W. D. WARNER.

CARBURETER CONTROL.

APPLICATION FILED JAN. 29, 1920.

1,373,469. Patented Apr. 5, 1921.

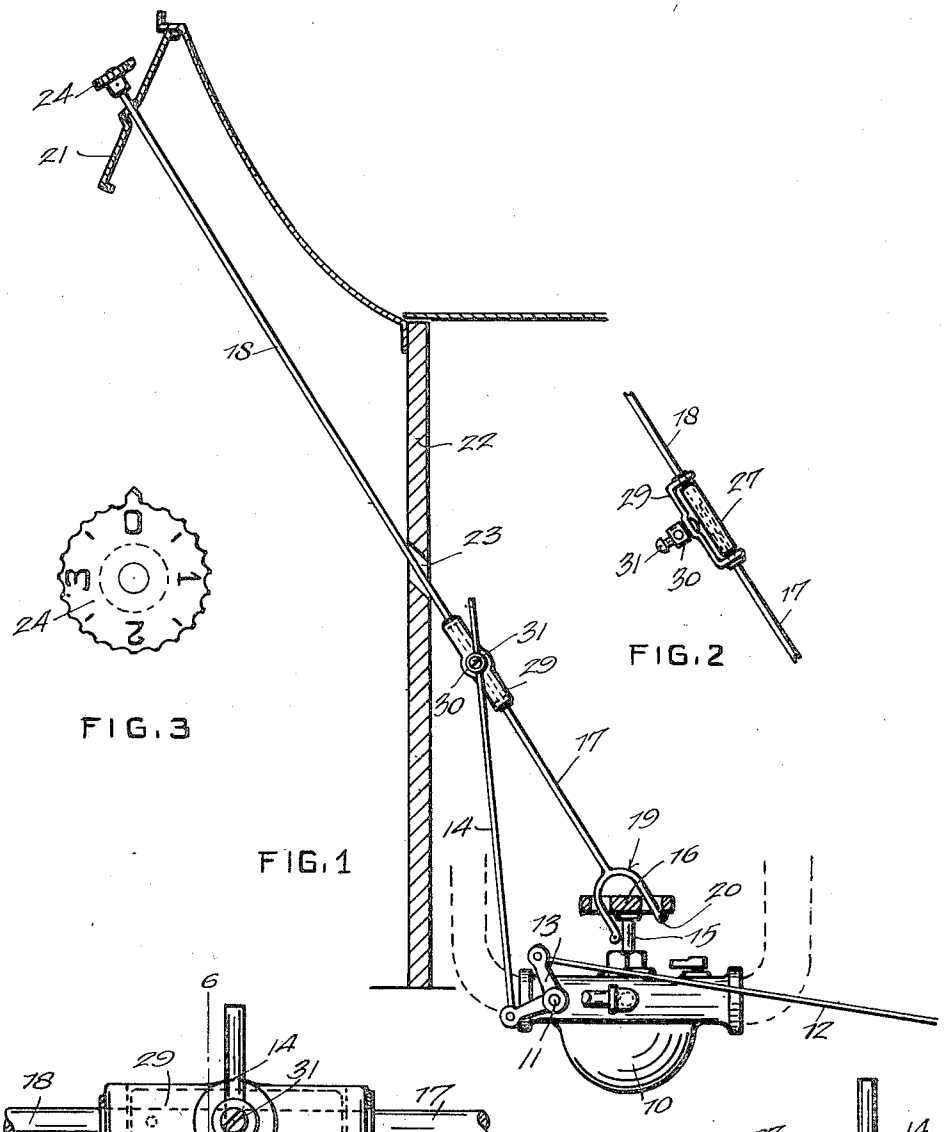


FIG. 1

FIG. 3

FIG. 2

FIG. 4

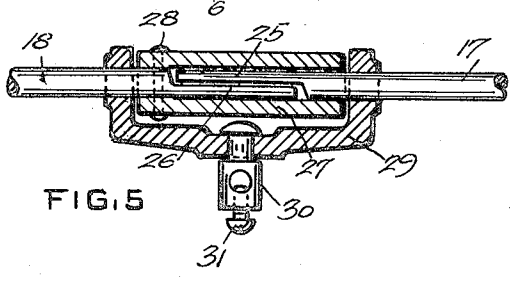


FIG. 5

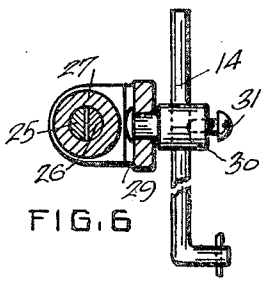


FIG. 6

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CARBURETER CONTROL.

1,373,469. Specification of Letters Patent. Patented Apr. 5, 1921.

Application filed January 29, 1920. Serial No. 354,789.

To all whom it may concern:

Be it known that I, WILLIAM D. WARNER, a citizen of the United States of America, residing at Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Carbureter Controls, of which the following is a specification.

