July 10, 1956

H. L. WESTERVELT

2,754,076

SACK HOLDER

Filed March 30, 1953

Fig. 1

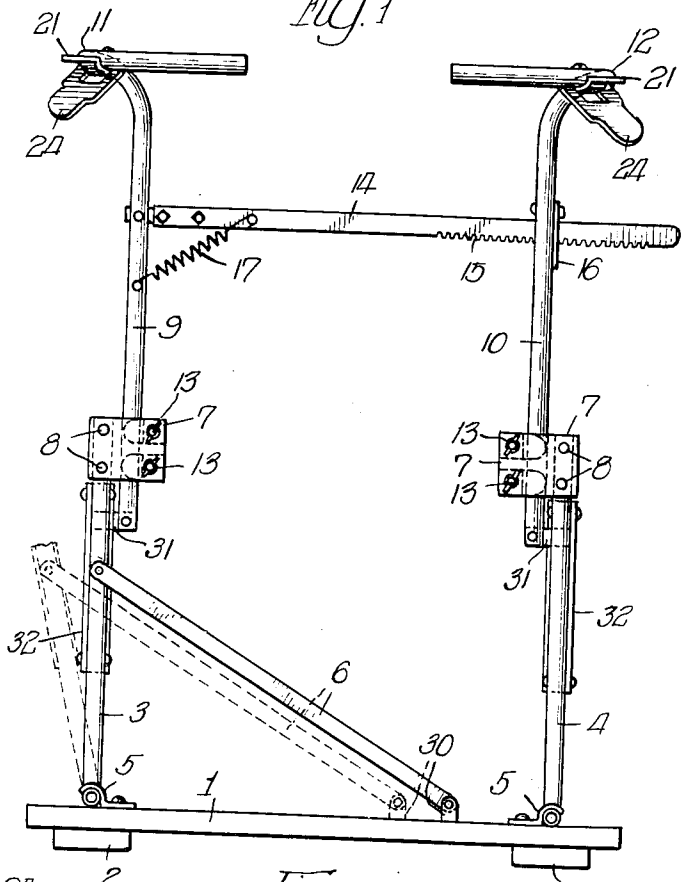


Fig. 3

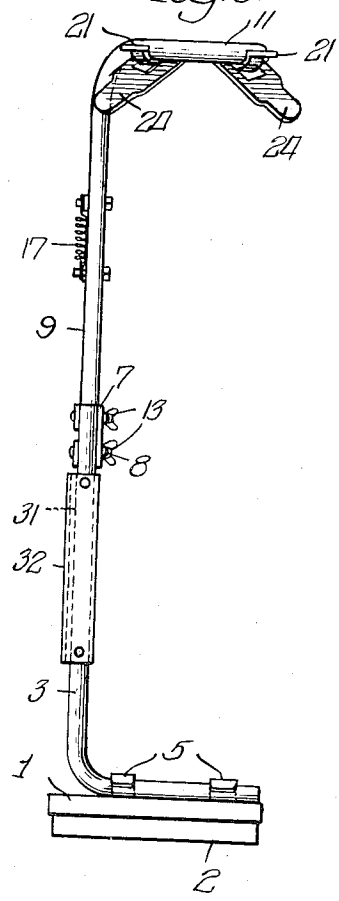


Fig. 2

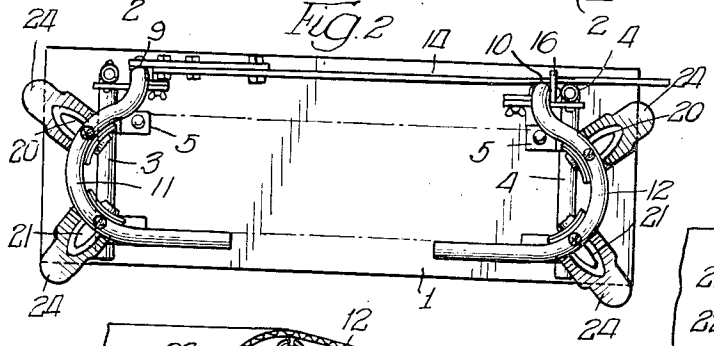


Fig. 4

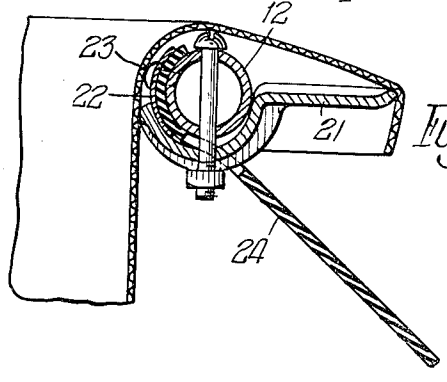
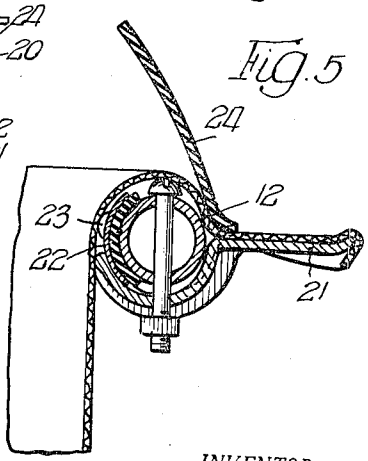


Fig. 5



INVENTOR.
Harry L. Westervelt,
BY
George H. Simmons
Atty.

United States Patent Office

2,754,076

Patented July 10, 1956

2,754,076

SACK HOLDER

Harry L. Westervelt, La Grange, Ill.

Application March 30, 1953, Serial No. 345,326

4 Claims. (Cl. 248—97)

This invention relates to a device for holding a sack open and upright to facilitate filling the sack, and has for its principal object the provision of a new and improved device of this kind.

It is a main object of the invention to provide a simple device for holding sacks, such as grain sacks composed of fabric or paper, upright and open so that one person can fill the sack with material in a convenient manner.

Another object of the invention is to provide a sack holding device which is fully adjustable so as to enable it to accommodate sacks of different heights and of different girths.

Another object of the invention is to provide a sack holding device which is light enough to permit it to be moved about from place to place as required.

Another object of the invention is to provide a sack holding device which can be manufactured at low cost without sacrificing ruggedness and quality.

Further objects of the invention not specifically mentioned here will be apparent from the detailed description and claims which follow, reference being had to the accompanying drawings in which a preferred embodiment of the invention is shown by way of example and in which:

Fig. 1 is a front elevational view of the device;

Fig. 2 is a plan view of the device;

Fig. 3 is an end elevational view of the device;

Fig. 4 is a cross sectional view through one of the lugs on the device, showing also a sack registered therewith; and

Fig. 5 is a view similar to Fig. 4, showing the sack retaining means in operated position.

