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Singer et al.

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[54] DEVICE FOR LOCKING ARTICLES TO A MOUNTING BASE

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[52] **U.S. Cl.** **70/58,** 70/232, 248/25

[51] **Int. Cl.** **E05b 69/00**

[58] **Field of Search**.....70/229, 230, 231, 232, 58; 248/316 R, 25, 154, 203

[56] **References Cited**

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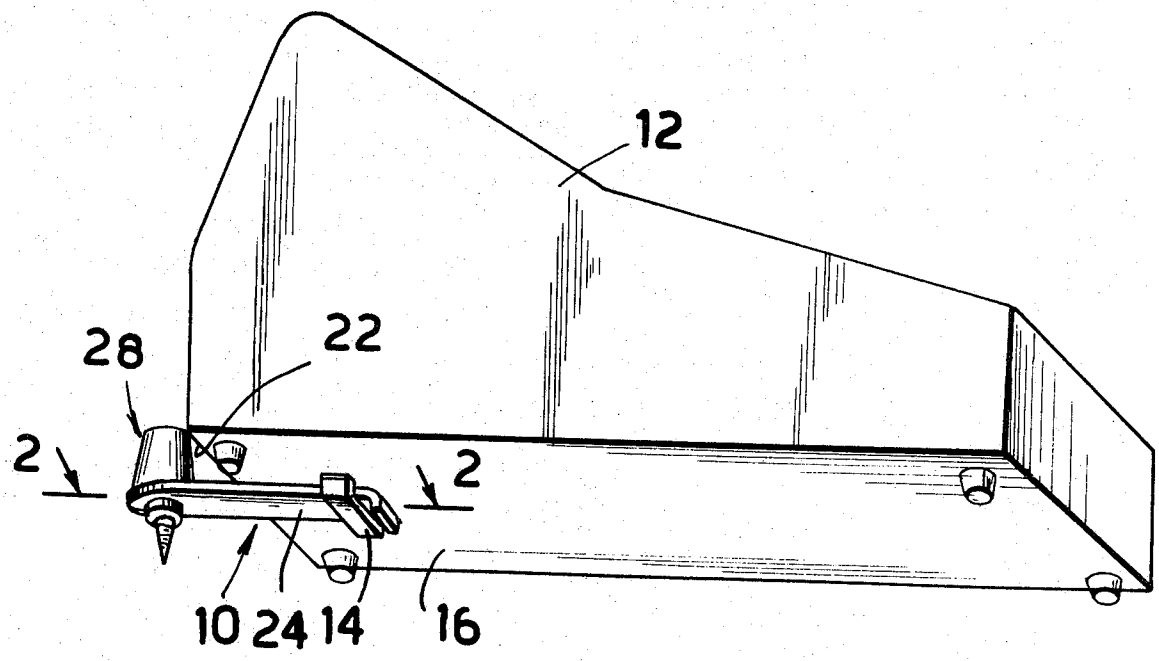
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[57] **ABSTRACT**

A device particularly for locking a calculator to a mounting base comprises a U-shape stirrup which is secured to the bottom of the device such as by epoxy glue and which includes a reinforcing rod therethrough so that it cannot be easily severed. The complete locking device includes a bar member having a hook shaped end which engages over the stirrup in an unreleasable manner and a securement end which extends beyond the end of the device being secured so that it cannot be pivoted out of this stirrup. The securement end is secured by a securing screw which extends through a locking device comprising a first member which engages through the securing plate to the mounting base and a threaded screw which extends through the first member and engages into the mounting base and has a head portion which is covered within the first member. A second member is telescoped in respect to the first member and it includes a locking cylinder which is key operated to engage a latch into a receiving groove of the first member to lock the two members together and prevent access to the screw head.

