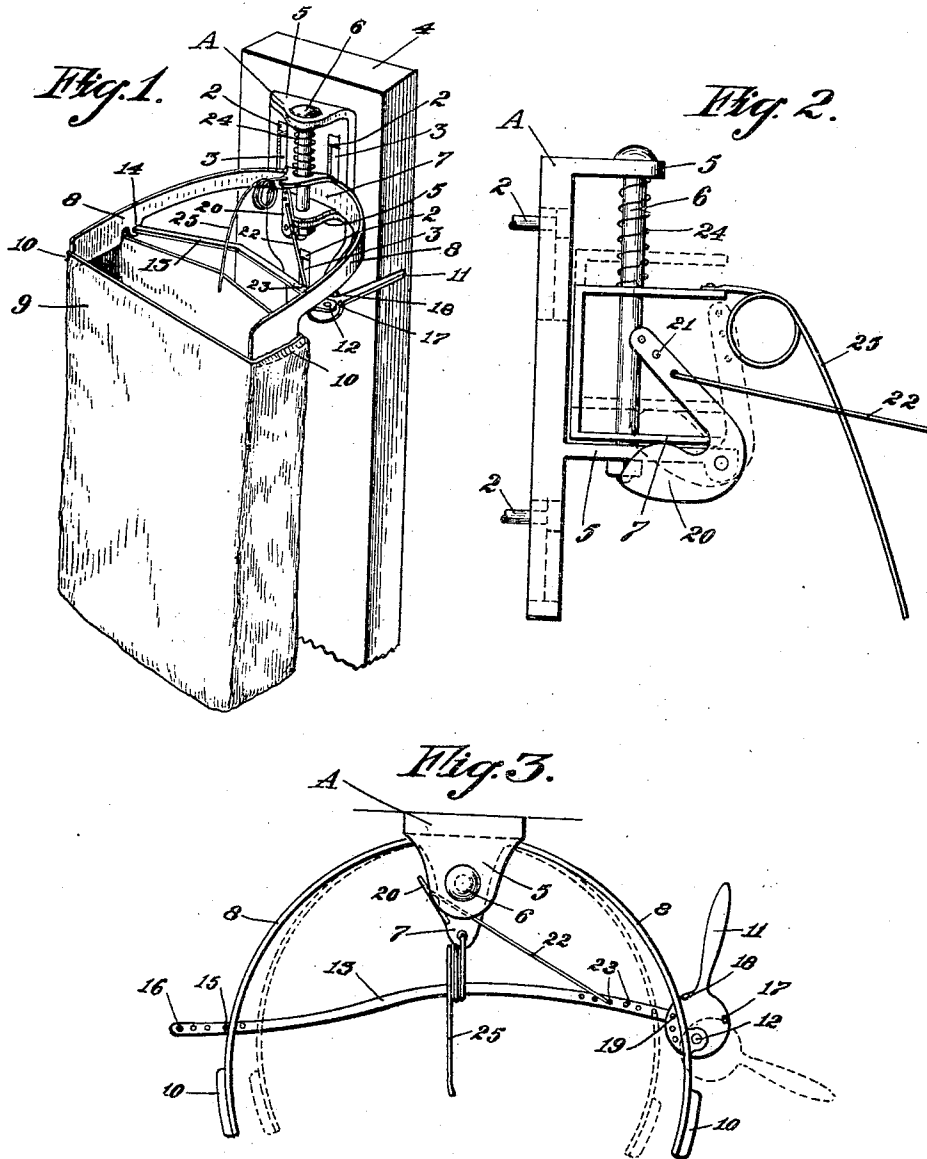


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BAG HOLDER.

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945,645.

Patented Jan. 4, 1910.



WITNESSES;

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BAG-HOLDER.

945,645.

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To all whom it may concern:

Be it known that I, FREDERICK C. VONDERAHE, JR., citizen of the United States, residing at Oregon City, in the county of Clackamas and State of Oregon, have invented new and useful Improvements in Bag-Holders, of which the following is a specification.

This invention relates to devices for holding grain bags while being filled.

The object of the invention is to provide a simple, practical, cheap bag holder which will hold and not mar the bag, which will offer a good opening at the mouth of the bag through which the bag may be filled, which a man can operate with one hand, and which will have means for elevating it out of the way of the filled bag when the latter is released.

