Jan. 23, 1934. J. SCHWEISS 1,944,531

OPERATING LEVER

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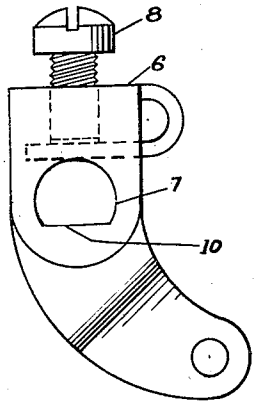



FIG. 1

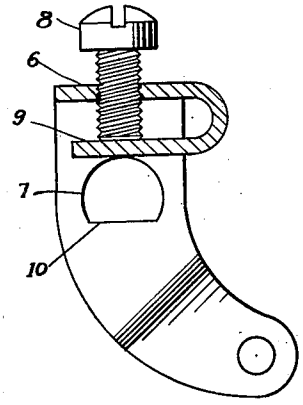



FIG. 3

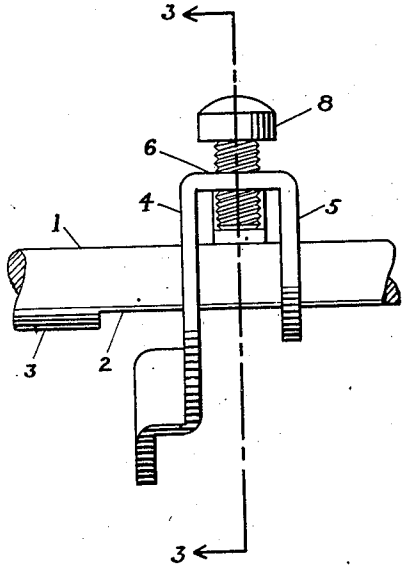



FIG. 2

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# UNITED STATES PATENT OFFICE

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## OPERATING LEVER

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4 Claims. (Cl. 287—52.02)

This invention relates to operating levers and more particularly to pump and throttle operating levers for carburetors. It has been customary to provide some kind of a bell crank lever for operating the throttle shaft or choke valve shaft of a carburetor and also to provide such levers for operating other parts of the carburetor in accordance with the positions of these shafts.

With previous constructions it was difficult to provide means for an accurate location of the lever with respect to the angular position of the throttle shaft. In the construction and use of carburetors it is frequently necessary to disassemble the various parts and re-assemble them in the same relative position, and one of the objects of my invention is to provide an operating lever which may quickly and conveniently be assembled in a definite angular position with respect to the throttle shaft.

In previous constructions it has been customary to use a set screw to rigidly hold the operating lever in place on the throttle shaft as a result of which the surface of the throttle shaft was marred and disfigured in such a manner as to seriously interfere with the accurate re-assembly of the lever to the shaft, and it is an object of my invention to provide an operating lever which may be repeatedly assembled to a shaft and disassembled without marring or disfiguring the shaft in any way. The invention will be better understood from the following description and accompanying drawing, referring to which:

Figure 1 shows an end view of the operating lever and attaching screw.

Figure 2 shows a side view of the operating lever mounted on a shaft.

Figure 3 shows a cross sectional view of the operating lever, the section being taken along the line 3—3 of Figure 2.

Referring to the drawing, the reference numeral 1 indicates a shaft to which the operating lever is to be assembled. The shaft is provided with a flat portion 2 terminating in a shoulder 3. The operating lever is formed from a single sheet metal blank and comprises inner and outer parallel side portions 4 and 5 respectively. These side portions have corresponding opposite non-circular perforations 7 therein, adapted to loosely fit the shaft 1, and the flat portion 2. The parallel side portions 4 and 5 are joined by the transverse portion 6 which is perforated and threaded to receive the set screw 8. The operating lever is provided with a tongue 9 of substantial length which is bent backwards as indicated in Figure 3 to pass between the end of the set screw and the shaft to which the operating lever is to be attached. This tongue forms a seat or pad for the set screw and has sufficient resiliency to be bent toward the shaft and held firmly in contact therewith when the set screw is tightened. The flat side 10 of the perforation 7 contacts the flat on the shaft and when the set screw is tightened the shaft and lever are held accurately in the proper angular relation to each other.

I claim:

1. An operating lever formed from sheet metal and having two parallel sides, said sides being joined at one end and provided with opposite non-circular perforations, a threaded opening in said lever to receive a set screw and a tongue formed integral with said lever, said tongue intersecting the axis of said threaded opening.

2. An operating lever comprising two parallel side portions joined together at one end, said side portions having opposite similar perforations to receive a shaft, a threaded opening in said lever, the axis of said opening being parallel to and between the planes of said side portions, and an integral tongue portion intersecting the axis of said threaded opening.

3. An operating lever comprising two parallel side portions joined at one end by a transverse portion, a threaded opening in said transverse portion, a tongue integral with said transverse portion, said tongue being bent backwardly to intersect the axis of said threaded opening, opposite openings in said side portion, said opposite openings being similar in shape and having a flat side opposite said transverse portion.

4. An operating lever of U-shaped cross section with respect to two perpendicular planes, a threaded set screw opening formed in a part of said lever, the axis of said opening lying in the line of intersection of said plane, said lever having a pair of oppositely disposed perforations, the center of said perforations lying in one of said planes.

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