Feb. 27, 1968 L. J. NEUMAN 3,370,629

CARRYING CASE

Filed Nov. 17, 1964 2 Sheets-Sheet 1

Fig. 1

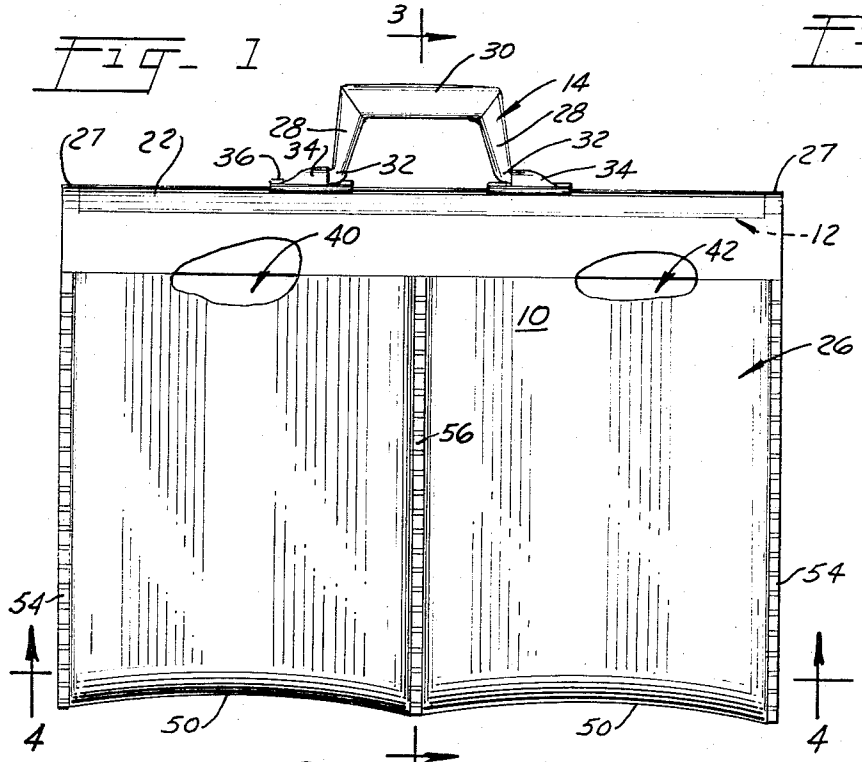


Fig. 3

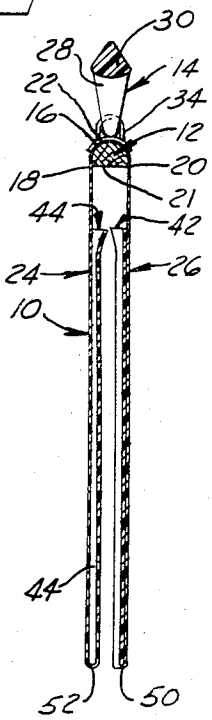
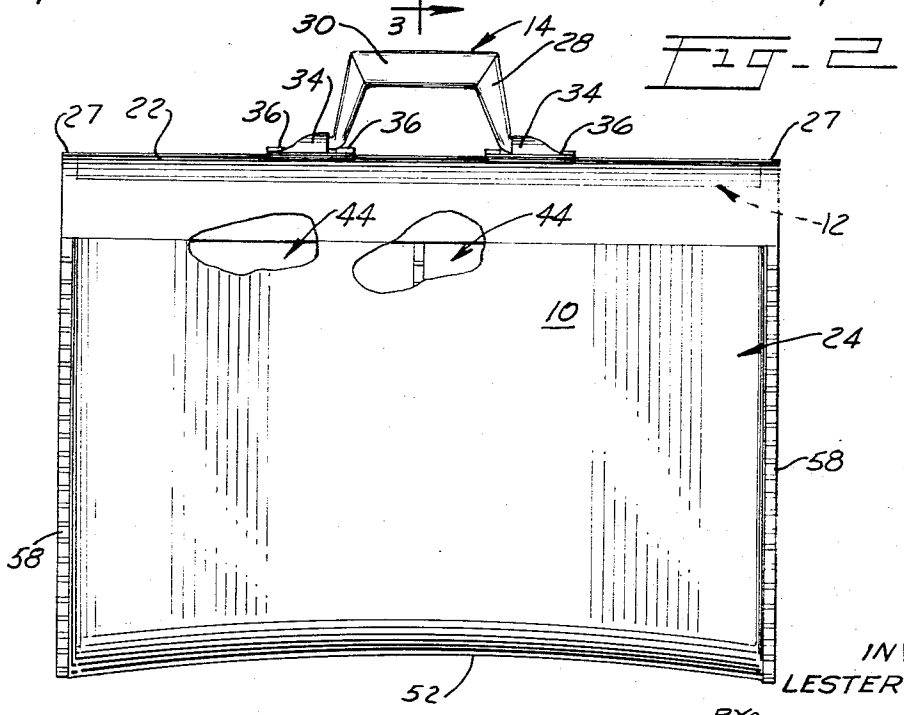


