No. 733,937. PATENTED JULY 21, 1903.

R. BARRETT.

SELF MEASURING CAN.

APPLICATION FILED FEB. 25, 1903.

NO MODEL.

Fig. 1.

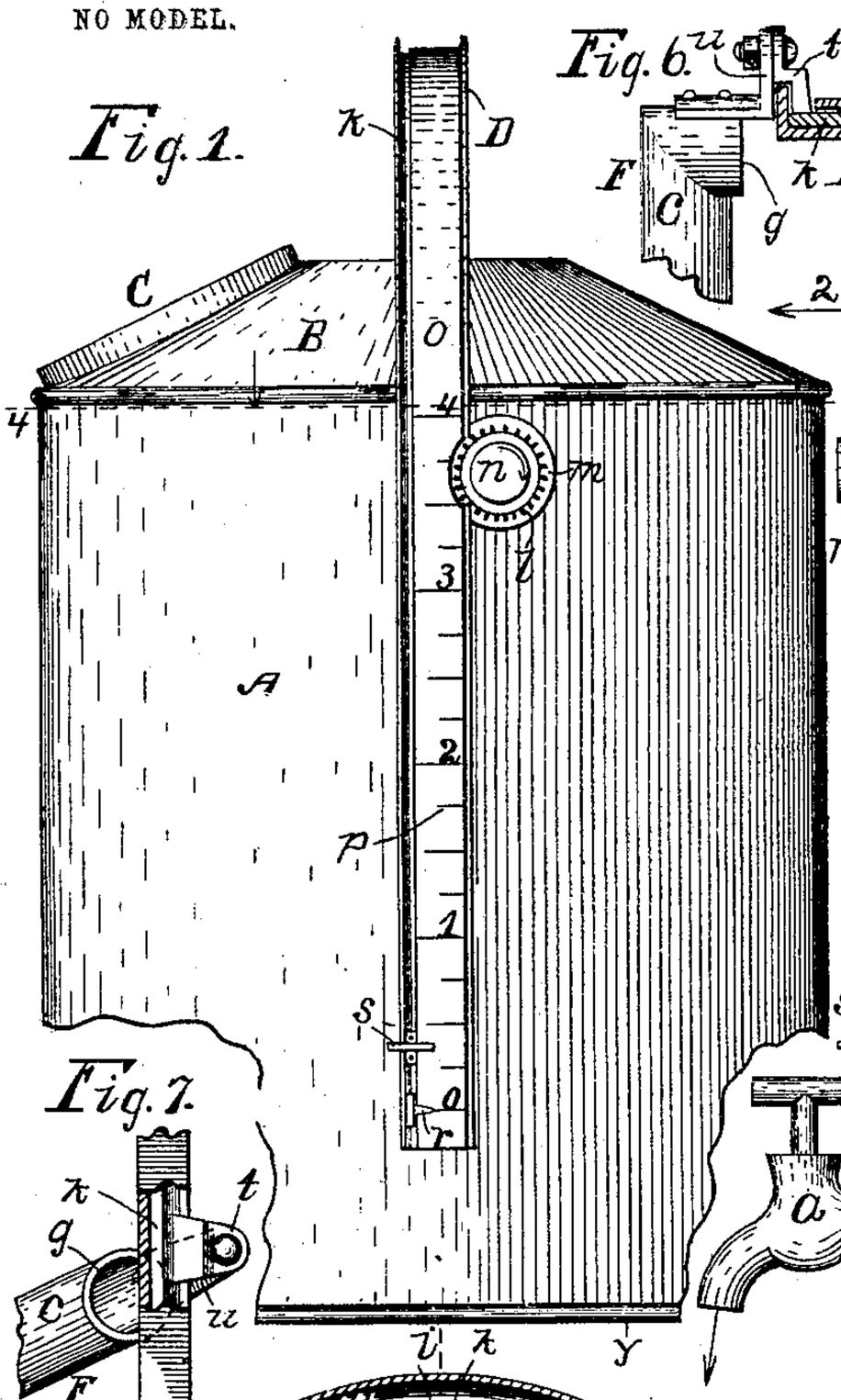


Fig. 6.

Fig. 2.

