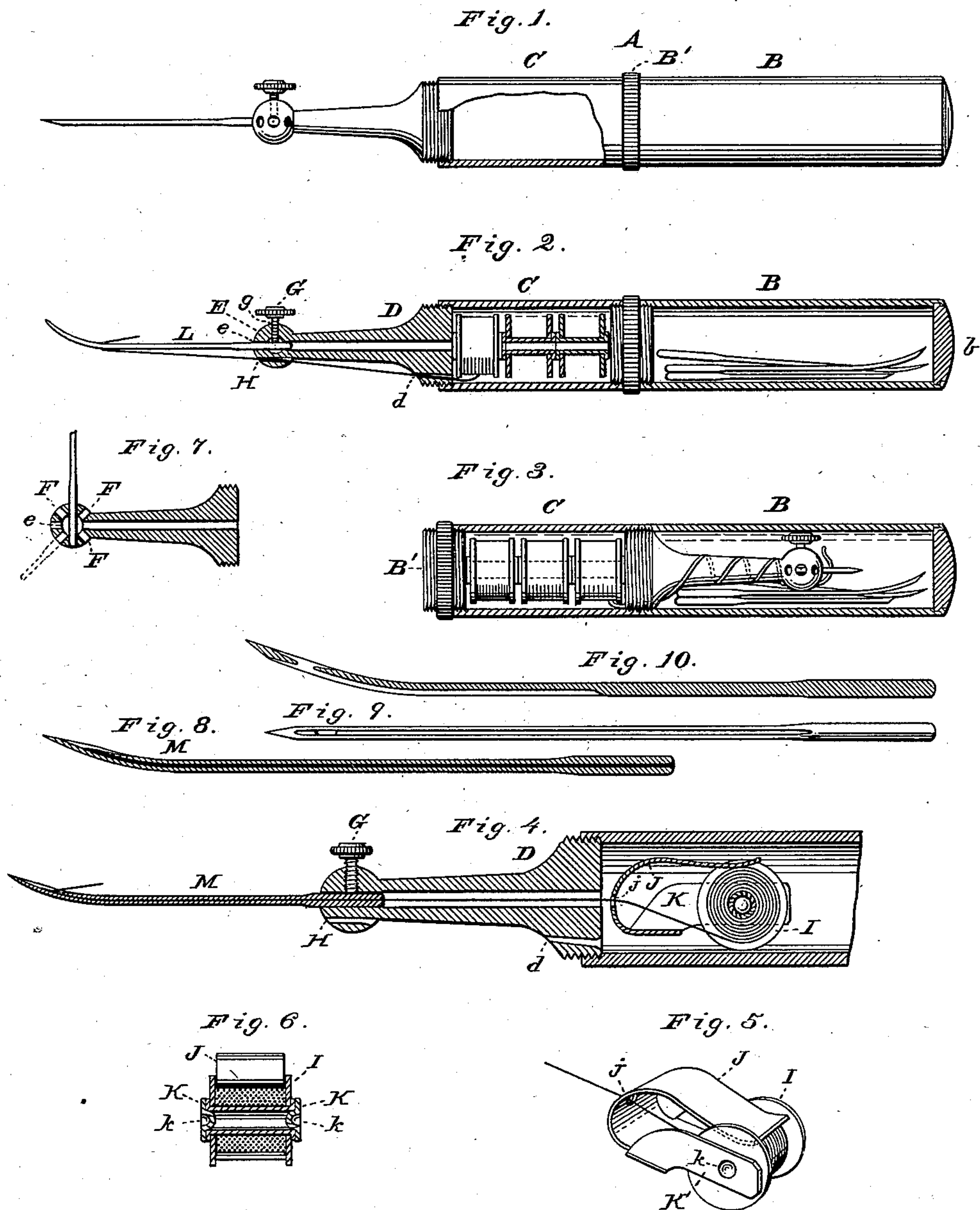


(No Model.)

J. LA FOREST KING.
SUTURE NEEDLE AND CASE.

No. 373,372.

Patented Nov. 15, 1887.



WITNESSES

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JAMES LA FOREST KING, OF SPRINGFIELD, ILLINOIS.

SUTURE-NEEDLE AND CASE.

SPECIFICATION forming part of Letters Patent No. 373,372, dated November 15, 1887.

Application filed July 30, 1887. Serial No. 245,725. (No model.)

To all whom it may concern:

Be it known that I, JAMES LA FOREST KING, a citizen of the United States, and a resident of Springfield, in the county of Sangamon and State of Illinois, have invented certain new and useful Improvements in Suture-Needle Case and Wire-Carrier; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a representation of this invention, and is a side view, partly broken away. Fig. 2 is a longitudinal section. Fig. 3 is a longitudinal section showing the case closed. Fig. 4 is a section of the forward end of the case with the wire-carrier in place. Figs. 5, 6, 7, 8, 9, and 10 are details.

The invention is a combined suture-needle-handle carrier; and it consists in the construction and novel combination of parts, herein after described, and pointed out in the appended claims.

