

(No Model.)

2 Sheets—Sheet 1.

R. MEGSON.

DEPOSITING APPARATUS FOR BAKERS' OR CONFECTIONERS' USE.

No. 573,432.

Patented Dec. 15, 1896.

Fig. 1

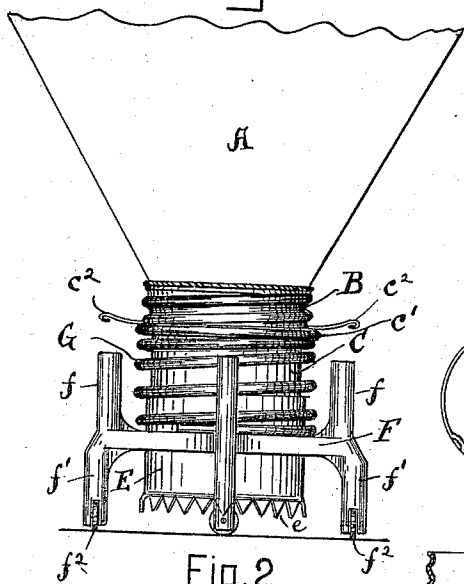


Fig. 2.

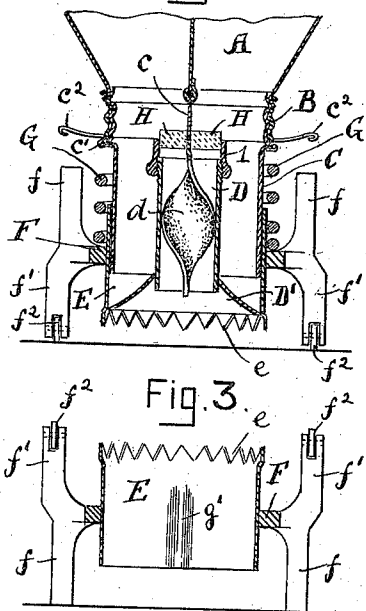


Fig. 3.

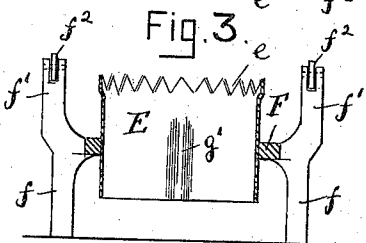
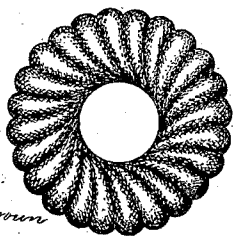


Fig. 14.



Witnesses.
Rufus F. Lewis
Edward C. Brown

Fig. 9



Fig. 10.

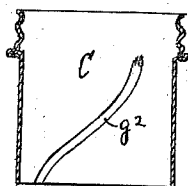


Fig. 11.

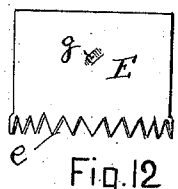


Fig. 12

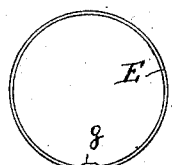


Fig. 15.

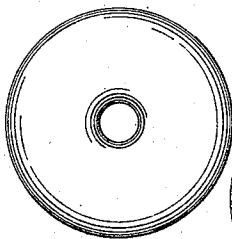


Fig. 16.

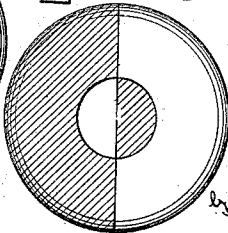


Fig. 4.

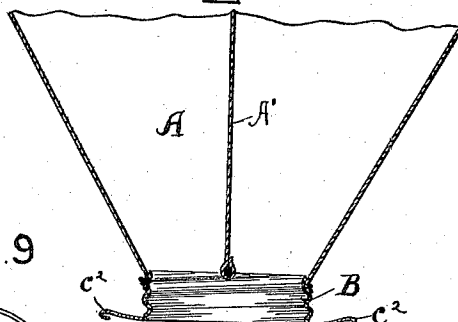


Fig. 5.

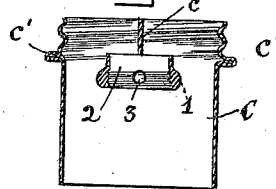


Fig. 6

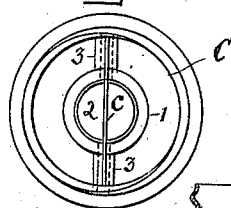


Fig. 13.

Fig. 7.

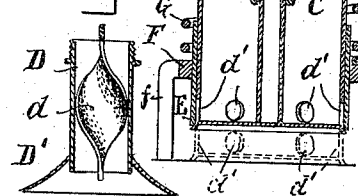
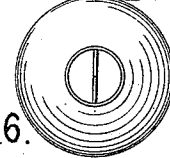


Fig. 8.



