Feb. 10, 1942. J. RITTER, JR 2,272,584

LUGGAGE CARRIER BOTTOM CLEAT

Filed April 14, 1941

Fig. 1.

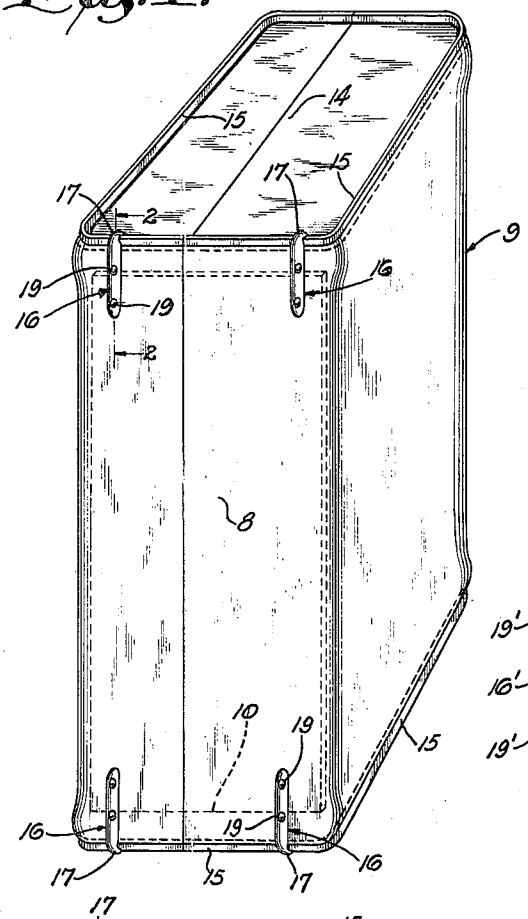


Fig. 4.

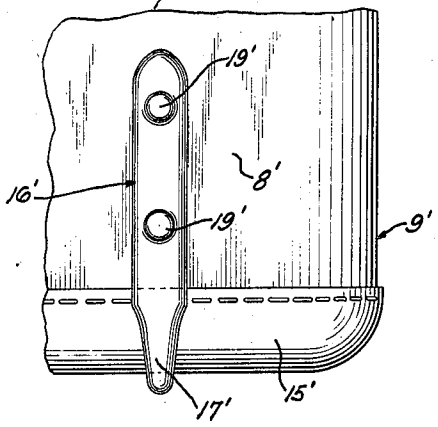
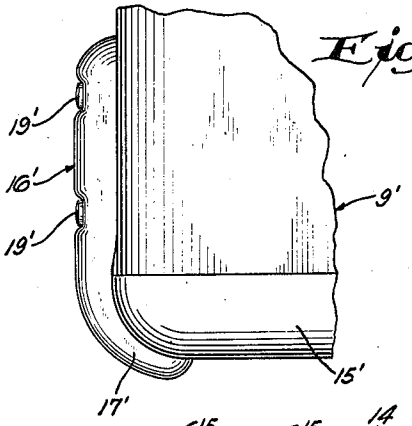


Fig. 5.



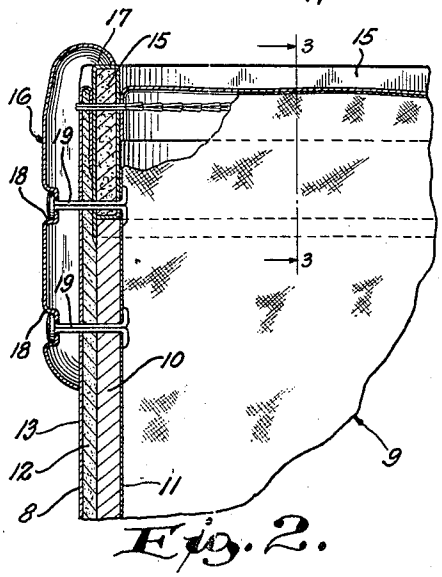


Fig. 2.

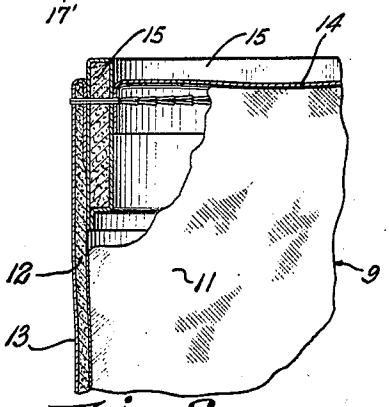


Fig. 3.

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LUGGAGE CARRIER BOTTOM CLEAT

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2 Claims. (Cl. 190—37)

This invention relates to improvements in luggage carrier bottom cleats.

Trunks and hand luggage cases, according to standard practice, are provided on the four corners of their bottom members or walls, with downwardly projecting metallic protuberances or studs. These studs are for the purpose of relieving the leather, fabric, or other coverings on the trunks or luggage from the usual scraping, scuffing and abrasive action to which such bottom wall surfaces would be subjected during handling and transportation of the luggage pieces, when the same are set down or pushed on a floor or other rough surface.

