

(No Model.)

E. N. PARKER.
JEWELER'S CLAMP.

No. 450,474.

Patented Apr. 14, 1891.

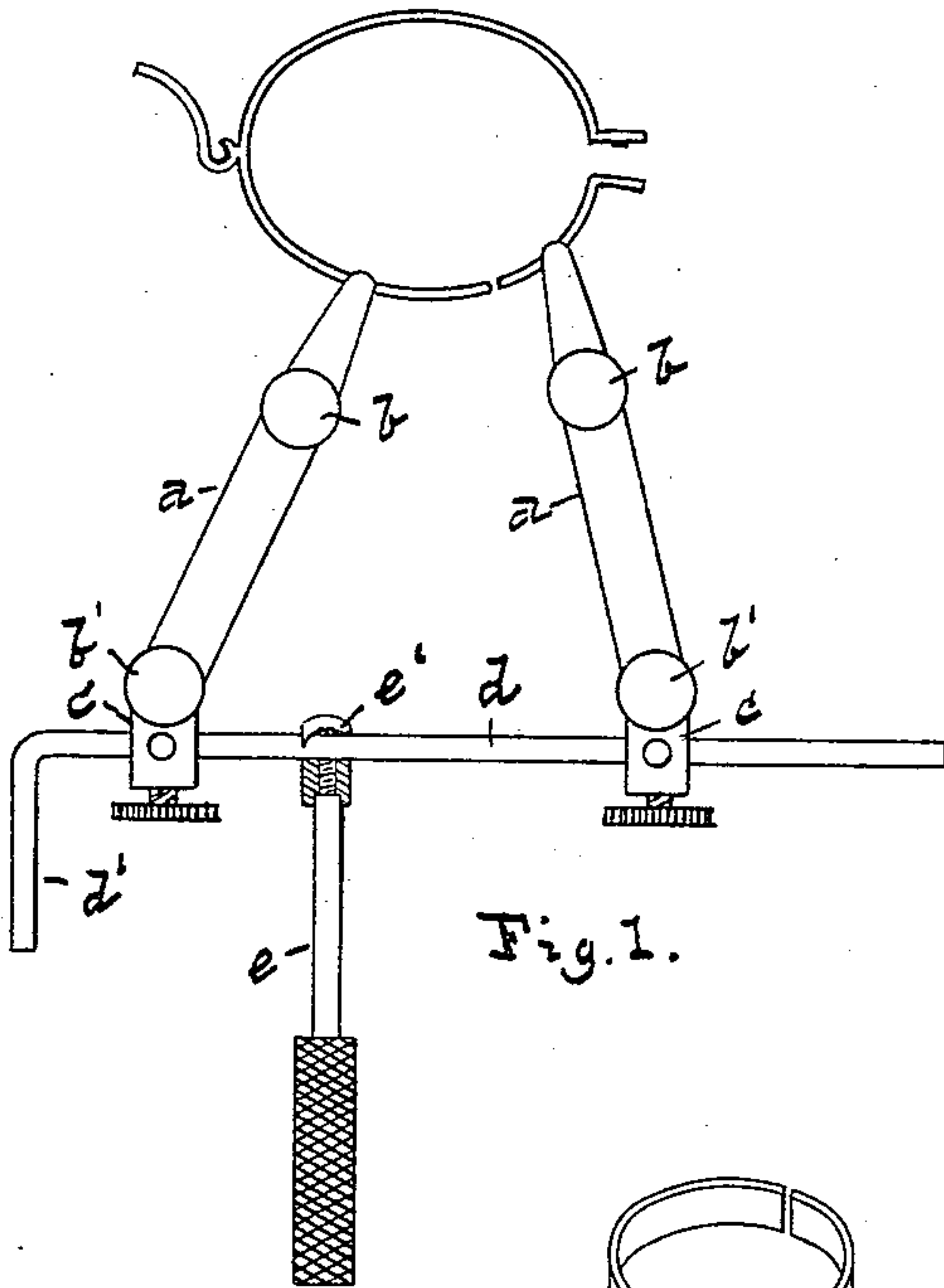


Fig. 1.

