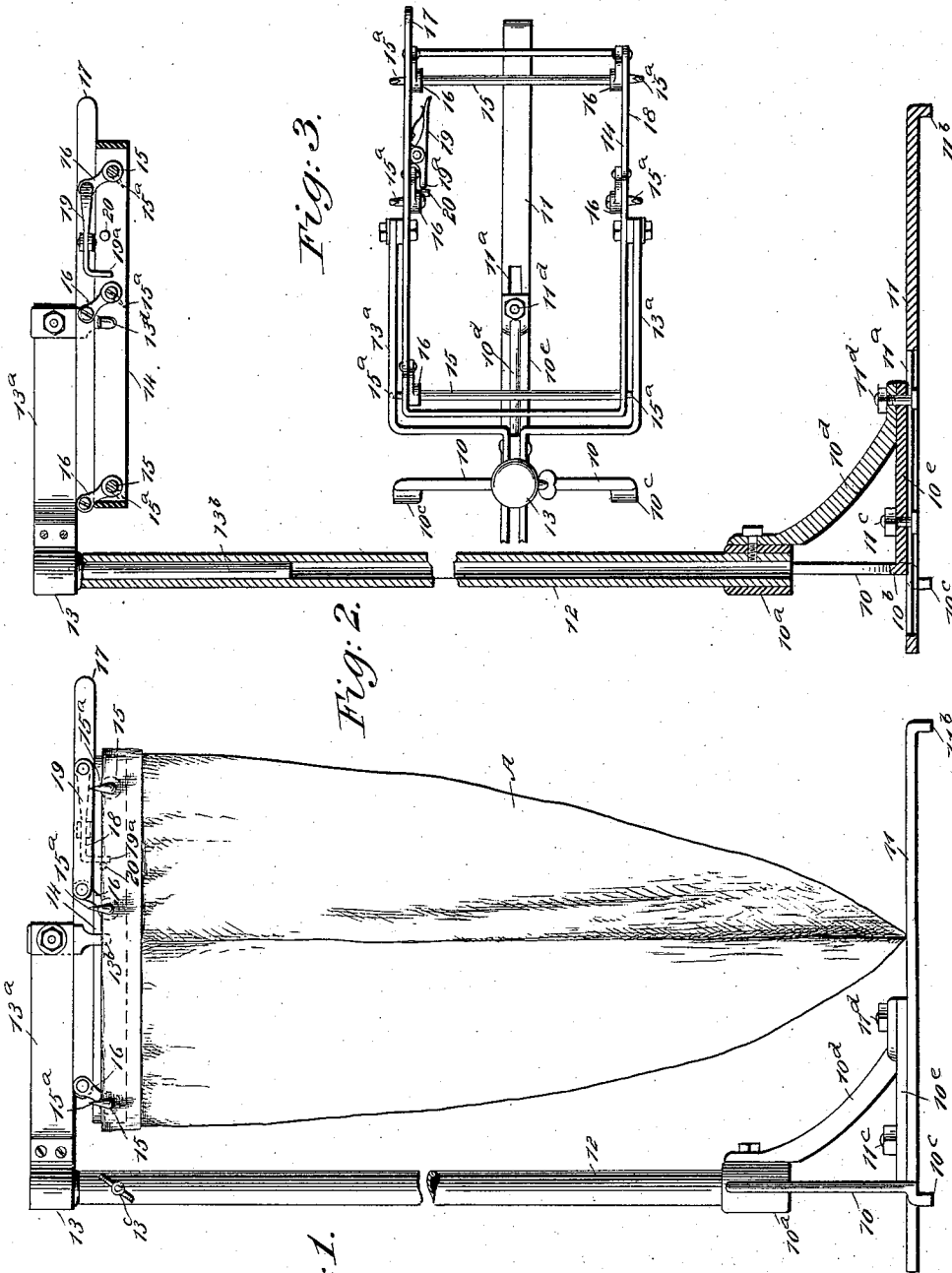


(No Model.)

W. H. BOYD.
BAG HOLDER.

No. 564,143.

Patented July 14, 1896.



WITNESSES:
John A. Rennie
Wm. P. Patton

Fig. 1.

INVENTOR
W. H. Boyd
BY
Munn & Co
ATTORNEYS.

UNITED STATES PATENT OFFICE.

WILLIAM H. BOYD, OF GAINESVILLE, FLORIDA.

BAG-HOLDER.

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To all whom it may concern:

Be it known that I, WILLIAM H. BOYD, of Gainesville, in the county of Alachua and State of Florida, have invented a new and Improved Bag-Holder, of which the following is a full, clear, and exact description.

This invention relates to an improved device for holding bags, which are to be filled, in an upright position, with the mouth of the bag distended so as to conveniently receive material.

The object of the invention is to provide a novel, simple device of the indicated character, which may to advantage be used in connection with platform-scales, and which will hold the bag suspended at its mouth that is fully opened for introduction of material, the device also affording convenient means for the quick release of the filled bag when desired.

