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Hares et al.

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[54] **CARRYING HANDLE**

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[51] **Int. Cl.** **E05b 5/00**

[58] **Field of Search** ..... 190/58 A, 57 R; 224/45 P; 16/114, 110 R; 24/230 R, 230 NP, 230 CF, 230 F, 230 AK; 294/16, 15, 33, 27

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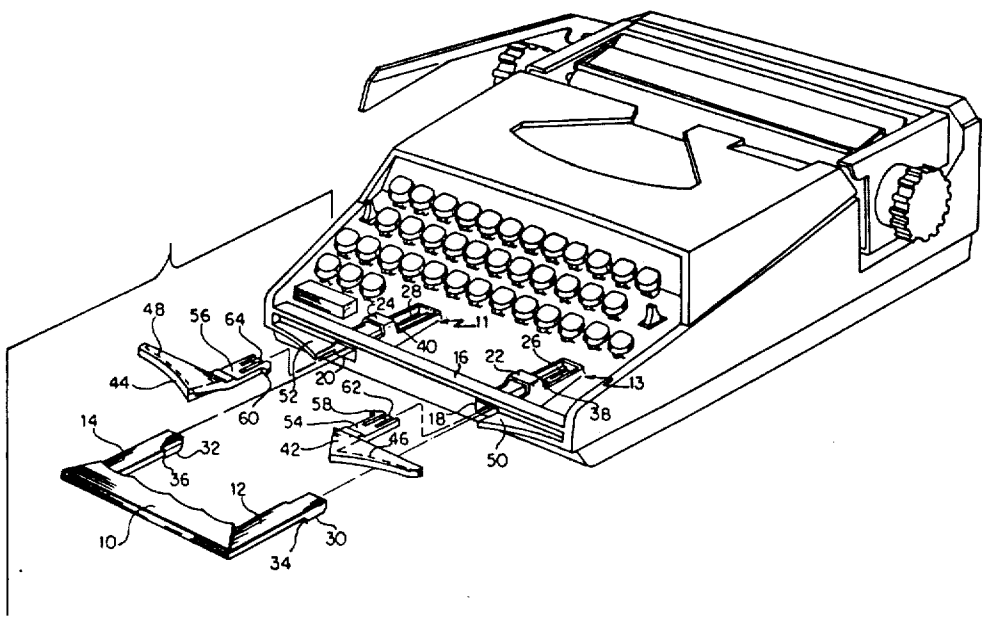
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[57] **ABSTRACT**

A carrying handle comprising a pair of arms which may be easily inserted into an article which is to be carried. The carrying handle is held in engagement with a base portion of the article, by means of a pair of retaining catches which are also inserted into the base portion of the article and then locked. The carrying handle is then free to slide into or out from the base portion a predetermined distance. A method for connecting the carrying handle with the base portion of the article to be carried is also disclosed.

