April 2, 1957 S. PLATT 2,787,350

HAND LUGGAGE

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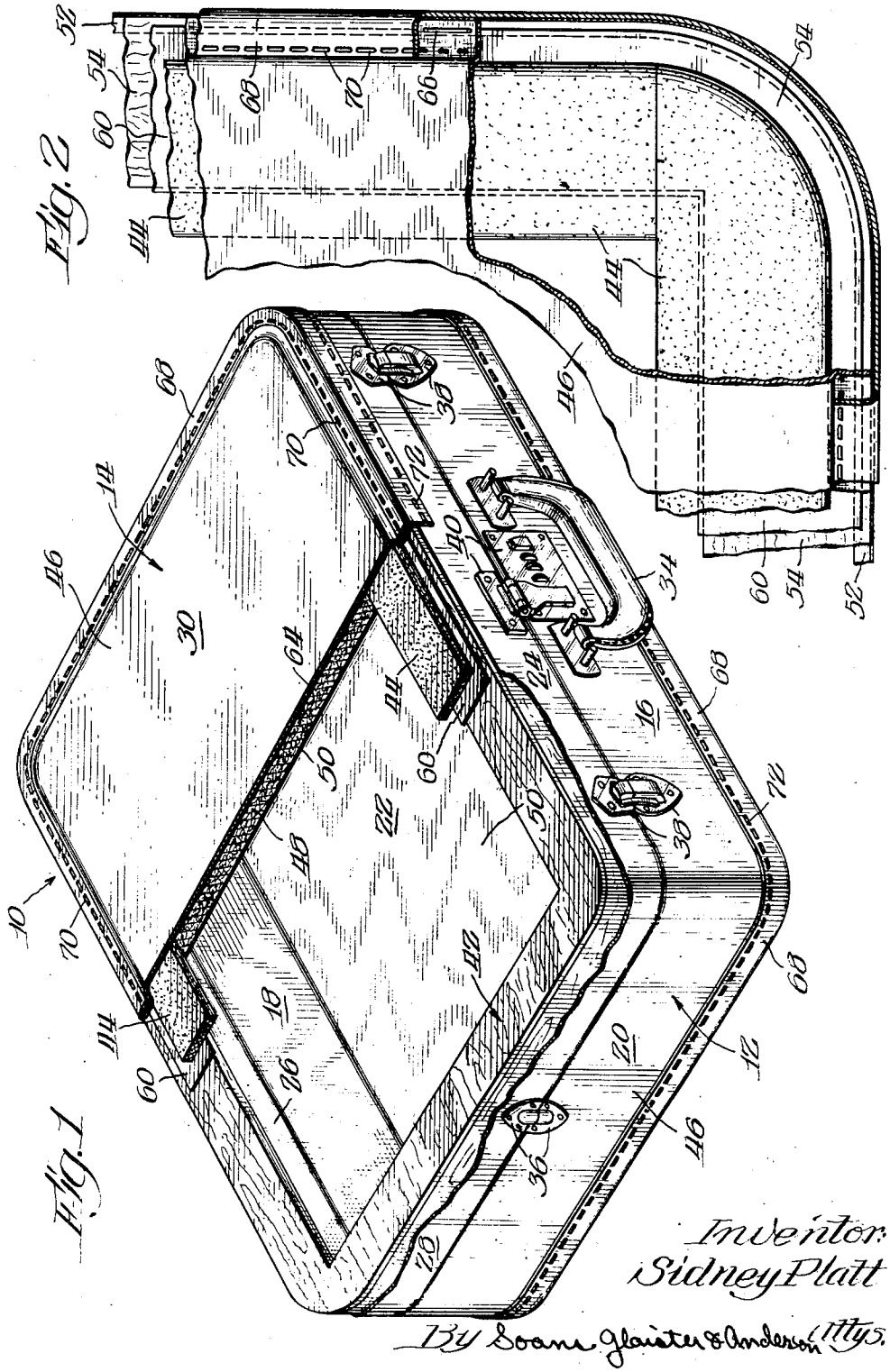


Fig. 2

Fig. 1

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April 2, 1957 S. PLATT 2,787,350

