No. 671,337. Patented Apr. 2, 1901.

L. GIBSON.

LIGATING FORCEPS.

(Application filed Dec. 6, 1900.)

(No Model.)

Fig. 1.

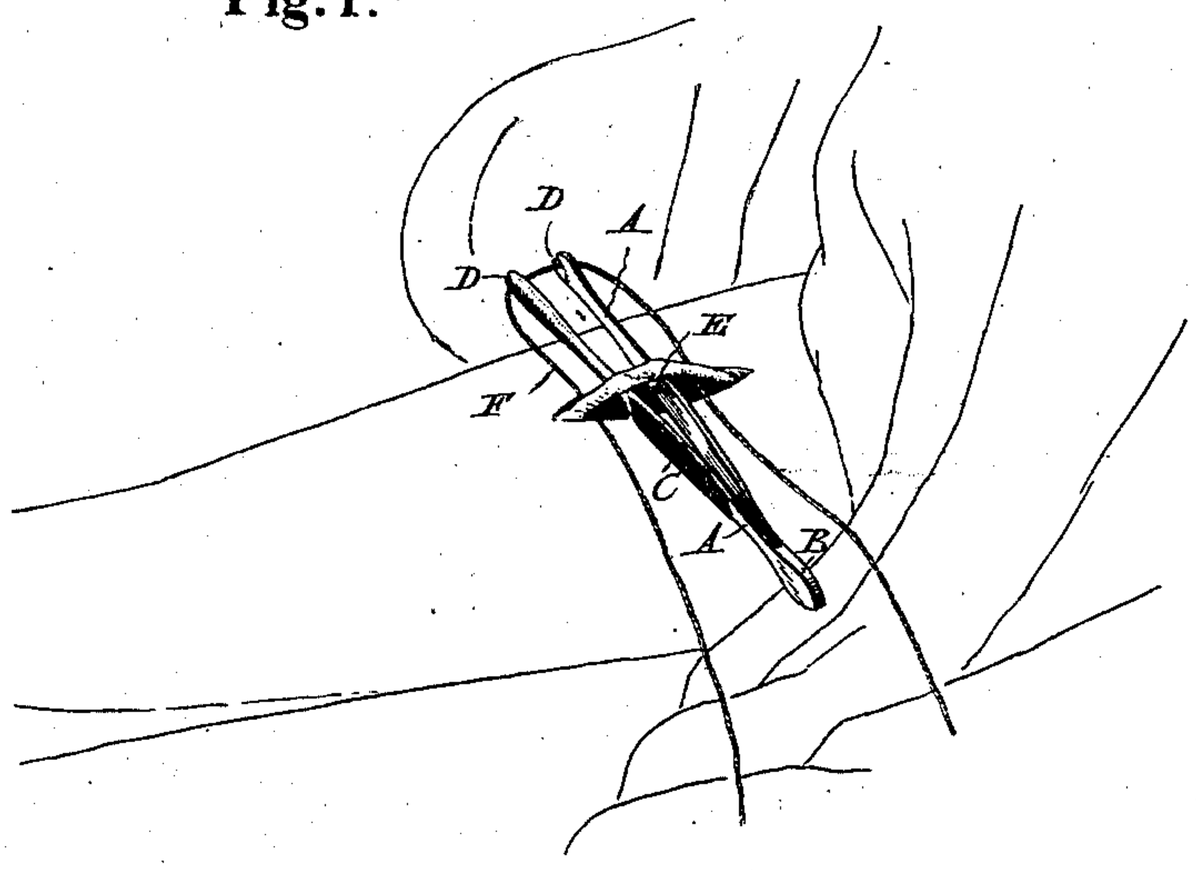
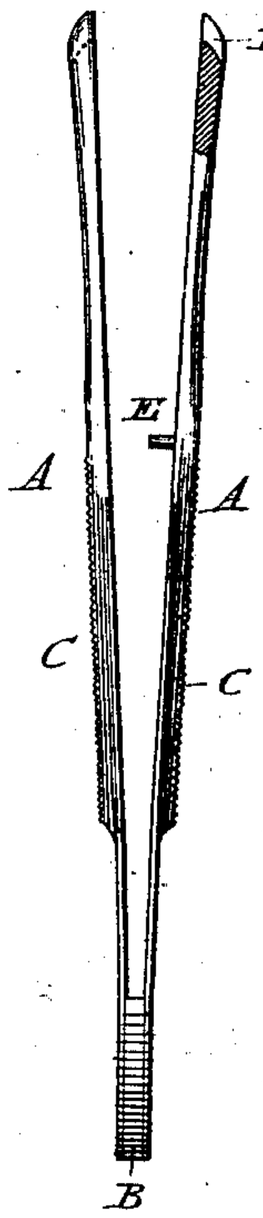


Fig. 2.

