## UNITED STATES TARIFF COMMISSION

# LIGHTWEIGHT LUGGAGE

Report to the President on Preliminary Inquiry Into Complaint Under Section 337 of the Tariff Act of 1930



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# UNITED STATES TARIFF COMMISSION

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#### REPORT TO THE PRESIDENT

#### Introduction

On November 7, 1970, Atlantic Products Corp., Trenton, N.J., hereinafter referred to as complainant, filed a complaint with the United States Tariff Commission requesting relief under section 337 of the Tariff Act of 1930, as amended (19 U.S.C. 1337), alleging unfair methods of competition and unfair acts in the importation and sale of certain lightweight luggage. Complainant alleges that its U.S. Patent Nos. 3,298,480 and Re. 26,443 cover certain lightweight luggage and that the importation and sale of such luggage by M&J Industries, Inc., Efenel Corp., and Steinberg-Baum Corp., all of Chicago, hereinafter referred to as respondents, has the effect or tendency to destroy or substantially injure an efficiently and economically operated industry in the United States.

Notice of receipt of the complaint and inititation of the preliminary inquiry was published in the <u>Federal Register</u> of November 24, 1970 (35 F.R. 18222). Interested parties were given until January 11, 1971, to file written views pertinent to the subject matter. In response to a request, that deadline was later extended to February 10, 1971; subsequently, the parties requesting the extension notified the Commission that they would submit no written views. Copies of the complaint, the notice of investigation, and the notice of time for filing written views were served on all known interested parties.

The Commission conducted a preliminary inquiry in accordance with section 203.3 of the Commission's Rules of Practice and Procedure (19 CFR 203.3) to determine whether a full investigation is warranted

and, if so, whether it should recommend to the President that a temporary exclusion order be issued pursuant to 19 U.S.C. 1337(f). The standard adopted by the Commission for deciding whether the issuance of such an order should be recommended (as indicated to the parties by letter notice) is (1) whether a prima facie showing of violation of section 337 has been established and (2) whether immediate and substantial harm to the domestic industry would result if a temporary exclusion order is not issued.

Findings and Recommendations of the Commission

Upon conclusion of its preliminary inquiry the Tariff Commission, on March 15, 1971, ordered a formal investigation and agreed to recommend to the President that he issue a temporary exclusion order to forbid entry into the United States, except under bond, of lightweight luggage embraced within the claims of U.S. Patent Nos. 3,298,480 and Re. 26,443, except where the importation is made under license of the registered owner of said patents, until the investigation ordered is completed. The Commission was unanimous in ordering the formal investigation; Commissioners Leonard and Moore dissented from the recommendation that the President issue a temporary exclusion order.

Statement of Commissioners Sutton, Clubb and Young

On November 7, 1970, a petition was filed with the United States Tariff Commission by Atlantic Products Corp., Trenton, N.J., under section 337 of the Tariff Act of 1930. The petition requested that the Commission recommend to the President that certain imported light-weight luggage be excluded from entry into the United States pending the completion of the Commission's investigation to determine whether it should be permanently excluded. We agree that a temporary exclusion order should be issued for the reasons which follow below.

The Commission's standard for determining whether a temporary exclusion order should be recommended is (1) whether a prima facie showing of violation of section 337 has been established and (2) whether immediate and substantial harm to the domestic industry would result if a temporary exclusion order is not issued.

A prima facie case is established under section 337 if from the facts available the Commission has sufficient reason to believe that the actions of the importer violate section 337. The section is violated if an unfair act or method of competition has the effect or tendency to substantially injure an efficiently and economically operated domestic industry.

The domestic industry is comprised of the domestic facilities of Atlantic engaged in the manufacture of lightweight luggage 1/. The

<sup>1/</sup>Atlantic Products Corp. is the owner of U.S. Patent No. 3,298,480 issued Jan. 17, 1967, and U.S. Patent No. Re. 26,443 issued Aug. 27, 1968. The patents have never been litigated before the courts and Atlantic has never granted a license to any party for production or sale of the patented luggage.

investigation disclosed that this industry is economically and efficiently operated. Atlantic uses modern and efficient manufacturing equipment.

A prima facie showing has been made that the respondent is violating section 337. The importer is indeed importing without license a product which is patented in the United States. The imported products are copies of the patented products in every way including the construction features set out in claim 4 of the patent and in claim 5 of the reissued patent.

The Commission has long held such importation to be an unfair method of competition within the meaning of section 337. 1/.