HAND LUGGAGE

Filed July 25, 1955 2 Sheets-Sheet 2

Fig. 3

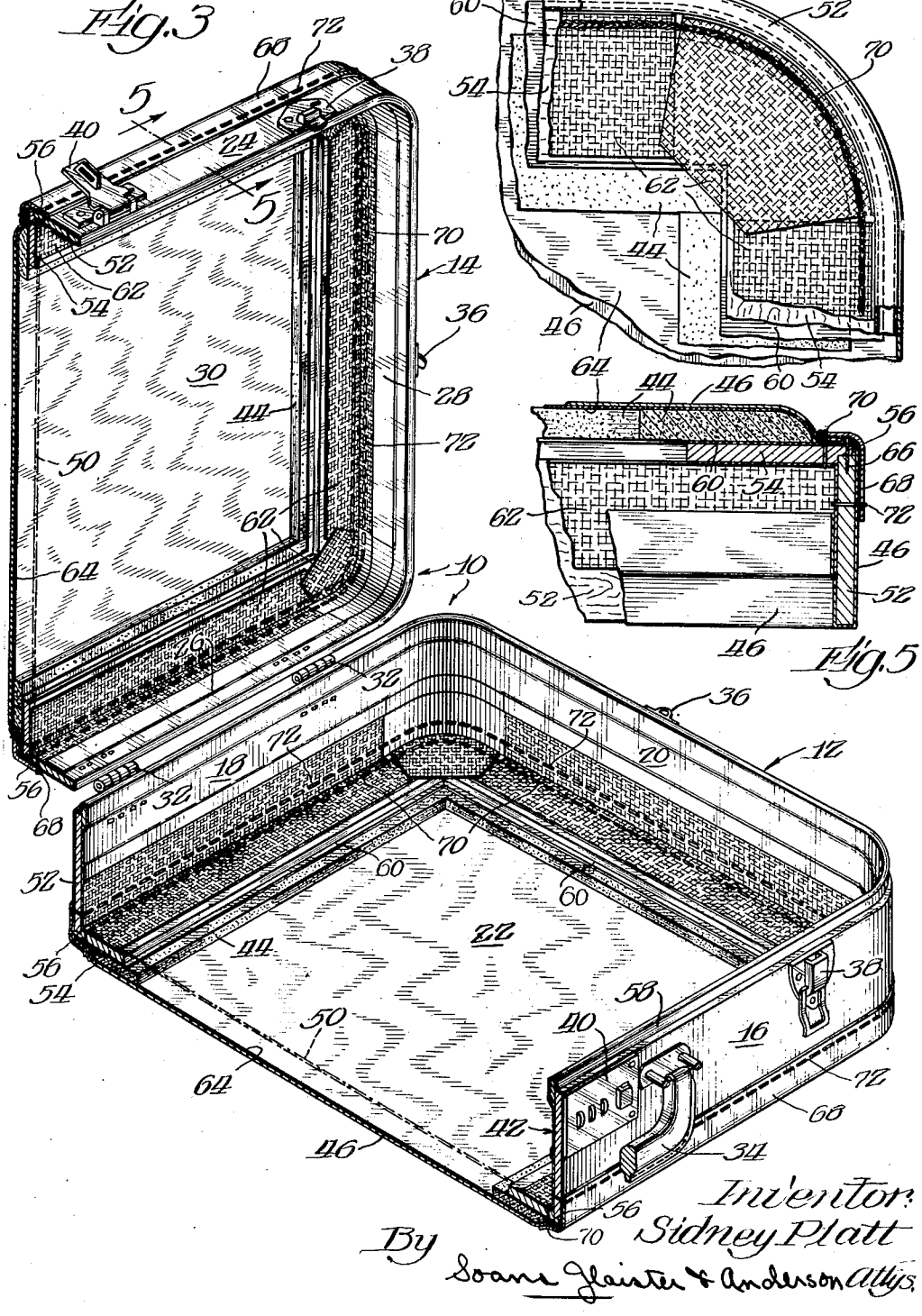


Fig. 4

Fig. 5

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HAND LUGGAGE

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5 Claims. (Cl. 190—53)

The present invention relates to hand luggage having a pair of complemental sections defining adjacent, open-sided compartments for the storage and/or transportation of articles and more particularly to light-weight hand luggage which is padded in appearance.