The invention consists of the parts and the construction and combination of parts as hereinafter more fully described and claimed, having reference to the accompanying drawings, in which—

Figure 1 is a perspective view of the invention as applied. Fig. 2 is an enlarged detailed view in side elevation of the bell-crank showing the manner of lifting the holder. Fig. 3 is an enlarged plan view.

A represents a bracket of suitable size, shape and material adapted to be secured to any wall, post, tree, platform, scales, or other suitable support, by suitable means, as the three bolts 2 passing through the longitudinal slots 3 and into the support behind, and which support is here represented at 4. The bracket has a pair of upper and lower horizontal arms 5 through which passes a bolt 6.

7 is a U-shaped frame having spring arms 8 for holding the bag, which latter is represented at 9. The U-frame is slidably mounted on the bolt 6, so as to have a limited up and down movement thereon between the arms 5, while the bracket engages the back of the frame 7 to prevent its rocking sidewise. At the forward end of the spring arms 8 are two outwardly extending, curved flanges 10 over which the mouth of the bag is adapted to be engaged and distended when the arms are spread apart. These spring arms are sufficiently stiff to hold the bag open and upright while the bag is being filled after it is caught over the flanges 10, and the latter are of sufficient

length so as to open the bag with a broad, rather than a round, opening, such a shaped opening giving easy access to the mouth of the bag in filling the latter with a shovel, bushel measure, bucket, or other means. These flanges 10 are smooth and of a gradual curve, so as not to wear or tear the bag as hooks would do, and they allow the sack or bag to slide to its proper place when the spring arms 8 are spread apart. The extension and contraction of these arms may be accomplished in a variety of ways. As here shown, I have fulcrumed a lever 11 at a point 12 on one of the arms, and have connected this lever with the opposite arm by an adjustable curved rod or link 13; the rod 13 being pivoted to lever 11 eccentric to fulcrum 12, while the other end of the rod passes through a slot in a projection 14 on the opposite spring arm 8, and a pin or the like 15 is passed down through one or other of the perforations 16 in the connecting rod 13. By shifting the pin 15 to one or other of the holes 16 the holder is adapted to bags of different sizes. A further adaptation of the device to bags of different sizes is afforded by the bolts 2 and slots 3 in the bracket A. Normally the action of the spring arms 8 tends to spring them apart and to pull the lever around so that the stop 17 on the lever engages its adjacent arm 8. By turning the lever on its pivot 12 as a fulcrum, the connecting rod 13 operates to draw the two spring arms together; the limit of movement of the hand lever 11 in this direction being determined by a stop 18 which engages its adjacent arm 8 just after the pivotal connection 19 of rod 13 with lever 11 passes beyond the center 12, so that with the lever in the position represented by dotted lines, Fig. 3, the spring arms will be drawn inwardly so as to release the bag.

In order to lift the holder upwardly and at the time the filled bag is released so that the bag can be easily removed, I have provided the following connections: A bell-crank lever 20 is fulcrumed on the lower arm 5 of the bracket A, with one end of the lever engaging the under side of the U-frame 7. The other member of the bell-crank 20 is perforated, as shown at 21, to provide an adjustable connection for one end of the connecting rod 22, the other end of the connecting rod being provided with means adapted

to engage one or other of the perforations 23 in the connecting rod 13. Consequently it is seen that by rocking the lever 11 so as to draw in the spring arms 8 of the holder the bell-crank or lifting device 20 is rocked on its pivot, causing it to act on the frame and lift it against the tension of a spring 24 which surrounds the bolt 6 and bears down on the U-frame, tending to press it always normally downward to its seat.

