Sept. 18, 1951 J. F. GAFFNEY 2,567,996

RADIO SUPPORT FOR REPAIR OPERATIONS

Filed June 2, 1948

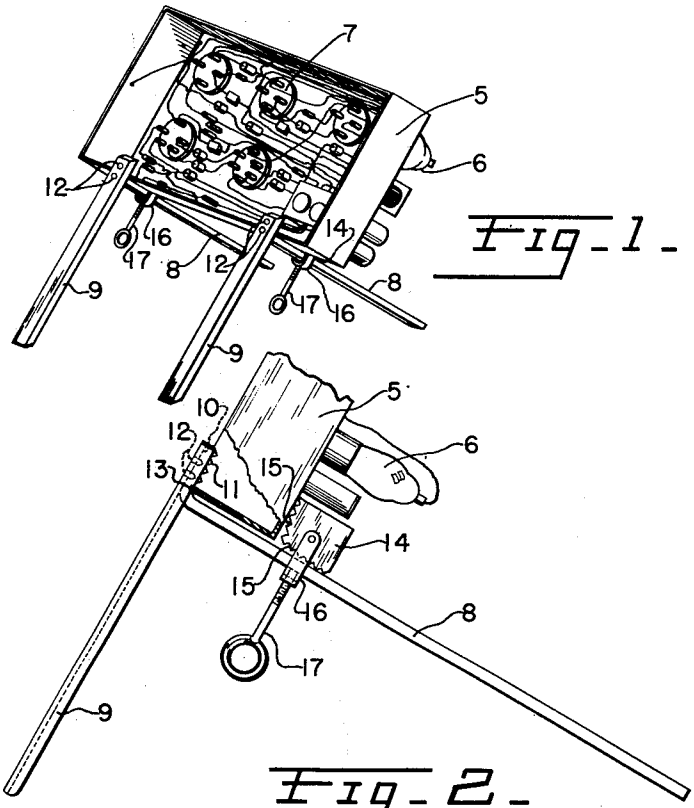


Fig. 1.

Fig. 2.

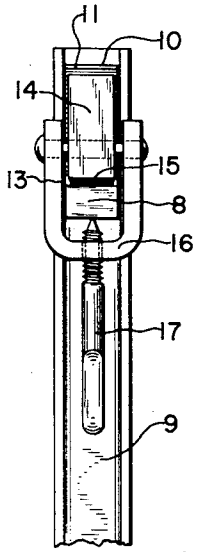


Fig. 4.

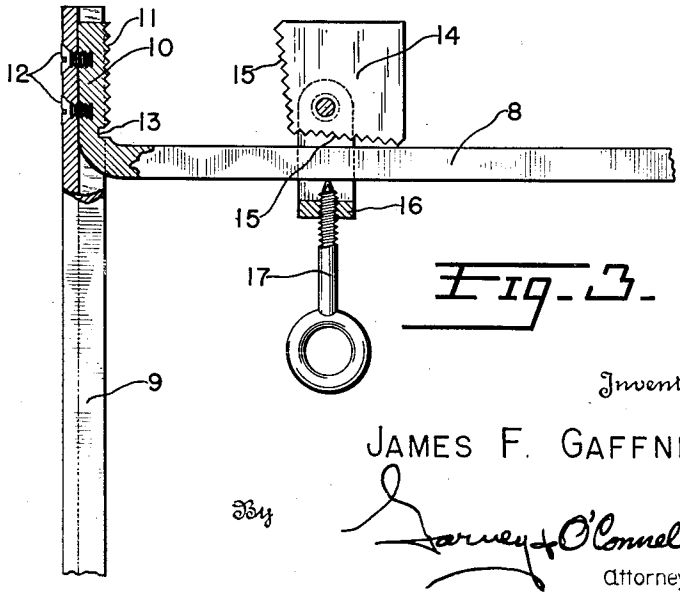


Fig. 3.

Inventor.

JAMES F. GAFFNEY.

By Harvey & O'Connell

Attorneys.

Patented Sept. 18, 1951 2,567,996

UNITED STATES PATENT OFFICE

2,567,996

RADIO SUPPORT FOR REPAIR OPERATIONS

James F. Gaffney, Steelton, Pa.

Application June 2, 1948, Serial No. 30,617

1 Claim. (Cl. 29—284)

1

The present invention comprises a device for supporting a radio in convenient accessibility for repair operations, the device being of lightweight simple construction, which is adapted for quick and facile application to and removal from a radio chassis or the like, positively holding the chassis from casual displacement during all normal repair operations.

A further object of the invention is to provide a device for supporting a radio, in desired workable position, on a floor, work bench or the like, the device being so formed and positioned that it will not slide or creep during the repair operation and may be applied to and detached from a radio chassis by one person and without the use of tools.

A still further object of the invention is to provide positive means for gripping the radio chassis at opposite points, the grip being intensified if excess downward pressure is exerted.

It is also within the objects of this invention to provide a support for securely holding a radio chassis in desired position, regardless of the size or construction of the chassis, the support being formed to normally hold the chassis at an angularity to expose the electrical connections.

