed of wood or sheet metal or a combination of the two and may be of required size, according to the quantity of flour or meal to be stored therein.

It is obvious from what has been said that changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus described the invention, what is claimed as new is—

1. The combination with the bin for storing flour, meal, &c., gradually decreasing in area throughout its length, of a stirrer formed from a series of wires which are twisted together at intervals in their length and which have the portions intermediate of the twists outwardly bowed to form loops, which loops are of graduated sizes to correspond to the taper of the said bin, substantially in the manner set forth.

2. As a new article of manufacture a stir-

rer for the purpose set forth formed of two wires which are twisted together at intervals in their length, and which have the portions between the twists bowed in opposite directions to provide loops, and which latter stand at different relative angles, substantially as set forth, for the purpose described.

3. The herein shown and described flour bin, comprising sloping sides and having a neck portion at its lower end, a partition dividing the bin into vertical compartments, cut-offs operating in the said neck portion to control the passage of the flour or meal from the said compartments, a spout adapted to embrace the lower end portion of the said neck and hinged thereto at one side, and secured at the opposite side by a suitable fastening, a sifter removably fitted to the lower end of the said spout, stirrers arranged in the said vertical compartments, and formed from wires which are twisted together at intervals in their length and have the portions between the twists bowed in opposite directions to form eyes, which eyes diminish in size from the upper to the lower end of the compartment and occur at different relative angles, said stirrers being supported by cross bars in the compartments, and covers to close the top ends of the said compartments, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JAMES MONRE PATTON.

Witnesses:

W. L. HARTGRAVES,
WESLEY WILLIAMS.