

Jan. 13, 1942.

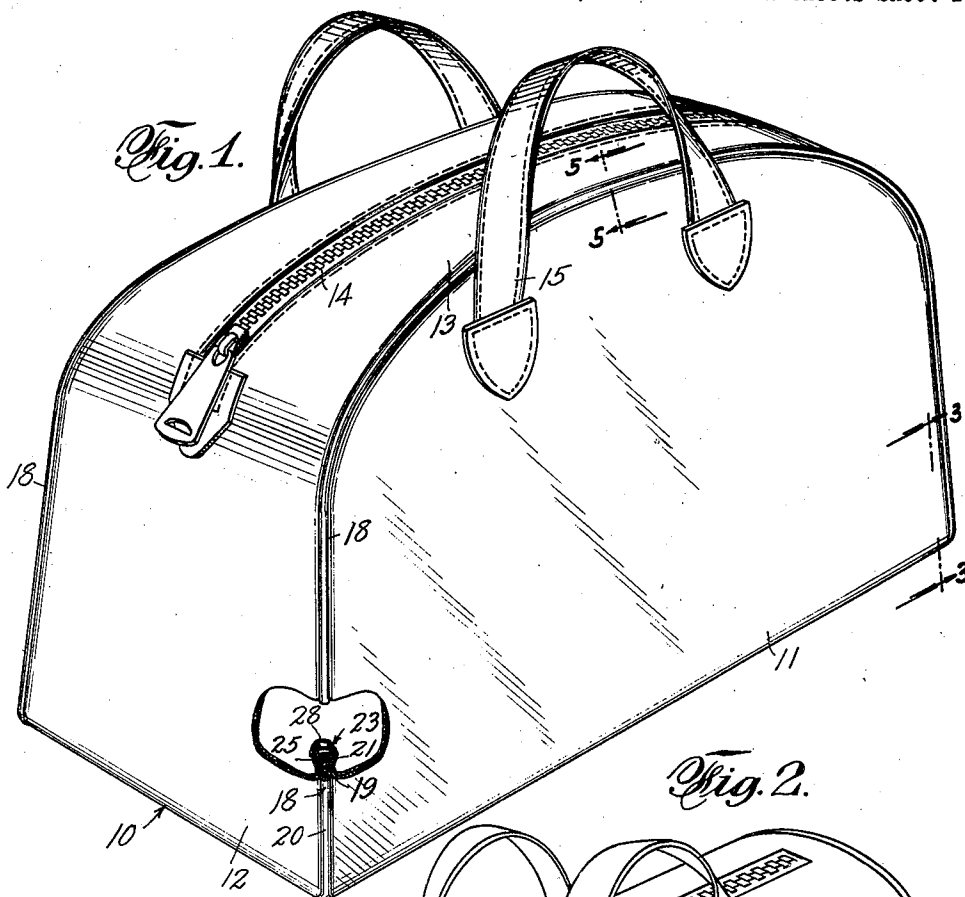
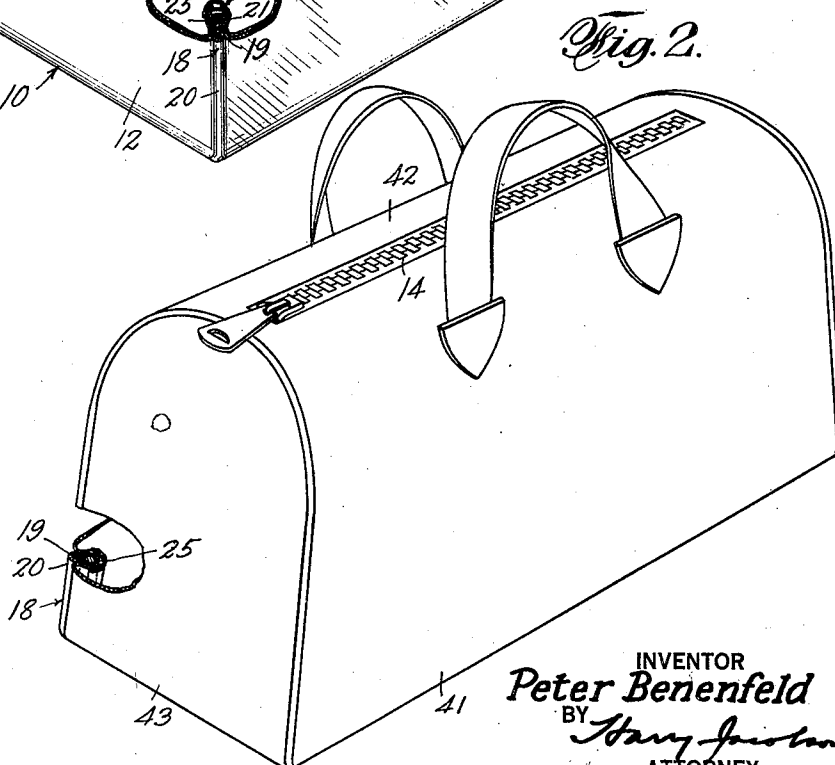
P. BENENFELD

