

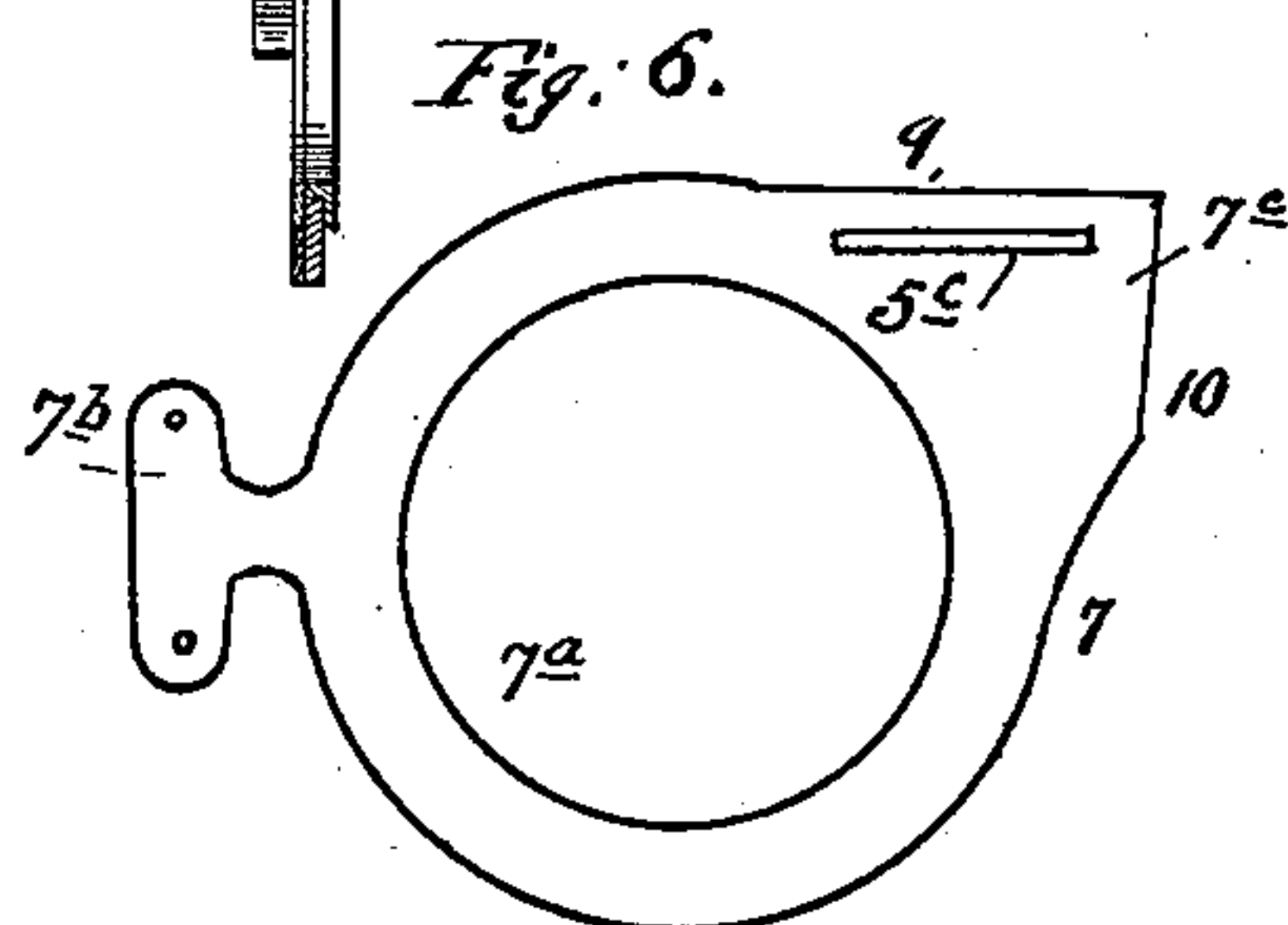
