

June 12, 1951

M. M. VENTERS
ELEVATED INGREDIENT DISPENSER HAVING A ROTARY
BOTTOM DISCHARGE VALVE
Filed April 20, 1948

2,556,782

Fig. 1.

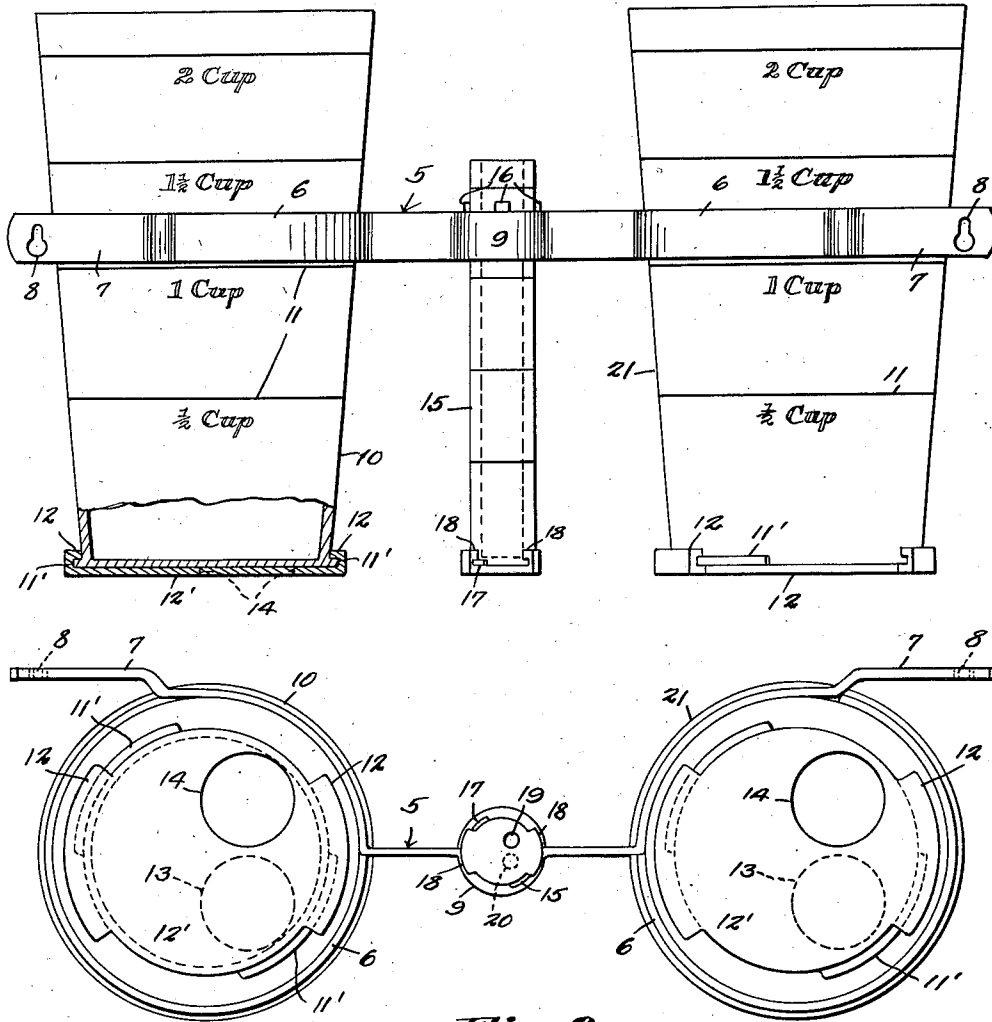


Fig. 2.

M. M. Venters

INVENTOR

BY *Chenoweth*
ATTORNEYS.

UNITED STATES PATENT OFFICE

2,556,782

ELEVATED INGREDIENT DISPENSER HAVING A ROTARY BOTTOM DISCHARGE VALVE

Melissa M. Venters, Winston-Salem, N. C.

Application April 20, 1948, Serial No. 22,160

1 Claim. (Cl. 222-181)

1

This invention relates to an elevated ingredient dispenser having a rotary bottom discharge valve, and more particularly, has reference to a device of the type stated particularly adapted for use in baking operations, or related culinary operations, in the household.