The Commission's "immediate and substantial harm" standard is more stringent than the injury standard set forth in the statute which requires only "the . . . tendency . . . to . . . substantially injure." It follows that if the Commission's standard is met, the less stringent standard of the statute must also be met.

While the Commission does not have complete information with respect to the number of importers and the quantities of the imports of the offending luggage, the actual imports thereof discovered during the preliminary investigation in themselves account for a very substantial part of U.S. consumption of the patented luggage.

The unlicensed sales of imported luggage represent lost sales and profits to Atlantic. There is no doubt that the time required for the

<sup>1/</sup> U.S. Tariff Commission, Self-Closing Containers (Squeeze-Type Coin Purses), Investigation No. 337-18 . . . , TC Publication 55 (1962).

Commission's investigation will provide the infringing importer with time to seriously and substantially harm Atlantic. The imports to date show a present ability to substantially penetrate the U.S. market in both volume and rate within a short period of time, and there is no reason to believe, in the absence of a temporary exclusion order, that the imports will not cause substantial harm to Atlantic's sales and profits.

The importer is not precluded from making entries if a temporary exclusion order is issued. On the contrary, the importers' goods are still entitled to entry under a bond prescribed by the Secretary of the Treasury. Should the respondent ultimately prevail the temporary order is lifted and the bond is no longer necessary. However, if a permanent exclusion order is issued, the Secretary may proceed against the bond covering the importations made during the pendency of the proceedings.

In conclusion, we believe that the value of the U.S. patents can only be maintained by the prevention of their unfair foreign utilization. Therefore, we recommend that the President issue a temporary exclusion order in this case.

## Statement of Commissioners Leonard and Moore

We agree that the facts obtained in the preliminary inquiry establish good and sufficient reason for ordering a full investigation. We do not concur with the recommendation that a temporary exclusion order be issued.

The Commission's standard for determining whether a temporary exclusion order should be recommended is (1) whether a prima facie showing of violation of section 337 has been established and (2) whether immediate and substantial harm to a domestic industry would result if a temporary exclusion order is not issued.

The immediate and substantial harm necessary for recommending a temporary exclusion order is not revealed by the facts obtained during the preliminary inquiry. These facts show that the domestic industry has experienced steadily increasing sales. There has been no evidence presented showing a decrease in profitability, idling of production facilities, or a reduction in employment. On the contrary, the evidence shows that the sales by the domestic industry of the patented luggage have more than tripled since 1968. While preliminary figures indicate that imports of the patented luggage are accounting for an increasing share of domestic consumption, we do not feel that such market penetration in itself, in a growing market, is causing immediate and substantial harm which warrants such extraordinary relief as a temporary exclusion order.

We would note further that the Commission's failure to recommend a temporary exclusion order at the time the full investigation is ordered does not preclude the Commission from recommending a temporary exclusion order at any time during the course of the full investigation. Thus, if subsequently the circumstances indicate immediate and substantial harm is likely to result from the failure to issue a temporary exclusion order, the Commission could at that time recommend the order. Further, the Commission has indicated that it intends to conclude the full investigation expeditiously, thus minimizing the complainant's exposure to injury in terms of time.

In view of the foregoing, we believe that the recommendation of a temporary exclusion order is not warranted at this time.

Alleged Unfair Methods of Competition and Unfair Acts
The complainant owns U.S. Patent No. Re. 26,443, reissued
August 27, 1968, and U.S. Patent No. 3,298,480, issued January 17,
1967. The product patents specifically cover a type of soft-sided
luggage of frame and zipper construction. The complainant alleges that
said patents are being infringed by the importation into, and sale in,
the United States of the lightweight carry-on luggage. The complainant
states that it has examined the infringing luggage and believes that it
embodies the inventions as claimed in claim 4 of patent 3,298,480 and
claim 5 of patent Re. 26,443 (see appendix).

The complainant, a corporation engaged in the manufacture of soft-sided luggage, has never granted a license to any party for the production or sale of the patented luggage. The patents in question have never been litigated in any manner before the courts.

The answer of one respondent, Efenel Corp., Chicago, Ill., alleges that the patents are invalid and, further, that Efenel's luggage does not infringe the complainant's patents. The respondent adds that the U.S. Tariff Commission should not adjudicate the questions of validity and infringement of patents between private parties as these matters should be adjudicated by the Federal courts.

Respondents M&J Industries, Inc., and Steinberg-Baum Corp. have answered alleging that they are not presently, nor have they ever been, engaged in the importation of the alleged infringing luggage. Accompanying respondents' answer is an affidavit of Frank M. Baum, president of Efenel Corp. (respondents' exhibit J) stating that he

is an officer of Steinberg-Baum Corp. and that Steinberg-Baum does not import the alleged infringing luggage but purchases it from Efenel Corp. The affidavit further states that M&J Industries does not import the alleged infringing luggage but purchases it from Efenel Corp.

