

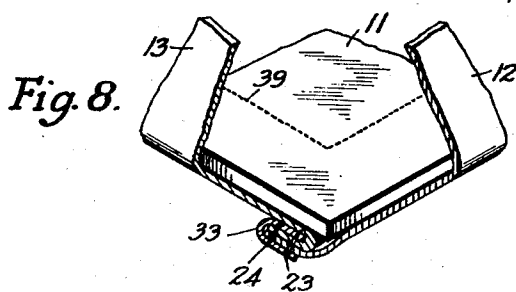
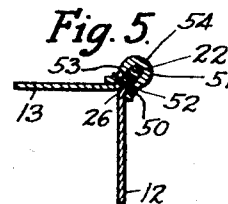
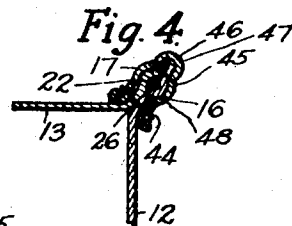
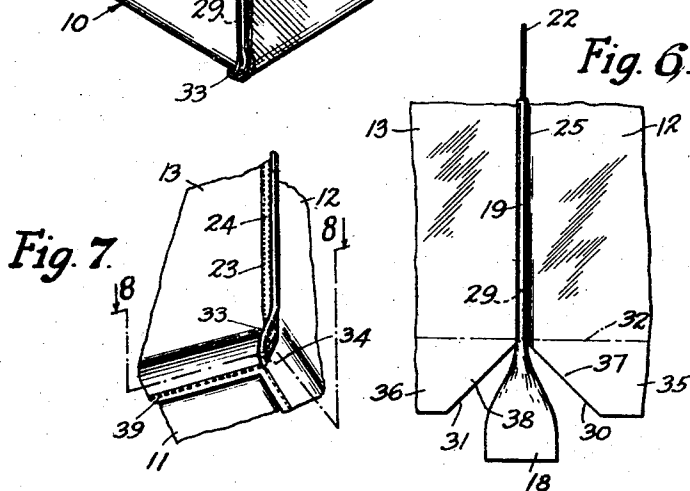
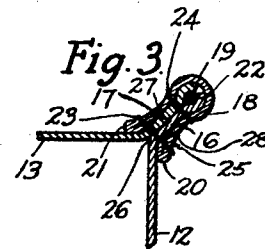
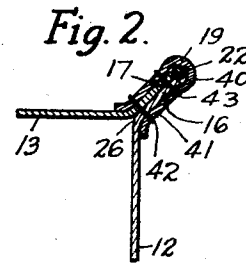
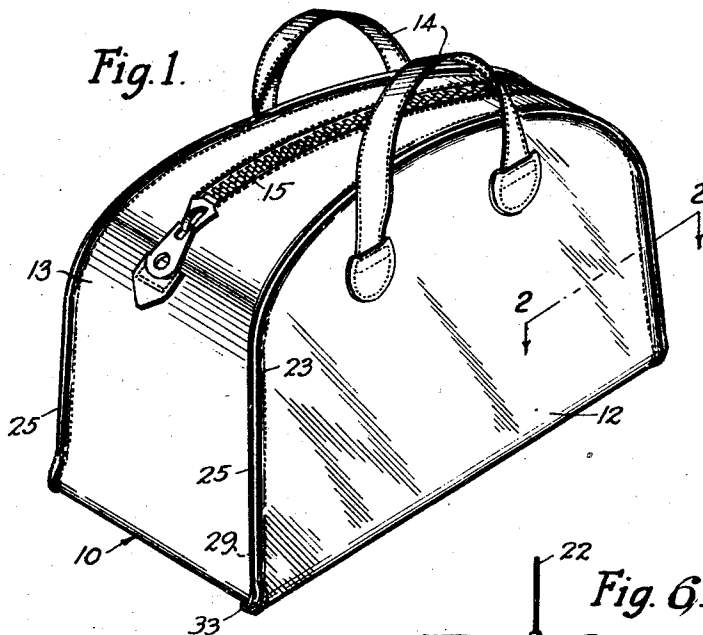
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2,440,138

REINFORCED CORNER SEAM FOR UTILITY BAGS

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REINFORCED CORNER SEAM FOR UTILITY BAGS

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4 Claims. (Cl. 190—54)

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This invention relates to hand bags and particularly to the type commonly known as "utility bags" and which are stiffened by a wire along certain edges to prevent the limp material of the bag from collapsing.

