

No. 715,426.

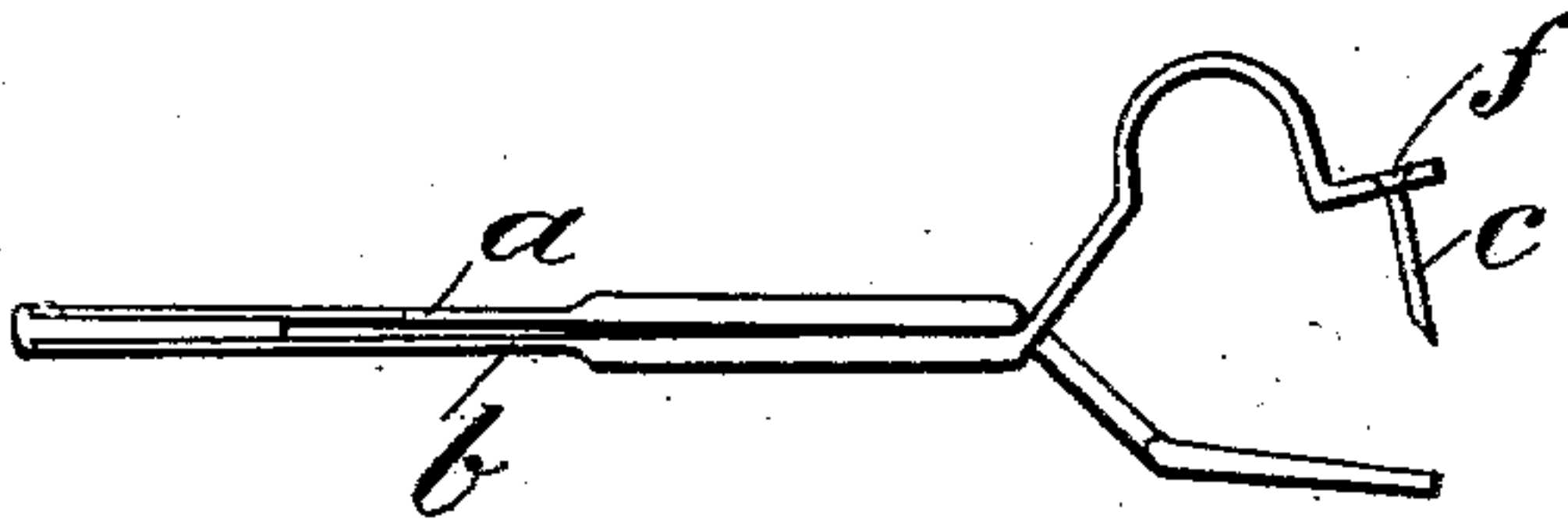
Patented Dec. 9, 1902.

D. SCHISGAL.  
SUTURING INSTRUMENT.

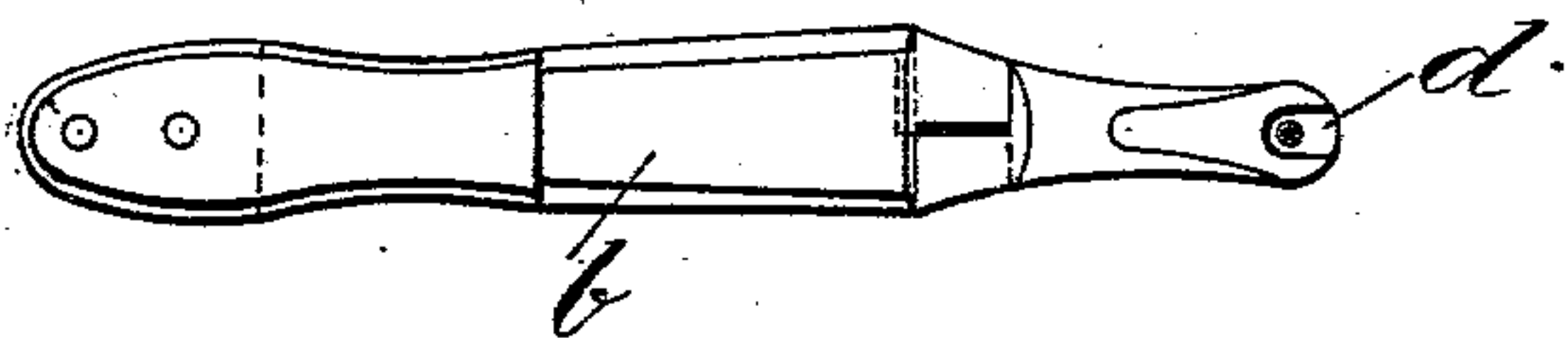
(Application filed Oct. 31, 1901.)

