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M. SLOANE
COLLAPSIBLE CONTAINER

2,529,267

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2 Sheets-Sheet 2

Fig. 4

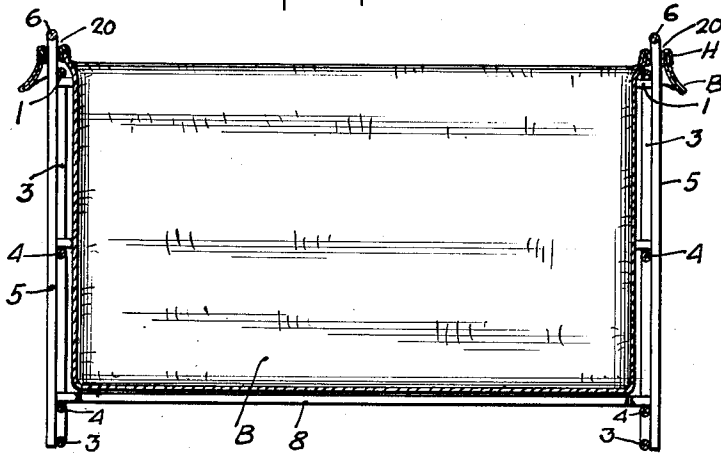


Fig. 5

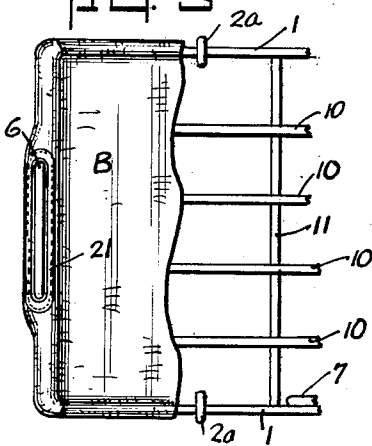


Fig. 6

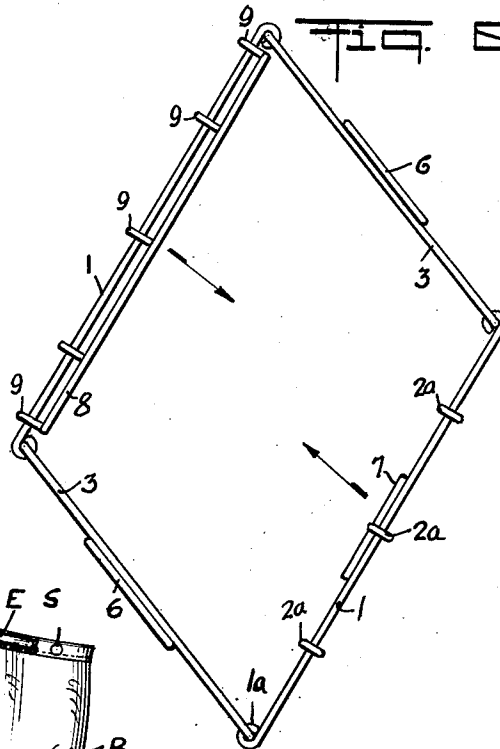
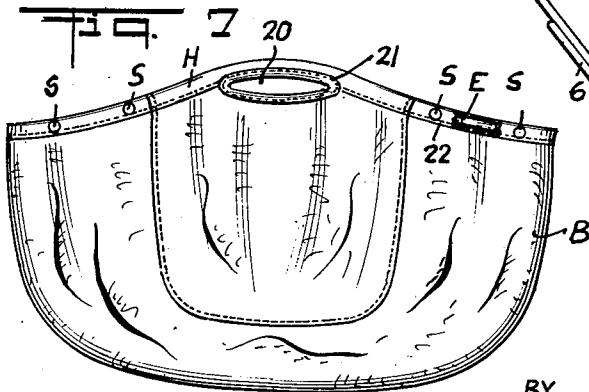


Fig. 7



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2,529,267

COLLAPSIBLE CONTAINER

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1 Claim. (Cl. 220-6)

1

This invention relates to new and improved combination laundry bag and a collapsible container or holder therefor. The invention also relates to the collapsible container or holder per se.

This application is a continuation-in-part of my application Serial No. 643,531, filed January 26, 1946.

According to this invention, I provide a collapsible container of improved rigid construction which can be easily manufactured and assembled and set up and collapsed. This container has skeleton walls which are made of rods or thick wires which can be easily bent. These rods are made of metal or any other suitable material.

I provide the end walls of said container with upwardly extending handle extensions. I provide a laundry bag which has a hem, in which an elastic member is located. I provide said laundry bag at its top with slits through which the handle extensions can be passed. The hem of the laundry bag is folded downwardly over the outer faces of the side walls and end walls of the container, thus stretching said elastic member and securely and releasably fastening the top part of the laundry bag to the top part of the container, by means of the elastic grip of said elastic member, which is exerted upon said outer faces.