## Article Under Investigation

The patents under consideration here are U.S. Patent No. 3,298,480, issued on January 17, 1967, and U.S. Patent No. Re. 26,443, reissued August 27, 1968 (original No. 3,266,604, dated August 16, 1966). The invention of the patents relate to a novel carrying-case construction. Only one type of carrying case is presently being made domestically under the claims of the patents. This case is about 21 inches long, 13 inches high and 9 inches deep when extended. As shown in figure 1 on page 11, the case is divided into three separate and distinct compartments; one compartment in the center of the case is formed by two panels attached to the center frame, (see fig. 1,A) and the other two, or outside, compartments are formed by each panel and the outer sides of the case (see fig. 1,B). The outer surfaces are made of vinyl and the inner surfaces are fabric.

This specific type of carrying case falls into a category of lug-gage commonly known in the trade as carry-on-type luggage 1/ and belongs to a larger class known as zippered lightweight casual luggage (hereinafter referred to as lightweight luggage).

Inspection of the complained-of imported carry-on luggage shows it to be identical to the domestic industry's in all essential aspects of construction.

<sup>1/</sup> It is small enough to be placed under an airline seat.

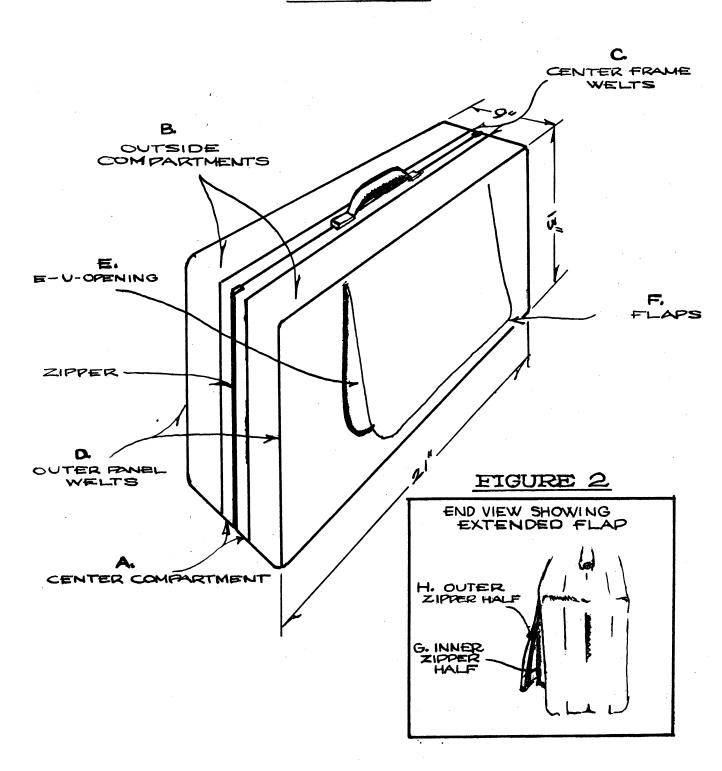
#### Violations of Patent

The construction of the complained of imported carry-on luggage embodies the inventions set out in claim 4 of the patent and claim 5 of the reissued patent.

Claim 4 of the patent deals with the tubular-frame construction of the luggage. It specifies the means for attaching the front and rear panels to the center frame. The panels are stitched to welts (see fig.1,0) on the outermost portion of the center frame. The outermost portion of the panels (i.e. the welts) contain reinforcing wire (see fig.1,D), as do the welts of the center frame. The attachment of the panels to the welts of the center frame enables the panels to remain rigid when in use and still retain the flexibility necessary in this type of luggage. The imported luggage is constructed with identical frame and panel attachment and construction.

Claim 5 of the reissued patent deals with the construction of the side panels. It specifies that the outside of the panels have a U-shaped opening with a zipper-half attached around its perimeter (see fig.1,E). The zipper-half has extended fabric so that when it is attached it extends outward from the opening in the panel (see fig. 2,G). The other zipper-half is attached to the flap which covers the panel opening (see fig. 2,H). This zipper-half also has extended fabric and it is connected to the outer perimeter of the flap and extends inward. This zipper construction expands the space available in the panels and conceals and protects the zipper. The imported luggage is constructed with identical panel and zipper construction.

