Oct. 26, 1943. B. R. THIELE 2,332,765

HANDLE ATTACHING DEVICE

Filed Nov. 13, 1942

Fig. 1.

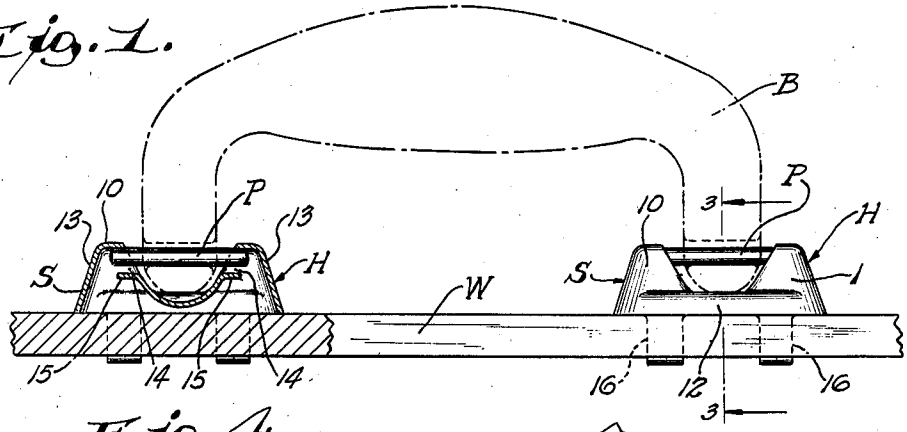
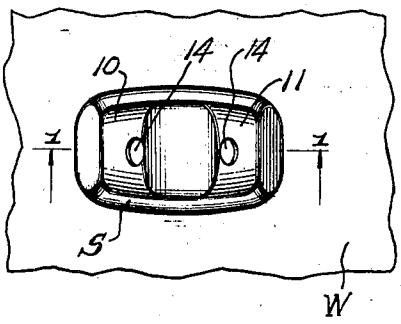


Fig. 4.



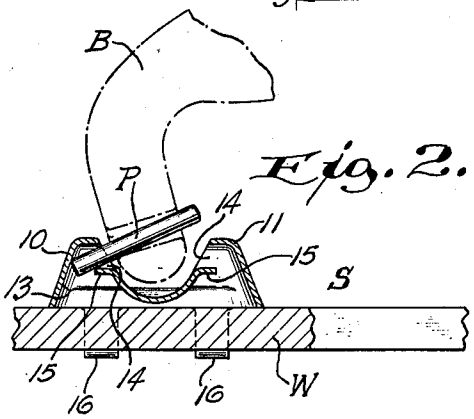


Fig. 2.

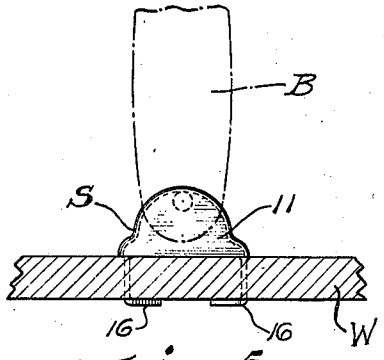
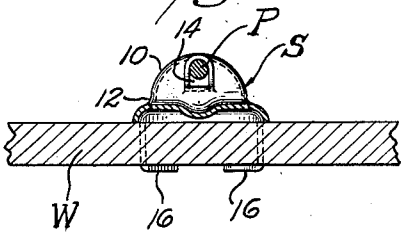


Fig. 5.

Fig. 3.



INVENTOR.
BERTHOLD R. THIELE.
BY John W. Michael
ATTORNEY.

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HANDLE-ATTACHING DEVICE

Berthold R. Thiele, Milwaukee, Wis., assignor to E. R. Wagner Manufacturing Company, Milwaukee, Wis., a corporation of Wisconsin

Application November 13, 1942, Serial No. 465,505

4 Claims. (Cl. 190—58)

This invention relates to a handle-attaching device for use on suit cases, traveling bags, or other receptacles.

