Feb. 19, 1924. 1,484,080

F. J. REVOR

SILENCER FOR VALVE MECHANISM

Filed May 11, 1923

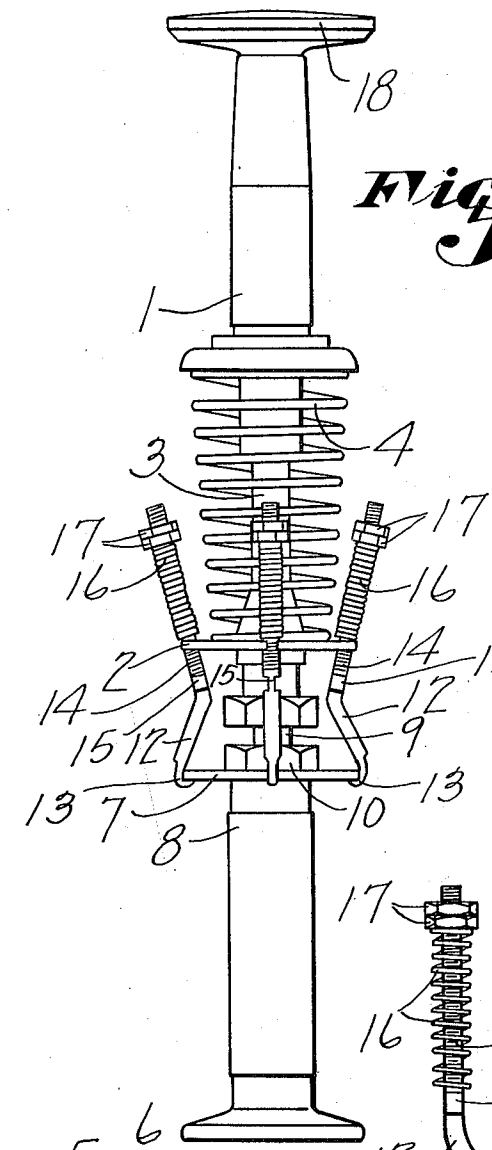


Fig. 1.

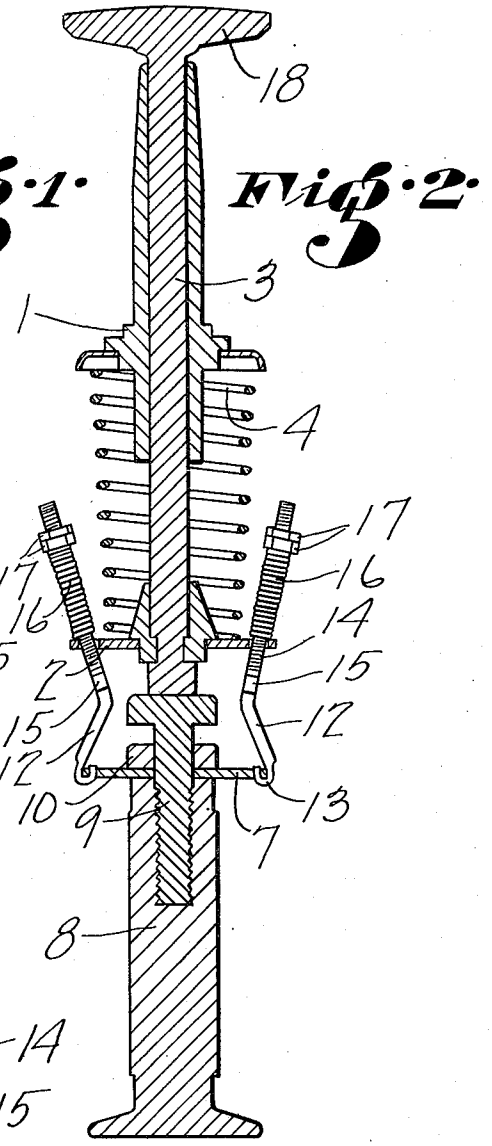


Fig. 2.

Fig. 5.

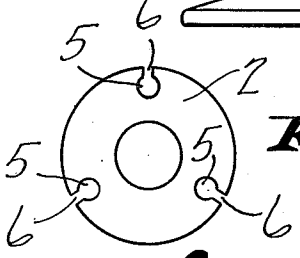


Fig. 3.

