No. 766,057. PATENTED JULY 26, 1904.

J. MÜLLER.

SPRING FORCEPS.

APPLICATION FILED APR. 7, 1904.

NO MODEL.

Fig. 1.

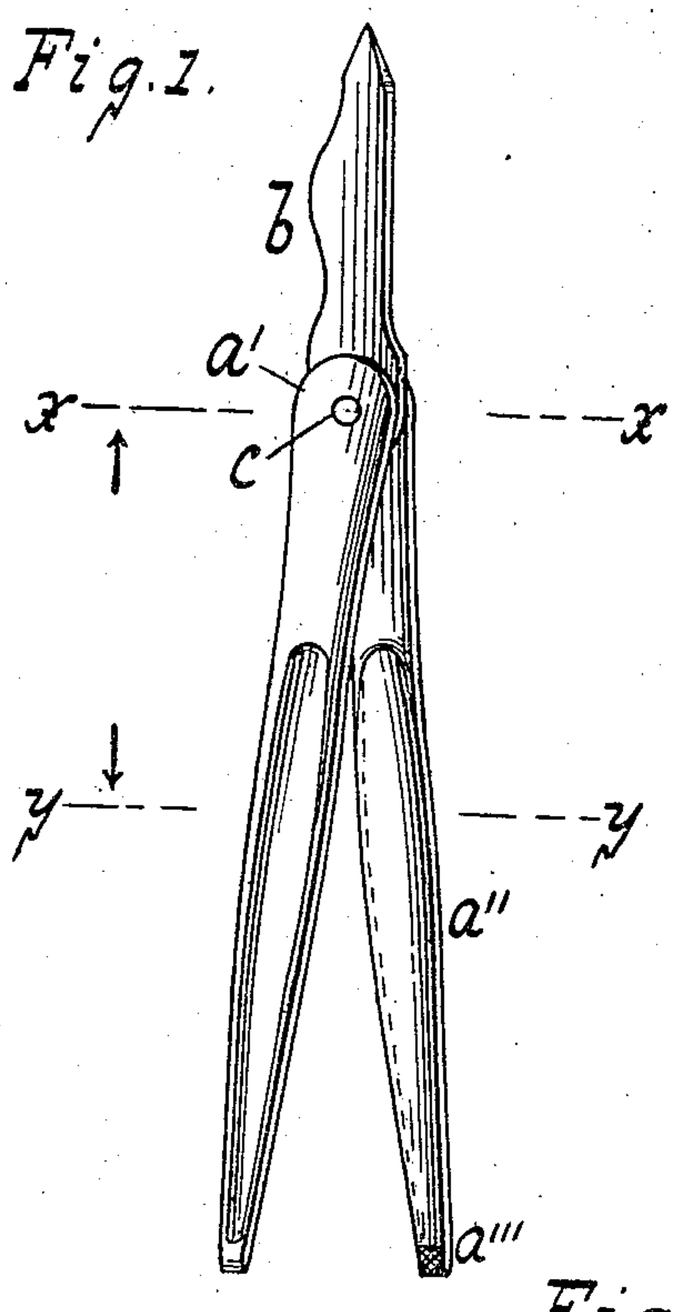

Fig. 2

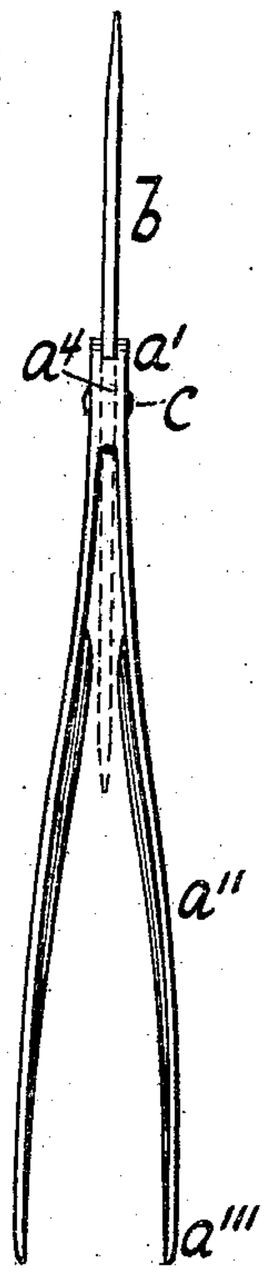

Fig. 5.