An object of the invention is to provide a device of this character of extremely simple and inexpensive construction although strong and durable in use and ornamental in appearance. The device is so constituted that it may be readily and easily permanently attached or secured to the receptacle without danger of injuring the same.

More specifically, the device is attached to the receptacle to which it is applied by means of penetrating prongs which are so constituted and so combined with the device that they may be driven through the wooden parts of the receptacle without danger of splitting the same and without the necessity of prior drilling. This is accomplished by having penetrating prongs so disposed that they lie lengthwise of or parallel to the grain of the wood.

Another object of the invention is to provide a device having these advantages and capacities, and which is of such special construction that the pivot pins employed to connect the handle to the device may be readily assembled with the main portion of the device and yet when once assembled cannot become dislodged or accidentally displaced.

The present invention may be advantageously employed for attaching a bail-like or inverted U-shaped type of handle to a receptacle, and in such application a separate handle-attaching device is provided for each end of the handle. Each such handle-attaching device is constituted, in the main, of a drawn sheet metal shell structure having penetrating prongs integrally formed with the side edges of the shell structure. The shell structure is so fashioned or formed as to comprise tubular end posts and an integral, depressed, central connecting structure. The outer end walls of the end posts are sloped upwardly and inwardly whereas the inner end walls thereof are formed with alined, vertically extending, oblong openings. A pivot pin, which has its intermediate portions fitted or received in an opening in one end of the handle, is interfitted with the opposed openings of the inner end walls of the end posts of one of the handle-attaching devices. The lower margins of the openings in the inner end walls of the end posts are provided with fulcrums. The construction is such that the pivot pin with its intermediate portion fitted in the handle may have one end inserted through one of the openings with the pivot pin tilted, and then as the handle and pivot pin are swung downwardly, the sloping wall with which one end of the pin is engaged will cam or thrust the pin in the direction of its axis so that as its other end comes into alinement with the other opening in the inner end wall of the other end post, it will be forced into said opening and a permanent connection will be had. In the assembled position of the parts the pivot pin will be raised above the fulcrums and it is impossible to dislodge it. Such a construction is provided at both ends of the handle.

Other objects and advantages reside in certain novel features of the construction, arrangement, and combination of parts, which will be hereinafter more fully described and particularly pointed out in the appended claims, reference being had to the accompanying drawing forming a part of this specification, and in which:

Figure 1 is a view partly in side elevation and partly in central, vertical cross section taken on line 1—1 of Figure 4, showing a pair of handle-attaching devices embodying the present invention, and illustrating how they are employed to attach a handle to the wall of a receptacle;

Figure 2 is a fragmentary view in central, vertical cross section, illustrating the manner in which one of the pivot pins is assembled with its handle-attaching device;

Figure 3 is a view in transverse, vertical, cross section taken on line 3—3 of Figure 1;

Figure 4 is a fragmentary view in top plan, illustrating one of the handle-attaching devices, the handle and the cooperable pivot being omitted; and

Figure 5 is a view in end elevation of one of the handle-attaching devices shown in Figure 1.

Referring to the drawing, the reference character W designates a wall of a suit case, or other receptacle, which may be constituted largely of wood although it may be covered in any suitable way (not shown). The wall W is equipped with two handle-attaching devices, designated at H and H'. These handle-attaching devices are of identical construction so that a single description will serve for both.

As shown in the drawing, each handle-attaching device comprises generally a drawn sheet metal shell or stamping, designated as a whole at S. A pivot pin P is combined with each of the shells S and has its intermediate portion interfitted with openings in the end of a bail-like handle B.

