

Luggage case handle assembly

The present invention relates generally to a handle assembly, and, more particularly, to an improved luggage case, handle assembly.

U.S. Patent Specification No. 3430742 describes a luggage case handle assembly comprising an elongate gripping member having a pair of mutually-spaced longitudinally-extending grooves in its surface and first and second longitudinally-directed openings in respective opposite ends. A one piece metal cover has longitudinal edges received in the grooves in the gripping member. First and second stanchions for securing the handle to the luggage case, each have a stub shaft which is received in a respective one of first and second openings in the cover.

In the U.S. Patent Specification No. 3430742 the gripping member is formed of relatively hard plastics material. It is the aim of the present invention to provide a handle which is more comfortable to hold and, to this end, the gripping member is formed of a soft compliant material. In the above-mentioned specification the gripping member is secured to the cover by clinching or press fitting. These techniques are not suitable for maintaining a soft compliant gripping member in place because the compliant material will easily roll or work out of any such retaining cover.

The present invention overcomes these problems by providing a gripping member which is of soft compliant material, by providing first and second end members having parts received in the first and second openings in the gripping member and parts extending in the same plane at an obtuse angle to the longitudinal axis of the gripping member and in that the metal cover overlies the first and second end members and in that means are provided for securing the metal cover to the first and second end members.

An embodiment of the invention will now be described by way of example with reference to the accompanying drawings of which:—

Figure 1 is a perspective view of a luggage case showing a handle assembly according to the invention mounted thereon;

Figure 2 is an exploded view of the various parts of the handle assembly of Figure 1;

Figure 3 is an enlarged fragmentary section taken along the line 3—3 of Figure 1;

Figure 4 is an enlarged fragmentary section of the mounting stanchion of the handle assembly of Figure 1 shown interconnected with the handle parts;

Figure 5 is a sectional end view taken along the line 5—5 of Figure 4;

Figure 6 is a sectional end view along the line 6—6 of Figure 3; and

Figure 7 is a sectional partially schematic view showing the handle assembly arranged at 90° to that shown in Figure 5.

With reference now to Figure 1, a luggage case of the variety frequently referred to as a train case, is identified generally as at 10, and includes a lower container shell 11 releasably joined to a cover 12 by latches 13, for example. The handle assembly 14 to be described is secured to the top lid of the cover 12 and is seen to have a generally trapezoidal appearance with the handle gripping portion being straight-line and parallel to the luggage case cover, and with two end portions extending angularly downwardly from the gripping portion of rotative securement to the cover.

Turning now to Figure 2, the handle assembly 14 is seen to include in its various components and elongated gripping member 15, first and second end parts 16 and 17 for sliding receipt within the ends of the gripping portion, and a half-shell frame 18 received about the gripping member and two end parts unitarily securing them together. First and second stanchions 19 and 20 are affixed to the cover 12 of the case and each includes a stub shaft 21 which are received through openings 38 in the frame 18 for rotatably mounting the handle assembly to the cover 12.

For the ensuing description of the gripping member 15 reference is made simultaneously to Figures 2 and 6. The member 15 is of a total length slightly greater than that necessary to enable grasping with the four fingers of one hand. It is substantially rectangular in cross-section with the lower corners rounded off making them more comfortable to the grip. A pair of grooves 22 and 23 extend longitudinally along the upper surface of the member and lying closely adjacent the outer sides thereof. The central portion of the member between the grooves extends above the grooves and outer edge portions of the member. An opening 24 extends completely throughout the body of the gripping member 15 and in cross section is generally trapezoidal with the narrow width toward the bottom. The bottom wall surface of the member 15 is a straight line, as can be seen best in Figure 3 whereas the top wall surface is formed immediately adjacent each end to taper downwardly a slight extent for a purpose to be described. The gripping member is molded from flexible rubber or pliant synthetic plastic material since this will add to the comfort of the user by being soft and pliable to the grip.

Since the end parts 16 and 17 are identical in construction, only member 16 will be described in detail. The handle end part includes an elongate, U-shaped channel 25 which is integrally joined with a body member 26. More particularly, the channel 25 is of cross-sectional dimensions and geometry generally the same as only slightly smaller than those of the opening 24 in the gripping member 15, thereby enabling the channel member to be fittingly re-

ceived within that opening as shown in Figure 3.

