Aug. 14, 1923. 1,464,601

H. J. FAIRCHILD

CARBURETOR CONTROL DEVICE

Filed Oct. 22, 1920

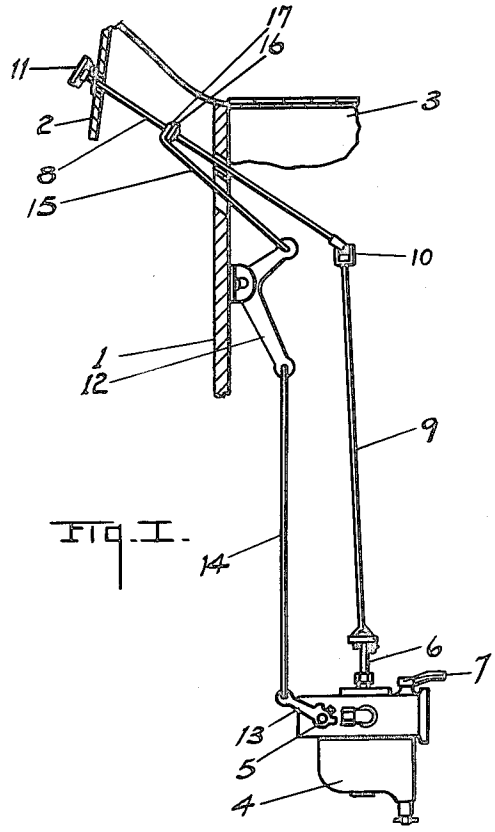


FIG. I.

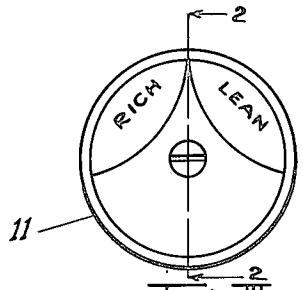


FIG. III.

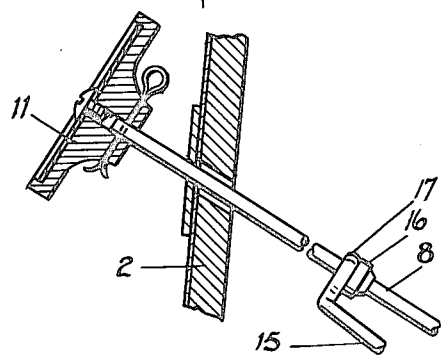


FIG. II.

INVENTOR.
Horatio J. Fairchild
BY Chappell Hall
ATTORNEYS

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UNITED STATES PATENT OFFICE.

HORATIO J. FAIRCHILD, OF KALAMAZOO, MICHIGAN, ASSIGNOR OF ONE-HALF TO WILLIAM DESHLER WARNER, OF COLUMBUS, OHIO.

CARBURETOR-CONTROL DEVICE.

Application filed October 22, 1920. Serial No. 418,777.

To all whom it may concern:

Be it known that I, HORATIO J. FAIRCHILD, a citizen of the United States, residing at the city and county of Kalamazoo and State of Michigan, have invented certain new and useful Improvements in Carburetor-Control Devices, of which the following is a specification.

This invention relates to improvements in carburetor control devices.

The main objects of this invention are to provide an improved carburetor control device of the type used on "Ford" automobiles, having choker and fuel valves.

Further objects, and objects relating to structural details, will definitely appear from the detailed description to follow.

I accomplish the objects of my invention by the devices and means described in the following specification. The invention is clearly defined and pointed out in the claim.

A structure which is a preferred embodiment of my invention is clearly illustrated in the accompanying drawing, forming a part of this specification, in which:

Fig. I is a side elevation of a structure embodying the features of my invention, a portion of an automobile body being indicated in section to illustrate the relation of the parts in use.

Fig. II is an enlarged detail section on a line corresponding to line 2—2 of Fig. III.

Fig. III is a front view of the control finger piece.

In the drawing similar numerals of reference refer to similar parts throughout the several views.

Referring to the drawing, 1 represents the dash of an automobile, 2 the instrument board, and 3 the hood thereof. The carburetor 4, which is shown mainly in conventional form, is provided with a choker valve 5 and a fuel regulating valve 6 and is also provided with a throttle valve 7, but as the means for operating the throttle valve forms no part of this invention they are not illustrated herein.

I provide a control rod 8 which is mounted on the instrument board for rotative and longitudinal adjustment. This control rod 8 is connected to the fuel valve 6 by means of the connecting rod 9 and the universal joint 10, so that the fuel valve is adjusted by the rotative movement of the control rod. The control rod is provided with a finger piece 11 having indicia thereon indicating the direction in which the control rod should be turned to secure a richer or a leaner mixture.

On the front side of the dash 1, I mount a bell crank lever 12. One arm of this bell crank lever is connected to the arm 13 of the choker valve 5 by means of the link 14. The other arm of the lever 12 is connected by the link 15 to the rod 8, the rod being provided with a collar 16 engaging the eye 17 on the rod 15 so that an upward pull on the rod actuates the choker. This, however, does not affect the operating connections for the control rod to the fuel valve so that the fuel valve may be adjusted with the choker closed or with it open or in normal position as may be desired. The choker or air inlet valve is returned to its normal position by the spring usually provided for that purpose and mounted on the stem of the valve.

My improved control device may be easily applied to automobiles equipped with carburetors having chokers such as the "Ford" and renders the operation thereof much more convenient and simple.

I have illustrated an embodiment or adaptation of my improvement which I find very practical. I have not attempted to illustrate or describe certain modifications and adaptations which I contemplate as I believe the disclosure made will enable those skilled in the art to which my invention relates to adapt or embody the same as may be desired.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent, is:

The combination with a carburetor including a choker valve and a fuel valve, a control rod mounted for rotative and longitudinal movement, a fuel valve rod having universal joint connections to the end of said control rod and to said fuel valve whereby said fuel valve may be operated by rotative movement of the control rod, a bell crank lever mounted at one side of said control rod, a link connecting one arm of said bell crank lever to said choker valve, a link connected to the other arm of said bell crank lever and having its other end formed into a laterally offset eye through which said control rod is arranged, and a collar on said control rod coacting

with said eye whereby a longitudinal movement of said control rod will actuate said choker valve, said universal joint connections for said control rod to said fuel valve permitting the operation of the said fuel rod valve and the control rod in any of its longitudinal adjusted positions.

In witness whereof, I have hereunto set my hand and seal in the presence of two witnesses.

HORATIO J. FAIRCHILD. [L. S.]

Witnesses:

GRACE B. THOMPSON,

M. L. GLASGOW.