Other objects of this invention will be apparent from the following description of the present preferred form of this invention taken in connection with the accompanying drawings wherein:

Figure 1 is a perspective view of a support constructed in accordance with this invention, illustrating its application as applied to a radio chassis;

Figure 2 is an end elevational view of the same with the chassis shown in fragmentary section;

Figure 3 is a fragmentary sectional elevational view of one of the supporting units, illustrating the manner of securing the two bars and the manner of mounting the movable jaw on one of the bars; and

Figure 4 is an end elevational view of one of the supporting units showing the U-shaped bar fragmentarily.

In order to illustrate the application of this invention I have in Figures 1 and 2 shown a radio chassis 5 of conventional construction equipped with tubes 6 which extend from one face of the chassis. Within the chassis electrical connections of various miscellany are mounted, generally designated 7.

The device of this invention consists of one or more units which are adapted for engagement with the radio chassis, each unit comprising a pair of bars 8 and 9. The bar 8 is solid and of rectangular configuration in cross section. The other bar 9, as advantageously shown in Figures 3 and 4, is U-shaped in cross section. The solid rectangular bar 8 has one of its terminals bent at right angles to provide a fixed jaw 10, the inner face 11 of which is serrated. The jaw 10 is mounted in the U of the bar 9 and is secured therein from displacement by screws 12. The crossheads are provided with kerfs to facilitate their removal in a manner well known in the art. The sides of the U are snugly engaged with the opposite edges of the jaw 10 so that lateral pressure on the bar 8 will be taken up by the bar 9 rather than by the screws 12. In addition, by this arrangement the bar 8 may be adjustably mounted in the bar 9 by engaging the screws 12 through the base of the U at predetermined points. At approximately the juncture of the jaw 10 with the body of the bar, a slot or recess 13 is provided which corresponds with complemental slots, as shown in Figure 2, in the opposite sides of the U of the bar 9. The slots 13 are adapted for the reception of one wall of the chassis frame or shell, as shown in Figure 2.

2

A jaw, generally designated 14, is adjustably mounted on the bar 8, the jaw consisting of a block, two faces of which are beveled and serrated, as indicated at 15. One of the beveled faces 15 is adapted to engage the bar 8 while the other face is adapted to engage the radio chassis 5, as also advantageously illustrated in Figure 2. In order to retain the block in a predetermined position on the bar 8, the jaw 14 includes a yoke 16 which embraces the bar 8, the free ends of the yoke being pivotally engaged with the block. A set screw 17 is threaded through the base of the yoke 16, the inner end of the screw impinging against a wall of the bar 8 opposite to the wall impinged by the block of the jaw. It will be noted that the axis of the yoke 16 is offset from the center of the jaw block so that the exertion of the pressure on the block by threading the screw 17 will urge one of the terminals of the serrated bevel faces into engagement with the radio chassis and the opposite terminal into engagement with the bar 8. When the chassis is engaged with the supporting units, as shown in Figure 2, downward pressure on the chassis during a repair operation causes the chassis to be more tightly engaged between the fixed jaw 10 and the movable jaw 14.

For repair operations on a radio of conventional size and weight a pair of supporting units

have been found to be best adapted for use. However, it is within the contemplation of this invention to use a single unit or to use more than two units should it be found expedient to follow this course. By using two bars engaged in the manner above described, the radio chassis is held at an angularity to expose the electrical connections in the chassis and make them readily accessible to the repairman, as shown in Figure 1. Although best results have been obtained by mounting the radio chassis on the unit, as shown in Figure 2, I am aware that good results can also be obtained by directly engaging the chassis with the upper face of the bar 8 and then clamping the chassis between the two jaws in an obvious manner.

The construction and manner of mounting the movable jaw 14 is of particular importance in the present invention because it adapts the support for engagement with any construction of radio chassis. In some makes of radios the tubes are located in such close proximity to the perimeter of the chassis that very little space is afforded to be engaged by a support. The present invention is especially adapted for radios of this construction because the terminal teeth of the serrations on the block of the movable jaw will give adequate purchase to positively prevent accidental displacement of the radio while being repaired.

As advantageously illustrated in Figures 1 and 2 of the invention, it is preferable to employ a plurality of the supporting units each of which, when the free ends thereof are engaged with a supporting base, are of substantially inverted V shape. Consequently when the radio chassis is

mounted on the top of one of the legs of the V, as shown in the drawings, the chassis is supported at an angle to expose the apparatus, including all the electrical connections on the inside of the radio chassis.

Although I have herein described a preferred form of the invention, I am aware that various changes may be made therein within the scope of the claim hereto appended.

I claim:

A radio support for repair operations, including a pair of bars one of which is rectangular in cross section and the other U-shape in cross section, the first bar being bent at right angles, one leg being mounted in the concave portion of the U of the second bar and secured to the latter, said first bar being provided with a recess approximately at the juncture of the angle of the bar, the U-shaped bar being provided with recesses complementing the recess of the rectangular bar, the recesses of said bars being adapted for the reception of a wall of a radio chassis, and a jaw movably mounted on the rectangular bar and co-acting with the right angle portion of said rectangular bar for clamping a radio chassis.

JAMES F. GAFFNEY.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
900,915	Cumner	Oct. 13, 1908
1,319,900	Reeder	Oct. 28, 1919
2,299,294	Barnes	Oct. 20, 1942