# FIGURE 1



# Atlantic Products Corp.

Atlantic Products Corp., the complainant, is a subsidiary of Cluett, Peabody & Co., Inc., of New York City. Cluett, Peabody is a large corporation which owns ll manufacturing and marketing subsidiaries for apparel and other consumer products in addition to Atlantic Products Corp. Seven subsidiaries produce women's and men's apparel, another produces tricot knit fabrics for the apparel trade, one operates men's and women's retail apparel stores, and two license the use of patents and trademarks. Among the better known manufacturing facilities owned by the parent corporation is the Arrow Co., a manufacturer of men's and women's shirts and sportswear with facilities in various countries. Another subsidiary, the Sanforized Co., licenses the worldwide use of its patents and know-how relating to the compressive shrinkage process. The retail subsidiary owns a total of 59 retail stores, among them 11 Rogers Peet outlets, which sell nationally advertised apparel. 1969, the net sales of Cluett, Peabody & Co., Inc., amounted to \$4.78.2 million, 7.2 percent greater than the value of 1968 sales (\$445.6 million).

Atlantic Products Corp., which was founded in 1925 and incorporated in 1928, has its executive offices and plant in Trenton, N. J. It is presently one of the five largest domestic manufacturers of luggage; other products include bowling and golf bags, and similar articles.

Atlantic's annual sales of carry-on luggage were valued at more than \$300,000 in 1968 and exceeded \$1 million in each of the years 1969 and 1970.

## U.S. Production and Consumption

According to Luggage and Leather Goods Manufacturers of America, Inc., the domestic shipments of all types of luggage in 1969 amounted to about \$180 million. An estimated \$5 million to \$8 million of this total is believed to have been carry-on-type luggage, some of which (that produced by Atlantic) incorporated the patented features. A number of domestic luggage manufacturers in addition to Atlantic are making the carry-on-type luggage. With an average wholesale price per bag of about \$10, it is estimated that about 500,000 to 800,000 such bags were shipped during 1969. However, the domestic production is believed to have decreased in 1970, because some producers started importing these bags from the Orient instead of making them in the United States. The trade source quoted above states that domestic consumption of carry-on-type luggage in 1970 was valued at \$10 million to \$12 million, with about 50 to 60 percent of this figure represented by imports.

## Efenel Corp.

The Efenel Corp., importers located in Chicago, Ill. and named by the complainant as a respondent, submitted data to the Commission showing its total imports of the infringing luggage for the period when such imports started (end of 1969) through November 1970. Imports by this concern were substantial when compared with the production of carry-ontype luggage by Atlantic during the same period.

## U.S. Imports

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U.S. imports of carry-on luggage are dutiable under item 706.60 of the Tariff Schedules of the United States (TSUS) at a rate of 20 percent ad valorem. This rate was not reduced in Kennedy Round trade negotiations; it has been 20 percent since the effective date of the TSUS (August 31, 1963).

Official statistics do not provide separate data on imports of either lightweight or carry-on luggage. They are part of a basket category (Tariff Schedules of the United States Annotated item 706.6035) which includes all vinyl luggage, school bags, nested luggage items, vinyl shopping bags, vinyl cosmetic bags, plastic camera cases, and so forth, but excludes such articles of leather, unspun fibrous vegetable materials, textile materials, or reinforced or laminated plastics. The value of imports in this basket category increased from \$9.3 million in 1968 to \$12.4 million in 1969 and to \$15.0 million in 1970 (table 1). Japan has been the principal supplier of these imports, but imports from the Republic of China (Taiwan) showed the greatest increase in 1970.

It is believed that lightweight and carry-on type bags (included in table 2) are being entered into the United States in significant quantities by importers—other than Efenel—located principally in New York City, Los Angeles, and San Francisco. Bureau of Customs personnel in these areas stated that imports of carry-on-type luggage of the type that includes the infringing luggage increased significantly in 1970. The Republic of Kores was reportedly the principal source of such imports in that year.

