Jan. 17, 1967 M. KISH, JR 3,298,480

CARRYING BAG CONSTRUCTION

Filed May 5, 1965 2 Sheets-Sheet 1

FIG. 1.

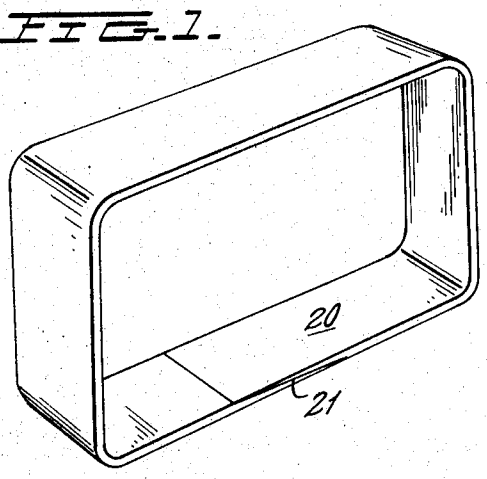


FIG. 5.

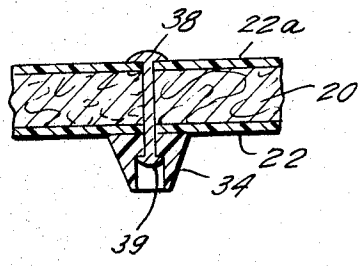


FIG. 2.

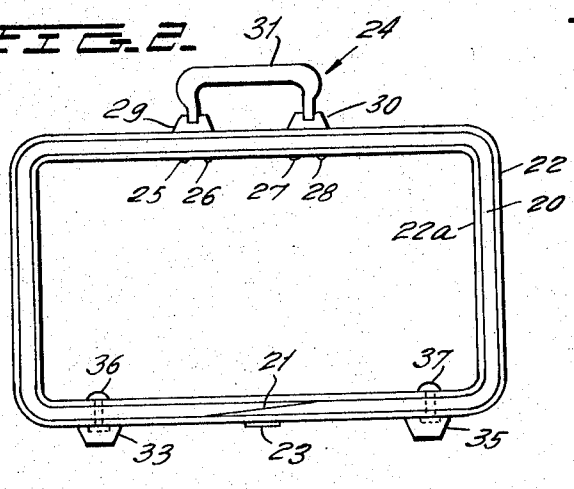


FIG. 7.

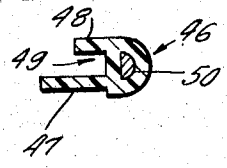


FIG. 3.

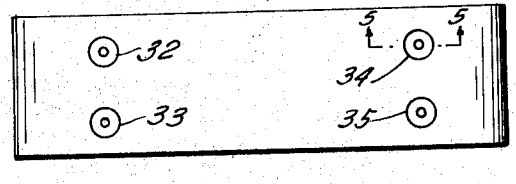


FIG. 8.

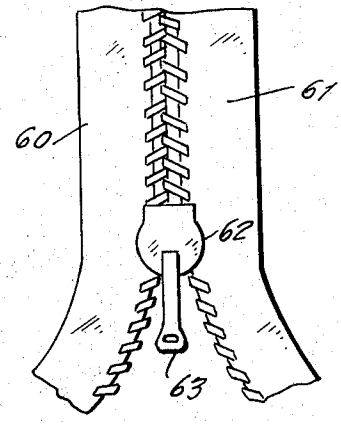
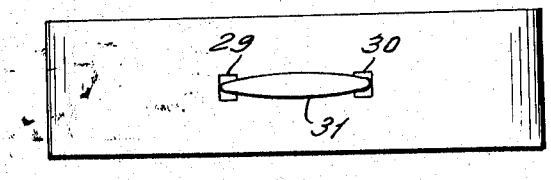


FIG. 4.



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Jan. 17, 1967 M. KISH, JR 3,298,480

CARRYING BAG CONSTRUCTION

Filed May 5, 1965 2 Sheets-Sheet 2

FIG. 6.

