July 25, 1933. E. R. OVERMYER 1,920,019

SACK OR BAG HOLDER

Filed Oct. 23, 1931

FIG. 1.

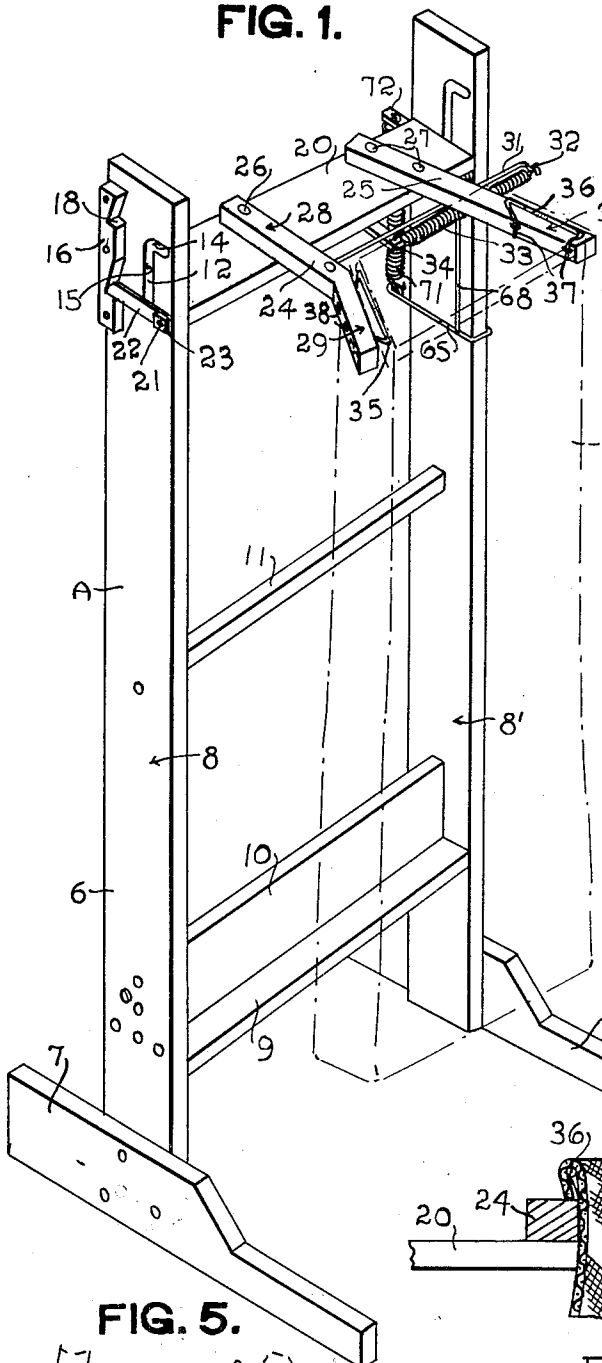


FIG. 2.

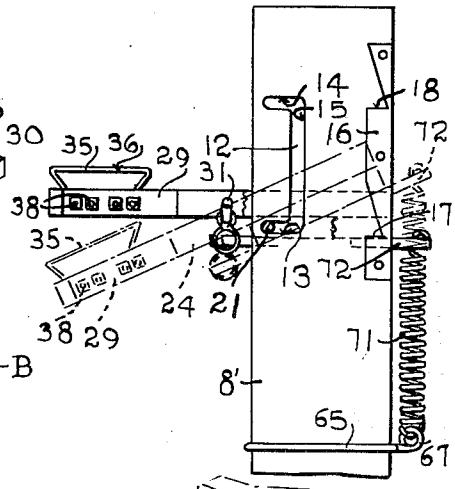


FIG. 3.

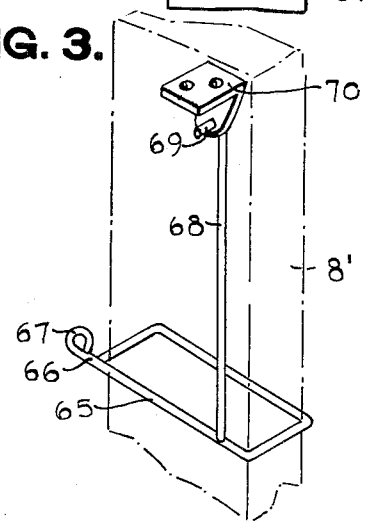


FIG. 4.

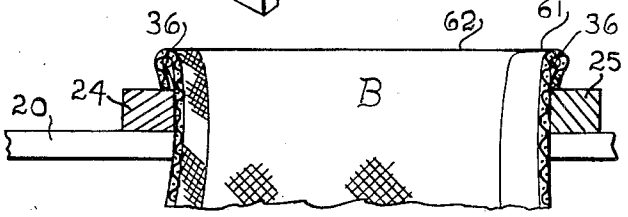
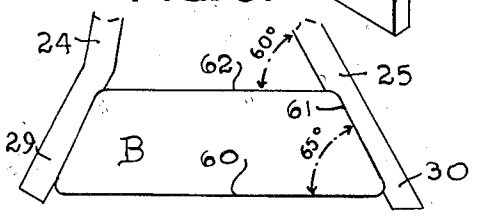


FIG. 5.