Fig. 3.



Witnesses.
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UNITED STATES PATENT OFFICE.

LLEWELLYN GIBSON, OF LANSING, MICHIGAN.

LIGATING-FORCEPS.

SPECIFICATION forming part of Letters Patent No. 671,337, dated April 2, 1901.

Application filed December 6, 1900. Serial No. 38,925. (No model.)

To all whom it may concern:

Be it known that I, LLEWELLYN GIBSON, a citizen of the United States, residing at Lansing, in the county of Ingham and State of Michigan, have invented certain new and useful Improvements in Ligating-Forceps, of which the following is a specification.

My present invention pertains to ligating-forceps, the construction and advantages of which will be hereinafter fully set forth, reference being had to the annexed drawings, wherein—

Figure 1 is a perspective view showing the use of the device; Fig. 2, a face view of the instrument; and Fig. 3, an edge view, one member being partially broken away at its end to disclose the formation thereof.

The object of the invention is to provide what may be termed a "ligating-forcep," by the use of which a ligature may be readily passed beneath an artery or any part and brought to a position where it may be fastened or tied.

Referring to the drawings, A A indicate two spring-arms connected to each other at one end, with a block B between them. The outer face of each arm is preferably roughened, as at C, and from this point the arms are first tapered slightly and then increased in thickness toward the free ends thereof. The taper and swell are formed on curved lines, so as to avoid all sharp projections and present a smooth rounding surface. The free end of each arm is, as will be noted, rounded off, so that when the arms are pressed together a smooth wedge-shaped or tapering surface at the head of the instrument is obtained.

In the end of each arm there is formed a groove or notch D, preferably tapered or V-shaped in cross-section, withthe bottom of the groove conforming in contour to the curvature of the outer face of the arm. (See Fig. 3.)

Normally the arms occupy the position indicated in Fig. 3, and to insure the proper registering of the parts when they are brought together a guide-pin E is provided, said pin entering a corresponding opening in the opposite arm.

In using the device a ligature, as F, is drawn down into the grooves or channels, the arms at such time being held together, and the instrument passed beneath the artery or other part, as indicated in Fig. 1, carrying with it the ligature. When the instrument has been passed far enough beneath the artery, pressure on the arms is removed and they tend to resume their normal spread position, with the ligature at each side of the instrument beneath the artery and the artery elevated, as indicated in Fig. 1. The ligature may then be tied at one or two points, as desired.

It is manifest that the formation or contour of the outer faces of the arms may be varied without departing from the spirit of my invention, so long as the arms are constructed so as to be readily passed beneath the part being operated upon without injuring the same and a proper hold on the ligature is maintained while the instrument is being forced to place.

Having thus described my invention, what I claim is—

1. A ligating-forcep consisting of two arms connected together and provided with rounded heads at their outer ends, each head having a notch formed therein at its extremity, the arms when brought together presenting a smooth surface throughout the operative portion thereof.

2. A ligating-forcep consisting of two spring-arms connected together at one end, said arms standing normally apart, their inner faces being smooth and flat and the free end of each arm having a cross-notch formed in its extremity, the notches being in alinement.

3. A ligating-forcep comprising two spring-arms connected at one end, each of said arms being curved upon its outer face, flat upon its inner face and having the outer face of its free end rounded, and having a V-shaped notch formed in said outer free end, the notch in one arm being in line with the notch in the other, substantially as described, whereby when the arms are brought together there is formed in effect a single continuous notch.

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

LLEWELLYN GIBSON.

Witnesses:
GEO. W. MCCLINTIC,
A. COURTNEY.