June 9, 1942. J. RITTER, JR 2,285,745

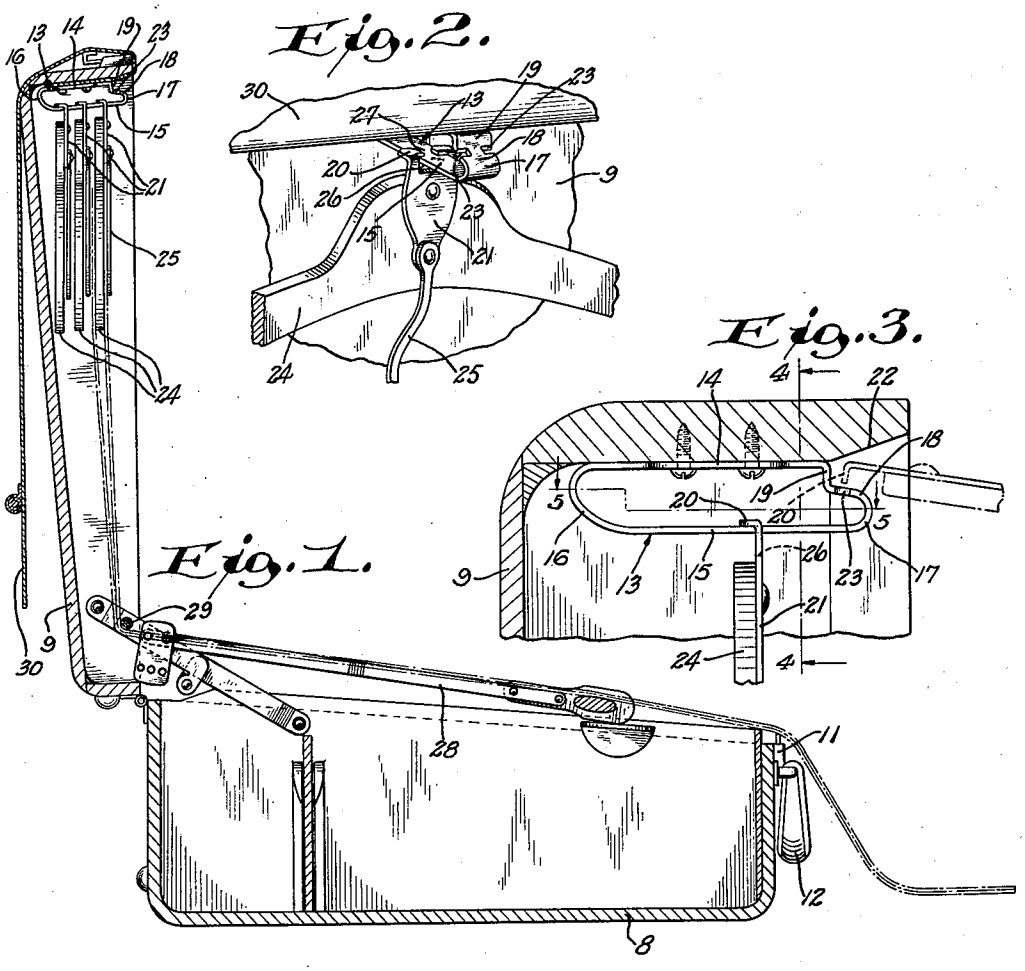
HANGER SUPPORT AND HANGER

Filed April 11, 1941

Fig. 2.

Fig. 3.

Fig. 1.



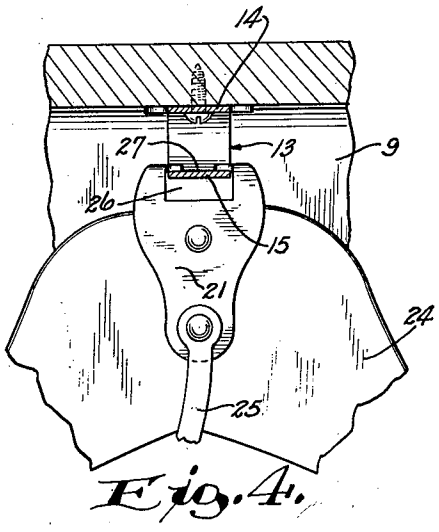


Fig. 4.

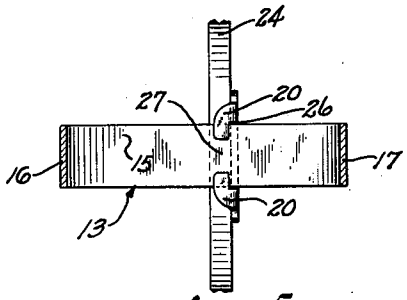


Fig. 5.