Preferably, the body member 26 extends angularly away from channel 25 (e.g., 45—90 degrees) and what is the outwardly directed surface in assembly has a pair of extended shoulders 27 and 28 formed along the body side walls, which shoulders have a mutual spacing substantially identical to that of the grooves 22 and 23. An upstanding mounting post 30 has a threaded opening 31 therein for a purpose to be described. The lowermost end of 26 is faced off at substantially 90 degrees to the channel 25 and includes a recessed shoulder 32.

Preferably, the members 16 and 17 are of molded one-piece construction. Any one of a number of hard plastics materials, such as acrylonitrile-butadiene-styrene (ABS) are suitable for this purpose. Alternatively, they may be made of metal.

The frame 18 consists of a thin metal sheet stamped into a shape including a rectangular center strip extending throughout its complete length with two side or edge walls 33 and 34. From the side, the frame is seen to have a straight line central portion 35 and two end portions 36 and 37 formed to 35 and lying in the same plane. Each outer end of the frame end portions is faced off at 90 degrees to the central portion and includes an opening therein to be more particularly described. The shape and dimensions of the frame are such that the central portion side walls 33 and 34 can be received into the grooves 22 and 23 of the gripping member with the central portion of the frame in full intimate contact with the intervening parts of the gripping member (Figure 6). Also, these frame edge walls in the frame end portions are so dimensioned as to permit receipt on 16 and 17 with the edges resting on shoulders 27 and 28.

As can be seen best in Figures 5 and 7, the opening 38 in each end of the frame 18 is oblong or egg-shaped with the narrow width being at the top and the broader width at the bottom. This shape is keyed as will be described to permit a locking engagement with parts on the stanchions 19 and 20.

The stanchions 19 and 20 are identical, therefore only 19 will be described in detail, and is seen to include in its major aspect a generally triangular body. A cylindrical post 39 extends out from one surface thereof for passing through an opening provided in the top of the case cover 12 and via which the stanchion is secured by suitable threaded member. Slightly spaced from the post 39 is a cylindrical positioning pin 40 for extending through a further opening in the cover to orient the stanchion in a fixed predetermined manner. On a flat surface at 90 degrees to that carrying the post 39 and pin 40, there is a stub shaft 21, the outer end of which is formed into an oblong head 42 of geo-

metry identical to the opening 38 in the end of member 18.

In assembly, the U-shaped channel member 25 of each end part 16, 17 is pressed into an end opening 24 of the gripping member 15. The half-shell frame 18 is then placed onto the gripping member and end parts with the frame edge walls 33 and 34 disposed within grooves 22 and 23 and resting on shoulders 27 and 28. Also, the terminal end portions of the frame are fitted into the recessed shoulders 32 of the gripping member end portions. A rivet 44, or optionally a threaded member, extends through an opening 31 in the frame for securement in the post 30. Next, the oblong head 21 of each stanchion is aligned and passed through a respective frame opening 38 and rotated to the locking position shown in Figure 5. Finally, the post 39 is secured to the luggage cover top by threaded means 43 with the positioning key 40 also properly located within a receiving opening on the cover.

Claims

1. A luggage case handle assembly comprising an elongate gripping member (15) having a pair of mutually-spaced longitudinally-extending grooves (22 and 23) in its surface and first and second longitudinally-directed openings (24) in respective opposite ends, a one-piece metal cover (18) having longitudinal edges (33 and 34) received in the grooves (22 and 23) in the gripping member, first and second stanchions (19 and 20) for securing the handle to the luggage case (12), each stanchion (19, 20) having a stub shaft (21) which is received in a respective one of first and second mutually-spaced openings (38) in the cover (18), characterised in that the gripping member (15) is of soft compliant material, in that first and second end members (16 and 17) are provided having parts (25) received in the first and second openings (24) in the gripping member and parts (26) extending in the same plane at an obtuse angle to the longitudinal axis of the gripping member (15), in that the metal cover (18) overlies the first and second end members (16 and 17), and in that means (31) are provided for securing the metal cover (18) to the first and second end members (16 and 17).

2. A luggage case handle assembly according to claim 1 characterised in that the first and second openings (38) of the cover (18) and the terminal ends (42) of the stub shafts (21) are of identical oblong shape so that the terminal ends (42) of the shafts (21) can pass through the openings (38) in one orientation but are prevented from passing through the openings (38) in other orientations.

