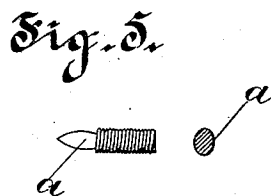
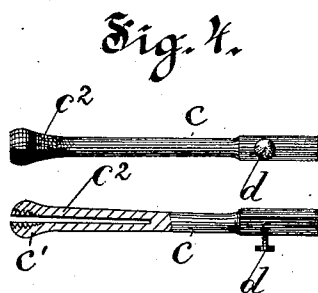
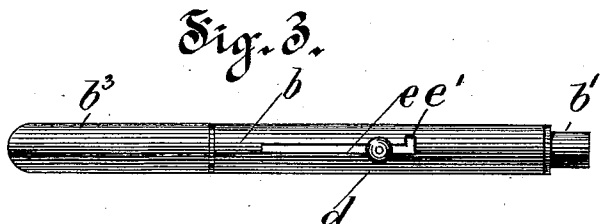
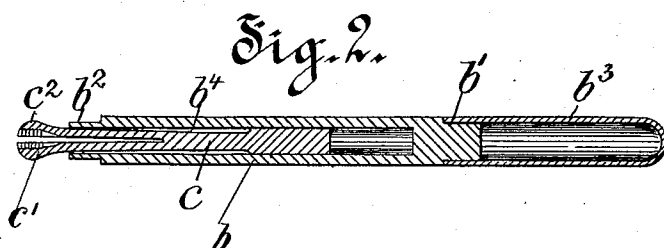
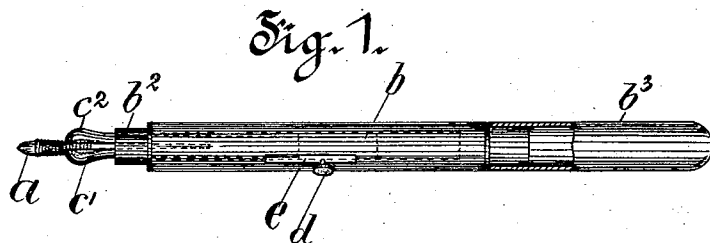


(No Model.)

C. SACK.
CAUTERIZING POINT HOLDER.

No. 474,972.

Patented May 17, 1892.



Witnesses:
Hermann Bornmann
C. C. Schiller

Inventor:
Carl Sack
by J. Walter Engle
att'y.

UNITED STATES PATENT OFFICE.

CARL SACK, OF BERLIN, GERMANY.

CAUTERIZING-POINT HOLDER.

SPECIFICATION forming part of Letters Patent No. 474,972, dated May 17, 1892.

Application filed April 1, 1892. Serial No. 427,339. (No model.)

To all whom it may concern:

Be it known that I, CARL SACK, a subject of the Emperor of Germany, residing at the city of Berlin, in the Empire of Germany, have invented certain new and useful Improvements in Devices for Detachably Supporting Cauterizing-Points, of which the following is a specification.

The principal object of my present invention is to provide a simple, neat, and comparatively inexpensive device for supporting a cauterizing-point in such manner that the latter in use is firmly and securely held to place and cannot become accidentally detached, whereby such serious and frequently fatal accidents as have hitherto occurred to patients undergoing surgical operations are avoided.

My invention consists of the improvements in devices for detachably supporting cauterizing-points hereinafter described and claimed.

The nature and characteristic features of my invention will be more fully understood from the following description, taken in connection with the accompanying drawings, forming part hereof, and in which—

Figure 1 is an elevation, partly in section, of a device for detachably supporting cauterizing-points embodying features of my invention and showing the respective parts of the device in open position for use. Fig. 2 is a longitudinal central section of Fig. 1, showing the construction and arrangement of the internal working parts of the device. Fig. 3 is an elevation of the device in closed position. Fig. 4 is a detached view of a chuck for holding the cauterizing-point, showing the same in plan and elevational section; and Fig. 5 is a similar view of the cauterizing-point, showing the same in elevation and cross-section.

