

**1,013,381.**

2 SHEETS—SHEET 1.



William R. Dunn

**WITNESSES**

WITNESSES  
Daniel Webster, Jr.  
Stewart

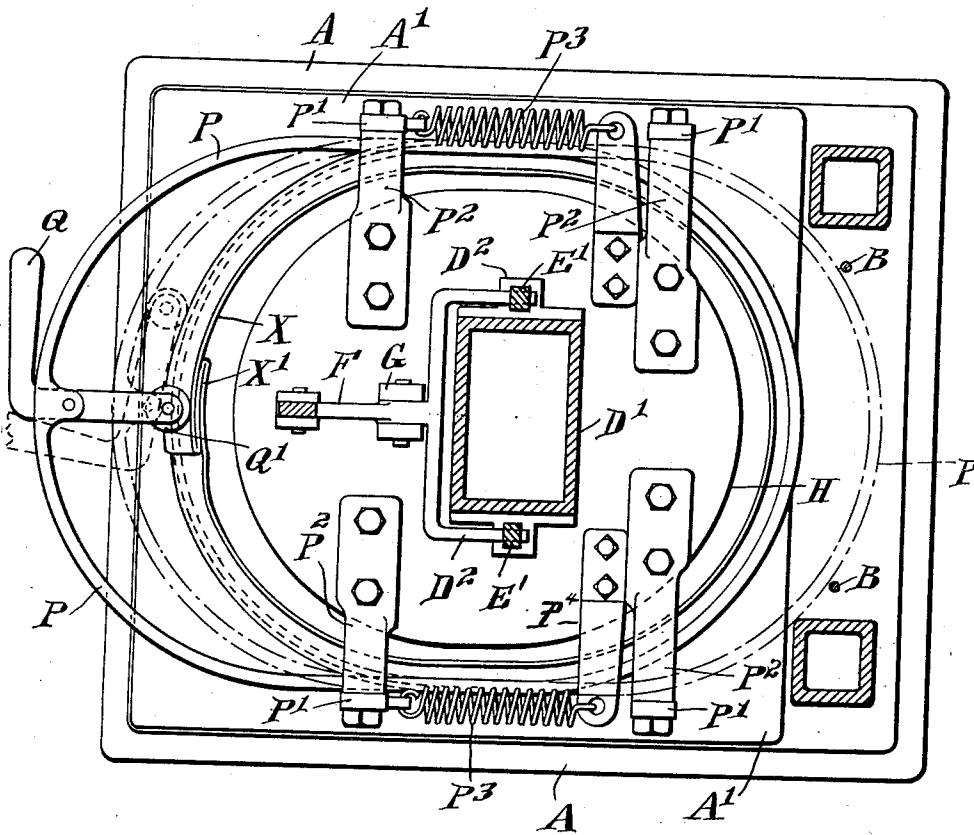
**BY**

Francis J. Chambers,  
his ATTORNEY

1,013,381.

Patented Jan. 2, 1912.  
2 SHEETS-SHEET 2.

FIG. 2.



WITNESSES  
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# UNITED STATES PATENT OFFICE.

WILLIAM R. DUNN, OF EASTON, PENNSYLVANIA.

## BAG-HOLDING DEVICE.

1,013,381.

Specification of Letters Patent.

Patented Jan. 2, 1912.

Original application filed February 14, 1910, Serial No. 543,711. Divided and this application filed May 25, 1910. Serial No. 563,390.

*To all whom it may concern:*

Be it known that I, WILLIAM R. DUNN, a citizen of the United States of America, residing at Easton, in the county of Northampton, in the State of Pennsylvania, have invented a certain new and useful Improvement in Bag-Holding Devices, of which the following is a true and exact description, reference being had to the accompanying drawings, which form a part thereof.

The object of the present invention is to provide an improved device for holding bags open, as when they are being filled, which is characterized by its simplicity in construction and reliability in operation, and the ease and rapidity with which a bag may be secured and released.

The various novel features of construction and arrangement which characterize my present invention are pointed out with particularity in the claims annexed to and forming a part of this specification. For a better understanding of the invention, however, and the advantages possessed by it, reference should be had to the accompanying drawings and descriptive matter in which I have illustrated and described one of the forms in which my invention may be embodied.

Of the drawings, Figure 1 is an elevation, partly broken away and in section, of a bag filling and weighing mechanism equipped with my novel bag holder; and Fig. 2 is a sectional plan on the line 2—2 of Fig. 1.

In the drawings A represents a scale on which a bag being filled with its contents may be weighed, and A' the platform of the scale. Above the scale platform is located a delivery chute D for the material to be bagged and weighed, the chute having a vertical depending nozzle portion D' terminating at a suitable distance above the scale platform A'. The escape of the material to be packaged from the nozzle D is controlled by a gate or disk like valve E, the double stems E' of which extend through, and are guided by, bearings D<sup>2</sup> carried externally by the nozzle D'. The valve E is controlled by a lever F bifurcated to straddle the nozzle D' and having the inner end of each fork received in a slot E<sup>2</sup> in the corresponding stem E'. The lever F is journaled in a yoke G the stem G' of which is secured to a stationary bag supporting member H which surrounds the lower end of the nozzle D'.

