

J. B. SIMMONS & F. W. BOYER.
BAG HOLDING AND FILLING DEVICE.
APPLICATION FILED JULY 28, 1913.

1,088,633.

Patented Feb. 24, 1914.

FIG. 1

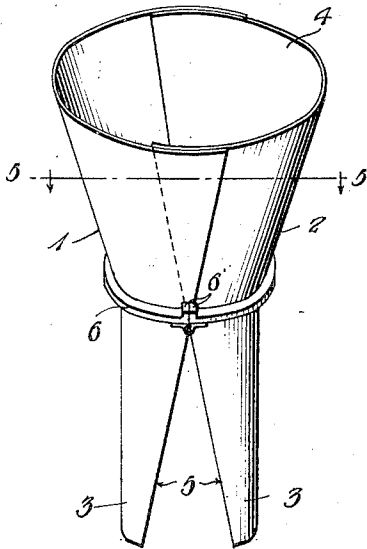


FIG. 2

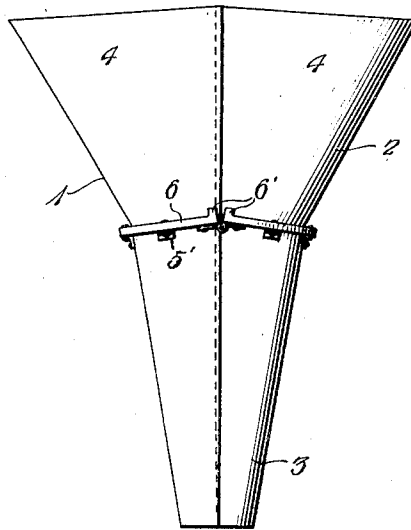


FIG. 3

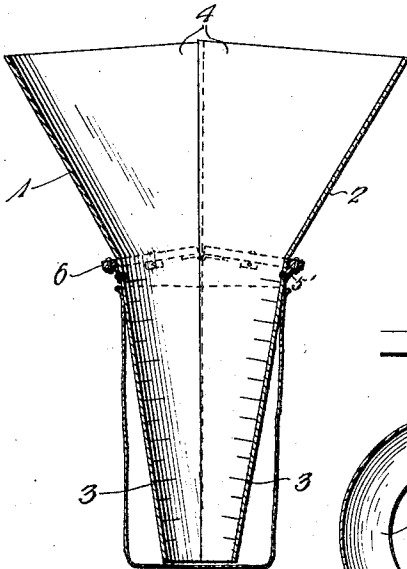


FIG. 4

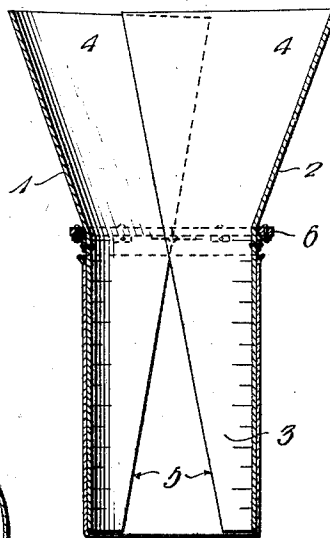
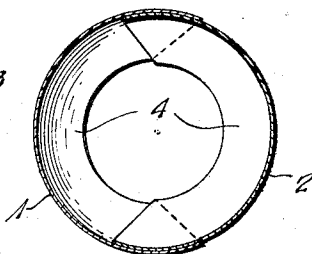


FIG. 5



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UNITED STATES PATENT OFFICE.

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BAG HOLDING AND FILLING DEVICE.

1,088,633.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that we, JAMES B. SIMMONS and FRANK W. BOYER, citizens of the United States, residing at Wadsworth, in the county of Medina and State of Ohio, have invented certain new and useful Improvements in Bag Holding and Filling Devices; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in bag holding and filling devices.

One object of the invention is to provide a device of this character by means of which a bag may be supported and held open to permit the same to be readily filled by one person without danger of tearing the bag when the latter is constructed of paper.

Another object is to provide a bag holder by the use of which a bag may be compactly filled and the contents be measured as the same are placed in the bag.

With these and other objects in view the invention consists of certain novel features of construction and the combination and arrangement of parts as will be more fully described and claimed.

In the accompanying drawings: Figure 1 is a perspective view of our improved bag holder. Fig. 2 is a side view thereof with the parts in an inoperative position as when inserted in a bag and before any of the contents have been placed therein. Fig. 3 is a central vertical sectional view of the device engaged with a bag and showing the parts in an inoperative position or before any of the contents have been placed in the bag. Fig. 4 is a similar view showing the parts expanded for supporting the sides of the bag and holding the latter open to receive the contents placed therein. Fig. 5 is a horizontal sectional view taken on the line 5—5 of Fig. 1.

