

1,333,776.

Patented Mar. 16, 1920.

FIG. 2

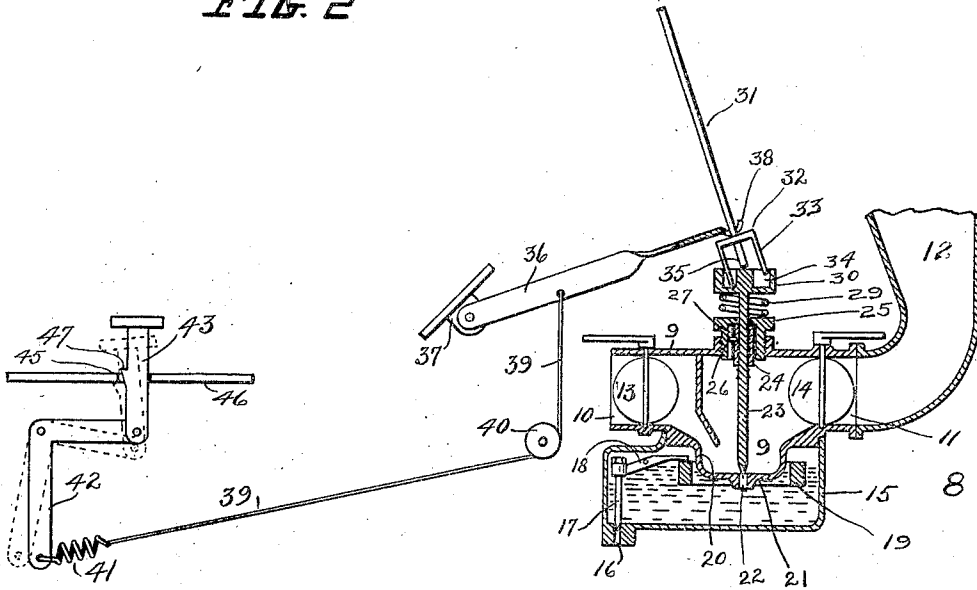
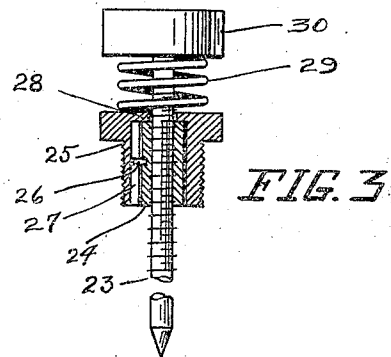
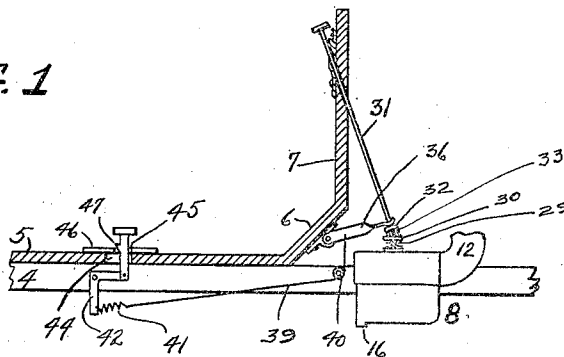


FIG. 1



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CARBURETER.

1,333,776.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, GEORGE A. PICOTTE, a citizen of the United States, and a resident of Lake Andes, in the county of Charles Mix and State of South Dakota, have invented certain new and useful Improvements in Carbureters, of which the following is a specification.

The present invention relates to carbureters and more particularly to carbureters of vehicle motors.

The invention aims to provide improved means for preventing waste of fuel when the vehicle is coasting.

Another object of the invention is the production in a carbureter of improved means for opening and closing the needle-valve without interfering with its delicate adjustment.

With these and other objects in view, the invention consisting in the construction, combination and novel arrangement of parts will be fully understood from the following description reference being had to the accompanying drawings which form a part of this application and in which like characters of reference indicate corresponding parts throughout the several views, of which,—

Figure 1 is a fragmentary vertical section of a motor vehicle equipped with the preferred embodiment of my invention;

Fig. 2 is an enlarged side elevation of the device, with carbureter being shown in section and a portion of the operating lever cut away; and

Fig. 3 is an enlarged elevation of the needle-valve and related parts shown in section.

