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DISPENSING ATTACHMENT FOR BINS.

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Fig. 4.

Fig. 3.

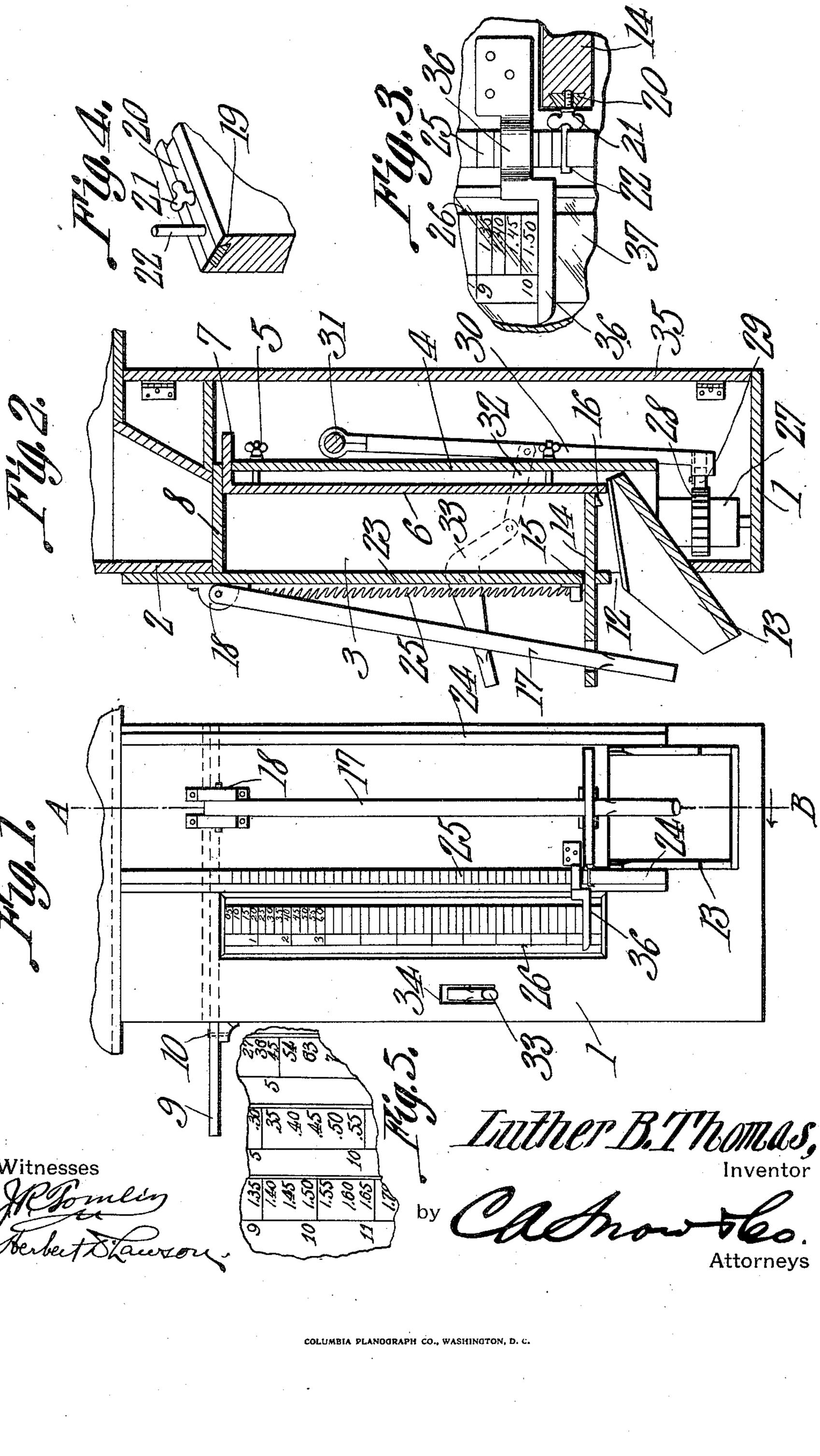

Fig. 2.

Fig. 1.

Fig. 5.

Witnesses

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DISPENSING ATTACHMENT FOR BINS.

998,812. Specification of Letters Patent. Patented July 25, 1911.

Application filed April 18, 1910. Serial No. 556,034.

To all whom it may concern:

Be it known that I, LUTHER B. THOMAS, a citizen of the United States, residing at Shreveport, in the parish of Caddo and State of Louisiana, have invented a new and useful Dispensing Attachment for Bins, of which the following is a specification.

This invention relates to dispensing attachments for bins and is particularly designed for use in connection with bins containing cereals, tea, coffee, and similar products.

