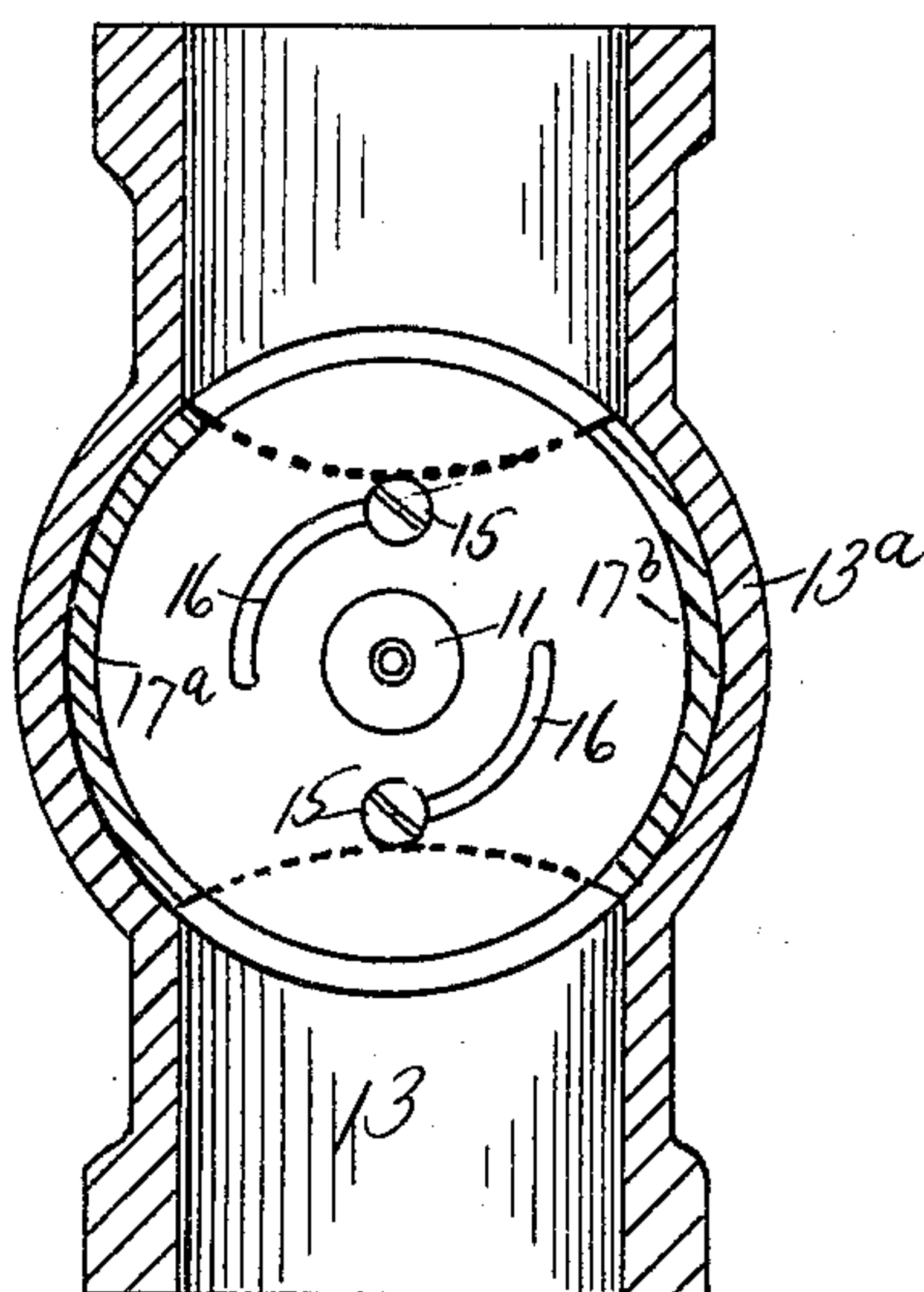