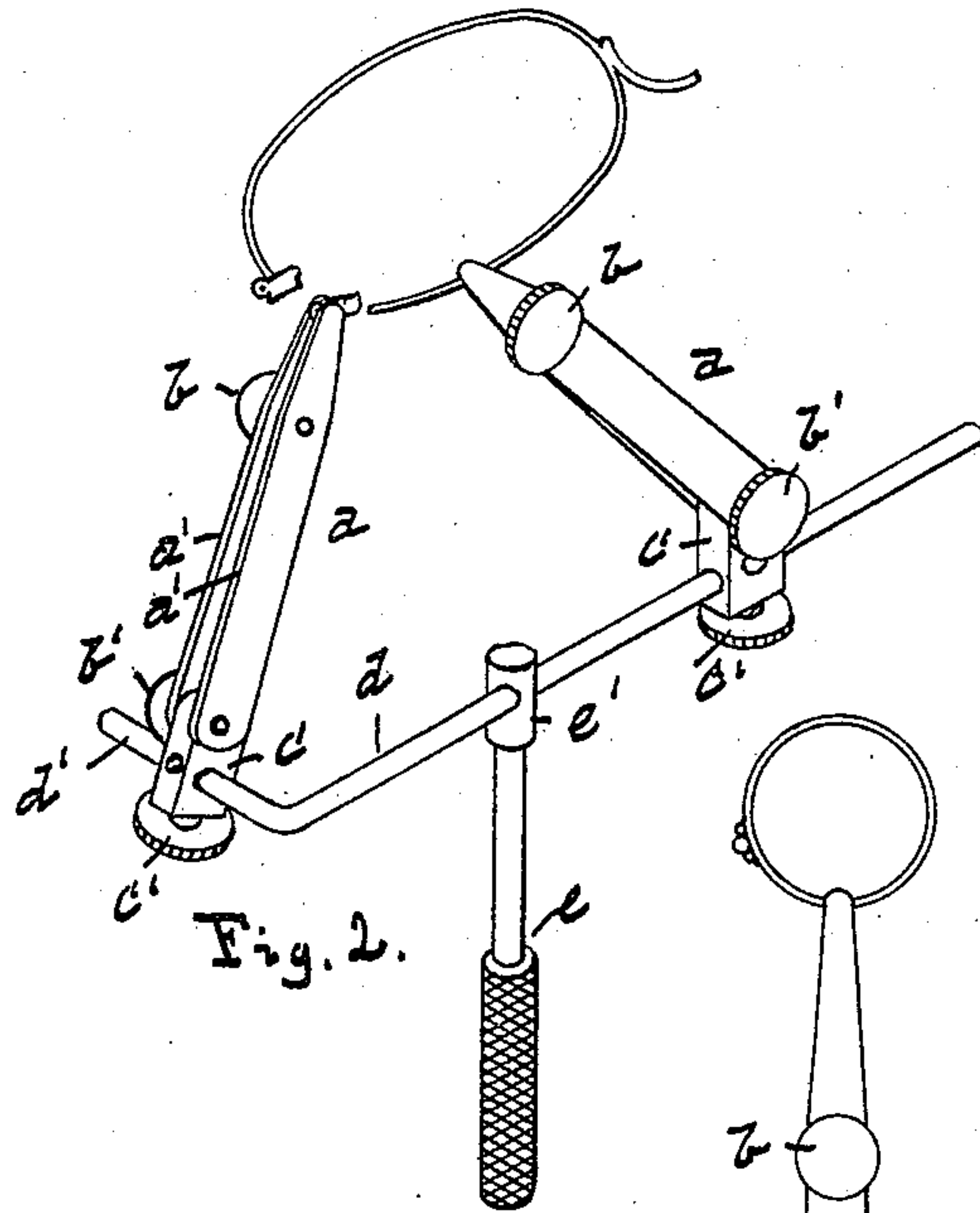


Fig. 2.

