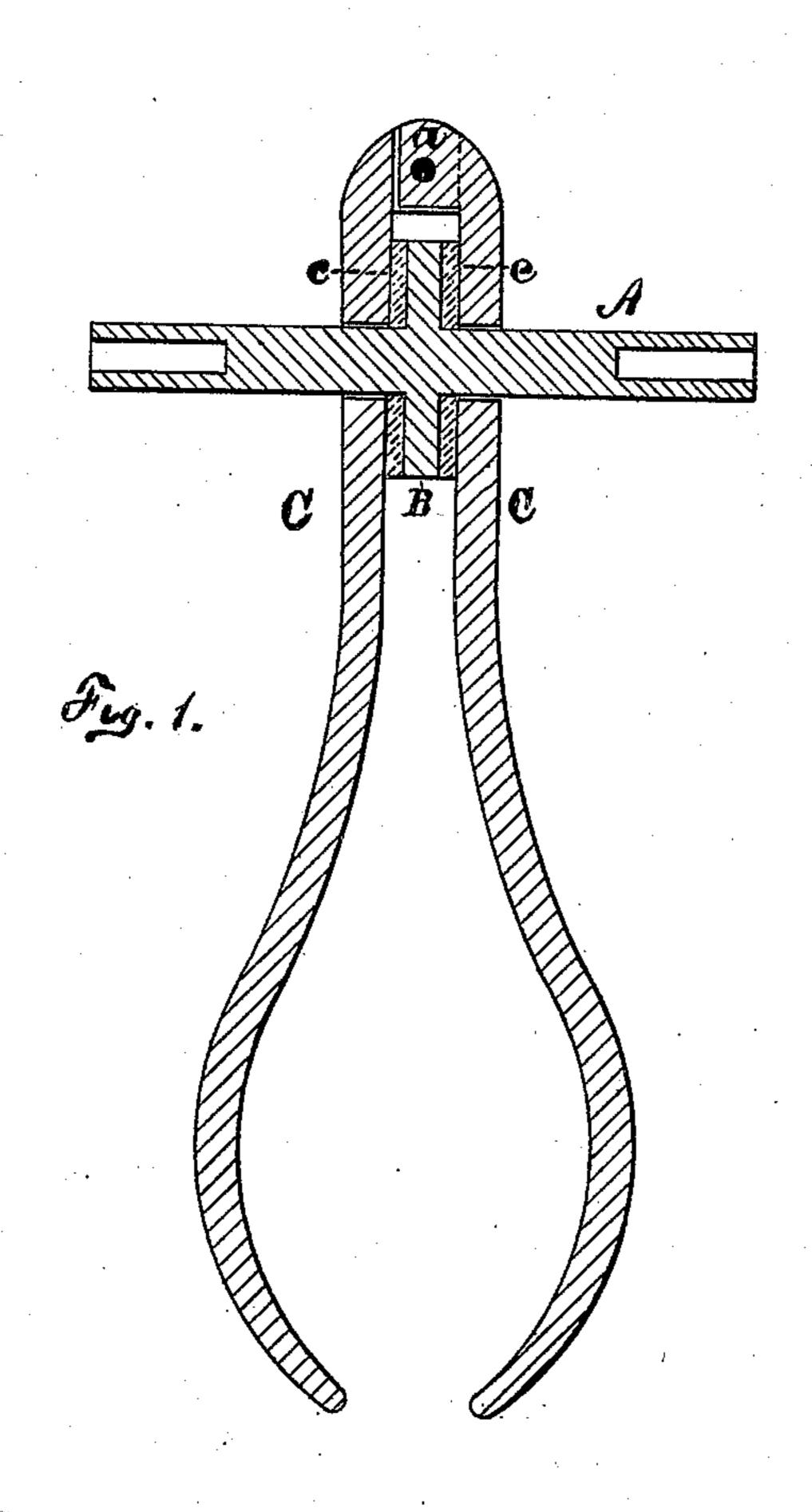
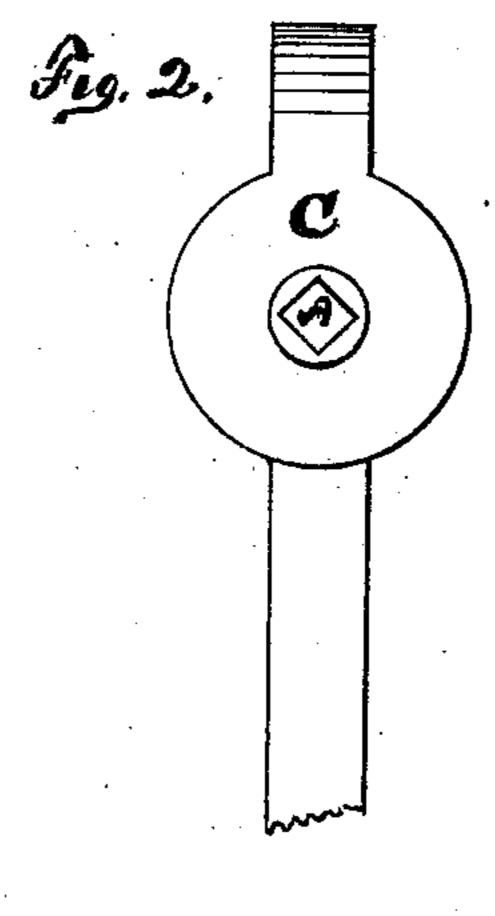
## F. HOELLE.

