

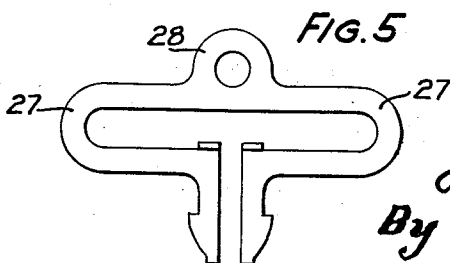
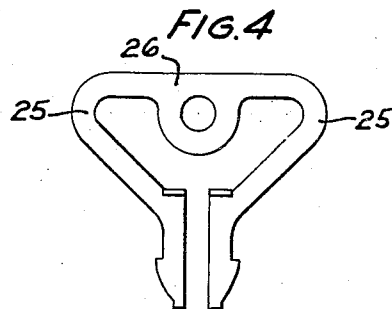
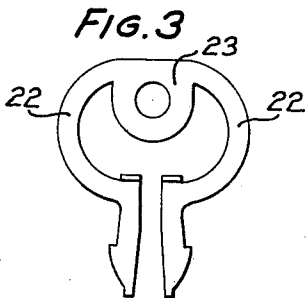
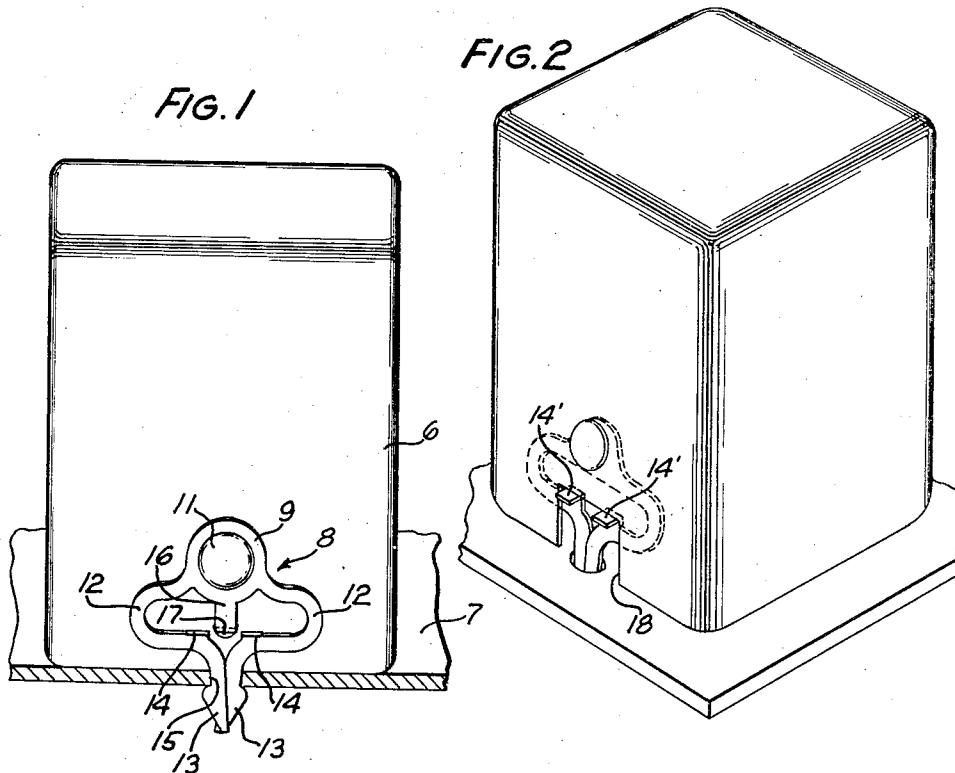
Aug. 15, 1939.

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2,169,708

SECURING DEVICE

Filed Jan. 27, 1936



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UNITED STATES PATENT OFFICE

2,169,708

SECURING DEVICE

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Application January 27, 1936, Serial No. 60,984

5 Claims. (Cl. 24-213)

My invention relates to a mounting lug and more particularly to a lug for mounting coil shields on the chassis of a radio apparatus.

Heretofore it has been common practice to mount a coil shield on the chassis by means of so-called spade bolts having flat heads which were riveted to the shield and the other end of the bolt was threaded and passed through an aperture in the chassis to be secured in place by a nut.

An object of the present invention is to provide a new and improved method and apparatus for mounting coil shields on a chassis.

A further object is to provide a mounting lug which may be conveniently applied to securely mount a shield.

Other objects and advantages will be apparent from the following description taken in conjunction with the accompanying drawing, in which—

Fig. 1 is a fragmentary perspective view of a device embodying the invention,

Fig. 2 is a fragmentary perspective view illustrating a different manner of positioning a lug similar to that shown in Fig. 1 but of slightly modified construction,

Fig. 3 is a detail view of a modified form of lug,

Fig. 4 is a detail view of a further form of lug, and

Fig. 5 is a detail view of still another form of lug.

