

(No Model.)

E. RUPPERTZ.
ARTERY FORCEPS.

No. 547,292.

Patented Oct. 1, 1895.

Fig. 1.

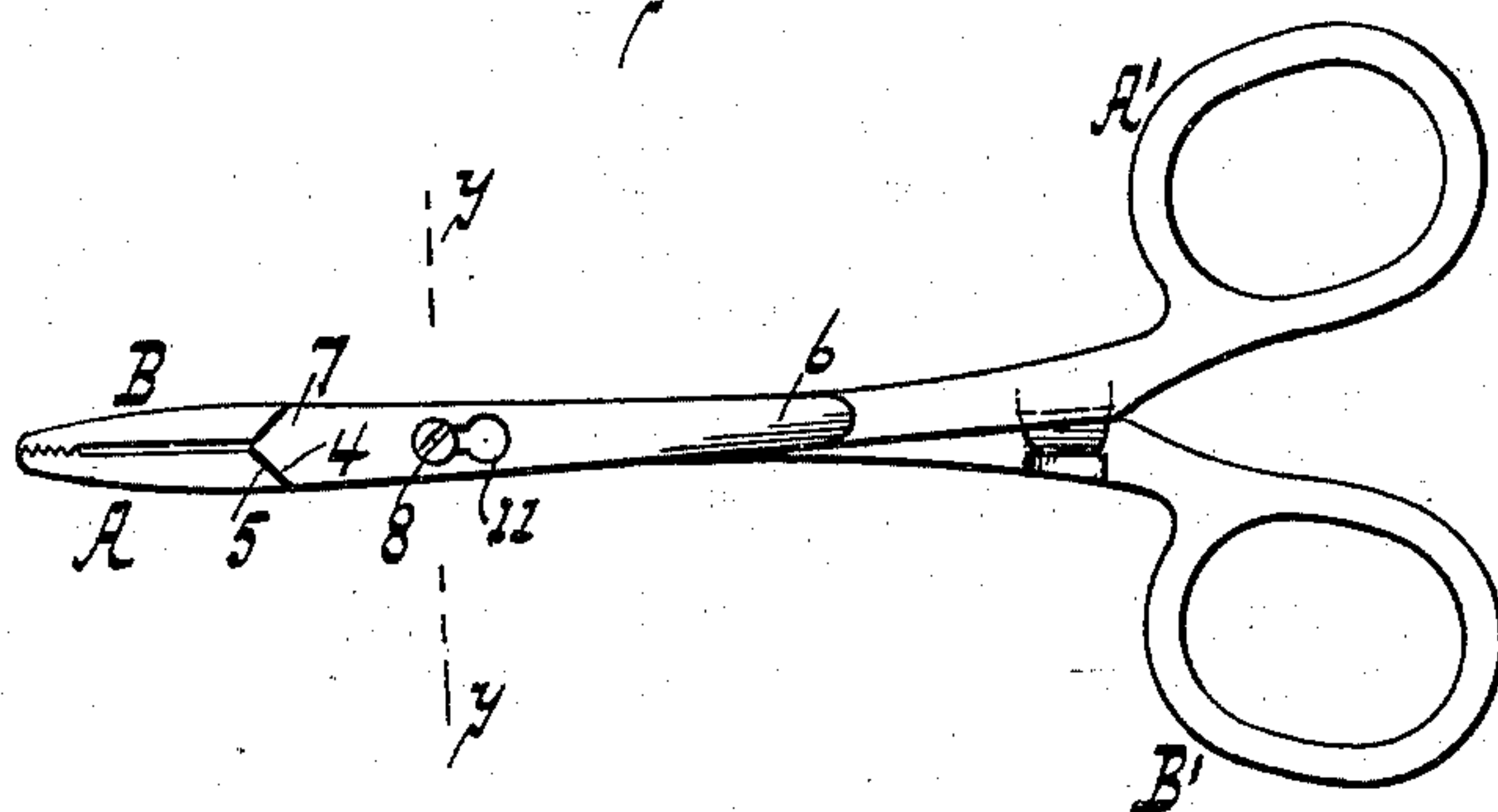


Fig. 2.