2,269,574

WIRED BAG

Filed Jan. 12, 1940

2 Sheets-Sheet 1



INVENTOR
Peter Benenfeld
BY *Harry Friedman*
ATTORNEY

Jan. 13, 1942.

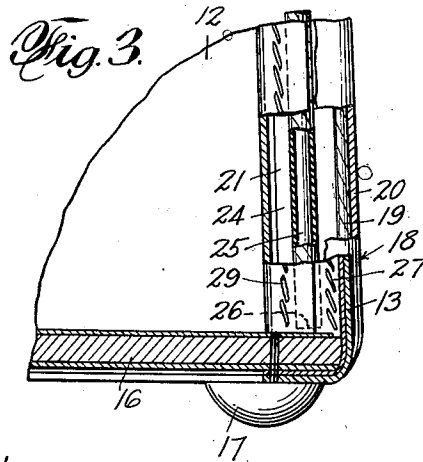
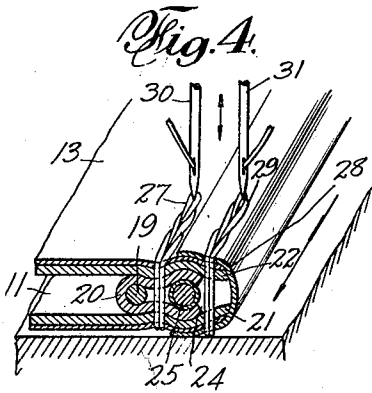
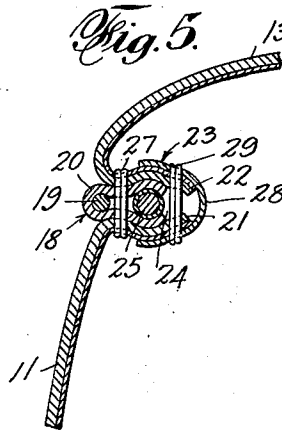
P. BENENFELD

2,269,574

WIRED BAG

Filed Jan. 12, 1940

2 Sheets-Sheet 2



INVENTOR
Peter Benenfeld
BY *Harry Jacobson*
ATTORNEY

UNITED STATES PATENT OFFICE

2,269,574

WIRED BAG

Peter Benenfeld, Brooklyn, N. Y.

Application January 12, 1940, Serial No. 313,514

3 Claims. (Cl. 190—54)

This invention relates to shopping or traveling bags and particularly to those of the soft or collapsible variety which are provided with flexible means to resist permanent distortion of the bag, while permitting the bag by limited changes in its shape to accommodate itself to stresses put thereon or any excess contents forced thereinto.

Attempts have been made heretofore to maintain the shapes of such bags by substituting for the usual non-resilient and non-metallic welt material used at the corner edges of the bag, metallic stiffening wires covered with a narrow strip of finishing material. In such construction, however, it is difficult to hold the resilient stiffening wires properly in place while the bag is stitched together to form the neat uniform appearance given by the usual non-resilient welt, as the wires tend to straighten out of control.