Fig. 2



INVENTOR
LESTER J. NEUMAN
BY Robert D. Haubaugh
ATTORNEY

Feb. 27, 1968 L. J. NEUMAN 3,370,629

CARRYING CASE

Filed Nov. 17, 1964 2 Sheets-Sheet 2

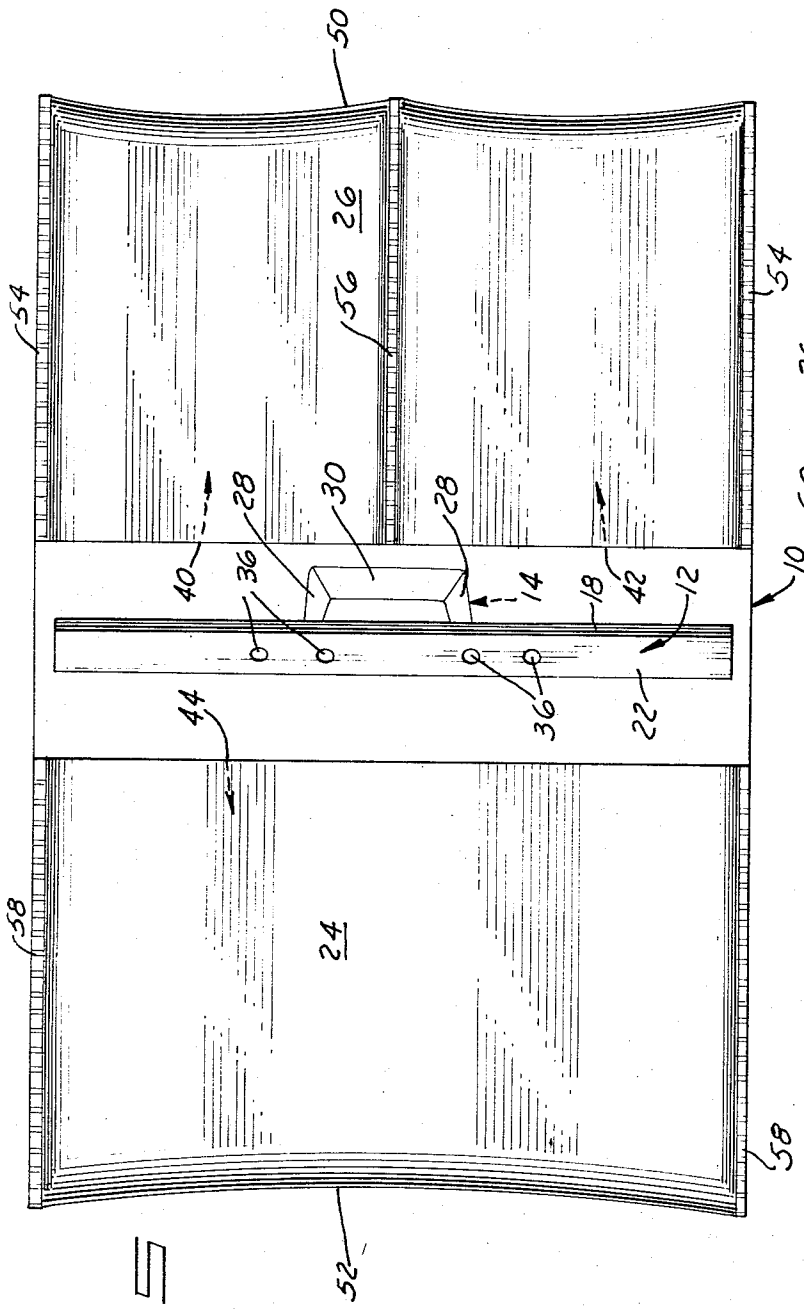
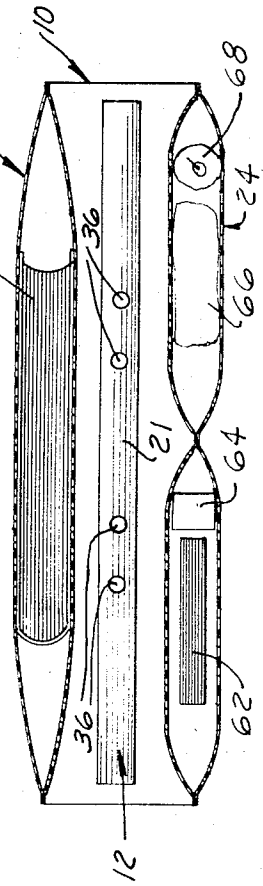