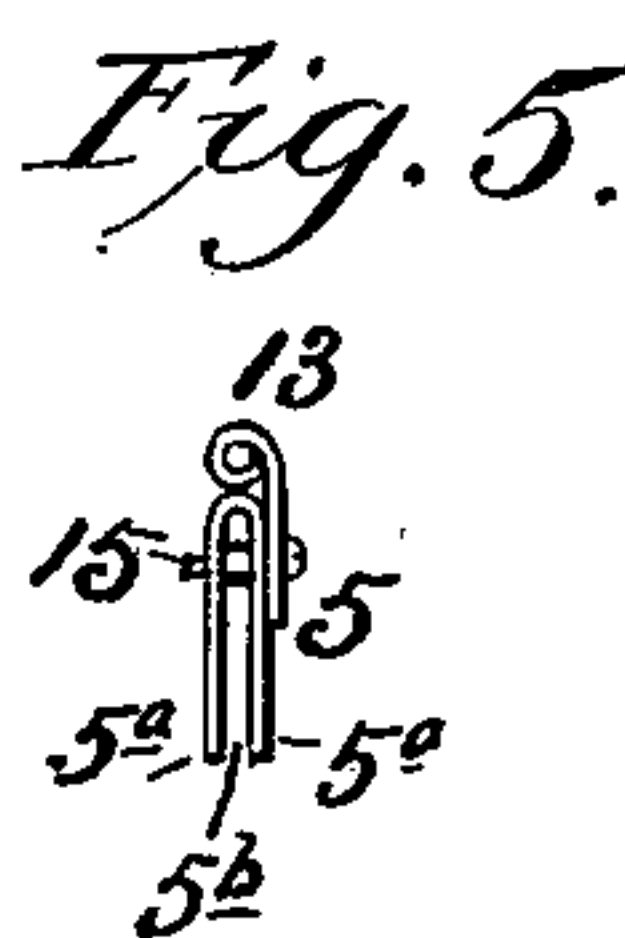
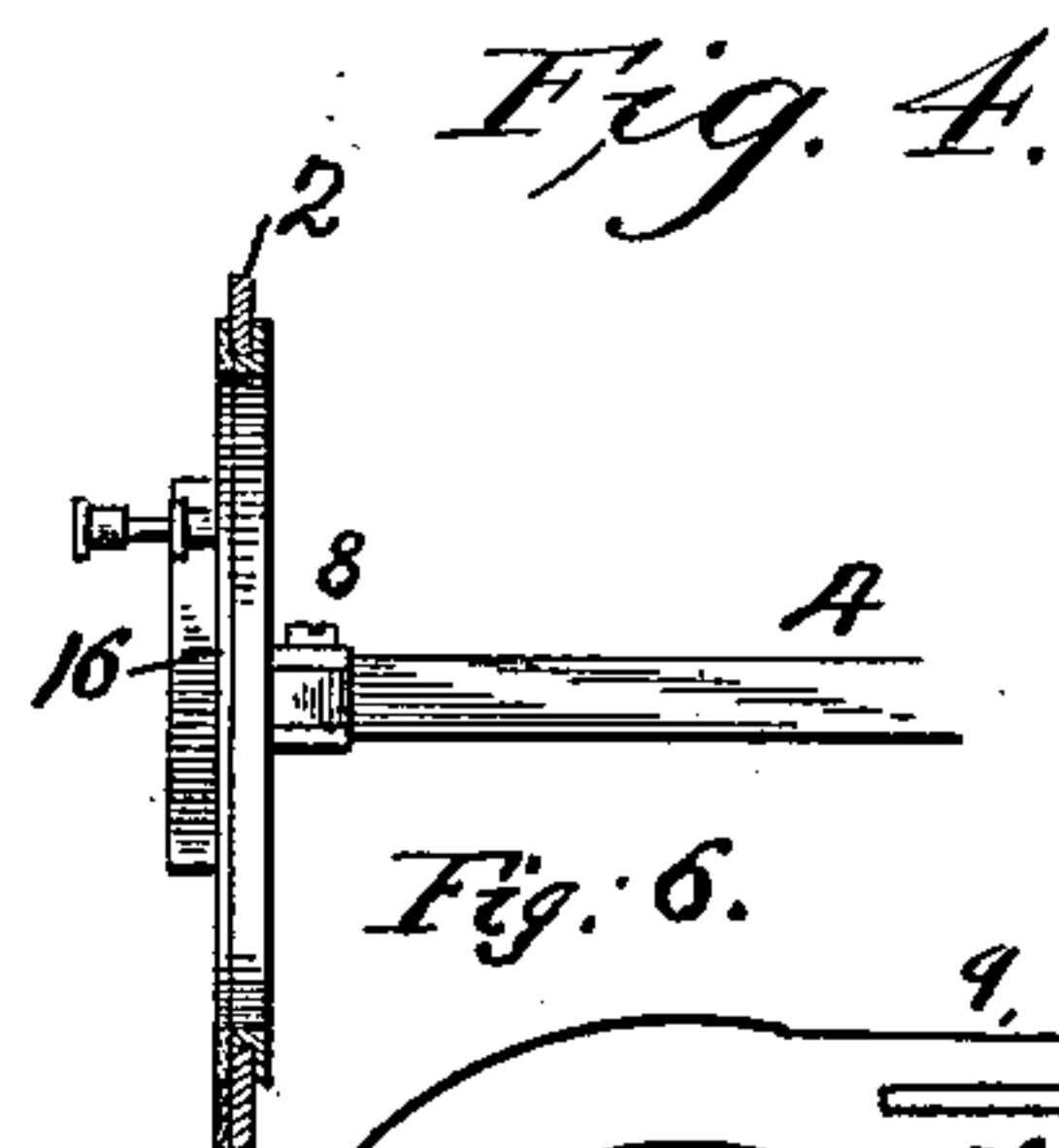
