Nov. 30, 1926. 1,609,202

G. P. RITTS

VALVE TAPPET

Filed June 21, 1926

Fig. 1.

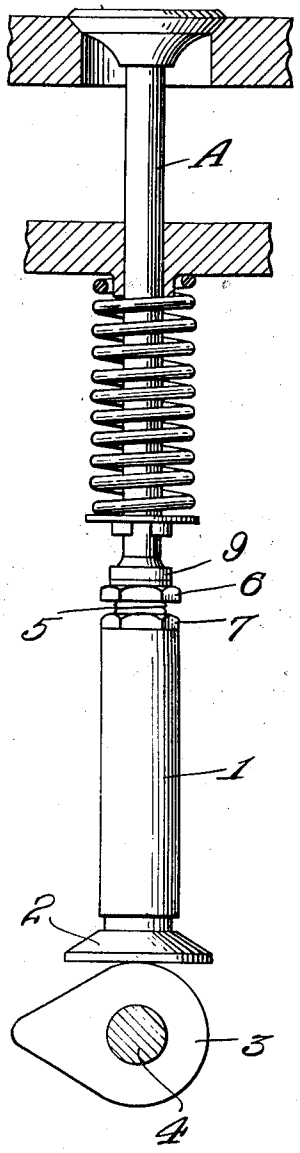


Fig. 3.

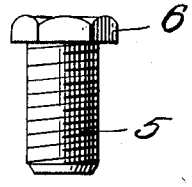


Fig. 4.

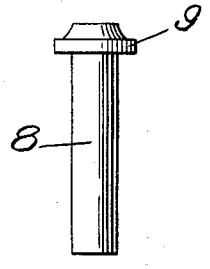
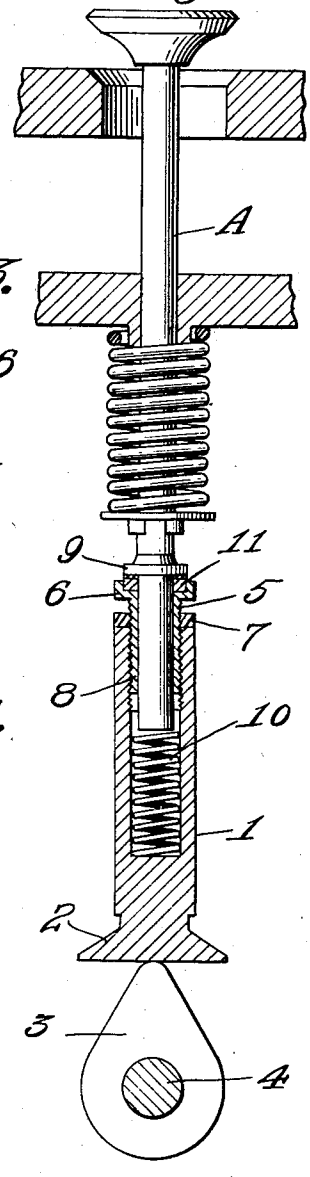


Fig. 2.



WITNESS

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UNITED STATES PATENT OFFICE.

GEORGE PAUL RITTS, OF CLEVELAND, OHIO.

VALVE TAPPET.

Application filed June 21, 1926. Serial No. 117,479.

This invention relates to a valve tappet for internal combustion engines, the general object of the invention being to provide spring means for keeping the tappet in constant contact with the valve stem and with the cam on the cam shaft.

Another object of the invention is to make the parts adjustable so that they can be adjusted to take up wear whenever desired.

This invention also consists in certain other features of construction and in the combination and arrangement of the several parts, to be hereinafter fully described, illustrated in the accompanying drawings and specifically pointed out in the appended claim.

In describing my invention in detail, reference will be had to the accompanying drawings wherein like characters denote like or corresponding parts throughout the several views, and in which:—

Figure 1 is a sectional view with parts in elevation, showing the invention applied to a valve, the figure showing the valve in closed condition.

Figure 2 is a similar view, with the valve in open condition and showing some of the parts in section.

Figure 3 is a view of the bushing.

Figure 4 is a view of the tappet member.

In these views, 1 indicates a cylindrical-like body which has an enlarged lower end 2 for engaging a cam 3 of the cam shaft 4. A bushing 5, having a nut-like head 6, is threaded into the upper end of the body 1 and is held in adjusted position therein by the nut 7. A tappet member 8, having a head 9, is slidably mounted in the bushing, with its head arranged above the head of the bushing. The head 9 has a flat upper face for engaging the lower end of the stem of the valve A and a coiled spring 10 is arranged in the body 1 and engages the lower end of the member 8 and tends to hold the body in engagement with the cam and the member 8 in engagement with the stem. The head 6 is recessed to receive a wear plate 11.

From the foregoing, it will be seen that I have developed a silent tappet, the spring in which tends to hold the parts in constant engagement with the cam and with the valve stem. Thus noise is eliminated. Due to the construction of this tappet, it is not necessary to set clearance close to obtain silence. Therefore, this tappet allows the correct clearance to obtain the maximum power of the motor. This invention also provides a large seating surface so that checking of tappet clearance will only be required at infrequent intervals. The necessary clearance is provided between the head 6 of the bushing 5 and the head 9 of the member 8.

It is thought from the foregoing description that the advantages and novel features of my invention will be readily apparent.

I desire it to be understood that I may make changes in the construction and in the combination and arrangement of the several parts, provided that such changes fall within the scope of the appended claim.

What I claim is:—

A tappet device for an internal combustion motor comprising a cylindrical body having its closed lower end adapted to engage a cam on the cam shaft of the motor, a bushing threaded in the upper part of the body, said bushing having a countersunk head, a wear plate in said countersink, a tappet member having its stem slidably arranged in the bushing, the head on the member engaging the valve stem and a spring in the body engaging the inner end of the tappet member.

In testimony whereof I affix my signature.

GEORGE PAUL RITTS.