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G. JONASSEN

2,113,153

BAG HOLDER

Filed April 18, 1936

FIG. 1.

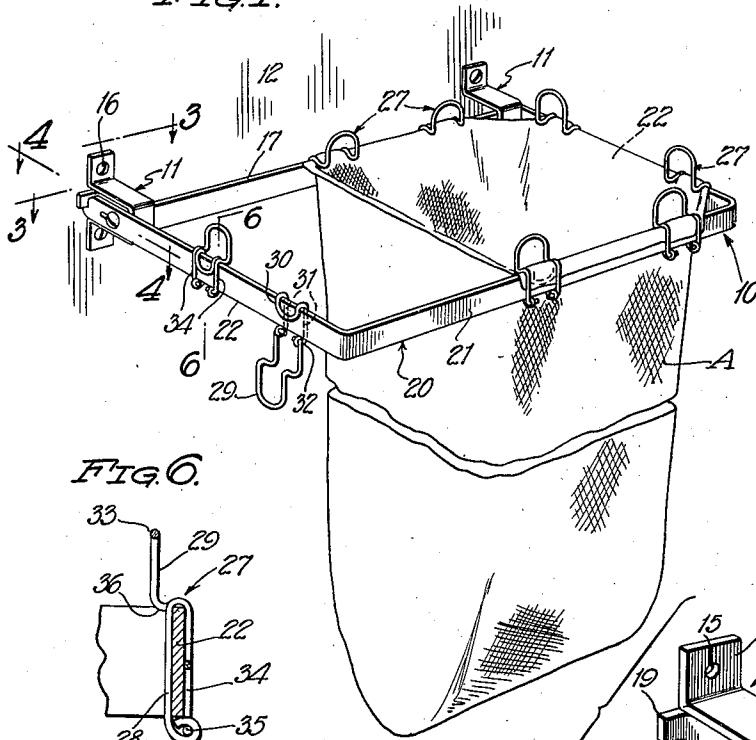


FIG. 3.

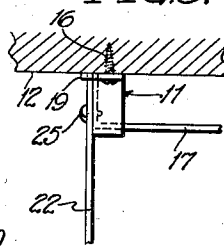


FIG. 4.

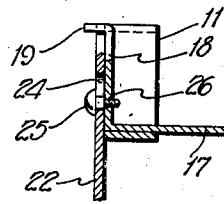


FIG. 5.

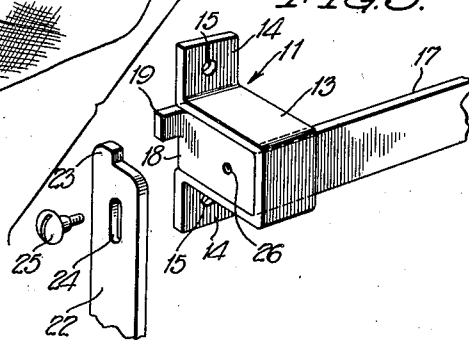


FIG. 2.

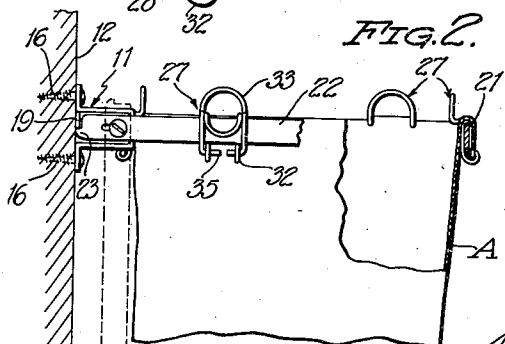


FIG. 8.

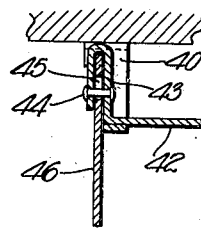


FIG. 7.

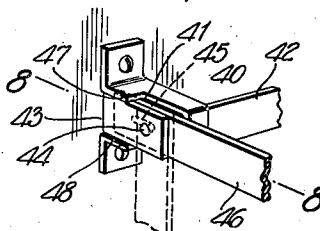
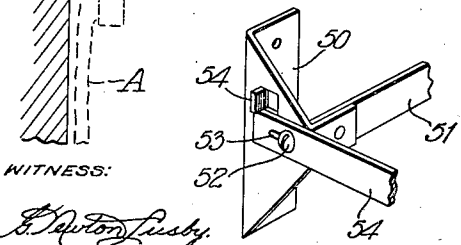


FIG. 9.