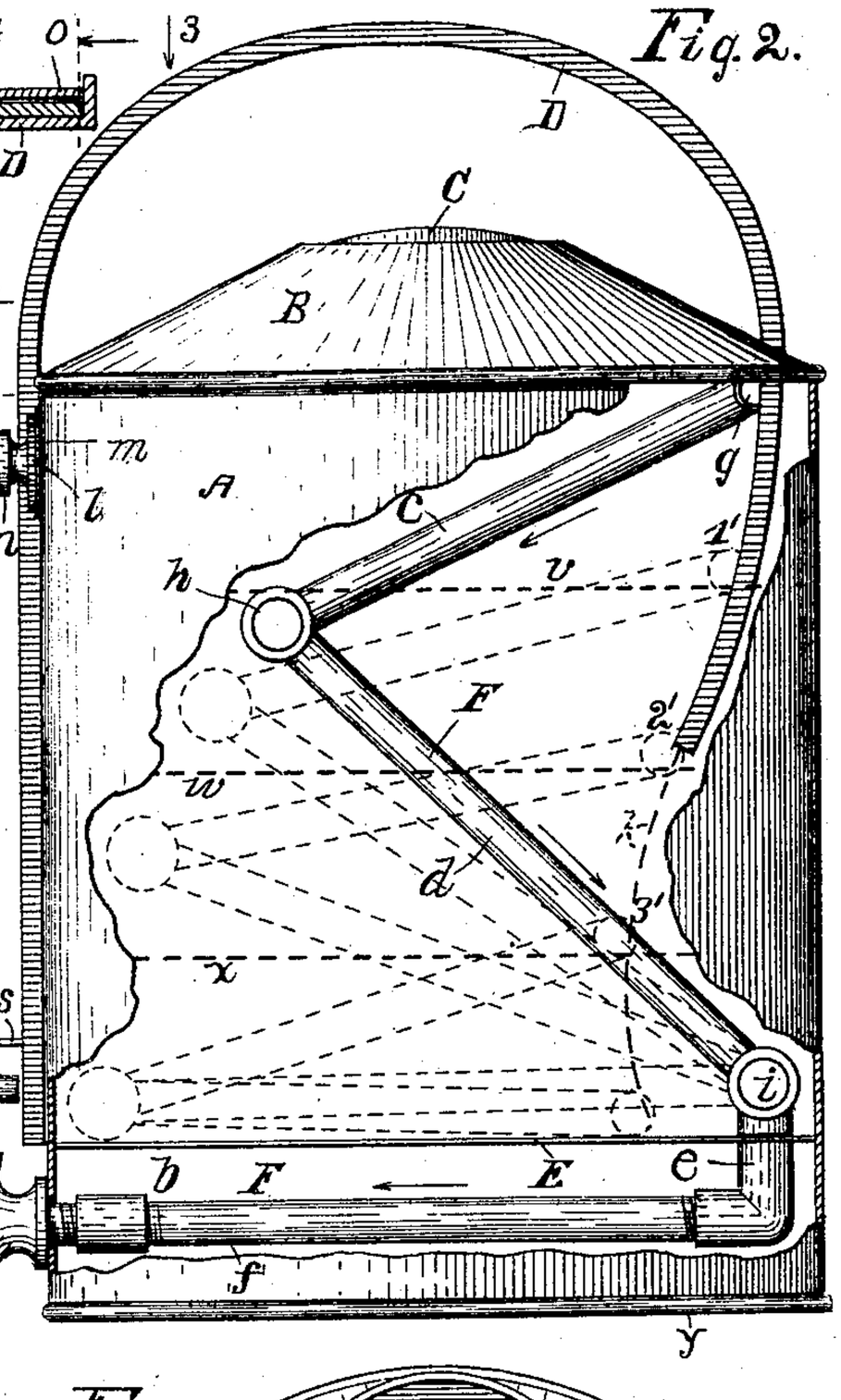


Fig. 7.