3. A luggage case handle assembly according to claim 1 or 2 characterised in that each end member (16 and 17) includes a pair of recessed shoulders (27 and 28) on which the

ceived within that opening as shown in Figure 3.

Preferably, the body member 26 extends angularly away from channel 25 (e.g., 45—90 degrees) and what is the outwardly directed surface in assembly has a pair of extended shoulders 27 and 28 formed along the body side walls, which shoulders have a mutual spacing substantially identical to that of the grooves 22 and 23. An upstanding mounting post 30 has a threaded opening 31 therein for a purpose to be described. The lowermost end of 26 is faced off at substantially 90 degrees to the channel 25 and includes a recessed shoulder 32.

Preferably, the members 16 and 17 are of molded one-piece construction. Any one of a number of hard plastics materials, such as acrylonitrile-butadiene-styrene (ABS) are suitable for this purpose. Alternatively, they may be made of metal.

The frame 18 consists of a thin metal sheet stamped into a shape including a rectangular center strip extending throughout its complete length with two side or edge walls 33 and 34. From the side, the frame is seen to have a straight line central portion 35 and two end portions 36 and 37 formed to 35 and lying in the same plane. Each outer end of the frame end portions is faced off at 90 degrees to the central portion and includes an opening therein to be more particularly described. The shape and dimensions of the frame are such that the central portion side walls 33 and 34 can be received into the grooves 22 and 23 of the gripping member with the central portion of the frame in full intimate contact with the intervening parts of the gripping member (Figure 6). Also, these frame edge walls in the frame end portions are so dimensioned as to permit receipt on 16 and 17 with the edges resting on shoulders 27 and 28.

As can be seen best in Figures 5 and 7, the opening 38 in each end of the frame 18 is oblong or egg-shaped with the narrow width being at the top and the broader width at the bottom. This shape is keyed as will be described to permit a locking engagement with parts on the stanchions 19 and 20.

The stanchions 19 and 20 are identical, therefore only 19 will be described in detail, and is seen to include in its major aspect a generally triangular body. A cylindrical post 39 extends out from one surface thereof for passing through an opening provided in the top of the case cover 12 and via which the stanchion is secured by suitable threaded member. Slightly spaced from the post 39 is a cylindrical positioning pin 40 for extending through a further opening in the cover to orient the stanchion in a fixed predetermined manner. On a flat surface at 90 degrees to that carrying the post 39 and pin 40, there is a stub shaft 21, the outer end of which is formed into an oblong head 42 of geo-

metry identical to the opening 38 in the end of member 18.

In assembly, the U-shaped channel member 25 of each end part 16, 17 is pressed into an end opening 24 of the gripping member 15. The half-shell frame 18 is then placed onto the gripping member and end parts with the frame edge walls 33 and 34 disposed within grooves 22 and 23 and resting on shoulders 27 and 28. Also, the terminal end portions of the frame are fitted into the recessed shoulders 32 of the gripping member end portions. A rivet 44, or optionally a threaded member, extends through an opening 31 in the frame for securement in the post 30. Next, the oblong head 21 of each stanchion is aligned and passed through a respective frame opening 38 and rotated to the locking position shown in Figure 5. Finally, the post 39 is secured to the luggage cover top by threaded means 43 with the positioning key 40 also properly located within a receiving opening on the cover.

Claims

1. A luggage case handle assembly comprising an elongate gripping member (15) having a pair of mutually-spaced longitudinally-extending grooves (22 and 23) in its surface and first and second longitudinally-directed openings (24) in respective opposite ends, a one-piece metal cover (18) having longitudinal edges (33 and 34) received in the grooves (22 and 23) in the gripping member, first and second stanchions (19 and 20) for securing the handle to the luggage case (12), each stanchion (19, 20) having a stub shaft (21) which is received in a respective one of first and second mutually-spaced openings (38) in the cover (18), characterised in that the gripping member (15) is of soft compliant material, in that first and second end members (16 and 17) are provided having parts (25) received in the first and second openings (24) in the gripping member and parts (26) extending in the same plane at an obtuse angle to the longitudinal axis of the gripping member (15), in that the metal cover (18) overlies the first and second end members (16 and 17), and in that means (31) are provided for securing the metal cover (18) to the first and second end members (16 and 17).

2. A luggage case handle assembly according to claim 1 characterised in that the first and second openings (38) of the cover (18) and the terminal ends (42) of the stub shafts (21) are of identical oblong shape so that the terminal ends (42) of the shafts (21) can pass through the openings (38) in one orientation but are prevented from passing through the openings (38) in other orientations.