The structure shown in Fig. 1 includes a motor-vehicle frame, 4, having a floor, 5, mounted thereon, a foot board 6, and a dash 7. In front of the dash is mounted a familiar form of carbureter indicated generally at 8. The carbureter includes a carbureting chamber 9, having an air-inlet, 10, and a vapor-outlet, 11, adapted to deliver into the manifold 12. The said inlet and outlet are controlled by butterfly valves 13, and 14, respectively. Below the carbureting chamber is mounted a float-chamber 15, having a fuel-induction-opening 16, opened and closed by a needle-valve 17, carried by one end of a lever 18, fulcrumed within the float-chamber and engageable at its free end by a float 19. The carbureting chamber is separated from the float chamber by a par-

tition 20, having a cup-shaped part 21, which depends below the normal liquid level of the float chamber and is provided with an induction-opening 22, in which is adapted to be seated a needle-valve 23, threaded into a sleeve 24, slidable longitudinally within a bushing 25, threaded into the top of the carbureting chamber. Relative rotation between the sleeve and bushing is prevented by a stud 26, carried by the sleeve 24, and extending into a slot 27, in the bushing. The upper end of the bushing is provided with an annular shoulder 28 against which the sleeve 24, is normally seated by means of a compression-spring, 29, positioned between the bushing and the head, 30, of the needle-valve.

By virtue of this construction, it is evident that the needle-valve may be adjusted in the usual way to regulate the amount of fuel admitted through the opening 22, and without interfering with the screw adjustment of the needle-valve, the needle valve may be positively seated by depressing the needle-valve, thereby preventing entrance of fuel into the carbureting chamber.

The present embodiment is provided with a familiar form of needle-valve adjustment including a rod, 31, which extends upwardly and rotatably through the dash and carrying at its lower end a boss, 32, having downwardly extended fingers, 33, engaged within openings 34, in the head of the needle-valve, whereby the driver can conveniently turn the needle-valve to adjust the normal flow of the fuel. The lower end of the rod, 31, preferably rests upon the head of the needle-valve, as at 35, whereby depression of the rod will similarly move the needle-valve. The operating means consists of a lever, 36, fulcrumed at one end on a suitable bearing, 37, mounted under the foot-board, 6, the free end 38 of the lever being bifurcated to straddle the rod, 31, and rest on the boss 32. To the intermediate portion of the lever 36, is connected one end of a flexible link, 39, which passes around a direction-pulley, 40, mounted on the main-frame; and the other end thereof, is connected to one end of a retracting spring, 41, the opposite end of which is connected to one arm of a bell-crank, 42, fulcrumed on the main-frame and having its other arm pivotally connected to a plunger, 43, which operates in a slot, 44, in the floor-board; and a slot 45, in a plate 46, mounted on the floor board. Obviously

depression of the plunger 43, will seat the valve 23, in which position it may be held by engagement of a shoulder, 47, on the plunger, with the underside of the plate, 46.

3 The spring 41, provides a yieldable connection between the lever 26, and the bell-crank, whereby depression of the plunger 43, may be continued after the needle-valve has become seated, to bring the shoulder 47,
13 into engagement with the underside of the plate, 46.

Having thus described my invention what I claim as new and desire to secure by Letters Patent of the United States, is—

15 A carbureter having a fuel passage and a needle-valve adapted to be screwed toward or from the passage to accordingly normally close or open the passage, the needle-valve

also being depressible to close the passage, and held yieldably from the passage, in combination with an upwardly-inclined rotatable and longitudinally-movable rod (having its lower end engaged with the needle-valve and provided with a boss adjacent its lower end having a fork engaged with the needle-valve to rotate the latter, a lever engaged with the boss to depress the rod and needle-valve, a controlling member for the lever movable between opened and closed position of the valve, and adapted to be locked in closed position, and a yieldable operative connection between said member and lever. 20 25 30

In testimony whereof, I have hereunto set my hand this 8th day of Sept., 1917.

GEORGE A. PICOTTE.