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SACK OR BAG HOLDER

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This invention relates to receptacle holders and more particularly to a bag or sack holder which will hold a bag or sack elevated, with its mouth open, and in a position to be filled.

An object of the invention is to provide a holder having no sharp projections nor hooks for holding the receptacle, which are apt to damage the receptacle or its contents or injure the operator.

Another object is to provide a holder which will suspend the receptacle in an open position in such a manner that even a wide scoop or shovel may be inserted into the mouth of the receptacle.

Still another object is to provide a holder so constructed that the receptacle may be readily jolted up and down so as to settle and compact the contents.

Another object is to provide a holder which will automatically adjust itself to receptacles with different size mouths and which may be readily manually adjusted to take care of receptacles of different lengths.

Another object is to provide a holder of sturdy construction, of few parts, none complicated, and one which will take up but limited space when not in use.

Other objects and advantages of the invention will be apparent during the course of the following detailed description, taken in connection with the accompanying drawing, forming a part of this specification and in which drawing:—

Figure 1 is a perspective view of the improved holder, showing the position of a bag, in dotted line, carried thereby.

Figure 2 is a fragmentary side elevation of the holder with a portion broken away to show details of construction.

Figure 3 is a perspective view of a bracket employed in the improved holder.

Figure 4 is a sectional view of a bag or sack with two or its open ends looped upon the holder.

Figure 5 is a diagrammatic view of the general appearance of the open end of a bag or sack as carried, stretched open by the improved holder.

Referring to the drawing in detail, and wherein similar reference characters designate corresponding parts thruout the several views, the letter A may generally designate the improved holder and B the receptacle carried thereby.

As to the improved holder, it may generally comprise a frame 6 including base member 7 bolted or otherwise secured to upwardly projecting end walls 8 and 8′ forming T's, braces 9, 10 and 11 may be provided to brace and space apart the end walls, which end walls are substantially the same height and width and evenly spaced apart thruout their height. Adjacent the upper end of each end wall and nearer the front edge thereof is a slot 12 having a lower and an upper horizontal section 13 and 14 and a connecting vertical section 15. On the outer side of each end wall adjacent the upper end thereof and spaced near the rear edge thereof is a projection 16 having detents 17 and 18, the former 17 on a line with the lower portion 13 of the slot 12 and the latter 18 on a line with the upper portion 14 of the slot 12. Between the walls 8 and 8′ is a shelf or support 20 which is provided with a pivot pin 21 extending from each end thereof and adjacent the front edge thereof. These pins 21 project thru the slot 12 and extend beyond the outer side of the end walls 8 and 8′ and are preferably screw threaded at their free ends. A detent arm 22 is pivoted about the free end of each pivot pin 21 and has a free end so shaped as to enter either detent 17 or 18 thus holding the shelf 20 against horizontal movement along either section 13 or 14 of the slot 12. A nut 23 or the like screwed upon each of the screw threaded ends of the pivot pins 21 holds the arms 22 upon the pins. It can be readily seen that the shelf 20 may be elevated by removing the free ends of the arms 22 from the lower detent 17 and sliding the pivot pins along the sections 13, 15 and 14 in turn of the slot 12. When the arms 22 are dropped into the upper detents 18 the shelf can neither move backward nor downward but may tip. A reversal of the manipulation last mentioned permits the shelf to be lowered and secured

against backward and upward movement but does not limit tipping.

Carried upon the shelf 20 are two arms 24 and 25, the former pivoted to the upper portion of the shelf 20 as at 26 and the latter fixedly secured to the upper portion of the shelf as by fasteners 27. The rearward portion 28 of the arm 24 is ordinarily at a right angle to the front edge of the shelf 20 and its free end 29 is offset as shown in Figures 1 and 5 and projects away from the arm 25. The arm 25 is secured at an angle other than a right angle from the front edge of the shelf 20, it is preferably straight and its free end 30 projects away from the free end 29 of the arm 24 as can be seen in Figure 5. Means are provided for forcing the arm 24 away from the arm 25 for stretching the mouth of the receptacle into an open position as shown in Figure 5. This comprises a rod 31 having one end secured to the arm 24 preferably midway the end of the arm 24, and projecting at a right angle to the portion 28 of the arm 24, so that it approximately parallels the front edge of the shelf 20 and preferably extends beyond the arm 25. The free end 32 of the rod 31 is bent forming an eye and carried by this eye is a coil spring 33, substantially paralleling the arm and secured at its opposite end to the shelf by an outwardly projecting short bracket 34. It will be seen that as the spring 33 tends to contract, the rod will cooperate to force the arm 24 away from the arm 25.