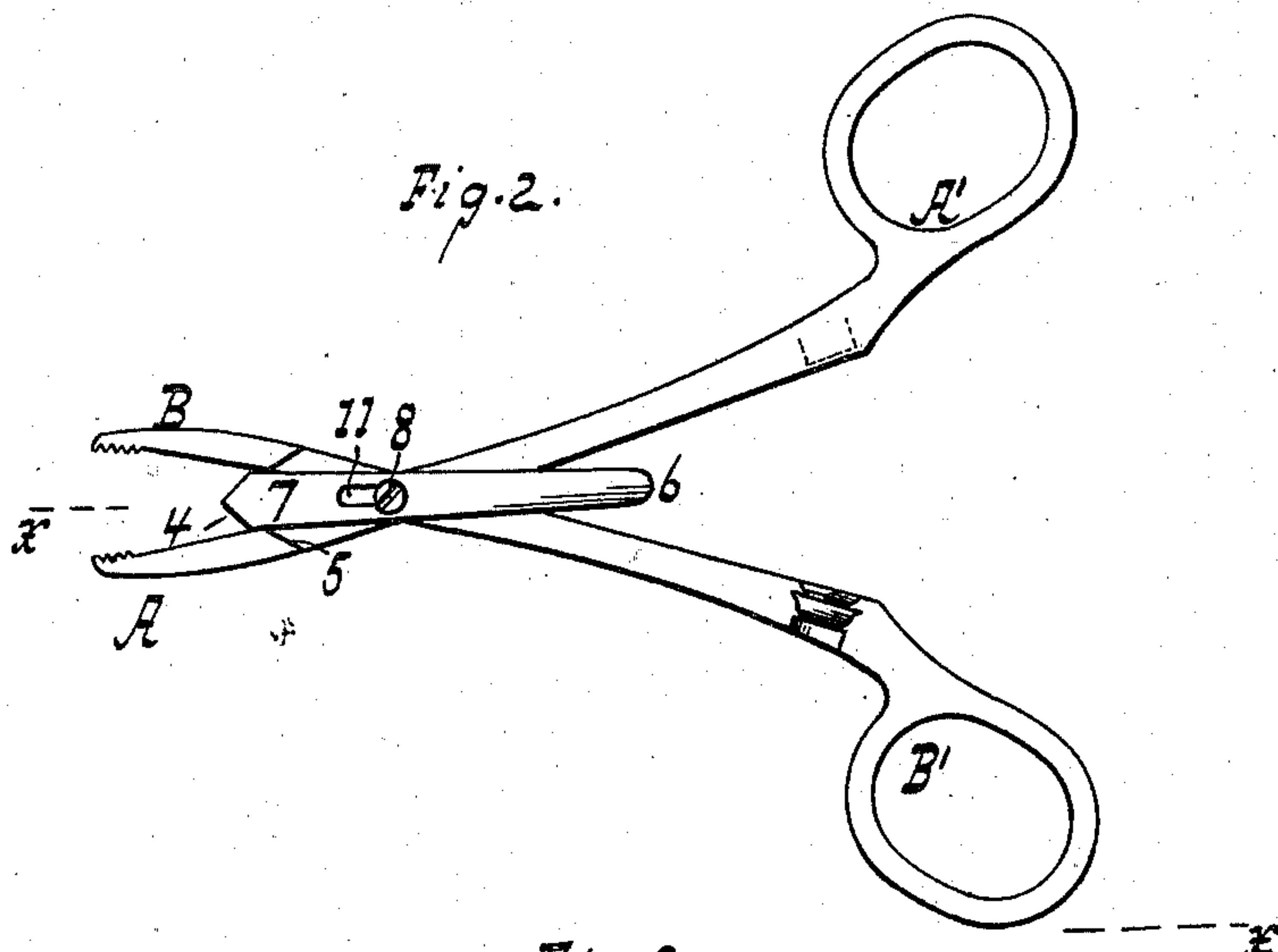


Fig. 3.

