

No. 651,756.

Patented June 12, 1900.

W. J. HARNOIS.
BAG HOLDER.

(Application filed June 14, 1899.)

(No Model.)

Fig. 2.

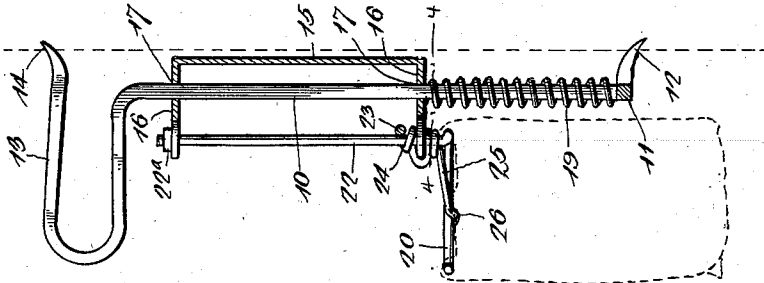


Fig. 3.

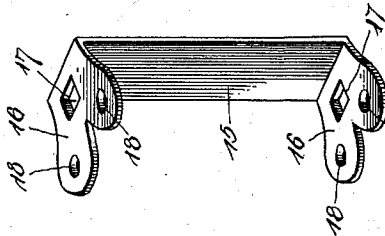


Fig. 4.

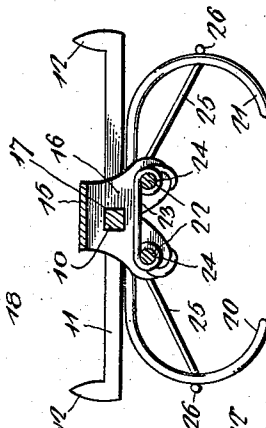
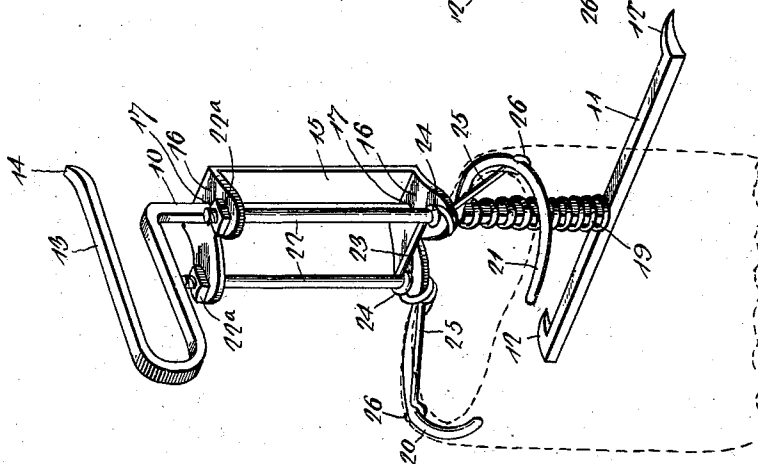


Fig. 1.



Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM J. HARNOIS, OF JAMES, SOUTH DAKOTA.

BAG-HOLDER.

SPECIFICATION forming part of Letters Patent No. 651,756, dated June 12, 1900.

Application filed June 14, 1899. Serial No. 720,551. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. HARNOIS, a citizen of the United States, residing at James, in the county of Brown and State of South Dakota, have invented a new and useful Bag-Holder, of which the following is a specification.

My invention relates to improvements in bag-holders; and one object in view is to provide improved means by which the entire device may be fastened securely in place on a wall or other surface.

A further object is to provide means which will allow the bag when partly filled to travel in a downward direction, so as to have its lower end rest upon the floor, while at the same time holding the bag in an upright position against collapsing, and, furthermore, to provide means for holding open the mouth of the bag, said means being held yieldably in place, so as to be adjusted in a manner to free the bag-mouth.

With these ends in view the invention consists in the novel combination and arrangement of parts, which will be hereinafter fully described and claimed.

In the drawings, Figure 1 is a perspective view of my bag-holder, illustrating by dotted lines a bag fitted to the yieldable spreading-arms. Fig. 2 is a vertical sectional elevation through the bag-holder on a plane at one side of the supporting-standard. Fig. 3 is a detailed perspective view of the slidable carrier or bracket. Fig. 4 is a transverse section of Fig. 2, taken on a line between the upper and lower plates of the carrier or bracket.

