

(No Model.)

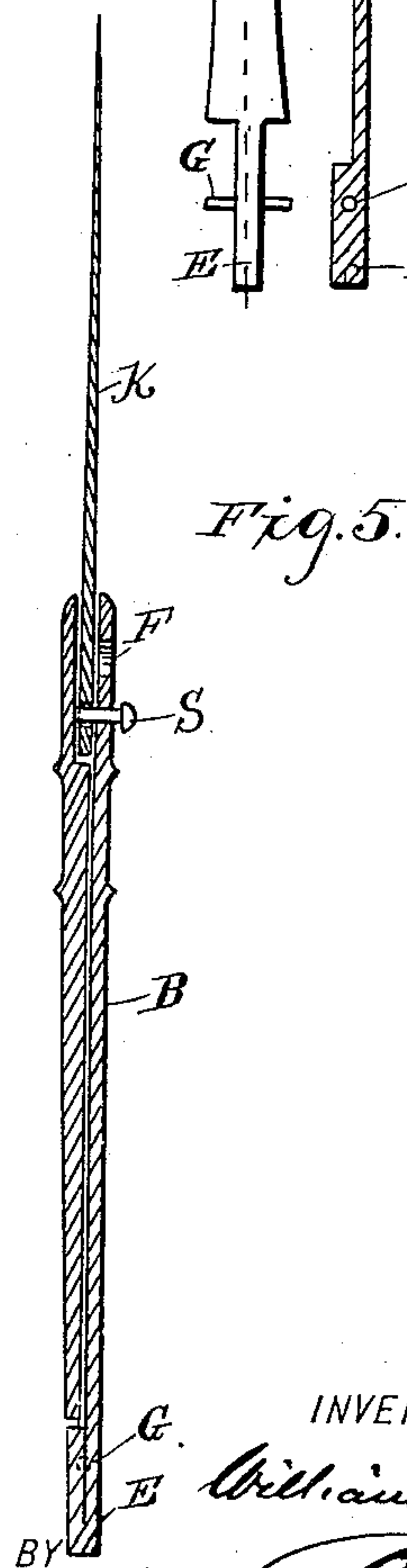
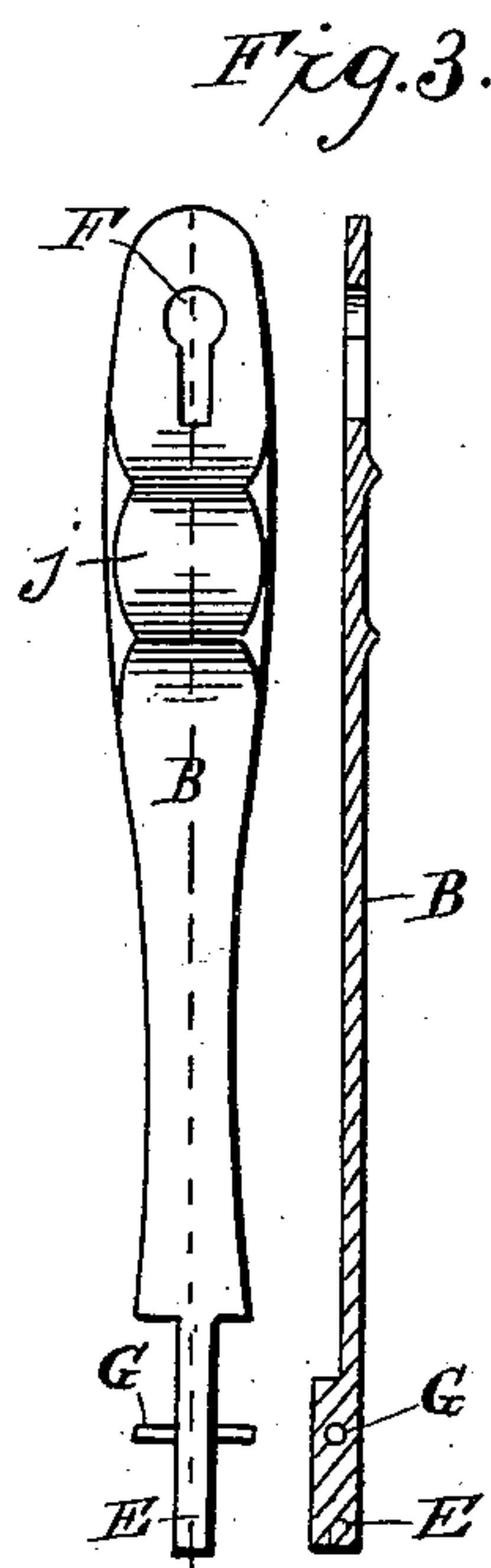
