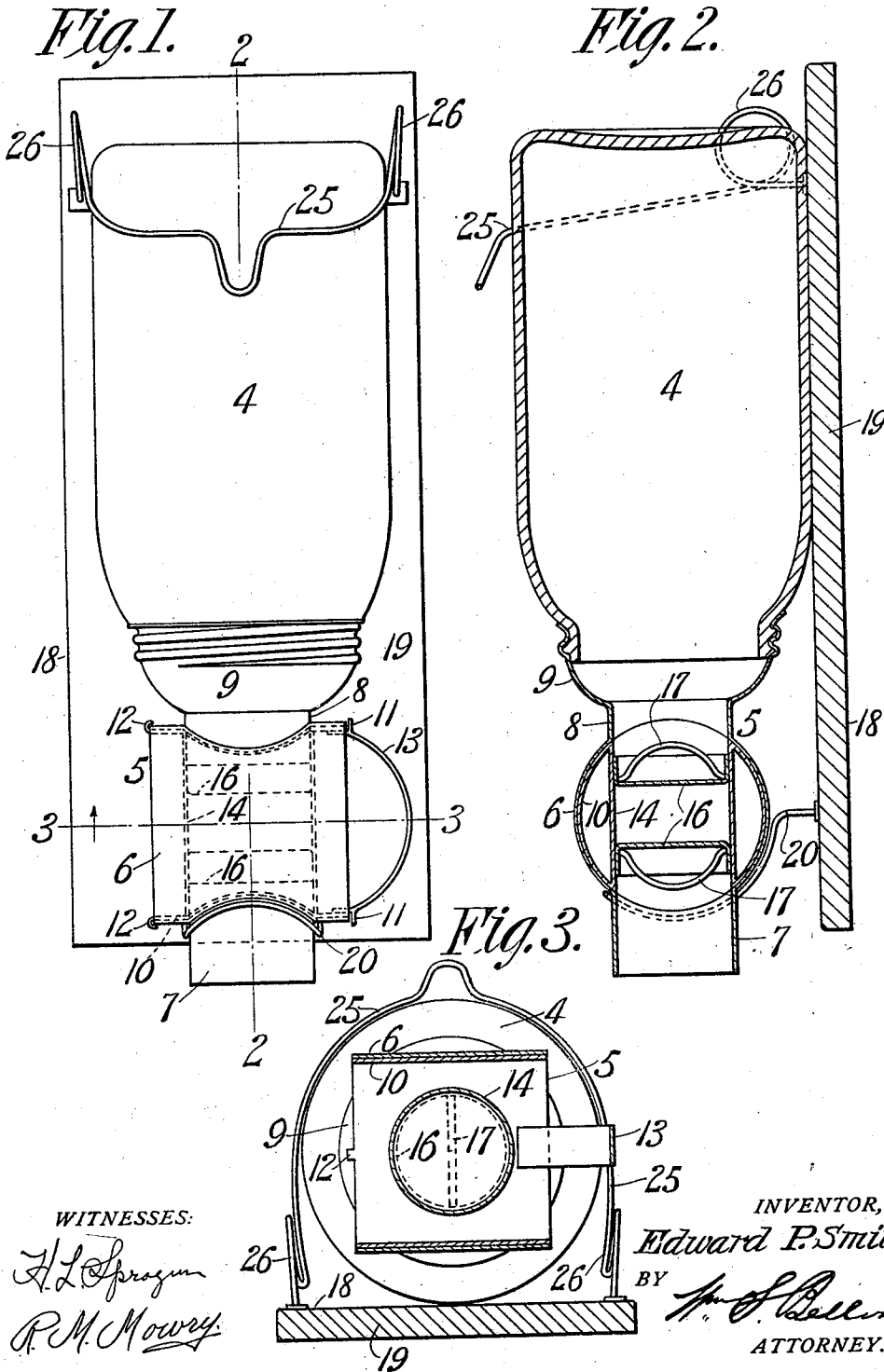


E. P. SMITH.
MEASURING AND DISPENSING DEVICE.
APPLICATION FILED JUNE 6, 1911.

Patented Jan. 9, 1912.

