March 24, 1964 C. S. GEHRIE 3,125,874

LATCHING AND LOCKING MEANS FOR LUGGAGE CASES AND LIKE RECEPTACLES

Filed Jan. 21, 1963 2 Sheets-Sheet 1

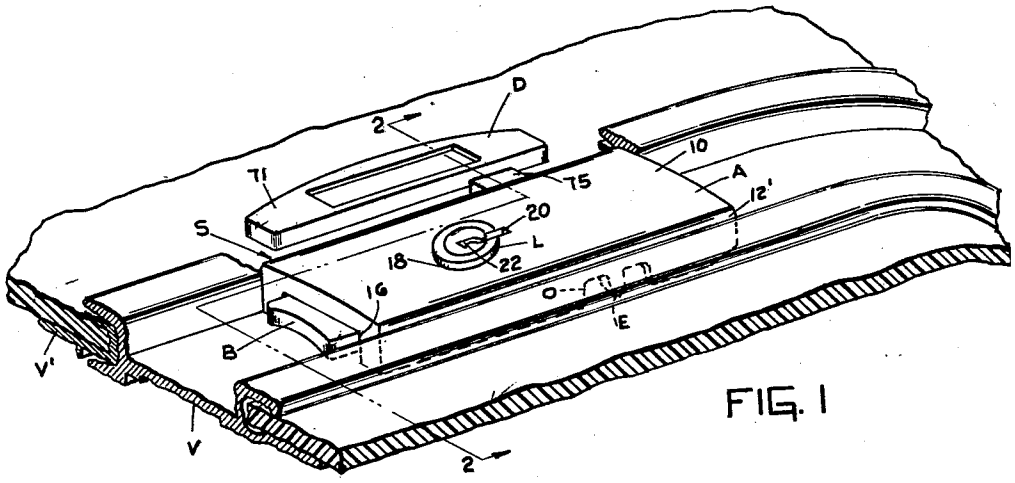

FIG. 1

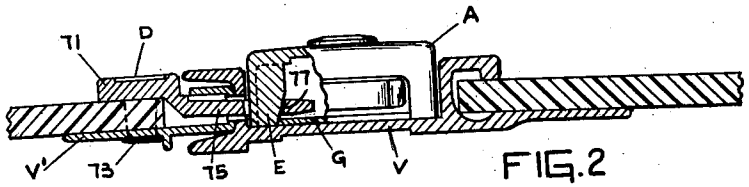

FIG. 2

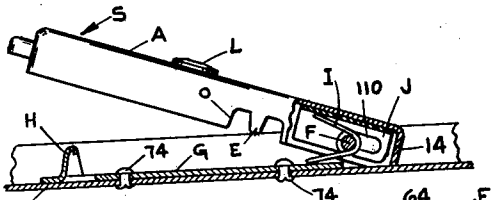

FIG. 3

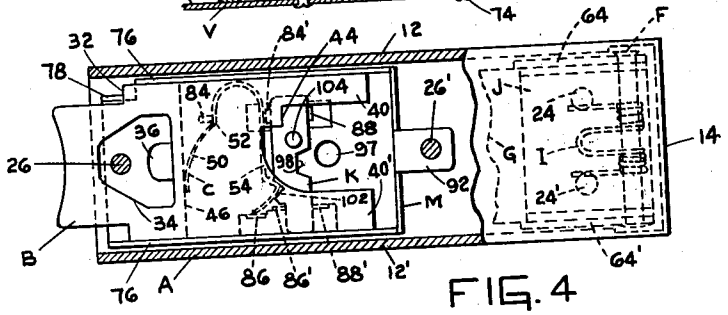

FIG. 4

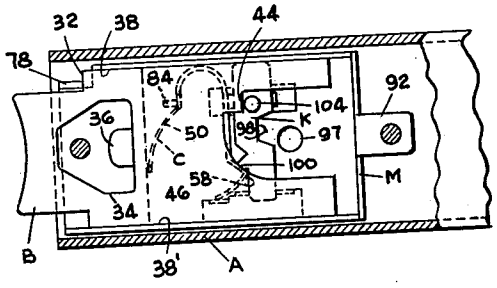

FIG. 5

INVENTOR.
CHARLES S. GEHRIE
BY Harry G. Shapiro
ATTORNEY

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FIG.6

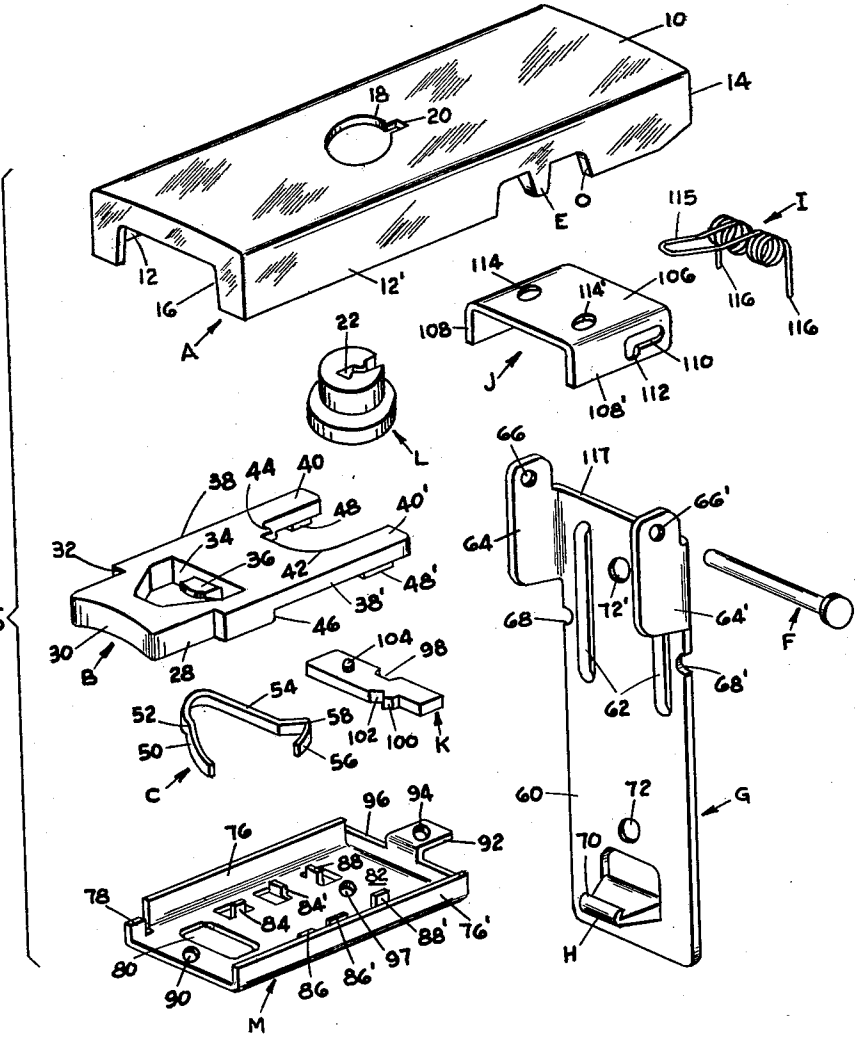
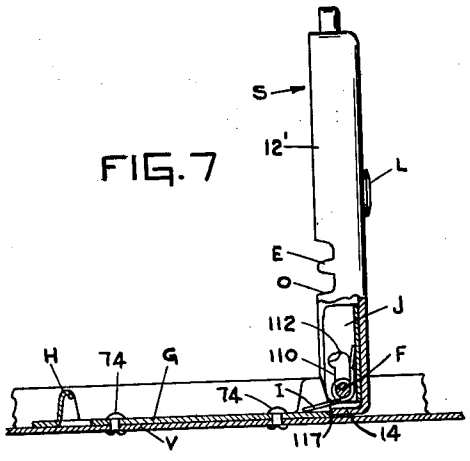


FIG.7



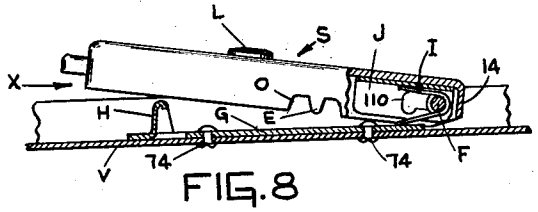


FIG.8

INVENTOR.
CHARLES S. GEHRIE
BY Harry G. Shapiro
ATTORNEY

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LATCHING AND LOCKING MEANS FOR LUGGAGE CASES AND LIKE RECEPTACLES

Charles S. Gehrie, Montclair, N.J., assignor to Presto Lock Co., Garfield, N.J., a limited partnership

Filed Jan. 21, 1963, Ser. No. 252,799
13 Claims. (Cl. 70—75)

The invention relates to latching devices or latching and locking devices for luggage cases and like receptacles.

An object of the invention is to provide a latching device having means for cooperation with a hasp wherein the latching means is resiliently hinged to a mounting plate adapted both to provide means for attaching the device to a luggage case and to furnish means cooperable with the latching means for the latching function.

Another object of the invention is to provide a latching device having a structure indicated above wherein locking means is related to the latching means to releasably maintain the latching means in its latched position.

A further object of the invention is to provide a latching and locking device wherein an assembly comprising means for releasably locking a resiliently biased latching member and means for coaction with a hasp is resiliently hinged to a mounting plate for spring-up action with respect to the mounting plate which, in addition to being adapted to secure the device to a luggage case, furnishes latch cooperable means for the latching member of the hinged assembly.

A more specific object of the invention is to provide a latching and locking device comprising an assembly providing means for latching and means for releasably locking the latching means in hasp-engaging position, the assembly being hingedly and resiliently related to a mounting plate providing latch cooperable means, wherein the assembly is related to the mounting plate in a manner which permits their hinged relationship to be changed to thereby enable attachment of the device to a luggage case without incurring damage to the finish of the assembly, the changed relationship of the assembly with respect to the mounting plate also changing the extent of the arc of rotation of the assembly with respect to the mounting plate.