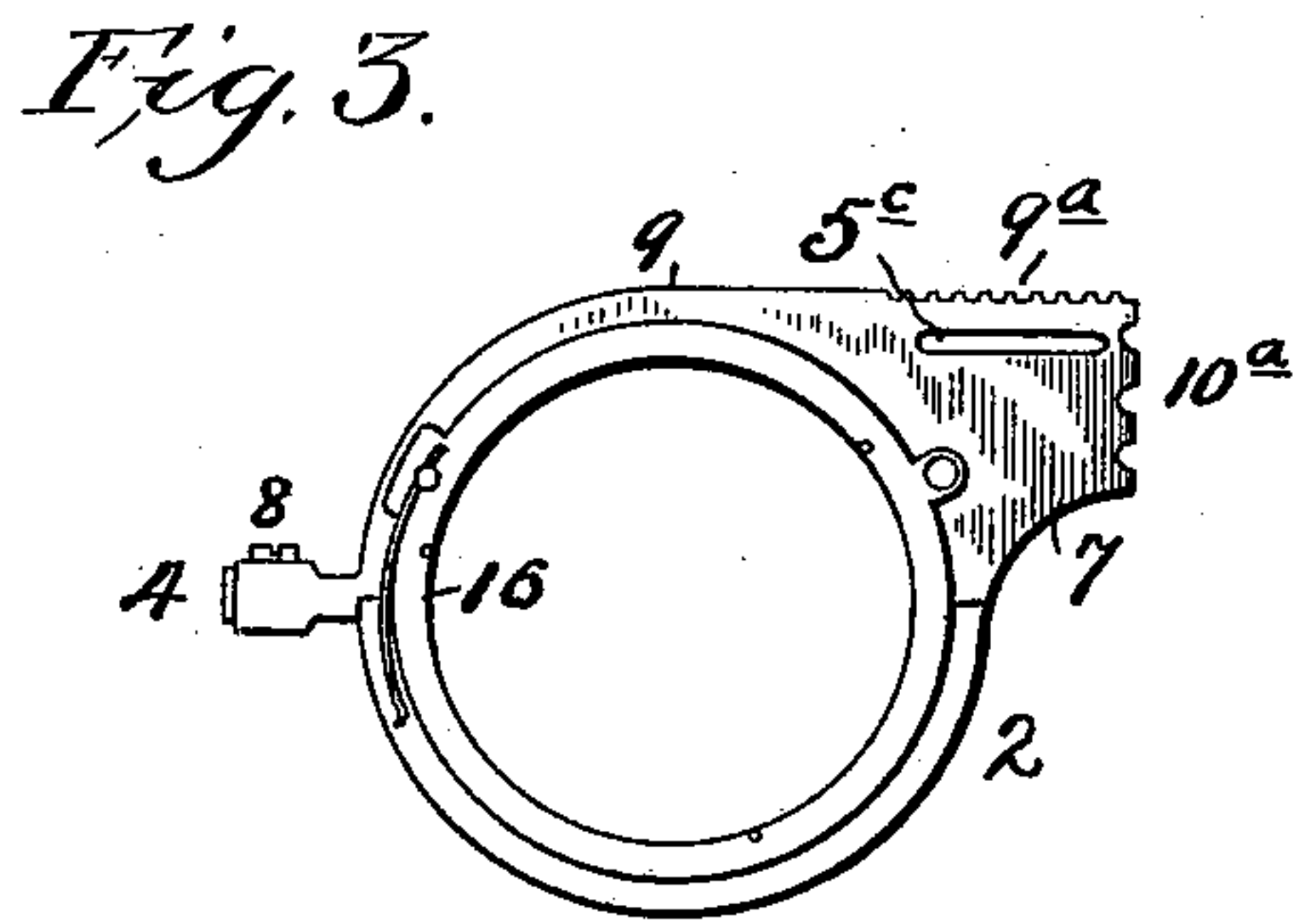
