

No. 659,526.

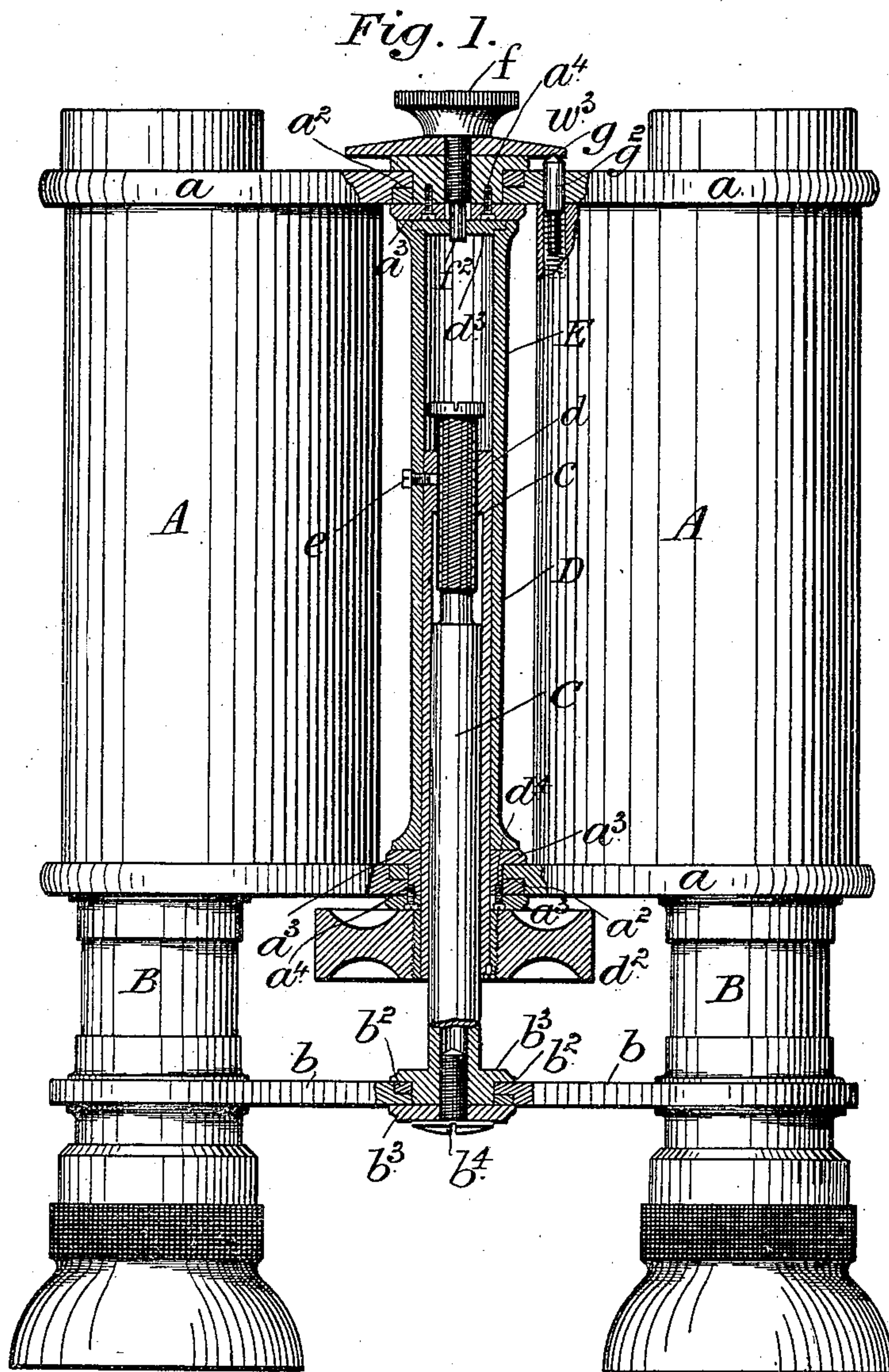
Patented Oct. 9, 1900.