Means are provided for looping and holding the end portions of two side walls of the receptacle so that the mouth of the receptacle will be held open and the edges taut. This comprises upstanding inverted U-shaped bag supports 35 the bight portion 36 thereof being elongated an the legs 37 being straight and secured to the inner confronting faces of the arms 24 and 25 by eye bolts 38 or the like. These supports are preferably of heavy, resilient wire and project above the arms as shown in the drawing. It is preferred to slightly twist the bight portions 36 and legs 37 of the support 35 so that the bight portions will not quite parallel the inner faces of the arms but will tend to project slightly over the arms. Thus, as shown in Figure 5 the angle formed by the front edge 60 of the bag A and the end edge 61 (which latter also corresponds to the bight portion 36 of one of the supports) will be approximately 65° while the angle formed by the rear edge 62 of the bag and the inner edge of the arm 25 will be approximately 60°. This tends to hold the receptacle more securely.

Means are provided for the purpose of preventing abrupt tipping of the shelf 20 on its pivot pins 21. This includes a bracket 65 which embraces the frame member 8′ as shown in Figure 3. This bracket is preferably constructed of wire and is free to move up or down the frame member 8′. A rearward end 66 of the bracket projects rearwardly and is bent to form an eye 67 or the like. Projecting upwardly from the bracket is an elongated, resilient arm 68 adapted to parallel the side of the frame member 8′. It ends in a right angled offset 69. This offset projects thru a hole in a bracket 70 secured to the under side of the shelf 20 adjacent its front edge. Carried by the eye 67 is one end of a coil spring 71, or the like, which is secured by its opposite end to the shelf 20 by a bracket 72. Thus it will be seen that the bracket 65 can move up or down with up and down movement of the shelf, that the resilient wire 68 and the bracket 70 will allow horizontal movement of the shelf and also serve as an auxiliary pivot for the shelf, while the bracket also carries the spring which will tend to prevent abrupt tipping of the shelf.

The receptacle B may be an ordinary bag or sack, or a similar container of material, al least flexible at its open end, which may be looped about the bight portions 36 of the supports 35. When the receptacle is in position on the holder, its open mouth may be said to have the shape of a trapezium, and the receptacle to have side and end walls.

In the operation of the device, the open ended receptacle is secured to the arms 24 and 25 by passing or looping the extremities of two opposite sides of the open ends over the bight portions 36. The arm 24 may be drawn towards the arm 25 in order to accomplish this and then released. The arm 24 will then spring away from the arm 25 and the shape and position of the arms, together with the shape and location of the supports 35 are such that the bag will be held open as shown diagrammatically in Figure 5. The receptacle is now in position to be filled.

When sufficiently filled, if it is desirable to compact the contents, the operator may grasp the arms 24 and 25 moving them up and down, the shelf moving freely because of the pivot pins, but restrained from any abrupt movement due to the coil spring 71. If it is desired to remove the filled receptacle, the arm 24 may be drawn towards the arm 25 and the extremities of the bag drawn from about the support 35.

It is also apparent that if very heavy material is being placed in the receptacle, it will in time cause the shelf to tip and the bottom of the receptacle to rest upon the floor surface thus relieving the arms and the device in general from unnecessary strain. Longer receptacles may be filled by elevating the shelf as heretofore described.

Changes in detail may be made to the

form of invention herein shown and described, without departing from the spirit of the invention or the scope of the following claims.

What is claimed is:

1. In a holder for receptacles being filled, the combination of a shelf provided with pivot pins secured to and extending from the ends thereof adjacent the side edge thereof, a frame including end walls provided with slots receiving said pins for horizontal and pivotal movement thereof and with connecting slots for vertical movement of said pins, means carried by said shelf for supporting a receptacle at the open mouth of said receptacle, means for normally holding said shelf in a horizontal position and means for selectively preventing said pins to travel along said horizontal slots, whereby, while said pins will be prevented from traveling along said horizontally disposed slots, rotation thereof will not be prevented in said horizontal slots, thus permitting manual tipping of said shelf.

2. In a holder for receptacles being filled, the combination of a frame including end walls, a shelf provided with pivot pins extending from the ends thereof and thru said end walls, said end walls provided with slots for horizontal movement of said pins and with adjoining slots for vertical movement of said pins for elevating and lowering said shelf, arms carried by said shelf and projecting forwardly therefrom, means carried by the arms adjacent their free ends for suporting a receptacle, a bracket slidable vertically along one of said end walls provided with an arm pivoted to said shelf and also provided with an eye, and resilient means conected to said eye and the rear portion of said shelf to prevent abrupt tipping of said shelf.

3. In a holder for receptacles being filled, the combination of a frame including end walls, a shelf provided with short pins extending from the ends thereof and thru said end walls, said end walls provided with slots for horizontal and vertical movement of said pins, arms carried by said shelf and projecting forwardly therefrom, means carried by said arms adjacent their free ends for supporting a receptacle, a bracket slidable vertically along one of said end walls provided with an upwardly projecting resilient arm pivoted to the under side of the forward portion of said shelf, and also provided with an eye, and a spring connected to said eye and to the rear portion of said shelf to prevent abrupt tipping of said shelf.

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