March 26, 1957 E. P. ARPIN, JR 2,786,557

LIGHT-WEIGHT LUGGAGE BOX FASTENER AND CARRIER

Filed June 30, 1954

Fig. 1

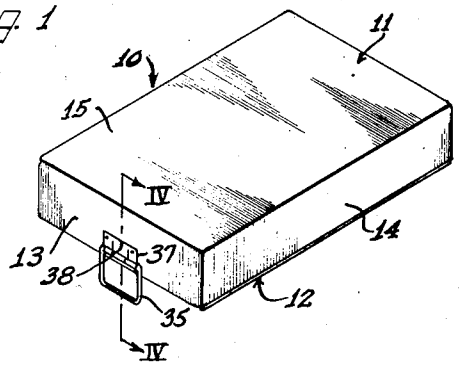


Fig. 2

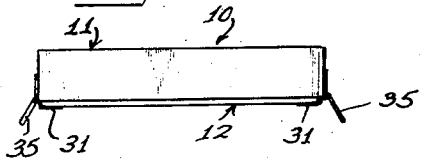


Fig. 4

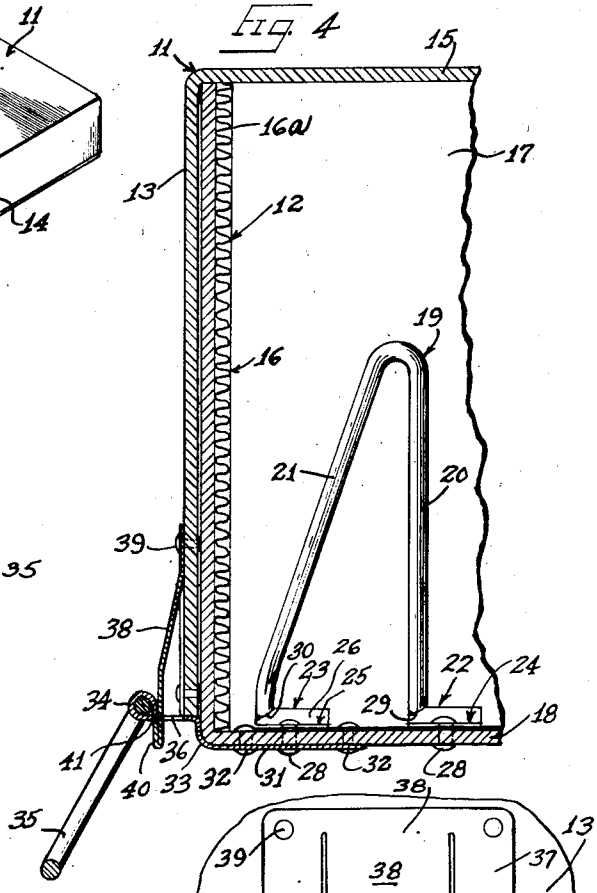


Fig. 5

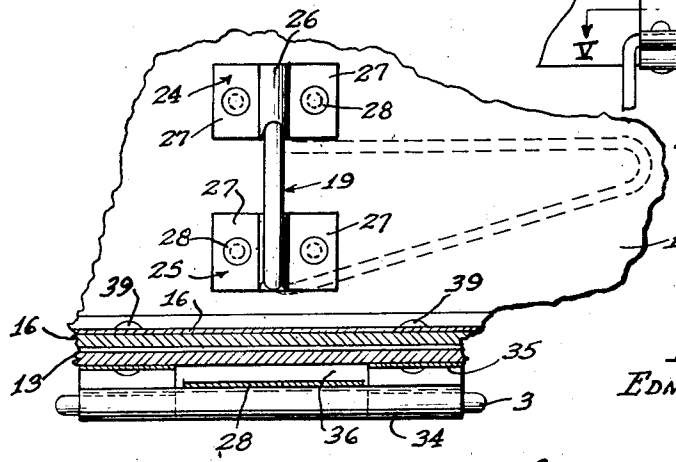
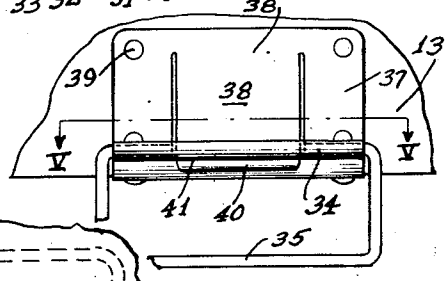


Fig. 3



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LIGHT-WEIGHT LUGGAGE BOX FASTENER AND CARRIER

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4 Claims. (Cl. 190—41)

The present invention relates to a new and improved light-weight luggage box and to a novel fastener and carrier therefor.