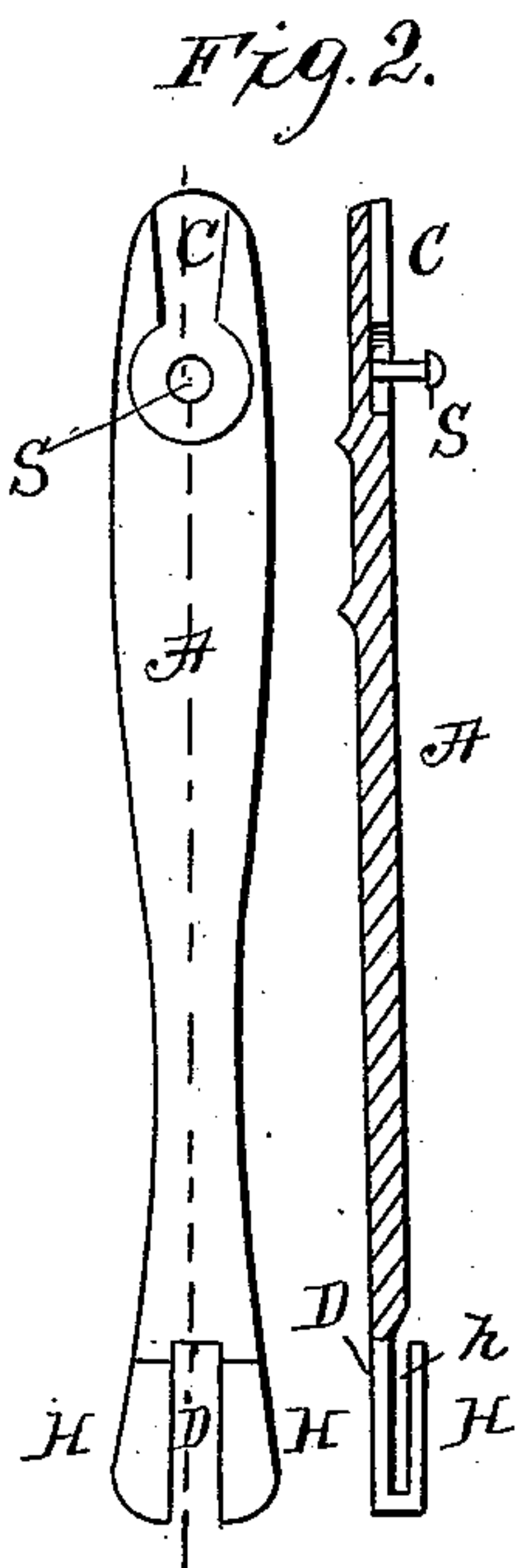
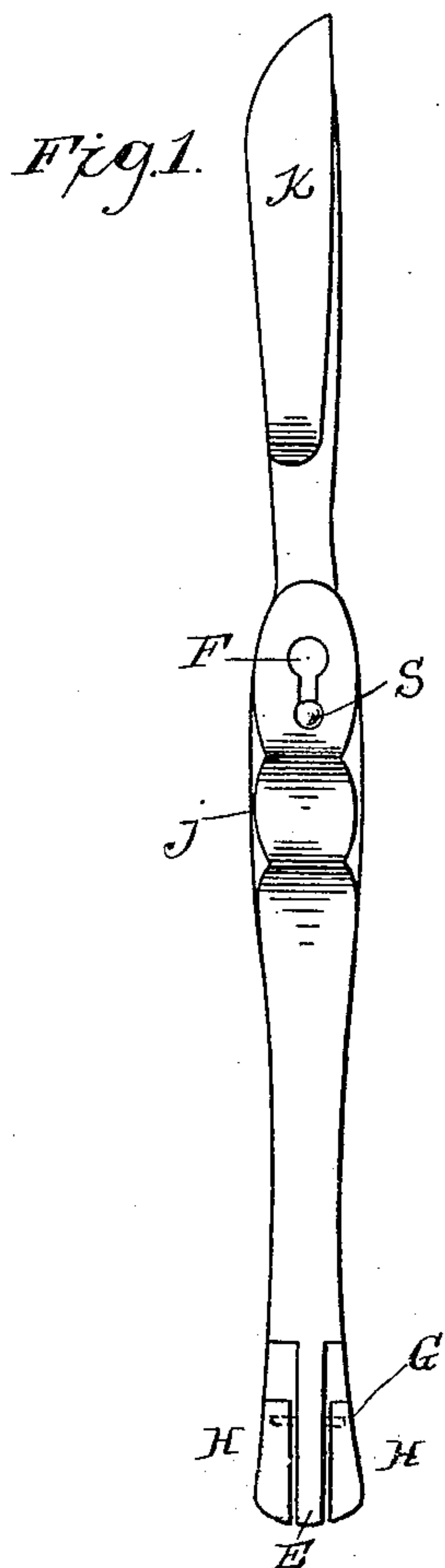
2 Sheets—Sheet 1.

