C. S. OLSON.

AUTOMATIC SPEED REGULATOR.

APPLICATION FILED JULY 21, 1919.

1,352,310.

Patented Sept. 7, 1920.

Fig. 1.

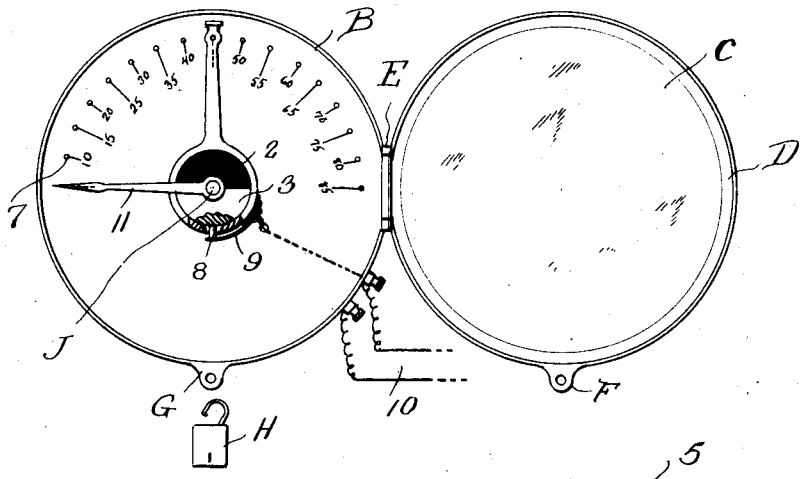


Fig. 2.

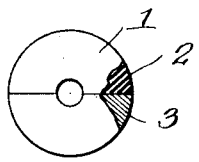
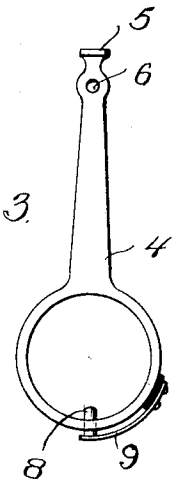


Fig. 3.



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AUTOMATIC SPEED-REGULATOR.

1,352,310. Specification of Letters Patent. Patented Sept. 7, 1920.

Application filed July 21, 1919. Serial No. 312,119.

To all whom it may concern:

Be it known that I, CARL S. OLSON, a citizen of the United States, residing at Troy, in the county of Latah and State of Idaho, have invented new and useful Improvements in Automatic Speed-Regulators, of which the following is a specification.

This invention relates to an automatic speed regulator and more particularly to a speed regulator for controlling the speed of an automobile and has for its primary object to provide simple inexpensive means that may be associated with a speedometer for rendering the motor of the automobile inoperative upon the automobile reaching a predetermined speed.

An object of the device is to provide means for attachment to a speedometer such that upon the latter reaching a certain registration the ignition system of the automobile will be rendered inoperative thereby stopping the engine of the automobile from generating power.

Besides the above my invention is distinguished in an improved form of switch that may be connected to the shaft of a speedometer and adjustable so as to accommodate different speeds.

With these and other objects in view the invention will be better understood from the following detailed description taken in connection with the accompanying drawing, wherein:

Figure 1 is a front elevation of a speedometer with the cover thrown to open position, showing my device connected to the speedometer shaft so as to be actuated thereby.

Fig. 2 is a plan view of the disk.

Fig. 3 is a detail view of the arm.

Again referring to the drawing illustrating one of the many forms of which the invention may be constructed, the letter B designates a speedometer which may be one of the wellknown types now on the market with the exception that the sight glass C is supported by a ring D hinged to the body of the speedometer as indicated at E so that access may be had to the invention which is associated with the speedometer shaft. This ring D is provided with an apertured ear F adapted to coöperate with a second ear G on the speedometer frame for the reception of a lock H. Fixed to the speedometer shaft J is a disk 1 consisting of a segment 2 of insulating material and a metallic segment 3. These segments are united in any suitable manner and fixed upon the speedometer shaft J so as to turn therewith. Slidably mounted on the disk 1 is an arm 4 one end of which is formed into a finger piece 5 and is further provided with an opening 6 adjacent the finger piece so as to receive any one of the series of pins 7 arranged in the dial of the speedometer and representing different speeds. As far as I have proceeded it will be seen that by springing the arm 4 out of engagement with the pin and moving the same about the disk 1 the position of the arm with relation to the disk may be changed at will. Carried by the arm 4 is a contact 8 forced into engagement with the periphery of the disk by a leaf spring 9. The numeral 10 designates one of the primary conductors of an ignition system in which my improved form of circuit breaker is arranged so as to break the continuity of this conductor when the speed of the automobile reaches a point above that for which my instrument is set. This conductor 10 has one terminal connected to the contact 8 while the other terminal is grounded on the frame of the speedometer.

Assuming that the speed of the automobile is not to exceed 25 miles an hour, the arm 4 is adjusted until it engages the pin 7 corresponding to a speed of 25 miles. This movement of the arm 4 will place the contact 8 at a point on the metallic segment 3 such that when the speedometer hand 11 registers 25 miles or slightly thereabove the contact will ride out of engagement with the metallic segment and into engagement with the non-metallic segment thereby breaking the ignition circuit and rendering it inoperative. As the ignition system is now rendered inoperative the power of the automobile is cut off and will continue in this condition until the speed of the car is retarded when the contact will again engage the metallic segment 3 and reëstablish the proper condition of the ignition system.

From the foregoing description taken in connection with the accompanying drawing, it will be apparent that I provide a simple inexpensive device that may be readily connected and associated with the frame and shaft of any form of speedometer now on the market with very little change. It is of course to be understood that the invention may be constructed in various other manners and the parts associated in other relations

and therefore I do not desire to be limited in any manner except as set forth in the claims hereunto appended.

What I claim is:—

1. In combination with a speedometer, a disk connected to the shaft of the speedometer consisting of an insulating segment and a metallic segment, and an arm making contact with and adjustable on the disk.

2. In combination with a speedometer, a disk connected with the speedometer shaft and including a metallic and an insulating portion, and a contact arm having a head portion rotatably engaging said disk.

3. In combination with a speedometer, a disk connected with the shaft of the speedometer indicator and consisting of an insulating segment and a metallic segment, an arm having a head formed open and surrounding said disk, and a contact carried by said head portion and engaging against the periphery of the disk.

4. In combination with a speedometer, a disk carried by the shaft of the speedometer indicator and consisting of an insulating and a metallic segment, an arm adjustable with respect to the disk and having an open head portion encircling the disk, said head portion being provided at one point with a hole, and a spring contact carried by the head portion and including a pin extending through said hole and engaging the periphery of the disk.

In testimony whereof I affix my signature.

CARL S. OLSON.