Jan. 17, 1933. K. H. MURRAY 1,894,597

BAG HOLDER

Filed May 24, 1930

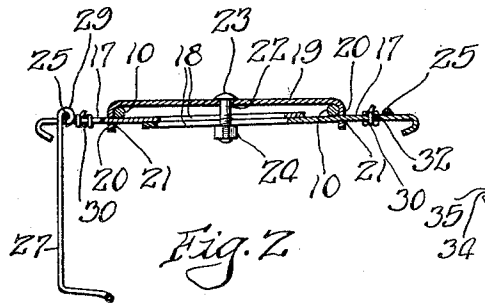


Fig. 2

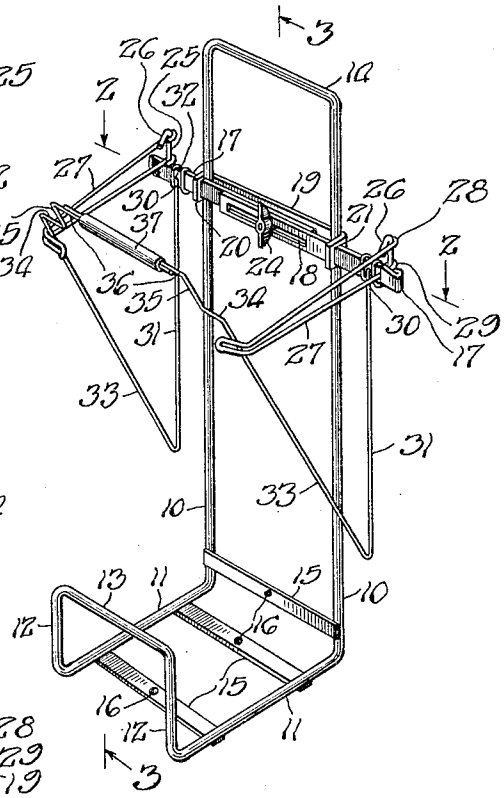


Fig. 1

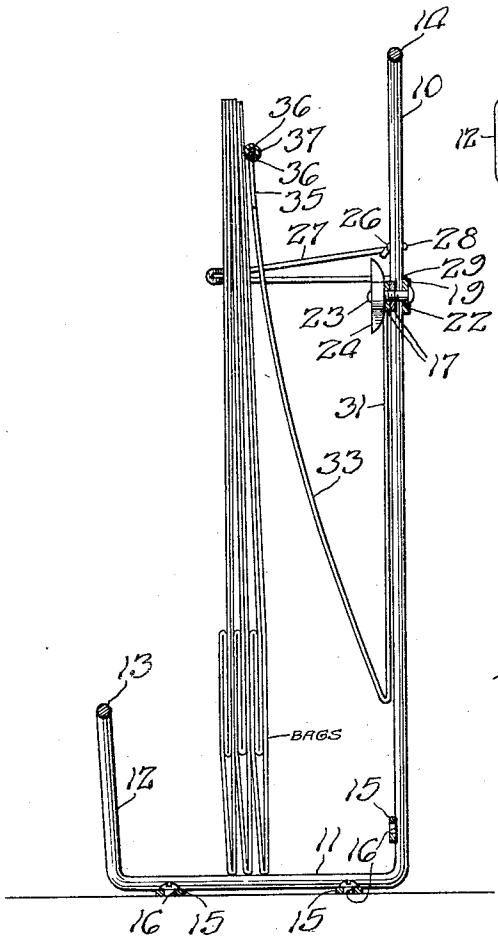


Fig. 3

Inventor:
Kay H. Murray

By Ellis P. Lloyd
Att'y.

Patented Jan. 17, 1933 1,894,597

UNITED STATES PATENT OFFICE

KAY H. MURRAY, OF CHICAGO, ILLINOIS

BAG HOLDER

Application filed May 24, 1930. Serial No. 455,185.

The present invention relates to holding devices and has to do particularly with bag holders.

In the present invention, the novelty resides in structural combination and details and in the adaptability and adjustability of the article.

Included in the objects of the invention, among others, are the following:

An improved structure for holding bags;

A unique arrangement in a holding apparatus adapting it to a wide sphere of adjustments without impairing its efficiency;

A new and novel instrumentality capable of accommodating a wide variety of bags differing in breadth and length, and whether numerous or few in quantity.