3 Claims, 3 Drawing Figures



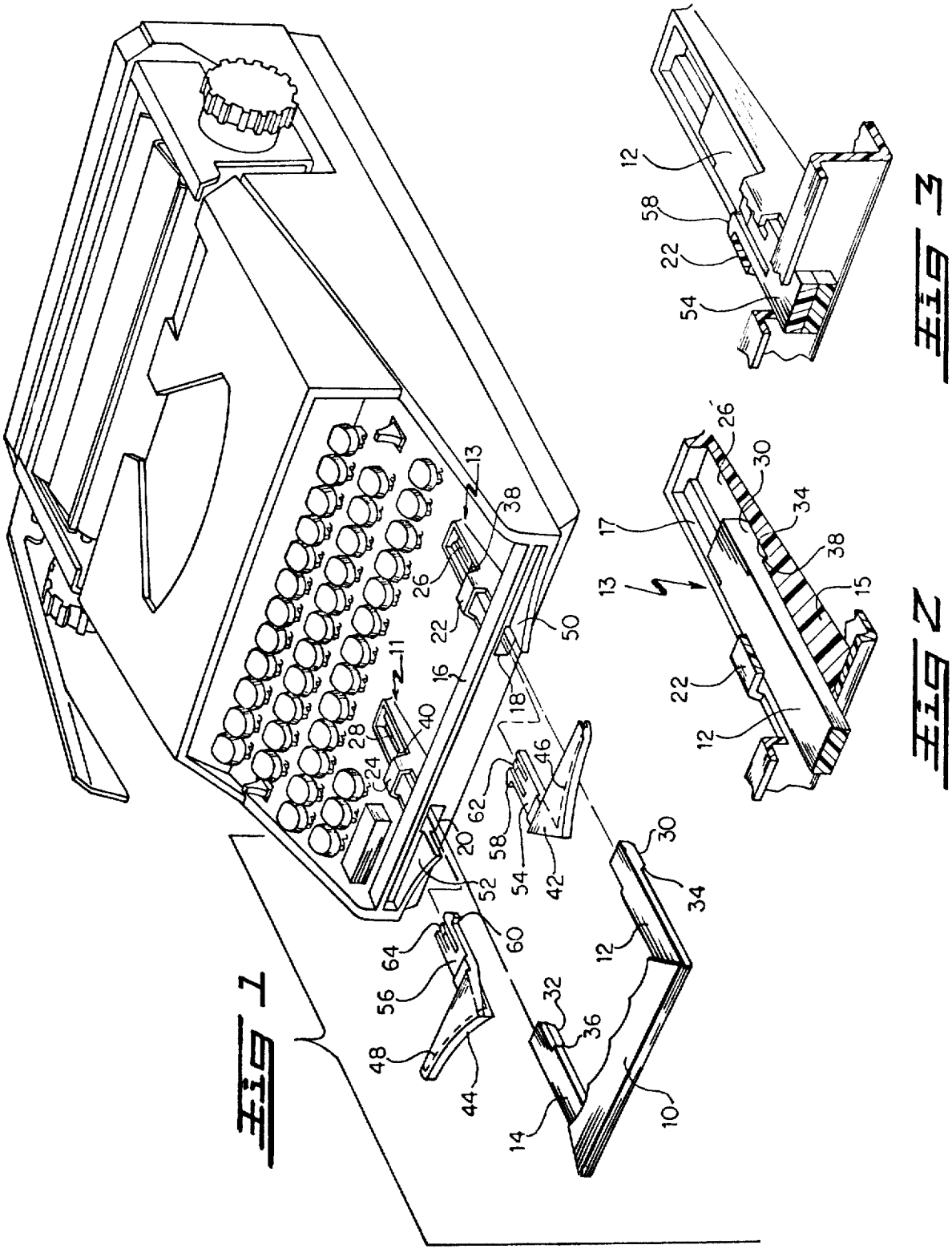


Fig 1

Fig 2

Fig 3

CARRYING HANDLE

BACKGROUND OF THE INVENTION

In the past, the most common type of carrying cases which have been used to carry relatively heavy objects, such as carrying cases for typewriters, have required two separate portions, a bottom portion in which the base portion of the article would sit and a top portion to cover the upper portion of the article. (Although in this application a typewriter is indicated as the article to be carried, it is done only for illustrative purposes and the present invention is not to be limited to carrying handle for typewriters.) In these prior art carrying cases, a carrying handle would then be attached to a side of the bottom or top of the article. Because the objects to be carried are heavy the carrying handle has to be securely fastened to the carrying case. In typewriter cases, for example, it had generally been necessary to rivet, screw or bolt the carrying handle to the carrying case. These prior art means of securing the carrying handle to the carrying case have been time consuming and at times have required some special training of the person assembling the handle to the carrying case.

In the present invention the base portion of the article to be carried serves as the bottom portion of the carrying case and a separate carrying case bottom portion is not required. A carrying handle of simple construction is disclosed which may be readily, inexpensively and quickly inserted into the base portion of the article to be carried and which provides a secure arrangement between the handle and carrying case.

SUMMARY OF THE INVENTION

This invention relates to a carrying handle which comprises a pair of arms which are inserted through openings in a base portion of an article to be carried. A tongue on the arms of the carrying handle is inserted into grooves of the base portion of the article to be carried and then is free to slide into or out from the base portion a predetermined distance.

The carrying handle is held in engagement with the base portion of the article to be carried by means of a pair of retaining catches, which are inserted through the openings in the base portion, and then locked by the base portion. It is within the contemplation of this invention to engage the carrying handle into either the top or bottom cover of a carrying case.

DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective exploded view of the carrying handle and components therefor.

FIG. 2 is a perspective sectional view of the carrying handle arm tongue located in the groove of the base portion.

FIG. 3 is a perspective portional view of the retaining catch hook locked over the rear surface of the bridge.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to the drawing and particularly to FIG. 1, a carrying handle 10 comprises a pair of arms 12 and 14 that are slideably mounted into a base portion 16 which holds an article to be carried, in this case a typewriter.