W. WALB.

HANDLE FOR SURGICAL INSTRUMENTS.

No. 397,949.

Patented Feb. 19, 1889.



WITNESSES:

W. C. Bowen.
E. L. Richards

INVENTOR,

William Walb.

BY

Richardson

ATTORNEYS,

(No Model.)

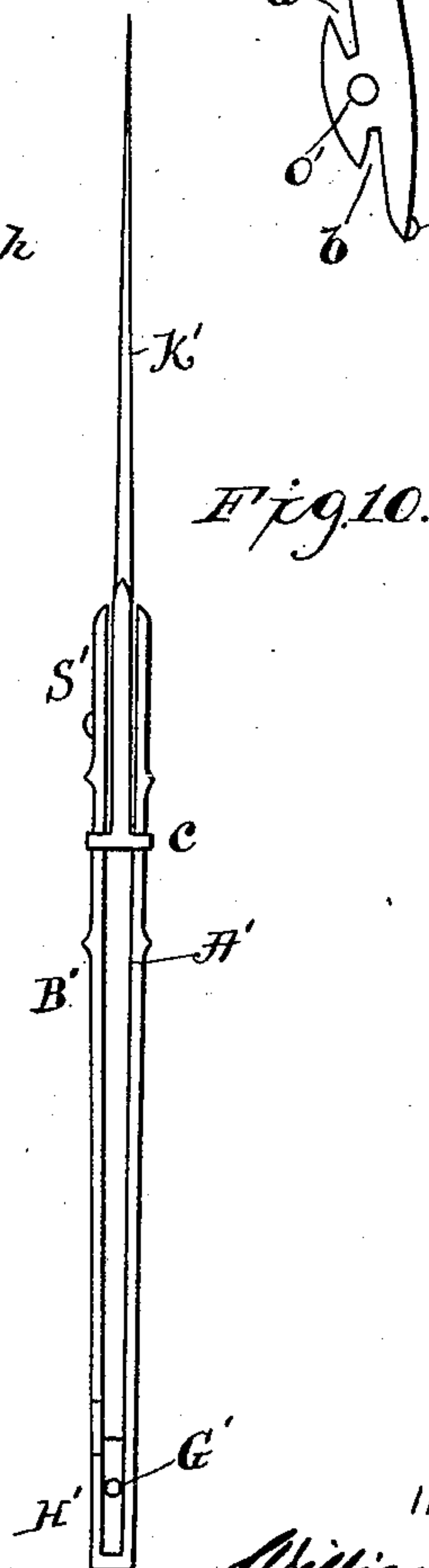