The object of the invention is to provide a bin having means whereby any desired quantity of the material within the bin can be quickly measured and the cost thereof accurately indicated.

With these and other objects in view the invention consists of certain novel details of construction and combinations of parts hereinafter more fully described and pointed out in the claims.

In the accompanying drawings the preferred form of the invention has been shown.

In said drawings:—Figure 1 is a front elevation of the attachment. Fig. 2 is a section on line A—B Fig. 1. Fig. 3 is an enlarged elevation of the index and the adjoining parts of the device, the lower cut-off slide being indicated in section. Fig. 4 is a perspective view of a portion of said slide and showing the adjustable pin outstanding therefrom. Fig. 5 is a detail view of a portion of the cover of the indicating cylinder and on which columns of numerals are arranged giving weight and prices.

Referring to the figures by characters of reference 1 designates the housing of the attachment, there being a hopper shaped inlet 2 in the top thereof at one side for directing material from a bin located above the housing and into a measuring compartment 3 located within said housing. This measuring compartment has a stationary back wall 4 within which are arranged adjusting screws 5, the said screws extending from an adjustable back 6 which is located within the compartment 3 and may be shifted toward or away from the front wall of the compartment by adjusting the screws 5. A guard plate or extension 7 extends at right angles from the top of the adjustable back 6 and is slidably mounted on the stationary back 4. This plate serves to prevent material from becoming lodged between the two backs 4 and 6. A cut-off plate 8 is slidably mounted between the bottom of the feed hopper 2 and the guard plate 7, this plate having a handle 9 extending from it and beyond one side of the housing 1, there being a pivot pin extending through the arm and into a bracket 11 or the like mounted on said housing. It will be seen that by swinging the arm 9 the plate 8 can be moved so as to either open or close communication between the hopper 2 and the measuring compartment 3.

An outlet opening 12 is formed in front of the compartment 3 at the bottom thereof and a discharge spout 13 extends through this opening, said spout being adjacent the bottom of the measuring compartment 3. A lower cut-off slide 14 is mounted within a slot 15 formed in front of the compartment 3 close to the opening 12 and this slide has a stop projection 16 thereon for limiting the outward movement of the slide. The outer end of the slide is engaged by a lever 17 preferably pivoted at its upper end upon a bracket 18 extending from the compartment wall. Obviously, by pulling outwardly on the lower end of the lever 17, the slide 14 can be drawn outwardly so as to release the contents of the compartment 3. This slide has a dove tail groove 19 in one side thereof and in which is mounted a block 20. A set screw 21 or the like may be carried by this block so as to secure said block in any position to which it may be adjusted. A pin 22 extends outwardly from the block and moves therewith.

The front wall of the compartment 3 has been indicated particularly at 23 and is mounted for vertical sliding movement between guide cleats 24 secured to the housing 1. One of these cleats is provided with ratchet teeth 25 any one of which is adapted to be engaged by the pin 22 heretofore referred to so as to support the front wall 23 and the slide 14 at any desired elevation.

An opening 26 is formed within the front face of the housing 1 and parallel with the toothed cleat 24, there being a vertical cylinder 27 mounted for rotation within the housing and back of this opening. Said cylinder has a ratchet wheel 28 secured to it and adapted to be engaged by a spring pressed pawl 29. This pawl is connected to one end of a lever 30 which is fulcrumed in the housing 1 as shown at 31. A link 32 connects the said lever with an actuating lever 33 one end of which projects through a slot

34 in the front wall of the housing 1. It will be apparent that by oscillating the lever 33 the pawl 29 can be caused to engage and actuate the ratchet wheel 28 so as to produce an intermittent rotation of the cylinder 27. This cylinder has longitudinal columns of numerals preferably grouped in pairs, (see Fig. 5) the numerals in one column of each pair indicating weights and the numerals in the other column of each pair indicating the cost of the indicated amount or weight of material.

The back of the housing 1 is preferably closed by means of a hinged door 35 so that access may be conveniently had to the adjusting screws 5 heretofore referred to.

An index 36 is connected to the lower portion of the slidable wall 23 and is adapted to straddle the toothed cleat 24 and to extend across the opening 26 in which the cylinder 27 appears. As shown particularly in Fig. 3 this opening 26 may be provided with a cover 37 of glass or other transparent material.