To the outer end of the lever F is pivotally connected the lower end of the vertically movable rod I. The latter passes through and is guided by a bracket D<sup>3</sup> secured to the chute D. A spring J coiled about the rod I and bearing at its upper end against the bracket D<sup>3</sup> and at its lower end against a collar I' secured to the rod I, supplements the action of gravity in tending to hold the gate or valve E against the lower end of the nozzle D' to thereby close the latter. A handle I<sup>2</sup> serves as a means by which the rod I may be readily lifted to lower the valve E and open the lower end of the chute nozzle D'. In my co-pending application Serial No. 543,711, filed February 14th, 1910, of which this application is a division, I have disclosed and claimed mechanism by which the closure of the valve E is automatically controlled by the weighing mechanism, and as such mechanism forms no part of the present invention I have not thought it necessary to illustrate and describe it herein.

The bag holder member H, in the form shown, is of an inverted pan shape with an external shoulder H' at its lower end. To secure the bag being filled in place an elongated clamping ring P is provided. The ring P is supported by swinging links P' hung from arms P<sup>2</sup> carried by the upper end of the bag holder member H. A spring P<sup>3</sup>, connected at one end to a bracket or arm P<sup>4</sup> secured to the bag holder H and at the other end to one of the swinging links P', normally tends to hold the member P in the position shown in dotted lines in Fig. 2. In this condition of the apparatus, each end of the elongated clamping ring P is separated from the adjacent end or side of the bag holder H by appreciable distances.

In putting a bag in place, the bag is first drawn snugly about the holder H and the loose material folded on itself as indicated at X' in Fig. 2. A tension lever Q, pivoted to one end of the member P is then swung into the position shown in Fig. 1, and in full lines in Fig. 2. As the lever Q is swung into the full line position of Fig. 2 the cam roll Q' carried by the inner end of the lever Q, engaging the periphery of the bag holder H through the bag material causes the member P to move with respect to the bag holder H to bring the back end of the member P into engagement with the corresponding

portion of the holder H. In the full line position of the apparatus shown in the drawings, therefore, the bag is clamped against the holder H at the rear of the holder by the rear end of the member P, and the overlapping portion X' of the bag is clamped against the front side of the holder H by the roll Q'. The bag may be released by returning the lever Q into the position relative to the holder P shown in dotted lines in Fig. 2, whereupon the spring P<sup>3</sup> returns the holder P to the dotted line position of Fig. 2.

It will be apparent to those skilled in the art that the bag holding mechanism disclosed is simple and relatively inexpensive to construct, and that it is effective and reliable in operation and permits of a bag being quickly and easily secured in place and released.

While, in accordance with the provision of the statutes, I have herein described and illustrated the best form of my invention now known to me, it will be apparent to those skilled in the art that changes may be made in the form of the apparatus disclosed without departing from the spirit of my invention, and I do not wish my claims hereinafter made to be limited to the particular form of apparatus disclosed more than is made necessary by the state of the art.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is:

1. In a bag holding device, the combination of an internal bag support, a clamping member adapted to engage said support at one side, and a lever pivotally connected to said clamping member at the opposite side of said support, and having an arm adapted to be forced against said opposite side of said support to thereby move the pivotal connection between said lever and said member away from said opposite side of said support and draw said clamping member toward said one side of said support, whereby said clamping member may be caused to hold a portion of a bag against one side of said support while said lever arm holds another bag portion against said opposite side of said support.

2. In a bag holding device, the combination of an internal bag support, a clamping member adapted to engage said support at one side, a lever pivotally connected to said clamping member at the opposite side of said support, and having an arm adapted to be forced against said opposite side of

said support to thereby move the pivotal connection between said lever and said member away from said opposite side of said support and draw said clamping member toward said one side of said support, whereby said clamping member may be caused to hold a portion of a bag against one side of said support while said lever arm holds another bag portion against said opposite side of said support, and means tending to hold said clamping member away from said one side of said support.

3. In a bag holding device, the combination of an annular internal bag support, a stiff elongated ring surrounding said support, and a lever pivoted to said ring at one end and adapted to engage the adjacent side of said support and thereby draw the opposite end of the ring into engagement with the corresponding side of said support, to simultaneously move the pivotal connection between said lever and ring away from the adjacent side of said support.

4. In a bag holding device, the combination of an annular internal bag support, a stiff elongated ring surrounding said support, and a lever pivoted to said ring at one end and adapted to engage the adjacent side of said support and thereby draw the opposite end of the ring into engagement with the corresponding side of said support, and means tending to hold the said opposite end of said ring away from said support.

5. In a bag holding device, the combination of an annular internal bag support, an elongated ring surrounding said support, a lever pivoted to said ring at one end and adapted to engage the adjacent side of said support and thereby draw the opposite end of the ring into engagement with the corresponding side of said support, and swinging links by which said ring is supported from said support.

6. In a bag holding device, the combination of an annular internal bag support, an elongated ring surrounding said support, a lever pivoted to said ring at one end and adapted to engage the adjacent side of said support and thereby draw the opposite end of the ring into engagement with the corresponding side of said support, swinging links by which said ring is supported from said support, and a spring tending to hold said ring out of said engagement.

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Witnesses:

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JOHN BRUNNER.