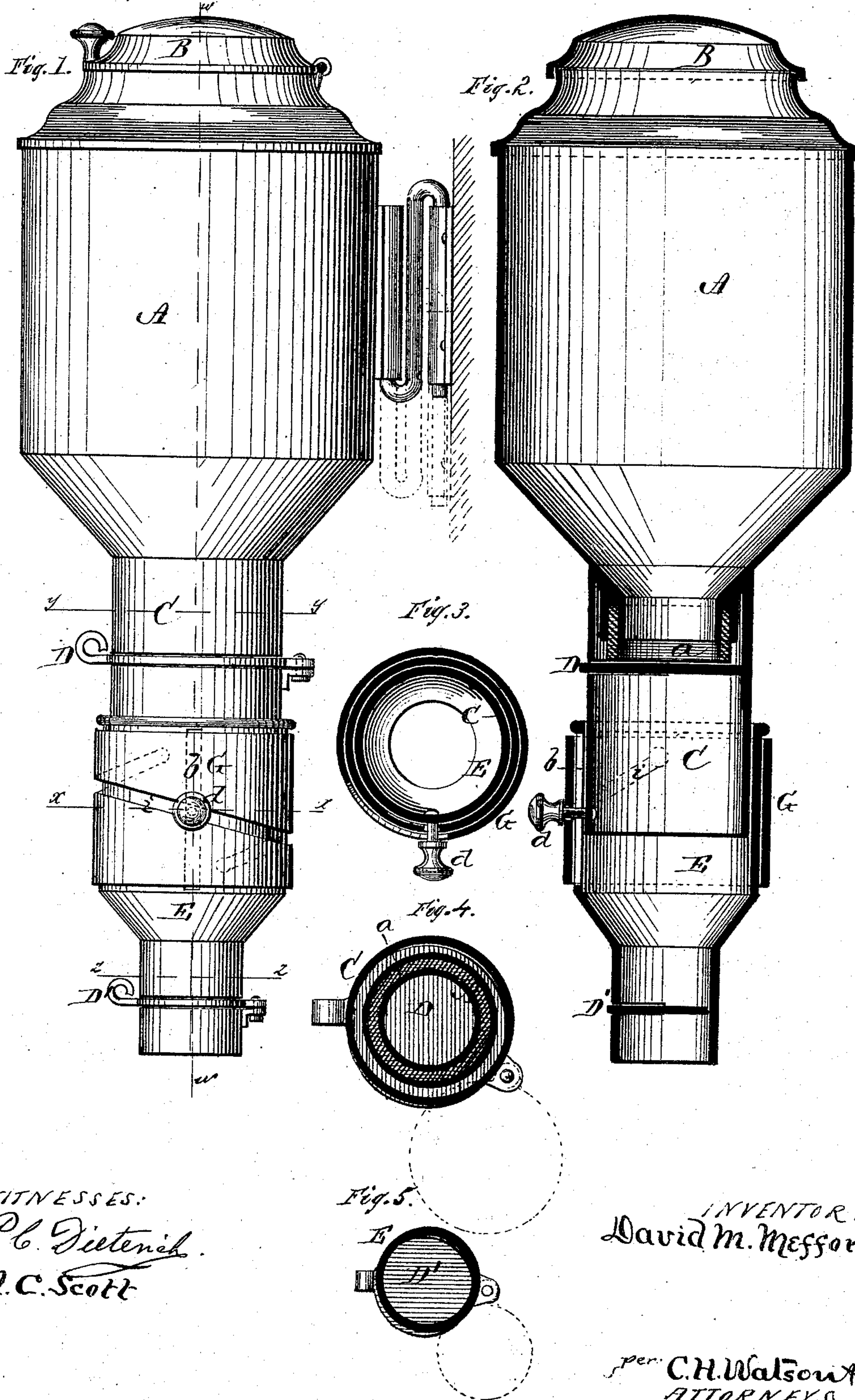


D. M. MEFFORD.
Measuring-Cans.

No. 156,809.

Patented Nov. 10, 1874.



WITNESSES:
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UNITED STATES PATENT OFFICE.

