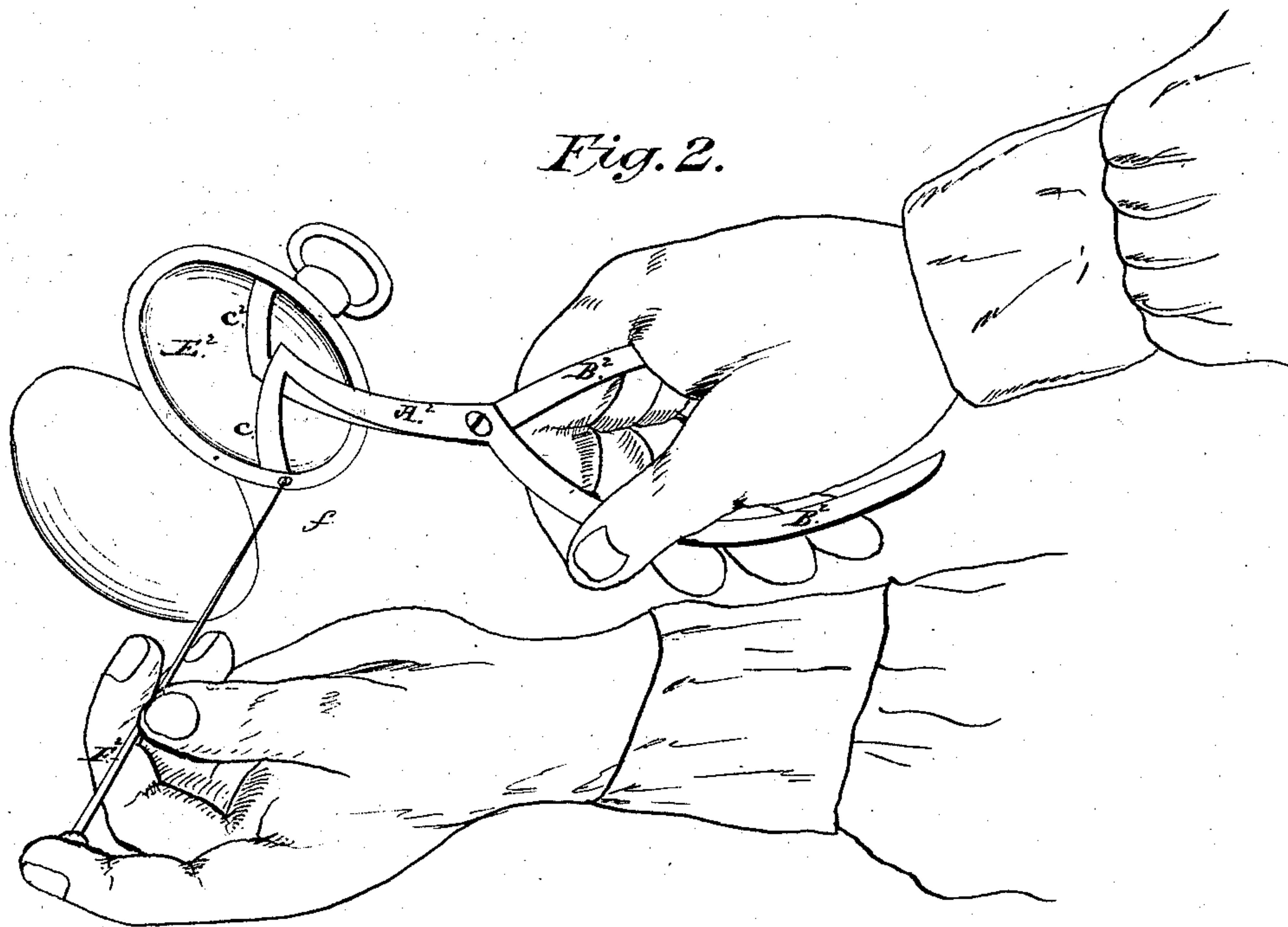
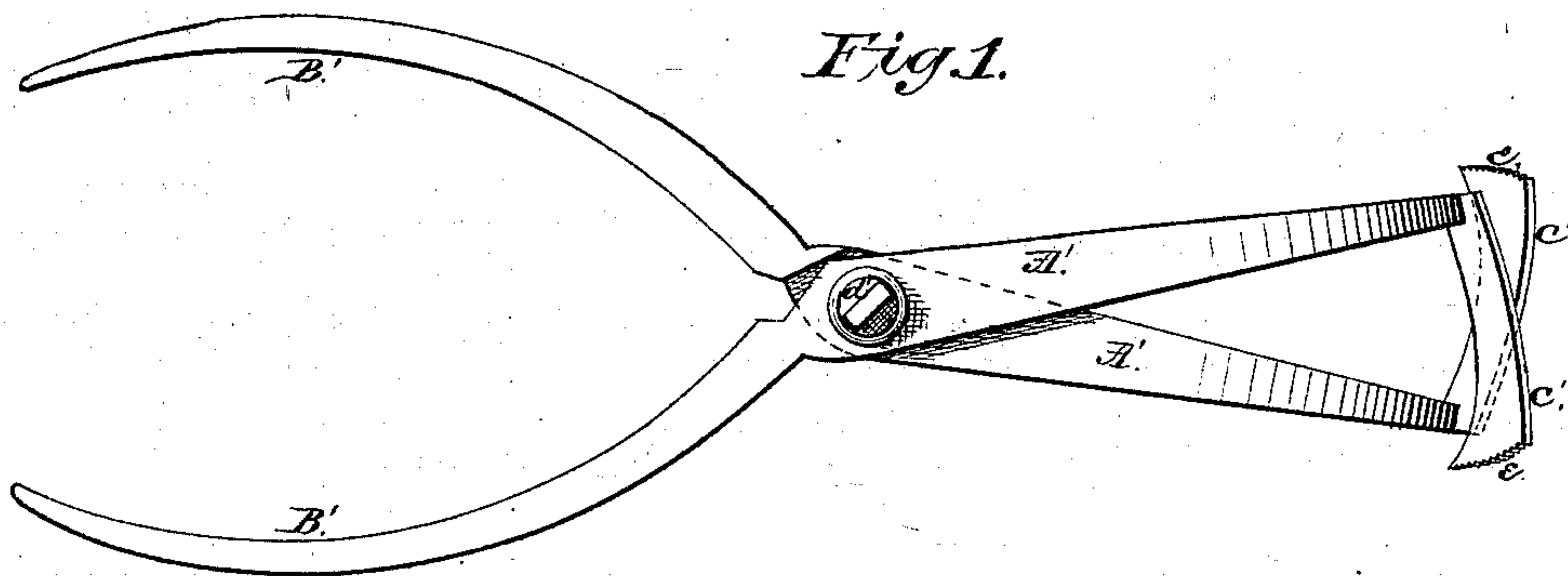