Appendix

Table 1.--Luggage, cases, and so forth, fitted or unfitted, of materials not specially provided for: U.S. imports for consumption, by principal sources, 1968-70

Source	1968	1969	1970
Japan Republic of China (Taiwan) Hong Kong Republic of Korea All other Total	453,947 865,513 551,614 1,978,922	\$7,392,694 1,372,311 1,387,882 599,739 1,650,897 12,403,523	3,625,771 1,735,468 1,576,626 2,019,908

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table 2.--Luggage, cases, and so forth, fitted or unfitted, of materials not specially provided for: U.S. imports for consumption, by specified sources and by specified customs districts, 1969

••		••	Republic :	Republic:	Total,
Gustoms district :	Japan :	Hong Kong :	of China :	of .	specified
	••	••	(Taiwan) :	Korea :	districts
	••	••		••	
New York	\$3,135,675:	\$747,255:	\$663,619:		\$4,689,697
Los Angeles	629,833	104,353:	31,727 :		1,117,086
San Francisco	656,297 :	75,049	32,813:		781,079
Chicago:	194,172:	98,790	433,725:	29,000:	755,687
Philadelphia	424,327:	26,872:	71,247 :		: 522,446
Boston:	404,795	51,813	6,803:	1	163,411
Portland, Oreg:	300,879:	22,875:	11,723:		347,515
Seattle:	262,512 :	17,694:	21,661:		304,777
San Diego:	62,905	56,733:	12,951:		139,482
Other districts:	1,321,299:	186,448	86,042 :	37,657 :	1,631,146
Total:	7,392,694:	1,387,882:	1,372,311:	599,739 :	10,752,626
•	••	••	••	••	
Source: Compiled from offic	official statistics	$_{\mathbf{J}_{0}}$	the U.S. Department of Commerce	f Commerce.	

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3,298,480 CARRYING BAG CONSTRUCTION

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Products Corporation, Trenton, N.J., a corporation of New Jersey

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 10 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 15 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 20 fiber. 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 25 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 con- 30 struction 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 35 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 preassembled main frame.

These and other objects of this invention will become apparent from the following description when taken in 45 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 50 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 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 65 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

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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 1/8" thick when made of wood or

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 22a 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 main frame, connecting welts and front and rear panels. 60 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 22a. The main body of the rivet then passes directly through lining 22a (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

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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 49.

As will be described more fully hereinafter, each of 10 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 20 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 25 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 equip- 35 ment 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.

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 45 than 1/2" 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 It will be noted that the flap 44 has dimensions 50 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, 1/2".

In assembling these two members, the zipper fabric portions 60 and 61 are first sewn to the adjacent edges of 55 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 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

Thus, in FIGURE 9, a sufficiently long length of zip-

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 47a. 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 60a 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 60a of plastic material is As will be described more fully hereinafter, such 40 also inserted into the pocket. The pocket strip 60a 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 60a, frame 40, flange 47 and the panel. The strip 60a 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 FIG-URE 11 would be covered by a similar inwardly curved

> 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

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

1. A carrying case comprising a generally tubular zipper is used, a zipper length greater than the length of 60 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 per is cut from a reel, it only being necessary that the 75 stitch line means extending through the other end of

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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 5 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 10 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 15 ends of said zipper. 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 20 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 25 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 30 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; 35 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.

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Jan. 17, 1967

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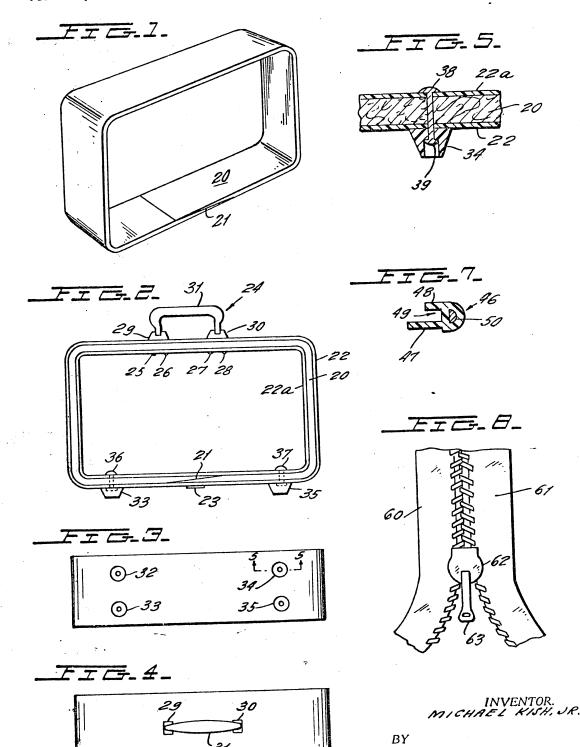
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## CARRYING BAG CONSTRUCTION