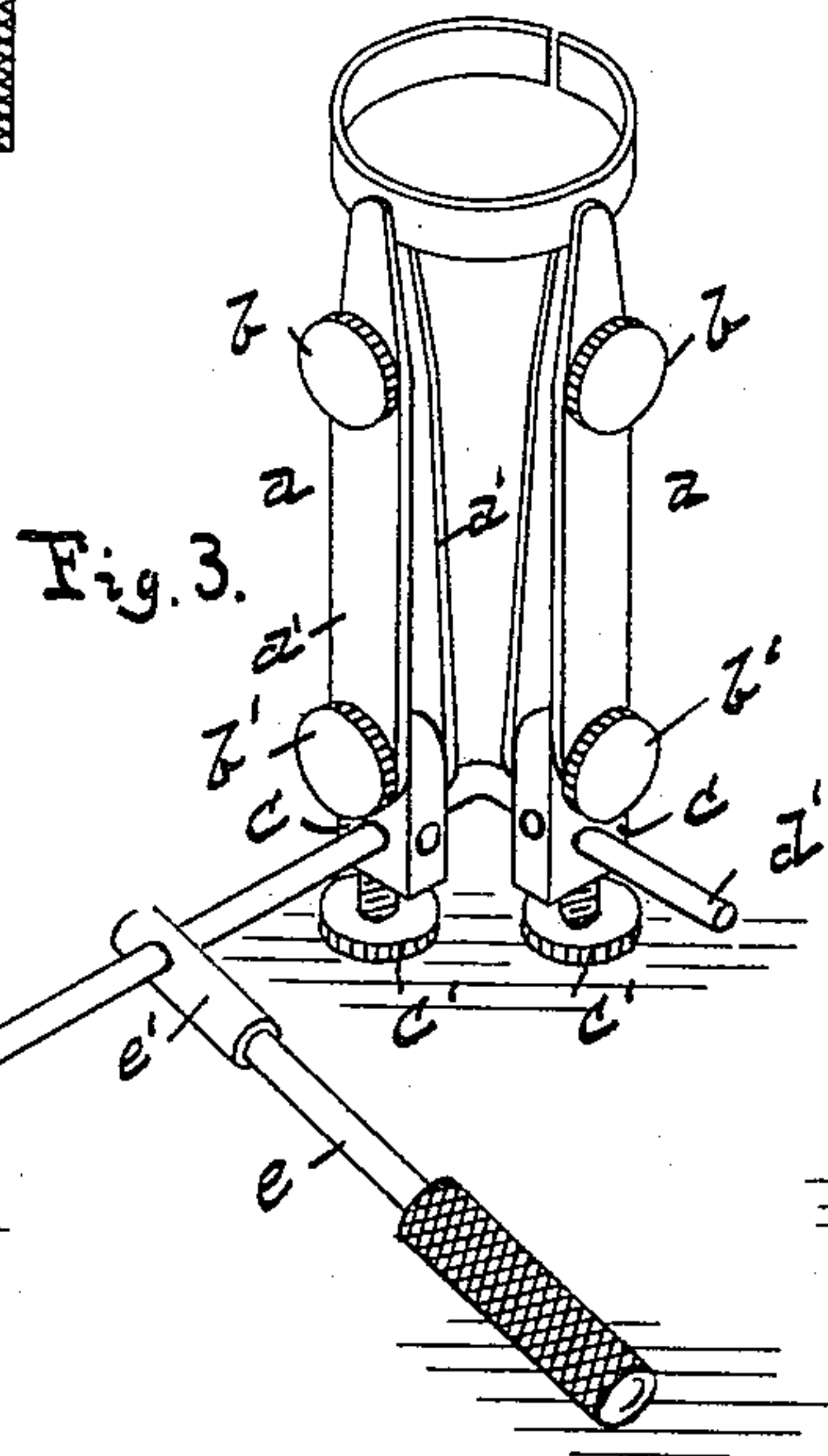


Fig. 3.

