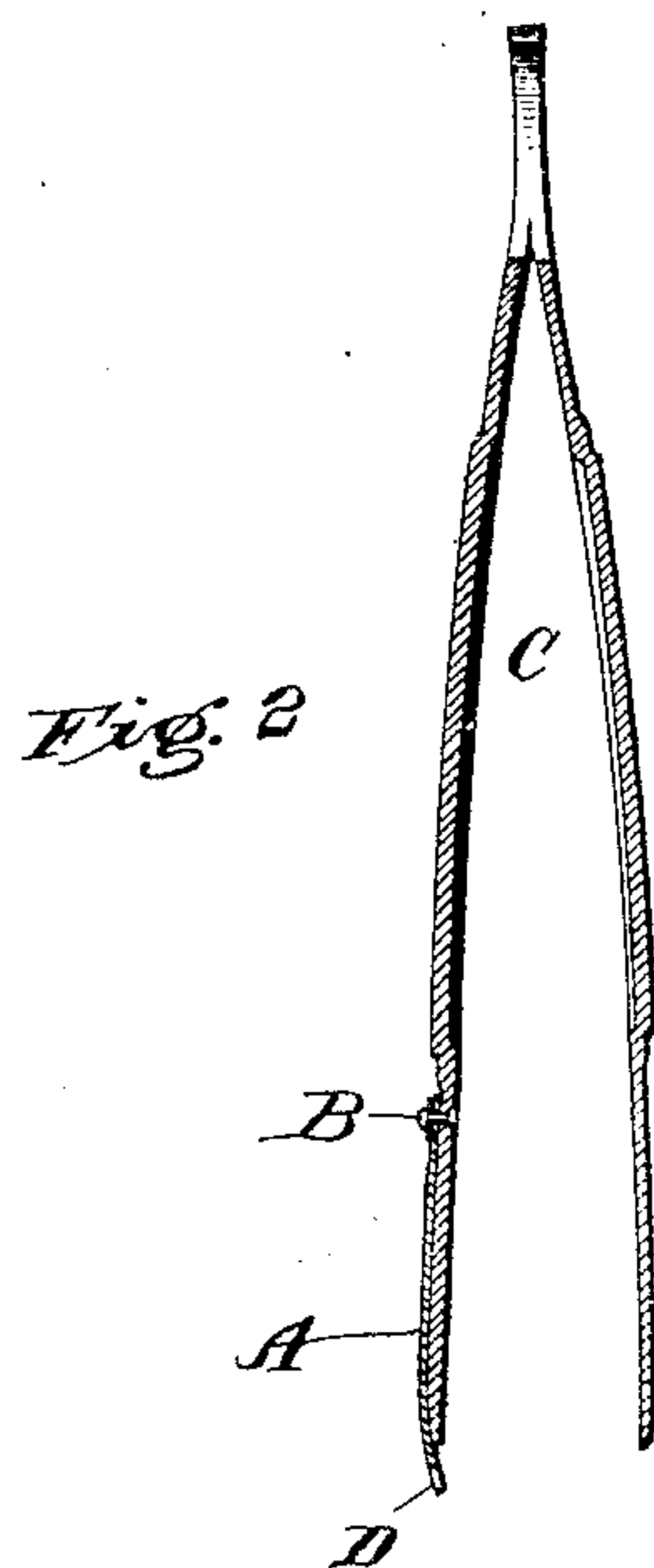
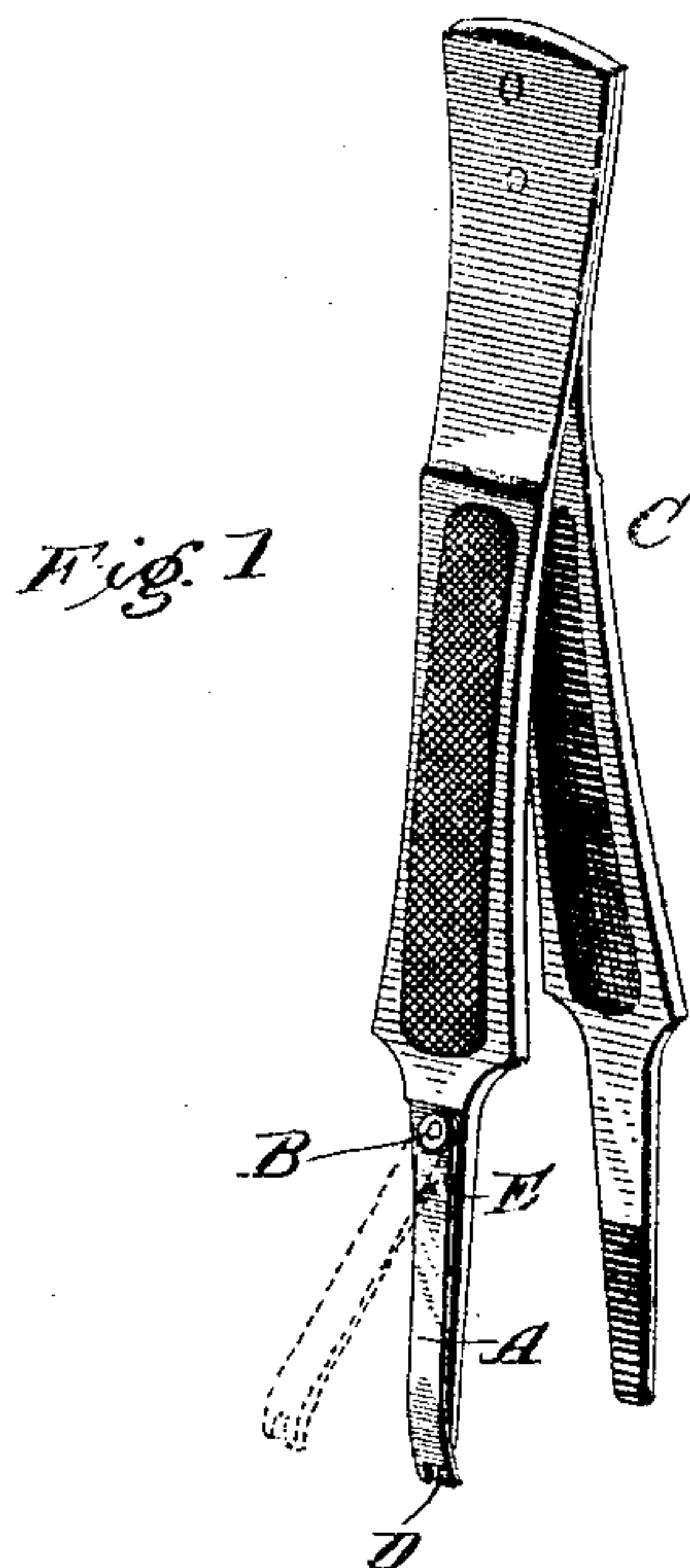


