July 17, 1934. F. A. THAHELD 1,966,772

FASTENER FOR ROCKER BOX COVERS

Filed April 4, 1932

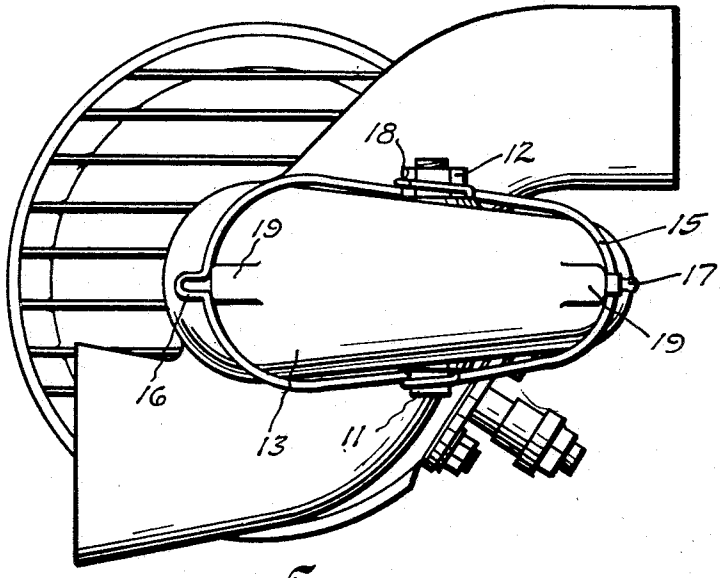


Fig. 1

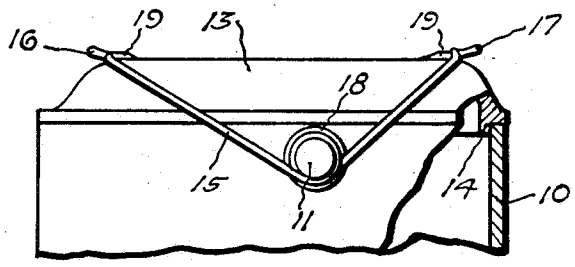


Fig. 2

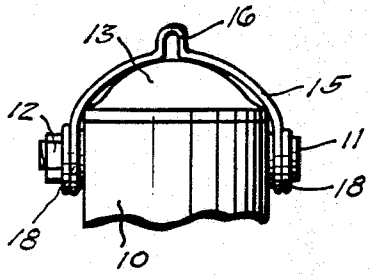


Fig. 3

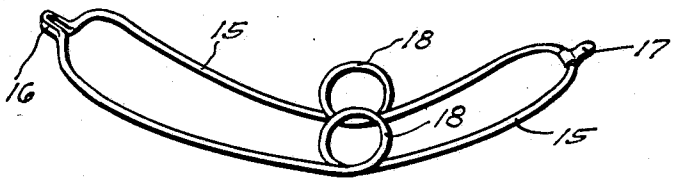


Fig. 4

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FASTENER FOR ROCKER BOX COVERS

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Application April 4, 1932, Serial No. 603,091

2 Claims. (Cl. 292—288)

This invention relates to new and useful improvements in fasteners for rocker box covers.

The invention has particularly to do with fasteners for securing or holding in place the covers used on the rocker boxes of internal combustion engines of the radial type.

One object of the invention is to provide a fastening for a rocker box cover, whereby the use of bolts, nuts, keys and other fasteners necessitating the use of tools, is avoided.

A particular object of the invention is to provide a simple and inexpensive fastener for a rocker box cover, which may be readily attached to the nut and bolt on the sides of the rocker box, and engaged over the ends of the cover.

Another object of the invention is to provide a resilient fastener which will securely hold the cover on the box, and which may be readily lifted to release the cover when it is desired to remove the same.

A construction designed to carry out the invention will be hereinafter described together with other features of the invention.

The invention will be more readily understood from a reading of the following specification and by reference to the accompanying drawing in which an example of the invention is shown, and wherein:

Figure 1 is a plan view of one of the cylinders of an internal combustion engine showing a fastener constructed in accordance with the invention and in position on the rocker box top.

Figure 2 is a view partly in elevation and partly in section, and showing the fastener applied thereto.

Figure 3 is an end elevation of the same.

Figure 4 is a perspective view of the fastener.

In the drawing the numeral 10 designates an ordinary rocker box, such as is found on internal combustion engines of the radial type. The box is provided with a transverse bolt 11 fastened by a nut 12. The usual rocker arm (not shown) is journaled on this bolt within the box. This box has an elliptical shape and its upper or outer end is closed by a lid or cover 13. The cover has a flange 14, which is offset inwardly from its edge so as to snugly engage within the top of the box 10 when the cover is placed thereon, thus holding the cover against lateral displacement.

In carrying out the invention I provide a fastener 15, which is preferably formed of a single piece of spring wire. This wire is shaped into an elongated loop, and its ends suitably welded or brazed together. At one end the loop is formed with a lug 16 by bending the wire upon itself. At the opposite end the loop has secured thereon a lug 17. The ends of the wire may be united, and secured in the lug 17 which is suitably fastened on the wire.

On opposite sides the wire is coiled to provide single coils 18 intermediate the ends of the loop. The loop is also bent or curved throughout its length whereby its ends are elevated above its central portion.

The fastener is sprung over the cover 13, and the sides of the box 10 so that the coils 18 may be engaged around the head of the bolt 11 and the nut 12. This causes the fastener to assume a substantial V-shape as is shown in Figure 2. The ends of the fastener will rest upon the ends of the cover 13. In order to assure a proper fastening and prevent accidental displacement of the cover, bosses 19 are provided on the end portions of the cover and are so located that the ends of the fasteners will bear thereagainst.

When it is desired to remove the cover 13 a suitable tool is engaged with the lugs 16 and 17, whereby the end portions of the fastener are swung upwardly, the coils 18 acting as hinges. When the ends of the fastener are elevated the cover may be lifted and slid longitudinally, and thus removed from the box. In replacing the cover the ends of the fastener are lifted, and when the cover is in position these ends are released. The resilient nature of the fastener causes it to snugly embrace the cover, and the bosses prevent displacement.

The description which has been given, recites more or less detail of a particular embodiment of the invention, which is set forth as new and useful, however, I desire it understood that the invention is not limited to such exact details of construction because it is manifest that changes and modifications may be made, within the scope of the appended claims, without departing from the spirit of the invention.

What I claim is:

1. A fastener means for the cover of a box having a pair of opposed projections, said cover including a pair of spaced bosses, comprising an elongated wire loop having coils intermediate its ends adapted to be received by said projections, the ends of the loop being engaged over the cover, and in engagement with said bosses.

2. A fastener means for the cover of a box having a pair of opposed projections, comprising an elongated wire loop having coils intermediate its ends adapted to be received by said projections, the ends of the loop being engaged over the ends of the cover.

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