March 17, 1931. C. A. HESTER 1,796,288

SACK FILLING RACK

Filed Nov. 25, 1929

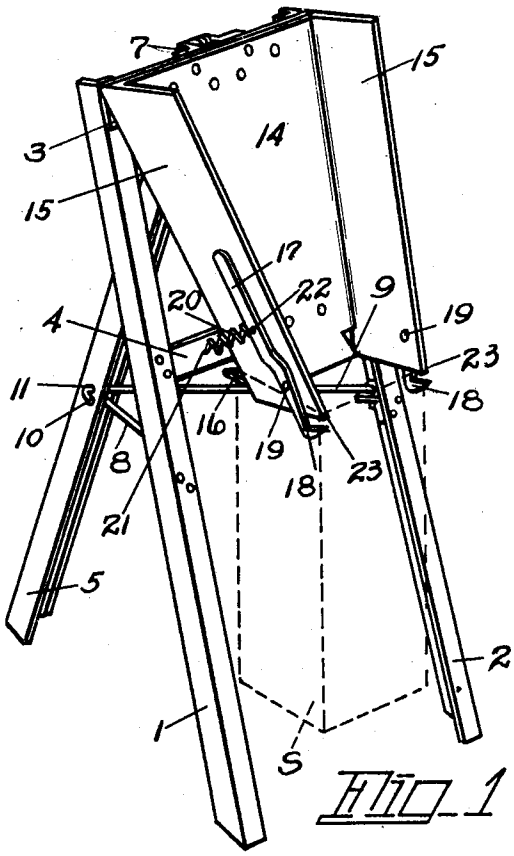


FIG. 1

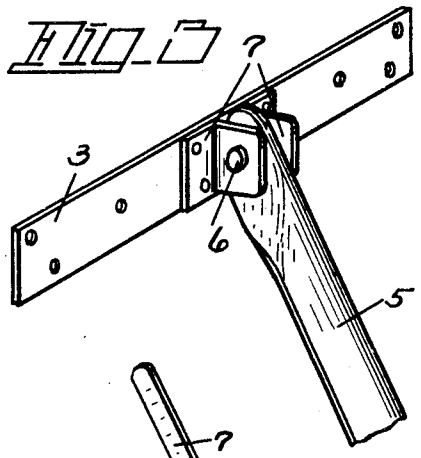


FIG. 3

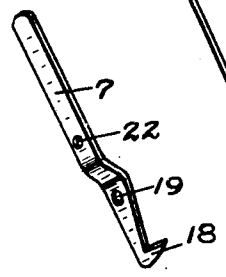


FIG. 4

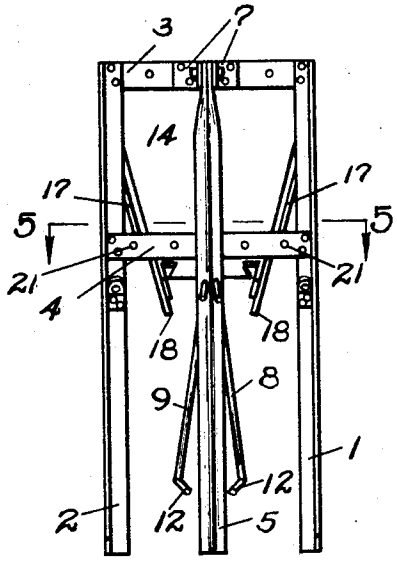


FIG. 2

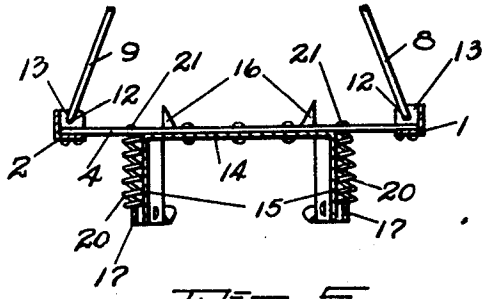


FIG. 5

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UNITED STATES PATENT OFFICE

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SACK-FILLING RACK

Application filed November 25, 1929. Serial No. 409,502.

My present invention relates to an improved sack filling rack of the type utilized for supporting a sack or bag and holding open its mouth in order that the bag or sack may be filled with suitable material, either by hand labor, or by mechanical means.