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HANGER SUPPORT AND HANGER

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4 Claims. (Cl. 312—176)

This invention relates to improvements in hanger supports and hangers, particularly, although not necessarily, adapted for mounting and use in wardrobe containers, hand luggage, trunks, and the like.

There is in usage a certain type of wardrobe luggage case wherein a hanger support or bracket is provided within the upper or free end of the hinged cover section of the case to removably receive one or more coat or garment hangers. Garments are draped from the hangers and are folded about a bar and other fixture elements in the inner end of the case cover section, whereby the long garments may be ultimately confined in folded and compacted condition within said cover section. The hanger support used in the conventional structures is in the form of a flat bar having its outer end formed for the reception and removal of hangers. When the cover section of a case is packed it is ultimately closed by a flexible curtain secured over the face of the cover section. However, with the conventional structure described it has been found that the bar, forming the hanger support, is inadequate for the retention of hangers thereon when the cover section is being swung from its open vertical position to its closed horizontal position because, during such movements of the cover, the hangers will slide to the forward end of the supporting bar or bracket and may become completely dislodged therefrom or cause dishevelment of the supported garments. This will occur even though the retainer curtain is secured over the face of the cover section because the curtain is flexible. If such flopping movements of the hangers are to be prevented in the conventional structures, it is necessary to provide and secure across the free end portion of the cover section a transverse, hanger-engaging strap. A strap increases the expense of the case and is additionally objectionable because of the extra manipulations required to secure and release it during packing and unpacking operations.

With the foregoing in mind it is, therefore, the primary object of the present invention to provide a wardrobe case hanger support and hanger which, while permitting the ready mounting and removal of a hanger if the hanger is swung from its normal position through an arc, which can not be accidentally accomplished during normal movements of the cover of the case, serves to positively retain the hangers on the bar of the bracket or support during usage and movement of the luggage case and the sections thereof.

A further object of the invention is to provide a wardrobe case hanger support having closed end portions with an entrance to the outer end offered by means removed from and out of the plane of the support proper.

A further object of the invention is to provide a hanger support having a closed entrance end with entrance channels therein cooperable with a T-slot in a garment hanger plate, free edges of said plate being flanged at right angles for supporting and retaining purposes.

A further object of the invention is to provide a wardrobe case hanger support and removable hanger therefor having cooperating means for retaining the hanger on the support without the aid of a curtain, retaining strap, or other auxiliary means.

A further object of the invention is to provide a hanger support and hanger with which a housing or piece of luggage may be readily equipped at a minimum of expense.

A further object of the invention is to provide a wardrobe case hanger support and hanger which are of very simple construction, are easily and naturally manipulated, are strong and durable and efficient in use, and which are well adapted for the purposes described.

With the above and other objects in view the invention consists of the improved hanger support and hanger, and their parts and combinations as set forth in the claims, and all equivalents thereof.

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

Fig. 1 is a vertical sectional view through an open wardrobe case in which the free end of the hinged cover section is equipped with the improved hanger support and hangers;

Fig. 2 is a fragmentary perspective view of the upper inner portion of the wardrobe case cover section showing the hanger support with a hanger mounted thereon;

Fig. 3 is an enlarged fragmentary vertical sectional view of the free end portion of the case cover showing the hanger support and hanger, there being a broken-line showing of the position of a hanger preparatory to mounting it on the support;

Fig. 4 is a fragmentary detail sectional view taken on line 4—4 of Fig. 3; and

Fig. 5 is a detail sectional view taken on line 5—5 of Fig. 3.

Although, for purposes of illustration, the improved hanger support and hanger are shown

and described herein as being mounted in a wardrobe hand luggage case, it should be understood that the invention is more generally applicable and may be used in connection with luggage and trunks of various types, wardrobe containers, and other housings.

Referring now more particularly to the drawing it will appear that the wardrobe hand luggage case in which the present improvements may be installed includes a body section 8 and a hingedly connected cover section 9. In Fig. 1 of the drawing said cover section is shown in its open position, but it may be swung over onto the body section to thus close the case for housing and transportation purposes. Conventional latches 11 are provided for securing the cover section in closed position, and a side wall of the body section carries a handle 12.