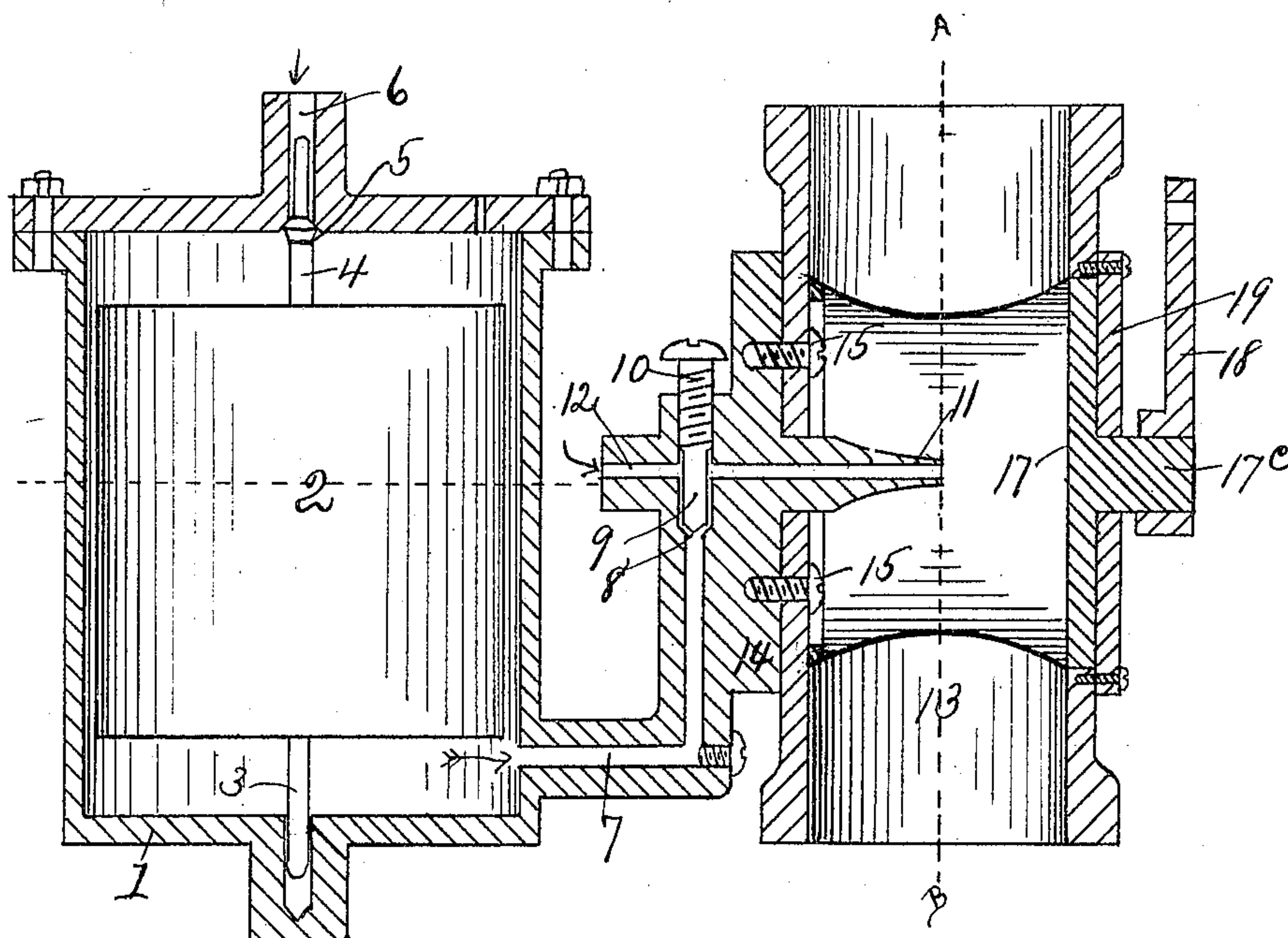