More particularly it relates to a two-piece, light-weight, box-like luggage structure having novel cooperating fastener elements provided on the end walls and bottom walls of the box.

The primary objects of this invention is to provide an inexpensive, light-weight luggage article of the two-piece, box-type wherein convenient carrying means are provided on one portion of the box and are adapted to engage cooperating fastener elements on the other portion to retain the two portions in proper luggage box-forming relationship during use.

Another object is to provide a light-weight luggage box having an upper box portion telescopically and removably disposed over a lower box portion, wherein the upper and lower box portions are held in luggage box-forming relationship by novel and inexpensive cooperating fastener elements mounted on the upper and lower box portions.

Still another object is to provide an inexpensive, disposable, light-weight luggage box which may be employed conveniently in packing and storing various articles, particularly clothes, and which is especially adaptable for packing clothes in motor travel.

Other objects and advantages will be apparent from the following discussion taken in conjunction with a preferred embodiment of the instant invention as shown on the annexed sheet of drawings, wherein:

Figure 1 is a perspective view of the luggage box of the instant invention;

Figure 2 is a side elevational view of the box shown in Figure 1;

Figure 3 is a fragmentary front elevational view of the novel carrying means and cooperating fastener elements employed on the instant luggage box;

Figure 4 is an enlarged cross sectional view taken along line IV—IV of Figure 1, and;

Figure 5 is a view taken along line V—V of Figure 3.

In accordance with the instant invention a luggage box shown generally at **10** is provided for convenient packing or storing of various articles, particularly clothes. The luggage box **10** comprises two half-box portions; namely an upper box member or box half **11** and a lower or bottom box half or box member **12**. Both the upper box half **11** and the lower box half **12** are preferably formed of a light-weight, inexpensive material which may be readily disposed of, if desired, and which may suitably include paper, box board, corrugated board, fiber board and similar materials.

The upper box member **11** comprises parallel, opposed end walls **13, 13** and parallel, opposed side walls **14, 14** and integral rectangular top portion **15** spanning the space between the end and side walls **13** and **14** and preferably integral therewith.

The lower box half or bottom box member **12** comprises parallel, opposed end walls **16, 16** and parallel, opposed side walls **17, 17**. An integral, rectangular bottom portion **18** spans the space between the end and side walls **16** and **17**, respectively, completing the lower half-box **12**. The end and side walls **16** and **17** of the lower box portion **12**, as seen in Figure 4, are formed in the instant embodiment with a corrugated cardboard reinforcement or liner **16***a*.

To facilitate the packing of clothes in the luggage box **10** a hanger support **19** is provided on the bottom portion **18** of the lower box **12** intermediate the side walls **17** and adjacent an end wall **16** thereof. In the embodiment shown in Figures 4 and 5, the hanger support **19** has a generally angular configuration and comprises a generally upstanding first leg **20** and a generally sloping or angular second leg **21** formed integrally therewith. The legs **20** and **21**, which are preferably formed of wire or a similar rod-like material, are pivotally mounted to the bottom portion **18** by means of foot portions **22** and **23** formed integrally with the free ends of the first leg **20** and the second leg **21**, respectively. The feet **22** and **23** are retained for pivotal movement by strap supports **24** and **25** respectively. The foot portions, indicated by the arrowed leads from numbers **22** and **23**, are hidden in the drawings by the strap supports **24** and **25**. The strap supports **24** and **25** comprise a substantially semi-cylindrical or yoke-shaped foot-retaining portion **26** having laterally extending, generally rectangular base portions **27** formed integrally therewith. The strap hinges **24** and **25** are secured to the bottom portion **18** of the lower box member **12** by means of rivets **28** or similar fastening means.