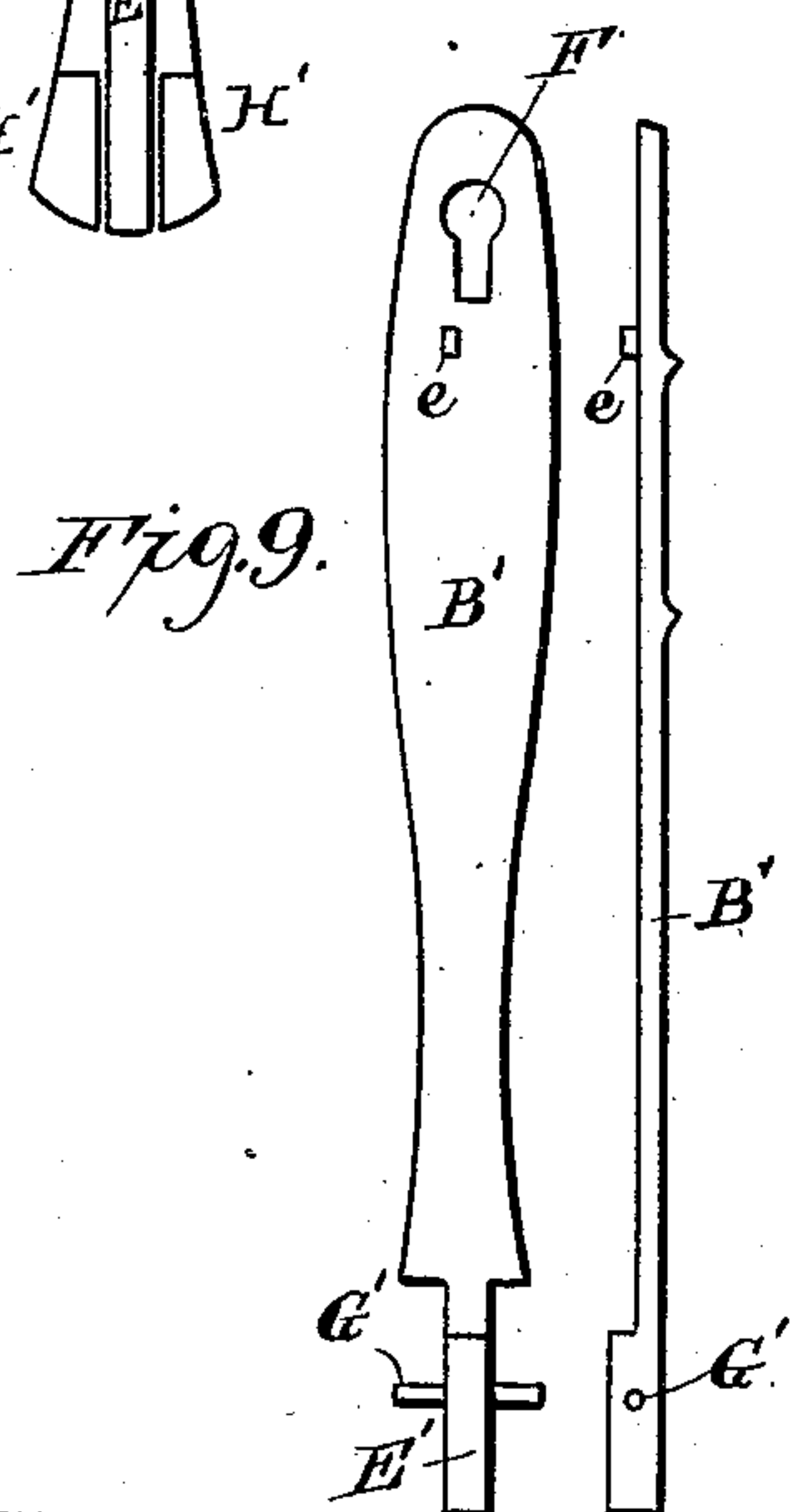
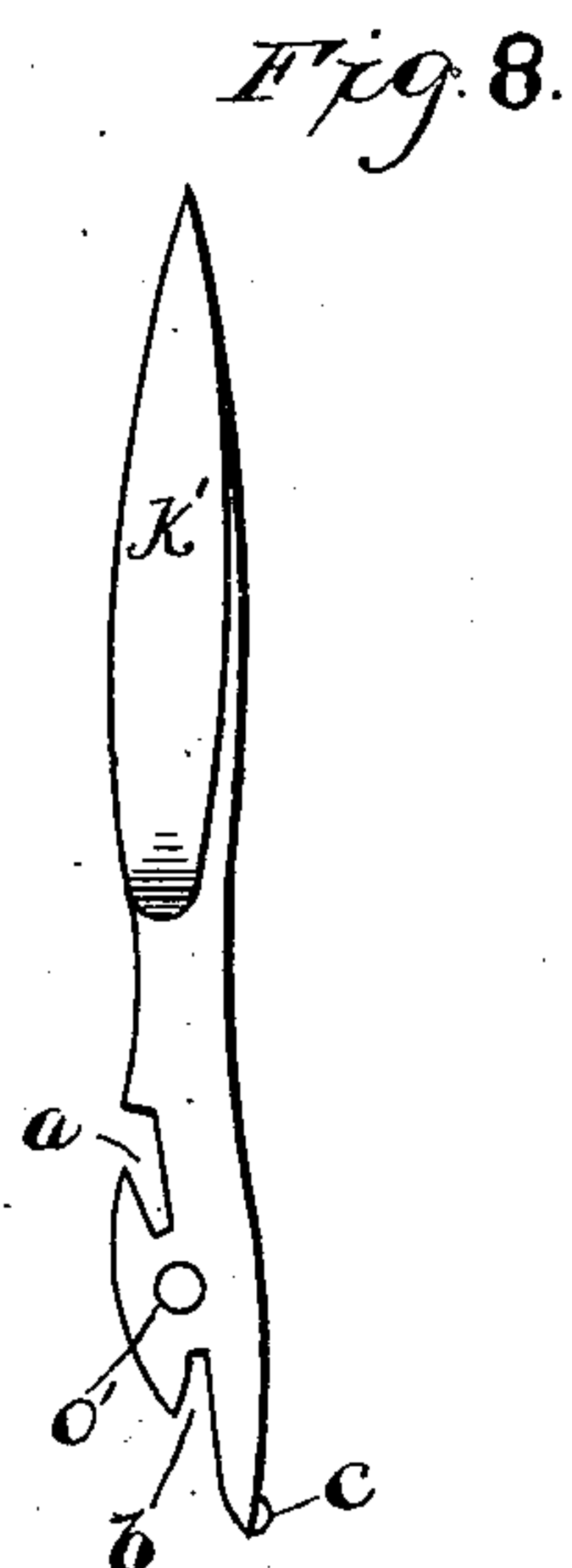
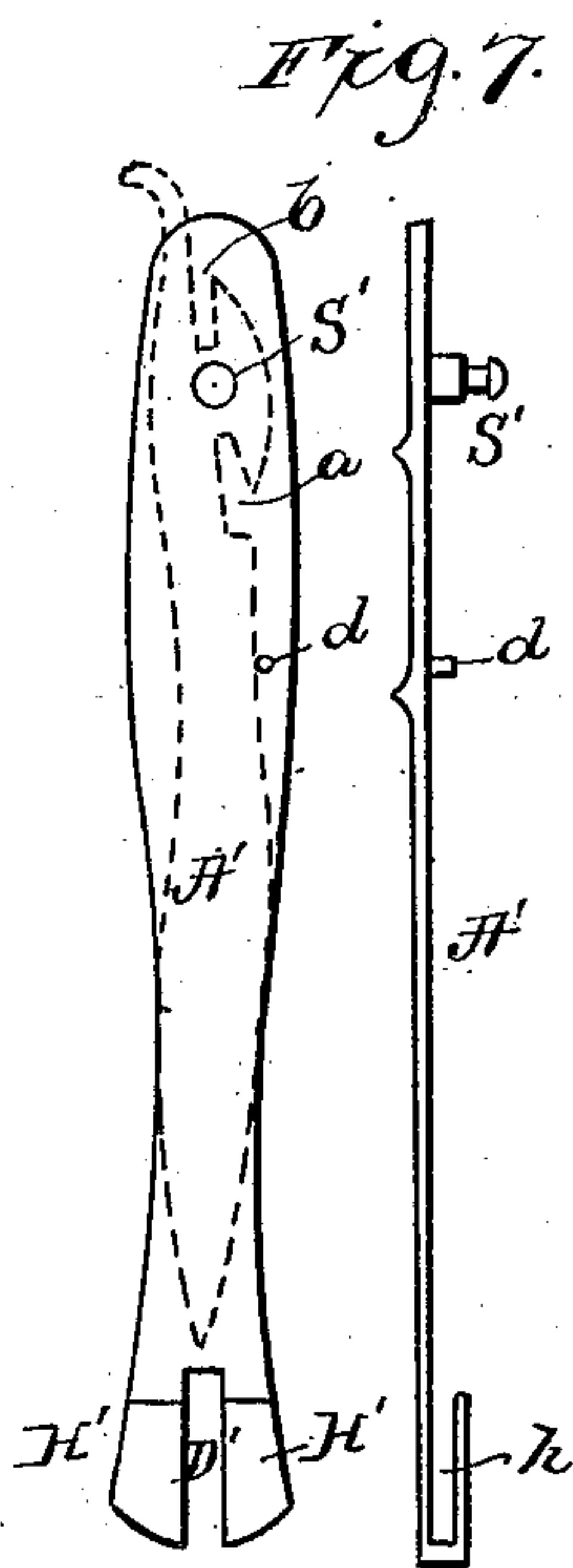
