April 6, 1926. 1,579,234

C. F. NEWMAN

DASH CONTROL

Filed May 14, 1923

Fig. 1.

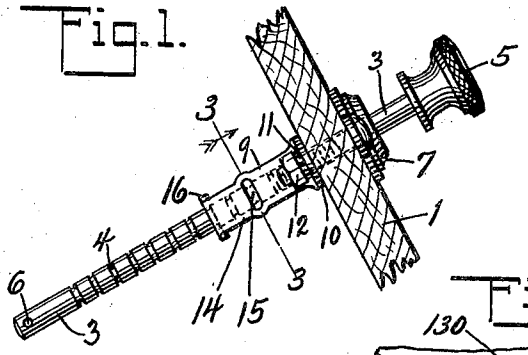


Fig. 5.

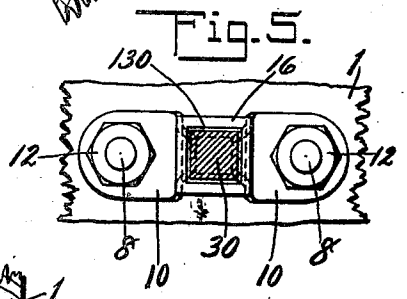


Fig. 2.

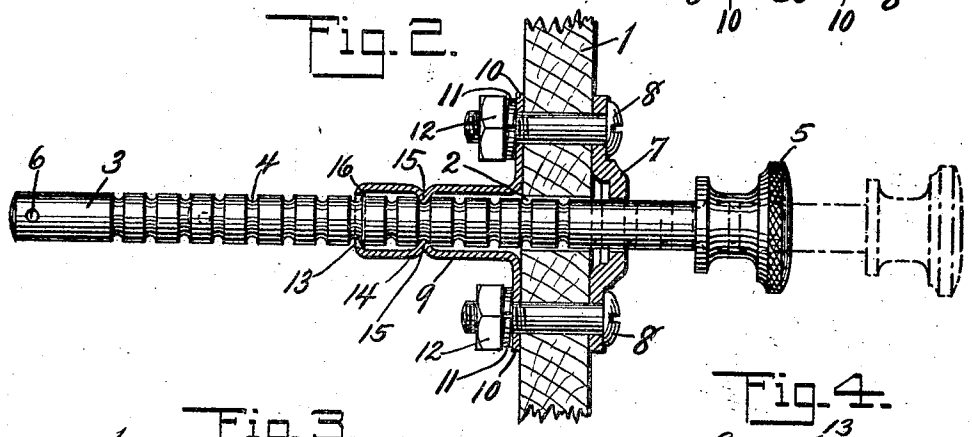


Fig. 3.

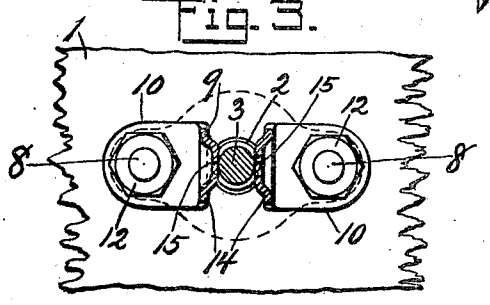
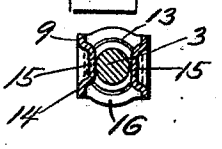


Fig. 4.



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UNITED STATES PATENT OFFICE.

CLAUDE FRANK NEWMAN, OF ST. LOUIS, MISSOURI, ASSIGNOR TO AMERICAN CAR AND FOUNDRY COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW JERSEY.

DASH CONTROL.

Application filed May 14, 1923. Serial No. 638,768.

To all whom it may concern:

Be it known that I, CLAUDE F. NEWMAN, residing at St. Louis, Missouri, and being a citizen of the United States, have invented certain new and useful Improvements in a Dash Control, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and to use the same, reference being had to the accompanying drawings, which illustrate the preferred form of the invention, though it is to be understood that the invention is not limited to the exact details of construction shown and described as it is obvious that various modifications thereof within the scope of the claims will occur to persons skilled in the art.

In said drawings:

Fig. 1 is a side elevation of the invention shown as applied to the instrument board of an automobile;

Fig. 2 is a central longitudinal section of the same on a larger scale;

Fig. 3 is a transverse section taken on the line 3—3 of Fig. 1 looking in the direction of the arrow;

Fig. 4 is a transverse section taken on the line 3—3 of Fig. 2 looking in the direction opposite to the direction of the arrow; and

Fig. 5 is an elevation of a modified form of my device, looking towards the right in Fig. 1, the adjusting rod being shown in section.

This invention relates to valve regulating means and more particularly to a means adapted to be applied to the instrument board of an automobile for adjusting the position of the choker valve of the air intake of the engine carbureter to control the air supply thereof.