3. A luggage case handle assembly according to claim 1 or 2 characterised in that each end member (16 and 17) includes a pair of recessed shoulders (27 and 28) on which the

respective edges (33 and 34) of the cover (18) rest.

4. A luggage case handle assembly according to any of claims 1 to 3 characterised in that the metal cover portions immediately surrounding the first and second openings (38) are formed parallel to one another and are received into further recessed shoulders (32) in the end members (16 and 17).

5. A handle assembly according to claim 2, adapted for swivelling securement to the outer wall of a luggage case, characterised in that the elongate member (15) has a passageway extending longitudinally therethrough which terminates at opposite ends of the member in the first and second openings (24) respectively, in that the end members (16 and 17) have a pair of recessed shoulders (27 and 28), in that the metal cover (18) is elongate and of generally U-shaped cross-section the side edges (33 and 34) of which are received within the respective grooves (22 and 23) of the gripping member (15) and recessed shoulders (27 and 28) of the end members (16 and 17), and in that the cover (18) has its two end portions formed parallel to each other, end portions including the first and second openings (38) in the cover being openings which extend through the said end portions.

Patentansprüche

1. Koffergriff mit einem länglichen Griffteil (15), welches ein Paar in gegenseitigem Abstand in Längsrichtung verlaufender Nuten (22 und 23) in seiner Oberfläche und in einander gegenüberliegenden Enden in Längsrichtung ausgerichtete erste und zweite Öffnungen (24) aufweist, einem einstückigen, metallenen Deckteil (18), welches sich in Längsrichtung erstreckende Ränder (33 und 34) für die Aufnahme in den Nuten (22 und 23) des Griffteils hat, und mit ersten und zweiten Stützen (19 und 20) für die Befestigung des Griffs an einem Koffer (12), mit jeweils einem Achsstumpf (21), welcher in einer von zwei in gegenseitigem Abstand angeordneten ersten und zweiten Öffnungen (38) des Deckteils (18) Aufnahme findet, dadurch gekennzeichnet, daß das Griffteil (15) aus einem weichen, schmiegsamen Werkstoff ist, daß ein erstes und ein zweites Endteil (16 und 17) vorgesehen sind, welches jeweils in den ersten und zweiten Öffnungen (24) des Griffteils Aufnahme findende Teile (25) und sich in der gleichen Ebene wie das Griffteil (15) in einem stumpfen Winkel zur Längsachse desselben erstreckende Teile (26) aufweisen, daß das metallene Deckteil (18) das erste und das zweite Endteil (16 und 17) überdeckt und daß Einrichtungen (31) für die Befestigung des metallenen Deckteils (18) am ersten und am zweiten Endteil (16 und 17) vorgesehen sind.

2. Koffergriff nach Anspruch 1, dadurch gekennzeichnet, daß die erste und die zweite Öffnung (38) des Deckteils (18) und die freien

Enden (42) der Achsstümpfe (21) von gleicher länglicher Form sind, so daß die freien Enden (42) der Achsstümpfe (21) in einer Ausrichtung durch die Öffnungen (38) hindurchpassen, in anderen Ausrichtungen jedoch an einem Durchtritt durch die Öffnungen (38) gehindert sind.

3. Koffergriff nach Anspruch 1 oder 2, dadurch gekennzeichnet, daß jedes Endteil (16 und 17) ein Paar eingezogener Schultern (27 und 28) aufweist, auf denen zugeordnete Ränder (33 und 34) des Deckteils (18) ruhen.

4. Koffergriff nach einem der Ansprüche 1 bis 3, dadurch gekennzeichnet, daß die ersten und zweiten Öffnungen (38) unmittelbar umgebenden Teile des metallenen Deckteils parallel zueinander geformt sind und in weiteren eingezogenen Schultern (32) der Endteile (16 und 17) Aufnahme finden.