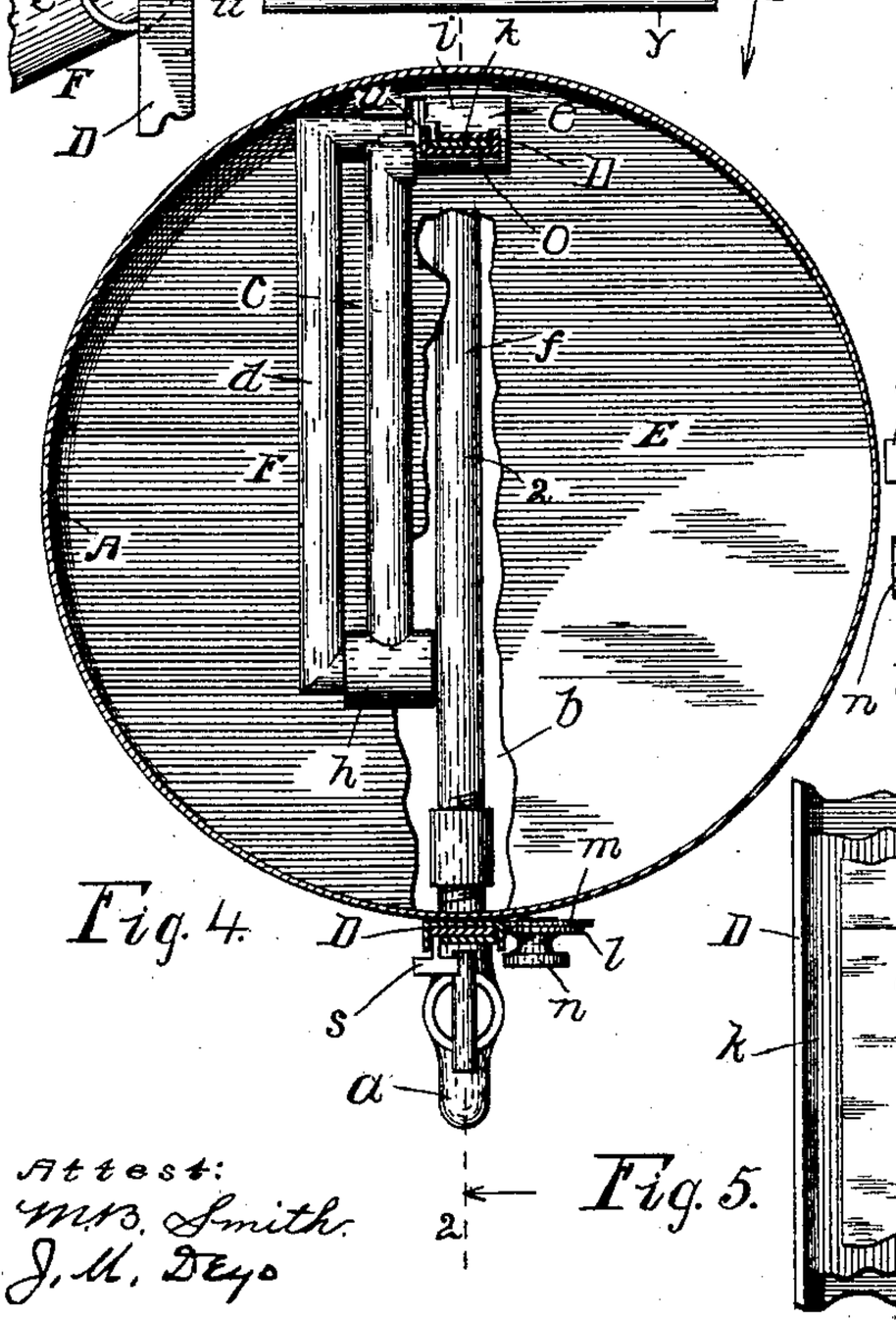


Fig. 3.