The metallic protuberances or studs heretofore provided, and in some instances plates or cleats, have all terminated short of the side or vertical walls of the cases or trunks. While the prior studs or cleats have been effective in protecting the bottom surfaces of the containers to which they were applied, they did not in any way protect and reenforce the adjacent side wall portions of the containers.

With the above in mind it is, therefore, a primary object of the present invention to provide luggage carrier bottom cleats which not only protect the bottom walls and surfaces of containers to which they are applied, but additionally protect, reenforce and truss adjacent side wall portions of the containers.

A further object of the invention is to provide a luggage carrier bottom cleat of a very substantial size, which is applied to and forms a protuberance relative to a bottom wall of a container and furthermore has a right angular portion extending adjacent a side wall portion of a container to form a projecting rigid protuberance and reenforcement therefor.

A further object of the invention is to provide luggage carrier bottom cleats which besides protecting the bottom wall of a container extend over and engage portions of the peripheral beads or welts on the end walls of the container, thus anchoring the beads or welts and reenforcing the same.

A further object of the invention is to provide luggage carrier bottom cleats which have particular utility and effectiveness in connection with soft sided luggage cases and function to prevent connected wall portions of the case from cracking or bending when subjected to unusual strains or stresses.

A further object of the invention is to provide luggage carrier bottom cleats which are of very simple construction, which are neat, attractive, and distinctive in appearance, which are strong and durable, and which are well adapted for the purposes described.

With the above and other objects in view, the invention consists of the improved luggage carrier bottom cleats and their parts and combinations as set forth in the claims.

In the accompanying drawing in which the same reference characters indicate the same parts in all of the views:

Fig. 1 is a perspective view of a luggage case of the soft sided type, said view showing the luggage case set on one end to expose the bottom wall, an adjacent end wall, and a side wall, the bottom wall being provided with the improved bottom cleats;

Fig. 2 is an enlarged fragmentary detail sectional view taken on line 2—2 of Fig. 1;

Fig. 3 is an enlarged fragmentary detail sectional view taken on line 3—3 of Fig. 2;

Fig. 4 is a fragmentary view of a lower corner portion of the bottom wall of a rigid wall container with a bottom cleat applied thereto of a slightly modified nature; and

Fig. 5 is a view similar to Fig. 4 only taken at right angles thereto.

Referring first to the form of the invention illustrated in Figs. 1 to 3 inclusive, it will appear that for purposes of illustration, the improved bottom cleats have been shown in connection with the corner portions of the rigid bottom wall 8 of a hand luggage case 9, preferably of the soft sided type. The bottom wall of this case is formed of two complementary sections which are hingedly connected together. In a soft sided case all of the walls thereof save the bottom wall are preferably flexible and "floppy" and are devoid of the usual rigid reenforcements. The composite bottom wall 8 of the case is, however, reenforced and rigid in character. Its structure can be best determined from the sectional showing in Fig. 2 where it will be observed that an inner panel or rigid member 10, preferably formed of laminated wood, is covered on its interior with a suitable lining fabric 11. Secured to the outer face of the panel is a layer of composition 12 to which is applied exteriorly the usual outer covering 13 of finishing material such as leather, fabricoid, canvas, or the like. The same covering material 13 is applied to all of the other walls of the luggage case 9 and the other walls are devoid of the rigid reenforcement 10, with the result that said walls, due to the flexibility of the covering material 13, are "soft sided" or "floppy" and are readily deformable.

As is customary in luggage manufacture, the peripheral portions of the end walls 14 of the case are surrounded by beads or welts 15. These beads or welts inwardly overlap substantial edge portions of the case walls to which they are applied and also protrude somewhat beyond the planes of the end walls 14. The beads or welts are furthermore relatively rigid, being formed of leather or other suitable material of a very substantial thickness.

From Fig. 1 of the drawing it will be observed that the improved bottom cleats are designated generally by the numeral 16. One cleat is applied to each corner portion of the bottom wall 8 of the luggage case 9. As modified from standard practice, the cleat 16 is relatively elongated and is provided at its outer end with an inturned, rounded and angled extension 17. Each cleat is formed of metal of a heavy gauge and is of shell-like formation. In the back wall of the shell, spaced recesses 18 are formed for the reception of the heads of attaching studs or rivets 19. As shown best in Figs. 1 and 2, the cleat is applied to a corner portion of the bottom wall 8 of the case in a manner so that its shank portion parallels the side edge of the wall, spaced inwardly therefrom, with one of the attaching studs 19 extending through the reenforced portion of the wall 8 and the other stud extending through the adjacent portion of the wall which carries the inner portion of the welt 15. The curved and angled extension 17 on the cleat 16 extends over and engages the projecting edge of the welt 15. Therefore, each cleat not only provides a protuberance and bearing surface of a substantial length for a bottom portion of the wall 8, but also forms a laterally projecting protuberance for a lower edge portion of an end wall 14 of the case. The extension 17 of the cleat is laterally removed from and substantially parallel to the plane of an end wall 14 and therefore provides a wear surface or abutment for the end wall of the case should the end of the case be pushed against some surface. The cleats tightly engage portions of the welt and thus additionally bind the welt to the adjacent wall portions of the case and serve as effective reenforcements therefor.