FIG. 5

FIG. 4



INVENTOR
LESTER J. NEUMAN
BY Watson D. Haubaugh
ATTORNEY

United States Patent Office

3,370,629

Patented Feb. 27, 1968

3,370,629

CARRYING CASE

Lester J. Neuman, 2238 Central St.,
Evanston, Ill. 60201

Filed Nov. 17, 1964, Ser. No. 411,787
3 Claims. (Cl. 150—1.6)

The improved carrying case comprising the present invention has been designed primarily for use by students for the unitized one-handed transportation of a heterogeneous collection of items such as text books, note books, leaflets, writing and drawing instruments, and other school supplies and personal effects too numerous to mention. The invention is also capable of other uses with or without some modification as desired. It may be used as a compactable brief case for carrying business papers, correspondence, documents, sales receipts, drawings and a wide variety of other written or printed material. However, irrespective of the particular use to which the invention may be put, the essential features thereof are at all times preserved as herein described.

Structurally, the carrying case of the present invention differs widely from conventional carrying or brief cases although, in use it may look somewhat like a brief case. Functionally however, the present carrying case dispenses with some of the non essential characteristics of conventional brief cases considering the use to which the present carrying case is to be put while in other respects the present carrying case presents distinct advantages over conventional carrying cases.

As distinguished from flat envelope-type cases adapted to be carried by tucking the same beneath the arm the improved carrying case of the present invention is primarily distinguished, inter alia, by a handle for carrying purposes. In this connection handle-equipped cases may be divided broadly into two general classes, rigid or flexible. Rigid type carrying cases, sometimes termed attache cases, are of a box-like design and consist of two rigid sections hingedly connected together at the bottom and adapted to be closed upon each other at the top with a handle on one or both sections at the top for carrying it. A latch usually of the locking type holds the sides against falling open. Flexible type carrying cases with or without bellows ends comprise either a single compartment envelope design with a hinged jaw-type entrance closure or two hinged sections closing at the top and maintained in their closed position by either zipper type fasteners or latching and locking devices of the flip over type similar to trunk locks. Here again handles are provided at the top opening, and, the case would fall open if not physically held closed. Individual smaller compartments or pockets, if present, are merely side pockets and do not receive the main load. They are essentially single compartment cases.

Although the carrying case of the present invention may be classified as of the flexible type it differs widely from conventional flexible type carrying cases in many respects, as previously stated. In addition to its being provided with a handle, further differences reside in the fact that the present carrying case is a multiple compartment carrying case. Two main sections are illustrated in the present invention which are completely isolated from and out of communication with each other yet both are individually and simultaneously accessible instantly without manipulation of a lock. Another difference resides in the handle placement and the effect of the handle support upon the carrying case as a whole. Whereas, with conventional flexible type carrying cases, the handle invariably is positioned at or adjacent to the entrance opening of the carrying case, in the present structure the handle is disposed at a point above and shielded from the entrance opening for both sections of the carrying case. Numerous other differences will readily become apparent as the nature of

the invention is further explained and understood including rain and water protection, visibility of contents when open, automatic closure when carried etc.