The same numerals of reference are used to indicate like and corresponding parts in each of the several figures of the drawings.

In carrying my invention into practice I resort to the employment of a supporting standard or spindle 10, which is adapted to slidably confine a carrier or bracket capable of a limited vertical travel on the standard, and said standard is peculiarly fashioned to hold itself on a wall or other surface, preferably without resorting to the employment of extraneous fastening means. The lower part of the standard is formed with a transverse foot-bar 11, which is disposed at right angles to said standard to extend from opposite sides thereof, said foot-bar being made either in-

tegral with the standard or united in a substantial and permanent manner thereto. The ends of this foot-bar are provided with prongs 12, which extend outwardly from the foot-bar and are tapered to produce the penetrating-points, as more clearly represented by Fig. 2, said prongs adapted to be forced by the blows of a hammer or other implement in a wall or other surface. At this upper end the supporting standard or spindle is formed into a spring-bow 13, which extends in a forward direction from the front side of the standard and is curved upon itself, as shown by Figs. 1 and 2, the free extremity of said bow extending rearwardly beyond the plane of the vertical face of the standard, so as to terminate in the tapered prong 14. The prongs 12 at the ends of the horizontal foot-bar incline in a downward direction, while the prong 14 on the free extremity of the spring-bow inclines in an upward direction, said spring-bow being disposed in the vertical plane of the standard or spindle, so as to lie centrally with relation to the foot-bar, whereby the prong 14 is in a plane midway between the prongs 12. The standard or spindle is square or other polygonal form in cross-section, as shown by Fig. 4, to serve as a guide for the slidable carrier or bracket, the latter being indicated very clearly by Fig. 3. Said carrier or bracket is formed, preferably, in a single piece of metal, and it consists of a vertically-disposed body 15 and the end plates 16, the latter extending at right angles to the body and disposed parallel to each other. Said end plates are provided with polygonal openings 17, adapted to receive the angular standard or spindle, so as to permit the carrier or bracket to fit slidably thereon, and said end plates are furthermore provided with two pairs of journal-openings 18, the openings in each plate being disposed in planes on opposite sides of the polygonal guide-opening 17, while the journal-openings in the two plates are in vertical alinement for the reception of the arbors which carry the spreading-arms.

In practice I prefer to make the spring-bow integral with the standard by bending the latter substantially as shown by Figs. 1 and 2, and the foot-bar 11 is made separate from the lower part of the standard, so that the

slidable bracket or carrier and the cushion-spring 19 may be slipped on the standard, after which the foot-bar should be united or joined with the lower part of the standard.

5 The cushion-spring 19 is shown by Figs. 1 and 2 in the form of a coiled spring slipped loosely on the lower part of the standard for its lower end to rest upon the foot-bar 11, and said spring serves to normally support the slid-
10 able bracket or carrier in an elevated position on the standard 10, the slidable bracket being seated upon the upper end of the coiled spring, as represented more clearly by Fig. 2.

The mouth of the bag is held in an opened
15 or spread condition by the employment of curved spreading-arms 20 21, each of which is provided with an arbor 22. The spreading-arms are curved throughout their length, as shown by Figs. 1 and 4, and the arbors 22 of
20 said arms are passed loosely through the journal-openings 18 of the slidable bracket, these parts being so arranged that the spreading-arms will be curved reversely to each other and lie in substantially the same hori-
25 zontal plane. The arbors for the pair of spreading-arms fit loosely in vertically-aligned openings 18 of the bracket, and at their upper ends said arbors receive the confining-nuts 22*, that rest upon the upper end plate
30 16 of the bracket to confine the spreading-arms against displacement in the bracket. A pressure-spring 23 is employed to normally press the curved arms 20 21 away from each other, and in the embodiment of this part of
35 the invention I have represented a single spring connected operatively to the bracket and to the pair of spreading-arms. This pressure-spring consists of a length of wire, which is looped loosely at 24 around the arbors 22,
40 and said spring-wire is then bent to form the diverging arms 25, the free ends of said spring-arms terminating in keepers 26. It will be observed that the pressure-spring 23 is connected with the bracket through the
45 medium of the arbors which carry the spreading-arms, and the keepers 26 of the spring-arms are fitted around said spreading-arms in a manner to force the pair of arms away from each other.

