G. LOYD.

ADJUSTABLE MEASURE.

APPLICATION FILED NOV. 6, 1911.

1,039,153. Patented Sept. 24, 1912.

Fig. I.

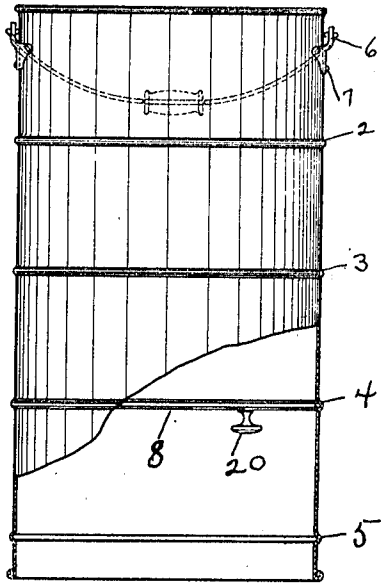


Fig. 2.

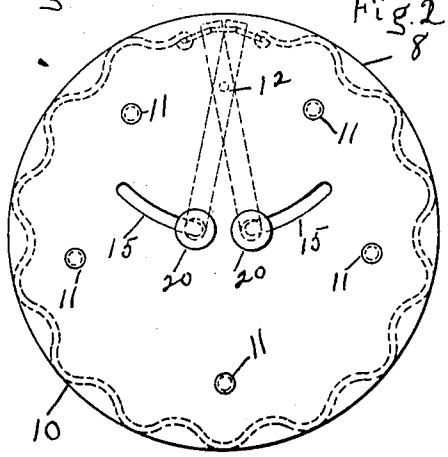


Fig. 3.

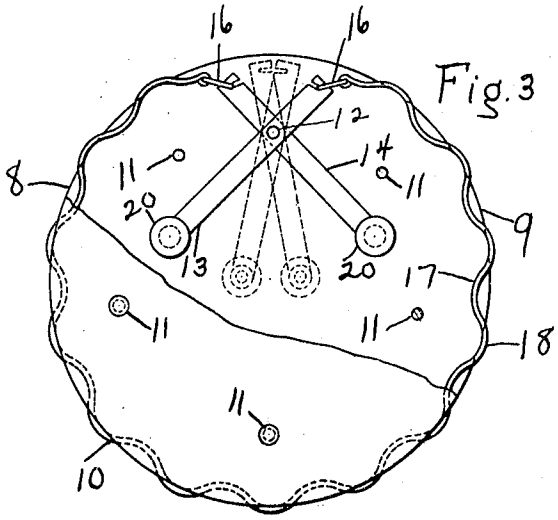
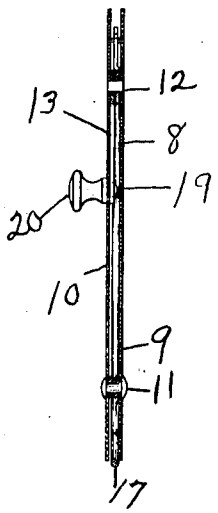


Fig. 4.



WITNESSES

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ADJUSTABLE MEASURE.

1,039,153. Specification of Letters Patent. Patented Sept. 24, 1912.

Application filed November 6, 1911. Serial No. 658,861.

To all whom it may concern:

Be it known that I, GEORGE LOYD, a citizen of the United States, residing at Fort Wayne, in the county of Allen, in the State of Indiana, have invented certain new and useful Improvements in Adjustable Measures; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to improvements in adjustable measures.

The object of my present invention is to provide an adjustable measuring device which will enable the operator to conveniently measure out several predetermined quantities by means of the same receptacle, and is especially devised and adapted for use in retail grocery stores.

My invention consists of an open ended cylinder preferably of sheet metal strengthened at its upper and lower edges by peripheral beads, and provided with a series of spaced annular recesses in which an adjustable bottom is conveniently secured at pleasure; means for firmly securing the said bottom in its various positions; and means for readily detaching it therefrom.

The principal novel feature of my invention resides in the construction and arrangement of the adjustable bottom, and in the means for securing and detaching it from such position.

Figure 1 is a view in elevation of my invention partly broken away to show the arrangement of the adjustable bottom in one of its positions. Fig. 2 is an enlarged detail bottom plan of the adjustable bottom showing in dotted outline the means for securing the same in position as it appears when it has been withdrawn from its holding engagement to permit the adjustment of the bottom. Fig. 3 is a bottom plan of the same partly broken away showing the supporting means in position for its holding engagement, and showing the levers for adjusting such holding means in the two limits of their movement. Fig. 4 is a central section of Fig. 3 showing the relative arrangement of the plates forming the adjustable bottom and of the interposed adjusting levers.

