April 19, 1932. D. J. DOLAN 1,854,735

THROTTLE CONTROL

Filed March 27, 1929

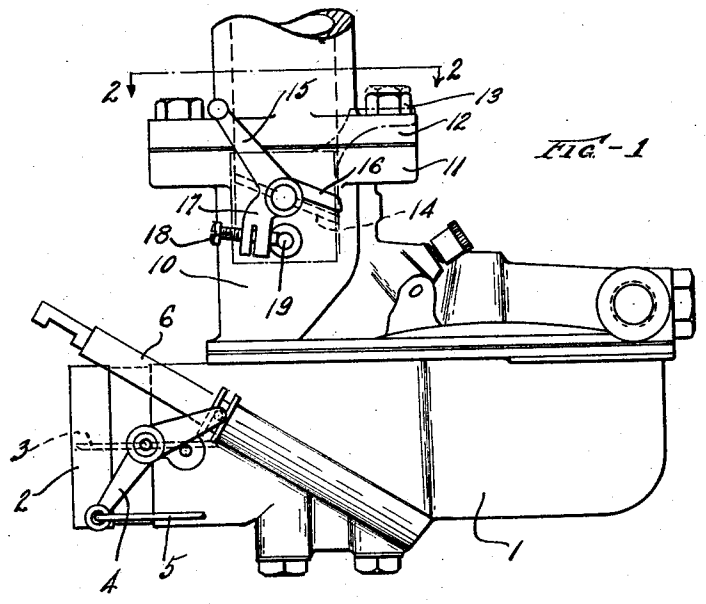

FIG. 1

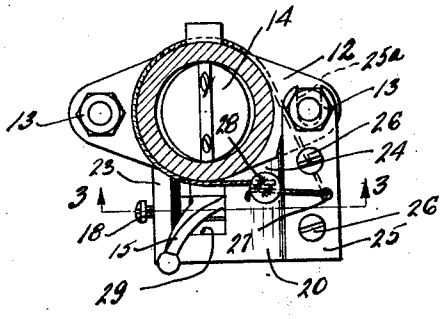

FIG. 2

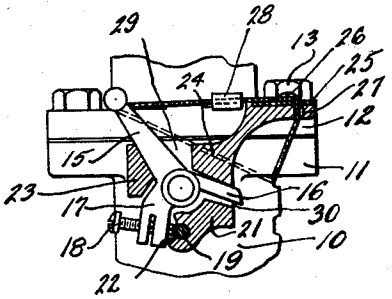

FIG. 3

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UNITED STATES PATENT OFFICE

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THROTTLE CONTROL

Application filed March 27, 1929. Serial No. 350,425.

This invention relates to throttle controlling means for automobiles, its object being to provide means whereby the usual throttling or controlling parts of the carburetor of an automobile may be sealed in such manner as to have their effective motion limited, preventing the operator from exceeding the prescribed speed limits in any manner except by breaking the seal. The invention has particular utility, for example, in those cases where distributors of automobiles purchased at a factory in one city have the automobiles delivered to them in another city by operators who drive them overland, the present throttle control being applied to restrict operation of the throttle and prevent the driver from exceeding the relatively low speed limit, say twenty miles per hour, above which speed a new car should not be driven until its parts have been more or less worn in to relieve the stiffness and tightness of assembling.

In the drawings, which represent one suitable embodiment of the invention, Fig. 1 is a front view of the carburetor with my throttle control applied thereto and shown in dotted lines; Fig. 2 is a plan view of the control; and Fig. 3 is a sectional elevation on the line 3—3 Fig. 2 looking in the direction of the arrows.

The invention may be applied to any form of carburetor or other device for controlling the speed of an automobile. It is shown applied to a well-known type of carburetor including a casing, to which air is supplied through the hollow extension 2, the air flow being controlled by a suitable butterfly valve 3 actuated by a lever 4 connected to operating link 5, said lever 4 also actuating the sliding choke member 6. In the positions of the parts shown the butterfly valve 3 is wide open and the choke is closed, but by pulling on the link 5 the butterfly valve is more or less closed to cut off the air supply and the member 6 is moved upwardly to supply raw fuel to the carburetor for choke purposes.