Farmers, feed dealers, and many others, have occasion frequently to fill sacks, such as grain sacks composed either of fabric or paper, with more or less finely comminuted material such as grain which can be most conveniently handled by scooping. If such a person is working alone, it is difficult to fill the sack since it is almost impossible to hold the sack open and at the same time to manipulate a scoop to fill the sack.

The present invention provides a device which will hold the sack open so that the workman will have both hands free to manipulate a scoop or other tool for filling the sack.

In the prior art of which I am aware are numerous bag holding devices, most of which include members engaging the inside surface of the bag at or near the top thereof, which members are arranged to hold the bag open and to keep the top edges of it taut so that it may be easily filled. Most of these devices include sharp points which pierce the bag at or near the top of it, and while such an arrangement is quite satisfactory with a bag composed of a fabric material, it is unsatisfactory for use with a sack composed of heavy paper, and such sacks are now in very common use. Furthermore, the prior art devices of which I am aware, were either permanently attached to an upright member, such as a

wall or post, or were of such heavy construction as to make moving the device from place to place extremely difficult.

The present invention in its preferred form provides a lightweight sack holding device capable of being used either with fabric or paper sacks without injury to the sack, and since the device is lightweight it can be moved about by one person easily, as required in the normal usage of a device of this kind.

Grain sacks, gunny sacks, and the like, come in a number of different heights and girths, and to be able to be used with such a variety of sacks a device must be capable of being adjusted vertically and laterally. The device of the present invention is so adjustable.

Referring now to the drawings in more detail, in its preferred form my improved sack holding device consists of a base 1 preferably rectangular and supported upon feet 2 which extend from side to side of the base near the ends thereof. This construction weights the bottom of the device sufficiently to prevent it from being top heavy and apt to be tipped over when in use.