The improved hanger support and hangers, forming the subject of this invention, are associated with the interior of the free end portion of the cover section 9. The hanger support is designated generally by the numeral 13, and it is in the form of a loop of flat metal arranged to provide an attaching portion 14, a flat supporting bar 15, a curved and closed rear end 16, and a curved and closed front end 17. The latter is in the form of a return bend to provide an offset or ledge 18 spaced from the plane of the flat bar 15. The inner end of said offset is connected with the front end of the attaching portion 14 by means of an angularly directed spacing flange 19. Said spacing flange is of a length or depth slightly greater than that of the angled ears 20 on the projecting edge of a garment hanger plate 21, as will hereafter appear. It should also be noted that the free edge portion of the end wall of the cover section, to which the member 13 is secured, is inclined as at 22 to provide additional clearance and to facilitate entrance of a garment hanger, as shown in broken lines in Fig. 3. The offset or ledge 18 is formed with opposed slots or recesses 23 for the passage of complementary shouldered portions on the garment hanger plate, as will also hereafter appear, the ears 20 being slightly wider than the recesses 23. The hanger support 13 is mounted on the inner face of the front or free wall of the cover section 9 of the case intermediate the ends of said wall.

One or more garment hangers 24 are adapted to be removably depended from the support 13. In general each garment hanger is of conventional construction, save for a feature to be discussed. A hanger, intermediate its ends, carries a plate 21 to the lower portion of which is pivotally attached a hook 25 which, when the hanger is removed from the luggage case, may be swung upwardly so the hanger may be conveniently hung from the usual hook or support in a closet, if desired. The plate 21 projects beyond the upper portion of the hanger and said projecting portion carries the ears 20 previously mentioned. Inwardly of the ears there is an elongated transverse slot 26 while there is a reduced entrance slot 27 formed between the adjacent inner ends of the ears 20. Said ears are, however, at right angles to the plane of the plate 21 so that in effect said plate has a T-slot or opening therein with the leg thereof in a plane at right angles to the plane of the head of the T-slot.

The use of the improved hanger support and hangers will be explained, by way of illustration, in connection with a wardrobe luggage case. Referring to Fig. 1 of the drawing it will appear that the luggage case is opened in the usual manner so that the cover section 9 thereof assumes a perpendicular position relative to the body section 8 of the case. Preliminarily the hangers 24 are all removed from the support or bracket 13 and are free of the case. When a long garment such as a coat or dress is to be packed, it is hung on the hanger 24 in the usual manner. If the wardrobe case is equipped with a fixture of the swing frame type, the frame 28 is swung to a substantially horizontal position overlying the body section of the case. Also, if the fixture includes an inner bar, this bar 29 is removed from its mounting in the inner end of the cover section. The hanger 24, with the garment thereon, is then manually moved toward the case in an elevated position, draping the lower end portion of the garment over the swing frame 28 in the manner depicted in broken lines in Fig. 1. The hanger 24 is substantially registered with the front end of the support or bracket 13 and is then tilted to a substantially horizontal position, as in broken lines in Fig. 3. At this point it may be stated that the spacing flange 19 of the bracket 13 together with the tapered wall 22 provide sufficient clearance to enter the flanged plate end of the hanger into a position adjacent the offset 18 of the bracket 13. In this position the angled ears 20 of the hanger plate 21 are at right angles to the plane of the bracket offset 18, and by then moving the hanger downwardly said ears 20 pass through the opposed entrance slots 23 in the bracket offset 18. This, therefore engages the hanger with the bracket and the hanger is then allowed to fall by gravity from the substantially horizontal plane of engagement to a normal position in a vertical plane. In so falling or being moved it traverses the rounded enclosed front end 17 of the bracket and finally assumes the full-line position, as shown in Fig. 1 or Fig. 3. After the ears 20 are entered into the entrance recesses 23 and the hanger is swung through an arc, the widened portion of the curved end 17 of the bracket and the bar 15 are lodged within the head portion 26 of the T-slot in the hanger plate, and the in-turned ears of the hanger plate ears 20 extend over and engage surface portions of the bracket, as best shown in Figs. 4 and 5. It will also be noted that the ends 20, because the same are bent at right angles to the plane of the hanger plate 21, provide substantial surfaces to engage the bar portion 15 of the bracket 13. A suitable number of hangers, with garments thereon, may be engaged on the bar portion 15 of the bracket 13 in the manner described, and the same are supported thereon against undesired dislodgement. If the garment folding fixture is of the type illustrated in Fig. 1 the detachable transverse bar 29 is next inserted in its mounting in the inner end of the cover section so as to engage intermediate portions of the garments, and then the frame 28 is swung upright into the cover section in the usual manner. Thereafter a flexible retainer curtain 30 should be swung over the open face of the cover section to close the same, and the lower end portion of said curtain is secured in closing position in a conventional manner. When the luggage case is packed the cover section may next be swung to closed position onto the body section 8 of the case. It is during the latter manipulation that the present improvements become especially desirable. It will be obvious that when swinging the cover section from a vertical to a horizontal position the depended hangers