4 Claims, 3 Drawing Figures



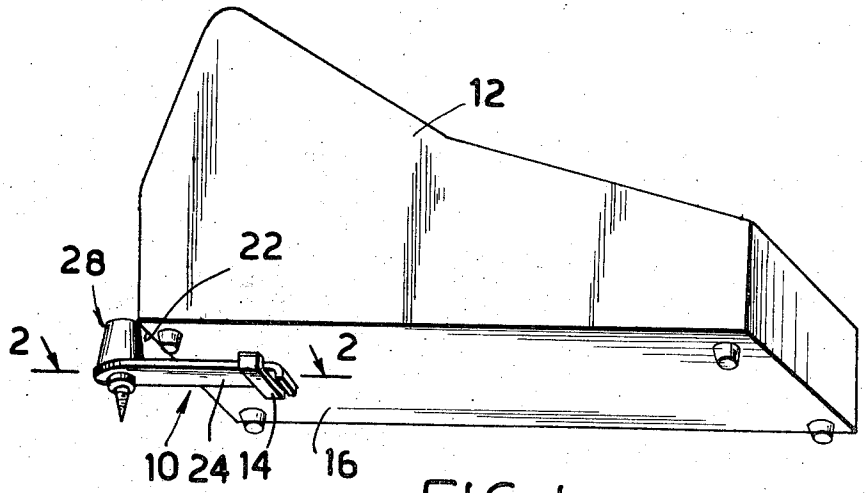


FIG. 1

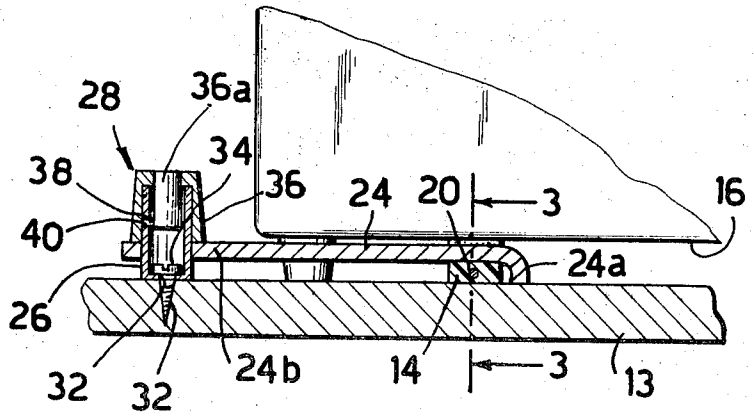


FIG. 2

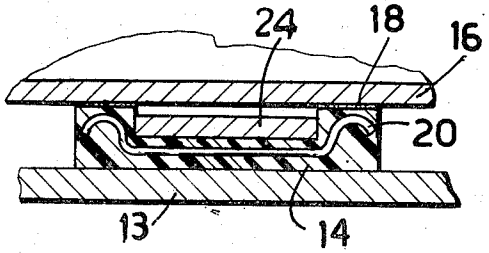


FIG. 3

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DEVICE FOR LOCKING ARTICLES TO A MOUNTING BASE

BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention relates in general to locking devices and in particular to a new and useful locking plate and stirrup device for securing articles such as calculators, adding machines etc. to a mounting base and which includes means for covering and locking the securing bolt against access after it has secured the holding plate to the mounting base.

2. Description of the Prior Art

Prior to the present invention devices have been known for locking elements such as adding machines or typewriters to a mounting base in a fixed position which include securing bolts which extend through the base and which are inaccessable from the underside at least to some degree. A disadvantage of such devices is that the securing bolts may be easily unthreaded in order to release the device and thus they do not provide adequate protection against pilferage.

SUMMARY OF THE INVENTION

The present invention provides an inexpensive and easy to install locking device for adding machines, calculators and the like which may be anchored to a mounting base in a manner such that is may not be removed. The device includes a U-shaped stirrup which is adapted to be permanently affixed to the bottom of the device to be secured, for example, by securing it with epoxy resin glue. The stirrup includes a rod member extending therethrough providing a reinforcement which insures against the cutting through of the stirrup member. In addition the stirrup member is located on the bottom of the calculator at a position spaced from an end thereof at a location which is inaccessable after the device is locked. A securing plate extends through the stirrup and is hooked over the end thereof in a manner which prevents its withdrawal once the device is secured to the base and the plate cannot be pivoted out of the stirrup. The outer end extends beyond the edge of the device to be secured and it includes an opening for the passage of a threaded member such as a screw therethrough. The head or securing nut for the threaded member is made inaccessable by positioning it within a first tubular member which is telescoped with a second tubular member which covers it and is locked thereto by a locking key.

Accordingly it is an object of the invention to provide an improved device for securing an article such as a typewriter, adding machine and the like to a mounting base which includes a stirrup which is secured to the underside of the article and which provides a loop through which a securing plate is hooked, the plate extending out through the end of the article and having an opening for the passage of a threaded securing member therethrough which is locked to the base and which is contained within a locking device against access.