Inventor.

Richard Megson
by Edwin Blanton
attorney

(No Model.)

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Fig. 17.

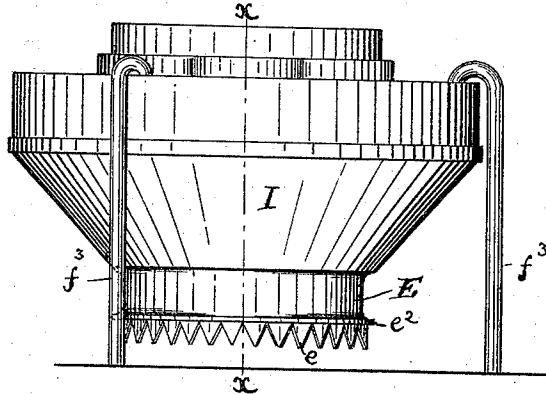


Fig. 18.

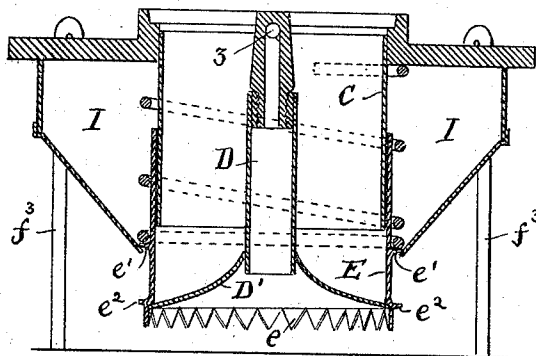
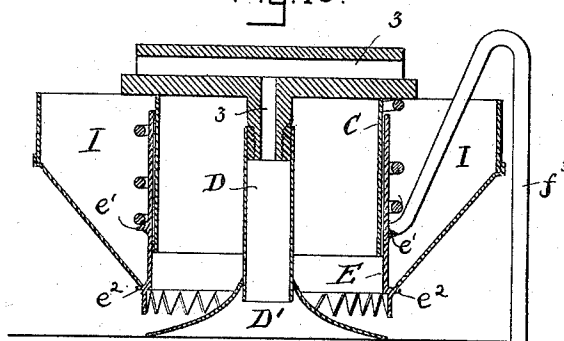


Fig. 19.



Witnesses.
Munfred L. Kerwin.
Edward D. Brown

Inventor
Richard Megson
by Edwin Beanta.
Attorney.

UNITED STATES PATENT OFFICE.

RICHARD MEGSON, OF CAMBRIDGE, MASSACHUSETTS.

DEPOSITING APPARATUS FOR BAKERS' OR CONFECTIONERS' USE.

SPECIFICATION forming part of Letters Patent No. 573,432, dated December 15, 1896.

Application filed October 23, 1893. Serial No. 488,868. (No model.)

To all whom it may concern:

Be it known that I, RICHARD MEGSON, a citizen of the United States, residing at Cambridge, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Depositing Apparatus for Bakers' or Confectioners' Use, of which the following, taken in connection with the accompanying drawings, is a specification.

This invention relates to tubes for bakers' and confectioners' distributing and depositing apparatus, and in machines to be used in connection therewith.

The object is to produce a tube whereby jumbles, cakes, or confections having a central hole, or a central hole, scalloped edges, and ornamental surface, or cakes and confections of alternating colors may be produced; also in a device for placing sugar confections or the like upon the same as they are deposited; and the invention also consists in the peculiar construction of the tube, as hereinafter fully described, and pointed out in the claims.

Referring to the accompanying drawings, Figure 1 represents a side view of a tube embodying my invention, showing a portion of a bag attached thereto. Fig. 2 is a vertical section through the same. Fig. 3 is a view of the outer shell or tube in the reversed position. Fig. 4 is a sectional view of the upper rim with a bag attached. Fig. 5 is a vertical section of the inner or sliding tube. Fig. 6 is a plan or top view of the same. Fig. 7 is a view of the cut-off and dough-divider. Fig. 8 is a plan or top view of the same. Figs. 9 to 12 are respectively plan or top view and vertical section of the inner or sliding tube and the outer shell or tube, showing means for guiding one within the other either vertically or at an angle, as required. Fig. 13 is a vertical section of a tube for depositing dough for a number of cakes at one time. Fig. 14 is a view of a cake with a scalloped edge and spiral top. Fig. 15 is a view of plain jumble. Fig. 16 is a view of a cake of alternating colors. Fig. 17 is a side elevation of a tube with a sugar-depositor attached. Fig. 18 is a vertical section of same, taken on line xx of Fig. 17. Fig. 19 is also a vertical section of same, taken at right angles to Fig. 18.

A represents a conical bag of canvas or

other suitable material, preferably divided in its center by a vertical partition A' . B is a screw-threaded rim secured thereto.