The present invention is an improvement over the bag shown in my prior Patent No. 2,269,574. In said prior patent, a bowed resilient wire is secured at the jointures or meeting edges of the bag walls by parallel lines of stitching which also serve to form a cored welt at the edges. Such construction, while effective, is too expensive for bags of the cheaper variety and also requires the operation of turning the bag right side out after the stitching is completed, an operation which is customary in bags of the type here involved.

This invention therefore contemplates the provision of a bag wherein the stiffening wire is so secured that the bag walls may be stitched together in right side out position at the same time that the wire is inserted into place and covered, the covering for the wire also serving as a covering for the raw edges of the bag parts and as a pocket for the wire while the stitching is exposed to view.

The invention also contemplates the arrangement of the stiffening wire outwardly beyond the corner edges of the bag, whereby the inside corners of the bag are made substantially sharp, smooth, continuous and unobstructed and free of protuberances.

The invention further contemplates the provision of a wire-stiffened bag having outstanding flanges within which the wire is arranged, the bag being adapted for rapid and economical manufacture, yet being strong, efficient and of good appearance, the flanges and the exposed stitching thereof producing a desirable ornamental effect.

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 to which my invention has been applied and showing the outstanding corner flanges.

Fig. 2 is a fragmentary horizontal sectional view taken on the line 2—2 of Fig. 1 and shows one form of the outstanding flange.

Fig. 3 is a similar view of another form of the flange.

Fig. 4 and Fig. 5 are similar views of other modified forms of the flange.

Fig. 6 is a fragmentary developed elevational view of one of the lower corners of the bag show-

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ing the bag walls, flange, and the binding for the flange in part stitched into place and in part unstitched.

Fig. 7 is a fragmentary perspective view, looking upwardly at a bottom corner of the bag, showing how the outstanding flange is bent or folded flat and secured to the under face of the bottom.

Fig. 8 is a fragmentary perspective view partly in section and partly broken away and taken on the line 8—8 of Fig. 7.

My invention, in its practical embodiment shown by way of example, is applied to the bag 10 which is of the usual general shape having a relatively rigid bottom 11, a limp, flexible front wall 12 of textile or other suitable material, a similar rear wall, and a limp flexible curved wall 13 forming the sides and top of the bag and joined to the front and rear walls and to the bottom. The usual handles 14 are secured respectively to the front and rear walls. As is customary, the slide-operated interlocking fastener 15 forms the closure along the top part of the wall 13.

However, instead of securing the various flexible walls of the bag together in an inside out position and then turning the bag right side out, my improved construction permits stitching of the walls together initially in right side out position, so that the turning step or operation is entirely eliminated, while the raw edges of the walls are nevertheless adequately concealed. As shown for example in Fig. 3, which illustrates the now preferred form of the invention, the peripheral edge portions 16 and 17 of the respective walls 12 and 13 are brought into face to face relation and covered with the binding strip 18, said strip being folded at its outer edge as at 19 and the inner edges of the two side flaps 27, 28 thus formed being infolded at 20, 21 to conceal the raw edges of the binding strip. At the same time, the resilient wire 22 is inserted between the outer parts of the edges of the portions 16 and 17, and while the various parts are in the positions described, the two parallel lines of stitching 23, 24 are made along the contacting margins of the wall 13 with the front or rear wall of the bag, as the case may be, so as to form the outstanding flexible corner flange 25 projecting angularly to the faces or planes of the walls 12 and 13.

The stitching 23 passes through six thicknesses of material namely, the two thicknesses of the binding strip 18, its infolded portions 20, 21, and the outstanding peripheral wall portions 16, 17

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to secure them all together and to form the clear, continuous and substantially sharp and uninterrupted interior corner 26 on the bag. The other line of stitching 24 passes through four thicknesses, namely both flaps 27, 28 of the binding strip and through the peripheral portions 16, 17 close to the wire 22 and thereby urges said wire outwardly toward the fold 19. Since the stitching follows the edges of the wall 13 which is curved, the flange becomes curved and the wire therein is bowed.