Each shell S is so formed or fashioned as to provide tubular end posts 10 and 11. These end

posts 10 and 11 are of identical construction and they are integral with a depressed central connecting structure 12. The posts 10 and 11 are tapered and have their outer end walls 13 sloping or inclining inwardly and upwardly. The bottom of the shell structure is open. The tops of the end posts are closed. In the inner or confronting end walls of the post openings 14 are provided. These openings extend vertically of their end posts, are of oblong shape, as shown in Figure 3, and are alined with each other. The lower margin of each opening 14 is provided with a ledge or fulcrum 15.

Penetrating prongs 16 are integrally formed with the lower side edges of the shell. These prongs are flat throughout their body portions although their lower ends are pointed and may be bifurcated. They are so disposed that when driven into the wall W, their slightest dimension is disposed transversely to the grain of the wood, the substantial width of the prongs being disposed in planes which are lengthwise or parallel to the grain of the wood. This makes it practical to drive the prongs through the wood and clench them over without any previous drilling, and without any danger of splitting the wood.

In assembling each pivot pin P with its end post, it is first interfitted with the opening in its end of the handle. One end of the pivot pin P is then inserted through an opening 14 in the manner shown in Figure 2. When so inserted, the pivot pin 10 is tilted and one of its ends engages sloping wall 13 of the adjacent end post 10. Then as the handle and pivot pin are rocked downwardly, the sloping wall 13 of the end post 10 will cam or thrust the pivot pin P so as to cause it to move axially. This action progresses as the opposite end of the pivot pin comes into alinement with the other opening 14 of the end post 11. The result is that the pivot pin P is made to assume the position shown in the left-hand side of Figure 1, in which position it is permanently attached to its handle-attaching device.

While I have shown and described one construction in which the invention may be advantageously embodied, it is to be understood that the construction shown has been selected merely for the purpose of illustration or example, and that various changes in the size, shape, and arrangement of the parts may be made without departing from the spirit of the invention or the scope of the subjoined claims.

I claim:

1. A handle-attaching device for use on suit cases and the like comprising a sheet metal shell structure having tubular end posts and an integral, depressed, connecting central structure, the outer end walls of the end post being sloping and the inner walls thereof having oblong openings, said openings confronting or being alined, and pivot pins adapted to have their intermediate portions extended through the openings of the handle and their end portions received and retained in said openings, the pivot pins being tilted when assembled with the device so that one end thereof will be cammed by one of the sloping walls to produce a lengthwise movement of the pivot pin and the entry of its opposite end in the opposed opening of the opposite end post.

2. A handle-attaching device of the character described comprising a sheet metal shell having tubular end posts tapering toward their upper closed ends, a central connecting structure integral with the end posts, the end posts having their outer end walls sloping inwardly and upwardly and having their inner end walls formed with alined oblong openings, the central connecting structure having fulcrums thereon, and a pivot pin selectively inserted in one of the openings and tiltable about the adjacent fulcrum so that its adjacent end will be cammed by the adjacent sloping end wall of the adjacent post to cause its opposite end to enter the opposed opening of the opposite post.

3. A handle-attaching device having tubular end posts, the outer end walls of which include inwardly and upwardly sloping portions and the inner walls of which have alined openings, and a pivot pin having one end insertible in the opening in one of the end posts and engageable with the outer sloping end wall portion thereof, with the pivot pin in a tilted position, so that, as the pivot pin is rocked downwardly, its inserted end will be cammed by the sloping end wall portion with which it is engaged to cause its opposite end to enter the opening of the other end post.

4. A handle-attaching device having tubular end posts, the outer end walls of which incline inwardly and upwardly and the inner end walls of which have alined openings, fulcrum formations adjacent the lower edges of said openings, and a pivot pin having one end insertible in the opening of one of the end posts and engageable with the outer sloping end wall thereof, with the pivot pin in a tilted position and engaged with the fulcrum formation adjacent the opening in which it is inserted, so that, as the pivot pin is rocked downwardly about said fulcrum, its inserted end will be cammed by the sloping end wall with which it is engaged to cause its opposite end to enter the opening of the other end post.

BERTHOLD R. THIELE.