(No Model.)

W. SCHEERER.

CAUTERIZING APPARATUS.

No. 589,484. Patented Sept. 7, 1897.

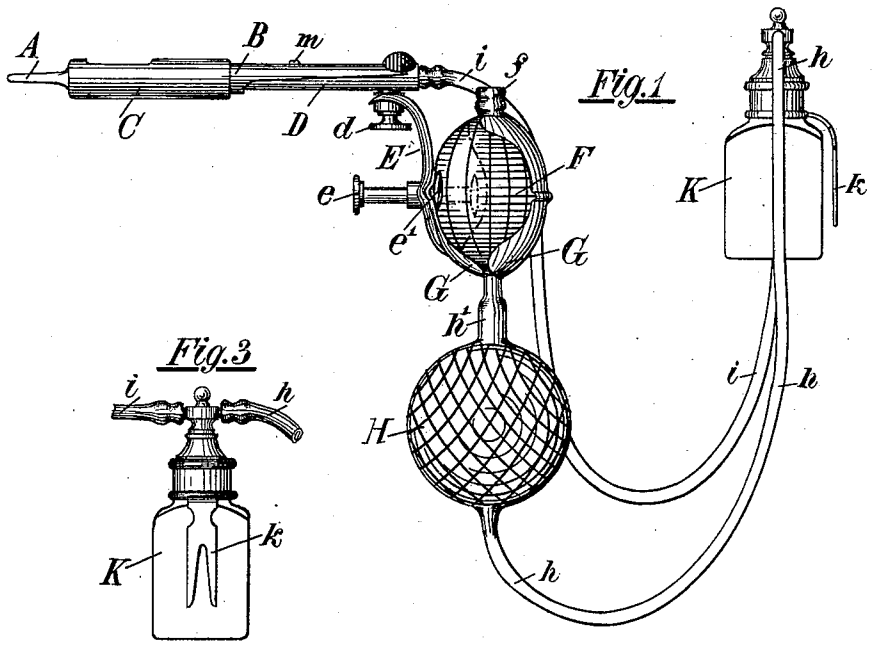


Fig. 1

Fig. 3

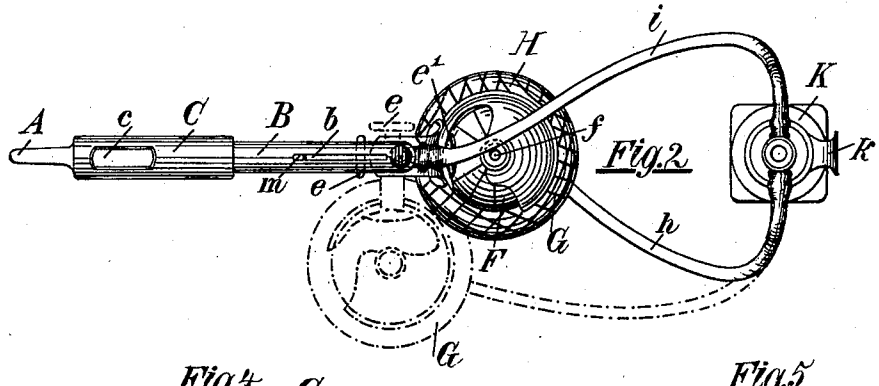


Fig. 2

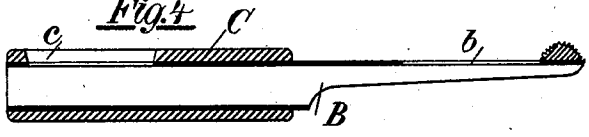


Fig. 4

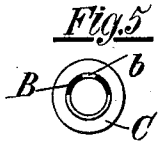


Fig. 5

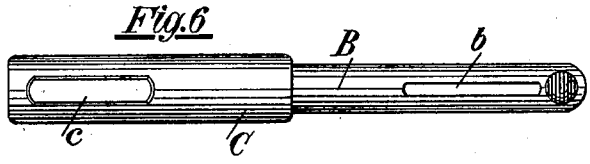


Fig. 6

Witnesses:
M. C. Massie.
T. H. Libby.

Inventor.
Wilhelm Scheerer
by Max Steingü
Attorney.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

WILHELM SCHEERER, OF TUTTLINGEN, GERMANY, ASSIGNOR TO THE ACTIEN-GESELLSCHAFT FÜR FEIN MECHANIC, VORMALS JETTER & SCHEERER, OF SAME PLACE.

CAUTERIZING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 589,484, dated September 7, 1897.

Application filed January 18, 1893. Serial No. 576,018. (No model.)

To all whom it may concern:

Be it known that I, WILHELM SCHEERER, manufacturer of surgical instruments, of Tuttlingen, Germany, have invented a new and useful Cauterizing Apparatus, of which the following is a specification.

My invention relates to an improvement in cauterizing apparatus.

