Dec. 10, 1940. A. D. COWAN 2,224,537

COLLAPSIBLE BASKET

Filed May 31, 1938

Fig. 1

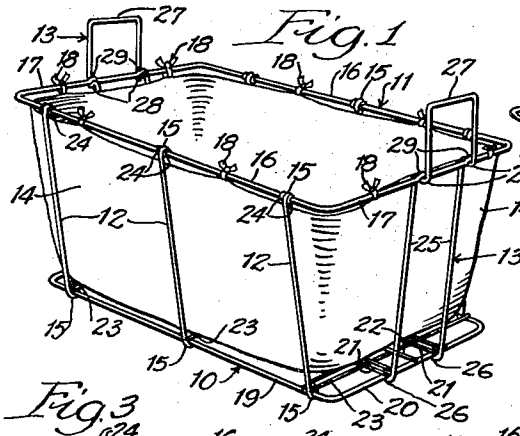


Fig. 2

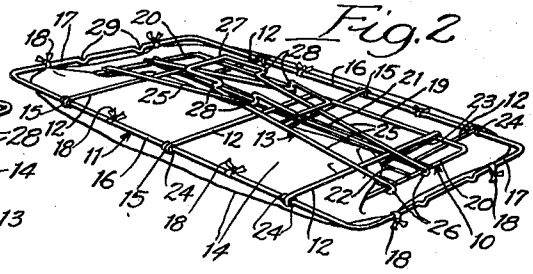


Fig. 3

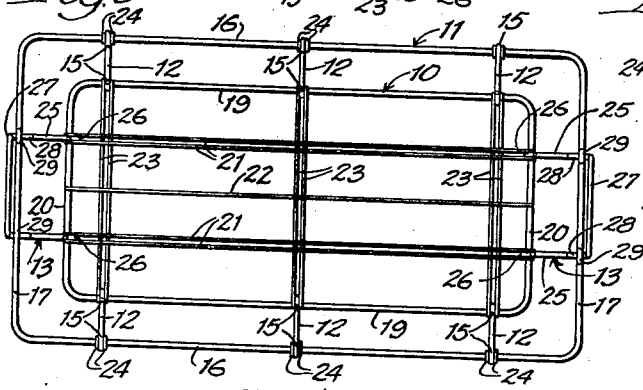


Fig. 4

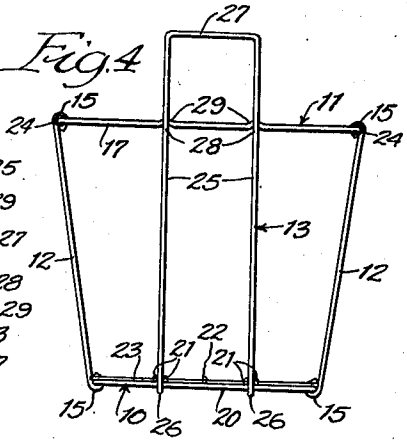


Fig. 5

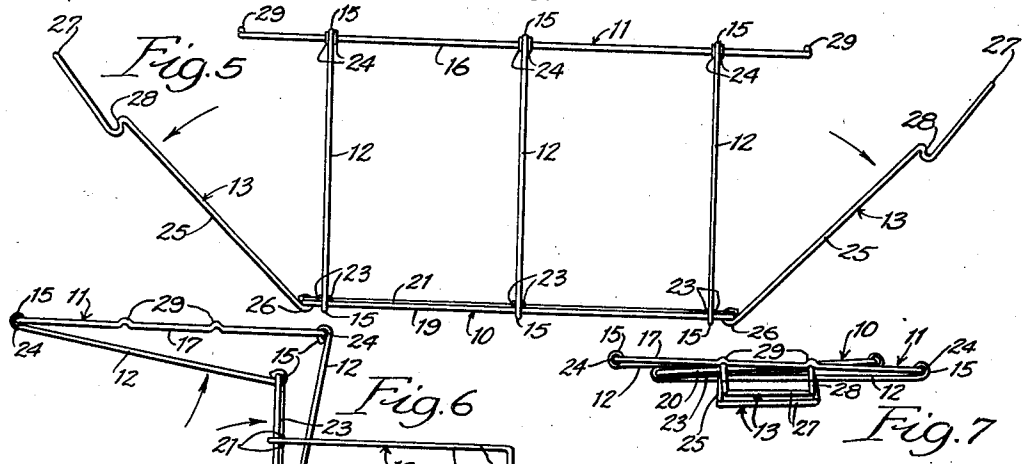


Fig. 6

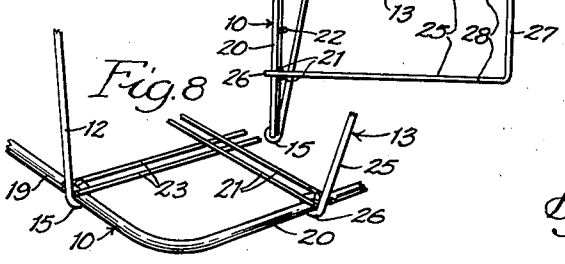


Fig. 7

Fig. 8

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COLLAPSIBLE BASKET

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Application May 31, 1938, Serial No. 210,917

3 Claims. (Cl. 150—49)

The present invention is directed particularly to a clothes basket comprising a collapsible wire frame and an inner fabric bag or container supported and distended by the frame; and the object of the invention is to so construct the frame that it may be readily knocked down or collapsed into flatwise condition for storage when not in use.

A further object of the present invention is to simplify the construction in such a way as to provide a light but strong and rigid wire frame with the parts so connected as to mutually reinforce one another to the extent necessary to prevent collapse when in use.

Further objects and details will appear from the description of the invention in conjunction with the accompanying drawing, wherein—

Figure 1 is a perspective view of the clothes basket erected in condition for use;

Fig. 2 is a perspective view of the under side of the basket in collapsed condition;

Fig. 3 is a top or plan view of the frame;

Fig. 4 is an end view of the frame;

Fig. 5 is a side view showing the handles disconnected as the first stage in the collapsing of the frame;

Fig. 6 is an end view showing the frame partially collapsed;

Fig. 7 is an end view showing the frame completely collapsed; and

Fig. 8 is a detail of one of the corners at the base of the frame.

The frame of the basket, in general, comprises a base 10 of rectangular contour, a top 11 likewise of rectangular contour, side struts 12, and a handle 13 at each end of the frame. Within the frame is located a bag or container 14 of fabric and of a size to substantially fill the interior of the frame.

All of the parts above described are formed of wire, and each of the struts 12 at each end is provided with a loop 15, which loops embrace the top and bottom sections of the frame and afford hinge connections at each end to permit collapse or folding of the frame in a manner presently to be described.

The top section 11 of the frame is of open rectangular configuration having side rails 16 and connecting end rails 17, to which side and end rails the margins of the bag are secured by strips of tape 18, which are tied in such a way as to permit easy removal of the bag for purposes of cleaning or otherwise.