It is well known among housewives that baking a cake, for example, has certain disagreeable aspects, in that the use of conventional measuring cups or the like can quite often result in spillage of the ingredients, as well as being time-consuming.

It is an important object of the invention, accordingly, to provide a measuring device novelly designed to eliminate the possibility of spillage, thereby leaving the work table and kitchen in general in a tidy condition.

It is a further important object of the invention to provide measuring means as stated that will eliminate the time-consuming aspects of the mixing operation.

With the foregoing and other objects in view which will appear as the description proceeds, the invention consists of certain novel details of construction and combinations of parts, hereinafter more fully described and pointed out in the claim, it being understood that changes may be made in the construction and arrangement of parts without departing from the spirit of the invention as claimed.

Referring to the drawing

Figure 1 is an elevational view of a measuring device constructed in accordance with the invention, as viewed from the rear a portion of one container being shown in section.

Figure 2 is a bottom plan view.

Referring to the drawing in detail, the reference character 5 designates generally a supporting bracket, that can be readily pressed from a length of strip metal material. The construction of this bracket can, it is believed, vary within the spirit of the invention, it being mainly essential that the bracket support containers to be described in an elevated position, and in a manner whereby the containers may be readily removed from the bracket.

To this end, I provide in the present instance annular supporting rings 6 at the ends of and integral with the bracket, and extended from these rings are offset arms 7 each having a bayonet slot 8. It will be readily observed that by reason of this construction, a pair of screws or nails can be extended into the inner surface of a cabinet door or the like, for permanently or removably supporting the bracket 5 at its ends.

2

The bracket need not necessarily be secured to the inside of a cabinet door, of course, and could as well be mounted on or be a part of a stand that can be brought out and placed upon the counter or work table so that the measuring device will be positioned adjacent the mixing bowl, thus to permit the mixing bowl to be moved thereunder whenever ingredients held by the measuring device are to be dispensed into the bowl. In the construction illustrated, however, it is understood that the door, when swung open, will position the bracket and accordingly the entire device, above the mixing bowl on a work counter.

Centrally of the supporting bracket 5, there is provided a smaller annular supporting ring 9.

Removably supported by one of the rings 6 is a measuring container 10, which in the present instance is of tapered construction for ready insertion into and supporting by the bracket 5.

As in the case of conventional measuring cups, container 10 has formed therein a plurality of level markings 11, each accompanied by a suitable legend, for the purpose of measuring the amount of ingredients deposited in the container.

Molded on and disposed in the plane of the bottom of container 10 is a pair of diametrically opposed elongated lugs 11', and these are straddled by arcuate flanges 12 of a rotatable disc member 12', said flanges 12 extending upwardly through the plane in which the lugs lie. The flanges 12 are coextensive in length with the lugs 11' and are interiorly grooved to receive the lugs. It may be noted that the disc member 12' is of one-piece construction, as is the container 10, and the disc member can be readily removed entirely from the container, for convenience in cleaning both of them after use.

The bottom of the container 10 is closed but for the provision of an opening 13, and the disc member 12' has an opening 14 of similar diameter, the two openings being adapted to be brought into coincidence by partial rotation of the disc member 12' relative to the container. Thus, when the parts are positioned as in Figure 2, with the flanges offset longitudinally of the lugs in one direction, the contents of the container 10 are held therein, but if the disc member were partially rotated so as to bring the flanges and lugs into register and thereby also bring the openings into register, the contents are free to flow out of the container 10 and into a mixing bowl placed thereunder. The flow can of course be regulated by bringing the openings into partial rather than full register, thereby to vary the size

of the flow opening. Further rotation of the disc in the same direction results in complete separation of the disc from the container for cleaning purposes or removal of all unused contents.

A small cylindrical container 15 extended through the ring 9 at the center of the bracket is adapted to hold liquid flavoring, such as vanilla, lemon flavoring, or the like. In the present instance, this is illustrated as cylindrical, and accordingly, to support it in proper position in the ring 9, a plurality of small radial lugs 16 are molded on the container 15, and are adapted to engage the ring 9.

