March 19, 1946. L. FRANK 2,396,943

MEASURING SPOON

Filed June 12, 1944

FIG. 1.

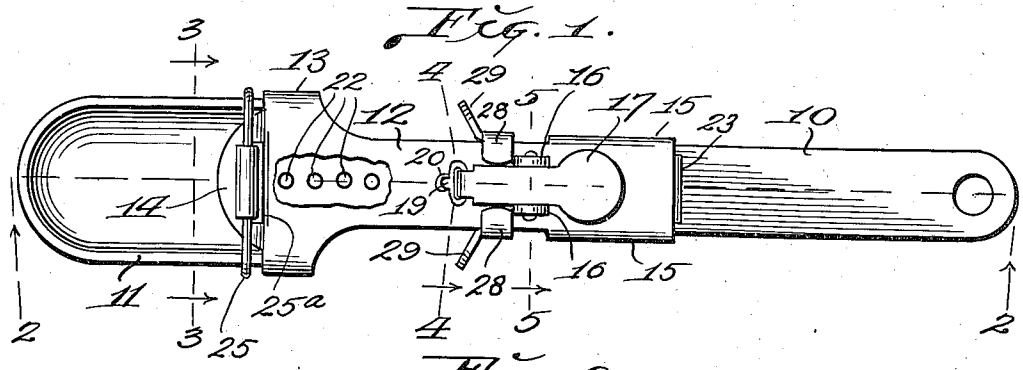


FIG. 2.

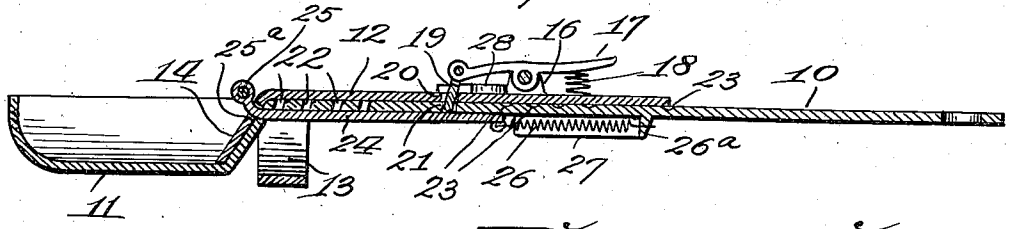


FIG. 3.

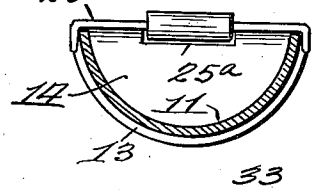


FIG. 4

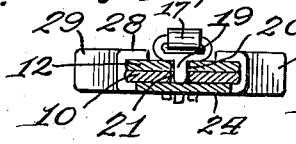


FIG. 5.

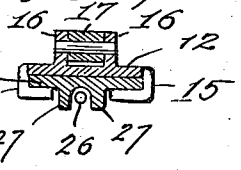


FIG. 6.

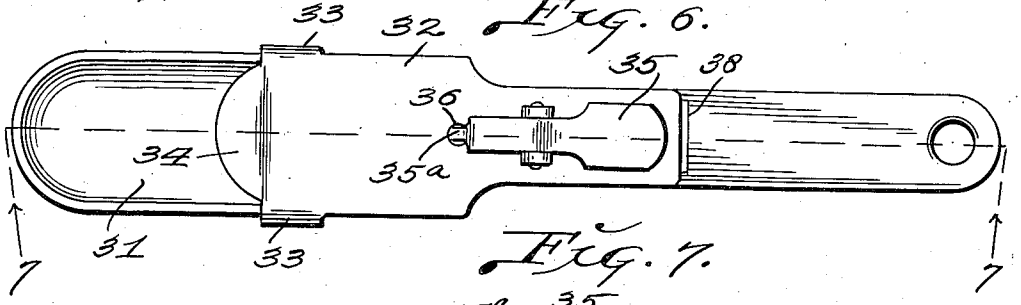
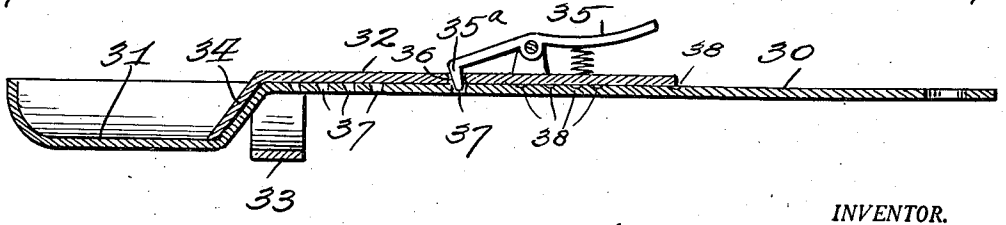