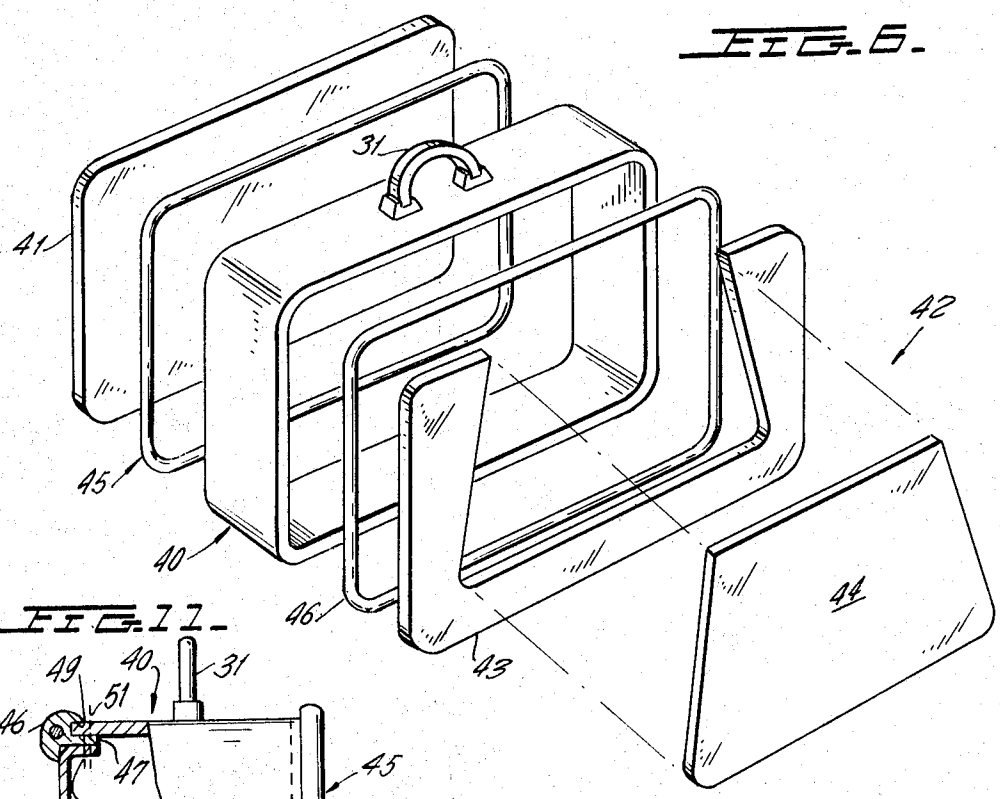


FIG. 11.

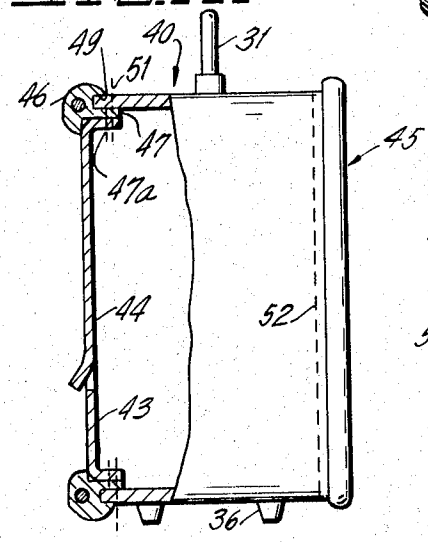


FIG. 12.

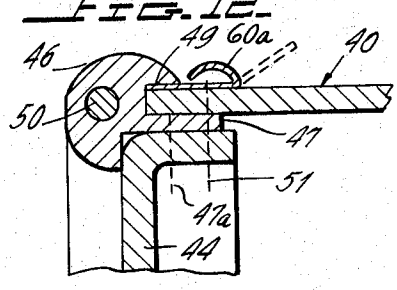
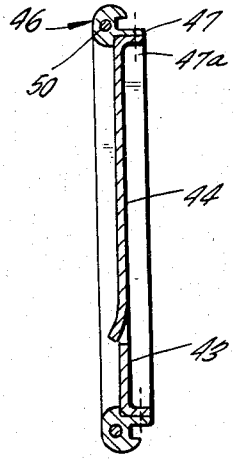


FIG. 10.