These, and other objects and advantages of the invention will be apparent from the following detailed description, taken in conjunction with the drawings illustrating a preferred embodiment of the invention, in which:

FIG. 1 is a perspective view of a latching and locking device in accordance with the invention shown mounted on a valance of a luggage case, this view showing the latching device in its latched position in engagement with a hasp, the associated valance member being broken away to better show the hasp;

FIG. 2 is a vertical cross-sectional view taken approximately in the plane of line 2—2 of FIG. 1;

FIG. 3 is a side elevation, partly broken away and in section, showing the device of FIG. 1 in unlatched or open position;

FIG. 4 is a top plan view, partly broken away and in section, showing the latch member in its latched but unlocked condition;

FIG. 5 is a partial view similar to FIG. 4 showing the latch member in locked condition;

FIG. 6 is an exploded view showing in perspective the several components of the latching and locking device of the invention;

FIG. 7 is a side elevational view, partly broken away and in section, showing the angular relationship of the assembly providing the latching means, locking means and hasp-engaging means with respect to a mounting plate to which it is hinged at one stage of the preferred manner of attaching the device to a luggage case; and

FIG. 8 is a view similar to FIG. 7, this view however, showing the second stage of attachment of the device to a luggage case just prior to the final attached relationship, which is shown in FIG. 3.

Referring to the drawings, a latching device made in accordance with the invention generally comprises a housing A within which a latch member B is mounted for sliding movement in a plane parallel to the length or plane of the housing. The latch member B is normally urged toward latching position by resilient means C positioned in the housing to cooperate with the latch member. A portion of the latch member extends exteriorly of the housing, the exposed portion being engageable manually or by a finger so that the latch member may be pushed back or retracted against the force exerted upon it by the resilient means or spring C. The housing A is provided with an opening on a side thereof which is located approximately 90° from that side of the housing from which the portion of the latch member B extends and is exposed. This opening, designated O, is of a size to allow the operating portion of a hasp member D to be received within or beneath the housing A. The assembly of the housing A and the resiliently biased latch member B is provided with hasp-engaging means E for cooperation with the hasp member D, such assembly being designated S.

As shown in FIG. 3, the described assembly S is hinged at one end thereof to one end of a mounting plate G by a hinge pin or shaft F. The mounting plate is provided with upstanding, latch-coacting or -engaging means H at the end of the plate remote from the end thereof which is hinged to the assembly S. Resilient means I cooperable with the mounting plate G and the assembly S is positioned at or adjacent the hinge pin F to normally urge apart the free or unhinged ends of the assembly and the mounting plate.

Preferably, the hinge pin F is journalled in a pivot plate J. The pivot plate may also serve as a bearing for a portion of the resilient means I which is also positioned to bear against the assembly S. Preferably, the pivot plate is assembled with and secured to the housing A to become a part of the assembly S.

When the latch member B, which is urged by the resilient means C toward latched position, is in engagement with the latch-engaging means H on the mounting plate G, the assembly S lies coextensively with respect to the mounting plate G, as shown in FIGS. 1 and 2. In the latched condition of the device, and when the luggage case is closed, the operation portion of the hasp D extends through the opening O disposed within the housing A and is captured by the hasp-engaging means E. A second hasp-engaging means E is located on the opposite side of the assembly S and remote from the hasp D. This second hasp-engaging means is inactive, and is provided for economy of manufacture. This makes a right and left assembly out of the same unit so that the latching device may be oriented in the opposite direction, or turned 180° on a luggage case, without having to manufacture right and lefthanded units.

When manual pressure is applied to the exposed portion of the latch member B to cause the latch member to be disengaged from the latch-engaging means H on the mounting plate G, the ends of the assembly S and of the mounting plate G remote from their hinged connection at F are caused, by the resilient means I, to swing apart. When the mounting plate G is attached or secured to a luggage case section, or to a valance strip V, which in turn is secured to a luggage case section, as shown in FIG. 2, the assembly S lifts or springs up about its pivotal connection to the secured, stationary mounting plate. This rotational, upward movement of the assembly S serves to

lift the hasp-engaging means E away from the operating portion of the hasp member D, and allows the luggage case to be opened about the usual hinged connection of the case sections on their bottom sides. Suitable stop means is provided to furnish the desired extent that the assembly S may spring up with respect to the mounting plate G to which it is hinged.

In the preferred embodiment of the invention, the described latching device is provided with means for releasably maintaining or locking the latch member in its latched position so that the assembly S may be secured in the hasp-engaging position shown in FIGS. 1 and 2. For this purpose, a locking bolt K is positioned in the housing A and related with respect to the latch member B so that in one position of the bolt, the latch member may be retracted and the device unlatched, as shown in FIG. 4. In the other or shifted position of the locking bolt, as shown in FIG. 5, the latch member cannot be retracted; it is maintained in latched position and locked to prevent movement of the assembly S with respect to the mounting plate G and its latch coacting means H. As a result, the hasp-engaging means E of the assembly S cannot be lifted away from the operating portion of the hasp D, and the luggage case is locked. The shifting of the locking bolt K from unlocked to locked position, and vice versa, is accomplished through the medium of a related key barrel L disposed within the housing A and having a portion thereof exposed through an opening in the top of the housing. The key barrel is turned by the usual key (not shown).