The improved cleats, as exemplified particularly in Figs. 1 and 2, besides forming protective protuberances for both the bottom and the end walls of a luggage carrier, and serving to reenforce and anchor the end welts, have an additional feature of decided advantage in connection with soft sided luggage carriers or cases. Luggage during transportation and in storage is subjected to extremely hard and abusive treatment. A piece of luggage may be thrown about or slid over a rough floor and it may be caused to bump walls, surfaces, or other pieces of luggage. Also, the piece of luggage in question may have other luggage piled on the top thereof or thrown thereagainst. The improved bottom cleats protect the bottom surface and the end surfaces of the luggage case 9 in the manner previously indicated. Because of the soft or flexible nature of the side and end walls of the case 9, rough treatment of the piece of luggage or throwing the same about or rough contact with other pieces of luggage may cause flexing and bowing of certain wall portions of the piece of luggage. From Figs. 1 and 2 of the drawing it will be observed that the reenforcing panel 10 for the bottom wall of the case terminates short of the junction of the bottom wall with the end walls. This arrangement would ordinarily present opposed weakened lines and it will be appreciated that should the end walls of the case be subjected to pressure or strain, the leather or covering material of the bottom wall might crack or bend in the neighborhood of the termination of the reenforcing panel. With the present improved construction, however, this difficulty is very adequately overcome because the shanks of the elongated cleat 16 bridge bottom wall portions from the reenforced area to and beyond the junctures with the lower edges of the side walls. The metallic cleats, being rigid, and being secured in a manner so as to bridge these portions of the bottom wall which are normally weaker than the major portion of the bottom wall, prevent damage to said portions of the bottom wall. It should further be observed that due to the angular formation of the cleats, strains and stresses imposed against the bottom or end walls of the case are resolved in two directions. It is furthermore a fact that in the prior structures in which the cleats or studs were applied to and covered only portions of the bottom wall, such areas which carried the cleats might very readily bow or bend inwardly because the cleats were in no wise associated with any adjoining wall portions of the case and were only local in their application.

A slight modification of the invention is illustrated in Figs. 5 and 6 wherein the improved cleats 16' are applied to the corner portions of the bottom wall 8' of a rigid walled container or piece of luggage 9'. In a container or luggage case of this type the walls adjoining the bottom wall 8' are likewise rigid, but the elongated and curved ended cleats 16' form protecting protuberances and wear surfaces for the bottom 8' of the container as well as extending around the edge members 15' of the end walls. In the illustration the edge members 15' are of somewhat greater width or depth than the welts 15 in the principal form of the invention and the curved end portions 17' of the cleats 16' are accordingly larger and more extended than corresponding portions in the principal form of the invention. However, just as in the principal form of the invention, the cleats, in addition to their functions in relation with the wall 8' of the container, form protecting abutments along lower end wall portions of the container. The construction of the cleats with the angular curved extremities also is effective in resolving strains and stresses in several directions.

From the foregoing description it will be seen that the improved luggage carrier bottom cleats are of very simple and novel construction and are well adapted for the purposes described.

What is claimed as the invention is:

1. In a container including a bottom wall with end walls secured to and extending vertically from opposite ends thereof, elongated metallic cleats applied to corner surface portions of said bottom wall with rectilineal portions of said cleats forming protective protuberances on said bottom wall, said cleats also having upturned outer end portions clampingly engaging lower portions of said end walls with said upturned end portions of the cleats forming lateral protective protuberances on said portions of the end walls, each cleat being of shell-like formation and of U-form in cross-section with spaced, apertured depressions in the rectilinear portion of the shell wall, and headed securing means extending through the apertured depressions of the cleat

walls and into the container bottom wall to secure said cleats in position with the heads of the securing means seated within the depressions.

2. A hand luggage case, comprising a container having a rigid bottom wall and flexible end walls secured to and extending vertically from opposite ends of the bottom wall, said bottom wall being formed of a rigid panel terminating at its ends short of the adjacent edges of the end walls, yieldable welts surrounding the peripheral portions of the end walls and having their outer portions projecting laterally beyond the planes of said end walls, the welts along the lower edges of the end walls projecting inwardly of the planes of said end walls and meeting the extremities of said rigid bottom wall, and metallic cleats secured to corner surface portions of said bottom wall and having elongated rectilineal bottom portions and short up-turned outer end portions clampingly embracing projecting portions of said welts, portions of said cleats forming protective protuberances for said bottom and end walls and the welts, the rectilineal portion of a cleat bridging the joint between the end portion of the bottom panel and the meeting inner portion of a welt to reenforce the connection and said portion of the yieldable welt.

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