Filed May 5, 1965

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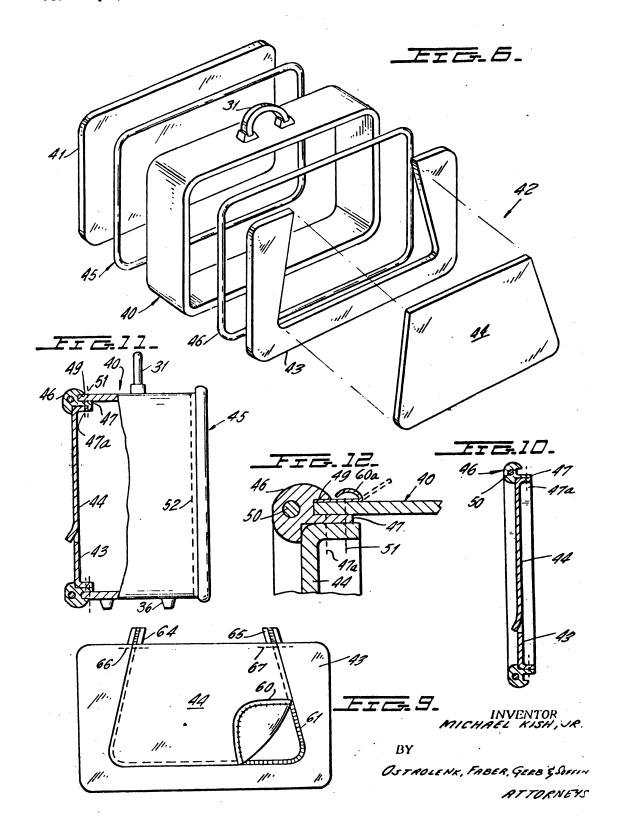
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CARRYING BAG CONSTRUCTION

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2 Sheets-Sheet 2



# United States Patent Office

Re. 26,443 Reissued Aug. 27, 1968

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26,443

PANEL STRUCTURE FOR SOFT-SIDED LUGGAGE Michael Kish, Jr., Hightstown, N.J., assignor to Atlantic Products Corporation, Trenton, N.J., a corporation of New Jersey Original No. 3,266,604, dated Aug. 16, 1966, Ser. No.

Original No. 3,266,604, dated Aug. 16, 1966, Ser. No. 443,019, Mar. 26, 1965, which is a continuation-in-part of Ser. No. 387,390, Aug. 4, 1964. Application for reissue Feb. 13, 1967, Ser. No. 617,440

5 Claims, (Cl. 190—41)

Matter enclosed in heavy brackets [] appears in the original patent but forms no part of this reissue specification; matter printed in italics indicates the additions made by reissue.

#### ABSTRACT OF THE DISCLOSURE

A carrying bag having flexible sides, one of which has a U-shaped flap with a zipper closure. The U-shaped opening in the panel receiving the flap has a zipper half extending from its interior surface, while the flap has a cooperating zipper half extending from its interior surface. The zipper fabrics envelop around the edges of the flap and panel, with the flap being pulled over the opening to cover the zipper when the zipper is closed. A reinforcing wire is secured to the edge of the opening.

This application relates to a novel panel and zipper construction for soft-sided luggage, and is a continuation-in-part application of my copending application Serial No. 387,390, filed Aug. 4, 1964, entitled "Method of Manufacture for Luggage," and assigned to the assignee of the present invention which issued on February 21, 1967 as U.S. Patent 3,305,052.

Soft-sided luggage is in general use, and is generally comprised of a main tubular frame body wherein fabric or fabric-type panels extend over the ends of the tube to define the sides of the luggage. Thereafter, a zipper opening is placed in one of the panels to define a flap 40 to provide access to the interior of the bag.

The principle of the present invention is to provide a novel closure arrangement for panels of this general type wherein the cooperating zipper halves connected to the panel are connected in such a manner that the zipper is 45 completely hidden when closed, and so that the panel portion secured to the bag support is provided with a reinforcing wire therein to provide rigidity for this portion when the panel is either opened or closed.

Accordingly, a primary object of this invention is to 50 provide a novel zipper arrangement for soft-sided luggage wherein the panel remains relatively rigid and stiff when the flap therein is opened.

Another object of this invention is to provide a novel zipper arrangement for soft-sided luggage.

A still further object of this invention is to provide a novel zipper arrangement of soft-sided luggage having an openable panel in one side thereof wherein the panel is provided with a reinforcing wire and a hidden zipper.

These and other objects of this invention will become 60 apparent from the following description when taken in connection with the drawings, in which:

FIGURE 1 is a perspective view of the type of softsided luggage to which the present invention applies.

FIGURE 2 is an exploded perspective view of the lug- 65 gage of FIGURE 1.

FIGURE 3 is a cross-sectional view illustrating the manner in which the panels of FIGURE 2 are secured to the main frame body.

FIGURE 4 is a cross-sectional view of a reinforced 70 welt used in the securement of the panels to the frame.