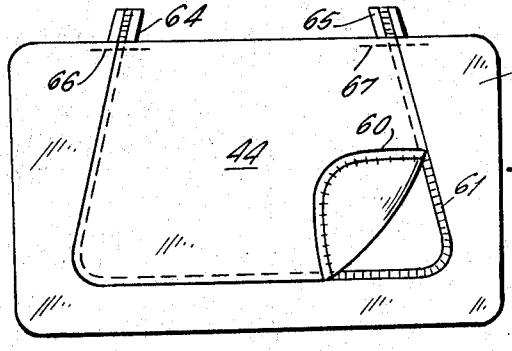


FIG. 9.

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3,298,480

CARRYING BAG CONSTRUCTION

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Filed May 5, 1965, Ser. No. 453,296
4 Claims. (Cl. 190—54)

This invention relates to a novel carrying bag construction wherein the main frame is pre-formed of a rigid rectangular body having a suitable covering means thereon and suitable hardware directly secured thereto which is thereafter assembled with front and rear panels of novel construction.

This application is an improvement of my copending application Serial No. 387,390, filed August 4, 1964, which is directed to a novel method of manufacture for carrying luggage, wherein the assembly of the main frame of the luggage is carried out in the flat with a central metallic support receiving all of the various hardware for the bag.

The present invention is directed to a novel construction for bags of this general type where, however, the main frame is formed of a rigid rectangular cylinder which has finishing materials applied thereto along with hardware, and thereafter receives the front and rear panels in a novel manner.

Moreover, an additional feature of the invention involves the use of a novel welt for the connection of the rear panels in the main bag body and a novel zipper construction for the front panel.

A primary object of this invention is to provide a novel carrying bag construction which is inexpensive.

Another object of this invention is to provide a novel construction for carrying bags wherein the main frame of the bag is a single pre-formed rectangular tube which is completely finished prior to the assemblage of front and rear panels.

Yet another object of this invention is to provide a novel zipper panel for luggage.

A further object of this invention is to provide a novel welt for the securement of front and rear panels to a pre-assembled main frame.

These and other objects of this invention will become apparent from the following description when taken in connection with the drawings, in which:

FIGURE 1 shows a perspective view of a rigid rectangular tube which forms the body of the main frame of the carrying bag of the invention.

FIGURE 2 is a side view of the tube of FIGURE 1 after the connection of interior and exterior finishing strips and various hardware to the main frame, thereby to completely finish the main frame structure.

FIGURE 3 is a bottom view of FIGURE 2.

FIGURE 4 is a top view of FIGURE 2.

FIGURE 5 is a cross-sectional view of FIGURE 3 across the lines 5—5 in FIGURE 3 to illustrate the connection of one leg to the main frame.

FIGURE 6 is an exploded perspective view of the main frame, connecting welts and front and rear panels.

FIGURE 7 is a cross-sectional view of the welts of FIGURE 6.

FIGURE 8 is a plan view of the coil zipper used in accordance with the invention.

FIGURE 9 illustrates the front panel containing a zipper therein when assembled with the panel flap and zipper of FIGURE 8.

FIGURE 10 is a cross-sectional view of the assembled front flap of FIGURE 9 after it has been sewn to its connecting welt.

FIGURE 11 is an end view partially in cross-section of the completely assembled bag to illustrate the manner

in which the subassembled panel and welt is connected to the finished frame of FIGURE 2.

FIGURE 12 illustrates a modification of the assembly of panel and welt which includes a plastic inwardly curved strip to cover the sewn junction between the main bag body of FIGURE 2 and the welt and panel.

Referring first to FIGURE 1, I have illustrated therein a rectangular tube **20** which can, for example, be of laminated wood wherein the ends of a sheet are bent to form in a suitable manner and joined along an elongated junction **21** in any desired manner.

The techniques for fabricating a wooden frame in this manner are well known and such frames are commercially available. Alternatively, however, a finished tube can be formed of any other desired material such as any of the thermoplastics, or fiber materials. The thickness of the frame **20** is sufficient to provide substantially all of the mechanical strength required of the carrying bag and can, for example, be ⅛" thick when made of wood or fiber.