Pivotally mounted upon this baseboard are a pair of generally L-shaped tubular members 3 and 4 secured to the baseboard near the ends thereof by clamping brackets 5. The tubular member 3 is secured in position substantially perpendicular to the baseboard by the bracket 6. Each of the tubular members 3 and 4 carries at its upper end a clamping plate 7 secured to the member in any preferred manner, such as by bolts or rivets 8. Secured in the clamping member 7 are second tubular members 9 and 10 which extend upwardly substantially in alignment with the members 3 and 4 respectively, and terminate in arcuate portions 11 and 12 which are disposed in substantially horizontal position over the base 1, as will be best seen in Figs. 2 and 3. Clamping plates 7 are provided with adjustable means such as wing nuts 13, by which the tubular members 9 and 10 may be clamped in fixed position relative to the members 3 and 4 respectively.

Mounted upon the tubular member 9 by a pivotal connection is a latch consisting of a bar 14 that has in its lower edge serrations or teeth 15 adapted to be registered with a keeper plate 16 fixed upon the bar 10. A spring 17 extending between the member 9 and the bar 14 is tensioned to hold the teeth 15 in engagement with the keeper bar 16. The latch thus holds the upright member, consisting of tubes 4 and 10, in fixed spaced apart relation to the upright member consisting of tubes 3 and 9. As will be seen in Fig. 2, the arcuate portions 11 and 12 open in a direction facing each other and each is provided with a pair of lugs 20 and 21 secured to the arcuate member 12 preferably by bolts.

Also secured to this arcuate member in any suitable manner, such as by a clamping plate 22 and screws 23, are bifurcated elastic members 24 which lie astraddle of the base portion of the lugs and, as will be seen in Figs. 1, 3 and 4, in normal or unused position, extend downwardly and outwardly from the lug.

As will be seen in Figs. 2 and 4, when a sack is registered with the device, it fits between the arcuate portions 11 and 12, and its top edge is draped over those arcuate portions and the lugs 20 and 21 carried thereby. To secure the sack to the device, elastic members 24 are pulled downwardly and outwardly, thereby to be stretched sufficiently to permit them to be swung upwardly past the outermost edge of the lugs and thence inwardly over the lug into the position shown in Fig. 5. Release of the tension on the elastic member causes it to be moved downwardly and to clamp the sack to the upper surface of the lug and arcuate member supporting the lug thereby to securely bind the sack to the device.

After the sack is thus secured in place, the pivoted

upright, consisting of members **4** and **10**, may be pushed outwardly far enough to draw the top edge of the sack taut so as to make it easy to fill the sack with a scoop or similar device.

In the case of sacks of exceedingly large girth, it is advantageous to provide adjustment of the relatively fixed upright of the device so as to keep the sack centered or substantially centered therein. To this end, the bracket **30**, by which the brace bar **6** is secured to the base, may be moved to any one of a number of positions, one of which is shown in dotted lines in Fig. 1. This effects movement of the fixed upright outwardly so as to accommodate the device to the greater girth of the sack. The device may be adjusted to the height of the sack by loosening wing nuts **13** and pushing the upper tubular members **9** and **10** downwardly from the position shown. Fixed to the lower ends of members **9** and **10** are plates **31** which extend outwardly therefrom into the space between tubular members **3** and **4** respectively, and angles **32** fixed thereto. These plates **31** run in a groove and prevent wobble between the members thereby aiding in maintaining the uprights rigid in all positions.

The resilient clamping members must be sturdy and sufficiently elastic to permit them to be stretched over the lugs and the portion of the sack registered therewith a number of times without breaking. I have found that when cut from India rubber of good grade, the lugs **24** have long life and maintain sufficient tension on the sack to securely bind it to the device. When it is necessary to replace a resilient member **24**, screws **23** and clamping plate **22** are removed and a new member inserted in a convenient manner.

When composed of thin wall metallic tubing, such as thin wall conduit, the uprights of my improved device are sufficiently sturdy to withstand the hard usage likely to be encountered and at the same time are light enough so that the device is not too heavy to be easily moved by one person. With the baseboard composed of a suitable hard wood, the device does not easily tip over, and since the bag rests upon this baseboard the tendency for the device to tip is lessened by the weight of the contents in the bag.