The base section 10 of the frame is of smaller dimensions, both longitudinally and transversely, than the top section, so that when the frame is erected it will present a tapering or converging configuration.

The base section comprises side rails 19 and connecting end rails 20, and the base section is reinforced by pairs of longitudinal wires 21 and a single center wire 22, which wires are connected at their ends to the end rails 20, and which longitudinal wires are intersected by three pairs of cross wires 23 connecting the sides of the base frame.

The longitudinal and transverse reinforcing wires of the base have their ends spot welded to the lower frame rails to afford a rigid and unyielding structure for the base, and the spacing of the pairs of cross wires 23 serves to center and hold the hinge loops 15 at the lower ends of the struts 12 against longitudinal displacement, while the upper ends of the struts are held in position by wire rings 24, likewise spot welded to the side rails of the upper frame. This permits the parts to hinge freely at each end, without, however, permitting lateral displacement of the struts, which are accurately held in position in the manner stated.

The struts 12 cooperate with the handles 13 at the ends of the basket, which handles are each of inverted U-formation comprising spaced rods 25, each terminating at its lower end in a hinge loop 26, and at its upper end in a cross bar 27 elevated above the upper frame section to afford a handle grip for lifting the basket. At the points where the side rods of the handle intersect the ends of the top frame, the side rods are offset to afford shoulders 28 which underlie the end rails of the top frame section, and at the point where contact occurs, the end rails are provided with crimps 29.

As shown in Fig. 5, the shoulders 28 are bent at acute angles in a Z-shaped configuration to afford depressions or sockets for the engagement of the crimps 29, and the location of the shoulders is such as to bring the inner bends or crests of the shoulders slightly above the level of the crimps, so that in interlocking the parts together it will be necessary to exert a moderate pressure in forcing the shoulders into engagement with the crimps, thereby affording means for preventing the accidental disengagement of the parts when in use.

Although the frame of the basket is formed of relatively stiff wire, nevertheless, the parts are sufficiently flexible to permit engagement and disengagement of the shouldered handles with the ends of the top frame as occasion may require.