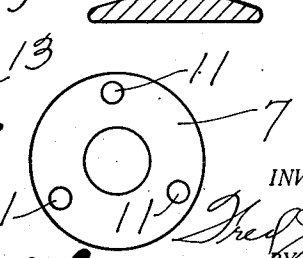


Fig. 4.

INVENTOR

Fred J. Revor

BY

Adam E. Fisher

ATTORNEY

Patented Feb. 19, 1924. 1,484,080

UNITED STATES PATENT OFFICE.

FRED JOHN REVOR, OF LYON MOUNTAIN, NEW YORK.

SILENCER FOR VALVE MECHANISM.

Application filed May 11, 1923. Serial No. 638,237.

To all whom it may concern:

Be it known that I, FRED JOHN REVOR, a citizen of the United States, residing in the city of Lyon Mountain, county of Clinton, and State of New York, have invented new and useful Improvements in Silencers for Valve Mechanism, of which the following is a specification, reference being had to the accompanying drawings.

This invention is in the way of a silencing device for use in connection with the valve mechanism of an internal combustion engine, and it is designed more especially for use upon valves which are set within the motor block.

The object of the invention is to afford means for readily adjusting the valve faces to their seats so that they will close tightly and give full compression, and in addition, all noise and rattle will be eliminated.

In the drawing

Figure 1 is an elevation of a valve mechanism equipped with this improvement;

Figure 2 is a vertical sectional view through a valve mechanism equipped with this improvement;

Figure 3 is a detail of the spring retainer substituted in lieu of the ordinary spring retainer;

Figure 4 is a detail of the anchor disc;

Figure 5 is a detail of one of the adjustment pins with spring mounted thereon.

In incorporating this improvement upon the usual valve mechanism 1, a spring retainer 2 is substituted for the old retainer at the lower end of the valve stem 3 below the spring 4. The retainer 2 is in all respects similar to the old retainer except that it is formed with three adjustment-pin-holes 5 equi-spaced around the edge thereof, with relatively narrow slots 6 opening outwardly from these holes. An anchor disc 7 is next mounted at the upper end of the valve lifter 8 over the adjustment screw 9 and under the lock nut 10; and this anchor disc is pierced with three hook holes 11 aligned with the holes 5 of the spring retainer 2. Three adjustment pins 12 are finally provided, the same being formed with hooks 13 adapted to engage the hook holes 11 of the anchor disc 7, and having threaded stems 14 adapted to pass freely through the holes 5 of the retainer 2. The stems 14 are also reduced or notched at points between their threaded ends, and the hooks 13, so as to form relatively flat necks 15 adapted to pass through the slots 6 of the holes 5. Coil springs 16 are set over the threaded ends of the stems 14, the lower ends of these springs abutting upon the retainer 2. Small adjustment nuts 17 are then screwed onto the upper ends of the stems 14, thus locking the springs 16 in place. By manipulation of the adjustment nuts 17, the valve head 18 may be readily centered so as to seat perfectly.

While I have herein described a certain specific manner and method of constructing and assembling the elements of my invention, it is understood that I may vary from the same in minor details, not departing from the spirit of my invention, so as best to construct a practical device for the purpose intended, as defined in the appended claim.

I claim:

A device of the kind described comprising in combination with the valve mechanism of an internal combustion engine, a spring retainer disc at the lower end of the valve stem, same having a plurality of adjustment-pin-holes, around its edge with relatively narrow slots opening outwardly; an anchor disc at the upper end of the valve lifter, same having hook holes aligned with the adjustment-pin-holes of the spring retainer disc; adjustment pins having hooks to engage the hook holes of the anchor disc and threaded stems to pass through the adjustment-pin-holes of the spring retainer disc, and having also flat neck portions intermediate of its ends adapted to pass through the slots of the spring retainer disc; coil springs on the upper threaded ends of the adjustment pins above the spring retainer disc; and adjustment nuts on the outer ends of the threaded stems of the adjustment pins.

FRED JOHN REVOR.

Witnesses:
LEO JOETTE,
H. JANFIN.