The invention consists in the construction and combination of parts, as hereinafter described, and indicated in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a side view of the improved bag-holder and a bag hung thereon, the standard of the device being shown broken. Fig. 2 is a partly-sectional side elevation of the device, showing the parts adjusted to release a bag; and Fig. 3 is a plan view of the bag-holder broken away at one end of its lower portion, the working parts being adjusted as indicated in Fig. 1.

As the improved bag-holder is preferably employed to hold a bag on the platform of scales, with its mouth distended and the bag pendant, so that a predetermined weight of material may be placed in the bag, an adjustable frame is provided as a base for the other parts of the improvement to enable the ready engagement of the base with the platform of the scales, and said base is composed of the following-described parts.

A bracket-stand comprising two legs 10, which project laterally from a hub 10^a, are portions of the base, these legs being joined together near their lower ends by a cross-bar 10^b, and a hook-like toe 10^c is rearwardly and downwardly projected from the lower portion

of each leg 10, as represented in Fig. 3. A third leg 10^d is provided for the bracket-stand, which is secured at its upper end on the hub 10^a, and thence projects forwardly and downwardly to seat its lower end on the horizontal brace-piece 10^e, that projects toward the front from the center of the cross-bar 10^b, the lower extremity of the leg 10^d being provided with a flat pad of such area as will adapt said pad to be bolted to the outer end of the brace-piece, as indicated in Fig. 2.

The composite base of the bag-holder further consists of a flat slide-bar 11, which has a longitudinal slot 11^a formed in it from a point near the rear end toward the front extremity, and, as shown in Figs. 1 and 2, a depending hook or toe 11^b is formed on the front end of the slide-bar.

It will be seen that the slide-bar 11, which is attached by bolts 11^c and 11^d to the brace-piece 10^e, may receive sliding adjustment to regulate its projection in front of the bracket-stand proper, if the nuts on said bolts are slightly loosened and afterward secured, and the toes 10^c on the legs 10 and toe 11^b may be set at such a distance apart as to embrace the rear and front edges of the platform of scales, and prevent the base of the bag-holder from shifting thereon.

The hollow hub 10^a is designed to receive the lower end of the standard 12, which is preferably of tubular form, and may be secured in the hub by the same screw that serves to clamp the upper end of the leg 10^d to the hub, as shown in Fig. 2.

The standard 12 is afforded sufficient height, when in place on the base, for the support of the working parts of the improved bag-holder, and the latter are connected with the standard by the furcated arm 13, that has a depending stem 13^b, which slides in the hollow standard, and is secured at a desired elevation therein by a set-screw 13^c, which projects in the same direction at a right angle to the stem 13^b.

A rectangular frame 14 is hung from the outer ends of the limbs 13^a, preferably as shown, two brackets having depending hooks being employed, which hooks enter perforations of the side bars of the frame 14, made near or at their longitudinal centers, one of said hooks being shown at 13^d in Fig. 2.

The frame 14 is of such dimensions as will adapt it to enter a large sack that is to be suspended therefrom, and the points of hooked or pivotal engagement of the frame with the limbs 13^a should be at or near the longitudinal centers of the side pieces of said frame, so that it will be pivotally supported in a level position.

Two transverse rock-shafts 15 are journaled at their ends in the side bars of the frame 14, near the front and rear ends of the same, and project through said bars, having hooks 15^a formed on said projecting ends.

One of the rock-shafts 15 nearest the front end of the frame 14 has two rock-arms 16 mounted and secured on its ends inside of said frame, near the sides of the same, and the said arms are so disposed on the shaft that they project in the same direction, and incline forwardly a proper degree when the hooks on the ends of the shafts are upright, as represented clearly in Fig. 3.

A single rock-arm 16 is secured on the rear rock-shaft 15 at the inner side wall of the frame 14, so as to project upward and forward parallel with the arms on the front shaft, and a pusher-bar 17 is pivoted to the upper ends of the front and rear rock-arms at one side of the frame 14.

Intermediately of the rock-shafts 15 two rock-arms 16, similar to the other rock-arms, are supported to vibrate on the side bars of the frame 14, at opposite points, by short lateral journals or other pivotal supports, and from each of said pivots a hook 15^a is projected parallel with the other hooks 15^a.

The rock-arm 16, intermediate of the rock-arms on the front and rear shafts 15, is pivoted at its upper end on the pusher-bar 17.

It will be seen that the hooks 15^a on the outer sides of the frame 14 may be rocked to project their points all in an upward direction if the bar 17 is drawn outward a short distance, and if said bar is pushed inward a sufficient distance all the hooks will be inclined downward, the first position of said hooks being shown in Figs. 1 and 3, and their downward inclination is indicated by dotted lines in Fig. 2.

As it is essential that the hooks 15^a be secured from rocking when in service, this is effected by providing a spring-pressed detent-dog 19, that is pivoted to rock on the inner side of one longitudinal bar of the frame 14. Said dog has a depending limb 19^a, that will have contact with a stud 20, which projects from the frame-bar when the pusher-bar is drawn outward to elevate the hooks, and the dog that has been manipulated to permit its limb to clear the stud is released so as to rock its limb 19^a in the path of said stud for contact therewith, as clearly shown in Fig. 3.