In operation, the device is attached to any suitable support and the bracket A adjusted by means of the bolts 2 and slots 3, to adapt the holder to the length of the bags to be handled, and also the normal distension of the spring arms 8 is adjusted by means of the pin 15 and perforations 16 in the rod 13. Also, the connecting rod 22 is adjusted in the holes 21—23, according to the amount that it is desired to lift the holder each time the filled bag is released. These adjustments being made, the lever 11 is turned in the position shown in dotted lines, Fig. 3, so as to pull the spring arms 8 of the holder together, and allow the mouth of the bag to be engaged over the flanges 10. A spring claw or holder 25 carried by the frame 7 is engaged with the inner edge of the bag, so as to hold the mouth of the bag open and give plenty of room for the filling operation. The lever 11 is then rocked in the opposite direction, carrying it into the full line position of Fig. 3, and allowing the spring arms 8 of the holder to expand and sustain the bag while it is being filled; the height of the holder usually being adjusted so that the bottom of the bag will just touch the floor and no unnecessary strain or weight will come on the holder. In so hanging the bag on the holder, the operator simply engages one side of the top of the sack over one of the flanges 10, then over the opposite one, and holds it there with one hand while he releases the lever 11 with the other. When the bag is filled, the operator pulls the lever 11 around again to draw the spring arms 8 inwardly. This movement of the lever 11 performs the double function, not only of releasing the bag, but of raising the holder, by reason of the connections 22 and 20, out of interference with the filled bag underneath; these operations being performed by a single sweep of the lever 11.

A device of this sort is very simple to operate, can be made in any desired size or style, and can be applied wherever desired; there are no parts, in the shape of hooks or roughened members, to wear or tear the sack, and there is nothing in front of or over the opening of the sack to interfere with the dumping of material into the bag. With this device the sack may be filled clear to the top and still the device will perform its duty perfectly by the proper manipulation of the single lever 11. The device is

also constructed with a wide mouth, rather than a small round one, which makes it more convenient for filling.

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

1. A bag holder having normally expanded resilient means for supporting a bag, means for contracting the bag supporting means and releasing the bag and coordinately lifting the holder, said last-named means including a single lever for effecting both the release of the bag and the elevation of the holder.

2. A bag holder comprising normally expanded jaw members of resilient material movable toward and from each other to expand and hold a bag, said holder having a vertical movement, and a lever and connections therefrom for moving the bag in a vertical direction simultaneously with the outward and inward movement of said jaws.

3. A bag holder having resilient members forming means for holding a bag, said members being normally expansible and said holder having a vertical movement, and a unitary device for simultaneously contracting said members and raising the holder.

4. A bag holder comprising a pair of normally expanded bag gripping members formed of resilient material and movable toward and from each other, said gripping members having outwardly turned flanges over which the bag is held, a suitable support for said gripping members, and means for simultaneously raising the gripping members and moving them inwardly to release the bag.

5. In a bag holder, the combination of a pair of spring arms having outwardly turned flanges, and a lever pivoted on one arm and having a connection with the other arm whereby on the oscillation of the lever the arms are moved toward and from each other.

6. In a bag holder, the combination of a pair of normally expanded spring arms having outwardly turned flanges, a lever pivoted on one arm and having a connection with the other arm whereby on the oscillation of the lever the arms are moved toward and from each other, said arms mounted on a vertically movable support, and means operated from the lever for raising and lowering said support.

7. A bag holder comprising a U-shaped frame having spring arms with outwardly-turned bag holding flanges, and a lever mounted on one arm and connected with the other for moving the arms in unison.

8. A bag holder comprising a U-shaped frame having spring arms with outwardly-turned bag holding flanges, a lever mounted on one arm and connected with the other for moving the arms in unison, a support for

said frame, said frame having a limited vertical movement thereon, and connections with said lever for elevating the frame simultaneously with the drawing together of the spring arms.

5 9. A bag holder comprising a U-shaped frame having spring arms with outwardly-turned bag holding flanges, a lever mounted on one arm and connected with the other for
10 moving the arms in unison, a vertically supported guide on which the frame is slidable, and connections between the lever and said frame to raise the latter simultaneously with
15 the contraction of said spring arms by the lever.

10 10. A bag holder comprising a U-shaped frame having spring arms with outwardly-turned bag holding flanges, a lever mounted on one arm and connected with the other for
20 moving the arms in unison, a vertically supported guide on which the frame is slidable, connections between the lever and said frame

to raise the latter simultaneously with the contraction of said spring arms by the lever, and means for adapting the holder for bags
25 of different lengths and widths.

11. A bag holder comprising a U-shaped frame having spring arms with outwardly-turned bag holding flanges, a lever mounted on one arm and connected with the other for
30 moving the arms in unison, an adjustably supported bracket having a bolt on which said frame is slidable, a spring bearing on the frame to press it down normally, and
35 means connected with said lever to raise the frame when the lever is rocked to contract the arms and release the bag.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

FREDERICK C VONDERAHE, JR.

Witnesses:

BERTHA LONG,
JOS. E. HEDGES.