No. 789,749.

PATENTED MAY 16, 1905.

H. B. MAXWELL.
CARBURETER FOR GAS ENGINES.
APPLICATION FILED SEPT. 4, 1903.



WITNESSES
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HARRY B. MAXWELL, OF ROME, NEW YORK, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO MAXWELL & FITCH COMPANY, OF ROME, NEW YORK.

CARBURETER FOR GAS-ENGINES.

SPECIFICATION forming part of Letters Patent No. 789,749, dated May 16, 1905.

Application filed September 4, 1903. Serial No. 171,867.

To all whom it may concern:

Be it known that I, HARRY B. MAXWELL, of Rome, in the county of Oneida and State of New York, have invented certain new and useful Improvements in Carbureters for Gas-Engines; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the numerals of reference marked thereon, which form part of this specification.

The object of my invention is to provide an improved carbureter for use with gas-engines by means of which the mixture can be satisfactorily regulated and which is simple in construction and easily operated and adjusted for different positions of use.

In the drawings, Figure 1 shows a vertical section of my carbureter, including the float feed-regulator. Fig. 2 shows a section taken on line A B of Fig. 1, showing the parts to the left of said section-line.

Referring to the reference-figures in a more particular description, 1 indicates the float feed tank or chamber which receives the float 2, having spindles 3 4 engaging in bearings in the end of the tank, serving to direct the movement of the float and maintain it in position. The spindle 4 also includes a valve 5, which in coöperation with the seat is adapted to regulate the inflow of gasolene or other carbureting fluid through the passage 6. From the receptacle 1 there is a passage 7, in which is provided a valve-seat 8. The flow through this passage is regulated by the valve 9, mounted upon the adjusting-screw 10. After passing the valve 9 the passage extends through and out of the end of the nozzle 11. Between the valve-seat 8 and the nozzle 11 the passage 7 is provided with an intake-opening 12. The nozzle 11 occupies a substantially central position in the casing 13, which casing is quite similar to the body of an ordinary gas-cock. This casing 13 has a face to fit and is secured on a face-plate 14, surrounding the nozzle 11, by screws 15 15. These screws pass through circular slots 16 16, and the angle of the cas-

ing 13 with reference to the float feed mechanism may be adjusted by tightening the screws 15 at any desired points in the slots 16.

The casing 13 has an inlet-opening at one end and an outlet-opening at the other, and as the construction is shown it is immaterial which is which. In a circular enlargement 13^a of the casing 13 I provide a rotary cut-off device 17, which includes particularly the two gates 17^a and 17^b. For operating the cut-off device 17 there is provided a handle 18, secured to the stem 17^c thereof, and the cut-off device is held in position in the casing and the casing closed by the removable cap or plate 19.

The arrangement of the float 2 is such that it will shut off the supply of gasolene or carbureting fluid to the inlet 6 at or before the time the level in the chamber 1 has attained the point indicated by the horizontal dotted line in Fig. 1.

When air or the gas to be carbureted is passing through the casing 13 across the end of the nozzle 11, the suction induced causes the gasolene or carbureting fluid to move from the receptacle 1 through the passage 7 and out of the nozzle 11. The amount of the flow can be regulated by the valve 9. At the same time a small amount of air is taken through the passage 12 and also mingling with the gasolene passes out of the delivery end of the nozzle 11. Under full operation the gates 17^a and 17^b will be preferably in full opened position, as indicated in Figs. 1 and 2. By turning the cut-off device 17 by means of the handle the intake of air and the delivery of the carbureted air are simultaneously regulated or shut off. By regulating this cut-off device the quantity of the mixture can be nicely regulated to answer for a faster or slower speed for the engine.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination in a carbureter device of the face-plate 14, having the nozzle 11 projecting centrally therefrom, and the casing 13 having an opening for receiving the nozzle, and means for adjustably securing the casing on the face-plate, substantially as set forth.

2. In a carbureter, a combination of a cas-

ing, having inlet and outlet openings, a rotatable cut-off device in said casing, having gates 17^a and 17^b, a handle attached to one side of said rotatable cut-off device, and the
5 carbureting-nozzle projecting axially into said rotatable cut-off device, substantially as set forth.

In witness whereof I have affixed my signature, in presence of two witnesses, this 31st day of August, 1903.

HARRY B. MAXWELL.

Witnesses:

OSWALD P. BACKUS,
NELLIE L. BUCK.