These objects, and such other objects as may hereinafter appear, are obtained by the novel construction, unique arrangement, and improved combination of the several elements which constitute the one form of the invention shown in the accompanying drawing, in which:—

Figure 1 is a perspective view of a device embodying the invention;

Figure 2 is a transverse section on the line 2—2 of Figure 1; and

Figure 3 is a vertical section on the line 3—3 of Figure 1.

Like reference characters are used to designate similar parts in the drawing and in the description of the invention hereinafter given.

The several figures in the drawing may be read conjointly. For a frame, the article may have a bent wire structure or comprise some other suitable member which, for the purpose of description, may be divided into parallel back members 10, parallel bottom members 11, parallel front members 12, a transverse member 13 connecting front members 12, and a transverse member 14 connecting the top of said upright back members 10.

Such frame may be unitary or it may be fabricated or assembled, as preferred. It may be of wire, or it may comprise other suitable material and, while the preferred shape of form for such frame is shown, other shapes may be employed without departing from the spirit of the invention.

Intermediate the several parallel and aligned members 10, 11, and 12, a number of spacer elements 15 may be arranged. In the present instance but three are shown, two intermediate the parallel bottom members 11 and one intermediate the upright members 10. These spacer elements 15 may be disposed in other places and their position in respect to the frame is one of selection. Generally, they are soldered or welded to the frame and carry at their central portion, or elsewhere, screw holes 16 so that the whole device may be sured by one or more screws passing through the apertures 16 in the transverse members 15.

In order to obtain adjustability in the apparatus relative to the height of a bag to be used therein, a vertically adjustable carrier is arranged upon the parallel upright members 10. In the present instance, this comprises two strap members 17 having adjacent their inner and overlapping ends slots 18 which are parallel and through which a bolt is adapted to project. Back of the parallel strap members 17 is a U-shaped frame 19 having its ends 20 normal to its body extending across the uprights 10, said ends 20 at a point adjacent to their front edges each having a slot 21 to receive through the slot strap member 17 which projects therethrough for relative movement.

The member 19 may be said to be U-shaped, and in its transverse section it has a bolt aperture 22. Therethrough the bolt 23 is inserted, there being a wing or other suitable nut 24 on the shank thereof to secure strap members 17 and the U-shaped member 19 therefor are raised or lowered to a desired position on the uprights 10.

The member 19 is normally horizontally disposed and when the strap members 17 are moved relatively one to another longitudinally to obtain the proper width to receive a bag, the tightening of nut 24 on bolt 23 firmly secures said strap members 17 and U-shaped member 19 in their proper adjustment. By tightening the wing nut 24, the U-shaped member 19 is drawn towards the

strap members 17 which causes the strap members, in conjunction with the U-shaped member 19, to pinch the upright frame members 10, to firmly engage the adjustable transverse portion of the article firmly upon the bag supporting frame in such position on said uprights 10, as is best suited for the particular size of bag in the holder.

At its outer end, each of the strap members 17 is twisted forwardly and upwardly. The end edge of the material of said members is sheared obliquely, so that by a combination of the cut edge and such twist, an elevated end is provided.

Upon the back of each strap member 17 and secured thereto by welding or otherwise, is a vertical stud 25 which has a forwardly projecting and downwardly turned end portion 26. About such stud 25, fingers 27 are arranged. The fingers comprise a single piece of wire beginning with an eyelet 28 which engages the stud 25 adjacent its top and extends outwardly therefrom and then back to the stud 25 in substantial parallelism to the forwardly extending section to terminate in another eyelet 29 which normally rides upon the upper edge of the material of a strap member 17. Thus a finger 25 which is held against spreading by strap member 17 and stud end 26 is compressible between eyelets 28 and 29 which ride on stud 25.

Compressibility is necessary because, when the finger 27 is once turned frontwardly, it can only be turned rearwardly by pressing the material of the lower portions of the material of the fingers 27 toward one another, to lift eyelet 29 over the oblique end of the stud member 25.

Thus, a bag engaging finger 27 is provided about the stud 25 which finger may be deformed at its fixed end, to permit of the finger 27 being rotated on the stud 25 and lifted over the pointed or latch end of the strap member 17 to facilitate the insertion of bags into the device.

The finger 27 is adapted to be rotated to its front and holding position by rotating it forwardly, the under portion thereof riding upon the cam surface of the upturned end of the strap member 17, such finger eventually passing the pointed end of said strap member, when it expands to be locked in forward position, in which position it possesses slight possibility of movement, but from which locked position it is adapted to be released in the manner hereinabove described.