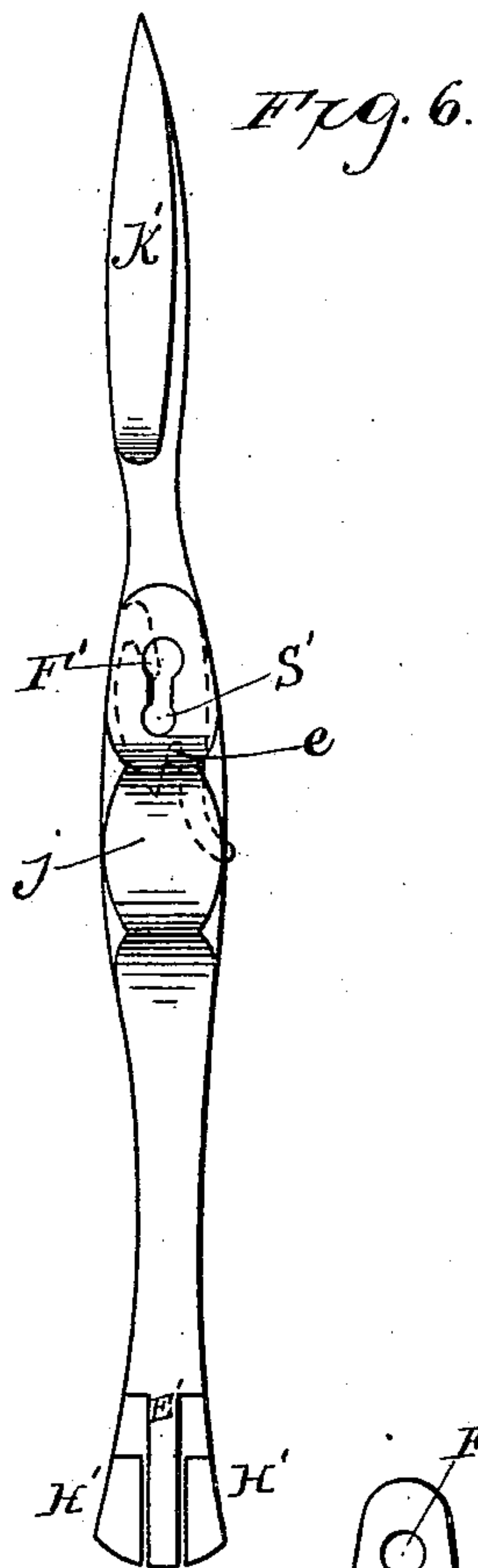
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UNITED STATES PATENT OFFICE.