As shown in the drawings, a support or instrument board 1 is provided with an opening 2 in which is slidably mounted a rod 3 provided with a series of shallow annular grooves 4 spaced a short distance apart and extending for the greater part of the length of the rod. At its outer end the rod is provided with an operating handle or knob 5 and projects through the support 1, being provided at its inner end with an opening 6 to which is secured a wire (not shown) which connects with the choker valve of the carbureter. Surrounding the rod 3 and engaging the face of the instrument board is a guide plate or guide 7 secured thereto by the bolts 8 which also serve to hold the locking spring 9 against the rear face of the instrument board. The locking spring 9 is formed from the strip of spring metal folded to a substantially U-shape and having flanges 10 provided with openings through which the bolts 8 pass to receive the lock washers 11 and nuts 12. The body of the locking spring 9 is provided with a flat outer portion 16 in which there is formed an opening 13 through which passes the rod 3, the locking spring 9 thus aiding in guiding the rod 3. The sides 14 of the body are provided with projections 15 formed by indenting the sides 14, these indentations being placed opposite to each other and the projections 15 formed thereby being adapted to engage in opposite sides of the grooves on the rod 3. The sides 14 possess sufficient resiliency to permit of the sides being sprung apart when the projections 15 are engaged by the portions of the rod between the shallow grooves 4 and to cause the projections 15 to snap back into the grooves as the grooves come opposite the projections thereby serving to retain the rod 3 in position when the projections 15 are in engagement with a groove and readily permitting of the moving of the rod to another position by the application of pressure on the knob 5. Should the rod 3 or projections 15 wear so that the rod is not securely held, the projections can be reformed so as to engage more deeply in the annular grooves by squeezing the spring 9 between the cutters of a pair of pliers, the edges of the cutters engaging the spring 9 in line with the projections 15.

The construction of the modified form shown in Fig. 5 is identical with the construction shown in Figs. 1 to 4 except that the rod 3 of Figs. 1 to 4 is replaced by a rod 30 of angular crosssection which passes through a correspondingly shaped opening 130 in the end of the spring 9. In this construction, the shape of the rod 30 and the opening 130 prevents rotation of the rod 30 in its support and twisting of the wire which connects the rod 30 to the choker valve of the carbureter.

What is claimed is:

1. In combination, a support, a rod having annular grooves slidably mounted in said

support and a folded spring strip secured to said support and having projections formed therein adapted to engage said grooves.

2. In combination, a support, a rod having annular grooves slidably mounted in said support and a U-shaped spring strip having its ends secured to said support and its body portion apertured to receive said rod and having projections formed therein adapted to engage said grooves.

3. In combination, a support, a rod having annular grooves mounted for reciprocation in said support and a U-shaped retaining spring having projections adapted to engage said grooves.

4. In combination, a support, a rod having annular grooves mounted for reciprocation in said support and a retaining spring apertured to receive said rod and having projections adapted to engage said grooves.

5. In combination, a support, a rod having annular grooves slidably mounted in said support and a U-shaped retaining spring apertured to receive said rod and having projections adapted to engage said grooves.

6. In combination, a support, a rod slidably mounted in said support and a spring apertured to receive said rod and prevent rotation thereof, said spring having projections formed therein adapted to yieldingly retain said rod in adjusted position.

7. In combination, a support, a noncircular rod slidably mounted in said support and a spring guiding means for said rod with a perforation therein slidably receiving said rod and conforming to the contour thereof to prevent rotation of said rod, said spring having a portion engaging the rod and yieldingly holding said rod in adjusted position.

8. In combination, a support, a guide, a valve control rod longitudinally movable through said guide and support, a perforated flat spring carried by said support in part parallel therewith and having portions extending from the support longitudinally of the rod and engaging said rod at a distance from the support.

9. In combination, a support, an adjusting rod projecting through and slidably mounted in said support and noncircular in cross section and a spring provided with a perforation slidably receiving the rod and conforming to the transverse contour thereof to prevent rotation of said rod, said spring having a projection engaging the rod and yieldingly retaining said rod in a longitudinally adjusted position.

10. In combination, a support, a rod slidably passing through said support, and a folded spring strip secured to said support and having arms extending longitudinally of the rod from the support, said arms being provided with portions engaging said rod for yieldably holding the rod against sliding movement.

11. In combination, a support having an opening, a guide secured in operative relation to the opening at one side of the support, a rod slidably passing through the guide and opening of said support, and a spring secured to the support at the opposite side from said guide and having arms extending longitudinally of the rod upon opposite sides thereof and having engagement with the rod to yieldably hold the rod against sliding movement.

12. In a valve regulating means for carbureters of automobiles, a longitudinally slidable valve operating rod, a guide for said rod adapted to be secured to the outer face of the instrument board of an automobile, in combination with a flat spring adapted for connection with the inner face of such instrument board, the spring being adapted to extend outwardly away from said instrument board and being adapted to grip said rod intermediate its length.

13. In combination, a support, a guide at one side of said support, a rod extending through the guide and support, a spring at the opposite side of said support having engagement with said rod to yieldably hold the rod in an adjusted position, and common means for securing the guide and spring to said support.

14. In a valve regulating device, a longitudinally slidable valve control rod, a perforated locking spring adapted to extend at each side of said rod and through which said rod is adapted to slide and by means of which the rod can be held in predetermined positions, in combination with means adapted to support the rod and spring in cooperative relation on the inner face of an instrument board of an automobile.

In witness whereof I have hereunto set my hand.

CLAUDE FRANK NEWMAN.