The objects of the present invention are to provide light-weight hand luggage which has a sufficiently rigid framework to enable the luggage to withstand the stresses and strains which it will normally encounter during use and handling; to provide hand luggage of simple, light-weight construction having supple, shape-retaining, side walls which are padded in appearance; to provide hand luggage having soft, flexible side walls which are capable of maintaining their shape without wrinkling, bulging, or otherwise becoming deformed from use; and to provide hand luggage of improved design and construction which is simple and inexpensive to manufacture and which is exceptionally rugged and durable.

Further objects and advantages of the present invention will become apparent from the following description and accompanying drawings of a selected embodiment of the invention.

In the drawings:

Figure 1 is a perspective view of a hand luggage case formed in accordance with the present invention with portions broken away to illustrate the internal construction;

Figure 2 is an enlarged top plan view of one corner of the luggage case illustrated in Figure 1 with portions broken away to show the underlying construction;

Figure 3 is a perspective view of part of the luggage case shown in Figure 1, the luggage case being illustrated in open position and with the lining and padding absent to show some of the details of the internal construction;

Figure 4 is an enlarged, inwardly directed plan view of one corner of the upper compartment shown in Figure 3; and

Figure 5 is a partial sectional view of the luggage case without its lining, padding, or fixtures, taken along line 5—5 of Figure 3.

The present invention is illustrated and will be hereinafter described in connection with a rectangular, box-type luggage case. However, it should be understood that the present invention is not limited to a luggage case having the illustrated and/or described form, shape, or size.

The luggage case **10** illustrated in Figure 1 of the drawings includes a pair of complementary, rectangular shaped sections or compartments **12** and **14**. The compartment **12**, which for convenience may be called the lower compartment, includes a top wall **16**, a bottom wall **18**, a pair of end walls **20**, and a side wall **22** and the complementary compartment **14**, which for convenience may be called the upper compartment, includes a top wall **24**, a bottom wall **26**, a pair of end walls **28**, and a side wall **30**. The upper compartment **14** is hingedly connected to the lower compartment **12** by suitable hinge structures **32** so as to permit the upper compartment **14** to move relative to the lower compartment **12** from a closed position which is illustrated in Figure 1 to an open position which is illustrated in Figure 3. The hinged structures may be attached in the usual fashion to the bottom walls **18** and **26** of the compartments **12** and **14**, respectively. The luggage case **10** is provided with the customary carrying handle **34** which is attached to the top wall **16** of the lower compartment **12**, suitable cooperative strengthening and guide elements **36** which are attached to the end walls **20** and **28**, respectively, of the compartments and latch elements **38** and locking elements **40** which are attached to the top walls **16** and **24**, respectively of the compartments.

The compartments **12** and **14** of the illustrated luggage case are fabricated in a generally similar manner and for simplicity, similar reference numerals will be used to designate corresponding constructional elements of the compartments. In accordance with the present invention, each of the compartments includes a relatively rigid, drum-type frame **42**, a ring of resilient material **44** overlying a selected portion of the surface of the frame which forms part of the side walls of the compartment, an outer covering of flexible sheet material **46**, and suitable finishing elements such as padding **48** and a lining **50**.

Each of the drum-type frames **42** of the compartments **12** and **14** may be composed of any rigid material, such as plastic, light-weight sheet metal, fiberboard, plywood, etc. which may be conveniently pierced by the needle of a heavy-duty stitching machine. Plywood has been found to be particularly satisfactory because of its light weight, strength, cost, and adaptability to the subsequent manufacturing operations. Each frame **42** includes a tubular body section **52** of uniform height and a transverse, circumferential flange section **54** which extends inwardly from one end of the body section. The flange section **54** may be made integral with or may be joined to the body section **52**, depending upon the material from which the frame **42** is fabricated. When the frame is constructed of plywood, the body section is generally made from a single strip which is molded to the tubular form desired for the body section **52**. The flange section **54** is generally cut from a single sheet and then attached in any suitable manner such as gluing to the body section **52**. If desired, the flange section may be connected to the body section through a lap butt as indicated at **56** or by any other suitable joint structure.