WILHELM WALB, OF HEIDELBERG, GERMANY.

HANDLE FOR SURGICAL INSTRUMENTS.

SPECIFICATION forming part of Letters Patent No. 397,949, dated February 19, 1889.

Application filed October 17, 1888. Serial No. 288,298. (No model.)

To all whom it may concern:

Be it known that I, WILHELM WALB, a subject of the Emperor of Germany, resident at Heidelberg, Germany, have invented a new and useful Improvement in Scales for Surgical Instruments, of which the following is a specification.

This invention relates to hafts or handles for bistouries and other surgical instruments.

The improved haft, constructed according to the said invention, is designed to enable the same to be readily and thoroughly cleaned after use. It can be made either so that the knife or blade K need only be connected with it ready for use, (see Figs. 1 to 5,) or that the knife or blade K' can be opened and closed like every ordinary pocket-knife, being received between the two scales of the haft. (See Figs. 6 to 10.)

In the one arrangement (see Figs. 1 to 5) the haft or handle consists of two scales—A, Fig. 2, and B, Fig. 3—one of which, A, hereinafter termed the “first,” has at its upper end a depression, C, in the circular part of which is placed a pin, S. At the lower end of this scale is formed a longitudinal opening or slot, *h*, parallel with the plane of the scale and inclosed on one side by the lower portion of the scale and on the other by a hook, H, which has a slit, D, that divides it into two parts. The second scale, B, which in Fig. 3 is represented in longitudinal section, has at its upper end an opening, F, which extends downwardly in the form of a slit, while its lower end, E, which is provided with steps or offsets, is of about double the thickness of the said scale and nearly square in section. With the lower end, E, is firmly connected a pin or projection, G, projecting beyond either side of the same. The width of the said end E corresponds to the width of the aforesaid slit D, provided in the first scale, A, so that if the two scales A and B are united to form a haft or handle the lower end, E, will be suitably received in the slit of the first scale.

The knife or blade K (represented in Fig. 4) has its lower end formed so that it corresponds to the depression C provided in the first scale, A, and its circular part has a central opening, O. If this part of the knife or blade K is placed in the said depression C of the first scale, A, the pin S on the latter

passes through the above-mentioned opening O in the knife or blade, so that it projects above the latter a distance about equal to the thickness of the second scale, B. The narrow lower part, E, of the second scale, B, is now introduced into the slit D in the first scale, A, so that the pin G, arranged on the said lower part and protruding from either side, engages with the two parts of the hook H on the first scale on either side of the said slit D, and the operator pushes down the second scale, B, until an opening, F, in the same is above the head of the pin S in the circular part of the depression provided in the first scale, A. If the two scales are then pressed against each other, the part of the last-mentioned pin S which is protruding above the knife or blade will be caused to pass through the opening F in the second scale, B. When this has been effected, the second scale, B is, pushed upward a little distance, so that the neck of the aforesaid pin S will enter the narrow part of the opening F in this second scale, B, thus connecting the two scales at this point with each other, while the desired connection of the same at their lower ends is established by the hooks H on the first scale, A, and the pin G on the lower end of the second scale, B.