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FIGURE 5 is a front view of the panel of FIGURES 1 and 2 which has a flap therein.

FIGURE 6 is a cross-sectional view of the panel of FIGURE 5 taken across the lines 6—6 in FIGURE 5 to particularly illustrate the novel manner in which a reinforcing wire is connected to the periphery of the panel opening and the novel manner in which the zipper is connected to the panel opening.

FIGURE 7 is a cross-sectional view of FIGURE 5 taken across the lines 7—7 in FIGURE 5 particularly to illustrate the manner in which the cooperating zipper half is connected to the flap.

FIGURE 8 is a cross-sectional view of the arrangements shown in FIGURES 6 and 7 when the zipper is closed and illustrates the manner in which the zipper is hidden.

Referring now to FIGURES 1 and 2, I have illustrated therein a typical soft-sided luggage to which the invention applies which includes a frame body 10 which may have reinforcing members 11 extending therefrom in the manner disclosed in my U.S. Patent 3,305,052 [copending application Serial No. 387,390]. This rigid frame body is then provided with a continuous rear panel 12 and a front panel 13 which has a flap opening 14 therein to provide access to the interior of the bag.

The panels 12 and 13 are connected to the frame 10 by means of welts 15 and 16, best shown in FIGURES 3 and 4. Thus, in FIGURE 4, the welt 15 (which is identical to welt 16) is provided with an enlarged head portion 17 which may have a reinforcing wire 18 extending therethrough.

As illustrated in FIGURE 3, the welt 15 is interposed between the inwardly bent legs of panel 12 and the edge of frame 10. More particularly, the extending section of welt 15 may first be sewn to frame 10 on the stitch line 20 with this subassembly thereafter being sewn to the panel 12 along the stitch line 21. Alternatively, the welt 15 can be first sewn to the panel 12 and thereafter sewn to the frame 10 so that only one stitch line is viewed from the external side of frame 10. Note that the welt 15 of FIGURES 3 and 4 could be constructed in the manner identical to that illustrated in my above noted copending application Serial No. 387,390 wherein the welt has a reentrant portion for completely receiving the inwardly bent sections of panel 12.

The panel 13 which has the flap 14 therein is best shown in FIGURE 5 wherein FIGURE 5 illustrates a zipper portion 30 connected about the periphery of flap 14 and a cooperating zipper portion 31 connected about the periphery of the opening in panel 13.

The manner in which zipper portions 30 and 31 are secured to flap 14 and panel 13, respectively, is best shown in FIGURES 7 and 6, respectively. Referring first to FIGURE 6, there is illustrated therein a cross-sectional view through the panel portion 13. It is to be noted in FIGURE 6 that the front of the panel is on the right of the drawing. Thus, the panel is formed of a main body 32 of any suitable flexible material which could have an interior lining 33 secured thereto.

The zipper half 31 is provided with the usual extending fabric section 34 which is shown as being folded around the end of the interior of the opening in panel 13 and sewn thereto as by the stitch line 35. Note that the zipper end is adjacent the front of the panel.

Thereafter, and in accordance with the invention, a rigid steel wire 36 is placed adjacent the end of panel 13 and on top of the zipper fabric 34, and a fabric cover 37 is wrapped about the wire and over the end of the periphery of the opening in panel 13 and is sewn thereto as by the stitch line 38 so as to hold the wire 36 in posi-

tion. Note that the wire 36 extends completely around the full length of the opening in panel 13.

Thus, when the flap 14 is open, and even when the flap 14 is closed, the wire 36 provides substantial rigidity to the normally flexible fabric, thereby substantially im- 5 proving the appearance of the product and increasing its ability to resist wear and to retain its shape even under adverse conditions of use.

Turning next to FIGURE 7, there is illustrated therein the manner in which the zipper half 30 is secured to the  $_{10}$ end of flap 14. Note that in FIGURE 7 the external surface of the flap 14 is at the right of the drawing so that the flap is comprised, for example, of the desired flap material 40 which could have an interior lining 41 which is similar to lining 33.

The zipper half 30 which has an extending fabric portion 42 in the usual manner is then folded around the end of flap 14, and is sewn thereto as along the stitch line 43. Thereafter a flap of a suitable finishing material 44 may be sewn about the end of the complete assemblage, 20 as illustrated, along the stitch line 45. Note that in FIG-URE 7 the zipper 30 extends along the rear surface of the flap.

