(No Model.)

F. M. ROY.

CAUTERIZING APPARATUS.

No. 312,512. Patented Feb. 17, 1885.

Fig. 1.

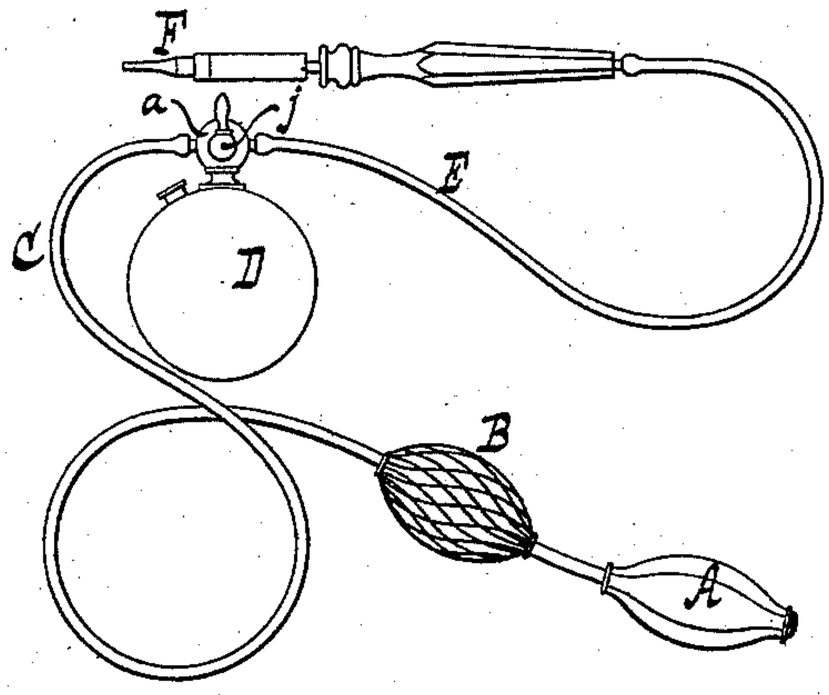
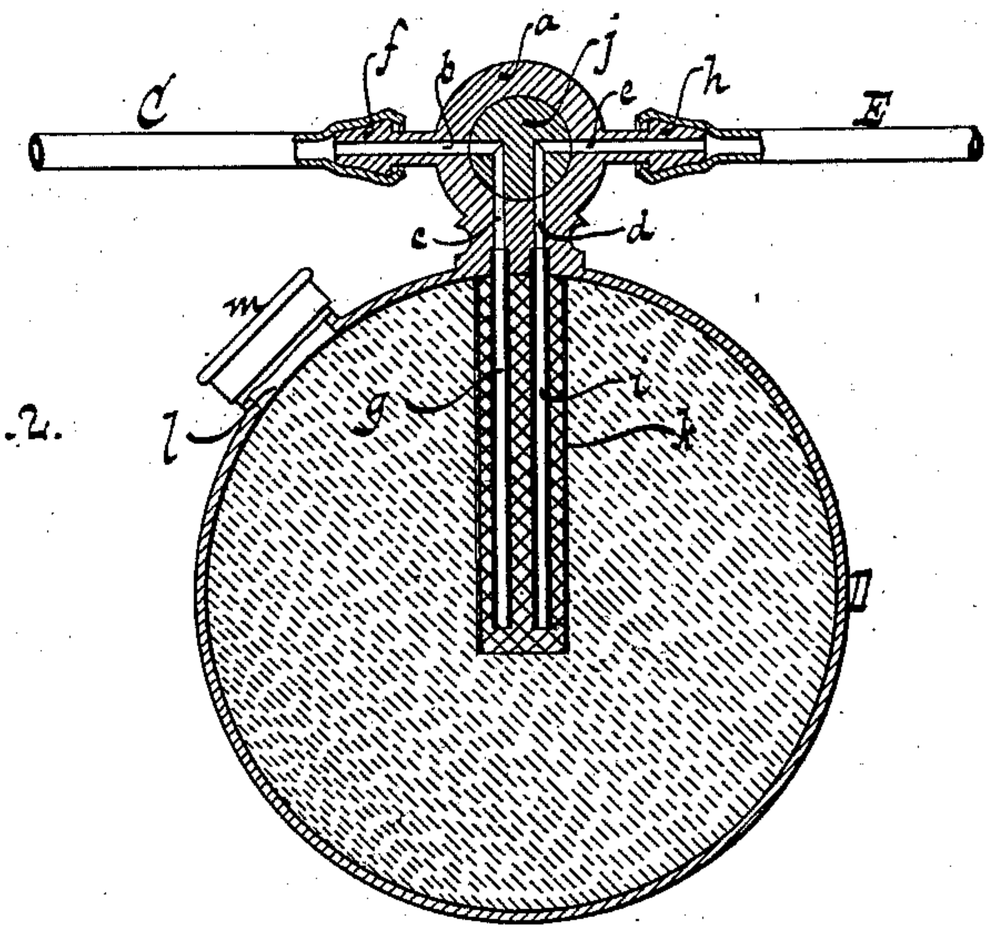