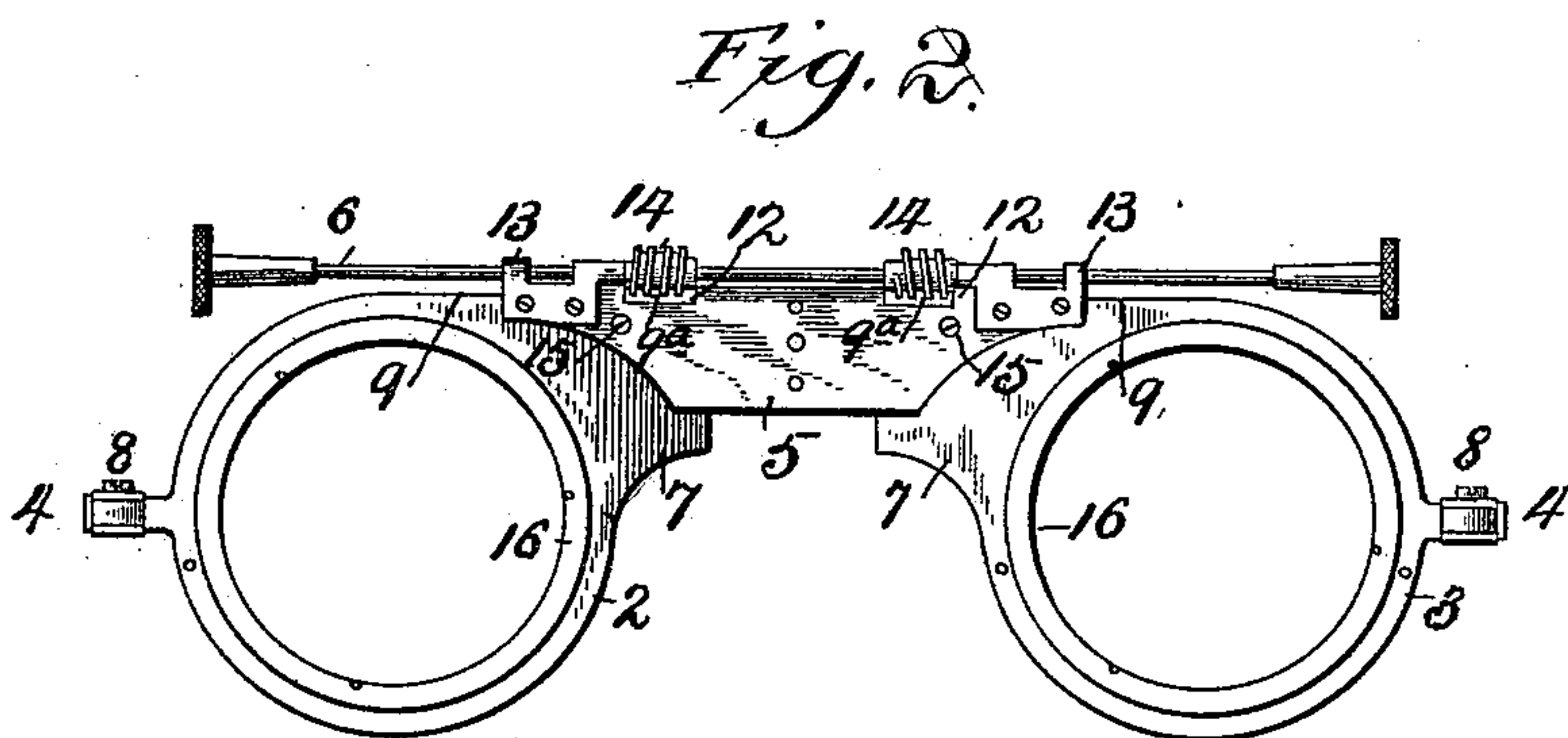