In operation, a sack or bag A is hung on the frame 14 by an engagement of its edge at the open end with the hooks 15^a, when the latter are in a vertical position, as clearly shown in Fig. 1, which will hold the mouth

of the sack widely distended for the easy introduction of material that is to be inclosed in the bag. If the bag-holder is placed on the platform of scales, the bag may be held suspended over but not in contact with the platform, which receives the weight of the material introduced within the sack or bag by the contact of the base portion of the improved bag-holder with said platform. When the correct weight of material is placed in the sack A, it may be dropped onto the platform of the scales, or upon a wheeled truck that may be seated thereon, if the pusher-bar 17 is shoved in so as to rock the hooks 15^a downwardly, the dog 19 being manipulated to permit such an adjustment, and after release of the sack, which is obviously effected by weight of contained material, the mouth of the bag can be secured to close it by any preferred means.

If desired, smaller sacks or bags may be hung on the frame 14 by an engagement with four hooks, two at each side of the frame. In this case the frame will not completely enter the suspended bag, but marginal portions of the latter are drawn up on the exterior of the frame 14, at each side, so as to permit the hooked engagement of the bag or sack with the frame at opposite points.

The peculiar construction of the improved bag-holder adapts it for the rapid filling of a large number of sacks or bags, which are used to produce merchantable packages of material, such as flour, grain, fertilizers, or other material that is prepared for sale by packing in bags, each containing a predetermined weight, which may be the same in each sack or bag. As the release of each bag when filled may be at a point over a truck, the dropped bag can be rapidly transported away from the scales (not shown) and the operation of filling and removing sacks or bags of material may be expeditiously conducted with the improvement.

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

1. In a bag-holder, the combination with a base, and a standard thereon, of a furcated arm on the upper part of the standard, a frame suspended from the outer ends of the members of said arm, the said frame at or near the longitudinal centers of its side pieces having pivotal engagement with the said members, whereby it will be pivotally supported in a level position, a device on said frame having rocking hooks adapted for engagement with a bag at its mouth, and means for rocking said hooks to release the bag, substantially as described.

2. In a bag-holder, the combination with a base, and a standard thereon, of a furcated arm at the upper end of said standard, the limbs of which arm are projected parallel and in the same direction, a frame hung from said limbs near its center, a plurality of rocking arms pivoted within the frame at intervals,

hooks on the pivots of said arms and projected from opposite sides of the frame, and a device for rocking the hooks at the same time, so as to dispose them upright or downwardly inclined, substantially as described.

3. In a bag-holder, the combination with a suitable support, of a furcated arm, a rectangular frame hung on said arm, transverse shafts journaled in the frame, rock-arms on said shafts and within the frame, rock-arms pivoted on sides of the frame intermediate of the first-named shafts, hooks on the ends of the shafts and on the pivots of the intermediate arms, and connections for the ends of the rock-arms, whereby they may be simultaneously rocked, substantially as described.

4. In a bag-holder, the combination with a suitable support, of a furcated arm, a rectangular frame hung from said arm, transverse shafts journaled in the frame near its ends, rock-arms secured on said shafts within the frame, hooks on the exterior of the frame and projecting from the shafts, intermediate rock-arms pivoted on the sides of the frame and having hooks on the ends of their pivots exterior of the frame, all said rock-arms inclining in the same direction, a pusher-bar pivoted on the rock-arms at one side of the frame, and a link-plate pivoted on the ends of the rock-arms at the opposite side of the frame, substantially as described.

5. In a bag-holder, the combination with a suitable support, of a furcated arm, a rectangular frame hung on said arm, a plurality of hooks pivoted to rock on the opposite sides of the frame for engagement with the mouth of a bag, rock-arms connected with the said

hooks, a device for simultaneously rocking the hooks into an upright or inclined position, and a locking-dog adapted to retain the hooks in upright position, substantially as described.

6. In a bag-holder, substantially as described, the adjustable base therefor comprising a bracket-stand having two laterally-projecting legs provided with depending hooks, a forwardly-projecting leg, a horizontally-arranged brace-piece connecting the said legs, and a slide-bar adjustable longitudinally on the said brace-piece and having a depending toe, substantially as specified.

7. In a bag-holder, the adjustable base therefor comprising a bracket-stand having a hub portion, two legs projecting laterally from said hub and connected near their lower ends by a cross-bar, each of the said legs having a hook-like toe projecting rearwardly and downwardly from the lower portion thereof and adapted to engage the rear edge of a scale-platform, a horizontal brace-piece projecting forwardly from the center of the said cross-bar, a third leg secured at its upper end on the hub and at its lower end to the horizontal brace-piece, and a slide-bar longitudinally adjustable on the said horizontal brace-piece and having a depending toe at its front end adapted to engage the front edge of a scale-platform, as and for the purpose specified.

WILLIAM H. BOYD.

Witnesses:

WALTER A. SIGSBEE,
E. E. CONNOR.