1,014,343.



UNITED STATES PATENT OFFICE.

EDWARD P. SMITH, OF PITTSBURGH, PENNSYLVANIA.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, EDWARD P. SMITH, a citizen of the United States of America, and resident of Pittston, in the county of Luzerne and State of Pennsylvania, have invented certain new and useful Improvements in Measuring and Dispensing Devices, of which the following is a full, clear, and exact description.

10 This invention relates to an improved measuring device, especially designed for coffee, sugar and the like, but which may be employed for measuring grains and other commodities in large quantities.

15 An object of this invention is to provide a measuring device of simple and efficient construction, which shall be inexpensive of manufacture and capable of protracted use without derangement.

20 Another object is to provide a measuring device which may be fitted on to the neck of an ordinary "Mason" jar and to provide means for changing the capacity of the measuring members.

25 A further object of this invention is to provide a device which shall be of such construction that no air will be allowed to enter the jar therethrough. And other objects are for the attainment of advantages as will be hereinafter rendered manifest.

30 The invention is described in conjunction with the accompanying drawings and is defined in the claims.

In the drawings:—Figure 1 is a front elevation of the device shown as in relation to an inverted can or jar and held by the wall frame therefor. Fig. 2 is a central sectional view of the device taken on the line 2—2, Fig. 1. Fig. 3 is a horizontal cross sectional view taken on the line 3—3, Fig. 1.

40 The measuring device may be used in conjunction with a can or jar of any desired construction or design, but may be conveniently used with the common "Mason" jar which has a screw threaded neck.

45 In the drawings:—4 represents a jar of common construction to which the measuring device 5 is attached. The measuring device 5 comprises a cylindrical casing 6, having openings at opposite ends and also having openings at right angles thereto, one of said openings terminating in a delivery spout 7, and the other of said openings terminating in a hollow guide neck 8. The 55 guide neck 8 has an enlarged portion 9 thereon, screw threaded for engagement

with the screw threads on the neck of the jar 4. Within the casing 6, a cylindrical shell 10 is rotatively mounted, having at one end the flanges 11 to engage an edge of the casing 6; while at the opposite end of the cylindrical shell 10 are the tongues 12, which are designed, when said shell 10 is placed within the casing 6, to be bent over the edge of the casing, thus securing the shell therein and yet allowing free rotative movement thereof. A handle 13 is secured to the shell 10 at one end thereof, for the purpose of rotating the shell within the casing. At diametrically opposite portions of the shell 10 are openings therethrough which are adjacent the openings of the delivery spout 7 and the guide neck 8 of the casing 6, when the shell is in its position within the latter. A tube 14 connects the diametrically opposite openings in the shell, 10. Slidingly mounted within said tube are two cups 16, having their openings oppositely disposed. The said cups frictionally bind on the sides of the tube 14 sufficiently to insure them against displacement by the weight of the material to be measured therein, but so that easy adjustment is possible by means of the handles 17, secured to the interiors thereof. These cups constitute adjustable bottoms or bases for the measuring chambers comprised in the opposite open portions of the tube in the rotatable shell. The inner wall of the tube 14 has marks of graduation thereon to facilitate the proper adjustment of the measuring cups 16, therein.