While I have chosen to show my invention by illustrating and describing a preferred embodiment of it, I have done so by way of example only, as there are many modifications and adaptations which can be made by one skilled in the art within the teachings of the invention.

Having thus complied with the statutes and shown and described a preferred embodiment of the invention, what I consider new and desire to have protected by Letters Patent is pointed out in the appended claims.

What is claimed is:

1. A device for holding sacks in open upright position to facilitate filling the same, comprising: a base; a first upright pivotally mounted upon said base near one end thereof for limited rotation around a horizontal axis and terminating at its upper end in a horizontal arcuate portion disposed over the base and opening towards the end of the base away from the upright; a brace extending between said base and first upright, said brace being adjustable to permit rotating the upright, thereby to adjust the device to bags of various girths; a second upright pivotally mounted on the base near the other end thereof for limited movement around a horizontal axis and terminating at its upper end in a horizontal arcuate portion disposed over the base and opening towards the first arcuate portion; a pair of spaced apart lugs fixed on each of said arcuate portions and extending outwardly therefrom, said lugs being adapted to receive portions of a sack disposed on the base and extending between and over the arcuate portions and lugs; a resilient member fixed to the arcuate portion adjacent to each lug and adapted to be stretched over the lug and sack portion thereon to bind the sack to the lug and the device, said second upright being movable away from the first upright to draw the top of the sack taut; and latch means for holding said second upright in position to keep the top of the sack taut thereby to facilitate filling the same.

2. A device as claimed in claim 1, in which the resilient member is a bifurcated rubber member straddling the lug at the base of the lug and disposed below the lug and adapted to be stretched over the lug into clamping position on the top thereof.

3. A device for holding sacks in open upright position to facilitate filling the same, comprising: a base; a pair of L-shaped tubes pivotally mounted upon said base, one near each end thereof; a brace extending between said base and one of said tubes to fix that tube uprightly with respect to the base; a second pair of tubes each terminating in arcuate portions at its upper end; means including clamps on each of said L-shaped tubes for supporting one of said second tubes thereon with the arcuate portions of said second tubes disposed over the base and opening towards each other; a pair of lugs fixed to each arcuate portion in spaced apart positions and extending outwardly from the arcuate portions and adapted to receive the top portions of sacks draped over the arcuate portions and lugs; resilient means fixed to the arcuate portions adjacent each lug and adapted to be stretched over the lug to clamp thereto the portion of the sack thereon, thereby to secure the sack to the device, the other one of said L-shaped tubes and second tube secured thereto being movable away from the other tubes to stretch the top of the sack taut; and latch means fixed on one tube and engaging the other tube to hold said sack top taut to facilitate filling the sack.

4. A device for holding sacks in open upright position to facilitate filling the same, comprising: a base; an upright fixed upon said base near one end thereof and terminating at its upper end in a horizontal arcuate portion disposed over the base and opening towards the end of the base away from the upright; a second upright pivotally mounted on the base near the other end thereof for limited movement around a horizontal axis and terminating at its upper end in a horizontal arcuate portion disposed over the base and opening towards the first arcuate portion; a pair of spaced apart lugs fixed on each of said arcuate portions and extending outwardly therefrom, said lugs being adapted to receive portions of a sack disposed on the base and extending between and over the arcuate portions and lugs; a resilient member fixed to the arcuate portion adjacent to each lug and adapted to be stretched over the lug and sack portion thereon to bind the sack to the lug and the device, said second upright being movable away from the first upright to draw the top of the sack taut; a latch pivotally mounted upon the first upright and containing notches; a keeper on the second upright with which the notched latch is engageable; and a spring extending between the first upright and the latch and tensioned to hold the latch in engagement with the keeper thereby to keep the top of the sack taut to facilitate filling the same.

References Cited in the file of this patent

UNITED STATES PATENTS

177,540	Mosher	May 16, 1876
199,705	Hatfield	Jan. 29, 1878
535,543	Leavitt	Mar. 12, 1895
729,564	Fjellman	June 2, 1903
824,332	Barnum	June 26, 1906
830,994	Hatin	Sept. 11, 1906
875,847	Peterson	Jan. 7, 1908
1,664,658	Blazer	Apr. 3, 1928

FOREIGN PATENTS

13,121	Denmark	Mar. 23, 1910
388,758	France	of 1908