The contents of the small container 15 are adapted to be dispensed in the same manner as is the case with container 10. To this end, the container has lugs 17 removably engaged by flanges 18 on a disc member that is provided with an opening 19, which opening can be brought into coincidence with opening 20 formed in the bottom of the container.

Another container 21 is preferably of like formation with the container 10, and is supported at the other end of the bracket, this container being equipped with the dispensing means at the bottom thereof, similar to the means provided for container 10.

In the use of a measuring device constructed as described and illustrated, it will be understood that normally, the three containers shown in the present instance would not have therein any ingredients used in baking or related culinary operations. Rather, they are preferably kept empty and clean, ready for use when a particular baking operation is to be performed.

In use, one of the large containers would normally contain a powdered ingredient, such as flour, while the other large container would contain an ingredient such as milk. Assuming that a cake is to be baked, and the recipe calls, say, for 2 cups of flour and 1 cup of milk, the large containers 10 and 21 would be removed from their support and ingredients in the designated amounts supplied thereto. The containers are now returned to the support, and it is understood that the flavoring container would also be supplied with the amount of flavoring called for by the recipe, the markings on the small container being quite possibly measured in terms of spoon measures.

As mentioned previously, the cabinet door to which the bracket is attached would be swung open so that it is disposed over, or roughly over, the bowl in which the ingredients are to be mixed. If a stand is used for the bracket, the stand would be placed adjacent the bowl on the work counter.

The recipe may direct, in this connection, that in mixing the ingredients, small amounts of flour are to be added to the creamed mixture alternately with small amounts of milk, the mixture to be beaten until smooth after each addition. Accordingly, the user simply partially rotates the appropriate disc member so as to dispense small amounts of the ingredient as desired. The total amount of said ingredients to be used has, of course, been previously measured when said ingredient was placed in its proper container, and in dispensing the aforesaid small amounts, there

is no necessity of further measurement to be made during the actual flow or gravitation of the ingredient into the mixing bowl.

From the above, it is seen that the entire mixing operation can be speeded up considerably, and that possibility of spillage is almost completely eliminated. Using conventional measuring cup means, a housewife who is baking a cake must measure the ingredient into the measuring cup, dispensing all or part of the measured ingredient into the mixing bowl. One or more measuring cups may as a result have to be used, and these may be filled to the brim and placed on a work counter at a point where they can be accidentally knocked over. The transferring of the ingredients to the cup, and thence to the mixing bowl, additionally is quite often accompanied by undesired spillage. The further observation is made that the continual necessity for measuring additional amounts, and transferring said amounts to the cup and into the bowl is time-consuming, and a source of minor irritation to the person who must perform these operations.

What is claimed is:

1. An ingredient dispenser comprising a container having a filling opening at its upper end and having a circular flat closed bottom formed with a dispensing opening, arcuate diametrically opposite elongated lugs formed on the lower end of said container and extending laterally from the marginal portion of and disposed in the plane of said bottom, a disc member underlying said bottom and having an opening adapted to register with said dispensing opening, and marginal diametrically opposite flanges on the disc member extending upwardly through said plane and grooved interiorly to straddle and grip the lugs, said flanges being coextensive in length with said lugs and being slidable on said lugs to provide a rotatable mounting of the disc member, partial rotation of the disc member bringing said openings of the disc member and container bottom into register simultaneously with shifting of the flanges and lugs into register, further rotation of the disc member in the same direction being adapted to disengage the flanges from the lugs for complete separation of the disc member from the container, and a bracket for supporting said container in elevated position above a mixing bowl or the like, said bracket including a ring proportioned to extend around and engage the container at a location spaced above said container bottom, and an arm extending laterally from the ring and adapted for connection to a vertical supporting surface, said arm having an offset for disposing the ring and container outwardly from said surface.

MELISSA M. VENTERS.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
164,801	Bryan	June 22, 1875
733,294	Sternheimer	July 7, 1903
1,459,602	Peterson	June 19, 1923
2,349,724	Henderson	May 23, 1944