The frame **42** of the lower compartment **12** may include an inner, upward, and circumferentially extending aligning strip **58** which provides a shoulder for guiding the upper compartment **14** into alignment with the lower compartment **12**. The strip **58** is conveniently formed of plywood veneer and is attached adjacent its lower end by means such as adhesive to the upper marginal portion of the inner surface of the body section **42**. This frame construction provides a light, strong, supporting structure for the various other constructional elements of the luggage case.

In order to give added support to the flange section **54** of the frame **42**, as well as to prevent the warping of the frame, a thin strip **60** of paperboard or other suitable sheet material is adhesively secured to the outwardly facing surface of the flange section.

The outer edge of the thin strip **60** is preferably positioned adjacent to but slightly inwardly of the outer edge of the flange section **54** in order to avoid possible overlapping beyond the outer edge of the flange section and to effect a more rounded corner between the side wall and other walls of the compartment when covering material **46** is subsequently applied over the frame **42**.

The ring of resilient material **44** lies above and is attached to the upper surface of the paperboard strip **60**. The resilient ring **44** is flat and of a width such that it overlies a major portion of the outwardly facing surface of the flange section **54** of the frame **42**. The outer,

circumferential edge of the ring 44 lies adjacent to but is spaced inwardly from the outer circumferential edge of the flange section 54 for reasons which will hereinafter become apparent. This ring may be formed of any resilient material; however, a resilient material which has reasonable softness and compressibility such as foam rubber is exceptionally excellent for the purposes of the present invention. The resilient ring 44 may be formed from a single sheet of the resilient material or may be fabricated from several strips of the resilient material which are joined so as to form, in effect, a continuous ring over the outwardly facing surface of the flange section 54. The inner edge of the resilient ring 44 should extend adjacent to or beyond the inner edge of the flange section 54 so that practically the entire inner margin of the outwardly facing surface of the flange section is covered by the resilient material.

In order to prevent the frame 42 from splintering during subsequent stitching operations, certain portions of the frame which are not otherwise covered prior to the stitching operation (to be hereinafter described) are covered by a suitable means such as by strips of closely woven fabric material 62 or the like which are adhesively secured to the frame. As illustrated in Figures 3 and 4, this fabric is primarily placed on the inside of the frame 42 adjacent the juncture between the body section 52 and the flange section 54 thereof. The material used may be sufficiently stiff to provide a further reinforcement for the frame 42, and, when such reinforcement is desired, the strips may be sufficiently wide so as to cover a reasonable portion of the inner surface of the frame.

It should be understood that the fabric stripping is not essential and may be omitted, particularly in those portions of the surface of the frame which are difficult to cover without producing creases in the fabric or which may interface with the subsequent stitching operation. For these reasons, the fabric stripping is omitted from certain selected areas such as the inner rounded corner surfaces of the body portion 52 of the frame.

The entire outer surface and the upper margin of the inner surface of the body section 54 of the frame 42 is covered by a suitable, durable, and decorative material 46. This material should be flexible and have reasonable wearing qualities. Material such as leather and various types of plastic sheet material are suitable for this purpose. A vinyl plastic sheet is particularly suitable as the covering material 46 since such sheets are available with certain backing material which is particularly useful in forming the outer surface of the side wall of the compartment. The decorative material, which may be a single, relatively wide strip of material is attached to the body section 52 of the frame 42 by suitable means such as adhesive and stitching.

A single sheet of the decorative material 46 extends across the end of the frame 42 containing the flange section 54 and forms a portion of the side wall of the compartment. This material is similar to the covering material which extends over the outer surface of the body section 52 of the frame. However, it is preferable that the decorative material 46 which extends over the end of the frame be exceptionally wrinkle-resistant and non-stretchable so that it will not be deformed during the subsequent use of the luggage case. This may be accomplished by attaching or embedding a suitable fibrous mat or web 64 to one side of the decorative material 46. Vinyl plastic sheets are commercially sold with suitable fibrous backings which prevent subsequent stretching or wrinkling of the sheets. One such commercial product has a fiber backing or coating known under the trade name "Pellon."