In this form of the invention, the wire does not come into contact with the fold 19 because of the interposition therebetween of the outer edge portions of the parts 16, 17. However, the wire is tightly confined in the pocket of the strip, formed between the stitching 24 and the fold and cannot become displaced under stresses such as are put upon the bag when the bag is distorted, as when articles are put therein or taken out, necessitating spreading of the closure 15. The wire therefore is capable of yielding adequately in response to such stresses without becoming displaced within the flange or permanently distorted or kinked, and upon release of the stresses, the wire resumes its initial position and reshapes the flexible walls of the bag to their original and normal positions by applying tensile force to the bag walls, tending to pull said walls outwardly and upwardly.

Preferably, the wire terminates a short distance above the bottom 11 as at 29 (Figs. 1 and 6) while the flange 25 continues downwardly past the lower end of the wire, thereby permitting the flange to be turned or folded substantially flat against the lower surface of the bottom as will be more fully explained hereinafter. Furthermore, by arranging the wire outwardly beyond the interior corner 26, more or less heavy articles put within the bag, cannot slide or push forcibly and directly against the wire and pinch it, protected as it is by the stitching 23 and the intervening parts, while the wire serves to relieve the bag walls of much of the stresses and strains to which the bag is subjected in ordinary use but does not become kinked or permanently distorted and consequently retains its initial shape and function for the life of the bag.

It will be understood that the stitching 24 tends to squeeze together or compress the outstanding portions 16, 17 as well as the binding strip inwardly of the wire thereby to form a more or less rounded or cylindrical and consequently ornamental bead at the outermost part of the flange, the bead being in outward spaced relation to the actual interior corner of the bag. The yieldable flange 25 serves as a protecting fender or guard yielding under outside forces about the stitching 23 as a hinge point thereby to avoid damage to the flange and to the adjacent parts of the bag, while retaining its functions of stiffening, reinforcing and shaping the bag.

As has been indicated, the wire 22 terminates at a point 29 above the bottom of the bag, but the remainder of the flange continues downwardly below the wire and is flexible but not resilient at its lower part. As is best seen in Figs. 7 and 8, the unstiffened lower part 33 of the finished flange is folded flat against the under face of the bottom 11 and secured thereto as by the stitching 34. The joint at the lowermost parts 35 and 36 respectively of the walls 12 and 13 with the bottom 11, and the flange at the bag corners will now be described. Said walls extend past the bottom 11 in their unsecured state (Fig. 6) and the extending

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parts 36, 35 thereof are mitered as at 31, 30. The peripheral portions 37, 38 of the parts 35, 36 are brought together in face to face relation to form continuations of the peripheral portions 16 and 17 at the same time that the extending parts 35, 36 are bent at the bend line 32 shown in dash dot lines in Fig. 6. The mitered edge parts 37, 38 in their face to face positions are inserted into and between the side flaps of the folded binding strip 18 and the whole secured together by the continuation of the stitching 23, 24, whereby the lower parts of the walls are retained in their bent positions ready to be secured to the bottom 11. Said bottom is then inserted in place and the lower marginal parts 37, 38 together with the binding strip forming the lowermost part of the flange, are turned through an angle of about 90° against the bottom and secured in place by the stitching 34 as hereinbefore mentioned, the remainders of the extending wall parts 35, 36 also being stitched to the bottom as by the stitching 39 near the edges thereof thereby completing the bottom part of the bag.

In that form of the invention shown in Fig. 2, instead of inserting the wire 22 between the peripheral portions 16, 17 of the walls, said wire is arranged directly inside of and in contact with the inner surface of the fold 19 of the binding strip and outwardly beyond the extreme edges of said portions 16, 17 whereby a somewhat thinner bead 40 is obtained on the flange 41. While the inner edges of the binding strip are shown as raw edges, as is unobjectionable where the binding strip is of leather or the like, it will be understood that said raw edges may be intumed as shown at 20, 21 of Fig. 3 if desired. The double line of stitching 42 and 43 secure the parts of the flange together, the stitching 43 also urging the wire tightly against the fold as hereinbefore explained in connection with Fig. 3.

