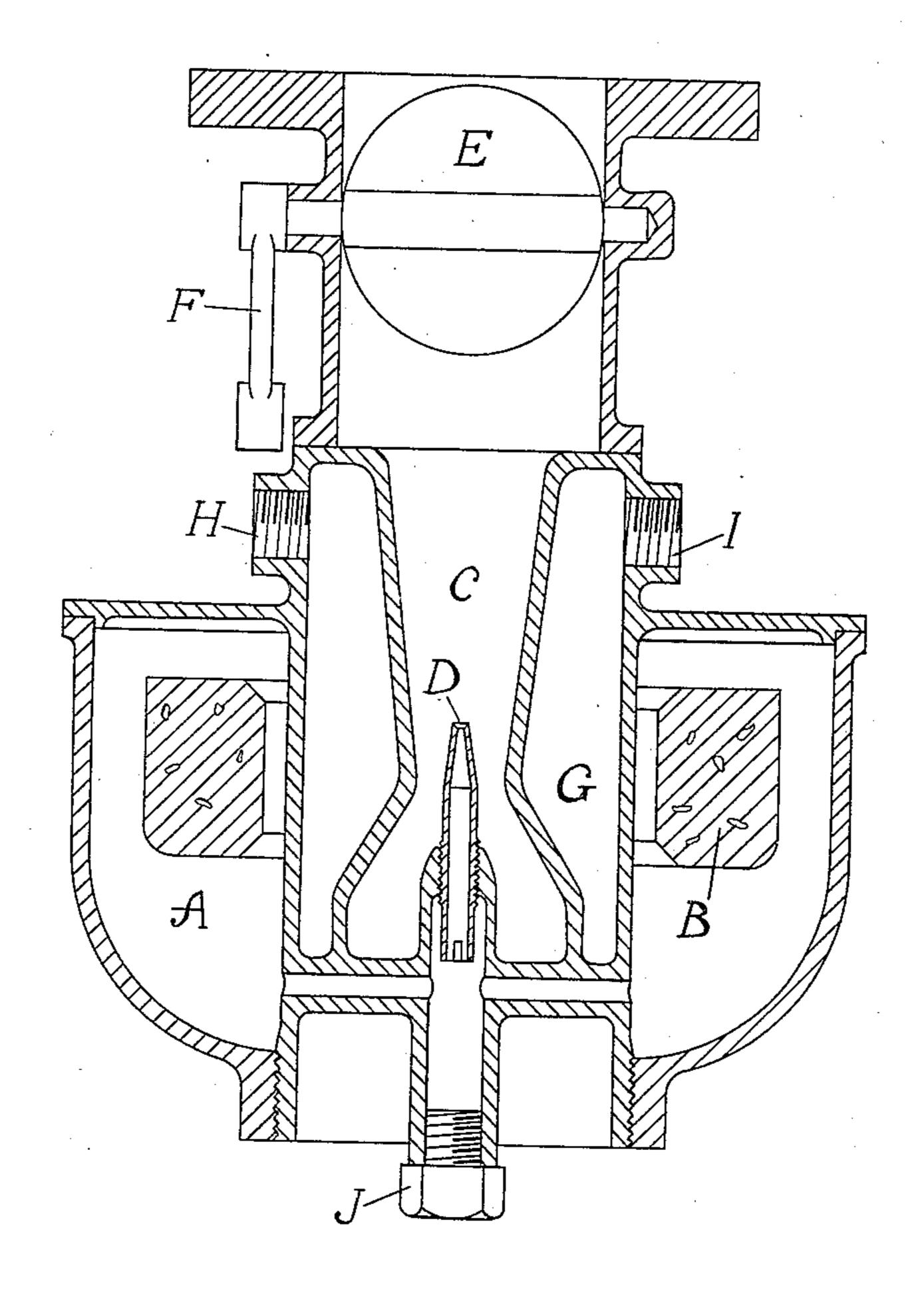
## A. M. WOLF. CARBURETER, APPLICATION FILED MAY 8, 1909.

954,905.

Patented Apr. 12, 1910.



WITNESSES:

leharles M. Vision. Earl Stiken, Crawpone

INVENTOR.

## UNITED STATES PATENT OFFICE.

AUSTIN M. WOLF, OF NEW YORK, N. Y.

954,905.

Patented Apr. 12, 1910. Specification of Letters Patent.

Application filed May 8, 1909. Serial No. 494,777.

To all whom it may concern:

Be it known that I, Austin M. Wolf, a citizen of the United States, residing at New York, in the borough of Manhattan, county of New York, and State of New York, have invented certain new and useful Improvements in Carbureters, of which the following is a specification.

My invention relates to such devices as are 10 employed to vaporize a liquid hydrocarbon in connection with internal combustion en-

gines or the like.

The object of the invention is to provide a means whereby the mixture made by the car-15 bureter is of a uniform quality, free from condensed particles of the liquid hydrocarbon, and in a perfect state for combustion. These and other objects will be more clearly set forth with reference to the accompany-\_o ing drawing, which is a sectional view of a carbureter embodying my invention.

In the desirable form of construction shown, the float-chamber A is concentric

with the mixing-chamber C.

B represents the float.

The spraying nozzle D is fixed perpendicularly in the mixing-chamber, as shown. The throttle valve E, actuated by the lever F, controls the volume of fuel charge. The 30 drain-plug J allows the removal of foreign matter and also gives access to the nozzle D.

Surrounding the mixing-chamber C is a jacket G. Through this jacket warm water circulates, as from the cooling system of the 35 internal combustion engine. Any fluid producing the desired result can be used. Inlet and outlet ports, H and I, open into the jacket G. Baffle plates (not shown) or equally efficient means are provided, so that 40 the fluid used enters the one port at the top of the jacket, flows down to the bottom of the same, then upward and out the other port. In this way, the walls of the mixingchamber are kept warm and any particles of

the liquid hydrocarbon coming in contact 45 with the same are instantly vaporized. Thus the inner wall of the jacket keeps the mixing - chamber warm. The outer wall of the jacket G is directly within the floatchamber and therefore the contents of the 50 latter are in contact with the former. The result is that the liquid in the float-chamber is kept warm. Therefore vaporization of the hydrocarbon is further aided. In this way, the hydrocarbon being warmed and the 55 entering air also, perfect vaporization follows. As will be readily seen, warming the liquid to be volatilized, does far more than merely warming the air; and by doing both the finest results are obtained. The single 60 jacket, as shown, doing a double duty, makes a very compact, simple and efficient construction.

It will be understood that parts and details of construction may be added, omitted, 65 modified and substituted without departing

from the spirit of the invention.

I claim as my invention— 1. A carbureter for the purpose described having a float-chamber, a mixing-chamber, 70 an air inlet leading thereto, and a jacket separate from the mixing-chamber and air inlet around said mixing-chamber and within said float-chamber.

2. A carbureter for the purpose described 75 having a float-chamber, a mixing-chamber, an air inlet leading thereto, and a jacket separate from the mixing chamber and air inlet around and extending the length of said mixing-chamber.

In testimony whereof I have hereunto subscribed my name this 5th day of May, A. D. 1909.

Witnesses:

Hamilton A. Wolf, HENRY WOLF.