Such frames are commonly used as the main support body of carrying bags. In the past, and in order to finish the bag, the rear panel of the bag is subassembled with a tubular finishing material, and the tubular finishing material is forced over the top of the frame **20**. Thereafter, the various hardware required was secured to the frame and the opposite panel for finishing the bag was sewn to the edge of the tubular finishing material covering the frame. This type construction leads to many manufacturing problems since the tubular finishing material must be stretched over the frame.

The principle of one aspect of the present invention is to completely finish the frame prior to the connection of panels thereto and thereafter securing the panels to the frame in a novel manner. More particularly, and as shown in FIGURE 2, the frame **20** first has an outer finishing strip **22** of any suitable material laminated thereto as by cementing, thereby defining the completely finished outer frame appearance. Note that the finishing strip **22** overlaps on the junction **23** where this overlap could be left as is or covered with a suitable finishing strip. An interior lining **22***a* is similarly applied as by cementing to the interior of the bag, defining the finished lining in the frame section of the bag.

Thereafter, a carrying handle **24** is secured to the top of the bag (FIGURE 4) as by rivets **25** and **26** which suitably engage hardware element **29** and rivets **27** and **28** which suitably engage hardware element **30**. The hardware elements **29** and **30** then pivotally mount the carrying handle **31**. Thereafter, the four legs **32** through **35** are secured to the bottom of the bag by suitable rivets such as the rivets **36** and **37** which engage legs **33** and **35**, respectively.

If desired, a suitable pocket commonly found at the base of luggage of this type can also be secured to the base of frame **20** by passing the rivets such as rivets **36** and **37** which secure legs **33** through **35** through the corners of such a pocket.

FIGURE 5 illustrates in detail the manner in which the legs are supported to the frame. It will be noted that the rivets **25** through **28** which engage hardware members **29** and **30** are connected in a similar manner. Thus, in FIGURE 5, a rivet **38** which is similar to rivet **36** has an enlarged head which engages the outer surface of lining **22***a*. The main body of the rivet then passes directly through lining **22***a* (and any pocket that may be at the bottom of the bag), and thence through the main wooden frame **20**, the outer finishing surface **22** and into the center of leg **34**. Thereafter, the end of the rivet is expanded into head **39** to engage the internal shoulder in the leg **34**.

With the completion of the securement of hardware, it will be noted that this portion of the bag is now completely finished, with the exception of the connection of side panels thereto.

FIGURE 6 is an exploded perspective view of the finished assembly of FIGURE 2 designated by numeral 40 in FIGURE 6, along with the rear panel 41, the front panel 42 comprised of panel section 43 and flap 44, and the welts 45 and 46 used for securing panels 41 and 43 to the subassembled bag frame 40.

As will be described more fully hereinafter, each of the welts 45 and 46 are identical extruded plastic members having a cross-section shown in FIGURE 7 for the case of welt 46 wherein the welt has two projecting flange surfaces 47 and 48 which define a pocket 49 which will be seen hereinafter to fit over the edge of frame 40. In addition, the extrusion has a central opening in the main head thereof which receives a metallic reinforcing wire 50.

As will be further described more fully hereinafter, the flap 44 which defines the main opening into the completed bag is provided with a coiled zipper of the type shown in FIGURE 8. More particularly, the coiled zipper of FIGURE 8 is comprised of two adjacent fabric sections 60 and 61 which each have a coil of a suitable plastic material such as nylon threaded through their opposing edges. These coils are then suitably formed to define engaging zipper-type elements which are opened and closed by way of a suitable runner 62 having a pull 63. Zippers of this type are well known, and are commercially available at the present time.

While certain aspects of the invention are practiced with the use of any type zipper, one specific aspect of the invention involves the use of a coiled zipper, the coils of which are made of a plastic material such as nylon, whereby the zipper can be cut with simple shearing equipment such as hand-scissors. Moreover, this type zipper can be sewn across with conventional sewing equipment without the danger of breaking the needle of the sewing machine on a metal zipper element.

As will be described more fully hereinafter, such zippers are further commerically available in long coils which are cut to length by the user as contrasted to the need for purchasing pre-finished metallic zippers in predetermined lengths. Thus, such predetermined lengths of metal zippers have been found commonly to vary by more than ½" in a length of the order of 36", thereby complicating manufacturing techniques using such zippers.