My invention therefore contemplates the provision of a bag construction wherein the usual satisfactory welt is retained but resilient stiffening wires are used in connection therewith and arranged and concealed in a pocket specially provided therefor inside of the bag and covered and thereby protected while adequately performing their shape-maintaining functions.

My invention further contemplates the provision of a bag construction wherein resilient stiffening wires are arranged adjacent the welt and in a pocket therefore on the inside of the bag whereby the parts can be quickly and inexpensively secured together in a single operation.

My invention further contemplates the provision of a normally concealed wire-holding pocket at the inside of the bag seams, one side of said pocket being formed by the line of stitching which separates the welt from the wire and the other side of the pocket being formed by a second parallel line of stitching, said pocket being adapted to be formed with the wire secured therein in one operation and simultaneously with the stitching of the bag seams.

My invention further contemplates the provision of a simple method of assembling the bag parts whereby a wire-pocket may be formed, with the wire arranged therein and automatically separated from the welt to prevent undesirable crossing thereof, simultaneously with the securing of the bag parts and welt together and simultaneously with the finishing of the bag seam.

The various objects of the invention will be clear from the description which follows and from the drawings, in which,

Fig. 1 is a perspective view of a bag partly broken away to show the welt and stiffening wires.

Fig. 2 is a similar view of a modified form of the bag.

Fig. 3 is a fragmentary vertical section taken on the line 3—3 of Fig. 1 showing the interior seamed flap and the wire-holding pocket thereof.

Fig. 4 is a fragmentary perspective view partly in section of one of the bag seams showing how the completed seam and pocket is finished in one operation and showing one form of the bag corner construction.

Fig. 5 is a cross-sectional view of the seam as it appears in its normal position, that is, after the stitched bag has been turned right-side out from the position of Fig. 4.

In the practical embodiment of the invention which I have shown by way of example, the bag 10 is of that type which is provided with similar opposed side walls 11 which are connected by a connecting wall of one-piece of material forming both ends 12 of the bag as well as the top 13. The top is slitted to provide the closure 14 preferably of the slide operated or "zipper" type. Suitable handles as 15 are secured to the side walls. The lowermost portions of the side walls and end walls are turned under the bottom 16 and secured thereto, the corner material being folded, creased or pleated and covered by the casters 17.

What will be termed the "corners" of the bag are located at the junctures of the end walls 12 and top 13 with the side walls 11, and it is the construction of the bag at said corners, which forms an important feature of the invention. The usual welt 18, comprising the cylindrical core 19 and the covering or binding strip 20, is interposed between the turned in adjacent edge portions as 21 and 22 of the walls 11, 12 and 13, the strip 20 being folded and the core 19 arranged at the fold and both projecting sufficiently to form the slightly projecting welt 18.

According to the present invention, said edge portions 21 and 22 as well as the binding strip 20 extend inwardly into the bag a sufficient distance to form the flap 23 (Fig. 1). I utilize the flap to form the pocket 24 in which is arranged the resilient stiffening wire 25. Said wire is preferably covered with a layer of paper or the like before its insertion into the pocket and when secured in place is bent into the same inverted U-shaped form as the welts 18 of Fig. 1. Two such wires are used, one where each of the side

walls 11 is joined to the adjacent part of the end walls 12 and top 13. As best seen in Fig. 3, the wire terminates preferably as at 26 a short distance above the upper surface of the bag bottom 16, so that the wire does not contact with the bottom of the bag and is free to shift with its flap 23 to accommodate itself to temporary distortion of the bag under stress.

The line of stitching 27, which is preferably chain stitching passing through the wall edge portions 21 and 22, and through the folded welt strip 20 inside of the core 19 forms one side of the wire pocket 24 and also serves to separate the core 19 from the wire 25. In the form shown an inside binding or covering strip 28 is provided for the flap, said strip being folded to cover the inner edges of the edge portions 21 and 22 and stitched thereto by the line of chain stitching 29. Said stitching also forms the other or inner side of the pocket 24 and cooperates with the stitching 27 to maintain the wire 25 in place in the pocket and against shifting therein. As has been indicated, the stitching 27 and 29 is preferably chain stitching to permit the stitching to stretch under stress without rupture.