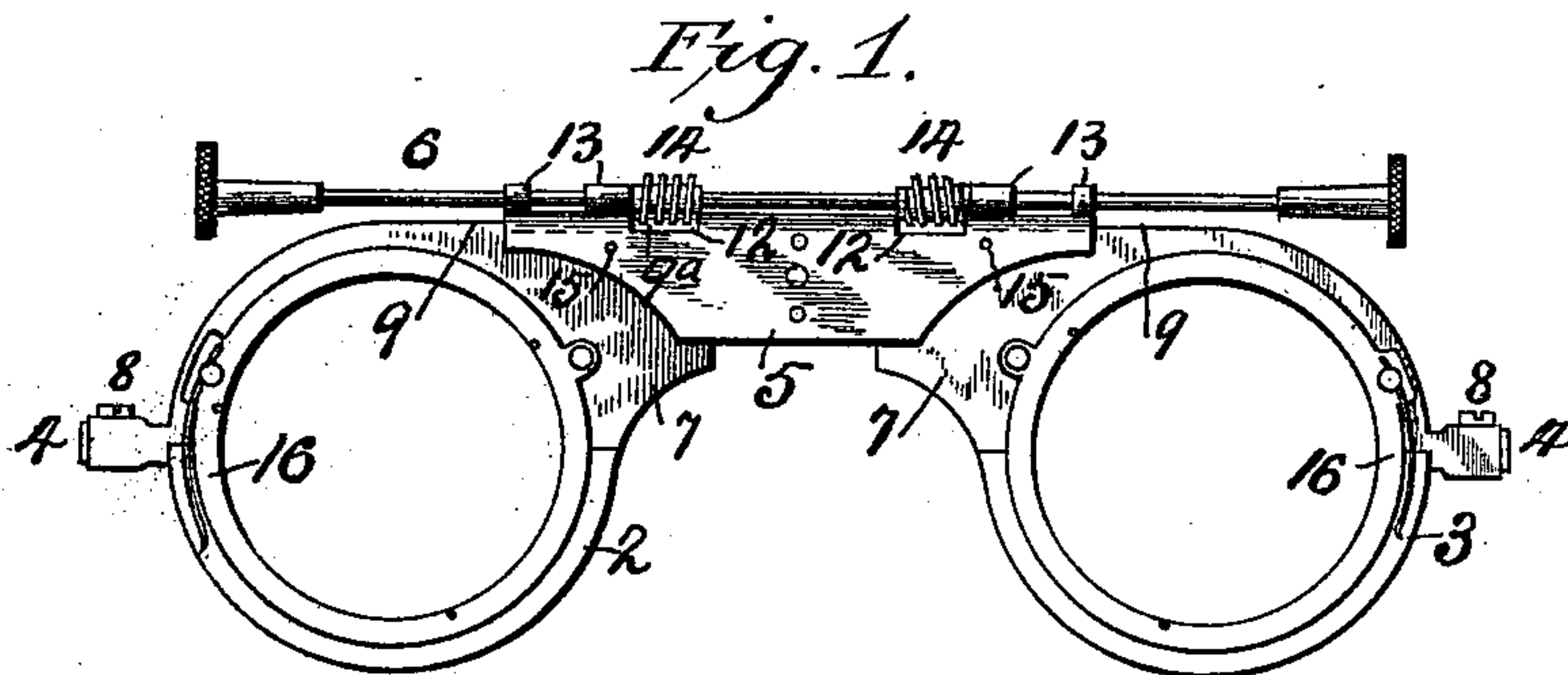
No. 635,444.