The frame 18 on which the receptacle and measuring device are mounted comprises a base or back board 19 to be screwed to the wall or other support and a wire 20 bent to the form of a curved yoke has the legs thereof rigidly secured to the lower portion of the back board and, outstanding from such back board, embraces the delivery spout 7 and supports the portion of the casing adjoining such spout; and to the upper portion of the back board is secured a spring retainer 25 made of a single piece of wire, the intermediate portion of which is bent to form an operating finger piece, while portions to the rearward thereof assume a U-form and are continued in coils 26, while the ends to the rear of the coils are secured in the back board. The jar or can being filled and the measuring device secured in place thereon, the united part, in inverted condition, is placed within the wall frame by in-

roducing the delivery spout 7 through the lower yoke shaped part,—the upper holding spring being temporarily swung upwardly to permit the butt end of the receptacle to be brought to its position to be engaged thereby; and when the receptacle and the measuring device are in their place in the wall frame, they are, so to speak, firmly chained or rigidly held. The coffee or other material to be measured enters each of the measuring chambers as they are brought uppermost from the guide neck, and when the shell 10 is turned one-half of a revolution by means of the handle 13, it is emptied through the delivery spout 7. One measuring chamber is, therefore, being filled while the other is being emptied of its contents. And, of course, by forcing the cup shaped bottoms of the measuring chambers toward the center of the tube or toward the mouths of the tube, the capacity of the measuring chambers is varied according to desire.

It is apparent from the construction of the device that air is excluded from the jar at all times, and thus the quality of the goods is preserved.

This measuring device could be applied equally well to a can or it could be enlarged to meet the requirements for measuring grain and the like, in which case it would be especially advantageous in that rats and mice could not enter the receptacle or grain bin therethrough.

Changes of minor character may be made in the device without departing from my invention or sacrificing any of the advantages thereof.

I claim:—

1. In a device of the character described, the combination with a receptacle, of a cylindrical casing having openings at opposite ends and also having openings at right angles thereto, one of said openings terminating in a delivery spout, and the other in a hollow guide neck, a means for securing said guide neck to the receptacle, a cylindrical shell rotatively mounted within said cylindrical casing, having a limiting flange at one end, and a handle rigidly secured thereto, and provided with tongues at its opposite end having engagement with the edge of the cylindrical casing, a tube arranged transversely within said shell, and open at its opposite ends and registering with the guide neck and delivery spout, and having bottoms dividing it into opposite measuring chambers.

2. In a device of the character described, the combination with a receptacle, of a cy-

lindrical casing having openings at opposite ends and also having openings at right angles thereto, one of said openings terminating in a delivery spout and the other in a hollow guide neck, a means for securing said guide neck to the receptacle, a cylindrical shell rotatively mounted within said cylindrical casing, having a limiting flange at one end and having a handle rigidly secured thereto, and provided with tongues at its opposite end, having engagement with the edge of the cylindrical casing, a tube arranged transversely within said shell and open at its opposite ends and registering with the guide neck and delivery spout, and cups slidably mounted within said tube.

3. In a device of the character described, the combination with a receptacle having a screw threaded neck, of a cylindrical casing having openings at opposite ends and also having openings at right angles thereto, one of said openings being continued in a delivery spout, and the other being continued in a hollow guide neck having an enlarged portion at its extremity, made screw threaded for engagement with the neck of the receptacle, a cylindrical shell rotatively mounted within said cylindrical casing, having a limiting flange at one end and a handle rigidly secured thereto, and provided with tongues at the opposite end, which have engagement with the edge of the cylindrical casing, and said shell having diametrically opposite openings, a tube transversely arranged within said shell connecting said openings, having marks of graduation on the inner wall thereof, and cups slidably mounted within said tube, having handles secured to the interiors thereof.

4. In a device of the character described, the combination with a receptacle having a measuring device secured thereon which includes a cylindrical casing and a delivery spout, of a wall frame comprising a base or back provided at its upper portion with a U shaped wire spring having a detachable engagement about said receptacle, and having secured thereto at its lower portion a yoke-shaped wire member having an embracing relation about the delivery spout and a supporting engagement under the casing.

Signed by me at Pittston, Pa., in presence of two subscribing witnesses.

EDWARD P. SMITH.

Witnesses:

M. B. SCHNERR,
H. L. HALTZEL.