FIG. 7.



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MEASURING SPOON

Louis Frank, Fellows, Calif.

Application June 12, 1944, Serial No. 539,854

4 Claims. (Cl. 73—429)

My invention relates to measuring spoons of the particular type employed for the convenient and accurate measurement of pulverized, powdered or granulated products used for culinary and medical purposes and has for its principal objects, to generally improve upon and simplify the construction of the existing forms of similar devices, and further, to provide a measuring spoon which is simple in construction, inexpensive of manufacture and which is provided with convenient, readily operable means for leveling the surface of the contents of the spoon and thereby insure accuracy of the measuring functions.

With the foregoing and other objects in view, my invention consists in certain novel features of construction and arrangement of parts which will be hereinafter more fully described and claimed and illustrated in the accompanying drawing in which:

Fig. 1 is a top plan view of a measuring spoon of my improved construction.

Fig. 2 is a longitudinal section taken on the line 2—2 of Fig. 1.

Fig. 3 is a cross section taken on the line 3—3 of Fig. 1.

Fig. 4 is a cross section taken on the line 4—4 of Fig. 1.

Fig. 5 is a cross section taken on the line 5—5 of Fig. 1.

Fig. 6 is a plan view of a modified form of the spoon.

Fig. 7 is a longitudinal section taken on the line 7—7 of Fig. 6.

Referring by numerals to the accompanying drawing and particularly to the structure in Figs. 1 to 5, inclusive. 10 designates a straight strap-like member which forms the handle of the spoon and formed integral with the forward end thereof is a spoon bowl 11.

Arranged for sliding movement on top of handle 10 is a plate 12, the forward end of which is formed as an integral loop 13 which passes around the rear portion of the spoon bowl 11.

Depending from the forward upper edge of loop 13 is an inclined plate 14, which has a sliding fit in the bowl. Hooks 15 depend from the sides of plate 12 at the rear end thereof and engage beneath the edges of handle 10 to maintain said plate in sliding engagement with said handle and pivoted to ears 16 on top of the rear portion of plate 12, is a thumb pressure lever 17.

An expansive coil spring 18 is arranged between the rear portion of lever 17 and plate 12 and hinged to the forward end of said lever is the upper end of a latch pin 19, which passes downward through an aperture 20 in plate 12.

When plate 12 is at its rearward limit of movement the lower end of latch pin 19 engages in an aperture 21 in handle 10 thus latching said plate to said handle, and under such conditions the bowl may be used for measuring a definite amount of product, for instance, one tablespoonful.

Located in the forward portion of handle is a plurality of apertures 22, in the present instance, four, which are spaced apart so as to receive the latch pin 19 when the plate 12 is moved forward to position plate 14 and thereby reduce the effective size of the bowl, when measuring one, three-quarters, one-half, or one-quarter of a teaspoonful.

Guide marks 23 spaced to correspond with the spacing of apertures 21 and 22 are formed on the upper face of handle 10, to the rear of said apertures and the rear end of sliding plate 12, cooperates with these guide marks so as to facilitate the correct or desired positioning of plate 14 which controls the effective size of the spoon bowl.

Arranged for sliding movement beneath the forward portion of handle 10 is a plate 24, the forward end of which projects through coinciding apertures 25^a in the rear wall of the bowl 11 and plate 12 and carried by the forward end of said plate 24 is a cross arm 25 which rides on the upper edge of the sides of the bowl. This cross arm acts to level the surface of the product within the bowl.