The measuring receptacle 1 is cylindrical in contour and preferably of sheet metal, and having a series of internal annular recesses 2, 3, 4 and 5 in the sides thereof properly spaced to accurately measure the predetermined contents of the receptacle under the various adjustments of the movable bottom. The lower one 5 of these recesses is arranged a proper distance from the bottom thereof, as shown, for the reason hereafter stated. The receptacle 1 also has a carrying bail 6 of common form and having its ends loosely mounted in the oppositely arranged ears 7.

The bottom 8 is formed of a pair of circular sheet metal plates 9 and 10 in parallel arrangement and fixed in spaced relation to contain loosely but snugly the operating means about to be described. These plates are rigidly secured in position by means of the bolts 11 in a well understood manner. The plate 10 is provided with a pair of curved slots 12 and 13 near its central portion to limit the movements of the operating means.

In the plates 9 and 10 is rigidly fixed a pivot 12 on which are loosely mounted the levers 13 and 14 near their outer ends. These levers are each provided at their outer ends and upon their inner edges with a lateral slot 15 in which are loosely arranged the respective links 16 to whose ends is loosely secured the opposite ends of the circular convoluted wire 17 of proper strength and tension to normally and firmly maintain the position shown in Fig. 3. When the wire 17 is in the position last described its outer bent portions 18 project beyond the perimeter of the bottom and are adapted to thus engage with any one of the receptacle recesses 2, 3, 4 or 5 and thereby firmly support the adjustable bottom in position under any ordinary strain to which it may be subjected in use.

The inner ends of the levers 13 and 14 are each provided with a fixed pin 19. These pins project downwardly through the respective slots 15 in the plate 10 and are provided upon their outer ends with the respective knobs or operating handles 20 which are thus arranged adjacent to the lower face of the adjustable bottom and within convenient reach of the operator. As the lower recess 5 of the receptacle 1 is higher than the bottom of the receptacle there is sufficient room for these operating handles to afford perfect clearance thereon.

The operation of my invention thus de-

scribed is obvious and briefly stated is as follows: Assuming that the receptacle 1 is a half bushel measure the recesses 2, 3, and 4 are so spaced as to measure a peck and a half, a peck and one half of a peck respectively when the bottom is adjusted therein. When the operator desires to adjust the bottom from one recess to the other he seizes the two operating knobs or handles and draws them to their inner limit as shown in Fig. 2 thereby withdrawing the convolute wire from its engagement with the said recess after which the bottom will slide freely within the receptacle. When he has adjusted the bottom to the desired recess he releases his hold upon the operating handles which will then be forced to their outer limit by the levers 13 and 14 under the tension of the said wire spring which will thereby automatically engage the annular recess and secure the bottom firmly in position.

It has been found by experimental tests that a swiveled connection between the inner ends of the operating levers and the respective ends of the circular wire is necessary to secure a proper operation or withdrawal of the wire from its engagement with the annular recess. This I have done by means of links as described.

Having thus described my invention and the manner of employing the same what I desire to secure by Letters Patent is:

1. A measuring receptacle consisting of a cylindrical body having a series of internal spaced annular recesses; an adjustable bottom loosely mounted therein and formed of two circular plates in spaced relation; a pair of levers pivotally mounted between the said plates and provided with operating handles upon their inner ends; a circular wire having a plurality of lateral bends therein and arranged between the said plates and having its opposite ends secured to the outer ends of the said levers respectively by swiveled connections, the said wire being adapted to normally engage the said annular recesses of the receptacle, and a swiveled connection between the said levers and the ends of the said wire.

2. A measuring receptacle having lateral recesses in spaced relation upon its inner face and an adjustable bottom vertically movable therein; a pair of levers pivotally connected and mounted on the said bottom with pendant operating handles thereon; means for normally engaging the said recesses arranged in the said bottom and a swiveled connection between the outer ends of the said levers and the said recess engaging means.

3. In a measuring receptacle a vertically adjustable bottom consisting of a pair of circular plates fixed in spaced relation; a wire having a series of lateral bends therein and arranged adjacent to the perimeter of the said plates and between the same and adapted to normally project beyond the perimeter of said plates; a pair of pivotally connected levers having upon their inner ends operating handles; and a swiveled connection between the ends of the said wire and the said levers for the purpose described.

Signed by me at Fort Wayne, Allen county, State of Indiana, this 28th day of September, 1911.

GEORGE LOYD.

Witnesses:
AUGUSTA VIBERG,
HELEN DENNY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."