In accordance with the preferred form of the invention, a frame M is provided to furnish a track for guiding the latch member B in the sliding movement thereof, to provide locating and guide means for the shiftable locking bolt K, to furnish a stop for limiting the extent of movement of the latch member, to furnish locating means for the resilient means C, and to protect and complete housing of the resilient means, the latch member and the locking bolt K on the underside of the assembly S.

In greater detail, and in accordance with the illustrated and preferred embodiment of the invention, the housing A is substantially rectangular in shape and comprises a plate portion 10 having downturned sides 12 and 12' along the long sides thereof. The housing A has a downturned side 14 at one end thereof and an opening 16 at the opposite end. The downturned sides 12 and 12' are each provided with the cut-out or opening O located more nearly adjacent that end of the housing having the downturned side 14. Substantially midway between the width of each opening O, the hasp-engaging means E is provided. As hereinbefore indicated, but one hasp-engaging means is needed for coaction with the hasp D; however, a hasp-engaging means is provided on each side of the housing so that the same housing may be used though a pair of latching and locking devices may be oppositely oriented on a luggage case. Preferably, the hasp-engaging means E is provided as an integral part of the housing A, being formed in the shape of a wedge as part of the side wall 12 (and 12') midway between the sides of the opening O.

The housing may be made from metal strip which is stamped and formed to desired shape. It is preferred, however, that the housing be made as a die casting and plated to provide a suitable finish. The upper or exposed surface of the plate portion 10 may be ornamented in any desired fashion. Ornamentation may be provided by a selected configuration imparted to the cavity in which the part is die cast or, when the part is made as a stamping, the plate portion may be suitably embossed to furnish the desired ornamental effect. The plate portion 10 of the housing is provided with a circular opening 18 and an intersecting notch 20 to allow exposure of the key barrel L and alignment of a slot 22 in the key barrel with the notch 20 for the reception of a key.

The underside of the housing's plate portion 10 is provided with means enabling connection with the pivot plate J and the frame M. Where the housing is made as a die casting, such connecting means is conveniently accomplished by casting the housing with integral, dependent studs which may then have their ends headed over to complete the connection. The studs for securing the pivot plate J to the housing are designated 24 and 24', and the studs for connection of the frame M to the housing are designated 26 and 26'. It will be understood, of course, that rivets or other suitable means may be used for connection of the parts.

As best shown in FIG. 6, the latch member B is a rigid piece, preferably die cast, having a generally rectangular outline. One end thereof, the end 28, which when assembled with the housing extends exteriorly thereof, is concavely formed to furnish a finger-engaging surface 30. Where the piece increases in width, a shoulder 32 is provided which, as will subsequently be explained, cooperates with a portion of the frame M to furnish a stop limiting the outward movement of the latch member. The latch member is provided with an aperture 34 to allow the latch-engaging means H to be extended therethrough when the assembly S is brought into coextensive relationship or latching position with respect to the mounting plate G. A beveled projection or tang 36 is situated to extend laterally into the aperture 34 for sliding contact upon and hooking beneath the upstanding, hook-like latch-engaging means H on the mounting plate G. The longitudinal sides 38, 38' of the latch member extend parallel to one another for sliding confinement between walls provided by the frame M, as will be subsequently described. The latch member terminates in a pair of spaced arms 40 and 40' constituting the sides of a substantially U-shaped cut-out 42. A shoulder 44 is provided to extend into the cut-out portion, such shoulder being provided to cooperate with a portion of the locking bolt K to block the retraction of the latch member B and thereby lock it in its latched position. The latch member is further provided with an area of reduced thickness to furnish a shoulder 46 which acts as a bearing surface for a portion of the resilient means or spring C, and to prevent the latch member from tilting because of the reduction in thickness occasioned by the provision of the spring-bearing shoulder 46, the arms 40 and 40' are provided with dependent projections 48 and 48', respectively, on the undersides thereof.

As shown in FIG. 6, the resilient means C is a leaf spring bent into substantially U-shape, and further given the configuration illustrated wherein one arm 50 is provided with an indentation 52. The indentation, as will be subsequently described, serves to position or locate the spring within the assembly S. The end of the spring's second arm 54 is provided with a short return bent portion 56 to furnish a convexly shaped hook 58 for coaction with a matingly shaped portion on the locking bolt K.

As shown in FIG. 6, the mounting plate G is in the form of a substantially rectangular metal strip 60 having substantally the same surface area as the housing A. When the mounting plate is made as a stamping, which is preferred, it may be indented at the areas 62 to impart rigidity to the plate. At one end, and at opposite sides of the plate, a pair of upstanding, parallel ear portions 64 and 64' are provided, these ear portions having holes 66 and 66' extending respectively therethrough to receive the pivot pin F. The plate 60 is provided with notches 68 and 68' along its longitudinal edges and at a location to coincide with and allow clearance for the tips of the wedge-shaped, hasp-engaging means E. At the end of the plate remote from the ear portions 64, 64', the plate is pierced and the metal displaced and formed to provide a hook 70 midway between the sides of the plate 60. The hook 70 constitutes the latch-engaging means H; it is formed with an upper beveled surface for sliding engagement with the beveled portion on the projection 36 on

the latch member B so that the projection is cammed under the hook when the parts are pressed together.