Connected to the rear end of plate 24 is one end of a retractile coil spring 26, the opposite end being connected to an ear 26^a depending from handle 10 and the body of said spring lying between two parallel protecting flanges 27, formed on the underside of said handle.

Hooks 28 are formed integral with and project upwardly from the rear portions of the side edges of plate 24 over the edges of plate 12, and projecting outwardly from the upright front edges of said hooks are ears 29 which are adapted to be engaged by the thumb and index finger of the user's hand when plate 24 is moved forward to level off the upper surface of the product in the bowl 11.

To operate the spoon, lever 17 is actuated to withdraw pin 19 from aperture 21 and plate 12 may be moved forward to position plate 14 at the proper point in bowl 11 and as pressure on lever 17 is relieved, pin 19 will move into the corresponding aperture 22 thereby latching the actuated parts.

The spoon is now manipulated to fill bowl 11 and by engaging and moving ears 29 forward, the plate 24 and cross arm 25 are moved forward so that the latter travels over the top of the bowl and levels off the surface of the product therein.

As pressure on the ears is relieved, spring 26 will retract plate 24 and cross arm 25.

In the modified construction illustrated in Figs. 6 and 7, 30 designates a straight strap handle, 31 a bowl, 32 a plate arranged for sliding movement on said handle and provided at its forward end with a loop 33 which surrounds and slides lengthwise on said bowl.

An inclined plate 34 on the forward end of plate 32 has a sliding fit in the bowl. A spring held latching detent 35, is pivoted on plate 32 and a depending pin 35a on the forward end of said detent is adapted to pass through an aperture 36 in plate 32 and engage in apertures 37 in handle 30. These apertures are spaced so as to receive pin 35a and thereby latch plate 32 to handle 30, when plate 34 is at the rear end of bowl 31, or at different points lengthwise therein, thus enabling the spoon to measure a tablespoonful of material or definite portions thereof, such as one teaspoonful or a quarter, a half or three-quarters of teaspoonful.

In this construction the body of the product in the bowl may be leveled off with a knife blade, a fork or the like.

The rear end of sliding plate 32 cooperates with guide marks 38 on the upper face of handle 30, which marks are spaced to correspond with the spacing of the apertures 37 for adjusting the position of plate 34 in bowl 31.

By actuating detent 35 so as to withdraw pin 35a from the rear one of apertures 37, plate 32 may be moved forward so as to position plate 34 at different predetermined positions in bowl 31.

Loops 13 and 33, which slide freely on the bowls 11 and 31 respectively, are for the purpose of maintaining the forward portions of the sliding plates 12 and 32 in proper operative relation, particularly during sliding movement of the plates lengthwise of the bowls.

Thus it will be seen that I have provided a measuring spoon which is simple in structure, inexpensive of manufacture, and very effective in performing the functions for which it is intended.

It will be understood that minor changes in the size, form and construction of the various parts of my improved measuring spoon may be made and substituted for those herein shown and described, without departing from the spirit of the invention, the scope of which is set forth in the appended claims.

I claim as my invention:

1. In a measuring spoon, the combination with a handle, a bowl on the forward end of said handle, a plate arranged for sliding movement on top of said handle, the forward end of which plate extends downward into said bowl, and means for latching said plate to said handle in different positions, of a spring held plate arranged for sliding movement on the underside of said handle, the forward portion of which spring held plate is arranged for sliding movement through apertures in the bowl and in the downwardly extending forward end of said first mentioned sliding plate and a cross arm carried by the forward end of said spring held plate and arranged for sliding movement on top of said bowl.

2. The combination as set forth in claim 1 including means on said handle for indicating the adjusted position of said first mentioned plate on said handle.

3. The combination as set forth in claim 1 including a loop on the forward end of said first mentioned sliding plate, which loop passes around said bowl.

4. The combination as set forth in claim 1, including ears projecting outwardly from the sides of said spring held sliding plate.

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