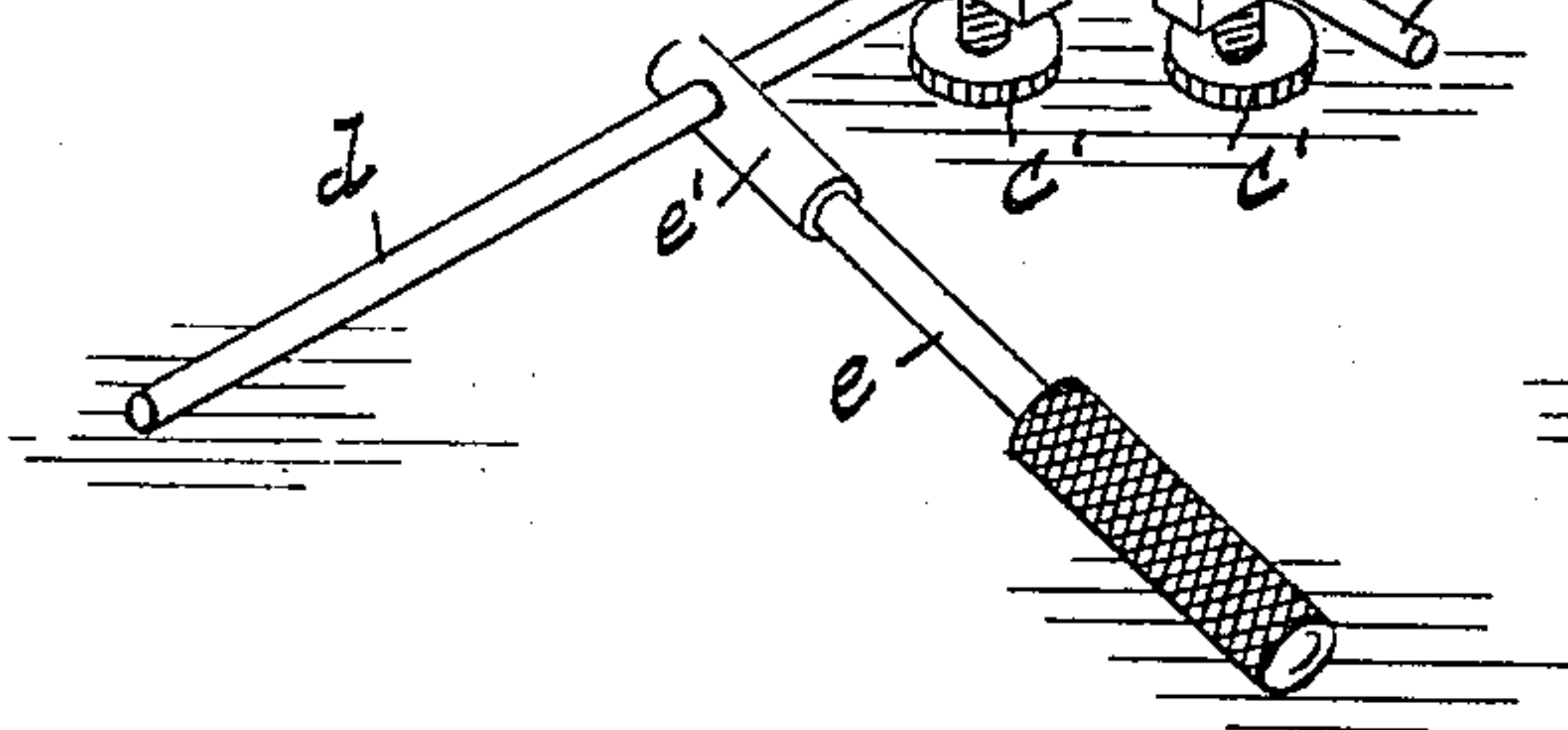


Fig. 4.

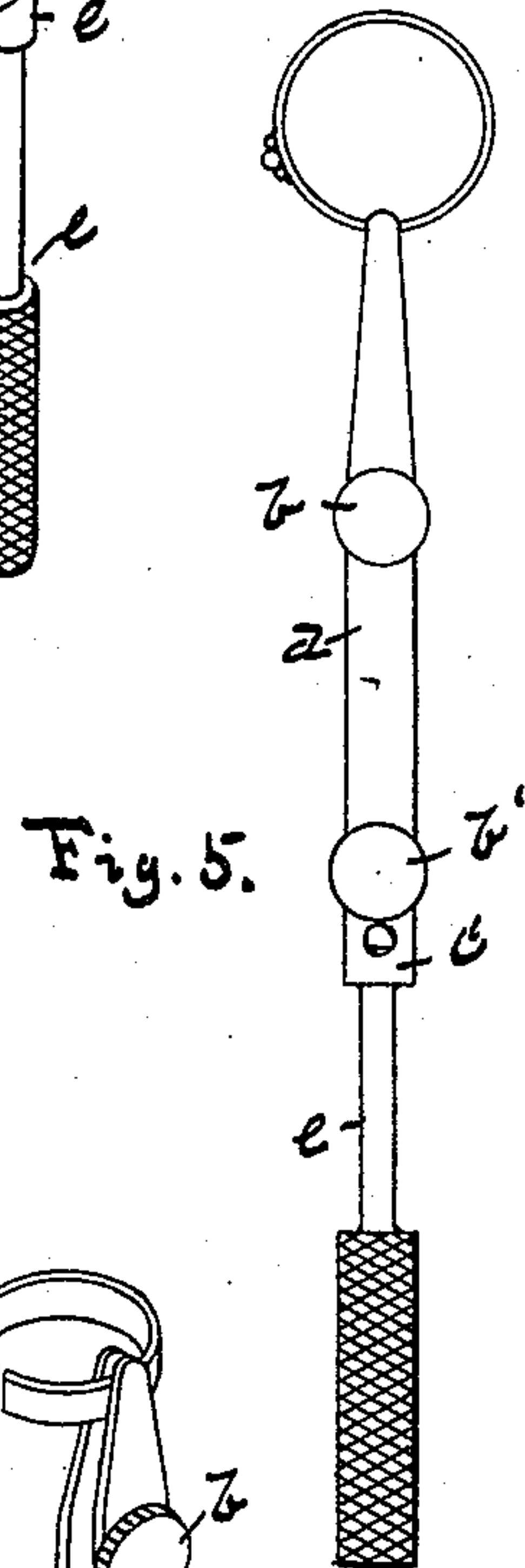


Fig. 5.

