June 5, 1928. 1,672,195

L. BERGE

WORM SHAFT MOUNTING

Filed Sept. 8, 1925

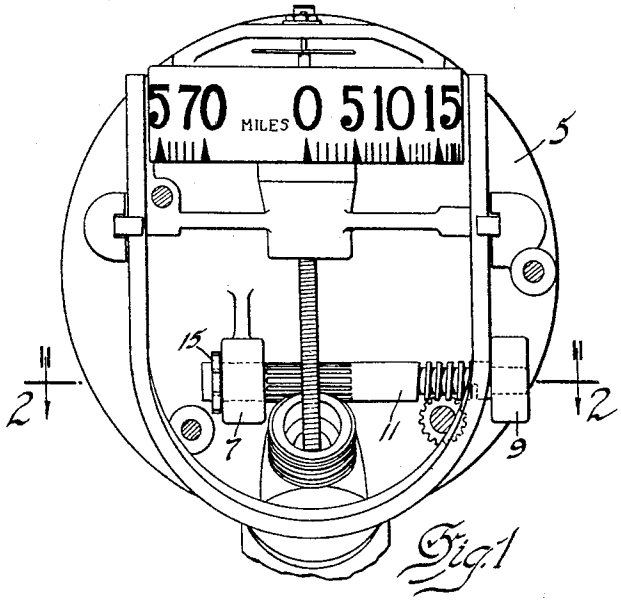


Fig. 1

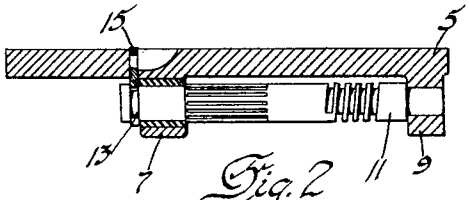


Fig. 2

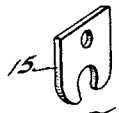


Fig. 3

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UNITED STATES PATENT OFFICE.

LOUIS BERGE, OF FLINT, MICHIGAN, ASSIGNOR TO A C SPARK PLUG COMPANY, OF FLINT, MICHIGAN, A COMPANY OF MICHIGAN.

WORM-SHAFT MOUNTING.

Application filed September 8, 1925. Serial No. 55,111.

This invention relates to a worm shaft mounting.

The object of the invention is to provide means to securely hold the shaft from movement along its longitudinal axis. A further object is to provide a simple expedient for holding the shaft by means which shall at once hold the shaft as stated and be locked by the shaft in its operative position.

The invention is shown as applied to a speedometer where a shaft carried in bearings on the base, is held from movement on its longitudinal axis, but obviously it may be used in numerous relations where a shaft must be held in position.

With these general objects in view the invention is carried into effect by the structure herein described and shown in the accompanying drawing.

In the drawing Figure 1 shows a plan view of a speedometer with the odometer removed.

Figure 2 is a section on line 2—2 of Figure 1.

Figure 3 is a perspective of a locking plate.

Referring to the drawing, there is shown at 5 the base of a speedometer. Upon this base are two bearings 7 and 9 for the so called second worm shaft 11. It is the purpose of this invention to provide a simple but effective means to hold this shaft from movement along its longitudinal axis. To that end a groove is formed in the shaft as shown at 13. Through the base opposite the groove is passed a locking plate 15, of substantially U shape. The legs of the U surround the grooved portion of the shaft as will be readily seen. The dimension across the opening of the U is, however, very slightly less than the diameter of the reduced portion of the shaft. The plate 15, must, therefore, be snapped over the shaft when the members are assembled in position. When thus positioned, it will be seen that no longitudinal movement of the shaft is possible and furthermore, because of the locking feature, the plate 15 can not slip off the shaft and out through the base.

The device is very simple and affords very effective means to secure such a shaft. Its field of usefulness is very extensive and obviously is not limited to the single application herein described.

What I claim and desire to protect by Letters Patent is:

In an instrument, a base, lugs projecting from one side of said base, a shaft journalled in said lugs, said shaft having a groove, said base having an aperture extending therethrough, a U-shaped fastening means extending through said base aperture and engaging said groove, the opening of the U being somewhat less than the diameter of the groove whereby longitudinal movement of the shaft is prevented by the fastening means and whereby the escape of the fastening means from the base is prevented by the engagement of the fastening means with the shaft.

In testimony whereof I affix my signature.

LOUIS BERGE.