The sheet of decorative material 46, which may have a fibrous coating 64 secured to one side thereof is stretched taut across the entire surface of a flange section 54 of the frame 42 with the coating, if present, facing the flange section and tacked to the flange section outwardly of the resilient ring while maintained in a taut condition. A convenient means of attaching the covering material over the flange section of the frame is to use a sheet of such material which is slightly larger at least in one dimension than the area encompassed by the flange section of the frame. An edge portion of the covering material is first tacked down to the flange section adjacent a portion of its outer edge by suitable means such as thin staples 66. The material is then stretched taut over the flange section in any suitable manner, for example, by hand. While maintained in a taut condition, additional edge portions of the covering material are attached to the edge portions of the flange section until the entire covering surface is maintained in taut condition by the securing means. The excess covering material which extends beyond the flange section is then trimmed off.

A narrow binding strip 68 which is preferably of similar material and somewhat thicker than the decorative material 46, overlies the outer corner formed by the juncture of the flange section with the body section and extends over marginal portions of both the flange section and the body section which were previously covered by decorative material 46. The binding strip 68 thus covers the cut edges of the decorative material 46 adjacent the juncture between the body sections 52 and flange section 54 of the frame 42. The binding strip 68 is stitched adjacent one of its edges as indicated at 70 to the decorative covering material 46 and the underlying flange section 54 of the frame inwardly of the staples 66. The binding strip is also stitched adjacent its other edge, as indicated at 72, to the underlying covering material 46 and body section 52 along a line spaced a short distance inwardly from the flange section 54.

The line of stitching 70 draws the decorative covering material 46 down closely to the flange section 54 of the frame 42 and at the same time compresses the outer edge of the resilient ring 44. The resilient ring 44 urges the decorative material 46 immediately inwardly of the line of stitching 70 in an outward direction and thereby maintains the sheet of decorative material covering the flange section 54 of the frame 42 in a taut condition and gives the outer surface of the covering material 46 above the flange end of the frame an attractive, padded appearance, as illustrated in Figures 1, 3, and 5. This construction also protects the line of stitching 70 from abrasive contact and results in increasing the life of the luggage case.

Each of the compartments include the usual interior lining 50. This lining is generally of soft, flexible, woven material.

To prevent the lining in the interior of the compartment from sagging and to give a greater body to the side wall of the compartment, suitable padding 48 such as a cotton bat may be placed in the space defined by the inner edges of the resilient ring 44 and flange section 54. This results in the side wall having an inner surface which extends smoothly and firmly between opposite sides of the body section 52 of the frame 42.

The fixtures are suitably attached to the frame at appropriate times during the construction of the compartments. The hinge structures 32 are generally attached to the frame 42 prior to the attachment of the covering material or lining thereto. The handle 34, guide elements 36, latch elements 38, and locking elements 40 are attached to the frames 42 after the covering material has been attached to the frame but prior to the attachment of the lining. Additional fixtures such as metal staples or feet (not shown) may be attached to the bottom wall of the luggage case to give additional strength and durability to the case. The luggage case may also include additional fixtures (not shown) such as hanger posts and removable hangers, curtains, pockets, removable packing fixtures, etc. as desired.

The resultant luggage case is light-weight, durable, in-

expensive to manufacture, and yet has an appearance similar to padded luggage cases of much more expensive construction.

While this invention has been shown in connection with the details of a certain embodiment of the invention, it is obvious to those skilled in the art that it is not so limited, but is susceptible to various changes and modifications without departing from the scope of the invention. For instance, various materials other than those particularly specified may be utilized in the construction of the compartments and the compartments need not take the exact size or shape described and illustrated. In addition, this invention could be used in luggage cases other than those having substantially identical compartments. Various features of the invention which are believed to be new are set forth in the appended claims.

I claim:

1. In a piece of hand luggage, an article receiving compartment comprising a relatively rigid, integral drum-type frame which includes a tubular body section and a transverse, circumferentially extending flange section which extends inwardly from one end of said body section, a ring of resilient material overlying a portion of the outwardly facing surface of said flange section, the outer circumferentially extending boundary of said resilient ring lying adjacent to but spaced inwardly from the outer circumferentially extending edge of said flange section, and an outer covering of flexible sheet material extending over the outwardly facing surface of said body section and the end of said frame containing said flange section and the overlying ring of resilient material, the sheet material which extends over the end of said frame containing said flange section and resilient ring being attached to said flange section outwardly of said resilient material to form a generally resilient surface which is padded in appearance.