Referring to FIGURE 9, I have illustrated therein the manner in which the flap 44 is connected to panel portion 43. It will be noted that the flap 44 has dimensions greater than the cut-out section in the panel section 43 so that the edges of the flap 44 will somewhat overlap the cut-out section of panel 43 by, for example, ½".

In assembling these two members, the zipper fabric portions 60 and 61 are first sewn to the adjacent edges of flap 44 and panel portion 43 in a manner disclosed in my copending application Serial No. 387,390, and assigned to the assignee of the present invention. However, as contrasted to that application, and where a coiled plastic zipper is used, a zipper length greater than the length of the closure is used so that the zipper ends 64 and 65 overlap the upper edge of panel portions 43 and 44. Thereafter, reinforcing stitch lines 66 and 67 are sewn directly across the upper edges of panel portions 43 and 44, thereby to firmly retain these panel portions in position with respect to one another independently of the zipper.

It is to be particularly noted that such an operation could not be performed with prior art metallic zippers because of the possibility of breaking a sewing needle when sewing through a metallic zipper. In the case of the plastic zipper, however, the sewing needle will pass directly through the plastic coil without damage to the needle.

Thus, in FIGURE 9, a sufficiently long length of zipper is cut from a reel, it only being necessary that the ends of the zipper will project beyond the top of the flap as shown by projecting ends 64 and 65. This is to be contrasted to pre-formed metallic zippers whose lengths can considerably vary, thereby resulting in some cases in an unsightly gap between the end of the zipper and the top of the flap formed of panel portions 43 and 44.

Thereafter, and as shown in FIGURE 10, the preassembled panel portions 43 and 44 have their edges sewn to the flange 47 of welt 46 along the stitch line 47*a*. Note that this sewing operation automatically forces the panel edges to bend inwardly to define a flange-type arrangement. Moreover, the reinforcing wire 50 in the welt 46 will hold the panel to its predetermined rectangular shape, thus simplifying subsequent operations. This welt further serves to reinforce the bag after assembly thereof.

The panel 41 is connected to its welt 45 in an identical manner to that illustrated in FIGURE 10. Thereafter, the two panels are assembled with the finished frame 40, as illustrated in FIGURE 11, wherein the edges of finished frame 40 are merely inserted into the pockets 49 of welts 45 and 46, and sewn thereto. Thus, in FIGURE 11, the left-hand edge of frame 40 is shown as inserted into the pocket 49 of welt 46, and a stitch line 51 is passed through the frame 40, flange 47 of welt 36 and the inwardly bent edge portion of the panel formed of panel portions 43 and 44.

In an identical manner, the welt 45 permits securement of the right-hand end of bag 40 to the panel 41 as by the exposed stitch line 52. Note that stitch line 51 will also be exposed in the finished bag.

FIGURE 12 shows a further modification of the manner in which securement between frame 40 and the subassembled welt and panel may take place for the case of panel 44 wherein a pre-stressed plastic strip 60*a* is used which will curve over the final stitch line, thereby to protect the final stitch line. Thus, in FIGURE 12, when the edge of subassembled frame 40 is placed within the pocket 49, an elongated strip 60*a* of plastic material is also inserted into the pocket. The pocket strip 60*a* is then flexed outwardly to the position shown in the dotted lines in FIGURE 12, and the stitch line 51 is made through the strip 60*a*, frame 40, flange 47 and the panel. The strip 60*a* is then released, and will curve inwardly and over the surface of frame 40 which carries the stitch line 51. In a similar manner, the stitch line 52 of FIGURE 11 would be covered by a similar inwardly curved strip.

Although this invention has been described with respect to its preferred embodiments, it should be understood that many variations and modifications will now be obvious to those skilled in the art, and it is preferred, therefore, that the scope of the invention be limited not by the specific disclosure herein, but only by the appended claims.

