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GEARLESS AUTOMATIC GAS CONTROL GOVERNOR

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The invention relates to means for controlling the speed of operation of internal combustion motors to limit the speed of the operation of the vehicle, and has for its object the provision of a casing adapted for insertion in the intake manifold of internal combustion motors and provided with a sliding valve that is open normally by spring tension and closed by suction created by the operation of the motor when the vehicle reaches a predetermined speed so as to prevent possibility of the operation of the vehicle at a speed in excess of a lawful speed or speed determined upon.

A further object of the invention is the provision of a speed governor including a casing adapted for insertion in the intake manifold of internal combustion engines, and having a valve seat therein, a stem slidably mounted in the casing, and carrying a valve to cooperate with the seat, a lever fulcrumed in the wall of the casing, and engaging the stem, and adjustable spring actuated means to normally hold the valve upon its seat.

The invention will be described in detail hereinafter and will be found illustrated in the accompanying drawings in which

Figure 1 is a longitudinal sectional view of the speed governor showing it in place in the intake manifold of an internal combustion engine, shown fragmentarily, and

Figures 2 and 3 are transverse sectional views on planes indicated by the lines 2--2 and 3--3 respectively of Figure 1.

In the drawings similar reference characters will be used to designate corresponding parts throughout the several views.

The speed governor as shown in Figure 1 is secured between the intake manifold A and the carburetor connection B, of an internal combustion engine, and comprises an open ended casing 1 having gears 2 to cooperate with the gears on the parts A and B as usually constructed to hold the casing 1 in position, said casing consisting of two parts threaded connection at 3. 4 indicates a valve stem that is slidably mounted in bearings 5 and 6 in the casing 1, and having a valve member 7 thereon that is adapted to engage valve seat 8. The valve stem 4 is provided with a socket 9 and 10 indicates a lever fulcrumed on the pin 11 in the wall of the casing 1, and having its end within the casing 1 provided with a ball 12 to engage in the socket 9. An arm 13 is secured to a support 14 carried by the casing 1 by means of a screw bolt 15, and is connected to the lever 10 by means of a contractile coil spring 16.

In operation it will be apparent that the spring 16 will normally move the valve 7 from its seat 8 into the position shown in Figure 1. When the engine is started, it will be apparent that the suction within the intake manifold A created by the operation of the engine will tend to move the valve 7 toward the seat 8, and valve 7 will eventually be seated when the engine reaches a predetermined speed so as to cut off the flow of fuel to the engine and when the supply of fuel is cut off from the engine it will be apparent that it will be momentarily stopped and the spring 16 will then react to open the valve 7 for admission of more fuel to the engine. By having the arm 13 adjustable mounted on the support 14 it will be apparent that the tension of the spring 16 may be regulated as desired to regulate the speed of the engine before the valve 7 will close and thus regulate the highest speed that may be attained by the vehicle on which the motor is mounted. It will furthermore be apparent that this device is particularly adapted for use on commercial vehicles and vehicles generally where driven by other than the owners to prevent the operator of the vehicle from exceeding the speed for the vehicle as provided by local regulations, thus making it impossible for the operator of the vehicle to drive the vehicle at an excess speed.

The device may also be used to limit the speed of the engine for operating corn shellers, wood-saws, feed grinders, and the like.

What is claimed is:

1. A speed control governor, comprising an open-ended casing adapted for insertion in the intake manifold of internal combustion motors and having a valve seat therein, a valve stem slidable in said casing, a valve on said stem to engage said valve seat, a lever fulcrumed in a wall of the casing and engaging said stem, an arm adjustable mounted on the casing, and a spring connecting said lever and arm and normally holding the valve unseated.

2. A speed control governor, comprising
an open-ended casing adapted for insertion in the intake manifold of internal combustion motors and having a valve seat therein, a valve stem slidable in said casing and having a socket therein, a valve on said stem to engage said valve seat, a lever fulcrumed in the casing, one end of said lever engaging in the socket in the stem, an arm adjustably mounted on the casing, and a spring connecting said lever and arm and normally holding the valve unseated.

In testimony whereof I affix my signature.

BERT CONLEY.