Briefly, the carrying case of the present invention is in the form of a flexible saddle which is draped over an elongated central rigid supporting bar, and includes stirrup portions or sections which hang downwardly in parallelism on opposite sides of the supporting bar. One or more pockets, for the retention of various articles may be formed, as desired, on the inside face of each stirrup portion so that the pockets on the two stirrup sections face each other when the stirrup portions hang in carrying position on the supporting bar. A supporting handle is attached to the center of the supporting bar centrally thereof and overlies the saddle arch.

As thus supported in carrying position the pockets and contents are effectively closed and concealed as when the material of the saddle is of an opaque nature as is contemplated according to one form of the invention. If desired, however, the inside wall of the pocket can be transparent and the contents are readily revealed but only when the case is in open position. On the other hand, the contents of the various pockets can be made visible from the outside as well as the inside and with the bag open or closed if all the material of which the case is made is transparent or nearly transparent. This latter form has appeal to a user when the contents are not confidential and has particular attraction for students who also find it desirable to paste stickers, banners and the like on the inside of the stirrup pockets for display through the walls of the stirrup portions.

Another advantage of a carrying case embodying the invention is the waterproof protection afforded its contents. Whereas with conventional carrying cases the closure edges of the outside walls are exposed upwardly even though maintained closed either in abutting relation by a porous zipper fastener, or in slightly overlapping relation by a narrow fold-over flap, the interior of the case is subjected thereby to the entrance of moisture by drippage or otherwise, the carrying case of the present invention is not subject to such entrance of moisture inasmuch as the imperforate saddle arch covers the pocket openings and sheds moisture on both sides thereof, thus shielding the contents of the carrying case. The invention is further characterized by being waterproof up to the height of the pockets if set down in a water puddle.

Another object and advantage of the present carrying case over conventional flexible type carrying cases resides in the improved ease of accessibility to the contents of the case. By laying the case on either side and then unfolding the other side in the manner of opening a book, all of the various article-containing pockets are opened for immediate access. Moreover, where the material of the carrying case is transparent, the location of the specific articles in the pockets is readily apparent and the contents of other pockets need not be disturbed. Thus, time is not wasted fumbling through the various pockets for a given article.

A further advantage of the present invention resides in the fact that whereas conventional flexible type carrying cases are usually provided with rigid bottom walls and semi-rigid side walls so that they possess appreciable thickness, even when devoid of contents, the carrying case of the present invention is normally of extremely small width, viz. thickness and will accommodate the reception of an appreciable number of small articles without perceptibly increasing its overall width. Thereafter, the placement in the carrying case of additional articles will cause the carrying case to automatically adjust itself to the over-all width of the articles contained therein but in no instance will the carrying case be of appreciably greater width than such over-all article width.

A similar and related advantage of the present invention resides in the fact that regardless of the number or size of the articles contained within the carrying case, such articles are at all times securely held within the pockets provided for them against looseness, shifting of position or rattling, the various pockets automatically adjusting themselves to the size and, to a certain extent, to the shape of the contained article.

Yet another advantage offered by the carrying case of the present invention resides in the fact that when the case is empty or contains only flexible sheet material which will not be damaged by coiling, the case may be rolled into the form of a tube on the nucleus of the rigid supporting bar and thus rendered suitable for packing and storage or convenient for underarm support.

Finally, although provision might be made for individual closing or sealing of the various pockets associated with the present carrying case such is eliminated because closure is automatically provided collectively when the case is lifted in actual use and such articles as may be contained therein provide and also find stable support within their respective enclosures since all of the pockets are generally in an upright or vertical position except when the case is open for access thereto.