In order to attach the mounting plate to a valance member V, the plate is provided with longitudinally spaced apertures 72 and 72' so that rivets 74 (FIGS. 3, 7 and 8) may be extended therethrough and aligned holes in the valance and then headed over to secure the connection of the plate to the valance. The valance shown in FIGS. 1 and 2 is formed to provide a recess, and the latching and locking device of the invention is adapted for substantially flush mounting therein. The valance structure shown does no constitute part of the present invention.

The hasp D possesses a structure adapted for coaction with the latching device when mounted in the recessed form of valance member V illustrated in FIGS. 1 and 2. The hasp, which is preferably made by die casting, comprises a body portion 71 having dependent studs 73 and a laterally extending, operating portion 75 having an opening 77. The body portion is secured to the second valance member V', and to the luggage case section upon which such valance member is mounted, by the studs 73 which are extended through aligned openings provided in the valance member and the luggage case section. The ends of the studs are then headed over to secure the connection of the parts. The operating portion 75 is made of a length sufficient to present the opening 77 to the hasp-engaging means E. It will be understood that when the latching device is secured directly to a luggage case section, and does not require spacing from the hasp to the extent necessitated by the positioning of the latching device in a recessed valance member as shown, then the operating portion of the hasp need not be in the extended form illustrated to present the aperture to the hasp-engaging means.

The frame M, as also shown in FIG. 6, is a channel-shaped member which is preferably blanked, pierced and formed from strip steel, and which may be protectively plated. The frame serves as the holding, locating and protective means for the latch member B, the resilient means C for biasing the latch member and the locking bolt K. These parts may be readily assembled with one another to provide a sub-assembly which may be easily handled for assembly with the housing A.

The frame M, which is substantially rectangular in outline, has a pair of upturned sides 76 and 76' extending longitudinally of the frame and parallel to one another. The side 76 is somewhat shorter than the side 76', the remainder of the piece at such side being taken up by a slightly inwardly spaced, bent up tang or stop 78 adapted to be engaged by the shoulder 32 of the latch member B. The frame is provided with a cut-out or opening 80 to allow the hook-like, latch-engaging means H to pass therethrough. The portion of the frame 82 intermediate the walls 76 and 76' is provided with a plurality of spaced locating means for the spring C and the locking bolt K. Preferably, the locating means are provided by piercing the wall 82, and striking up the metal to furnish projecting tangs. The tangs 84 and 84' serve to confine the arms 50 and 54 of the spring C therebetween, with the tang 84 situated at the indentation 52 in the spring arm 50, as shown in FIGS. 4 and 5. As also shown in these figures, the spring arm 50 bears against the shoulder 46 provided by the latch member B, and the end 56 of the spring is confined by the tangs 86 and 86'. The tangs, designated 88 and 88', together with the tangs 84' and 86' confine the locking bolt K for sliding movement in the frame M and transversely with respect to the plane of movement of the latch member B. The frame is provided at one end with an opening 90, and at the opposite end with a central tab 92 having an opening 94. The tab extends laterally from an upstanding end wall 96 and lies in a plane substantially parallel to the plane of the wall portion 82 of the frame. The frame's wall 82 is provided with a hole 97 to enable clearance of the tip of the key which actuates the locking bolt K.

The locking bolt K is provided on one longitudinal side thereof with a notch 98 to receive a portion of the key to allow the piece to be shifted from the position shown in FIG. 4 to the position shown in FIG. 5, and vice versa. The opposite longitudinal side of the locking bolt is formed to furnish a projection 100 and an adjacent indentation 102. The indentation receives the bowed portion 58 of the spring arm 54 when the locking bolt is in unlocked position (FIG. 4). When the locking bolt is shifted to locking position, as shown in FIG. 5, the bowed portion 58 of the spring is resiliently hooked behind the projection 100. Thus, in addition to its biasing function upon the latch member, the spring serves, by virtue of its configuration, to resiliently maintain the locking bolt in its extreme positions. The locking bolt is formed to provide an upstanding lug or projection 104 extending from the flat face thereof for positioning behind the shoulder 44 of the latch member B to prevent the retraction of the latch member when the locking bolt has been shifted to the position shown in FIG. 5. When the locking bolt K has been shifted by the key to the position shown in FIG. 4, the lug 104 clears the latch member B, which may be retracted against the action of the spring C, thereby permitting the projection 36 to become unhooked from the latch-engaging hook 70 on the mounting plate.

With the latching member B confined between the sides 76 and 76' of the frame M for sliding movement with respect thereto, the spring C confined between the shoulder 46 of the latching member, between the tangs 84, 84' and 86, 86', and bearing against the locking bolt K, and the locking bolt K confined for sliding movement between the tangs 84', 86' and 88, 88', such assembly is secured to the housing A by extending the studs 26 and 26' of the housing through the openings 90 and 94 on the frame and then heading over the ends of the studs.