The hanger support **19**, as seen in Figures 4 and 5, is normally held in an upright position by means of arcuate cut out or locking portions **29** and **30** respectively formed on the strap hinges **24** and **25**. When not in use the hanger support **19** may be disengaged from the locking portions **29** and **30** swung conveniently out of position to lie flat against the bottom portion **18** of the lower box member **12** as shown by dotted lines in Figure 5.

The upper box member **11** is of a slightly larger dimension than the lower or bottom box half **12**. This allows the upper box member to be removably disposed telescopically over the lower or bottom box half **12**.

Means are provided on the bottom box member **12** for grasping or carrying the luggage box **10**. In the embodiment shown in Figure 4 such means comprise a pair of parallel spaced opposed plates **31, 31** mounted on the bottom portion **18** of the lower box member **12** adjacent the end walls **16**, and intermediate the side walls **17**, by means of rivets **32** or similar fastening devices. The free ends of the plates **31** extend laterally beyond the end walls **16** and are bent to conform generally to the contour of the corner of the lower box member **12** as at **33**. The outermost or edge portion of the laterally extending free end of the plate **31** is bent into a substantially cylindrical configuration to provide a pintle-receiving loop **34**. A generally rectangular or U-shaped wire handle **35** is retained by and pivotally mounted in the loop **34**. A substantially rectangular aperture or slit **36** is provided in the laterally extending end portion of the plate **31** intermediate the side edges thereof. The function of this aperture **36** will be explained more fully in describing the operation of the cooperating fastener elements employed in retaining the upper box member **11** and the lower box member **12** in luggage box-forming relationship.

Means are provided on the upper box member **11** for resiliently engaging the carrying means on the lower box portion **12** for retaining the upper and lower box members **11** and **12** in proper luggage box-forming relationship during use. In the embodiment shown in the drawings, such means comprise a pair of generally rectangular

spring metal plates 37, 37 having a flat latch spring 38 formed integrally therewith. The plates 37, 37 are mounted in parallel spaced opposed relationship on the end walls 13, 13 of the upper box member 11 along the bottom edge thereof intermediate the side walls 14, 14 by a suitable means such as rivets or the like 39. The latch spring 38, which is formed integrally with the plate 37, comprises an elongated, generally rectangular depending member extending slightly below the lower edge of the plate 37. As seen best in Figure 4, the spring 38 is bent outwardly and downwardly so as to exert a resilient pressure outwardly from the end wall 13. The free edge of the latch spring 38 is folded back upon itself as at 40 to form an abutment shoulder edge 41.

In assembling the upper box member 11 and the lower box member 12 in proper luggage box-forming relationship, one merely slidably engages the upper box member 11 over the lower box member in a telescopic manner. The spring latch 38 is initially depressed inwardly toward the end wall 13 of the upper box member 11 by suitable manual pressure, if necessary. The upper box member 11 is then advanced telescopically downwardly. The positions of the plates 37, 37 mounted on the end walls 13, 13 of the upper box member 11 are such that the spring latch 38 when depressed is in proper alignment to be slidably received by the aperture 36 in the plate 31 mounted on the lower box member 12. When the upper box member 11 has been advanced downwardly to its lower limit and the spring latch 38 aligned in and received by the aperture 36, the pressure urging the latch spring 38 inwardly is released. This allows the spring latch 38 to be urged resiliently outwardly against the cylindrical portion 34. The abutment shoulder 41 on the spring latch 38 is forced resiliently against the underside of the loop 34 and restricts upward movement of the upper box member 11. In this fashion the cooperating fastener elements in the form of the spring latch 38 on the upper box portion resiliently urged against the loop 34 on the lower plate 31 assure a tight locking together of the upper and lower box portions 11 and 12, respectively, while the luggage box 10 is being employed.

In removing the upper box member 11 from the lower box member 12 the above procedure is simply reversed. That is, the spring latch 38 is depressed inwardly toward the end walls 13 and the upper box member 11 slidably disengaged upwardly from the lower box member 12.