Referring to the drawings by letter, A designates a cylindrical casing composed of the parts B and C, which are properly tapped at their adjoining ends for the former to screw upon the latter. The part B has a closed outer or rear end and is perfectly cylindrical. Its open end is provided with a stopper, B', of cork or other suitable material, to retain the needles carried therein when the neck of the part C is turned outward. The part C beyond its inner cylindrical part is provided with the neck D, centrally bored for the passage of a needle. The part C just where the neck begins is threaded externally, so that the neck can be put in the part B and the part C and screwed therein. The stopper B' is then inserted into the open end of the part C. This construction is for convenience of carriage.

d is an inclined perforation in the part C just where the cylindrical part begins to contract into the neck, and is intended to aid in producing tension.

Upon the end of the neck D is the hollow spherical head E, having an opening, e, diametrically opposite its communication with the bore of the neck, and a number of other

diametrically-opposite openings, F, extending centrally around it from the opening e.

G is a set-screw engaging in a tapped opening, g, in the head E at right angles to the openings e and F, and H is a tension-canal on the side of the head opposite the set-screw.

The heel of the needle L is placed in the opening e, and held firmly in place by the set-screw G; or, if it is desired to give it different inclinations when using it on different parts of the body, the heel is placed in any two diametrically-opposite openings F and held by the set-screw.

I is a spool-shaped bobbin having the curved spring J attached to it. The said spring is provided with the arms K K, punched in at k k to form journals that enter the orifices of the central opening of the bobbin, so that the latter can turn thereon. The spring bears on the ligature to produce tension, and the ligature passes through an opening, j, in the spring, which is adjacent to the neck, thence through the perforation d, thence through the passage H in the head back of the needle L, and then through the eye of the needle, being drawn far enough through to be taken hold of when the needle is passed during an operation. If more tension is needed, the ligature may be wound in one or more turns around the neck before passing it through the passage H.

If desired, a hollow needle, M, may be used, and the ligature passed directly through the hollow neck and the needle.

In using wire the same would, in this case, be bent down into a groove after passing through the outer orifice of the needle, which is about a quarter of an inch from the point.

The needle can be held entirely within the neck and casing by the set-screw or projecting at any distance from out the head.

Some of the advantages of the invention are as follows: There are no openings in the combined case and handle, except the opening in the neck for the passage of the needle and the tension-opening at the beginning of the neck for the ligature, and the parts are not connected by hinge joints or springs. Consequently the blood cannot enter while performing an operation; or, should a little enter, the casing can be very readily cleansed or disinfected after unscrewing the parts. It is compact, simple, and strong, and one set-screw only is neces-

sary to hold the needle in whatever position the same may be placed. With it catgut, thread, silk, animal ligatures, or wire may be used, and it may carry a number of bobbins, 5 so that the size of thread can be quickly changed when necessary during an operation.

Having described my invention, I claim—

1. The combination, with the cylindrical casing made in two detachably-connected sections, the front section having a neck, a tension-channel through the base of the neck, and a head provided with a tension channel or opening and a needle-perforation, of the needle, 15 the set-screw to retain the needle, and the bobbin in the interior of the casing, substantially as specified.

2. The combination, with the cylindrical two-part casing provided with a neck, a tension passage or channel through the base of the neck, and a head provided with a tension-opening and needle-perforation, of the needle, the set-screw to retain the same, the spool-shaped bobbin, and the spring attached to said bobbin and pressing on the ligature, which passes 25 thence out of the tension opening in the base of the neck, substantially as specified.

3. The combination, with the cylindrical casing made in two parts screwing together and provided with a perforated neck and head, 30 of a needle fitting in the perforation of the head and a set-screw engaging a tapped opening in the head, so as to hold the needle entirely within the neck and casing or any distance out from the head, substantially as specified. 35

4. The combination, with the cylindrical casing provided with a neck and a hollow head

thereon having a series of diametrically-opposite openings in it, the members of which series are all situated in the same axial plane of 40 the head and neck, of a needle having its heel of proper size to fit into any two opposite members of said series, and a set-screw engaging in a threaded opening in the head, which opening is equally distant from and at right angles to 45 the members of the series of openings, so as to bind upon the needle in any position the latter may be, substantially as specified.

5. The combined needle casing and handle made in two detachable parts and having a 50 stopper or detachable partition between the two parts, so as to form a compartment to hold needles and a compartment for the reception of the bobbin, and having no openings except those for the needle and for the ligature, 55 substantially as specified.

6. The herein-described combined handle and case for suture-needles, consisting of the cylindrical body A, consisting of the parts B and C, screwing together and having the stop- 60 per or detachable partition between them, the perforated neck D, standing from the end of the part C, the tension-opening *d* at the beginning of the neck, the head E, provided with the opening *e* opposite the perforation of the 65 neck, the tension canal H, and the diametrically-opposite opening F, and the set-screw G, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

J. LA FOREST KING.

Witnesses:

B. J. HARDIN,
SAML. D. SCHOLES.