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2,113,153

BAG HOLDER

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Application April 18, 1936, Serial No. 75,074

4 Claims. (Cl. 248—101)

This invention relates to improvements in bag holder devices, and more particularly to adjustable bag holder devices for the support of bags of different sizes.

5 The primary object of the invention resides in a bag holding device which is adapted to be mounted upon a wall or other like structure for firmly suspending a bag with its mouth held in an open spread position to facilitate easy access
10 to the interior thereof. Such device will be found convenient for home use in the support of trash bags, and for sundry commercial and industrial purposes, to neatly support such bags, and to eliminate the manual spreading of the walls of the bag when depositing trash or other material therein.

Another feature of the invention is to provide a bag holder which when swung to a horizontal position serves to spread and maintain the walls of the mouth of the bag in an open position for filling, and which may be swung down to a lowered vertical out of the way position at other times. When in lowered out of the way position, the same effects the closing of the walls of the mouth of a partially filled bag to conceal the
25 contents thereof.

A further feature of the invention is the provision of a bag holder device in which a burlap or like fabric bag may be releasably supported upon a frame by a novel construction of adjustable spring clamps in a manner to prevent puncturing or tearing of the walls of the bag, and which clamps do not require the bag to be manually lifted from the frame, for the weight of the contents of a filled or partially filled bag is sufficient to effect a complete release of the bag from the frame upon actuation of the clamps to releasing position.

40 A still further feature of the invention resides in a bag holder device in which a novel construction of pivotal lock connection is provided between the bag frame and the supporting brackets therefor, whereby the tension of the walls of the mouth of a bag connected to said frame in a taut stretched manner, causes the frame to automatically become locked when the same is swung from a lowered position to a substantially horizontal position.

45 A still further feature resides in a bag holder device which is simple, rigid, and inexpensive of construction, and which may be mounted in position for use upon a wall or like structure by persons not skilled in the art of mechanics.

55 With these and other objects in view, the invention resides in the certain novel construction,

combination and arrangement of parts, the essential features of which are hereinafter fully described, are particularly pointed out in the appended claims, and are illustrated in the accompanying drawing, in which:

Figure 1 is a perspective view of the preferred form of the invention, illustrating the frame in a raised operative position and in which a bag smaller than the size of the frame is supported.

Figure 2 is a side elevational view with parts broken away and shown in section, the frame and bag being shown in a non-operative position in dotted lines.

Figure 3 is a detail horizontal sectional view on the line 3—3 of Figure 1.

Figure 4 is an enlarged detail horizontal sectional view on the line 4—4 of Figure 1.

Figure 5 is a fragmentary separable perspective view of one end of the device.

Figure 6 is an enlarged detail vertical sectional view on the line 6—6 of Figure 1.

Figure 7 is a detail perspective view of a modified form of frame lock.

Figure 8 is a horizontal sectional view on the line 8—8 of Figure 7.

Figure 9 is a detail perspective view of a further modified form of frame lock.

Referring to the drawing by reference characters and more particularly to the form of the invention shown in Figures 1 to 6, inclusive, the numeral 10 designates the bag holder device in its entirety which includes a pair of attaching brackets 11—11 secured in spaced horizontal alignment upon a wall or like supporting structure 12. Each bracket 11 is of a like construction and is constructed of rigid bendable strap metal and comprises a U-shaped body 13, and outwardly extending ears 14—14 at the terminal ends of the body. The ears 14 fit flat against the supporting structure 12 and are provided with openings 15 for the passage of fastening screws 16. Welded or otherwise secured to the inner side of the bight portions of the U-shaped bodies of the brackets is a flat rail 17, the terminal ends of the rail being bent inwardly at right angles to provide bearing walls 18 which respectively close the outer sides of the respective U-shaped bodies 13. The rail 17 and brackets 11—11 coact to provide a rigid U-shape attaching frame section which coacts with a larger U-shape frame section hereinafter described for forming a rectangular shape bag supporting frame. The bearing walls 18 are flush with the outer sides of the respective brackets, and extending outwardly from each of the bearing walls at the inner end thereof is a

stop lug 19. It will thus be seen that the two brackets 11—11 and the rail 17 constitute a rigid unit held fast to the supporting structure 12 by the attaching screws 16, the rail 17 being sufficiently disposed in spaced relation to the supporting structure to allow ample room for the folding over and attachment of bag to said rail. This rigid unit with the addition of the releasable adjustable clamping means to be hereinafter described comprises a complete and novel arrangement in itself for the purpose of hanging and holding bags. In addition to forming a brace for the spaced brackets 11—11, the rail 17 constitutes one side of a rectangular shaped bag supporting frame now to be fully described.