The mixture of gas and air produced by the carburetor passes out to the engine through the connection 10 provided with a flange 11 secured to the flange 12 of the intake manifold by cap screws 13. At 14 is shown the usual butterfly valve actuated by lever 15 to control the speed of the engine, said lever having two arms 16 and 17, the latter carrying an adjustable stop screw 18, said stop screw and the arm 16 alternately engaging a rigid post 19 to limit movement of the throttle control lever 15 between idling speed and full speed.

The foregoing parts are all standard equipment and form no part of the present invention, which is directed to the means for limiting or restricting movement of the throttle control lever 15 to less than its normal movement.

My throttle control device or attachment comprises a body portion 20 properly shaped to fit the parts of the particular carburetor to which it is to be secured. For this purpose, in the form shown, it is provided with three rearward extensions, one of which, marked 21, is in the form of a hollow sleeve designed to fit over the post 19 before referred to. Said sleeve 21 may be provided with a recess 22 in that side next to the stop screw 18, so that the stop screw can project through the opening 22 into actual contact with the post 19, leaving the idling position of the throttle undisturbed although the sleeve 21 may be left imperforate and the stop screw may be given a new setting or adjustment so as to engage the outer surface of the sleeve in idling position.

Above the extension 21 the body is provided with two other rearwardly extending portions, one of which, marked 23, seats against the upper portion of the carburetor connection 10 at about the flange 11 thereof, while the other extension 24 likewise has a portion seating against the carburetor connection 10 and above it an additional extension in the form of a plate 25, the open slot 25a in the end of which forms two prongs enabling said plate to be pushed in beneath the head of a cap screw 13. Said plate 25 may be attached to the extension 24 by screws 26, and the plate and extension are provided with a small opening 27 through which a wire may be passed and laid or coiled around the connection 10 or a portion of the intake manifold and secured together with a lead or other

suitable seal 28 such as is used on railway car doors and in like places.

Extensions 23 and 24 are separated by a cavity or recess 29 through which the operating arm of lever 15 extends, while the extensions 24 and 21 are separated by a slot 30 in which rests the arm 16 of the throttle control lever. Indeed, the opposite sides of the extension 21 form fixed abutments to limit operating movement of the lever 15 to a fixed amount, usually a very small amount, such as an eighth of an inch or so.

The attachment or control device is applied to the carburetor of the car at the factory by loosening one of the cap screws 13 and pushing the attachment into place with the slotted end of its plate 25 beneath the head of the cap screw which is then screwed up tight to firmly secure the attachment. The sealing wire is then coiled around the manifold and its ends are sealed with a seal, with the wire pulled up tight. As a result, the motion of the throttle lever is now limited by the new abutments or stops provided for its arms, the arrangement being such as to permit the throttle lever to freely move to proper idling position according to the setting of screw 18, but to limit its movement in the opposite direction to limit the car speed to a desired amount, say 20 miles per hour. After the car has been driven to its destination at the distributor's station, the presenting of the attachment with the seal unbroken is conclusive evidence that the car speed has not been exceeded. The attachment can then be removed and sent back to the factory for attachment to another car for like delivery.

What I claim is:

1. In combination with a carburetor having a throttle control lever, a device removably secured to the carburetor and having a portion arranged to limit movement of said lever toward open position, and sealing means for preventing removal of said device from said carburetor without detection.

2. In combination with a carburetor having a throttle lever, a device having a portion arranged to extend into the normal path of said lever to limit the swing of said lever toward open position, and means providing assembly of said carburetor and device and comprising a screw member and a sealing member arranged to prevent outward swinging of the device about said screw member.

In testimony whereof I hereby affix my signature.

DAVID J. DOLAN.