Should it be desired to use this attachment in connection with a bin containing coffee, the hopper 2 is placed under the outlet of the bin and the cut-off plate 8 is brought into position so as to close communication between the hopper and the compartment 3. The lever 33 is then actuated so as to rotate the cylinder 27 until the two columns of numerals having reference to the coffee to be dispensed are brought into position where they are visible through the opening 26. By referring to Fig. 1 it will be seen that coffee sells at 20 cents per pound. Should a customer desire 45 cents' worth of coffee, the salesman pulls the lever 17 so as to disengage the pin 22 from the teeth 25 and he then pushes the slidable wall 23 upwardly until the index 36 arrives at the graduation designated by the numeral 45. The lever 17 is then swung back toward the housing 1 and the cut-off plate 14 is thus moved inwardly and the pin 22 brought into engagement with the adjoining tooth 25. That portion of the compartment 3 remaining above the cut-off plate 14 is so proportioned as to hold the exact amount of coffee to be sold for the amount indicated. After the parts have been adjusted as described the cut-off plate 8 is swung open and a portion of the contents of the bin flows downwardly into the compartment 3 and onto the plate 14. After the upper portion of the compartment has been filled, the cut-off plate 8 can be returned to closed position and by then pulling the plate 14 outwardly, the measured material can flow downward by gravity and be discharged through the spout 13 into a sack provided therefor. The lever 17, at this time, serves as a handle to support the wall 23 in its elevated position and, should the plate 14 be left in its forwardly extended position subsequent to the discharge of the contents of the compartment, the wall 23 would move downwardly onto the wall 13 as soon as lever 17 becomes released.

It is of course to be understood that the inner back wall of the compartment 3 is to be adjusted to regulate the bulk of the material held within the compartment 3 this bulk being dependent upon the weight of the material. As this adjustment on the inner back wall 6 necessitates the adjustment of the pin 22 so as to enable said pin to be moved into engagement with the teeth 25, it has been deemed advisable to mount the pin upon an adjustable block 20 such as has been shown in Figs. 3 and 4. It is to be understood, however, that this pin may be mounted in any other manner desired.

It is of course to be understood that various changes may be made in the construction and arrangement of the parts without departing from the spirit or sacrificing any of the advantages of the invention as defined in the appended claims.

What is claimed is:—

1. An attachment of the class described including a measuring compartment having one wall slidable relative to its other wall, there being an inlet at one end of the compartment and an outlet at the other end thereof, a closure for the inlet, and an outlet closure slidably mounted within said slidable wall and movable therewith, and cooperating means upon said outlet closure and a fixed portion of the compartment for locking the closure at a desired elevation.

2. An attachment of the class described including a measuring compartment having one wall movable relative to the other walls of the compartment, there being an inlet at one end and an outlet at the other end of said compartment, a closure for the inlet, an outlet closure slidably mounted within and movable with the movable wall, means for actuating said outlet slide relative to the wall, a series of immovable teeth disposed adjacent the movable wall, and means outstanding from the outlet closure for engaging any one of the teeth to support said closure and the wall at a desired elevation.

3. An attachment of the class described including a measuring compartment having one wall slidable with relation to the remaining walls, there being an inlet at one end and an outlet at the other end of said compartment, an adjustable inner wall within said compartment for varying the cross sectional area of said compartment, means for closing the inlet, an outlet closure slidably mounted within and movable with the slidable wall, a series of teeth adjacent the slidable wall, and means adjustably mounted upon the outlet closure for engaging any one of said teeth to support said closure and wall at a desired elevation.

4. An attachment of the class described including a measuring compartment having one wall slidable with relation to the remaining walls of the compartment, there being an inlet at one end and an outlet at the other end of said compartment, a closure for the inlet, an outlet closure slidably mounted within said slidable wall, teeth disposed adjacent said slidable wall, means upon the outlet closure for engaging the teeth to support the closure and slidable wall at a desired elevation, an index movable with said wall, and a graduated element coöperating with the index to disclose data relative to the contents of the compartment.

5. An attachment of the class described including a measuring compartment having one wall slidably mounted with relation to the other walls of the compartment, an inner wall adjustable to vary the cross sectional area of said compartment, the said compartment having an inlet and an outlet, a closure for the inlet, a closure for the outlet and adjustable toward or away from the inlet, a series of teeth adjacent the slidable wall, means adjustably mounted upon the outlet closure for engaging the teeth to support said closure at a desired elevation, and an index movable with said wall, there being graduations adjacent and adapted to be designated by the index.

6. An attachment of the class described including a measuring compartment having one wall slidably mounted with relation to the remaining walls of the compartment, there being an inlet at one end and an outlet at the other end of said compartment, a graduated cylinder mounted for rotation adjacent said compartment, a closure movably mounted within and adapted to move with the slidable wall to vary the depth of the measuring compartment, teeth adjacent the compartment, means upon the said closure for engaging the teeth to support the closure at a desired elevation, and an index movable with the wall for designating a graduation upon the cylinder.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

LUTHER B. THOMAS.

Witnesses:
Z. G. PAGE,
L. H. PISHLE.