The bag supporting frame includes a U-shaped frame section 20 which has a depth greater than the U-shape attaching frame section and which comprises a single piece of rigid strap metal bent to provide a longitudinal rail 21 and end rails 22—22. The terminal end of each of the end rails 22—22 is provided with an extending shoulder 23, and the said end rails adjacent the shouldered ends are provided with elongated slots 24. The terminal ends of the frame section 20 embrace the outer sides of the brackets 11—11 and are pivoted thereto by pivot screws 25 which freely pass through the slots 24 and thread into threaded openings 26 provided in the bearing walls 18. The slots 24 are of such length and location as to permit the shoulders 23 to engage beneath the lugs 19 when the frame section 20 is swung to a substantially horizontal position, and to enable the frame section 20 to be pulled forward to cause the shoulders to clear the lugs when it is desired to lower the frame section to the vertical position shown in dotted lines in Figure 2 of the drawing without allowing the shoulders 23 of end rails to become locked in front of lugs 19 due to the upward pull of a taut bag positioned on frame section, the cam action of shoulder 23 of end rail against lug 19 causing both to engage and lock when being raised to a substantially horizontal position.

Slidably supported and captively secured to the rail 17, end rails 22—22 and longitudinal rail 21 of the bag holding frame are releasable clamp members 27, there being two of such clamp members along each side of the frame. The clamp members 27 are of identical construction and each broadly comprises an attaching element 28 to which a clamping bail 29 is pivoted. The attaching element is constructed of a single length of stiff bendable wire bent midway of its length to form a rail engaging hook 30 for engagement with the upper edge of its supporting rail, while the parallel legs 31 lie flat against the inner side of the rail and terminate in forwardly extending eyes 32 which engage the lower edge of the rail and extend beyond the plane of the outer side thereof. The clamping bail 29 is constructed of a single length of stiff resilient bendable wire, the same being substantially U-shape to provide a bight portion 33 and legs 34, the terminal ends of the legs being bent inwardly toward each other to provide trunnions 35 which respectively enter the eyes 32. The legs 34 are bent to provide angular locking shoulders 36 which releasably and clampingly engage the upper edge of the rail adjacent the opposite sides of the hook portion 30 of the attaching element 28. The shoulders 36 are so constructed that they must be slightly springy to clampingly engage the upper edge of the rail, which effects a locking of the clamp to the rail when the bail

is in locking position, and release of the bail to the swung down position shown at the left end of the frame in Figure 1, permits the attaching element to freely slide along the rail. Thus the clamps may be adjusted to various positions to facilitate the suspension of bags of different sizes from the bag holding frame.

In Figure 1 of the drawing, I have illustrated a burlap bag A, supported upon the bag holding device 10, the open spread mouth of which fills only a part of the frame, hence, one or more bags may be suspended if desired. While two clamps 27 are shown on each longitudinal rail of the frame, additional clamps may be provided for the clamping of more than a single bag.

In positioning a bag A in the frame, the mouth of the bag is spread open and the walls thereof folded over the rails, it being understood that the frame is in a raised horizontal position as shown in Figure 1. The bag is secured to one of the longitudinal rails of the frame by swinging the bails of the clamps upward over the edge of the bag, the edge of the bag being folded over the rail. The walls of the mouth of the bag are stretched taut transversely of the frame, and while manually held in such taut condition, the bails of the clamps on the other longitudinal rail are swung upwardly to locking position. This stretching of the bag transversely of the frame causes an automatic movement of the frame section 20 in a direction toward the supporting structure 12 when the frame section is swung from its lowered vertical position to a raised substantially horizontal position for the purpose of causing the shoulders 23 to engage beneath the lugs 19. When the bag fills the frame opening or when a smaller bag is positioned at one end of the frame, the clamps on the end rails also grip the folded edges of the bag to prevent sagging, but it is the clamps along the longitudinal sides of the frame that provide the major spreading of the mouth of the bag.

With the bag A suspended in the manner shown in Figure 1, the mouth of the same is open to receive trash or articles to be placed into the bag, or which may be emptied thereinto from waste-baskets or other receptacles. Assuming that the bag A is full or partially full, it is only necessary to release the clamps 27 from clamping engagement with the folded edges of the bag and the weight of the contents will cause the same to drop from the frame, thus making it unnecessary for a user to manually lift the bag upwardly as from a hook.