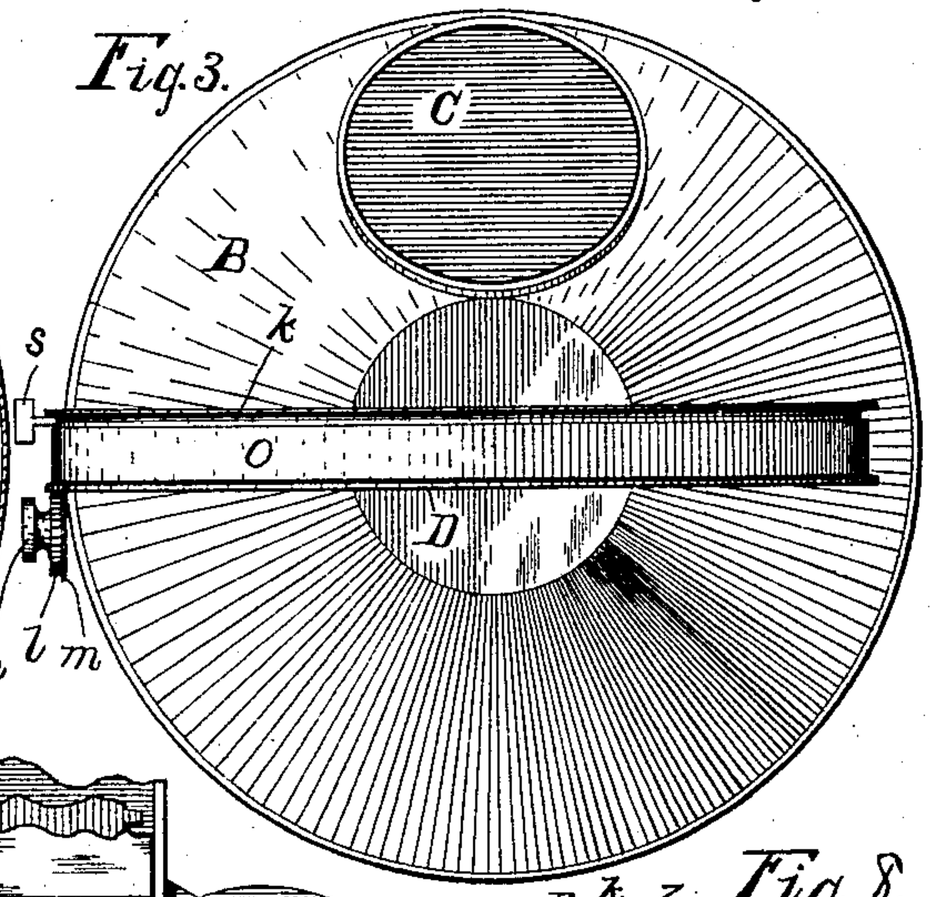


Fig. 4.

Fig. 5.

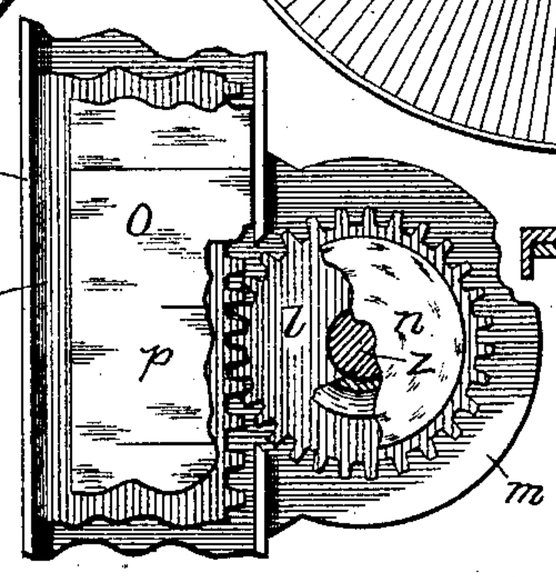
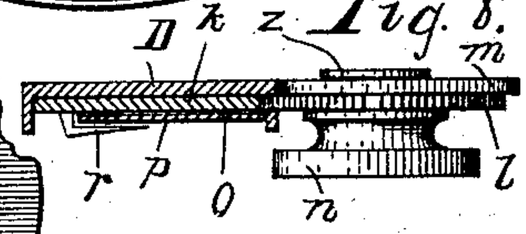


Fig. 8.



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No. 733,937. Patented July 21, 1903.

UNITED STATES PATENT OFFICE.

ROY BARRETT, OF PALMYRA, NEW YORK.

SELF-MEASURING CAN.

SPECIFICATION forming part of Letters Patent No. 733,937, dated July 21, 1903.

Application filed February 25, 1903. Serial No. 145,027. (No model.)

To all whom it may concern:

Be it known that I, ROY BARRETT, of Palmyra, in the county of Wayne and State of New York, have invented a new and useful Improvement in Self-Measuring Cans, which improvement is fully set forth in the following specification and shown in the accompanying drawings.

My invention is a self-measuring can for containing oil or other like liquids and arranged to deliver any given quantity or measure required of the contained liquid, thereby dispensing with the ordinary measuring devices or vessels, as gallon, quart, &c.

The invention is hereinafter fully described, and particularly pointed out in the claims, reference being had to the accompanying drawings, forming a part of this specification.