C is an inner tube formed at its upper end with a screw-thread to fit the thread of the rim B. This tube C is at its upper end divided by a central partition c . Just underneath and attached to the partition c is a tubular dividing-piece 1, having a circular screw-threaded opening 2 in the center. This tubular piece is attached to the tube C by a small tube 3, attached to each side of said circular piece 2, said tube 3 being open to the atmosphere, so as to admit air to the central tube, and acts as a vent, as hereinafter described, and into the opening 2 is screwed the upper end of a tube D, carrying the cut-off D' . This cut-off projects a given distance below the tube C and is flaring, so as to conduct the dough to the outer edge. In the tube D a partition d (of spiral form) may be fitted, so that dough forced into the tube D on one side of said partition will be deposited on the opposite side, as more fully described hereinafter.

E is the outer tube, within which the tube C slides. This tube is plain or straight on one of its ends and the other end is notched or serrated, as shown at e . To this tube is secured a frame F, having legs $f f'$, the legs f' being fitted with small wheels f^2 . These legs form a support for the outer tube E when the inner tube is pressed down, and the wheels f^2 allow the said outer tube to be partly rotated, as is required with certain descriptions of cake.

A spiral spring G is placed around the tubes C E, one end of which spring rests upon the leg-frame F and its upper end against a projection c' on the inner tube C, so that when the inner tube has been depressed by the handles c^2 the spring G is pressed down, and as soon as the said inner tube is released it, and with it the cut-off D' , will be immediately raised by said spring G.

The diameter of the cut-off D' is the same as that of the outside of the tube E, and the teeth or serrations e on said tube are bent out the thickness of the metal, as shown, so that the dough is cut off at the upper end of said serrations.

The outer tube may be guided on the inner

tube so that when the inner tube is depressed it will move the outer tube in a vertical line or on any required angle up to forty-five degrees. This may be accomplished by forming a small teat or projection g in the outer tube, as shown in Figs. 11 and 12, and a corresponding vertical or angular recess g' on the inner tube, as shown in Figs. 3, 9, and 10. The teat g , working in the groove g' , Fig. 3, causes the tube E to work in a vertical line, but when the teat g is in the groove g^2 , Figs. 9 and 10, a twist or turn will be given to said tube. Although I prefer to thus guide the outer tube, any other suitable means may be employed.

When the apparatus is operated so that the outer tube turns, the small wheels f^2 on the legs f' allow it to turn freely. Therefore only a vertical movement of the inner tube is required.

When it is desired to deposit at one time dough to form a number of cakes, I construct the inner tube as shown in Fig. 13. In this case the lower end of the inner tube C is closed and a number of holes d' are formed around the sides, as shown, so that when the inner tube is depressed it will be in the position shown in dotted lines and the dough will escape out of said holes d' below the outer tube E, and when the inner tube is released it will be drawn up by the spring G, as before described, and the dough will be cut off by the lower edge of the outer tube.

The operation is as follows: Supposing it is desired to produce a cake of the form shown in Fig. 14, then the outer tube E is placed upon the inner tube C, with the notched or serrated end downward and so that the teat or projection g will work in the curved groove g^2 in the inner tube C, and in the upper ends of the tube D plugs H are inserted, as shown in Fig. 2. Now when the bag or hopper containing the dough is pressed down the cut-off D' is lowered so as to leave a space between it and the under edge of the outer tube E, through which the dough escapes until it is nearly in contact with the legs f' . The bag or hopper A is then released and the spiral spring G forces up the inner tube C, and with it the cut-off D', thereby separating the dough that has been deposited from that in the bag or hopper, and as the lower edge of the outer tube has been turned in its downward and upward movement the said scallops will be continued in a curved form over the surface of the cake, as shown in Fig. 14. In order that the dough may not be forced inward at its central part by the pressure of the atmosphere, air is admitted through an opening 3 in the dividing-piece 1 to the tube D, so that the cut-off is sharp and complete. Should it be desired to produce a cake with only a scalloped edge, then the outer tube would have to be guided vertically by the teat g working in the recess g' . Should it be desired to produce a cake or jumble with a smooth outer

edge and a small hole in the center, as shown in Fig. 15, then the outer tube is reversed, so that its straight edge is at the lower end. The vent 3 is also closed by inserting a plug, so that when the inner tube and cut-off rise the atmospheric pressure will cause the dough to be forced inward until separated by the cut-off. In this case the outer tube would work vertically.

In the above-mentioned cases an ordinary bag or hopper might be employed, but if a divided bag or hopper is employed dough of the same description would have to be placed on both sides of the partition and be deposited in the same manner as if an undivided bag or hopper was employed.

