June 14, 1960 S. S. WULC 2,940,114

HANDLE FOR OSCILLATOR

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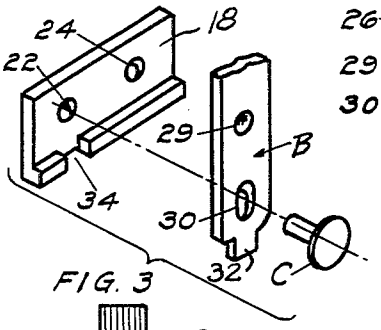

FIG. 3

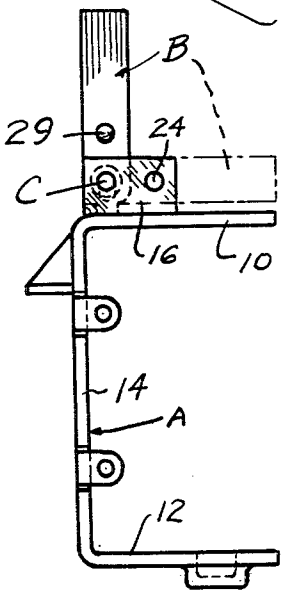

FIG. 1

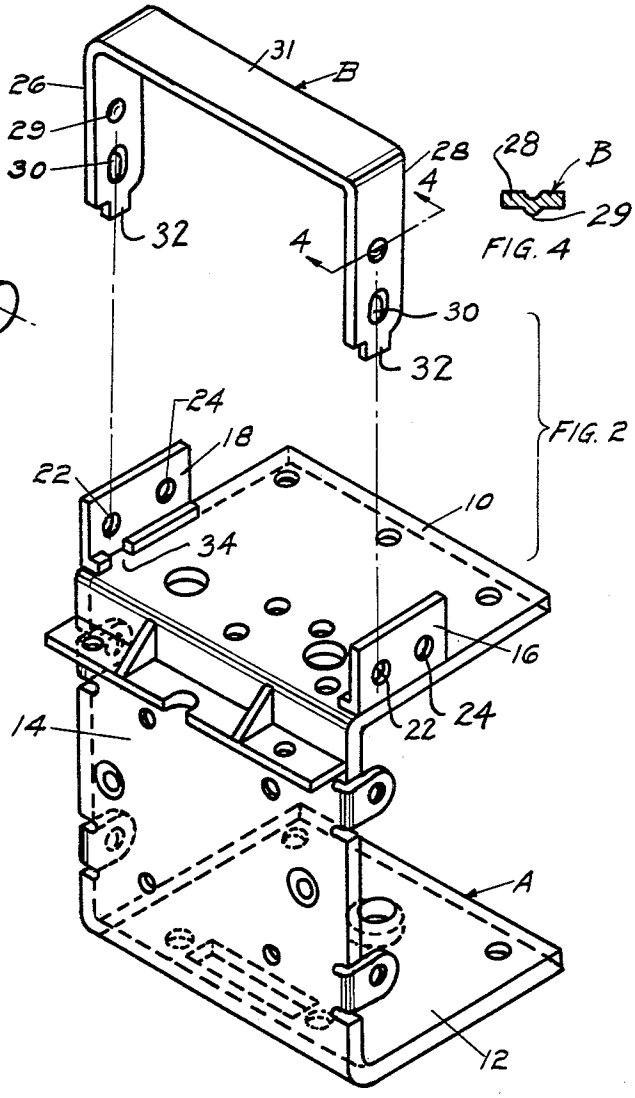

FIG. 2

FIG. 4

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HANDLE FOR OSCILLATOR

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3 Claims. (Cl. 16—126)

My invention relates to a handle, and relates primarily to a handle which is adaptable for use in an electronic oscillator unit. Heretofore, handles have been used for carrying luggage, radios, television and other instruments, but it is important in an electronic oscillator, to remove the oscillator elements rapidly from a set in order to examine them and then to replace them rapidly without injuring the oscillator elements. The unit not only must be inserted accurately, but the oscillator is a delicate instrument and it must be properly and easily aligned.

It therefore is an object of my invention to provide a handle which can be used as a lever for pressing the oscillator frame into its mounting rack in a straight line or rectilinear direction and wherein the handle will serve as a guide.

Another object of my invention is to provide a handle which may be pivoted to lie in a predetermined out of the way position.

Other objects of my invention are to provide an improved device of the character described, that is easily and economically produced, which is sturdy in construction, and which is highly efficient in operation.