Figure 1 is a front elevation of the can with parts broken away. Fig. 2 is a side elevation of the same seen as indicated by arrow 2 in Fig. 1, parts being broken away and interior parts shown in various positions by full and dotted lines, the section being on the dotted line 2 2 in Fig. 4. Fig. 3 is a plan of the device, the view being indicated by arrow 3 in Fig. 2. Fig. 4 is a horizontal section on the dotted line 4 in Fig. 1, showing the interior parts, a part of the floor of the can being broken away. Fig. 5 further shows a portion of the toothed band and the operating-pinion, parts being broken away, the view being the same as in Fig. 1. Fig. 6 shows the connection of the toothed band and the outflow-pipe, the view and the horizontal section being the same as in Fig. 4. Fig. 7 is a side elevation of parts at the mouth of the outflow-pipe seen as in Fig. 2 and as indicated by arrow in Fig. 6, the vertical section being as on the dotted line at the point of said arrow. Fig. 8 shows the operating-pinion and associated parts, the view and the horizontal section being the same as in Fig. 4. The detail figures 5 to 8, inclusive, are drawn to scales larger than that of the other figures.

In the drawings, A is the inclosing can or body of the device, usually made cylindrical in form and of sheet metal, as tin, and of any size desired.

B is the top or cover of the can, rigid therewith, which cover may be conical or other form, C being the opening in the cover through which the can is filled.

D is a channel-bar or strip of metal formed in a straight part and a curved part, the latter made to bow or bend above the top B and constituting a handle or bail for carrying the can. The straight part of the channel-bar D is secured rigidly to the outer surface of the can in vertical position, as shown, the curved part piercing and made rigid with the cover B and extending into the interior of the can, as appears in Figs. 2 and 3.

E, Figs. 2 and 4, is the bottom or floor of the can, it being a horizontal sheet-metal plate rigid with the circular walls of the can some distance above the foot *y*, leaving beneath it a chamber or apartment *b*.

F is a pipe within the can, consisting of movable sections *c d* above the floor E, a section *e* rigid in the floor, and a rigid horizontal section *f* in the space *b* below the floor terminating in a discharge-faucet *a* without the can. The various sections of the pipe are joined to form a continuous passage for the liquid out of the can, the liquid entering the pipe through the upper opened end or mouth *g* of the primary section *c*. This section is joined flexibly to the section *d* at *h*, the latter section being joined flexibly at *i* with the fixed section *e*, said section *e*, the section *f*, and the faucet being joined rigidly together and to the adjacent parts of the can. The pipe F being thus constructed the movable sections *c d* may swing or move in vertical planes within the can, allowing the open free end of the former section to move from the top of the can to the floor, as indicated by the positions of the sections shown by dotted lines in Fig. 2.

Within the longitudinal channel or hollow of the channel-bar D is placed a flexible metallic toothed band *k*, a toothed pinion *l* being provided to engage and move the band longitudinally within the bar D, which bar constitutes a holder for the band. The pinion is held by and to turn upon a stud *z* in a laterally-extending part or lug *m* of the channel-bar D, Figs. 5 and 8, a knurled head or thumb-piece *n*, rigid with the pinion, affording means by which to turn the latter. A bent strip of metal *o* is placed longitudinally in the channel of the bar D and made rigid

with the latter in position to substantially cover and so confine the band *k*, said band being free to move longitudinally under the strip. The toothed band *k*, which constitutes a rack for the pinion *l*, is provided with a pointer *r*, Figs. 1 and 8, and the rigid inclosing strip *o* is marked with a graduated scale *p*, Fig. 1, to coact with the pointer, by means of which the relative positions of the band *k* with the part *o* may be readily seen as the former is moved in the channel-bar D. A thumb-piece or short handle *s*, Figs. 1, 2, 3, and 4, rigid with the band *k*, enables the attendant to more quickly move the band to bring the pointer to indicate any desired division-mark on the scale *p* than by using the pinion *l*, the latter being employed more particularly to move the band through short distances and to more finely adjust the pointer to the marks on the scale.