Witnesses

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JEWELER'S CLAMP.

SPECIFICATION forming part of Letters Patent No. 450,474, dated April 14, 1891.

Application filed December 15, 1890. Serial No. 374,662. (No model.)

To all whom it may concern:

Be it known that I, ERASTUS N. PARKER, of Springfield, in the county of Hampden and State of Massachusetts, have invented a new and useful Improvement in Tools for Jewelers' Use, of which the following is a specification, reference being had to the accompanying drawings, forming part thereof.

The present invention relates to that class of tools for jewelers' use for which Letters Patent No. 434,946 were issued to me on the 26th day of August, 1890, consisting of a base or holder and clamping arms or jaws connected therewith for holding spectacle or eye-glass frames and other small articles while being soldered or brazed.

The object of my present invention is to provide a tool of this nature in which the clamping arms or jaws will have a capacity for independent adjustment in a variety of directions with a view to materially increasing the number and variety of articles which can be held thereby.

To this end the invention consists in the tool constructed and operating as hereinafter fully described, and particularly pointed out in the claims.

Referring to the drawings, in which like letters designate like parts in the several figures, Figure 1 is a side elevation of the tool, and illustrating one of the uses for which it is adapted. Fig. 2 is a perspective view thereof, showing a different position of the clamping-arms. Fig. 3 is a similar view showing the tool arranged to rest upon a table or bench and to hold a finger-ring or similar article. Fig. 4, by a similar view, shows the use of the base and a single clamping-arm, the other arm and the handle being removed from the base. Fig. 5 illustrates the use of one of the clamping-arms and the handle without the base.

In my present device I employ two clamping arms or jaws *a a*, each composed of two strips or bars *a'*, which are preferably tapered to a dull point at their outer end, as shown, and provide a thumb-screw *b*, located near said outer end of said arms, to draw the two members thereof together to clamp an

article between them, as in the tool shown and described in said Letters Patent. Instead, however, of connecting said arms at their inner end directly to a holder, as in my previous device, I connect each of said arms to a block *c* by means of a thumb-screw *b'*, passing loosely through one member and a hole in the block and entering a tapped hole in the other member, whereby the arm is adapted to have a pivotal movement about the screw *b'* as a center and by tightening the latter to be rigidly held at any angle to which it may be adjusted. Said blocks are themselves connected to a base *d* in such manner as to be capable of a pivotal adjustment in a plane at a right angle to that of said arms upon screws *b'*, and for this purpose said base *d* is made in the form of a round rod, and each of said blocks with a hole or socket to receive said rod and with a thumb-screw *c'* for securing it in any desired position upon the latter.

In practice I prefer to provide said blocks with two holes or sockets extending there-through in planes at a right angle to each other, as shown, either of which holes is adapted to receive the rod *d*, and thus permit said blocks to be set in such position that the arms *a a* are adapted to hold parts of any article which stand at a right angle to each other. The base *d* is provided at or near one end thereof with a lateral extension *d'*, standing at a right angle thereto, which, as shown, is made integral with the same, but which may be secured thereto by means of a socket and thumb-screw, if desired. Said extension enables one of the arms *a* to be set out of alignment with the other arm, as shown in Figs. 2 and 3, whenever the shape of the article to be soldered or brazed renders such position necessary or desirable.