24 will slide forwardly on the bar portion 15 of the bracket 13. In conventional hanger supporting arrangements this becomes particularly objectionable because the hangers are apt to slide off of the front end of the supporting bracket. With the present improvements the hangers will merely slide toward the curved and closed front end 17 of the bracket and cannot become dislodged. Removal of the hangers from the bracket can only be effected by swinging the same through a substantial arc and lifting the hangers to a position where the ends may be passed through the entrance slots 23 in the bracket offset 18. The entrance openings in the bracket offset are in a plane substantially removed from the plane of the support proper, namely the bar portion 15, so removal of the hangers can only be accomplished through a predetermined manual manipulation.

From the foregoing description it will appear that the improved hanger support and hangers provide simple means for the effective retention of a hanger on a supporting bracket. The angled ears 20 on the hanger plates 21 provide relatively wide supporting and bearing surfaces and engagement and disengagement of the hangers from the bracket can be effected by normal and natural swinging movement of the hangers accomplished manually, but not susceptible of being accomplished during movement of the luggage case or swinging of the cover section thereof. The hanger support and hangers are, furthermore, of simple and novel construction and are well adapted for the purposes described.

What is claimed as the invention is:

1. In a housing, a bracket secured to a wall thereof, said bracket having a flat bar spaced from and parallel to said housing wall and a closed end merging into an offset spaced from the plane of said bar, said bar, closed end and offset having a relatively wide wall and a reduced wall in the offset extending into the wide wall, and a hanger detachably cooperable with said bracket and normally supported by and hanging freely from said bracket bar, said hanger having a pair of ears at right angles to the plane of the hanger proper with a slot between adjacent end portions of the ears, there being a slot in the hanger proper communicating with the slot between the ears, the slot between the ears receiving the reduced wall portion of the bracket offset in certain positions of the hanger and the slot in the hanger proper receiving the wide portions of the bracket.

2. In a housing, a fixed wall having a free edge portion, the free edge portion of said wall being inwardly tapered, a bracket having a portion secured to said wall and extending rearwardly of said tapered portion, said bracket also having a flat bar spaced from said housing wall and parallel thereto, the forward end of said bar having a return bend therein terminating in a flat offset between the bar and said housing wall, there being an angularly directed spacing flange between an end of said offset and the first-mentioned portion of the bracket, and a hanger detachably cooperable with said bracket, said hanger being formed with slotted openings to receive both the wide and reduced wall portions of the bracket and having right angular ears to prevent undesired removal of the hanger from the bracket, the width of said hanger ears being less than the length of the bracket spacing flange and the wall taper affording easy entrance of the eared portion of the hanger to the slotted portion of the bracket offset.

3. In a housing, a bracket secured to a wall thereof, said bracket having a flat bar spaced from and parallel to said housing wall and a closed end merging into an offset spaced from the plane of said bar, said bar, closed end and offset having a relatively wide wall and a reduced wall in the offset extending into the wide wall, there being slots at the sides of the reduced wall, and a hanger detachably cooperable with said bracket and normally supported by and hanging freely from said bracket bar, said hanger being formed with slotted openings to receive both the wide and reduced wall portions of the bracket, the hanger having adjacent its openings ears at right angles to the hanger proper and restricting one of the hanger slotted openings, said ears being slightly wider than said bracket reduced wall slots to prevent removal of the hanger from the reduced wall portion of the offset except when the hanger is turned through a substantial angle from its normal hanging position.

4. In a housing, a bracket secured to a wall thereof, said bracket having a flat bar spaced from said housing wall and parallel thereto, the forward end of said bar having a return bend therein terminating in an offset spaced from the plane of said bar portion, said bar portion, return bend and offset having a relatively wide wall and a reduced wall in the offset extending into the wide wall, there being slots at the sides of the reduced wall, and a hanger detachably cooperable with said bracket and normally supported by and hanging freely from said bracket bar, said hanger being formed with slotted openings to receive both the wide and reduced wall portions of the bracket, the hanger having adjacent its openings ears at right angles to the hanger proper and restricting one of the hanger slotted openings, said ears being slightly wider than said bracket reduced wall slots to prevent removal of the hanger from the reduced wall portion of the offset except when the hanger is turned through a substantial angle from its normal hanging position.

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