G. S. FALES.
Watchmakers' Tools.

No. 150,550.

Patented May 5, 1874.



Attest.

*James Fales Jr.
Peter Fales.*

Inventor.

Giles S. Fales

UNITED STATES PATENT OFFICE.

GILES S. FALES, OF NEW BEDFORD, MASSACHUSETTS.

IMPROVEMENT IN WATCHMAKERS' TOOLS.

Specification forming part of Letters Patent No. 150,550, dated May 5, 1874; application filed February 18, 1874.

To all whom it may concern:

Be it known that I, GILES S. FALES, of New Bedford, in the county of Bristol, in the State of Massachusetts, have invented certain Improvements in Watch-Tools, of which the following is a specification:

My invention relates to the construction and operation of the within-described extension-pliers, for the purpose set forth. The object of my invention is to secure firmly the spring when adjusted, and while inserting the screw which secures it to the inside of the rim of the case.

Figure 1 is a vertical section of my invention. Fig. 2 is a vertical section of the same when applied to a watch-case, &c.

Fig. 1, A' A' is the pliers; B¹ B¹, their handle; C¹ C¹, projecting jaws extending outward. These jaws are also set either in a curve or at right angles, about one-fourth of an inch out of line with the handles, to enable it to be applied to the case; e' e', teeth cut in the ends of the jaws to prevent them from slipping when in operation; d', the bolt which secures the handles together in a movable joint.

Fig. 2, my invention applied to a watch-case for the purpose specified; B² B² the pliers;

C² C, the jaws; F², the screw-driver; f², the screw, &c.; E², case.

When the spring which throws up the cover of the case of a watch or locket is to be secured in its proper position by the screw which holds it to the inside of the rim of the case much difficulty has heretofore been experienced not only in adjusting it but in preventing it from slipping. By the application of my invention, as shown in Fig. 2 of the engraving, this difficulty is entirely obviated, the jaws of the pliers being inserted in the inside of the case, as shown, with jaw C against the spring, and jaw C² against the inside of the rim of the case. By pressing upon the handles B² B² the operation of holding the spring with my invention for the purpose specified will be apparent without further specification.

I claim as my invention—

The within-described extension-pliers, constructed as herein specified, with teeth e' e' on jaws C¹ c, for the purpose set forth.

GILES S. FALES.

Witnesses:

JAMES FALES, Jr.

PETER FALES.