Although the plate 31 having the handle 35 mounted thereon and the latch spring 38 are shown to be mounted on the end of portions of the upper and lower box members, it will be obvious that they could be mounted also on the side walls, or on both the end and side walls if desired.

One of the distinct advantages and features of the instant luggage box 10 is its use in packing clothes for motor travel. The regular, rectangular shape of the luggage box 10 allows a plurality of such boxes to be stacked neatly and compactly in an automobile trunk with minimum waste of space. In addition, the luggage box 10, being produced preferably from an inexpensive material, such as box board or the like, may be disposed of at the end of a journey, thereby eliminating the necessity of storing or shipping empty containers.

Another feature of the instant luggage box is the location of the handling or grasping means in the form of handles 35 mounted adjacent the bottom surface thereof. This structure makes it possible to carry easily two such luggage boxes in one hand. That is, by placing two luggage boxes 10 with their bottom portions 18 in face-to-face engagement, the handles 35 are brought into aligned, superposed relationship. This allows one to grasp the handles 35 of both boxes with one hand and permits carrying of at least two boxes in each hand with ease.

It will be apparent to those skilled in the art that I have now provided a new and improved, light-weight, inexpensive, and disposable luggage box, having inexpensive, but permanent cooperating fastener elements thereon for firmly holding the component parts of the article in luggage-box-forming relationship.

It will be understood that modifications and variations may be effected without departing from the scope of the novel concepts of the present invention.

I claim as my invention:

1. A luggage box, which comprises an upper half-box portion, a bottom half-box portion, said upper half-box portion being adapted to being removably disposed telescopically over said bottom half-box portion, plates mounted on said bottom half-box portion and extending laterally therefrom, each of said plates defining an aperture and providing means for mounting a handle on said luggage box, latch springs mounted on said upper half box portion, said latch springs being adapted to be received by said apertures in said plates and locking means between said springs and plates for retaining said latch springs in said apertures and retaining the upper and bottom half-box portions in telescopically disposed luggage box-forming relationship.

2. In a luggage box, an upper box member, said upper box member comprising parallel opposed end and side walls and a top portion, a lower box member, said lower box member comprising parallel opposed end and side walls and a bottom portion, said upper box member being adapted to be removably disposed telescopically over said bottom box member, a pair of parallel spaced opposed plates mounted on the bottom portion of said lower box member adjacent the end walls thereof, said plates having the free edges thereof projecting laterally from said end walls, said free edges providing means defining an aperture in each of said plates, means for handling said luggage box mounted on said free edges, a pair of parallel opposed spaced latch springs mounted on the end walls of said upper box member, and locking means between said latch springs and said plates, said latch springs being adapted to be received by and held in place in said apertures in said plates, by the locking means for retaining said upper and lower box members in the telescopically disposed luggage box-forming relationship.

3. In a luggage box including an upper box member having parallel opposed end and side walls and a top portion, a lower box member having parallel opposed end and side walls and a bottom portion, said upper box member being adapted to be removably disposed telescopically over said lower box member, the improvement which comprises providing a pair of parallel opposed plates on said bottom portion of said lower box member adjacent the end walls thereof and extending laterally therefrom, means defining an aperture in said laterally extending portion of each of said plates, handles pivotally mounted on said laterally extending portions, a pair of parallel opposed spaced latch springs mounted on the end walls of said upper box member, and locking means between said plates and said latch springs, said latch springs being adapted to be received by and resiliently engaged with the sides of said apertures in said plates and held therein by said locking means for retaining said upper and lower box members in telescopically disposed luggage box-forming relationship.

4. In a luggage box including an upper box member and a lower box member with the lower box member to be telescopingly received in the upper box member in box-forming relationship, the improvement comprising a plate secured to the lower box member and extending laterally therefrom, said plate having an aperture therein and a handle loop formed thereon, a handle member mounted on said plate in said loop, a latch spring secured to said upper box member and disposed to cooperate with and extend through said aperture in said plate when said box members are in box-forming relationship, and an

abutment shoulder portion formed on said latch spring to engage the handle loop on said plate to retain the box members in box-forming relationship.

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