In the illustrated and preferred embodiment of the invention, the described assembly S, which comprises the housing A, the latch member B, the latch-biasing spring C, the locking bolt K and the frame M, is hingedly connected to the mounting plate G by the pivot plate J. As shown in FIG. 6, the pivot plate comprises a flat base portion 106 having inturned sides 108 and 108' to furnish a substantially channel-shaped member. The sides 108 and 108' are each provided with a longitudinally extending slot 110 which terminates at its inner end in a depressed bearing 112. The base portion 106 is provided with laterally spaced openings 114, 114' through which the studs 24 and 24' of the housing A are extended and headed over for connection of the pivot plate to the housing. The pivot plate thereby becomes a part of the assembly S. Before the pivot plate is secured to the housing, the ears 64 and 64' are placed over the sides 108 and 108' with the apertures 66 and 66' aligned with the slot 110 on each side of the pivot plate. The spring I which, as shown in FIG. 6, is coiled to provide a median bowed portion 115 and parallel extending, straight ends 116 is positioned between the mounting plate G and the pivot plate so that the spaced ends 116 will bear against the surface 60 of the plate G and the bowed portion 115 will bear against the inner surface of the base portion 106 of the pivot plate. The pivot pin F is then extended through the opening 66', the slot 110, the opening extending through adjacent coils of the spring I, through the slot 110 on the opposite side of the pivot plate and through the opening 66 in the ear portion 64 of the mounting plate. After the pivot plate and the related parts are secured to the housing, the ends of the pivot pin are located between the sides 12 and 12' of the housing, as shown in FIG. 4.

With the parts thus assembled, the assembly S is biased away from the mounting plate G by the spring I at their hinged connection to one another by the pivot pin F so that the assembly assumes a position substantially 90° with respect to the mounting plate, as shown in FIG. 7. In this relationship of the hinged parts, the

end wall 14 of the housing A engages the extremity 117 of the mounting plate G to limit or stop the rotation of the assembly S with respect to the mounting plate. The pivot pin F is located at the extremity of the slots 110 in the pivot plate which is remote from the depressed bearings 112. Such angular relationship of the assembly S with respect to the mounting plate G is particularly desirable for the attachment of the described device to a recessed valance member V. The mounting plate is fully exposed to allow unobstructive riveting or other desired attachment of the mounting plate to the valance member, and there is no danger of marring the finish of the housing which will be exposed on the luggage case, or of damaging the components contained in the housing.

It is preferred however, that the assembly S spring up with respect to the mounting plate G, or the luggage case to which the latching and locking device is attached, not more than approximately 15°. Although other stop means may be used to limit the extent that the assembly S may swing with respect to the mounting plate G, the described slotted arrangement provided by the pivot plate J permits limiting the extent of swing of the assembly with respect to the luggage case to 15°, while affording the advantage of unobstructed attachment of the device to a luggage case, as previously described.

This is accomplished by moving the assembly S, after the device has been secured to a luggage case section, down to the position shown in FIG. 8, and then applying pressure in the direction of the arrow X, or parallel to the length of the assembly S when the assembly is in such position. As a result, the assembly S is shifted lengthwise with respect to the mounting plate G, the pivot pin F travelling in the longitudinal slots 110 until it reaches the depressed bearings 112, as shown in FIG. 3. With the assembly S and the mounting plate G thus related to one another, the fulcrum provided by the pivot pin F has been shifted so that the valance V is engaged by the downturned side 14 of the housing A, whereby the valance acts as a stop limiting the extent of rotation of the assembly S with respect to the mounting plate G to the desired angle of 15°, as shown in FIG. 3. The parts are dimensionally related so that following the shifting of the fulcrum to the position shown in FIG. 3, the latch-coacting means H is aligned with the opening 80 in the frame M so that the projection 36 may be hooked under the latch-coacting means H when the assembly S is brought into the latching and hasp-engaging position of FIGS. 1 and 3.

It will be apparent that when the latching or latching and locking device of the invention is attached directly to a luggage case section, rather than to an intermediate recessed valance, the preferred slotted arrangement permitting shifting of the fulcrum of the mounting plate G and assembly S for facility of attachment may be dispensed with. Instead of utilizing the valance member itself to furnish the desired angle that the assembly S may rotate with respect to the mounting plate, any suitable means cooperative with the mounting plate G and assembly S may be used to furnish the extent that the assembly may spring up from the mounting plate to which it is hinged. If desired, the mounting plate may be extended at its hinged end so that the upper face thereof may be engaged by the end wall 14 of the housing to stop the rotation of the assembly S when it reaches a desired amount.

Also, while the coiled form of spring I lends itself to the described slotted arrangement which allows shifting of the fulcrum, it will be apparent that where the pivotal connection of assembly and mounting plate is fixed as contemplated by the invention, a leaf spring may be used in lieu of the described coiled spring.

It is believed that the advantages and improved results of the invention will be apparent from the foregoing detailed description of a preferred embodiment of the invention. It will be apparent that various changes and modifications may be made without departing from the spirit and scope of the invention as sought to be defined in the following claims.