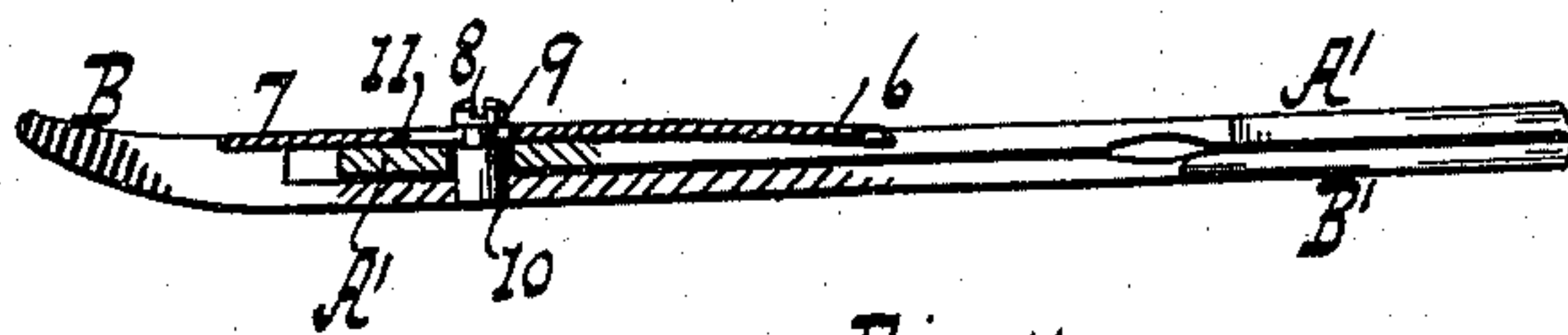
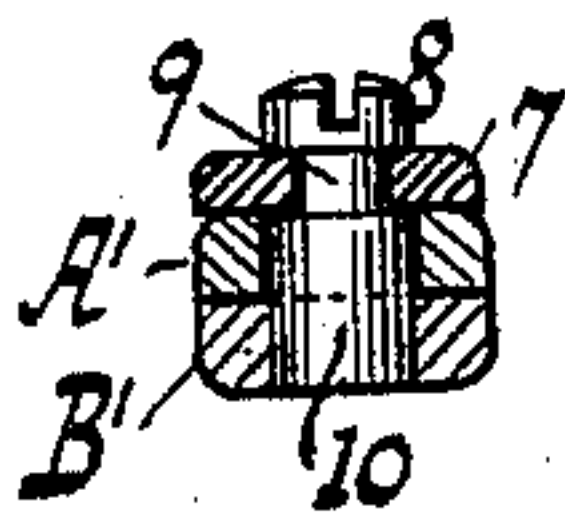


Fig. 4.



WITNESSES:

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ARTERY-FORCEPS.

SPECIFICATION forming part of Letters Patent No. 547,292, dated October 1, 1895.

Application filed June 27, 1895. Serial No. 554,257. (No model.)

To all whom it may concern:

Be it known that I, ERNST RUPPERTZ, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented new and useful Improvements in Surgical Scissors and Forceps, of which the following is a specification.

The object of this invention is to provide scissors, forceps, and like articles which, while capable of being readily taken apart, will have as few as possible loose parts, so that the liability of a part becoming lost is comparatively slight; and the invention resides in the novel features of construction set forth in the following specification and claim, and illustrated in the annexed drawings, in which—

Figure 1 is a plan view of forceps closed. Fig. 2 shows forceps open. Fig. 3 is a section along $x x$, Fig. 2. Fig. 4 is a section along $y y$, Fig. 1.

A B are two jaws or blades having the handles A' B', respectively. To the jaw B or handle B' is fixed a stud or pivot 10, about which is milled a groove 9, leaving a head 8. The spring 6 7 has a pear-shaped or keyhole slot 11, the enlarged part of which, after the jaw A is placed about pivot 10, is passed over the head 8 of said screw or pivot 10, and said spring being then slipped along to bring the contracted part of slot 11 to the groove or milling 9, said spring is held by head 8 from coming up off its seat on handle A'.

When taking the instrument apart, the stud or screw 10 being fixed to handle B' cannot become detached or lost, as might occur if this stud were loose, said stud being generally of small dimension. The spring 6 7, bearing against the pivot-head 8, will effect proper tension. The groove 9, being milled all around the pivot, makes a true cylindrical bearing for the spring, not only leaving the spring free to turn or play, but also facilitating the putting together and separating of the parts, as the spring does not have to be

brought to any specially-defined position relatively to the pivot for enabling the spring to be mounted or dismounted.

The spring has its part 4 set into a suitable depression or offset 5 in handle A', so that the spring will lie flush with jaw A, and the tail 6 of the spring is contracted or conformed to the contiguous part of the handle A'. The structure is thus compact and saves space in putting the same into a case, and besides no projecting parts are formed which are apt to catch or tear. The spring part 4, abutting against offset 5, also prevents sliding or longitudinal movement of the spring, so that the enlarged or releasing portion of the keyhole-slot 11 cannot move toward pivot 10 until the spring part 6 is sprung or pressed clear of handle A', as shown in Fig. 2. Accidental separation of the jaws or accidental removal or loss of the spring is thus avoided.

What I claim as new, and desire to secure by Letters Patent, is—

The blades A and B, one of which is provided with the offset 5, and the other with the immovable, permanently attached stud 10 extending through the blade having the offset and constructed with a groove 9, and the spring 6, 7, having the key-hole slot 11 engaging the groove of the permanently attached stud and constructed at its forward end portion to lie in rear of and bear against the aforesaid offset for the purpose of locking the spring against longitudinal movement toward the blades when the contracted part of the key-hole slot engages the groove of the stud, substantially as and for the purposes described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

ERNST RUPPERTZ.

Witnesses:

LUDWIG ROSENFELD,
CHAS. E. POEMGEN.