The fingers 27 at the right and at the left hand sides of the machine are opposed or reversed, there being at the ends of the fingers 27 a turned in section of material which extends just over the edges of the front of the outermost bag, so that between the two fingers there is an open space. Each finger, by extending over such front portion of the outermost member of a group of bags, will maintain the entire group of bags in the holder in condition for ready removal.

Also, secured to the strap members 17 is a spring for urging the contents forwardly of the holder. The spring illustrated comprises a suitable wire member in the form of two reversed complemental parts. One end 30 of each part 31 is passed through an aperture 32 in a strap member 17 adjacent to the stud 25, and the end 30 of the wire twisted around the strap member 17 to provide a secure anchor for the part. The material of the spring then extends straightly downward, section 32, taking a sharp angle to extend almost vertically upward, section 33, the material then being bent inwardly and upwardly and then again inwardly to provide the following sections, 34, 35 and 36.

The opposed spring members are similarly formed, except reversed, so that the material of the ends of the sections 36 of the spring overlap.

In order that they may be kept in alignment, a sleeve 37 is secured thereover, and the ends 36 of each of the springs project thereinto a considerable portion of their extent. As the strap members 17 are brought together or forced apart to adjust the apparatus to a particular size of bag, the sleeve 37 upon the ends 36 of the springs provides for reciprocal movement between said ends while still being maintained in parallelism. Hence, an adjustment in respect to the strap members 17 produces a concurrent adjustment of the springs, so that the springs which may be considered a follower, engage the back bag of a group of bags in the holder at a substantially fixed distance from its top edge, this distance normally being but slightly removed from the top edge of the material of the bag. Such position has been found to be the most appropriate position for a follower to engage.

The V-shaped side portion of the spring members is of such magnitude that the device, when accommodating the smallest normally used bag, does not have an excessive amount of pressure at the bottom, and said spring does not project beneath the forwardly extending sections 11 of the holder frame. As larger bags are used and the strap members 17 are moved upwardly, the spring is accordingly moved upwardly. It always has a sufficient bearing surface upon the back of a bag within the holder frame to provide a firm, urging action upon the back of a stack of bags in the holder.

The present form of invention is equally efficient whether there is one, or one hundred bags in the holder. The bags should be placed therein, with mouth at the top, and these bags are drawn therefrom by reaching into the bag material at its mouth, the lower side of the bag normally being outermost, and pulling it from the holder. By such op-

eration, only one bag is withdrawn at a time, the others remaining firmly held in the holder for further use.

Bags may be inserted into the holder in groups of twenty-five, fifty or one hundred, and the filling of the bag holder is facilitated by throwing one or both of the fingers 27 to a free position by lifting it over the arresting shoulder formed by the end of the strap 17.

As indicated, the bag holder may be placed upon a wall and held securely thereon by passing a screw through a transverse member 15 between members 10, or it may be held firmly upon a counter in upright position by running a screw through either transverse member 15 between sections 11.

I claim:

1. In a bag holder, a unitary frame of wire bent to provide a bag supporting base and upright portions, a member adjustable vertically upon said upright portions and expansible transversely of said frame, and fingers pivotally secured to said member for movement in a horizontal plane and engaging the edges of bags on said frame and releasably secured on said member.

2. In a bag holder, a unitary frame of wire bent to provide a bag supporting base and upright portions, complemental and opposed members movable relatively to one another and releasably attached to said frame, and flexible bag edge engaging members pivotally secured at the free ends of said opposed members.

3. Bag holding means comprising a transverse member having end supports, and deformable spring fingers on said supports and releasably held in bag holding position by said transverse member.

4. Bag holding means comprising an expansible transverse member of telescoping members the ends of which are deformed to provide a detent, and fingers on said member and rotatable in a plane parallel thereto, said fingers being held in operable position by engagement with the ends of said member.

5. Bag holding means comprising a bag support, and a bag follower comprising V-shaped springs movable relatively to one another, and a connecting member therebetween, and in which said connecting member comprises a sleeve relatively movable to part of said springs.

6. Bag holding means comprising an upright part, a transverse unit adjustable upon said vertical part, said transverse unit having adjustable sections whereby it is made expansible, bag holding fingers on said sections, and springs on said sections to provide a follower for bags in said means.

7. Bag holding means comprising an upright part, a transverse unit adjustable upon said vertical part, said transverse unit having adjustable sections whereby it is made expansible, bag holding fingers on said sections, and springs on said sections to provide a follower for bags in said means, said springs comprising vertical and transverse sections, and means for releasably associating said transverse sections for relative movement.

KAY H. MURRAY.