Our improved bag holding and filling device comprises two similarly constructed sections 1 and 2 each of which has a substantially semi-cylindrical shaped lower portion 3 which may be of any suitable size and length and which are adapted to be inserted into the bag to be filled, said bag engaging portions 3 preferably corresponding to the length of the bag and which preferably have a combined circumference substantially the same as the circumference of the bag.

On the upper ends of the bag engaging portions 3 are outwardly flared extensions 4 which together form a funnel shaped mouth of sufficient size to readily receive the material which is shoveled or otherwise placed therein and directed thereby into the bag between the lower bag engaging portions 3. The section 1 is preferably slightly larger than and fits over or overlaps the edges of the section 2 as clearly shown in Fig. 5 of the drawings. The inner edges of the bag engaging portions 3 are preferably formed on an angle from the upper ends of said portions to the lower ends thereof as shown at 5 whereby when the sections 1 and 2 are in operative engagement with a bag, wedge shape discharge openings will be formed at the opposite side of the device to permit the contents placed therein to fill into the corners of the bag as will be readily understood. The sections 1 and 2 of the device are connected and held in operative engagement by a ring or band 6 which is also formed into semi-circular sections, the ends of which are hingedly connected to permit the outer portions of the ring to swing upwardly and downwardly or inwardly and outwardly when the sections of the device are brought to operative and inoperative positions. The sections 1 and 2 of the holding and filling device are secured to the semi-circular sections of the ring 6, preferably by angle iron bars or corner braces 5' by means of which a strong rigid connection is formed between these parts.

In order to limit the upward swinging movement of the ring sections 6 and to provide a stop which will hold the sections 1 and 2 in operative position when open in a bag we provide a pair of stop lugs 6' one of which is secured to one end of each section of the ring 6 whereby when said sections of the ring are swung outwardly and upwardly to a horizontal position said lugs will be brought into engagement thus stopping a further upward movement of the ring sections and a further expansion or opening movement of the lower bag engaging portions 3 of the device. By thus limiting or stopping the opening movement of the bag engaging ends of the device, the said ends are prevented from being expanded so far as to tear or burst the bag with which they are engaged.

If desired we may provide one or both sections of the device with a graduated scale

of measurement, said scale preferably being placed on the inner surface of the sections and beginning near the lower end of the sections and extending upwardly to any desired distance so that by observing the scale the quantity of material placed in the bag and the holding and filling device will be readily indicated and the amount of the material thus readily determined.

10 In the operation of the device the upper flared or funnel shaped ends of the sections 1 and 2 are spread apart or expanded thus bringing the lower bag engaging members thereof into a closed and overlapped
15 position as is clearly indicated in Figs. 2 and 3 of the drawings. With the parts in this position the device is inserted into a bag after which the first shovel or scoop full of material thrown into the funnel shaped
20 upper end of the device will force the lower bag engaging members apart and into firm engagement with the inner sides of the bag thus expanding the latter and holding the same in an expanded or operative position
25 for supporting the bag and holding the sides thereof open while the contents are being placed therein.

From the foregoing description taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion and the minor details of construction may
35 be resorted to without departing from the principle or sacrificing any of the advantages of the claimed invention.

Having thus described the invention what we claim is:

40 1. In a bag holding and filling device, a plurality of sections, each of which comprises a bag engaging member and a flared mouth forming member, one of said sections having its edges overlapping the edges of
45 the other section, a ring consisting of hinged section, one of which is secured to each of the sections of the device, whereby said sections are hingedly connected to permit the lower portions thereof to be brought
50 together for insertion into a bag and to be

expanded for engagement with the sides of the bag, whereby the latter are supported and held in open position.

2. A bag holding and filling device comprising a plurality of sections each of which
55 consists of a bag engaging portion and a mouth portion, said bag engaging portions having their edges inclined inwardly from their upper toward their lower ends to form discharge openings when the device is in
60 operative position, a supporting ring formed of hingedly connected sections, one of which is secured to each of the sections of the device whereby the latter are hingedly connected to permit the bag engaging portions
65 to be contracted or brought together for insertion into a bag and expanded into engagement with the sides of the bag to support and hold the latter in an open position.

3. A bag holding and filling device comprising a plurality of hingedly connected
70 sections each of which consists of the bag engaging and expanding portion, and a flared mouth forming portion, the side edges of said sections being inclined downwardly and
75 inwardly from the upper edges of the mouth portions to the lower edges of the bag engaging portions when in collapsed condition, and means whereby said sections of the device are hingedly connected at the junction of the
80 mouth and bag engaging portions.

4. A bag holding and filling device comprising two longitudinally separable sections the upper ends of which are flared, a device for pivotally connecting said sections at the
85 junction of the flared upper ends with the bag engaging portions thereof comprising semi-circular members hingedly connected at their ends and having laterally extending stops at said ends for limiting the opening movement of said sections.

In testimony whereof we have hereunto set our hands in presence of two subscribing witnesses.

JAMES B. SIMMONS.
FRANK W. BOYER.

Witnesses:

W. F. WAX,
T. B. YODER.