This novel zipper arrangement then operates as illustrated in FIGURE 8 wherein, when the zipper is closed, the end of flap 14 will be pulled over the top of the exterior of panel 13, since the zipper fabric 42 has a shorter length than the zipper fabric 34. Therefore, the zipper closure will be completely hidden from external view, and will be protected from abusive handling.

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, 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. In a carrying bag; a main enclosed frame having first and second side panels enclosing the ends of said frame; one of said side panels having a U-shaped flap therein cooperating with a U-shaped opening therein; and zipper means extending between the edge of said U-shaped flap and the edge of said U-shaped opening to secure said flap to said one of said side panels and to provide access to the interior of said bag when said zipper means is open; said zipper means comprising first and second cooperating zipper halves having respective extending fabric portions for securement of said zipper halves; and an elongated rigid metallic reinforcing wire; first and second connection means; said fabric portion of said first zipper portion and said reinforcing wire conected 55 along the full length of the said edge of said U-shaped opening in said one of said panels by said first connection means; said fabric portion of said second zipper portion connected along the full length of said edge of said U-shaped flap by said second connection means; said first zipper half having a free edge extending outwardly from the exterior surface of said one of said panels adjacent its said edge; said second zipper half having

4 a free edge extending outwardly from the interior surface

2. The carrying bag substantially as set forth in claim 1 wherein said first and second connection means include lines of stitching connecting said respective zipper halves to the surfaces adjacent said respective edges of said Ushaped opening in said one of said panels and said flap.

3. The carrying bag substantially as set forth in claim 1 wherein said outwardly extending free edge of said second zipper half has a length shorter than the distance from the beginning of said free edge to said edge of said flap whereupon said edge of said flap is pulled over to top of said edge of said U-shaped opening when said zipper is closed.

4. The carrying bag substantially as set forth in claim 2 wherein said first connection means further includes an elongated fabric strip lapped over said edge of said Ushaped opening and secured to the opposing surfaces of said U-shaped opening adjacent its said edge; said wire interposed between said edge and the interior of said elongated fabric strip.

5. In a carrying bag, a main enclosed frame having first and second side panels enclosing the ends of said frame; one of said side panels having a U-shaped flap therein cooperating with a U-shaped opening therein; and zipper means extending between the edge of said U-shaped flap and the edge of said U-shaped opening to secure said flap to said one of said side panels and to provide access to the interior of said bag when said zipper means is open; said zipper means comprising first and second cooperating zipper halves having respective extending fabric portions for securement of said zipper halves; first and second connection means; said fabric portion of said first zipper portion enveloping around the full therefore, that the scope of the invention be limited not 35 length of the said edge of said U-shaped opening and connected along the full length of the said edge of said U-shaped opening in said one of said panels by said first connection means; said fabric portion of said second zipper portion enveloping around the full length of the said edge of said U-shaped flap and connected along the full length of said edge of said U-shaped flap by said second connection means; said first zipper half having a free edge extending outwardly from the exterior surface of said one of said panels adjacent its said edge; said second zipper half having a free edge extending outwardly from the interior surface of said flap.

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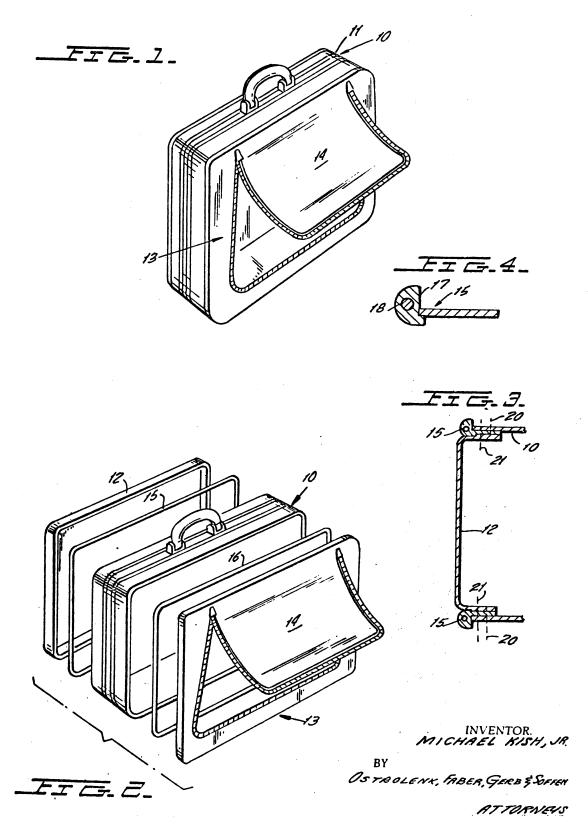
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