Patented Oct. 24, 1899.

E. B. MEYROWITZ & F. BUCHHOP.
OPTICIAN'S TESTING FRAME.

(Application filed Nov. 14, 1898.)

(No Model.)



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UNITED STATES PATENT OFFICE.

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OPTICIAN'S TESTING-FRAME.

SPECIFICATION forming part of Letters Patent No. 635,444, dated October 24, 1899.

Application filed November 14, 1898. Serial No. 696,358. (No model.)

To all whom it may concern:

Be it known that we, EMIL B. MEYROWITZ and FERDINAND BUCHHOP, citizens of the United States, and residents of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Opticians' Testing-Frames, of which the following is a specification.

This invention relates to the construction of opticians' testing-frames; and the invention consists in the construction, arrangement, and combinations of parts, as hereinafter described and claimed.

In the accompanying drawings, to which reference is made and which form a part of this specification, Figure 1 is a front elevation of our new and improved testing-frame, the nose-rest being omitted, the same not being necessary to be shown, as any desired form of nose-rest may be selected for use. Fig. 2 is a like view of the opposite side of the testing-frame. Fig. 3 is a detailed view of one of the sliding eyepieces. Fig. 4 is a sectional elevation of the part shown in Fig. 3. Fig. 5 is a detailed end view of the bridge or yoke piece and of one of the spindle-bearings applied thereto, and Fig. 6 is a plan view of the eyepiece-blank.

The testing-frame comprises the two rings 2 3, (each provided with a temple 4,) a bridge or yoke piece 5, and an adjusting-spindle 6. Each eyepiece 2 3 is formed by means of a blank 7, struck out in a die or otherwise in substantially the form shown in Fig. 6, formed with an annular portion 7^a, extension-ear 7^b, and bridge extension 7^c. In completing each blank 7 the ends of the ear 7^b are upset to form a temple-hinge 8, the upper edge 9 is provided with teeth 9^a, and the edge 10 is by preference notched, as shown at 10^a, Fig. 3. These notches may be omitted; but we prefer to employ them and to so form them on each pair of eyepieces that the teeth of one will intermesh with the teeth of the other only when the notched edges are brought to abut against each other, so that when the flanges 7 are brought together by the adjusting-spindle each eyepiece will lock the other, and thus make the frame rigid and firm as a whole. In Figs. 1 and 2 the adjacent edges of the eyepieces are cut straight and come flush together, and thus brace each other, but slightly less

satisfactorily than when the notches 10^a are employed.

The bridge or yoke piece 5 is made of a sheet of metal, preferably steel of proper gage, folded or united along its medial line to form two parallel cheeks 5^a 5^a, properly spaced to form a passage 5^b between them, which, together with the slots 5^c in the eyepieces, constitutes a way for the sliding adjustment of the eyepieces to and from each other. At the fold of the bridge-piece or yoke two notches or recesses 12 are formed to reveal the adjusting-teeth 9^a, and at one side of these notches or recesses 12 a bearing 13 for the spindle 6 is secured to the bridge-piece or yoke, as shown clearly in Fig. 2. The said adjusting-spindle 6 is by preference provided with worms 14, which when the spindle is held in its bearings mesh with the racks or teeth 9^a of the eyepieces.

15 15 represents small screws, rivets, or bolts, which pass through the sides of the bridge or yoke piece and through the slots 5^c in the eyepieces, so that they not only hold the eyepieces in place, but hold the upper straight portions 9 of the eyepieces in contact with the inner surface of the fold of the bridge or yoke and securely brace up the eyepieces and prevent them from sagging out of proper alinement.

Each eyepiece is provided with a lens-holder 16, of the usual or of any approved form, adapted to be rotated in the eyepiece for the required rotation of the lenses.

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

1. In a testing-frame a bridge or yoke composed of a piece of metal folded or united along its medial line so as to form side pieces whose inner surfaces form an extended way, combined with eyepieces held in said extended way, and means for adjusting the eyepieces back and forth in and along said way, substantially as described.

2. In a testing-frame a bridge or yoke piece folded to form a way for the eyepieces and recessed at the upper edge to form clearances for the operation of the adjusting devices for the eyepieces, substantially as described.

3. In a testing-frame an eyepiece having an extension formed with a straight edge 9 at

its upper side, a slot 5^c, and with teeth 9^a, substantially as described.

4. In a testing-frame an eyepiece having an extension formed with a straight edge 9 at its upper side, teeth 9^a and with a notched edge 10^a, substantially as described.

5. The testing-frame herein shown and described consisting of sliding eyepieces formed with extensions each having adjusting-teeth and a slot parallel therewith, a bridge or yoke piece having spaced cheek-pieces, recesses

therein for the adjusting devices and bearings adjacent to said recesses, a spindle held in said bearings and worms on said spindle, and pins passed through said cheek-pieces and through said slots in the eyepieces, substantially as described.

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