To enable the tool to be conveniently held in one hand, I provide a handle *e*, which at its outer end is suitably milled, as shown, and at its inner end is threaded to adapt it to be screwed into a cap *e'*, which cap contains a hole or socket to receive base *d*. Said handle when screwed against the base within said cap is rigidly held in any position to

which it may be moved, and is adapted, by loosening it slightly, to be moved to any position upon the base or to be withdrawn therefrom entirely. The arms *a a* and handle *e* are thus adapted to be adjusted to any desired position longitudinally of the base or its extension *d'* and to be set at any desired degree of angularity to each other, in addition to the pivotal adjustment of said arms upon blocks *c*. The great capacity for adjustment thus afforded adapts the tool for a great variety of uses, of which I have shown but five examples in the drawings. In Fig. 1 both clamping-arms are located upon the main portion of the base, with their work-receiving openings parallel with each other, and handle *e* projects from the opposite side of the base in a plane parallel with said arms. In Fig. 2 one of the arms is shifted to the extension *d'* of the base, its work-receiving opening still remaining parallel with that of the other arm. In these two positions the tool is adapted for repairing different parts of spectacle or eyeglass frames, as shown. In Fig. 3 the arms are moved nearer together, and their work-receiving openings stand at a right angle to each other, while the handle *e* is adjusted to a position at substantially a right angle to said arms, thereby adapting the tool to rest upon a table or bench with the arms in a vertical position and enabling the operator to employ both hands in repairing the ring or other article held by the arms. In Fig. 4 one of the arms and the handle are removed from the base, and the latter supports the remaining arm in a vertical position, the lateral extension of the base serving to steady said arm in such position. In Fig. 5 one of the arms is utilized like an ordinary pair of tweezers, the thumb-screw *c'* being removed from the end thereof and handle *e* being screwed into said end to facilitate holding the same. As before stated, these constitute but a few of the various positions of adjustment of which the tool is capable, and it will be obvious without further description that the tool has a wide range of usefulness for jewelers' use. By attaching the handle *e* to the extension *d'* of the base and folding the arms *a* to a position parallel with the main portion of the latter the tool is reduced to compact form for shipment or for being carried in the pocket.

Notwithstanding its capacity for a great variety of uses, the tool devised by me is simple and inexpensive in construction, the several parts thereof being entirely interchangeable.

If desired, the rod *d* can be supported by a suitable stand adapted to rest upon the table or bench; but I prefer to employ the handle *e*, which enables the tool to be held in the hand or rested upon the table, as may be desired.

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

1. The tool for jewelers' use herein described, comprising, in combination, a base consisting of a round rod, a plurality of clamping-arms mounted upon said rod and adjustable both longitudinally thereof and about the same as a center, each of said clamping-arms being composed of two strips or bars and having means, as a thumb-screw, for drawing the outer ends thereof together, and a suitable handle or support for said base, substantially as set forth.

2. A tool for jewelers' use, comprising, in combination, a base consisting of a round rod having at or near one end thereof a lateral extension standing at substantially a right angle thereto, a plurality of clamping-arms, each being composed of two strips or bars provided with a thumb-screw for drawing the outer ends thereof together and connected at their inner ends to a block having therein a hole or socket to receive said base and provided with a clamping-screw for securing the same in any adjusted position upon the latter, and a suitable handle or support for said base, substantially as set forth.

3. A tool for jewelers' use, comprising, in combination, a base, a plurality of clamping-arms mounted upon said base, each of which is capable of pivotal movement about two different centers and in planes perpendicular to each other, each of said arms consisting of two strips or bars provided with a thumb-screw for drawing the free ends thereof together, and a suitable handle for said base movable about the base as a center, substantially as described.

4. A tool for jewelers' use, consisting of a base in the form of a round rod, a plurality of blocks, each having a hole or socket to receive said rod and a clamping-screw for securing the same in any adjusted position upon the latter, a clamping-arm pivotally secured to each of said blocks, each of said arms consisting of two strips or bars provided with a thumb-screw for drawing the free ends thereof together, and a suitable handle or support for said base, combined and operating substantially as described.

5. A tool for jewelers' use, comprising a base consisting of a round rod, a plurality of clamping-arms, and a handle, each of said clamping-arms and said handle being independently adjustable upon said base both longitudinally of the latter and about the same as a center, substantially as set forth.

6. A tool for jewelers' use, comprising, in combination, a base consisting of a round rod, a plurality of clamping-arms adjustably mounted upon said base, a cap provided with a hole or socket to receive said base and having a tapped hole leading into said first-mentioned hole or socket, and a handle having its inner end threaded and adapted to enter said tapped hole in said cap and to bear against said base, whereby said handle is adapted to be adjusted longitudinally upon the base and

about the latter as a center, substantially as set forth.

7. In a tool of the kind described, the combination, with base *d*, having lateral extension *d'*, of blocks *c*, having holes or sockets extending therethrough at a right angle to each other to receive said base and provided with clamping-screws *c'*, and clamping-arms *a*, ad-

justably secured to said blocks and provided with screws *b* for drawing their free ends together, substantially as described.

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Witnesses:

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