I claim:

1. A latching device for a luggage case or like receptacle comprising a housing, an opening in the side of the housing to allow a hasp to be received in the housing, a latch member slidably mounted in the housing, resilient means positioned in the housing and cooperating with the latch member to urge the latch member toward latching position, said latch member having a portion thereof extending exteriorly of the housing for manual engagement and retraction against the force exerted by said resilient means, hasp-engaging means provided by the assembly of said housing and resiliently biased latch member located at said opening, a mounting plate for attaching the latching device to a luggage case, means hinging one end of the mounting plate to the end of said assembly opposite the end thereof having the manually engageable portion of the latch member, latch-engaging means upstanding from the mounting plate for coaction with said latch member, and resilient means cooperable with said assembly and said mounting plate to urge the mounting plate and the assembly apart about their hinged connection.

2. A latching device as set forth in claim 1 including a locking bolt mounted in the hinged assembly for movement transversely of the plane of movement of the latch member, said locking bolt having a lug for blocking the retraction of the latch member, said housing having key admission means, and said locking bolt having key cooperable means whereby the locking bolt may be moved from latch member-blocking to latch member-unblocking positions.

3. A latching device for a luggage case or like receptacle comprising a substantially rectangular housing having a plate portion, downturned sides and a downturned end, the opposite end providing an opening to allow a portion of a manually engageable latch member to extend therethrough, a second opening extending through a downturned side to allow a hasp to be received beneath the plate portion of the housing, a latch member mounted in the housing for sliding movement in a plane parallel to the plane of said plate portion, resilient means positioned in the housing and cooperating with the latch member to urge the latch member toward latching position, said latch member having a portion thereof extending through said first opening for manual engagement and retraction against the force exerted by said resilient means, hasp-engaging means provided by the assembly of the housing and resiliently biased latch member located at said second opening, a mounting plate for attaching the latching device to a luggage case, means hinging one end of the mounting plate to the end of the assembly opposite the end thereof having the manually engageable portion of the latch member, latch-engaging means upstanding from the mounting plate at the end opposite the hinged end, and resilient means cooperating with said assembly and said mounting plate to urge the mounting plate and the assembly apart about their hinged connection.

4. A latching device as set forth in claim 3 including a locking bolt mounted in the hinged assembly for movement transversely of the plane of movement of the latch member, said locking bolt having a lug for blocking the retraction of the latch member, said plate portion having key admission means, said locking bolt having key cooperable means whereby the locking bolt may be moved from latch member-blocking to latch member-unblocking positions, and said resilient means cooperable with the latch member being formed to also cooperate with the locking bolt to resiliently maintain the locking bolt in its latch member-blocking and latch member-unblocking positions.

5. A latching device for a luggage case or like recep-

tacle comprising a housing, an opening in the side of the housing to allow a hasp to be received in the housing, a latch member slidably mounted in the housing, resilient means positioned in the housing and cooperating with the latch member to urge the latch member toward latching position, said latch member having a portion thereof extending exteriorly of the housing for manual engagement and retraction against the force exerted by said resilient means, a frame member secured to the housing and positioned on the underside thereof, providing locating means for the resilient means and means for guiding the latch member, hasp-engaging means provided by the assembly of said housing, resiliently biased latch member and frame member and located at said opening, a mounting plate for attaching the latching device to a luggage case, means hinging one end of the mounting plate to the end of said assembly opposite the end thereof having the manually engageable portion of the latch member, latch-engaging means upstanding from the mounting plate for coaction with said latch member, and resilient means cooperable with said assembly and said mounting plate to urge the mounting plate and the assembly apart about their hinged connection.

6. A latching device as set forth in claim 5 including a locking bolt mounted on said frame member for movement transversely of the plane of movement of the latch member, said frame member providing means for guiding the locking bolt, said locking bolt having a lug for blocking the retraction of the latch member, said housing having key admission means, and said locking bolt having key cooperable means whereby the locking bolt may be moved from latch member-blocking to latch member-unblocking positions.

7. A latching device for a luggage case or like receptacle comprising a substantially rectangular housing having a plate portion, downturned sides and a downturned end, the opposite end providing an opening to allow a portion of a manually engageable latch member to extend therethrough, a second opening extending through a downturned side to allow a hasp to be received beneath the plate portion of the housing, a latch member mounted in the housing for sliding movement in a plane parallel to the plane of said plate portion, resilient means positioned in the housing and cooperating with the latch member to urge the latch member toward latching position, said latch member having a portion thereof extending through said first opening for manual engagement and retraction against the force exerted by said resilient means, a frame member secured to the housing and positioned on the underside thereof providing locating means for the resilient means and means for guiding the latch member, hasp-engaging means provided by the assembly of the housing, resiliently biased latch member and frame member and located at said second opening, a mounting plate for attaching the latching device to a luggage case, means hinging one end of the mounting plate to the end of the assembly opposite the end thereof having the manually engageable portion of the latch member, latch-engaging means upstanding from the mounting plate at the end opposite the hinged end, and resilient means cooperating with said assembly and said mounting plate to urge the mounting plate and the assembly apart about their hinged connection.