The embodiments of the invention in which an exclusive privilege or property is claimed are defined as follows:

1. A carrying case comprising a generally tubular frame, carrying handle means connected to a central portion of said tubular frame, front and rear side panels of flexible material extending across the opposite ends of said tubular frame and first and second identical welt means connecting the periphery of said front and rear panels to the periphery of the said opposite ends of said rigid frame; each of said first and second welt means being identical in construction; each of said welts having first and second extending flanges, said first flanges of said first and second welts extending along the inner surfaces of said opposite ends of said frame; said second flanges extending over the outer surfaces of said opposing ends of said frame; and first stitch line means extending through one end of said frame, said first flange of said first welt, and the periphery of said first panel; and second stitch line means extending through the other end of

said frame, said first flange of said second welt and the periphery of said rear panel; said second flanges of said first and second welts extending over the outer surface of said opposite end of said frame; said first and second stitch lines spaced from the ends of said second flanges of said first and second welts, respectively; and first and second laterally coiled plastic strips secured to said frame by said first and second stitch lines; one lateral side of said first and second strips captured beneath said second flanges of said first and second welts, respectively; the opposite lateral side of said first and second strips coiling over their respective first and second stitch line.

2. A carrying case comprising a generally tubular frame, carrying handle means connected to a central portion of said tubular frame, front and rear side panels of flexible material extending across the opposite ends of said tubular frame and first and second identical welt means connecting the periphery of said front and rear panels to the periphery of the said opposite ends of said rigid frame; each of said first and second welt means being identical in construction; each of said welts having first and second extending flanges, said first flanges of said first and second welts extending along the inner surfaces of said opposite ends of said frame; said second flanges extending over the outer surfaces of said opposing ends of said frame; and first stitch line means extending through one end of said frame, said first flange of said first welt, and the periphery of said first panel; and second stitch line means extending through the other end of said frame, said first flange of said second welt and the periphery of said rear panel; said front panel comprising a separate U-shaped central flap portion extending down from one end of said front panel and a body portion receiving said flap portion as a closure; a coiled plastic zipper connecting said flap portion to said body portion; said zipper extending along the full length of the junction between said flap portion and said body portion with both ends of said zipper extending beyond the said one end of said front panel; said first stitch line extending directly through said both ends of said zipper.

3. A carrying case comprising a generally tubular frame, carrying handle means connected to a central portion of said tubular frame, front and rear side panels of flexible material extending across the opposite ends of said tubular frame and first and second identical welt means connecting the periphery of said front and rear panels to the periphery of the said opposite ends of said rigid frame; each of said welts being identical in construction; each of said welts having first and second extending flanges; said second flanges extending over the outer surfaces of said opposing ends of said frame; and

first stitch line means extending through one end of said frame, said first flange of said first welt, and the periphery of said front panel; and second stitch line means extending through the other end of said frame, said first flange of said second welt, and the periphery of said rear panel; said front panel comprising a separate U-shaped central flap portion extending down from one end of said front panel and a body portion receiving said flap portion as a closure; a coiled plastic zipper connecting said flap portion to said body portion; said zipper extending along the full length of the junction between said flap portion and said body portion with both ends of said zipper extending beyond the said one end of said front panel; said first stitch line extending directly through said both ends of said zipper.

4. A carrying case comprising a generally tubular frame, carrying handle means connected to a central portion of said tubular frame, front and rear side panels of flexible material extending across the opposite ends of said tubular frame; first stitch line means extending through one end of said frame and the periphery of said front panel; second stitch line means extending through the other end of said frame and the periphery of said rear panel whereby said first and second stitch line means secure said front and rear panels to said frame; said front panel comprising a separate U-shaped central flap portion extending down from one end of said front panel and a body portion receiving said flap portion as a closure; a coiled plastic zipper connecting said flap portion to said body; said zipper extending along the full length of the junction between said flap portion and said body portion with both ends of said zipper extending beyond the said one end of said front panel; said first stitch line means extending directly through said both ends of said zipper.

References Cited by the Examiner

UNITED STATES PATENTS

2,181,912	12/1939	Ries.	
2,263,467	11/1941	Medoff	190—54
2,684,136	7/1954	Wheary	190—54
2,746,581	5/1956	Ritter	190—41
2,985,265	5/1961	Gehire	190—41
3,141,536	7/1964	Fulton	190—41

FOREIGN PATENTS

94,703	9/1959	Norway.

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