The laundry bag, with its filling of laundry, can be easily detached from the container, and the top slits of the bag then serve as a handhold for conveniently carrying the laundry bag.

Other objects and advantages of my invention are stated in the annexed description and drawings which illustrate a preferred embodiment thereof.

Fig. 1 is a perspective view of the improved container, in assembled or set-up form, detached from the laundry bag;

Fig. 2 is a section, partially in elevation, on the line 2-2 of Fig. 1;

Fig. 3 is a section, partially in elevation, on the line 3-3 of Fig. 1;

Fig. 4 is a sectional view similar to Fig. 3, showing the laundry bag in position on the container;

Fig. 5 is a partial top view, showing the laundry bag in position on the container;

Fig. 6 is a detail perspective view which illustrates the collapsing of the container; and

Fig. 7 is a detail end view of the laundry bag, shown separate from the container. A part of the representation of the hem has been broken away, to show the elastic member.

2

The container C has identical side or longitudinal walls, each of which consists of horizontal or longitudinal rods 1 and vertical rods 2. In this embodiment, each said longitudinal wall has three horizontal and longitudinal rods 1 and three vertical rods 2. The bottom end of each vertical rod 2 is suitably fixed to the bottom horizontal rod 1 as by welding, soldering or the like. Each vertical rod 2 is similarly fixed to the intermediate horizontal rod 1. At its top, each vertical rod 2 has a loop end or hook end 2a, as clearly shown in Fig. 2, which embraces and rigidly clamps the top horizontal rod 1.

The container has two identical end-walls.

Each end-wall comprises a continuous edge-frame 3, which has two vertical legs, a top lateral and horizontal leg, and a bottom lateral horizontal leg. Each edge-frame 3 is of substantially rectangular shape. The ends of intermediate lateral and horizontal rods 4 of said end-walls are fixed to the vertical legs of the edge-frame 3, as by spot welding or soldering or the like. In this embodiment, each end-wall has two rods 4. Each end-wall also includes a U-shaped handle-frame which has a top lateral and horizontal leg 6. The vertical legs 5 of each handle-frame are fixed to the top and bottom horizontal and lateral legs of the edge-frame 3, and also to the intermediate lateral rods 4 of the end-walls. Each horizontal and lateral leg 6 is located above the top horizontal and lateral leg of the respective edge-frame 3, thus providing a hand-hold HH.

The ends of the longitudinal rods 1 of the longitudinal walls have pivot loops 1a which turnably engage the vertical legs of the edge-frame 3.

The bottom longitudinal rod 1 of the front longitudinal wall is fixed to a U-shaped latch-frame 7, which is located at the rear of said bottom longitudinal rod.

The bottom wall comprises a U-shaped edge-frame 8 whose lateral legs are provided with end-loops 9, which turnably engage the bottom rod 1 of the rear longitudinal wall. Said bottom wall is also provided with longitudinal rods 10 and with lateral rods 11. The longitudinal rods 10 overlie the lateral rods 11. The longitudinal rods 10 are fixed to the lateral legs of the edge-frame 8 and also to the lateral rods 11. Each lateral rod 11 has its front end thereof fixed to the front longitudinal leg of the edge-frame 8. The rear end of each lateral rod 11 is provided with a pivot loop 12 which turnably engages the bottom longitudinal rod 1 of the rear longitudinal wall. The loops 9 substantially abut the

respective end-loops of said rear bottom rod 1, so that the bottom wall cannot shift longitudinally.

The bag B is provided with a hem H, which has a bottom line 22. At respective opposed ends thereof, said bag B is provided at its top with openings 20 whose edges are reinforced by fabric strips 21. The hem H of said bag is provided with a conventional elastic member E which is preferably endless, which extends through the entire length of the hem H. A part of member E is shown in Fig. 7. The inner wall of the hem H is provided with cooperating snap fasteners S.

When the bag B is off the container and the endless elastic member E is therefore under no tension, the hem H is shirred, so that said shirred hem H can be extended.

The bag B is attached to the container when said container is set up as shown in Fig. 1, by passing the portions of the handle-frames which extend above the top lateral legs of the edge-frames 3, through the slits or openings 20.

