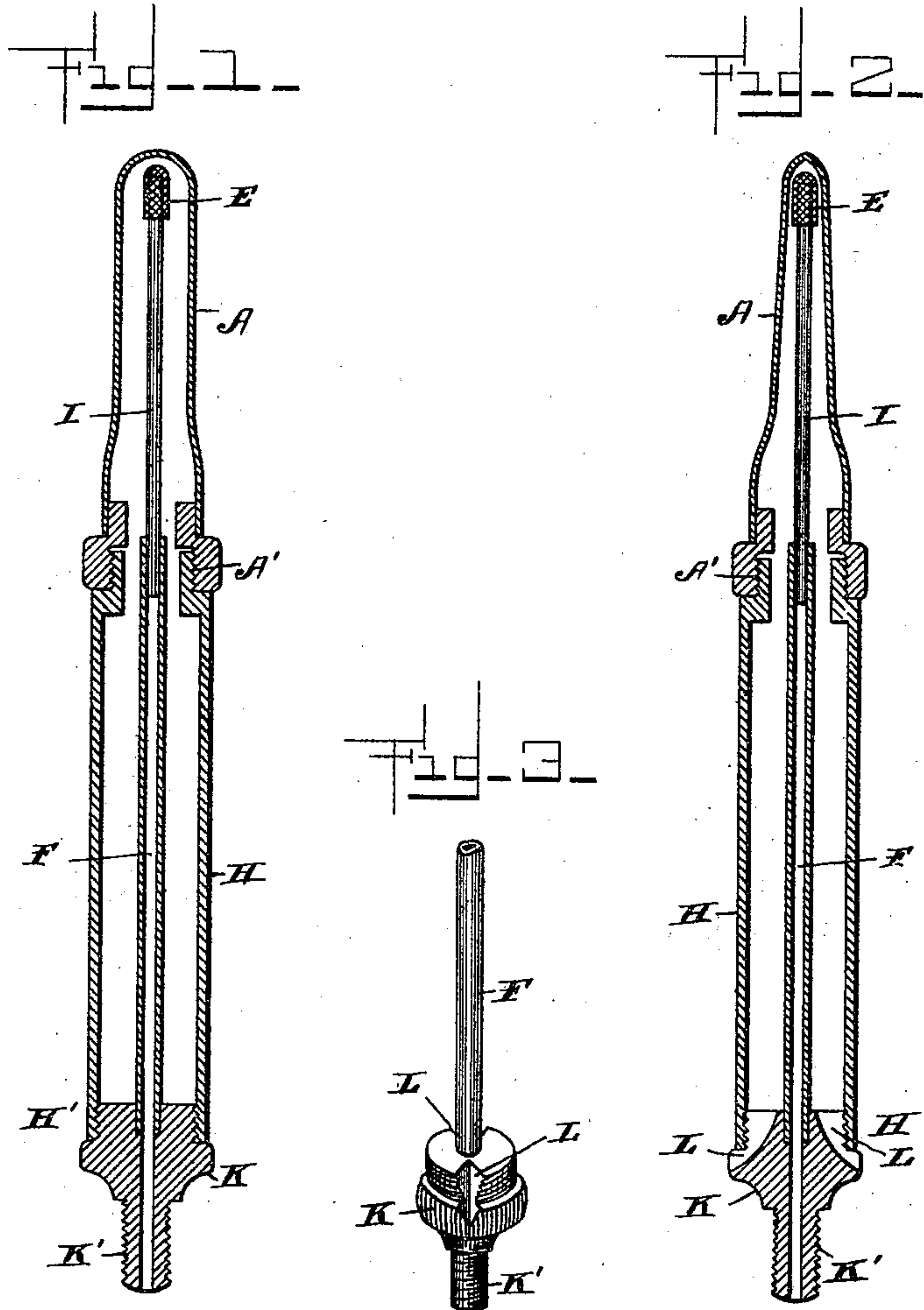


(No Model.)

F. A. REICHARDT.  
THERMOCAUTER.

No. 538,282.

Patented Apr. 30, 1895.



Witnesses:

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# UNITED STATES PATENT OFFICE.

FERDINAND ALFRED REICHARDT, OF NEW YORK, N. Y.

## THERMOCAUTER.

SPECIFICATION forming part of Letters Patent No. 538,282, dated April 30, 1895.

Application filed June 21, 1892. Serial No. 437,533. (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 Cauterizing Apparatus, of which the following is a specification.

The nature and object of the invention will be fully understood from the following general description, and the annexed drawings, and will be subsequently pointed out in the claim.

Figure 1 is a sectional view taken on a line parallel to the axis of my newly invented cautery. Fig. 2 is also a sectional view of the same, taken on a plane parallel to the axis of my cautery, but at right angles to the plane of Fig. 1. Fig. 3 is a perspective view of the base plug, detached, showing the form and location of the air passages or notches therein and also a portion of the inner tube.

Heretofore many devices for the purpose of cauterization have been invented and used, and some of them somewhat resembled my present invention, but all of them were found in practice to be subject to many serious objections. In all of them heretofore the entire length from A, to K', was integral, and could not be separated. On this account when the combustion chamber had been used for some time, it began to clog with a residuum left by the consumed vapor, and as there was no adequate way to clean out the combustion chamber the efficiency of the instrument became more and more impaired, the longer and oftener it was used; and again, deficiency of ventilation has greatly impaired the completeness of combustion, so that it required a considerable expense of vapor to produce the required amount for heat, and when such heat was produced, it was very hard to maintain. It is to remedy these difficulties that my present improvement has been devised.

H, designates the body of the instrument which consists of a larger outer tube and a smaller inner tube as illustrated.

K, designates the base plug which is provided with a screw shank K'. The inner tube F, is inserted in a casket in this base plug K,

and a perforation in line therewith extending through the said plug communicates with said tube. The exterior of this inner tube F, is smaller than the interior of the outer tube H, so that there is a space between the two tubes, which communicates with the outer air through the notches L.

A, designates the combustion chamber which consists of a platinum tipped shell, of the form illustrated and screwed upon the tube section H. At A', a tube I, communicating with the inner tube F, extends nearly through the entire length of the combustion chamber. This tube is surmounted with a gauze hood E. This hood may however be made of wire gauze, asbestos, or any other suitable material, the whole device to be as illustrated in the drawings.

This cautery will be found exceedingly convenient, for all the parts are separable, and therefore may at any time be easily cleaned, and thus the efficacy of the instrument may always be kept at a maximum with less difficulty of manipulation, and less expense of vapor. Otherwise than as herein described, this cautery is to be used in the common and well known way.

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

In a thermocauter the inner and outer tubes F and H, arranged to leave an annular space between them and secured to a common, tubular base-plug K having the perforated shank K' and the notches L leading from the air space to the external air, in combination with the detachable tube I, connected to the inner tube F, the hood E to said tube I, and the detachable imperforate shell A covering said hood and tube I and screw-threaded upon the outer tube H, thereby forming a removable combustion chamber, all substantially as described.

In testimony that I claim the foregoing as my invention I have hereto signed my name in presence of two witnesses.

FERDINAND ALFRED REICHARDT.

Witnesses:

J. WHITTLE,  
FRED McDONALD.