To drop the frame section 20 to lowered vertical position as shown in dotted lines in Figure 2 it is only necessary for the user to pull outwardly upon the frame section, placing the stretched bag under tension, which causes the shoulders 23 to clear the lugs 19 whereupon the frame section may freely swing downward on the pivot screws 25. When in this position the mouth of the bag is substantially closed to conceal and retain the contents of the bag. However, the mouth opens up to spread position when the pivoted frame section is swung to raised position. When dropped down, the frame section and suspended bag lie adjacent the supporting structure 12 in an out of the way position.

In Figures 7 and 8 of the drawing, I have illustrated a modified form of pivotal lock connection between the frame section of its supporting brackets. In this form, the top and bottom outer edges of each U-shaped bracket 40 is cut away as at 41. The brace and rear frame rail 42 has

each end bent inwardly and thence outwardly into a substantially flat hook portion 43, the rail being fixed to the bight portion of the bracket in a manner similar to that described in the preferred form. Secured in the opposite walls of the hook portion 43 is a pivot pin 44 which freely passes through an elongated slot 45 in the end rail 46 of the pivoted frame section. The slotted end of the end rail 46 is interposed between opposite walls of the hook portion and locks beneath the shoulder 47 on the bracket 40. When the frame section is pulled out to cause the inner end of the rail 46 to clear the shoulder 47, the frame section may swing downward to vertical out of the way position. A stop shoulder 48 is provided on the bottom wall of the bracket 40 to limit the rearward swinging of the frame section when in lowered position.

In Figure 9 of the drawing, a still further modification of pivotal lock connection between the frame section and supporting bracket is shown. In this form, I employ an angle attaching bracket 50 to which a brace rail 51 is connected. A pivot screw 52 is carried by the outwardly extending flange of the angle bracket which passes through an elongated slot 53 in the terminal end of the end rail 54 of the frame section. A stop lug 54 is bent outwardly from the side flange of the angle bracket beneath which the slotted end of the end rail 54 of the frame section engages when the frame section is in raised locked position.

While I have shown and described what I consider to be the most practical embodiments of my invention, I wish it to be understood that such changes as come within the scope of the appended claims may be resorted to if desired.

Having thus described the invention, what I claim as new and desire to secure by Letters Patent of the United States, is:—

1. A device of the class described comprising in combination, a fixed rail, a U-shaped frame section, a loose pivotal connection between the terminal ends of the U-shaped frame section and the ends of said fixed rail to permit a limited sliding movement of the frame section relative to its pivotal axis, releasable locking means for securing said frame section in a raised horizontal position when swung thereto and shifted laterally in one direction of its sliding movement, said releasable locking means being released upon manual sliding of the frame section in an opposite direction, and securing devices provided on said fixed rail and U-shaped frame section for attaching the mouth of a bag thereto in spread position.

2. A device of the class described comprising in combination, a rectangular bag holding frame structure including a stationary U-shaped frame section, and a larger U-shaped frame section having its leg portions pivoted to the leg portions of said stationary U-shaped frame section, means provided along the bight portion of the stationary U-shaped frame section and along the rails of the larger U-shaped frame section for securing the edges of the mouth of a bag thereto, and releasable means provided on the leg portions of the two U-shaped frame sections for locking said larger U-shaped frame section in a substantially horizontal position when manually swung thereto.

3. A device of the class described comprising in combination, a supporting rail, means for securing said supporting rail in horizontal, parallel, spaced relation upon a supporting wall structure, said means including end supporting brackets to which opposite ends of said rail are respectively connected, a U-shaped frame section, a loose pivotal connection between the terminal ends of the U-shaped frame section and the end supporting brackets to permit a limited sliding movement of the U-shaped frame section relative to its pivotal axis to enable movement of the U-shaped frame section to a substantially horizontal set up position or to a vertical collapsed position, and coacting releasable locking elements provided between said supporting brackets and the leg portions of said U-shaped frame section for securing said U-shaped frame section in a horizontal position when manually swung thereto and shifted laterally, said locking elements being rigid and integral parts of the supporting brackets and frame sections respectively.

4. A supporting device comprising in combination, a pair of U-shaped brackets adapted to be fixedly secured in spaced horizontal alinement upon a wall or other like vertical support, a U-shaped frame having its respective leg portions seated in and closing the outer side of said U-shaped bracket, said U-shaped frame being fixedly secured to said bracket, a second U-shaped frame having its leg portions pivotally connected to the outer sides of the leg portions of the first mentioned U-shaped frame for swinging movement to a raised horizontal position for use or to a lowered non-usable vertical position, and releasable means for locking said second mentioned U-shaped frame in horizontal position for use when manually swung thereto.

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