Should it be desired to produce a cake of two different colors, as shown in Fig. 16, then a divided bag or hopper has to be employed. The upper end of the tube D is then unstopped and the vent 3 closed. Now when the bag or hopper is lowered the different-colored dough will be forced down on each side, and that forced through the central tube D will be given a half-twist, so as to bring the dough on the opposite side to the side of the bag or hopper from which it enters. Thus a cake alternating in color, as shown, is produced.

When it is desired to cover the cake with sugar confections or the like, I apply to the tube a sugar-holder, as shown in Figs. 17 to 19. In this case the construction and operation of this tube itself is the same as that before described, but to the lower end of the outer tube is attached a sugar-measuring device consisting of two flanges or projections $e' e^2$. I is a hopper for holding the sugar, which hopper is attached to the inner tube C, the lower end of which hopper works between the two flanges or projections $e' e^2$, sufficient space being left between the lower edge of the hopper and the tube E to measure and allow the required amount of sugar to pass from the hopper to be delivered onto the cake. Thus when the hopper is in its normal or raised position, as shown in Figs. 17 and 18, the lower edge of said hopper will be in contact with the upper rim or projection e' . Thus the supply of sugar will be cut off; but when the inner tube C is depressed the hopper will be carried with it and its lower edge will come into contact with the lower rim or projection e^2 , so that the sugar will be free to pass between the two rims $e' e^2$. Then when the inner tube C (and with it the hopper) is raised the lower edge of the hopper will pass up until in contact with the upper rim e' , thus leaving the space between the two rims $e' e^2$ filled with sugar, which will fall down upon the top of the dough just deposited by the lowering of the inner tube C. In this case I have shown the legs f^3 passing up over the top of the hopper I and secured to the side of the tube E.

What I claim is—

1. A tube for bakers' and confectioners' use

consisting of an inner tube adapted at its upper end to be secured to a bag or hopper; a central tube or partition secured therein to the lower end of which is secured a cut-off, and an outer tube mounted in a frame provided with legs substantially as set forth.

2. A tube for bakers' and confectioners' use consisting of an inner tube adapted at its upper end to be secured to a bag or hopper, a small tube secured in the center thereof, a tube near its upper end passing through the wall of the inner tube to form a vent, a cut-off at the lower end of said small tube and an outer tube mounted in a frame provided with two sets of legs said outer tube being straight at one end and serrated at the other end and capable of being reversed substantially as and for the purposes set forth.

3. A tube for bakers' and confectioners' use consisting of an inner tube C, a small central tube D carried by and attached to the tube C, by the tubular dividing-piece I, and partition c, a tube communicating between the tubular dividing-piece and the tube C, whereby the atmosphere is admitted to form a vent, a cut-off D', at the end of the central tube D, and a partition in said central tube in combination with an outer tube E, mounted in a frame having legs f, f', and a spiral spring G, around said tubes all arranged and operated substantially as set forth.

4. A tube for bakers' and confectioners' use consisting of an inner tube having a cut-off at its lower end and an outer tube serrated on one of its edges and supported by legs, the inner tube and cut-off being lowered to deposit the dough below the serrated edge of the outer tube and means such as described for imparting a partial rotary motion to said outer tube while the dough is being deposited whereby the upper surface presents a series of curved scallops substantially as set forth.

5. A tube for bakers' and confectioners' use consisting of an inner and outer tube the inner tube having a cut-off at its lower end, said inner tube and cut-off being lowered to deposit the dough around the outer tube, and

raised to cut off same, substantially as set forth.

6. A tube for bakers' and confectioners' use consisting of an inner and an outer tube, the inner tube having a cut-off at its lower end, said inner tube and cut-off being lowered to deposit the dough and raised to cut off same in combination with an air-vent leading to the center of said inner tube whereby a ring or a flat circular piece of dough will be deposited according as to whether the air-vent is open or closed substantially as set forth.

7. In a tube for bakers' or confectioners' use a central tube having a spiral partition therein, said tube being secured in a depositing-tube by a screw-thread as described, whereby the dough entering on one side of the partition in the central tube will be deposited on the opposite side, while the dough that passes outside of said central tube will be deposited on the same side in combination with an outer tube for the depositing-tube to work in substantially as set forth.

8. In combination with a depositing-tube a hopper for containing sugar or other material said hopper being connected at its upper end to an inner tube free to slide within an outer tube, said outer tube being near its base formed with two flanges or projections, the lower edge of said hopper working between the said flanges or projections on the outer tube substantially as set forth.

9. In a depositing apparatus consisting of an inner and outer tube, a conical hopper secured to the inner tube but extending around the outer tube, two rings or projections around the lower end of the outer tube, between which rings the lower end of the hopper works to measure and deposit sugar or other material from the hopper substantially as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 17th day of May, A. D. 1893.

RICHARD MEGSON.

Witnesses:

CHAS. STEERE,
EDWIN PLANTA.