The provision of a carrying case of the character briefly outlined above being among the principal objects of the invention, a further object is to provide such a carrying case wherein economy of manufacture is readily attainable by its structural organization, a judicious choice of materials and its final fabrication methods. For extreme economy of manufacture, the material selected for construction of the flexible saddle may be a suitable and inexpensive commercially available plastic sheeting such as polyethylene sheeting, either transparent, translucent or opaque, nylon sheeting, vinyl glass sheeting or the like. One particular polyethylene sheeting material which has been found highly satisfactory for use in construction of the saddle is the sheet material known as "Mylar" and which is manufactured and sold by E. I. du Pont de Nemours of Wilmington, Delaware, under that trademark. This material is extremely strong and possesses a durability which exceeds that of most known plastic sheeting materials. All of such materials lend themselves readily to high frequency resistance seam welding and thus, when employed for the construction of the saddle, the necessary seams may be made economically by rapid welding and sealing operations. Where utmost economy of manufacture is not a consideration, such materials as canvas or other textile fabrics, leather and the like may be employed for construction of the saddle and the necessary seams may then, if desired, be sitched and sealed. Irrespective however of the specific materials employed and of the methods of assembly utilized, the essential features of the invention are not altered.

Further objects include the provision of a carrying case which is devoid of fastening devices, clamps, corner fittings or other reinforcements, yet is rugged and durable and is unlikely to get out of shape; the case is one in which the flexible saddle portion thereof may be stamped or cut from a single elongated rectangular blank of sheet material so that there will be no excess waste or scrap; it also is one which despite its open-pocket arrangement, as previously described, is both wind proof as well as for rain or puddles in which it might be set down. Aesthetically it is one which is pleasing in its appearance and attractive in its design and is easy to clean and store and one which is well adapted with longevity to perform the services required of it. These are desirable features which have been attained in the development production and use of the present invention.

Other objects and advantages of the invention, not heretofore expressly enumerated, will readily suggest themselves as the following description ensues.

In the accompanying two sheets of drawings forming a part of this specification, one illustrative embodiment of the invention has been shown.

In these drawings:

FIG. 1 is a side elevational view of a carrying case constructed according to the present invention;

FIG. 2 is rear side elevational view of the structure shown in FIG. 1;

FIG. 3 is a sectional view taken substantially along the line 3—3 of FIG. 1;

FIG. 4 is a sectional view taken substantially along the line 4—4 of FIG. 1 but showing the carrying case filled with typical school supplies; and

FIG. 5 is a bottom plan view of the carrying case, showing the same in an opened position for full accessibility.

Referring now to the drawings in detail and in particular to FIGS. 1 to 3 inclusive, the carrying case of the present invention, in the form illustrated in these views, comprises three principal parts, namely, a flexible saddle portion **10**, a rigid supporting bar **12**, and a handle **14**. The saddle **10** is supported in its entirety by the supporting bar, and the latter, in turn, is suspended from the handle **14** when the carrying case is in use. The saddle **10**, in the illustrated form thereof, is formed of a suitable transparent or translucent flexible plastic sheet material such as polyethylene. The supporting bar **12** is preferably formed of wood, although other lightweight materials such as aluminum are contemplated. The handle **14** may be molded of a suitable plastic material such as a phenol-formaldehyde condensation product although other materials such as metal or leather covered metal can be used.

The supporting bar **12** is of elongated rod-like design and, as best seen in FIG. 3, it is generally rectangular in transverse cross section except for the provision of an arcuate convex upper surface **16**. The supporting bar **12** thus is provided with spaced vertical side surfaces **18** and **20**, and a flat horizontal bottom surface **21** which may be as wide horizontally as desired.

The saddle **10** is "draped," so to speak, over the supporting bar **12** and hangs downwardly on opposite sides thereof, thus establishing a saddle arch section **22** and two freely hanging depending side stirrup sections **24** and **26** respectively. The saddle arch section **22** overhangs the opposite ends of the bar **12** a slight distance as indicated at **27**. Article-retaining pockets are provided on the opposed inside faces of the two stirrup sections in a manner that will be described in detail presently.