50 The operation may be described as follows: To apply the device in position for use, it is fastened to a wall, counter, or other surface by embedding the prongs 12 of the foot-bar into the surface of the object against
55 which the bag-holder is fitted, and this may be conveniently effected by driving said prongs 12 into place by the blows of a hammer. The spring-bow 13 is then depressed, and its prong 14 is forced into the surface of
60 the wall or counter, after which the pressure on the spring-bow is removed to allow the bow to recoil, and thereby firmly hold the prong in engagement with the wall or counter. The bag-holder should be supported at
65 a proper height from the floor or other surface, and the coiled cushion-spring 19 supports the carrier or bracket and the spread-

ing-arms at a suitable elevation. To use the device, the bag-mouth is opened and the spreading-arms 20 21 are forced inwardly
70 against the tension of the spring-arms, whereupon the edges of the bag, at the mouth thereof, may be slipped over the spreading-arms. The recoil of the spring 23 forces the spreading-arms away from each other and in a manner
75 to hold open or distend the bag-mouth, thus attaching the bag to the slidable carrier and holding its mouth in a distended condition. The merchandise may be deposited in the bag between the curved spreading-arms, and
80 when the bag is partly filled the weight of its contents depresses the carrier and compresses the cushion-spring, so that the carrier will descend a sufficient distance for the lower end of the bag to rest upon the floor, whereby
85 the entire weight of the load is not imposed upon the bag-holder; but at the same time the cushion-spring offers resistance to the descent of the carrier for the purpose of making the spreading-arms keep the bag in an
90 open condition against collapsing, so that the bag may be entirely filled without imposing undue strain on the holder. The spreading-arms may be forced together for quickly disengaging the mouth of the filled bag from
95 the holder, after which the filled bag should be removed and an empty bag fitted to the holder.

Changes within the scope of the appended claims may be made in the form and proportion of some of the parts while their essential features are retained and the spirit of the invention embodied. Hence I do not desire to be limited to the precise form of all the parts as shown, reserving the right to vary
105 therefrom.

Having thus described the invention, what I claim is—

1. In a bag-holder, a supporting-standard provided with rigid prongs at its lower end, and a yieldable prong at its upper end, adapted to maintain the standard in a fixed position on a wall or other surface, in combination with a carrier, and a bag-spreading device supported by said carrier, substantially
115 as described.

2. In a bag-holder, a supporting-standard provided with a spring-bow terminating in a prong or spur, and also provided with holding-spurs, in combination with a carrier, and
120 a bag-spreading device on said carrier, substantially as described.

3. In a bag-holder, a supporting-standard provided with a foot-bar having the holding-prongs and also provided with a spring-bow which terminates in another prong, in combination with a carrier, and a bag-spreading device on said carrier, substantially as described.
125

4. In a bag-holder, the combination with a standard, of a carrier confined slidably thereon and comprising upper and lower plates, a cushion-spring upon which the carrier is seated, and a bag-spreading device on said car-
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rier comprising arbors pivotally mounted in said plates, and arms fast with the arbors, substantially as described.

5 5. In a bag-holder, the combination with a standard having rigid prongs at its lower end and a yieldable prong at its upper end adapted to maintain the standard on a wall or other surface, of a carrier confined slidably on the standard, spring-actuated spreading-arms
10 mounted pivotally on said carrier, and means for cushioning the carrier against the weight imposed on the spreading-arms, substantially as described.

15 6. In a bag-holder, the combination with an angular standard having rigid prongs at its lower end, and a yieldable prong at its upper end adapted to maintain the standard on a

wall or other surface, a carrier fitted slidably on said standard between the prongs thereof, a cushion-spring seated on the standard and 20 acting against said carrier, yieldable spreading-arms mounted pivotally on the carrier, and a pressure-spring connected to said spreading-arms to travel therewith in the play of the carrier and operating to normally force 25 said arms away from one another, substantially as described.

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

WILLIAM J. HARNOIS.

Witnesses:

N. S. BASOM,

E. MOORE.