The primary object of the invention is the provision of a portable device of this character that is foldable into compact form for storage or transportation purposes; which is simple in construction and may readily be manipulated for erection and use; which comprises a comparatively small number of parts, and which may be manufactured at a comparatively low cost of production.

The invention consists in certain novel combinations and arrangements of parts as will hereinafter be more fully set forth and claimed. In the accompanying drawings I have illustrated one complete example of the physical embodiment of my invention wherein the parts are combined and arranged according to the best mode I have thus far devised for the practical application of the principles of my invention.

Figure 1 is a perspective view of the rack in position for use, showing by dotted lines the bag or sack to be filled. Figure 2 is a rear elevation of the rack. Figure 3 is an enlarged detail perspective view from the rear showing part of the main brace. Figure 4 is a perspective view of one of the supporting hooked-levers. Figure 5 is a horizontal sectional view at line 5—5 of Figure 2.

In carrying out my invention I preferably use a pair of legs 1 and 2 fashioned from angle irons, and of suitable length. These legs are rigidly connected at their upper ends by a cross plate 3, and also by an intermediate cross plate 4, both plates being riveted or bolted securely to the spaced legs to form a rigid structure.

The rack is supported in manner similar to an easel and is provided with a main brace or rear leg 5 that is pivoted at 6 in perforated lugs 7 fixed centrally at the rear of the top cross plate 3, the free end of the brace of course resting upon the ground or floor as do the lower ends of the legs 1 and 2.

The rigid legs and the pivoted legs are detachably connected together and braced by means of a pair of horizontal brace rods 8 and 9 which are formed with end hooks 10 to be slipped through complementary holes 11 in the rear leg. These brace rods are also formed with end hooks 12 to be slipped down into holes or perforations in brackets 13 secured to the two rigid legs 1 and 2.

At their rear ends the hooked rods are pivoted in the rear leg so that the front hooks 12 of the rods may be lifted from the perforated brackets 13 to permit folding of the rear leg against the rigid or front legs for storage or shipment of the rack, and of course the brace rods fold into the angle of the rear leg for the same purpose.

As thus constructed the three legs are rigidly connected to provide a substantial supporting structure for the sack S which rests upon the ground or upon the floor for filling and is maintained in erect position by means of the rack.

At the upper front part of the structure I attach a hopper or chute that comprises a flat plate 14 of downwardly tapering shape, which is fashioned with a pair of converging wings or flanges 15, 15, the plate and the two flanges forming three sides of a rectangular opening at the lower end of the chute about which the open upper end of the sack S is supported in order that the material may flow from the chute or hopper into the open mouth of the sack.

The two rear corners of the rectangular mouth of the sack are supported on spaced fixed supporting hooks 16, 16 that may be struck from the metal of the plate 14, and the mouth of the bag of course fits up over the exterior faces of the plate and wings.

The two front corners of the mouth of the sack are supported by means of adjustable levers 17 having end hooks 18 for the mouth of the bag. These levers are pivoted at 19 on the outer faces of the side flanges or wings of the chute, and a spring 20 for each lever tends to pull the upper arm of the lever to the rear and at the same time tends to project the front or hooked end of the lever toward the front. The springs are anchored at 21 to the cross bar or plate 4 and their

front ends are anchored at 22 to the levers. Thus these hooks 18 co-act with the lower corners 23 of the wings for holding the mouth of the sack with a rectangular formation, exterior of the bottom of the chute, for a free flow of the material from the chute or hopper into the sack.

The sacks rest on the ground or floor, and when they have been filled the upper free ends of the levers are turned toward the front to withdraw the hooks 18 from the sack, thus freeing the latter so that it may be carried away.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent is:—

1. The combination with a rack having a downwardly tapering chute with an open lower end, of a pair of exterior hooks at the rear corners of the lower end of the chute, a pair of levers pivoted at the exterior opposite sides of the chute and springs connecting the upper free ends of the levers with the rack, said levers having sack-supporting hooks at their lower ends for the purpose described.

2. The combination with a pair of rigidly connected front legs, a rear pivoted leg and detachable braces joining the front and rear legs of a rack, of a downwardly tapering chute fixed to said rack and provided with an open-front rectangular shaped, open lower end, rear supporting hooks on the chute, a pair of hooked levers pivoted exterior of the sides of the chute, and springs connecting the free ends of said levers with the rack.

In testimony whereof I affix my signature.

CALVIN A. HESTER.