(No Model.)

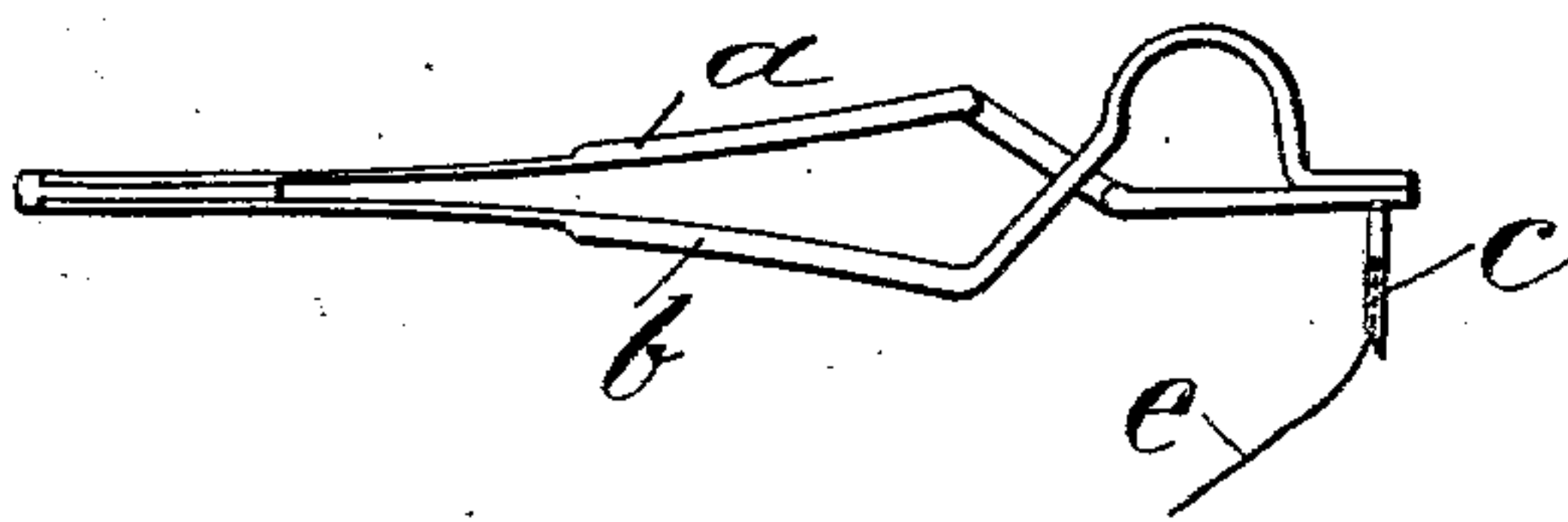
*Fig. 1*



*Fig. 2*



*Fig. 3*



Witnesses:  
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Inventor:  
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# UNITED STATES PATENT OFFICE.

DAVID SCHISGAL, OF VERNON, FRANCE.

## SUTURING INSTRUMENT.

SPECIFICATION forming part of Letters Patent No. 715,426, dated December 9, 1902.

Application filed October 31, 1901. Serial No. 80,629. (No model.)

*To all whom it may concern:*

Be it known that I, DAVID SCHISGAL, a citizen of the Republic of France, and a resident of Vernon, 19 Rue St. Louis, Eure, France, have invented certain new and useful Improvements in or Relating to Surgical and Like Instruments, of which the following is a specification.