5. Koffergriff nach Anspruch 2 für die verschwenkbare Anbringung an der Außenwand eines Koffers, dadurch gekennzeichnet, daß das längliche Teil (15) einen sich in Längsrichtung durch es hindurch erstreckenden Durchlaß aufweist, welcher an einander gegenüberliegenden Enden des Teils in der ersten bzw. zweiten Öffnung (24) ausläuft, daß die Endteile (16 und 17) ein Paar eingezogener Schultern (27 und 28) haben, daß das metallene Deckteil (18) länglich ist und ein im wesentlichen U-förmiges Querschnittsprofil hat, dessen Seitenränder (33 und 34) in den zugeordneten Nuten (22 und 23) des Griffteils (15) und den eingezogenen Schultern (27 und 28) der Endteile (16 und 17) Aufnahme finden, und daß die beiden Endstücke des Deckteils (18) parallel zueinander geformt sind und die ersten und zweiten Öffnungen (38) des Deckteils aufweisen, welche sich durch die Endstücke hindurch erstrecken.

Revendications

1. Montage de poignée de valise qui comporte un élément de préhension allongé (15) présentant à la surface, dans le sens longitudinal de celle-ci, deux rainures espacées l'une de l'autre (22 et 23) et, aux extrémités opposées, dans le sens longitudinal également, une première et une seconde ouverture (24), un élément de couverture en métal (18), d'une seule pièce, présentant des bords longitudinaux (33 et 34) qui sont contenus dans les rainures (22 et 23) de l'élément de préhension, un premier et un second élément de liaison et de support (19 et 20) qui sont destinés à la fixation de la poignée pour valise (10), chacun des éléments de liaison et de support (19 et 20) étant muni d'un bout d'axe (21) qui est contenu dans une ouverture correspondante de l'élément de couverture (18) qui, à cet effet, présente une telle première ouverture (38) et une telle seconde ouverture (38) qui sont espacées l'une de l'autre, le montage de poignée étant caractérisé en ce que l'élément de préhension (15) est fait de matière molle,

que se donne, en ce que le premier et le second élément d'extrémité (16 et 17) comportent des parties (25) qui sont contenues dans la première et dans la seconde ouverture (24) de l'élément de préhension, et des parties (26) qui s'étendent dans le même plan en formant un angle obtus avec l'axe longitudinal de l'élément de préhension (15), en ce que l'élément de couverture en métal (18) se trouve à un niveau supérieur à celui du premier et du second élément d'extrémité (16 et 17), et en ce que des moyens (31) sont prévus pour fixer l'élément de couverture en métal (18) au premier et au second élément d'extrémité (16 et 17).

2. Montage de poignée de valise suivant la revendication 1, caractérisé en ce que la première et la seconde ouverture (38) de l'élément de couverture (18) et les extrémités terminales (42) des bouts d'axe (21) sont de forme oblongue identique, de telle sorte que les extrémités (42) des bouts d'axe (21) peuvent être orientées dans un sens dans les ouvertures (38), mais ne peuvent pas y être orientées dans d'autres sens.

3. Montage de poignée de valise suivant l'une ou l'autre des revendications 1 et 2, caractérisé en ce que chacun des éléments d'extrémité (16 et 17) est muni de deux épaulements évidés (27 et 28) sur lesquels prennent appui les bords correspondants (33 et 34) de l'élément de couverture (18).

4. Montage de poignée de valise suivant

l'une quelconque des revendications 1 à 3, caractérisé en ce que les parties de l'élément de couverture en métal qui entourent immédiatement la première et la seconde ouverture (38) sont formées parallèlement l'une à l'autre et sont contenues dans d'autres épaulements évidés (32) dont sont munis les éléments d'extrémité (16 et 17).

5. Montage de poignée suivant la revendication 2, prévu pour être fixé à pivotement à la paroi externe d'une valise, caractérisé en ce que l'élément allongé (15) présente, la traversant suivant la longueur, un passage qui se termine aux extrémités opposées de l'élément dans la première et dans la seconde ouverture (24) respectivement, en ce que les éléments d'extrémité (16 et 17) sont munis de deux épaulements évidés (27 et 28), en ce que l'élément de couverture en métal (18) est allongé et est de section transversale en substance en forme de U, les bords latéraux (33 et 34) de cet élément de couverture en métal étant contenus dans les rainures correspondantes (22 et 23) de l'élément de préhension (15) et dans les épaulements évidés (27 et 28) des éléments d'extrémité (16 et 17), et en ce que les deux parties d'extrémité de l'élément de couverture (18) sont formées parallèlement l'une à l'autre, les première et seconde ouvertures (38) que présentent les parties d'extrémité de l'élément de couverture étant des ouvertures qui traversent ces parties d'extrémité.

35

40

45

50

55

60

65

5