No. 177,510.

Patented May 16, 1876.





John G. Tumbridge a. D. Wagner

Inventor Firancis Hoelle By O. Drake, Atty.

## United States Patent Office.

FRANCIS HOELLE, OF NEWARK, NEW JERSEY, ASSIGNOR TO HIMSELF AND JOHN OBRIG, OF SAME PLACE.

## IMPROVEMENT IN CLOCK-KEYS.

Specification forming part of Letters Patent No. 177,510, dated May 16, 1876; application filed February 24, 1876.

To all whom it may concern:

Be it known that I, Francis Hoelle, of the city of Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Clock-Keys; and I do hereby declare that the following is a full, clear, and exact description thereof, which 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 the letters of reference marked thereon, which form a part of this specification.

The nature and object of this invention are to control the mainspring of a clock while being relaxed, so that it may be done slowly, thereby avoiding the liability to injure the machinery of a clock, which frequently occurs when a spring is released and allowed to re-

lax suddenly.

My invention consists in securing a clockkey by means of suitable clamps, adapted to be held in the hand, by means of which said key may be held rigidly or allowed to rotate as slowly as may be desired, thereby controlling the relaxing of the springs.

The accompanying drawing illustrates the nature and character of my invention, Figure 1 being a sectional view, and Fig. 2 a plan view, of a clock-key combining my improvements, which, however, is susceptible of various modifications, which might readily oc-

cur to one skilled in the art to which it appertains.

As here shown, the barrel A of the key is provided with a collar, B, at the center, secured between two adjustable clamps, C, hinged at a. A gutta-percha or leather washer, c, intervenes between said collar B and clamp C on each side, the object of which will be apparent.

The key-barrel A, which passes through the clamp, as indicated in Fig. 1, is arranged so as to rotate therein freely, the pressure upon the collar being graduated by the han-

dles, as required.

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

1. The combination of a clock-key, A, and clamps C, when combined and arranged to operate substantially as and for the purposes set forth.

2. The combination of the clock-key A, provided with a collar, B, and the clamps C, when combined and arranged to operate substantially as and for the purpose described.

In testimony that I claim the foregoing as my own I hereto affix my signature in presence of two witnesses.

FRANCIS HOELLE.

Witnesses:

OLIVER DRAKE, JOHN C. TUNBRIDGE.