The handle **14** may be of any conventional design or construction provided that it preferably is mounted for 180° pivotal movement. In the illustrated form of the invention the handle **14** is formed of a suitable plastic material as heretofore mentioned and it is of inverted U-shape design. It includes a pair of diverging tapered side or leg portions **28** and a relatively thick connecting bight portion or grip section **30**. The free ends of the side portions **28** are turned laterally as at **32** and extend pivotally into sockets which are provided in a pair of base fittings **34** which are secured upon the saddle arch **22** by rivets **36**. The rivets extend through both the saddle arch and the supporting bar **12** to provide a unitary assembly. The handle **14** is thus pivotally mounted on the saddle arch and receives its tensional reaction support from the rigid supporting bar **12**. The rivets **36** serve the dual function of retaining the fittings **34** in position above the supporting bar **12** and of anchoring the saddle in place thereon. If desired, the arch section **22** may be cemented co-extensively to the supporting bar **12** by a transparent adhesive.

Referring now additionally to FIGS. 4 and 5, the inside face of the stirrup section **26** which overhangs the side surface **18** of the supporting bar **12** is provided with two article-retaining pockets **40** and **42**, while the inside face of the stirrup section **24** which overhangs the side surface **20** is provided with a single article-retaining pocket **44**. The pockets **40** and **42** are partial width pockets, in a horizontal direction, while the pocket **44** is a full width pocket. All of the pockets open upwardly

towards the bar **12** and have their rim regions disposed a slight distance below the saddle arch **22**.

It should be borne in mind that in the various view of the drawings, the disclosures have been made on the basis of transparency of the plastic material from which the saddle **10** is formed, Thus, for example, in FIGS. 1 and 2, certain seam lines and edge lines have been drawn as full light lines to indicate that they are background structure which is seen through an overlying transparent thickness of material. Where two thicknesses of overlying material are involved, no attempt has been made to illustrate the background structure.

Although the saddle can be made crosswise from roll stock of a width equal to the unfolded length of the saddle element as a continuous process of folding the edges, seaming and cutting to the length of the saddle, each saddle **10** preferably is made from a single elongated blank of the transparent sheet material with the opposite end portions of the blank folded inwardly (i.e. upwardly as viewed in FIG. 3) toward the center of the blank in opposite directions but on the same side of the blank along wide fold lines **50** and **52** (FIG. 5) which ultimately become the bottom walls or edges of the pockets **40**, **42** and **44**. The fold line **50** accommodates the pockets **40** and **42** and the fold line **52** accommodates the pocket **44**. After such folding operations, the fold which emanates from the fold line **50** is heat sealed along marginal (vertical) seam lines or areas **54** and along a central seam line or area **56** to provide the two pockets **40** and **42**. Similarly, the fold which emanates from the fold line **52** is heat sealed along marginal seam lines or areas **58** to provide the single wide pocket **44**.

While the construction of the saddle **10** from a single elongated blank of plastic sheet material as described above represents a convenient and preferred method of forming the saddle and results in economy of manufacture since it simplifies material-handling procedures, as well as eliminating scrap or waste material, it is also possible to form the saddle by using three separate sheets of flexible transparent material including a main sheet for the body portion of the saddle **10**, a lining sheet for the pocket **44**, and another lining sheet for the two pockets **42** and **44**.

In such an instance seam lines will be provided at the bottoms of the various pockets instead of fold lines.

While the provision of a single pocket on one of the stirrup portions, and two pockets on the other stirrup portion represents a convenient arrangement of pockets suitable for use when the carrying case is employed for school purposes, it is obvious that other pocket arrangements involving multiple pockets in excess of two on either or both stirrup portions may be employed. Additionally, the size and shape of the various pockets may be varied as desired. For example, elongated narrow pockets may be provided for reception of individual writing implements such as pens or pencils. If desired a triangular pocket may be provided to receive the corner region of a draftsman's ruling triangle.

In FIG. 4 the carrying case **10** is shown as being put to a typical use in the transportation of school supplies. A book or the like **60** is disposed within the pocket **44**; a notebook **62** and a pencil box **64** is disposed in the pocket **40**; and a lunch packet **66** and an article of fruit **68** is disposed in the pocket **42**. It is to be noted that due to the flexibility of both the outer walls and the inner walls of the various pockets, the various articles cause the pockets within which they are disposed to bulge both outwardly and inwardly of the carrying case as a whole. The carrying case thus is automatically variable in width to accommodate the combined widths of articles contained therein. In no given instance however is the overall width of the carrying case appreciably greater than the overall width of the contents thereof. Where extremely wide objects are contained in the various pockets, the inside walls of the pockets **40** and **42** may abut against the inside wall of the pocket **44** but, despite this fact, no appreciable stress will be applied to the various seam lines unless, of course, the pockets are unduly stuffed.