In the drawings, *a* is a cauterizing-point of nitrate of silver or other preferred material, provided with a threaded or ribbed shank having, preferably, an elliptical form in cross-section. *b* is a stock provided upon the exterior thereof with seats *b'* and *b''* for the accommodation of a cap *b'''* and having the interior thereof provided with a chamber *b⁴*, to which access may be had from one extremity of the stock *b*. *c* is a chuck afforded a range of end-play in the chamber *b⁴*. One end of

this chuck projects from the open end of the chamber and is bifurcated to form spring-jaws *c'* and *c''*. The working faces of these jaws are provided with ribs or threads and correspond exactly in form with the surface of the shank of the cauterizing-point *a*. *d* is a handle working in a slot *e*, cut or otherwise formed in the stock *b* and having one of its extremities connected with the chuck *c* and the other accessible from the exterior of the instrument. This handle *d* affords convenient means for shifting the chuck *c* into the stock *b* in order to close the jaws *c'* and *c''*, and in a reverse direction in order to open the same. This handle may be threaded and adapted to engage a tapped orifice in the chuck, Fig. 4. In such case it operates as a set-screw and serves to clamp the chuck to place in the stock. If preferred, the slot *e* may be provided with a transversely-ranging opening *e'*, Fig. 3, into which the shank of the handle may be turned, so that the shank *d'* and opening *e'* constitute a bayonet-joint that serves to clamp the chuck to place.

In use the caustic point *a* may be inserted into the chuck *c* and clamped to place in the following manner: The handle *d* is loosened or disengaged from the stock *b* and the chuck *c* is shifted toward the left in the drawings, so that the jaws *c'* and *c''* are projected therefrom, and thus permitted to open or spring apart. The caustic point *a* is then inserted between them in such manner that its minor axis is perpendicular to the working faces of the jaws and that the threads or ribs on the jaws engage the corresponding threads or ribs on the point. The handle *d* is then shifted toward the right in the drawings, and this movement of the handle causes the chuck *c* to be shifted in a similar direction, with the result that the jaws *c'* and *c''* are brought into engagement with the inner faces of the stock *b*, and are thus caused to clamp and retain the cauterizing-point *a* to place. The chuck *c* is then locked in such position by means of the handle *d* in the manner hereinabove described. The point *a* may be removed and replaced by a fresh point by pushing the handle *d* toward the left in the drawings in order to open the jaws *c'* and *c''* to permit of the removal of the spent point and the insertion of

a fresh point, and the latter may then be clamped to place in the manner hereinabove explained.

It may be remarked that the threads or ribs
5 prevent end-play of the caustic point and that the elliptical configuration of the working faces of the jaws and of the shank of the point a prevents rotation of the point, so that surgical operations, however delicate, may be
10 readily and accurately performed by means of an instrument embodying these features of my invention. Moreover, the cap b^3 may be fitted upon the seat b' , thus serving to increase the length of the stock, or upon the seat b^2 ,
15 thus serving to protect the caustic point when the instrument is not in use.

Having thus described the nature and objects of my present invention, what I claim as new, and desire to secure by Letters Patent, is—
20

1. The combination, with a cauterizing-point having a ribbed shank, of a chuck provided with jaws having ribbed working faces for

engaging the shank of the point, substantially as and for the purposes set forth. 25

2. The combination, with a cauterizing-point having a ribbed shank of elliptical cross-section, of a chuck provided with jaws having ribbed working faces corresponding in contour with the shank of the point, substantially as and for the purposes set forth. 30

3. A device for detachably supporting cauterizing-points, comprising a stock, a chuck working in said stock and provided with spring-jaws having ribbed working surfaces
35 for engaging the corresponding surfaces of the shanks of the points, and a handle connected with said chuck and working in a slot in said stock, substantially as and for the purposes set forth. 40

In witness whereof I have hereunto set my hand in presence of two witnesses.

CARL SACK.

Witnesses:

PAUL FISCHER,
PAUL BRINKMANN.