As shown in Fig. 4, the wire 22 is arranged between and held in place by the lines of stitching 44 and 45. The stitching 45 is made inwardly of the fold 46 of the binding strip and passes through the peripheral portions 16, 17 of the walls, between which portions the wire is arranged. Being quite close to the fold, the stitching 45, by compressing the parts together forms a somewhat smaller bead 47 than the main bead 48 encompassing the wire. The inner edges of the binding strip may be infolded or not as desired.

It will be understood that a single line of stitching may replace the double line illustrated in Figs. 2 and 4. In Fig. 5, I have shown such single line of stitching 50 in connection with the relatively narrow flange 51 resulting from the use of peripheral wall portions 52, 53 of minimum width. If it is desired to make such portions wider, they may be extended up to the fold 54 of the binding strip in the manner illustrated in Figs. 3 and 4, the wire in that case being interposed between such portions as is there shown. Where a single line of stitching is employed, it serves the double purpose of forming the smooth and unobstructed interior corner of the bag and of forcing the wire toward the fold of the binding strip.

In all cases, by arranging the stiffening wire in an outstanding flexible guard flange formed by a folded binding strip and the peripheral portions of the bag walls, the purposes of the invention are adequately attained and a durable and effective construction is provided capable of rapid and economical manufacture with a minimum number of operations.

Various changes may be made in the specific

forms of the invention shown and described without departing from the spirit of the invention defined in the appended claims.

I claim:

1. In a stiffened bag having flexible side and end walls, an outstanding flange on the bag at the corner junctions of said walls, said flange comprising outstanding peripheral portions on the walls terminating in raw edges and arranged in face to face relation with the raw edges outside the planes of the walls, a binding strip for said portions, said strip being folded to provide an integral bend and a pair of flaps, each flap being in face to face relation with one of said portions, the free edge parts of the flaps being infolded against the adjacent walls, stitching passing through the flaps, through the infolded edge parts of the strip and through said portions and forming a smooth and substantially continuous corner on the inside of the bag at the inner interior edge of the flange, a bowed resilient stiffening and shaping wire within the flange and between said peripheral portions, and additional stitching adjacent the wire and passing through said portions and said flaps.

2. In a bag having flexible side and end walls, peripheral portions at the corner junctions of said walls outstanding angularly to the surfaces of the walls and in face to face relation to each other, a folded binding strip arranged with the fold thereof outermost and having two parallel side flaps respectively in face to face relation to the peripheral portions, the inner edge parts of the strip being infolded against the adjacent walls, a stiffening wire within the strip and stitching passing through the side flaps of the strip and through the peripheral portions inwardly of the wire and through the infolded edge parts of the strip, said strip, peripheral portions and wire forming outstanding flexible flanges at the jointures of the walls with the stitching exposed to view.

3. In a bag having flexible side and end walls, peripheral portions at the corner junctions of the walls outstanding from the walls in face to face relation to each other, a folded binding strip arranged with the fold thereof outermost and hav-

ing side flaps respectively in face to face relation to the outermost faces of the peripheral portions, the inner edge parts of the strip being infolded against the adjacent walls, a stiffening wire within the strip adjacent the fold and between the outermost edge parts of the peripheral portions, and stitching passing through the side flaps of the strip and through the peripheral portions inwardly of the wire and through the infolded edge parts of the strip, said strip, peripheral portions and wire forming outstanding flexible flanges.

4. In a bag having flexible side and end walls, an outstanding flexible guard flange at the corner junctions of the walls, said flange comprising peripheral edge portions of the walls, a binding strip having infolded inner edges, said binding strip being folded around the edge portions and with the fold thereof forming the outermost edge of the flange, a stiffening wire within the flange and between the outermost parts of the edge portions, and two parallel lines of visible stitching passing through the edge portions and the binding strip, one line of stitching being arranged closely adjacent to and inwardly of the wire and the other line of stitching passing through the infolded edges of the binding strip and through the edge portions to form a substantially sharp and smooth interior corner on the bag at the innermost edge of the flange.

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