The object of the present invention is to enable the operator to handle platinum cauterizing apparatus with one hand. In the cauterizing apparatus hitherto known one hand was required for operating the blower and one hand to grasp the handle of the burner. The new apparatus is so modified that the cauterizer and manually-operated blower are mounted on one handle, so that by grasping the same with one hand the blower may be actuated by one finger and the cauterizer guided as desired. In order to more effectually facilitate the latter, the burner is exteriorly provided with a sliding guard-sleeve formed of asbestos or other incombustible substance—*e. g.*, infusorial earth—so that the operator may grasp the cauterizer at the guard-sleeve and accurately direct the same with the naked hand. The bottle of benzin is, by the operator, suspended from a buttonhole or a button of his coat, so that he is enabled to employ all the parts of the cauterizing apparatus conveniently and in correct juxtaposition and, in general, requires only one hand for the same.

In Figures 1 to 3 of the drawings the new arrangement of the cauterizing apparatus is represented. Figs. 4 to 6 show, on an enlarged scale, the guard-sleeve, with incombustible coating, adapted to slide over the burner-tube.

At one end of the burner-tube D is arranged a cauterizer A, and to the other end is coupled a flexible tube *i*, through which the benzin gases from the benzin-receptacle K are, in a well-known manner, carried to a platinum-sponge in the interior of the burner, thereby rendering the same sponge incandescent and thus heating the cauterizer to the required extent.

So long as the cauterizer A is not in use the guard-sleeve B, which is adapted to slide on the cauterizer-tube D and enveloped by an incombustible ring C, is slid over the cauterizer A. By virtue of the elongated opening *c* in the asbestos ring C and the guard-sleeve B the condition of the burner or cauterizer A may be observed, even though covered.

When the cauterizer is in use, the sleeve B is shoved back so as to expose the cauterizer A, as represented in Figs. 1 and 2. The sliding motion of the guard-sleeve is limited by a detent-stud *m*, secured to the burner-tube D and extending into a slot *b* in the guard-sleeve. The burner-tube D is pivotally attached to bracket E by means of screw *d*, the said bracket being rigidly connected with the partly-open and egg-shaped casing G, which contains the manually-operated blower F and which, together with the bracket, forms the handle by which the apparatus is grasped. A slide-pin *e* passes through the bracket E and carries at its inner end a small disk *e'*, which rests against the blower-bulb F. When the pin *e* is pressed against F, the blower-bulb F is compressed, its suction-valve *f* being thereby closed and the air forced through the connecting-tube *h'* to the pressure-regulating bulb H, whence it passes by tube *h* to the benzin-flask K and thence to the cauterizer.

The benzin-flask K is provided with a forked hook *k*, adapted to be slipped over a button or inserted into a buttonhole in the coat of the operator, and thus to support the flask.

The egg-shaped casing G, wherein is located the blower-bulb and the bracket E, are of such a shape that the casing G conveniently fits into the palm of the hand, the front side and the bracket E grasped by the fingers, one of which serves to actuate the blower-pin *e*, while the thumb lies laterally over the casing G at the side of the suction-valve *f*.

In the drawings the burner-tube D is represented in such a manner that the handle G is arranged behind the same. Inasmuch as the tube D is pivotally attached to E, the casing, as indicated in dotted lines in Fig. 2, may be swung around to occupy a position at the side of the burner-tube D, either to the left or the right of the same. In all positions, however, the handle G may be conven-

iently grasped and the blower actuated just as conveniently with one finger.

The advantages of the new arrangement of cauterizing apparatus are substantially those referred to in the beginning—viz., that one hand of the operator is left entirely free and an unintentional injury by the guard-sleeve is avoided.

I claim—

1. In a cauterizing apparatus, the combination, with a burner-tube, and a handle connected to the burner-tube, of a blower-holder carried by the handle, a manually-operated blower supported by the blower-holder, and mechanism in front of the blower for actuating the same, substantially as set forth.

2. In a cauterizing apparatus, the combination, with a burner-tube, and a handle pivotally connected to the burner-tube, of a blower-holder carried by the handle and a manually-operated blower supported by said holder, substantially as set forth.

3. In a cauterizing apparatus, the combination, with a burner-tube, and a handle pivotally connected to the burner-tube, of a blower-holder carried by the handle, a manually-operated blower supported by said holder, and means for operating the blower, substantially as set forth.

4. In a cauterizing apparatus, the combination, with a burner-tube, and a handle connected to the burner-tube, of a blower-holder carried by the handle, a manually-operated blower supported by said holder, and a plunger in front of the blower and arranged to actuate the same, substantially as set forth.

5. In a cauterizing apparatus, the combination, with a burner-tube, and a handle connected to the burner-tube, of a blower-holder carried by the handle, a manually-operated blower supported by said holder, and a plunger passing through the handle and arranged to actuate the blower, substantially as set forth.

6. In a cauterizing apparatus, the combination, with a burner-tube, and a bracket connected thereto, of a blower-casing shaped to fit the palm of the hand and secured to the bracket, a manually-operated blower located in the casing, and a plunger passing through the front of the bracket and arranged to press against the blower, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

WILHELM SCHEERER.

Witnesses:
AUGUST B. SHUTZ,
CHRISTIAN BAUS.