(No Model.)

F. A. REICHARDT.

CARBURETOR FOR THERMOCAUTERS.

No. 538,791. Patented May 7, 1895

Fig. 1.

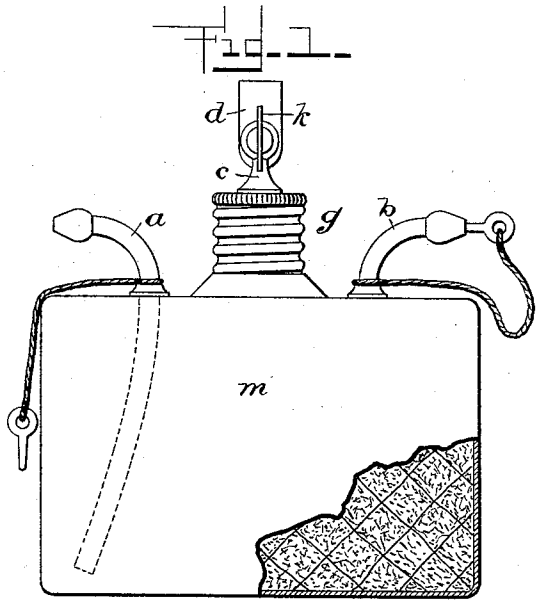


Fig. 2.

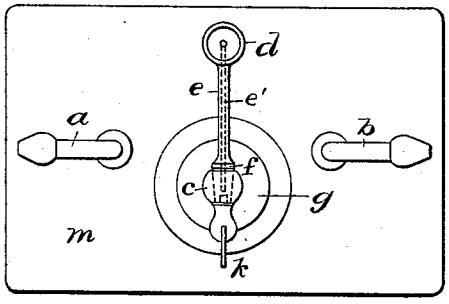
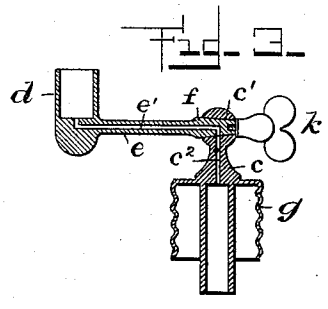


Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

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CARBURETOR FOR THERMOCAUTERS.

SPECIFICATION forming part of Letters Patent No. 538,791, dated May 7, 1895.

Application filed May 2, 1894. Serial No. 509,863. (No model.)

To all whom it may concern:

Be it known that I, FERDINAND ALFRED REICHARDT, a citizen of the United States, residing at the city of New York, in the county of New York and State of New York, have invented a new and useful Improvement in Carburetors for Thermocauters, of which the following is a specification.

The nature of the invention consists in the details of combination and construction substantially as illustrated in the accompanying drawings, hereinafter described, and subsequently pointed out in the claim.

Figure 1 is a side elevation of my improved carburetor, partly broken away to show the fibrous filling. Fig. 2 is a plan view of the same, showing the relative positions of the combustion-chamber and the inlet and outlet pipes or nozzles. Fig. 3 is a vertical section through the screw-cap, valve, and combustion-chamber.

In the drawings, *m* indicates the body of the carburetor chamber, of any convenient size, and of any desired form or material. This body *m* forms a hollow chamber or vessel, which is packed with cotton, asbestos or any other suitable, fibrous material.

a represents the inlet and *b* the outlet pipe or nozzle. The inlet pipe *a*, is preferably extended down to a point near the bottom of the chamber *m*, while the outlet pipe *b* terminates at or near the top of the chamber to which it is secured.

g is a screw cap which is adapted to fit upon a corresponding screw-neck at a point near the center, in length, of the body or vessel *m*. This cap *g*, best illustrated in Fig. 3 consists of a sleeve or threaded collar, as shown, upon which is mounted a post or upright, *c*, in which is formed a suitable valve seat, or tapering perforation *c'*. *f* is a valve, fitting said seat, and adapted to be turned by means of a thumb piece *k*, projecting therefrom. *e* is a pipe or tube extending laterally from said valve *f*, and having formed upon its outer end a cylindrical cup *d*, which forms the combustion chamber of my improved carburetor.

e' represents the duct or perforation, through the tube *e* and valve *f*, and c^2 represents a corresponding duct or passage in the post *c*, for the admission of the vapor to the valve.

When the valve is adjusted to the position shown in Fig. 3, the vapor passes from the chamber *m*, through the perforation c^2, thence through the perforation in the valve, through the pipe or tube *e* and into the combustion chamber, where it may be ignited.

To use my invention, the carburetor is charged with a volatile carbon fluid in the common and well known way. A suitable pumping apparatus is then connected, by a suitable tube, with the inlet nozzle *a*, and a vapor, thermo-cauter, of any approved construction, attached by a flexible tube, to the outlet nozzle *b*. Then the valve *f* is turned, until vapor is admitted to the combustion chamber *d*. The operator then begins to pump air through the inlet *a* into the chamber *m*, thus forcing the vapor into the combustion chamber, where it may be lighted, thus producing considerable heat. If then the cauterizing end of the cauter, be held in the flame of the combustion chamber, it will soon be heated enough to operate with. The valve or cock *f* may then be turned so as to shut off the vapor mixture from the combustion chamber, and the proper degree of heat of the cauter may, thereafter, be maintained by forcing the vapor into the combustion chamber of the cauter, where it is ignited and burned in a well known manner.

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

In a carburetor for thermocauters, a chamber or receptacle *m*, containing an absorbent or fibrous material, in combination with a cap *g*, a combustion chamber *d*, connected with said cap, inlet and outlet nozzles for admitting air to and permitting the discharge of carbureted air from said carburetor chamber to the cauter, said inlet and outlet being independent of the combustion chamber supply-pipe, whereby carbureted air may be admitted, either to the combustion chamber or to the cauter or to both, simultaneously, in the manner and for the purpose described.

In testimony that I claim the foregoing as my invention I have hereto signed my name, in presence of two witnesses, this 30th day of March, 1894.

F. ALFRED REICHARDT.

Witnesses:
S. G. PATTERSON,
J. B. TANNER.