It is preferred to form the top and base frame sections of relatively heavy wire, and to form the struts and handles of somewhat lighter wire, with the reinforcing wires in the base of still lighter wire, in order to provide the necessary stiffness and rigidity to those portions of the frame structure which are required to sustain the weight of a filled basket.

When it is desired to fold up or collapse the basket, the handles are first disengaged from the crimped end rails of the top frame, as in Fig. 5, and swung outwardly. The struts 12, on one side, are then swung inwardly toward the plane of the top frame, as in Fig. 6, after which the base frame section together with the companion struts overlying the base section is swung up into substantially the same plane, which then permits the handles to be folded down to overlie the last mentioned side struts. This completes the folding operation with the parts in substantially the position shown in Fig. 2. The folding may be easily accomplished by reason of the fact that the struts 12 are of greater length than the width of the base frame section but of lesser width than that of the top frame section, as will be apparent from Fig. 6. Thus, in folding the parts together, the base frame will be centered substantially within the plane of the top frame, and the struts will hinge freely at each end until all portions of the structure have been folded into substantially flatwise condition with the handles overlying the struts. This permits the basket to be easily stowed away as occasion may require.

The frame structure is one which permits the entire load to be readily sustained from the two handle grips, since the shoulders 28 in the handles afford full support for the upper frame, which being of relatively heavy or stiff wire serves to sustain the struts 12 on each side, which struts, moreover, are additionally supported at their lower ends by the lower frame section, which is likewise sustained by the side rods of the handle. The parts being thus united and tied together, the frame as a whole is amply reinforced against bending or distortion under the moderate loads which the basket is intended to sustain.

Although the invention has been described with particularity as to detail, it is not the intention to limit the invention to the particular form shown, since modifications thereof may be made without departing from the spirit of the invention.

Furthermore, although the invention has been particularly described as a collapsible clothes basket, it is not the intention to limit its use in that regard, since the basket described is capable of other uses.

I claim:

1. In a collapsible basket, the combination of a container, a frame consisting of upper and lower sections, and groups of side struts hingedly connected to the upper and lower frame sections on each side of the basket and adapted to be collapsed by folding into substantially the plane of the upper frame section with the lower frame section lying intermediate the groups of side struts, and a handle at each end of the basket hingedly connected to the proximate end of the lower frame section and shouldered at an intermediate point to detachably interengage with and support the proximate end of the upper frame section and extend upwardly therefrom to afford a handle grip, the handles being adapted to be disengaged from the upper frame section and hinge upon the lower frame section and to be folded to overlap the struts and lower-frame section.

2. In a collapsible basket, the combination of a container, a frame consisting of upper and lower wire sections, the lower section being reinforced by pairs of spaced wires extending longitudinally and transversely of the lower frame section, wire side struts looped at their ends around the sides of the upper and lower frame sections to afford hinge connections, and a handle at each end of the basket consisting of spaced side rods connected at their upper ends to afford handle grips and provided at their lower ends with loops affording hinge connections with the ends of the lower frame section, the lower loops of the side struts and handle rods lying intermediate the members of the pairs of reinforcing wires and held thereby against longitudinal displacement, the basket being collapsible by swinging the side struts on opposite sides inwardly toward the plane of the upper frame section to bring the lower frame section into intermediate relation to the side struts and to bring the handle sections into overlapping relation to the side struts when folded.

3. In a collapsible basket, the combination of a container, a frame consisting of upper and lower wire sections of rectangular shape and wire side struts looped at each end to afford hinge connections with the proximate sides of the upper and lower frame sections, the lower frame section being provided with pairs of longitudinal and transverse reinforcing wires rigidly secured to the ends and sides of the lower frame section, the ends of the pairs of transverse reinforcing wires lying closely adjacent to and on each side of the hinge loops at the lower ends of the side struts to prevent longitudinal displacement thereof, and a handle at each end of the basket consisting of spaced side rods looped at their lower ends around the ends of the lower frame section to afford hinge connections located between the ends of members of the pairs of longitudinal reinforcing wires to prevent longitudinal displacement of the hinge loops, the side rods of the handles being shouldered at an intermediate point to interengage with the proximate ends of the upper frame section with the handles extending above said points to afford handle grips, the basket being collapsible by disengaging the handles and swinging the side struts inwardly into substantially the plane of the upper frame section with the lower frame section lying intermediate the groups of side struts and with the handle sections folded inwardly to overlie the side struts and lower frame section.

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