8. A latching device as set forth in claim 7 including a locking bolt mounted on said frame member for movement transversely of the plane of movement of the latch member, said frame member providing means for guiding the locking bolt, said locking bolt having a lug for blocking the retraction of the latch member, said plate portion having key admission means, said locking bolt having key cooperable means whereby the locking bolt may be moved from latch member-blocking to latch member-unblocking positions, and said resilient means cooperable with the latch member being formed to also cooperate with the locking bolt to resiliently maintain the locking bolt in its latch member-blocking and latch member-unblocking positions.

9. A latching device for a luggage case or like receptacle comprising a housing, an opening in the side of the housing to allow a hasp to be received in the housing, a latch member slidably mounted in the housing, resilient means positioned in the housing and cooperating with the latch member to urge the latch member toward latching position, said latch member having a portion thereof extending exteriorly of the housing for manual engagement and retraction against the force exerted by said resilient means, hasp-engaging means provided by the assembly of said housing and resiliently biased latch member located at said opening, a mounting plate for attaching the latching device to a luggage case, a pivot pin hinging the end of the assembly opposite the end thereof having the manually engageable portion of the latch member to the mounting plate, means allowing shifting of the fulcrum between the assembly and mounting plate, latch-engaging means upstanding from the mounting plate for coaction with said latch member, and resilient means cooperable with said assembly and said mounting plate to urge the mounting plate and the assembly apart about their hinged connection.

10. A latching device for a luggage case or like receptacle comprising a housing, an opening in the side of the housing to allow a hasp to be received in the housing, a latch member slidably mounted in the housing, resilient means positioned in the housing and cooperating with the latch member to urge the latch member toward latching position, said latch member having a portion thereof extending exteriorly of the housing for manual engagement and retraction against the force exerted by said resilient means, a substantially channel-shaped pivot plate having the base portion thereof secured to the underside of the housing, the sides of the pivot plate each having a longitudinally extending slot terminating in a depressed bearing, a hasp-engaging means provided by the assembly of said housing, resiliently biased latch member and pivot plate and located at said opening, a mounting plate for attaching the latching device to a luggage case, said mounting plate having at one end thereof a pair of laterally spaced upstanding ears each having an aperture extending therethrough, a pivot pin extending through said apertures and slots to hinge the end of the assembly opposite the end thereof having the manually engageable portion of the latch member to the mounting plate, latch engaging means upstanding from the mounting plate for coaction with said latch member, and resilient means cooperable with said assembly and said mounting plate to urge the mounting plate and the assembly apart about their hinged connection.

11. A latching device as set forth in claim 10 including a locking bolt mounted in the hinged assembly for movement transversely of the plane of movement of the latch member, said locking bolt having a lug for blocking the retraction of the latch member, said housing having key admission means, and said locking bolt having key cooperable means whereby the locking bolt may be moved from latch member-blocking to latch member-unblocking position.

12. A latching device for a luggage case or like receptacle comprising a substantially rectangular housing having a plate portion, downturned sides and a downturned end, the opposite end providing an opening to allow a portion of a manually engageable latch member to extend therethrough, a second opening extending through a downturned side to allow a hasp to be received beneath the plate portion of the housing, the latter downturned side being formed at said second opening to provide hasp-engaging means, a frame member secured to the housing and positioned on the underside thereof, a latch member intermediate the plate portion and the frame member, a substantially U-shaped leaf spring cooperating with the latch member to urge the latch member toward

latching position, means provided by the frame member for guiding the latch member for sliding movement in a plane parallel to the plane of said housing plate portion, means provided by the frame member for locating said spring, said latch member having a portion thereof extending through said first opening for manual engagement and retraction against the force exerted by said spring, an opening provided in said frame member to allow latch-engaging means to be extended therethrough for cooperation with the latch member, a channel-shaped pivot plate having the base portion thereof secured to the underside of the housing, the sides of the pivot plate each having a longitudinally extending slot terminating in a depressed bearing, a mounting plate for attaching the latching device to a luggage case, said mounting plate having at one end thereof a pair of transversely spaced upstanding ears each having an aperture extending therethrough, said ears straddling the sides of said pivot plate, a pivot pin extended through said apertures and said slots to hinge the assembly of housing, spring biased latch member, frame member and pivot plate opposite the end of the assembly from which the manually engageable portion of the latch member extends to the mounting plate, latch-engaging means upstanding from the mounting plate for coaction with the latch member, and resilient means adjacent the

pivot pin cooperable with said assembly and said mounting plate to urge the mounting plate and the assembly apart about their hinged connection.

13. A latching device as set forth in claim 12 including a locking bolt mounted intermediate the housing plate portion and the frame member, said frame member providing means for guiding the locking bolt for movement transversely of the plane of movement of the latch member, said locking bolt having a lug for blocking the retraction of the latch member, said housing plate portion having key admission means, said locking bolt having key cooperable means whereby the locking bolt may be moved from latch member-blocking to latch member-unblocking position, one arm of the U-shaped leaf spring engaging the latch member, the second arm of the spring engaging the locking bolt, said second arm and the locking bolt being matingly formed for cooperative engagement whereby the spring resiliently maintains the locking bolt in its latch member-blocking and latch member-unblocking positions.

References Cited in the file of this patent

UNITED STATES PATENTS

2,970,858 Norrenberg-Sudhaus ------ Feb. 7, 1961
3,031,874 Levine ---------- May 1, 1962