Fig. 2.



WITNESSES:

Otto Hufeland

William Miller

INVENTOR

Fernand M. Roy

BY

Van Santvoord & Hauff

ATTORNEYS

UNITED STATES PATENT OFFICE.

FERNAND M. ROY, OF JAMAICA, NEW YORK.

CAUTERIZING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 312,512, dated February 17, 1885.

Application filed November 26, 1884. (No model.)

To all whom it may concern:

Be it known that I, FERNAND M. ROY, a citizen of France, residing at Jamaica, in the county of Queens and State of New York, have invented new and useful Improvements in Cauterizing Apparatus, of which the following is a specification.

This invention relates to a cauterizing apparatus in which a suitable cauterizing-iron or hollow metallic tip is heated to the temperature required for cauterization by means of the combustion of carbureted air or similar fuel.

My invention consists in the combination, with the carbureting-vessel, of a head from which extend two pipes down into the carbureting-vessel, a four-way cock fitted into said head, and two nipples extending from said head, one of said nipples being intended to connect with the air-supply pipe, and the other forming the discharge for the carbureted air.

In the accompanying drawings, Figure 1 represents a side view of a cauterizing apparatus constructed according to my invention. Fig. 2 is a section of the carbureting-vessel on a larger scale than the previous figure.

Similar letters indicate corresponding parts.

In the drawings the letter A designates an elastic ball with valves serving to force the air into the regulating-chamber B, and thence through the pipe C into the carbureting-vessel D. This vessel is by preference made of sheet metal, but it can be made of any other suitable material. It is provided with a head, *a*, in which are formed four channels, *b c d e*. The channel *b* extends out through a nipple, *f*, which connects with the air-supply pipe C, and the channel *c* leads into a pipe, *g*, which extends from the head *a* down into the carbureting-vessel D. The channel *e* extends through a nipple, *h*, which forms the discharge for the carbureted air, and the channel *d* leads into a pipe, *i*, which extends from the head *a* down into the carbureting-vessel D. The head *a* forms the seat for a four-way cock, *j*, and when this cock is turned to the position shown in the drawings the channel *b* is brought in communication with the channel *d*. The pipes *g i* are protected by a wire screen, *k*, and the vessel D is filled with sponge or other porous and absorbent material. The vessel D is charged with the hydrocarbon liquid through an opening, *l*, which is closed by a cap, *m*. The hydrocarbon liquid is absorbed by the sponge, and when the four-way cock is opened, as shown in the drawings, the air injected through the pipe C passes down through the pipe *g*, and after having become carbureted by contact with the saturated sponge it passes out through the pipe *i* and channels *d e*. The nipple *h* connects by a pipe, E, with the cauterizing-tip F. When the cock *j* is closed, the escape of the hydrocarbon liquid or of its vapors from the vessel D is effectually prevented, and the apparatus can be carried in the pocket or transported from place to place without danger of spilling any portion of its contents; and when the apparatus is set in operation the supply of carbureted air to the cauterizing-tip can be regulated by the proper manipulation of the four-way cock *j*, so that the temperature to which said tip is heated can be maintained at the required point, which is of great importance for the successful use of the cauterizing apparatus.

This apparatus has been constructed for the purpose of simplifying Paquelin's thermocautery, but it is also applicable to all instruments where either gases or liquids are to be projected.

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

The combination, substantially as hereinbefore described, with the carbureting-vessel, of a head from which extend two pipes down into the carbureting-vessel, a four-way cock fitted into said head, and two nipples extending from said head, one of said nipples being intended to connect with the air-supply pipe and the other forming the discharge for the carbureted air.

In testimony whereof I have hereunto set my hand and seal in the presence of two subscribing witnesses.

FERNAND M. ROY. [L. S.]

Witnesses:

W. HAUFF,

E. F. KASTENHUBER.