The channel-bar D, the band *k*, and the confining strip *o* all extend some distance within the interior of the can, as shown in Fig. 2, the parts of the bar and of the confining strip within the can serving to control and guide the inner end of the band *k* in its movements within the can. The inner end of the band *k* is connected with the free open end of the primary section *c* of the outflow-pipe F by means of a short extended arm *t*, Figs. 4, 6, and 7, rigid with said band, and a similar arm *u* on the pipe-section *c*, said two arms being pivotally joined. On account of this connecting of the parts a movement of the band *k* by either means stated will cause the open or free end of the pipe *c* to move up or down, as the case may be, in the liquid within the can. If the free end of the pipe be raised to the top of the can by bringing the outer end of the band *k* down, so the pointer will indicate zero on the scale *p*, the opening *g* will be above the liquid and none will flow into the discharge-pipe F; but by moving the band to carry the pointer upward along the scale the opening *g* will be caused to correspondingly descend within the can, allowing liquid to flow into the pipe F, and so be delivered at the faucet *a*. To illustrate, if the pointer be raised to indicate "1" of the scale the open end of the pipe F will fall to the position shown by dotted lines at 1′, Fig. 2, and draw the liquid down to the horizontal dotted line *v*, amounting to, say, one gallon, which passes out at the faucet *a*, or if the pointer indicate "2" or "3" of the scale the open end of the pipe will stand correspondingly at the positions 2′ or 3′ and draw the liquid down to the associated horizontal dotted line *w* or *x* and deliver from the can a corresponding number of gallons of the liquid. The can will be emptied when the pointer indicates "4" of the scale, this position of the band allowing the open end of the section *c* of the pipe F to descend to the floor E of the can. By again bringing the pointer to the zero-mark on the scale by means of the thumb-piece *s* the open end of the outflow-pipe F will be raised to the top of the can, when the latter may be again filled and ready to be drawn from, as before.

The scale *p* is shown as being subdivided for half-gallons and quarts, the forming of the scale being, however, a matter of use or convenience.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A self-measuring can having a floor above the foot of the can, and an outflow-pipe within the can consisting of movable and fixed sections joined, the movable sections being above the floor and mounted to move in vertical planes and the fixed sections rigid with and below the floor, and means for controlling the movable sections comprising a strip forming a handle for the can and a band within said strip and connected with the uppermost movable section.

2. A self-measuring can having a floor, and space beneath the floor, and an internal outflow-pipe consisting of movable and fixed sections joined, the latter being rigid with and below the floor, and the movable sections being above the floor and mounted to move in vertical planes, one end of a movable section opening into the interior of the can and being adapted to be moved from the top of the can to the floor, and means for controlling the movable sections comprising a strip forming a handle for the can and a band within said strip and connected with the uppermost movable section.

3. A self-measuring can having an outflow-pipe within it consisting of movable and fixed sections joined to form a continuous passage from within the can outward, the movable sections being pivotally joined to swing in vertical planes, one end of a movable section opening out into the interior of the can, and means extending within the can and connected to one of the movable sections for determining its position relative with the top of the can and a curved strip inclosing said means with one end rigid with the outer wall of the can and its other end extended within the can.

4. A device of the kind described, having an internal outflow-pipe comprising movable sections joined in flexible joints to move in vertical planes within the can, a band, partly without and partly within the can and connected with a movable section of the pipe, a rigid holder for said band, a graduated strip confined within said holder and means for moving the band in the holder.

5. A device of the kind described, having an internal outflow-pipe comprising movable sections joined in flexible joints, a toothed band connected at one end with a movable section of said pipe within the can, a holder for the toothed band, and a toothed wheel outside of the can to control the toothed band.

6. A self-measuring can having an outflow-pipe comprising movable sections pivotally

joined within the can, a flexible band extending from without to within the can and connected with a movable section of the outflow-pipe, a holder for the flexible band rigid with the can and formed in a bow over the top of the can, and means for moving said flexible band.

7. A self-measuring can having an outflow-pipe comprising movable sections joined within the can, a flexible band partly without and partly within the can and connected with a movable section of the outflow-pipe, a holder for said band, and a confining strip for the band, the confining strip being marked with a scale of equal parts, and the flexible band having a pointer for traversing the scale, and means for moving the flexible band within the holder.

8. A can, an outflow-pipe comprising jointed sections and a combined handle and section operating device comprising a fixed strip and a notched movable strip within the same and having a portion extended within the can and connected to operate said sections.

In witness whereof I have hereunto set my hand, this 19th day of February, 1903, in the presence of two subscribing witnesses.

ROY BARRETT.

Witnesses:
F. E. CONVERSE,
F. H. DURFEE.