2. In a piece of hand luggage, an article receiving compartment comprising a relatively rigid, drum-type frame which includes a tubular body section and a transverse, circumferentially extending flange section which is attached to and which extends inwardly from one end of said body section, a flat ring of resilient material overlying a major portion of the outwardly facing surface of said flange section, the outer circumferentially extending edge of said resilient ring lying adjacent to but spaced inwardly from the outer circumferentially extending edge of said flange section, and an outer covering of flexible sheet material extending over the outwardly facing surface of said body section and the end of said frame containing said flange section and the overlying ring of resilient material, the sheet material which extends over the end of said frame containing said flange section and resilient ring being stitched to said flange section outwardly of said resilient material while in a taut condition so as to form a generally resilient surface which is padded in appearance.

3. In a piece of hand luggage, an article receiving compartment comprising a relatively rigid, drum-type frame which includes a tubular body section and a transverse, circumferentially extending flange section which is attached to and which extends inwardly from one end of said body section, a flat ring of foam rubber overlying a major portion of the outwardly facing surface of said flange section, the outer circumferentially extending edge of said foam rubber ring lying adjacent to but spaced inwardly from the outer circumferentially extending edge of said flange section, and an outer covering of flexible sheet material extending over the outwardly facing surface of said body section and the end of said frame containing said flange section and the overlying ring of foam rubber, the sheet material which extends over the end of said frame containing said flange section and foam rubber ring having shape retaining characteristics and being stitched to said flange section outwardly of said foam rubber while in a taut condition so as to form a generally resilient surface which is padded in appearance.

4. A piece of hand luggage comprising a pair of complementary compartments which are hingedly connected together, at least one of said compartments having a relatively rigid, drum-type frame which includes a tubular body section and a transverse, circumferentially extending flange section which is attached to and which extends inwardly from one end of said body section, a sheet material reinforcing strip extending circumferentially around and adhesively attached to the outwardly facing surface of said flange section, a flat ring of resilient material attached to the outwardly facing surface of said reinforcing strip, said ring of resilient material overlying a major portion of the outwardly facing surface of said flange section, the outer circumferentially extending edge of said resilient ring lying adjacent to but spaced inwardly from the outer circumferentially extending edge of said flange section, and an outer covering of flexible sheet material extending over the outwardly facing surface of said body section and the end of said frame containing said flange section and the attached ring of resilient material, the sheet material which extends over the end of said frame containing said flange section and resilient ring being attached to said flange section outwardly of said resilient material while in a taut condition so as to form a generally resilient surface which is padded in appearance.

5. A piece of hand luggage comprising a pair of complementary compartments which are hingedly connected together, each of said compartments having a relatively rigid, drum-type frame which includes a tubular body section and a transverse, circumferentially extending flange section which is attached to and which extends inwardly from one end of said body section, a sheet material reinforcing strip extending circumferentially around and adhesively attached to the outwardly facing surface of said flange section, a flat ring of foam rubber attached to the outwardly facing surface of said reinforcing strip, said foam rubber ring overlying a major portion of the outwardly facing surface of said flange section, the outer circumferentially extending edge of said foam rubber ring lying adjacent to but spaced inwardly from the outer circumferentially extending edge of said flange section, and an outer covering of flexible sheet material extending over the outwardly facing surface of said body section and the end of said frame containing said flange section and the attached ring of foam rubber, the sheet material which extends over the end of said frame containing said flange section and foam rubber ring having shape retaining characteristics and being stitched to said flange section outwardly of said foam rubber while in a taut condition so as to form a generally resilient surface which is padded in appearance.

References Cited in the file of this patent

UNITED STATES PATENTS

1,093,484	Schwarzrock	Apr. 14, 1914
2,455,861	Gerson	Dec. 7, 1948
2,502,632	Platt	Apr. 4, 1950
2,717,093	Mautner	Sept. 6, 1955