With the above and related objects in view, my invention consists in the details of construction and combination of parts, as will be more fully understood from the following description, when read in conjunction with the accompanying drawing, in which:

Fig. 1 is a side view of an oscillator frame, together with a handle mounted thereon.

Fig. 2 is an exploded view of the handle and the oscillator frame.

Fig. 3 is a fragmentary view of the handle, the holding bolt, and the bracket.

Fig. 4 is a sectional view taken along the line 4—4 of Fig. 2.

Referring now in greater detail to the drawing, I show an electronic oscillator frame, generally designated as A, which has mounted thereon, a handle, generally designated as B.

The frame A has two parallel leg members 10 and 12, which are joined by a vertical connecting bight 14. Between the parallel leg members 10 and 12 and the vertical connecting portion 14, are mounted electronic oscillator elements, which may include electronic tubes, a condenser, resisters, etc.

Upon the upper outside portion of the leg 10 are two parallel brackets or arms 16 and 18, which are suitably attached to the leg 10 of the frame.

One arm or bracket will be described since the other arm or bracket is a mirror image of the other arm or bracket.

The arm 18 has a pair of holes 22, 24, one of which is to receive a bolt C for holding the handle, generally designated as B. The rigid handle B is of generally U-shaped configuration with legs 26, 28, which are parallel to one another and connected by a bight 31. The bolt passes through an opening 30 in one leg of the handle and through the opening 22 in the bracket 18.

On the leg 26 of the handle B there is a dimple 29, which is adapted to engage into the recess 24; and there is a longitudinally elongated opening 30 in the leg 36 whereby the rivet or holding bolt C may pass therethrough to hold one leg 26 of the handle B against the bracket 18. A similar connection is shown on the leg 28.

At the bottom of the leg 26 there is a narrowing so that a projection 32 is formed which is adapted to interfit within a recess 34 on the bracket 18.

The bolt C is fixed in position but the leg 26 may ride vertically with respect to the shaft of the bolt. In other words, the handle may be pulled away from the top surface of the frame leg 10 so that the projection 32 will not interfit with the recess 34 on the bracket 18.

However, for pushing the oscillator frame A into position in the oscillating unit, the handle B may be pushed downwardly so that the projection 32 interfits with the recess 34 in order to enable the handle to be locked in position so that it may not move about the bolt C.

The handle B, being positioned vertically, serves as a guide so that when the oscillator frame A is pushed downwardly into its rack, the handle could be used as a guide for moving the oscillator frame A into the position desired. When the handle is not to be used it can be pulled vertically with respect to the bolt C so that the projection 32 and the recess 34 are not interlocked and then the handle can be swung downwardly about the bolt C.

The dimple 28 and its receiving hole 24 hold the handle in an out of the way position, wherein the handle lies upon the upper surface of the frame.

This invention is equally applicable to any electrical unit such as oscillator electric meter or any other electric part which should be removed rapidly and replaced.

Although my invention has been described in considerable detail, such description is intended as being illustrative rather than limiting, since the invention may be variously embodied, and the scope of the invention is to be determined as claimed.

I claim:

1. A handle construction for a minature electronic chassis, comprising a bracket member adapted to be rigidly secured to a top face of the chassis and having a recess, a handle having an interconnected hand gripping portion and an arm portion with the free end of the arm portion being flat and planar with a substantially uniform cross section, an integral projection extending from the free end of the arm portion and being of a smaller cross section than the arm to enter said recess when the arm is positioned upright and extending upwardly from the chassis, said arm being connected to said bracket for pivotal and translational movement with respect thereto, whereby said arm may be rotated to said upright position and then translated so its projection enters said recess in the bracket and thereby be rigidly locked against pivotal movement in that position, said rotational and translational connection comprising an elongated slot in said arm proximate the free end thereof and a connector of smaller cross section than said slot for movably supporting said arm on said bracket, and releasable resilient locking means for locking said arm to said bracket when said arm is positioned alongside the face of said chassis, said means including an interfitting dimple and a recess.

2. In the handle construction of claim 1, said bracket having an upright flat portion disposed in a plane lying parallel to the plane of said planar arm portion and having a flange portion, said bracket flange portion having said recess therein to receive the projection on said arm portion when said arm is positioned in an upright position on said chassis and translated downwardly causing said projection to enter said recess.

3. In the handle construction of claim 2, said bracket flange portion adapted to engage the top face of the chassis with said recess passing through the flange to expose the chassis, said projection having a substantially rectangular cross section of smaller area than that of the arm portion whereby the free end of said arm portion provides a shoulder that is adapted to abut said bracket flange portion when said projection enters the bracket recess.

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