Referring now more in particular to Fig. 1, a coil shield 6 is shown mounted on a chassis 7 by means of a mounting lug 8. The lug is provided with an eyelet 9 through which it is riveted to shield 6 by a rivet 11. In order for the lug to serve its intended purpose, it must hold the shield rigidly to the chassis. To attain this end, the eyelet is provided with laterally extending arms 12 having a U-shaped portion and the ends of the arms extend downwardly, or radially with reference to the eyelet, and each arm has an arrow head 13. Each arm is also provided with a forwardly extending projection 14 upon which pressure may be exerted to force the arrow heads through an aperture 15 to lock the lug in the chassis.

The lug is preferably made of resilient sheet metal and is capable under stress of both lateral contraction and longitudinal elongation. That is, when the pointed ends of the arrow heads are inserted in an aperture and a pressure is exerted on projections 14, the lug will contract laterally while the U-shaped arms permit an elongation of the lug. Thus when the arrow heads have

passed through the aperture, the arms will expand laterally to lock the lug on the chassis and the tendency to longitudinal contraction of the resiliently elongated lug will securely retain the shield on the chassis.

In order to prevent rotational movement of the lug about the rivet, it is preferable to provide an arm 16 on the lug having a right angle projection which engages an aperture 17 in the shield.

Fig. 2 illustrates a lug similar to that described in Fig. 1 except that for appearance the lug is secured to the inside of the shield. In this case, the shield is provided with a relatively large aperture 18 through which the projections 14' extend to render them accessible for forcing the arrow heads through the aperture in the chassis. In this case, an arm such as arm 16 of Fig. 1 is not required since the projections 14' prevent rotational movement of the lug.

In Fig. 3 a lug is shown which operates on the same principle as the one shown in Figs. 1 or 2 but has a slightly different shape in that the laterally extending arms 22 are arcuate and the eyelet 23 lies substantially within a continuation of the arcs.

Fig. 4 illustrates a lug in which arms 25 extend in a straight line tangentially from an eyelet 26 and then turn downwardly at an oblique angle.

In Fig. 5, the arms 27 extend in a straight line tangentially from the lower side of the eyelet 28, make a U-turn and then return parallel to their original direction.

In each of the above forms, the ends of the arms carrying the arrowheads may be formed to lie in different but parallel planes instead of in the same plane so that the arrowheads may be inserted in an aperture which is not substantially larger than the width of one arrowhead. This is illustrated in Figs. 1 and 2 in which the arrowheads are shown overlapping even though they are expanded to lock the lug to the chassis.

While only one lug has been shown in Figs. 1 and 2, it will be obvious that usually at least two lugs on opposite sides of a shield are used. When a shield is secured to the chassis by a pair of lugs as described, the distended arms will hold the shield in firm engagement with the chassis.

It will be also understood that the nature and embodiments of the invention herein described are merely illustrative and that many changes and modifications may be made therein without departing from the spirit and scope of the invention.

What is claimed is:

1. A device for securing one member to an-

other, comprising a portion for attachment of the device to one member, a pair of arms shaped and arranged so as to be laterally and longitudinally yieldable relative to the permanently attachable portion, and releasable securing means on the ends of said arms.

2. A device for securing a coil shield to a chassis, comprising a portion having an eyelet for attachment to said shield, curved arms capable of lateral and longitudinal flexing, locking means for locking said arms to said chassis, and a projection on each arm adapted to be engaged to force said locking means longitudinally relative to said eyelet into locking engagement with said chassis.

3. A device for securing one member to another comprising a portion for permanent attachment of the device to one member, a pair of arms extending from said portion and having edge portions adjacent to their ends for passage through an aperture in the other member and for engagement therewith and at least one of said arms having a loop of such length and shape as to permit relative longitudinal movement of its edge portion relative to said permanently attached portion for the purposes described.

4. A device for securing one member to an-

other comprising a portion having means whereby it may be rigidly attached to one of said members, a pair of arms extending from said portion and having edge portions adjacent their ends for passage through an aperture in the other member and for engagement therewith, and at least one of said arms being constructed and arranged for longitudinal movement of its edge portion relative to that portion of the device which is fixed, and means provided as a part of said arm whereby said arm may be pressed longitudinally in a direction away from the fixed portion.

5. A device for securing a part to an apertured support comprising an attaching portion adapted to be securely attached to said part, fastening arms for engagement with said support through its aperture, at least one of said arms having a yieldable arcuate portion of substantial length joined at one end to said attaching portion and at the other end to an arm to permit movement of said arm in a direction away from said attaching portion, the ends of said arms away from said attaching portion being free and each arm having a portion providing releasable securing means for engagement with the support.

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