The base portion 166 of the object to be carried includes openings 18 and 20 behind which are located identical handle support members 11 and 13 for purposes of description, only handle support member 13 illustrated in FIG. 2 will be fully described. Handle support member 13 comprises a bottom portion 15 having upstanding sides 17 and a bridge portion 22 extending from sides 17. A groove 26 is located within the handle support member 13. Handle support member 11 has an identical bridge portion 24 and a groove 28.

The arms 12 and 14 of the carrying handle 10 are inserted through the openings 18 and 20 and then through the bridges 22 and 24 of the base portion 16. A pair of tongues 30 and 32 extending from the end of the arms 12 and 14 are then positioned to slide in the grooves 26 and 28 of the base portion 16. The arms 12 and 14 of the carrying handle 10 are then locked in engagement with the base portion 16, by means of a pair of retaining catches 42 and 44, next to be described.

The retaining catches 42 and 44 (FIG. 1) comprises a pair of grooves 46 and 48 therein for receiving a pair of flanges 50 and 52 which project out from the base portion 16 and act as a guide and support. The retaining catches 42 and 44 also comprises a pair of arms 54 and 56 which have a pair of resilient hooks 58 and 60 and a pair of resilient ears 62 and 64. The arms 54 and 56 of the retaining catches 42 and 44 (FIG. 1) are inserted through the openings 18 and 28 of the base portion 16, thereby depressing the resilient hooks 58 and 60 inward, causing the resilient ears 62 and 64 to be moved upward from their material position by contact with carrying handle arms 12 and 14. The resilient ears 62 and 64 in seeking to return to their material position exert a downward pressure on the arms 12 and 14.

The arms 54 and 56 of the retaining catches 42 and 44 are then inserted through the bridges 22 and 24 until the grooves 46 and 48 of the retaining catches 42 and 44 are completely projected over the flanges 50 and 52 of the base portion 16.

When the retaining catches 42 and 44 are positioned flush with the base portion 16, the resilient hooks 58 and 60 (FIG. 3) will then spring outward from the arms 54 and 56 thereby locking over the rearward surface of the bridges 22 and 24 of the base portion 16 and at the same time resilient ears 62 and 64 are depressing the arms 12 and 14 into engagement with grooves 26 and 28. Now the carrying handle 10 is free to slide into the base portion 16 to a closed position or slide out from the base portion 16 until the forward end surfaces 34 and 36 of the tongues 30 and 32 contact forward walls 38 and 40 of the grooves 26 and 28 limits the travel of the carrying handle 10.

After assembly, a cover portion (not shown) may be employed to cover the top portion of the typewriter.

The present invention may be disassembled by unlocking the resilient hooks 58 and 60 from the bridges 22 and 24 removing the retaining catches 42 and 44, thereby the carrying handle 10 may be removed from the base portion 16.

It will be apparent that the foregoing and other changes may be made without departing from the spirit and scope of the present invention. Accordingly, the carrying handle herein disclosed is to be considered merely as illustrative, and the scope of the invention is to be limited only as specified in the claims.

We claim:

1. A carrying handle assembly for carrying an article comprising:

a support member attached to the article, said support member having a bridge forming an opening therein and having a groove;

a carrying handle having arm means extending through said support member opening and having a tongue projecting from said arm means and seated in said support member groove for sliding along said support member groove permitting said carrying handle to slide between a handle closed position and a handle extended out position;

a retaining catch rigidly positioned between said support member bridge and said carrying handle arm means for maintaining said arm means tongue seated in said support member groove while said carrying handle slides between said carrying handle closed position and said carrying handle extended out position and while said carrying handle is in each of said closed and extended out positions;

a flange projecting from the article; and

said retaining catch includes means for engaging said flange and includes a resilient hook member for engaging a rear surface of said support member

bridge when said retaining catch is inserted into said support member for attaching said retaining catch to the article and for maintaining said carrying handle attached to the article for slidable movement between said closed and extended out positions.

2. A carrying handle assembly as defined in claim **1** wherein said retaining catch includes a resilient ear engaging said carrying handle arm means for biasing said arm means tongue into said support member groove while said carrying handle slides between said carrying handle closed position and said carrying handle extended out position and while said carrying handle is in each of said closed and extended out positions.

3. A carrying handle assembly as defined in claim **1** wherein said support member includes a wall defining one end of said support member groove and said arm means tongue includes an end surface for engaging said wall of said support member for limiting said carrying handle at said extended out position.

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