No. 804,652.

PATENTED NOV. 14, 1905.

E. C. ELLSWORTH.
TWEEZERS.

APPLICATION FILED JUNE 24, 1905.



WITNESSES:

E. C. Ellsworth

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EDGAR CHAPMAN ELLSWORTH, OF CAMBRIDGE, VERMONT, ASSIGNOR OF
ONE-HALF TO C. C. HOLDEN, OF WEBSTER, MAINE.

TWEEZERS.

No. 804,652.

Specification of Letters Patent.

Patented Nov. 14, 1905.

Application filed June 24, 1905. Serial No. 266,852.

To all whom it may concern:

Be it known that I, EDGAR CHAPMAN ELLSWORTH, a citizen of the United States, residing at Cambridge, in the county of Lamoille and State of Vermont, have invented certain new and useful Improvements in Tweezers, of which the following is a specification.

The invention relates to tweezers adapted for general use, but specially designed for watch-makers for use in removing and replacing the escapement-lever of watches.

The object had in view is to provide a new and useful implement of this character which shall not only possess special advantages for the purpose intended, but be cheap to manufacture and simple in construction.

To the end above stated I have invented the peculiar tweezers or, more definitely stated, attachment to an ordinary pair of spring-tweezers shown by the accompanying drawings and which will hereinafter be fully described, the novel features thereof being pointed out in the claims.

In the drawings, Figure 1 is a perspective view of an ordinary pair of spring-tweezers with my attachment shown applied thereto, and Fig. 2 is a horizontal sectional view through the tweezers and my attachment.

In the practice of my invention I employ an elastic or yielding metal plate A and rivet or otherwise secure it at its upper end B to the outer side of one leg of an ordinary pair of tweezers C.

It will be observed that the spring-plate A is arranged on the tweezers with its lower or free end projecting beyond the leg of the tweezers to which it is secured, and it will be further noticed that the projecting end of the spring-plate is bifurcated, as at D, adapted for receiving the post or arbor, whereupon the lever is arranged between the forks thus formed at the projecting end of the spring-plate.

It is intended that the mode of attachment of the plate A to the tweezers shall permit of the plate being adjusted, as indicated by dotted

lines in Fig. 1, and thereby permit use of the tweezer-legs, as will be understood by watch-makers and, in fact, any person using the instrument.

It is preferred that the spring-plate A be made substantially the same width as the tweezer-legs, and to limit adjustment in one direction of the plate a fixed stop E may be arranged on the tweezer-leg to which the plate is secured, (see Fig. 1,) and the stop may consist of a struck-up portion of the leg or be in the nature of a pin or shoulder, obvious to those skilled in the art and not thought necessary to illustrate in detail.

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

1. The combination with a pair of tweezers, of a spring-plate secured near its upper end, to the outer side of one leg of the tweezers, the plate being arranged with its lower end projecting beyond the tweezer-legs and adapted to be adjusted, on its attachment device, to one side out of alinement with the tweezer-legs, substantially as described.

2. The combination with a pair of tweezers, of a spring-plate secured near its upper end, to the outer side of one leg of the tweezers, the plate being arranged with its lower end projecting beyond the tweezer-legs, the projecting end being bifurcated or made forked, and the plate adapted to be adjusted out of alinement with the tweezer-legs, substantially as described.

3. The combination with a pair of tweezers, of a spring-plate on the outer side of one leg of the tweezers, the plate being arranged with its free end projecting beyond the tweezer-legs, and said free end bifurcated or made forked, and a stop whereby to limit adjustment of the spring-plate, substantially as described.

EDGAR CHAPMAN ELLSWORTH.

Witnesses:

GLENNA BRUSH,
ANN A. LEACH.