When a surgeon uses a needle for effecting the sewing up of wounds, he is obliged to pinch tightly together the two edges of the wound between the fingers of his left hand in order to hold each part in position and drive the needle through. He must necessarily employ a certain amount of force for this purpose, which makes the needle liable to rise and more often slip over it, producing only a slight tear and unnecessary suffering. When the needle has been driven through, the surgeon opens one of the sides of the eye of the needle to introduce the silver or other thread, closes the eye again, and draws the needle in the opposite direction; but then the thread passed through the needle forms at each side a projection larger than the hole of the puncture, and consequently the thread in passing through tears the flesh and causes pain. However skillful the operator is the suture is always slow, painful to the patient, and difficult for the surgeon. In order to remedy these inconveniences, I have invented a new kind of pincers-needle with which the operator acts with certitude and the person being operated upon only feels the slight pain caused by the successive necessary insertions of the needle.

In order that my invention may be clearly understood, reference is made to the accompanying drawings, in which—

Figure 1 is an elevation of the improved sewing instrument with the shanks closed. Fig. 2 is a plan view of Fig. 3, and Fig. 3 is a view of the device with the shanks open.

The apparatus consists of a pincers or clip device having two flexible shanks *a* and *b*, formed of springs and arranged in such a manner that the shanks constantly tend to separate from each other, as represented in Fig. 3. The ends of these two shanks are conveniently bent and cross each other and form an angle at their free ends, so that the two ends are superposed and rest one on the

other when the device is in its normal position, Fig. 3. The shank *b* is furnished at its end with a hollow needle *c*, which can, if desired, be removed, while the other shank *a* is provided at its end with an open slot *d*, in which the needle *c* enters.

To effect a suture with this instrument, the operator takes hold of one of the parts of the wound in order to lift it, but without pressing it between his fingers. Then he presses together the spring-arms *a* and *b* of the instrument, their ends consequently opening, as represented clearly in Fig. 1. He then places the edge of the wound between the ends of the instrument, or, rather, between the end of the needle *c* and the end of the shank *a*, and when the apparatus is in the required position he releases the spring-arms *a* and *b*. The free ends of the spring-arms now approach each other automatically. The needle *c* passes through the edge of the wound without making unnecessary punctures and without risk of slipping on the surface, as it acts surely and is efficiently guided, owing to its firm connection with one of the two spring-arms. The silver or other thread *e* employed is then drawn through the hollow needle and by the same action drawn through the interior of the hole made by the needle in the edge of the wound. The operator bends the thread back on the edge, as represented in Fig. 3, and it only remains for him to again press the spring-arms *a* and *b* of the instrument in order to open their extremities, thereby drawing the needle from the flesh. The thread, stopped by its end being bent, naturally stays in the hole made for it. In operating thus along the whole length of the wound the suture is easily effected with security and rapidity and without causing any unnecessary tearings of the flesh or incisions, and consequently with a minimum amount of pain to the patient. It must also be remarked that the shank *b* is conveniently bent at its end to allow the operator to make the incision more or less near the edge of the wound.

It is evident that instead of effecting the suture by drawing the thread separately through each side of the wound the latter can in certain cases be drawn together and the thread drawn through both edges at the same



time. Lastly, at the part where the needle *c* is fixed to its shank *b* I propose to provide a hollow cavity *f*, which will permit the introduction of the end of a syringe for the purpose of introducing an antiseptic liquid into the needle *c*.

From the foregoing it can be seen that by the use of the improved instrument the inconveniences connected with the needles now in use are entirely avoided. It must finally be observed that other uses for the apparatus than surgical ones will present themselves.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is as follows:

A pincers-needle for making surgical su-

tures, comprising two members adapted to cross each other, joined together at one end and resting upon each other at the other end owing to their elasticity, one of said members being provided at its end with a hollow needle for the passage of the thread for making the suture and the corresponding end of the other member being provided with an open slot for the passage of said needle and the withdrawal of the thread, substantially as set forth.

Signed at Paris, France, this 18th day of October, 1901.

DAVID SCHISGAL. [L. S.]

Witnesses:

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PAUL BARAUD.