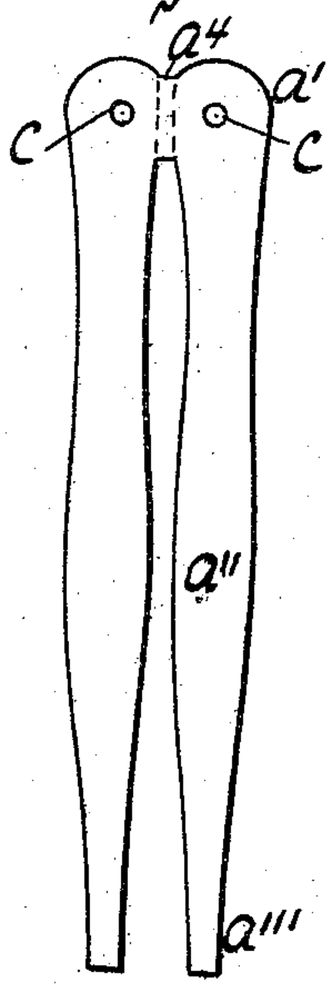

Fig. 3.

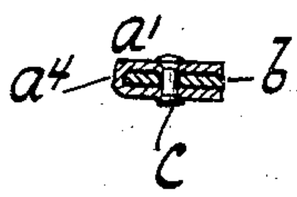

Fig. 4.

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No. 766,057. Patented July 26, 1904.

UNITED STATES PATENT OFFICE.

JOHN MÜLLER, OF BROOKLYN, NEW YORK.

SPRING-FORCEPS.

SPECIFICATION forming part of Letters Patent No. 766,057, dated July 26, 1904.

Application filed April 7, 1904. Serial No. 202,074. (No model.)

To all whom it may concern:

Be it known that I, JOHN MÜLLER, 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 Spring-Forceps, of which the following is a specification.

This invention relates to spring-forceps which can be adapted for use by jewelers, surgeons, and elsewhere, the use of the instrument being no limitation of the invention.

This invention is set forth in the following specification and claims and illustrated in the annexed drawings, in which—

Figure 1 is a perspective view of a forceps embodying this invention. Fig. 2 is an edge view of Fig. 1. Fig. 3 is a section along $x\ x$, Fig. 1. Fig. 4 is a section along $y\ y$, Fig. 1. Fig. 5 shows a blank for forming a forceps.

The forceps can be formed from a blank of sheet or spring metal, Fig. 5.

Each jaw or section for convenience of description can have the several parts designated, respectively, as the "bow" part a', the "body" or "finger" part a'', and the "jaw" or "seizing" part a'''. Each jaw or shank or at least its body part a'' is curved in cross-section, so as to have a concave outer face and a convex inner face. The spring or sheet metal is strengthened or stiffened by such curvature, and the concavity also gives a rest or hold portion for the finger and thumb of the user. As the part a'' forms the finger or grasping part of the instrument, the finger and thumb sit into the hollow or rest formed by the concavity and insure against the operator or user slipping or losing hold.

In delicate work—as, for example, in certain surgical operations, say, on the eye or a tender organ, or in picking up valuable jewels—a slip is to be avoided for obvious reasons. While the bow part and the jaws or ends can be left flat or springy, the curved body portions are comparatively stiff or rigid.

The blank for the forceps can have the several sections united by a joining-strip a^4. Such blank can be brought from its flat shape to the form of a forceps by suitably bending at the joining portion. The joining-piece being at the bow portion, the remainder of the shanks, such as body a'' and jaws a''', are left free to spring apart.

The bow parts can be bent to leave a suitable space in which can be mounted a lancet, knife, or any other instrument, as indicated at b. This instrument being mounted on pivot c can be opened and closed on the plan of a pocket-knife blade.

This instrument or part b can be omitted or not, as seen fit. The seizing or jaw part a''' can be given any desired form as required—for example, for iris or splinter forceps, jewelers' pincers, or other articles.

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

1. A forceps comprising jaws or shanks curved in cross-section so as to have concave outer and convex inner faces or sides.

2. A forceps formed of sheet or flexible metal comprising spring-jaws formed flat at their bow or uniting ends, and having their body portions curved in cross-section to form concave outer and convex inner faces whereby the metal is stiffened and finger rests or seats obtained to prevent the operator or user from slipping or losing hold.

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

JOHN MÜLLER.

Witnesses:
HENRY MÜLLER,
CHAS. E. POENSGEN.