My present invention relates to a well known type of automobile whose carbureter is commonly controlled by a rotatable button on the dash, and more especially to devices of the general nature disclosed in a separate application No. 353,823, filed January 24, 1920, which seeks to adapt such control button to the further purpose of control of the usual choker valve whereby the carbureter and the choker valve may be controlled from the same point within the automobile.

I have proposed such an arrangement in a separate application which my present invention seeks to improve with respect to simplicity, ease of installation and reduction in cost, in connection with these types of bodies permitting of its use.

In the accompanying drawing which illustrates my present invention and forms a part of this specification,

Figure 1 is a vertical longitudinal section illustrating the practical application of my invention,

Fig. 2 is a detail side view of certain of the connections,

Fig. 3 is a face view of the control button,

Fig. 4 is a plan view, on an enlarged scale, of certain of the connections,

Fig. 5 is a longitudinal section therethrough, and,

Fig. 6 is a transverse section taken substantially on line 6—6 of Fig. 4.

Referring now to these figures I have in Fig. 1 shown a carbureter at 10 whose air intake has a choker valve at 11 with the usual forwardly extending choker rod 12 connected to one arm of an actuating bell crank 13, the other arm of which has an upwardly and rearwardly extending choker rod 14 for control from the dash.

The fuel mixing valve is controlled by virtue of its stem 15 having an apertured head 16, by means of a control rod in axially alined forward and rear sections 17 and 18, the lower forward end of the forward section of which has a fork 19 which extends through apertures of the controlling stem head 16 so that the control rod may by its rotation rotate the valve stem 15 and is at the same time permitted certain lengthwise movements, one extremity of the fork 19 at least having a cross pin 20 which prevents it from pulling rearwardly out of engagement with the head 16.

The apparatus proposed by my invention is capable of utilization in certain types of bodies, known as the short body, common to open touring cars, roadsters, light delivery cars and trucks, coupes and taxi cabs, where the instrument board 21 is so located with respect to the dash-board 22 as to permit the control rod sections 17 and 18 to extend from the instrument board and through an opening 23 of the dash-board in a straight line to the carbureter.

The upper rear end of the upper section 18 thus passes rearwardly through an opening in the instrument board 21 and is provided with a control button 24 which is both rotatable and shiftable toward and away from the instrument board for the respective control of the fuel mixing valve and the choker valve.

The adjacent ends of the control rod sections 17 and 18 have reduced lapping extensions 25 and 26 which extend within a sleeve 27 to one end of which the section 18 is securely fastened by a cross pin or rivet 28. This sleeve is disposed endwise between the extensions of a U-shaped yoke 29, the extensions of which are apertured to receive the control rod sections 17 and 18 therethrough in rotatable relation.

To the yoke 29 is swiveled a post 30 in which the upper rear portion of the choker rod 14 is adjustably secured by a set screw 31, and it is thus obvious that when the button 24 is rotated, both sections 17 and 18 of the control rod will be rotated by virtue of their lapping extensions 25 and 26, without affecting or moving the yoke 29 through which they are freely rotatable.

In this way rotation of the button 24 serves to adjust the mixing valve stem 15 without affecting the choker valve, and it is equally obvious that when the button 24 is pulled upwardly and rearwardly away from the dash, the consequent axial shifting movement of the control rod section 18 is communicated through the sleeve 27 to the yoke 29 and through the latter to the choker rod 14 whose movement thus shifts the choker valve bell crank 13, without moving the for-

ward section 17 of the control rod in view of the sliding movement of the latter in the sleeve 27 with respect to the rear section 18.

It is thus obvious that my present improvements provide an arrangement capable of ready installation, which is simple in its nature, inexpensive, and will be effective and efficient in use.

I claim:

1. A device for use in connection with an automobile having a carbureter provided with a mixture regulating valve and an air supply having a choker valve, said device comprising control rods one of which is directly connected at one end to the said choker valve and the other of which is connected at one end to said regulating valve, the control rod of the regulating valve having a control button at its opposite end and being in two axially alined sections slidable relatively to one another and constrained to simultaneous rotation, a yoke having extensions through which said rod sections are rotatable, a sleeve within the yoke around the adjacent ends of the rod sections and connected to one of the rod sections to engage and move the yoke when the rod section is shifted in the direction of its length, and a swiveled connection between the other end of the choker valve rod and the said yoke as described.

2. A device for use in connection with an automobile having a carbureter provided with a mixture regulating valve and an air supply having a choker valve, said device comprising control rods operatively connected to the said choker valve and the said regulating valve, the control rod of the regulating valve having a control button at one end and being in two axially alined sections slidable relatively to one another and having overlapping flat ends constrained to simultaneous rotation, a yoke having extensions through which said rod sections are rotatable, a sleeve around said flat ends within the yoke, secured to one of the rod sections to engage and move the yoke when the rod section is shifted in the direction of its length, a post swiveled in connection with the yoke, and means for adjustably connecting the choker valve rod to the said post.

In testimony whereof I affix my signature.

WILLIAM D. WARNER.