It will be understood that if the flap 23 is not to be finished with a binding, the strip 28 may be omitted and reliance had upon the stitching 29 without the binding to form the inner side of the wire pocket.

The construction just described forms a simple but highly efficient and economical means for reinforcing and stiffening the bag corners and to maintain the bag in its proper shape as well as to bring the bag back to shape after it has been temporarily distorted by pressure put thereon. Said construction also lends itself to economical manufacture. The bag walls are stitched together when in their inside-out positions, as shown in Fig. 3, at the same time that the welt 18 is formed and secured and simultaneously with the formation of the pocket 24 and the securing of the wire 25 therein.

This is done by assembling the end parts of the walls, the welt, the wire and the binding in the position of Fig. 4, passing the mentioned parts through suitable attachments to maintain the relative positions thereof and securing the parts together by the stitching 27 and 29 simultaneously by means of a pair of needles as 30, 31 as the parts are fed by a suitable sewing machine in the direction of the arrow of Fig. 3.

The needle 30 not only operates to secure the parts together but also serves to separate the welt core 19 from the wire to prevent the core and wire from crossing, and thus forces the wire into the pocket 24 formed between the lines of stitching the wire being automatically bent to conform to the U-shape of the pocket flap 23 as the simultaneous stitching operation by both needles progresses. The parts are thereby stitched together, the pocket formed, the wire bent and the binding of the flap (if such binding is used) all completed in a single operation without material difficulty in holding the wire in proper position. When the stitching of the flap 23 as above described throughout the peripheries of the walls (except the bottom) has been thus completed, the bag is turned inside out and the bottom 16 attached thereto.

As shown in Fig. 2, my invention may be applied to bags in which the walls are shaped and secured otherwise than as shown in Fig. 1. A single sheet is used in Fig. 2 to form the side walls 41 and top 42 of the bag, while two separate pieces are used for the two end walls 43. The welt 18 and the wires 25 in this case, while also in form of an inverted U, are arranged at the juncture of the end walls with the piece forming the side walls and top of the bag.

In any case, it will be seen that by arranging shape-maintaining wires within a pocket defined by lines of stitching and in the flap extending inside of the bag at the bag corners, an adequate reinforcing and shape-maintaining structure is provided, adapted to be economically produced in a single operation and hence well designed to meet the requirements of practical use.

While I have shown and described certain specific embodiments of my invention, it will be understood that modifications may be made provided they come within the scope of the claims.

I claim:

1. In a bag having a welt at the bag corners, said welt comprising a flexible non-resilient core and a folded strip enclosing the core, walls on the bag having intumed edge portions at the bag corners, said portions covering the inner edge parts of the welt strip to form a flap on the inside of the bag at said corners, a wire-holding pocket in said flap, and a resilient metallic wire in said pocket arranged between the inner edge parts of the welt strip, the outer side of said pocket being closed by a first line of stitching passing through said edge portions and through said inner edge parts of the welt strip between the core and the wire and adjacent the inner faces of the bag walls, such stitching forcing the core against the fold of the strip, the inner side of said pocket being closed by a second line of stitching arranged inwardly of and adjacent the wire and passing through said edge portions and forcing said wire toward said first line of stitching.

2. In a bag corner construction, a pair of bag walls provided with inwardly extending edge portions forming a flap, a welt including a core interposed between the edge portions, the inner parts of said welt forming part of the flap, a wire-holding pocket in the flap arranged inwardly of the core, a resilient wire in the pocket inwardly of and parallel to the core, a line of stitching securing the edge portions and welt together on one side of the wire, and a second line of stitching passing at least through the edge portions on the other side of the wire and forming at least one side of said pocket.

3. In a bag corner construction, a pair of inwardly extending wall edge portions forming an inside flap on the bag, a welt between said portions including a core arranged outwardly of said portions, a pocket in the flap, a resilient wire of circular cross-section in the pocket parallel to the core, a line of stitching through the flap between the core and the wire and parallel thereto and sufficiently close to the core to force the core outwardly, and a second line of stitching through the inner part of the flap inwardly of the wire and parallel thereto and sufficiently close to the wire to limit the transverse movement thereof.

PETER BENENFELD.