DAVID M. MEFFORD, OF TOLEDO, OHIO, ASSIGNOR TO AMERICAN INVENTION COMPANY, OF ST. LOUIS, MISSOURI.

IMPROVEMENT IN MEASURING-CANS.

Specification forming part of Letters Patent No. 156,809, dated November 10, 1874; application filed August 15, 1874.

To all whom it may concern:

Be it known that I, DAVID M. MEFFORD, of Toledo, in the county of Lucas and State of Ohio, have invented certain new and useful Improvements in Measuring-Cans; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings and to the letters of reference marked thereon, which form a part of this specification.

The nature of my invention consists in the construction of a can with an egress or delivery-spout of any desired shape at its bottom, which is capable of being elongated or shortened within certain limits, in order that accurate weights may be obtained by measurement of all articles of different densities that will flow by their own gravity, as will be hereinafter more fully set forth.

In the accompanying drawing, Figure 1 is a side elevation of a measuring-can embodying my invention. Fig. 2 is a vertical section of the same through the line *w w*, Fig. 1. Figs. 3, 4, and 5 are horizontal sections through the lines *x x*, *y y*, and *z z*, respectively of Fig. 1.

A represents a can, of any desired dimensions, having a conical bottom, with a pitch sufficiently steep to secure the desired flow of the contents, and a cap, B, covering an opening in the top large enough to allow the convenient filling of the can. C is a cylindrical funnel attached to the bottom of the can, with an interior flexible curtain, *a*, to prevent the descending contents of the can, when in the form of grain, from choking the pivoted valve D, as, if the contents of the can were grain, unground, being hard, it would fill the entire space of the funnel above the valve, and become wedged in the opening in the funnel, in which the valve moves; but by the use of the curtain *a* the contents are kept from the sides of the funnel above the valve, and as the curtain is flexible it does not interfere with the movement of the valve. This valve passes horizontally through an opening in one side of the funnel C, and forms the top of the measure. E is an adjustable cylinder, which

can be moved up and down on the funnel C, and has a straight longitudinal slot, *b*, as shown in dotted lines in Fig. 1, through which a pin, *d*, passes, said pin being fixed in the funnel C. The cylinder E has an exterior loose band or sleeve, G, which has a spiral slot, *i*, crossing the slot *b* at the point where the pin *d* comes through, and is also penetrated by it.

By turning the loose band G, the tube composed of the parts C and E is varied in length by means of the pin *d* working in the spiral slot *i*, the action of which is to completely lock the two cylinders unless the band G is turned.

D' is another horizontal valve, similar to the valve D, and forms the bottom of the adjustable measure. The cylinder E terminates in a tapering funnel, to facilitate the packing of the goods that have been weighed.

The can may be suspended in any convenient manner from the shelves or ceiling; or it may be supported on a column or other suitable base, as may be desired.

In operating the can, after both valves have been closed the can is filled with the commodity through the opening in the top. The desired unit of measure is then obtained by adjusting the delivery-tube to such a height that the measure between the valves will hold the exact amount desired, its accuracy being tested by correct scales. The measure thus established being firmly held at the point thus ascertained by the band G, all that needs to be done until the can is emptied of that commodity is to open first the upper valve, D, and close it when the measure is full; then open the lower valve, D', and allow the contents of the measure to discharge themselves into the packing bag or receptacle, held below the funnel.

This operation is repeated as often as necessary, and the unit of measure can be changed at will in the manner indicated above.

It will be found that the commodity in the can will almost instantaneously fill the measure by its own flow, and the valve D, by its operation of closing, gives a struck measure of uniform weight, so that each measure will be the duplicate of the one that preceded it.

In addition to the saving of time secured by weighing by measure, my scale-can has the great advantage of protecting its contents from exposure to the atmosphere, and thus not only keeps them from dust and moisture, but saves them from loss of odor and flavor.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination, with a can, A, having a cylindrical spout or funnel, C, at its bottom,

of the cylinder E, provided with the vertical slot *b*, the exterior sleeve G, with spiral slot *i*, the pin *d*, and valves D D', all substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

DAVID M. MEFFORD.

Witnesses:

JAS. J. FRENCH,
IRA E. LEE.