A further object of the invention is to provide a locking device which is simple in design, rugged in construction and economical to manufacture.

The various features of novelty which characterize the invention are pointed out with particularity in the claims annexed to and forming a part of this disclosure. For a better understanding of the invention, its operating advantages and specific objects attained by its uses, reference should be had to the accompanying drawing and descriptive matter in which there is illustrated a preferred embodiment of the invention.

BRIEF DESCRIPTION OF THE DRAWING

In the drawing:

FIG. 1 is a bottom perspective view of a device for locking a calculator in position constructed in accordance with the invention;

FIG. 2 is a section taken along the line 2—2 of FIG. 1;

FIG. 3 is a section taken along the line 3—3 of FIG. 2.

GENERAL DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to the drawings in particular the invention embodied therein in FIG. 1 comprises a locking device generally designated **10** for locking an article such as a calculator **12** to a base **13**. The device **10** includes a U-shaped stirrup **14** which is secured to the underside or bottom wall **16** of the calculator **12** by means of an epoxy securing glue **18**. The stirrup is provided with a reinforcing rod member or metal wire **20** which extends through the plastic material of the stirrup and insures that the stirrup cannot be broken through easily such as by the use of a hacksaw.

The stirrup **14** is located at a position on the bottom such that it is removed from all side edges or the rear end **22** of the calculator.

In accordance with the invention the locking device **10** includes a holding plate **24** having a hooked or curved end **24*a*** which engages beyond the inner end of the stirrup **14** and when the calculator is in a position overlying the plate **24** it cannot be removed outwardly from the stirrup as shown in FIG. **2**. The opposite end **24*b*** of the securing plate is provided with an opening through which is inserted a first tubular member **26** of a locking device generally designated **28**. The first tubular member **26** is provided with a bottom opening **30** to which there extends a threaded securement member, such as a screw **32** which engages into the base **13**. The head **34** is retained within the first member **26** in an inaccessable position and this first member is closed by a second member **36**. The second member **36** has a locking cylinder portion **36*a*** which extends into the first member and it carries a latch **38** which is shifted upon the turning of a key within the cylinder **36*a*** to engage in a recess or latch portion **40** of the first member **26**. The first and second member **26** and **28** are telescopic together and they interlock and form a permanent covering over the head **34** so that it is inaccessable and cannot be removed. The first tubular member **26** is sized to fit into the opening defined at the end of the securing plate **24** and the second tubular member **36** includes bottom edges which engages flush over the top of the plate **24**.

The invention provides a simple device for anchoring the calculator **12** against removal from the mounting base but without requiring large and expensive equipment.

While a specific embodiment of the invention has been shown and described in detail to illustrate the application of the principles of the invention, it will be un-

derstood that the invention may be embodied otherwise without departing from such principles.

What is claimed is:

1. A device for locking an article to a mounting base comprising a U-shaped stirrup connected to the bottom of the article to be secured and which defines an opening between the bottom thereof and the bottom of the article, a securing plate extending through the opening of the stirrup and having an end bent downwardly on the interior side of said stirrup preventing removal of said plate by passage of the bent end through the opening, the opposite end of said plate extending beyond the edge of the article and having a securement opening, a threaded securement member extended through the opening and secured in the mounting base and a locking device engaged over the threaded securement member and preventing access thereto.

2. A device according to claim 1, wherein the locking device comprises a first tubular member having a closed end wall with an opening therethrough through which the threaded securement member extends, and a second tubular member telescoped with the first tubular member and closing the open end thereof and being locked to said first tubular member.

3. A device according to claim 2, wherein said second tubular member overlies said first tubular member and includes a lock cylinder extending centrally into said first tubular member at the open end thereof, and a latch member carried by said locking cylinder being rotatable to engage within a recess of said first tubular member.

4. A device according to claim 1, including a first tubular member of a size to fit through the securement opening of said plate and having an inner end abutting against the base to which the article has to be secured, said threaded securement member extending through the inner end of said first tubular member and into the base and having a head portion enclosed within said first tubular member, and a second tubular member telescopically engaged with said first tubular member, and lock means carried by said second tubular member for locking said second tubular member to said first tubular member.

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