The illustration of FIG. 5 shows that the carrying case **10** may conveniently be "opened" for convenient and simultaneous access to all three of the pockets **40**, **42** and **44**. To thus expose the pockets for access purposes it is merely necessary to lay the carrying case on one side and open the other upwardly and outwardly on a planar supporting surface as shown in this view with the handle **14** underlying the saddle **10** and resting on its side. A feature of the present invention which is prevalent when the saddle is formed of transparent or nearly transparent material resides in the fact that the contents of the various pockets are visible through the inside walls of the pockets when the carrying case is spread out as shown in FIG 5 and thus it is unnecessary to fumble through the various pockets in search of a given article.

In a modified form of the invention it is contemplated that the material of the saddle be formed of an opaque material such as opaque polyethylene sheet material, treated cloth such as canvas, leather, or a leather substitute. Where the particular material employed is not readily susceptible to heat sealing operations, the various seam lines employed may be effected by suitable stitching and sealing operations.

The invention is not to be limited to the exact arrangement of parts shown in the accompanying drawings or described in this specification as various changes in the details of construction may be resorted to without departing from the spirit of the invention. Therefore, only insofar as the invention has particularly been pointed out in the accompanying claims is the same to be limited.

What is claimed is:

1. A flexible carrying case of the character described and comprising a horizontal elongated rigid supporting bar convexly rounded cross-sectionally or its upper side, a saddle formed of flexible sheet material draped over said supporting bar to provide a saddle arch section which overlies and rests upon the rounded upper side of the supporting bar with a pair of depending stirrup sections hanging freely of each other from the opposite sides of said supporting bar, said saddle being in the form of a single blank of flexible sheet material substantially coextensive with said supporting bar, the end regions of said blank which constitute the stirrup sections being provided with flap portions that are folded upwardly upon themselves inwardly of the carrying case in reentrant fashion along single fold lines to provide dual-thickness regions with the vertical marginal free edges thereof secured against each other in the regions of the blank which they overlie along vertical seam lines to provide upwardly opening article-receiving pockets with the side walls of the pockets normally against each other and disposed on the opposed inside faces of said stirrup sections whereby the saddle when empty may be coiled around the rigid supporting bar.

2. A flexible carrying case of the character described and comprising a horizontal elongated rigid supporting bar convexly rounded cross-sectionally on its upper side, a saddle formed of flexible translucent polyethylene sheet material freely draped over said supporting bar to provide a saddle arch section which overlies and rests freely upon the supporting bar with a pair of depending stirrup sections hanging freely from the opposite sides of said supporting bar, said saddle being in the form of a single elongated rectangular blank of flexible sheet material, the end regions of said blank which constitute the stirrup sections being provided with flap portions that are folded upwardly upon themselves inwardly of the carrying case and transversely of the elongated rectangular blank in reentrant fashion along single hori-

zontal fold lines with the vertical marginal free edges thereof secured against each other in the regions of the blank which they overlie along vertical seam lines of dual thickness regions to provide upwardly opening article-receiving pockets with the side walls of the pockets normally against each other and disposed on the opposed inside faces of said stirrup sections, and whose upper edges are directly supported by said stirrup sections whereby the saddle when empty may be coiled around the rigid supporting bar.

3. A flexible carrying case as set forth in claim **2** including a handle effectively secured in pivotal relationship to said supporting bar at the center portions thereof for swinging movement about a horizontal axis parallel with said supporting bar as the sole means of fastening said saddle arch section to said bar.

References Cited

UNITED STATES PATENTS

1,204,877	11/1916	Isidor	190—58
1,851,918	3/1932	Marks	150—1.6
2,493,182	1/1950	Beder	150—1.6
2,554,215	5/1951	Schell et al.	150—1.6
3,204,678	9/1965	Worcester	150—1
3,204,760	9/1965	Whiteford	150—1 X

FOREIGN PATENTS

113,267	1/1926	Switzerland.

DONALD F. NORTON, *Primary Examiner.*

FRANKLIN T. GARRETT, *Examiner.*