The knife or blade between the two scales, by reason of the connection of the latter, cannot leave the depression C in the first scale. It is in fact firmly connected with the haft composed of the two united scales, so that the whole constitutes a bistoury ready for use.

If the instrument is to be taken to pieces again, the scale B is pushed down until the head of the pin S on the first scale, A, again enters the enlarged part of the opening F in the scale B. The two scales can now be separated from each other at this point and completely disconnected if the second scale, B, is drawn up a little, so that the pin G on the lower part of the second scale, B, leaves the hook H on the first scale, A. If the knife or blade is finally removed from the depression C in the first scale, A, three parts are obtained, each of which can be readily and thoroughly cleaned.

In order to facilitate the displacement of the two scales placed one upon the other, they are provided with a cavity, *j*, which in this manipulation offers a hold to the finger.

In a second arrangement (represented in Figs. 6 to 10) the haft or handle also consists of two scales, A' and B', which, as regards their lower end, are constructed like those in the arrangement hereinbefore described.

The first scale, A', in the second arrangement differs from the first scale, A, in the first arrangement only in that it has no depression C, which is seen by comparing Figs. 2 and 7. The second scale, B', in the second arrangement (see Fig. 9) is similar to the second scale, B, in the first arrangement, (see Fig. 3,) with the exception that the former has an additional small projection, e, below the opening F' therein. The lower end of the knife or blade K', Fig. 8, however, differs in its construction from that of the knife or blade in the first-described arrangement. This part has, in addition to an opening, C', two slits, a and b, (see Fig. 8,) arranged above and below the said opening, while a small cross-bar, c, is provided at the lower point of the same. (See Figs. 8 and 10.) The knife or blade is placed with its opening C' upon the pin S' on the first scale, A', and the second scale, B', is connected with the first in the same manner as described with reference to the first arrangement.

According to the open or shut position of the knife or blade K', (either that shown in Fig. 6 or that shown in dotted lines in Fig. 7,) the projection e on the second scale, B', when the latter is pushed on, enters either the aforesaid slit b or the slit a in the knife or blade and arrests the same, thus insuring it a firm position. (See Fig. 6.)

In order to prevent the edge of the knife or blade projecting from between the scales A' and B' when it is closed, the first scale, A', is provided with a small pin, d, which does not allow the knife to move farther forward. In the same manner the small cross-bar c, ar-

anged at the lower end of the knife or blade, prevents the latter opening too much when the bistoury is to be made ready for use. As soon as the knife or blade is stopped by these means in its movement to the one or the other side, the second scale is moved upward, in order to arrest the knife in its position in the manner as before described.

Having thus described my invention and the manner of employing the same, what I claim, and wish to have secured to me by Letters Patent of the United States of America, is—

1. In a separable haft or handle for bistouries or other surgical instruments, the combination of the two halves or scales provided at their upper ends with suitable means for holding a blade and having at their lower ends, respectively, a longitudinal opening, h, and a projection for engaging therein to form the combined hinge and slide joint, substantially in the manner and for the purpose described.

2. In a separable haft or handle for bistouries or other surgical instruments, the combination of the two halves or scales provided at their upper ends, respectively, with the headed pin S and the corresponding slotted aperture, F, whereby the blade is held, and having at their lower ends, respectively, a longitudinal opening, h, and a projection for engaging therein to form the combined hinge and slide joint, substantially in the manner and for the purpose described.

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

WILHELM WALB.

Witnesses:

MICHAEL EWALD,
FRANZ KLON.