At this time, the length of the hem H is less than its full extended length, because said hem H is shirred. The hem H is then bent outwardly and downwardly over the tops of the top longitudinal rods 1 so that the line 22 is substantially coincident with or below the bottoms of said top longitudinal rods 1. The hem H also is bent outwardly and downwardly in the same manner, over the top lateral legs of the edge-frames 3. The elastic member E and the hem H are thus extended, so that the elastic member E firmly and detachably grips the top portions of the four walls of the container. The bottom of the bag B then rests upon the bottom wall of the container. When it is desired to remove the filled bag from the receptacle or container, the overlying top-portion of the bag B is first detached from the longitudinal walls of the container, by bending the hem H upwardly. The hem H is similarly bent up at the end-walls. The openings 20 then serve as hand-holds whereby the bag B can be conveniently carried. The cooperating snap fasteners S which are provided at the inner faces of the walls of the hem, then serve as a releasable closure for the bag.

When the bottom rear wall of the container C is in the assembled position shown in Fig. 1, the latch frame 7 abuts the adjacent front longitudinal leg of the edge-frame 3. The container is made of rods or heavy wires which are somewhat resilient, although said rods or wires are stiff enough to maintain their normal shapes shown in Fig. 1. When the bottom wall of the container is moved into the assembled position shown in Fig. 1, the front longitudinal leg of the edge-frame 3 is located in front of and it tightly abuts the vertical legs of the latch-frame 7 and the respective abutting part of said front leg of the edge-frame 3 is slightly flexed forwardly, thus providing a firm but releasable frictional grip. Likewise, the vertical legs of the latch-frame 7 abut or substantially abut the respective proximate lateral rods 11 of the member 7, or one of the vertical legs of the latch-frame 7, then frictionally abuts a respective lateral rod 11, thus holding the container C securely in its set-up position. The front leg of frame 3 is also pressed against front vertical rods 1.

In order to collapse the container C, the bottom wall is turned upwardly from its horizontal position shown in Fig. 1 to a vertical position in which it abuts the rear longitudinal wall.

As previously noted, the end-loops 1a which are provided at the ends of the longitudinal rods 1 of the respective longitudinal walls, turnably engage the vertical legs of the respective edge-frames 3. The container C can thus be collapsed to flat shape when the bottom wall is in upturned vertical position. In said flat shape, each longitudinal wall is substantially in the same vertical plane as the respective end-wall, and the bottom wall projects above the horizontal and lateral legs 6 of the handle-frames 5.

As shown in Fig. 1, the pivot loops of the top longitudinal rods 1 are located substantially at the top corners of the edge-frames 3. Each intermediate longitudinal rod 1 has pivot loops which are located above and which abut the respective lateral rod 4 of the respective end-walls. Each bottom longitudinal rod 1 similarly has a pivot loop which is located above and which substantially abuts the respective lateral rod 4 of the respective end-wall 3. Hence each longitudinal wall cannot shift downwardly relative to the end-walls, because this is prevented by one or more lateral rods 4 of the end-walls. The longitudinal walls cannot shift upwardly relative to the end-walls because the pivot loops of the top longitudinal rods 1 are located in the top corners of the edge-frames 3.

I thus provide a strong and rigid construction with the use of skeleton walls which are made of metal rods which can be easily bent to provide pivot loops, thus greatly reducing the cost of manufacturing.

I claim:

35 A collapsible container which has a front longitudinal wall and a rear longitudinal wall and end-walls, each said wall being of skeleton construction, each end-wall being an end-wall edge-frame of substantially rectangular shape, each end-wall edge-frame having front and rear vertical legs and top and bottom transverse legs, each longitudinal wall consisting of a plurality of parallel longitudinal-wall rods, each longitudinal-wall rod having end-loops which turnably engage only a respective vertical leg between the top and bottom of the respective end-wall edge-frame, the end-loops of each top longitudinal-wall rod being located substantially in a respective top corner of a respective end-wall edge-frame, each said end-wall edge-frame having at least one end-wall transverse rod which underlies and substantially abuts the end-loops of respective longitudinal-wall rods of said front and rear longitudinal walls which are located below the top longitudinal-wall rods, a bottom wall which has a bottom-wall edge-frame, said bottom-wall edge-frame having bottom-wall transverse legs which have end-loops which turnably engage the bottom longitudinal-wall rod of said rear longitudinal wall and which are located between and substantially abut the end-loops of said bottom longitudinal-wall rod of said rear longitudinal wall, said bottom-wall edge-frame having a front bottom-wall rod which overlies and abuts the bottom longitudinal-wall rod of the front longitudinal wall when said container is set up, said bottom wall having additional rods fixed to said bottom-wall edge-frame, the bottom longitudinal-wall rod of said front longitudinal wall having a U-shaped latch-frame which is closed at its top and which has vertical legs which are fixed to the inner face of said bottom longitudinal-wall rod of said front longitudinal wall, said latch-frame frictionally abutting and releasably retaining said front bottom-

5

wall rod, said bottom wall having at least one transverse rod which substantially abuts a vertical leg of said latch-frame when said container is set up.

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