J. W. HASSELKUS.  
PRISMATIC BINOCULAR GLASSES.

(Application filed Aug. 10, 1900.)

(No Model.)

3 Sheets—Sheet 1.



WITNESSES

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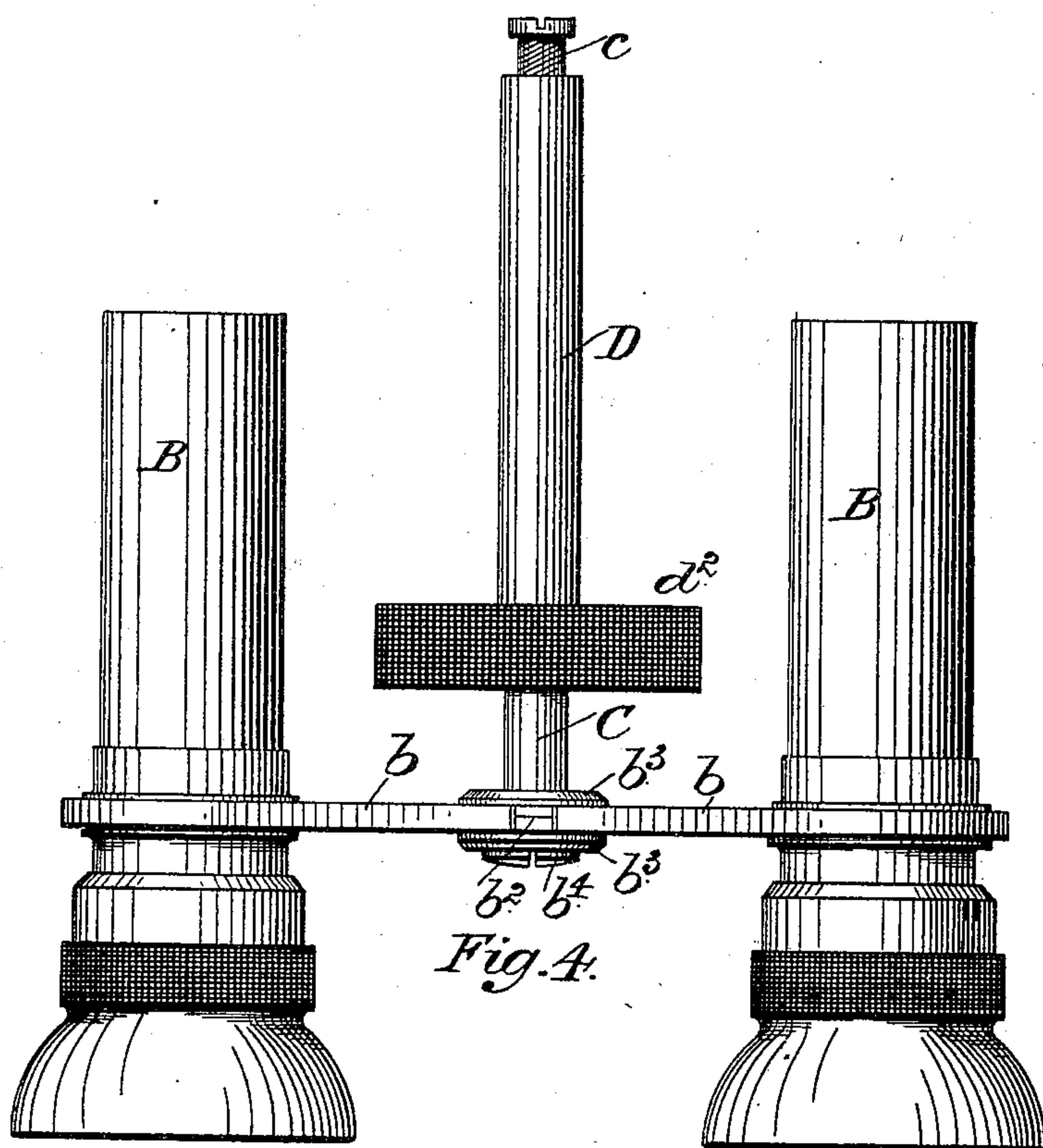
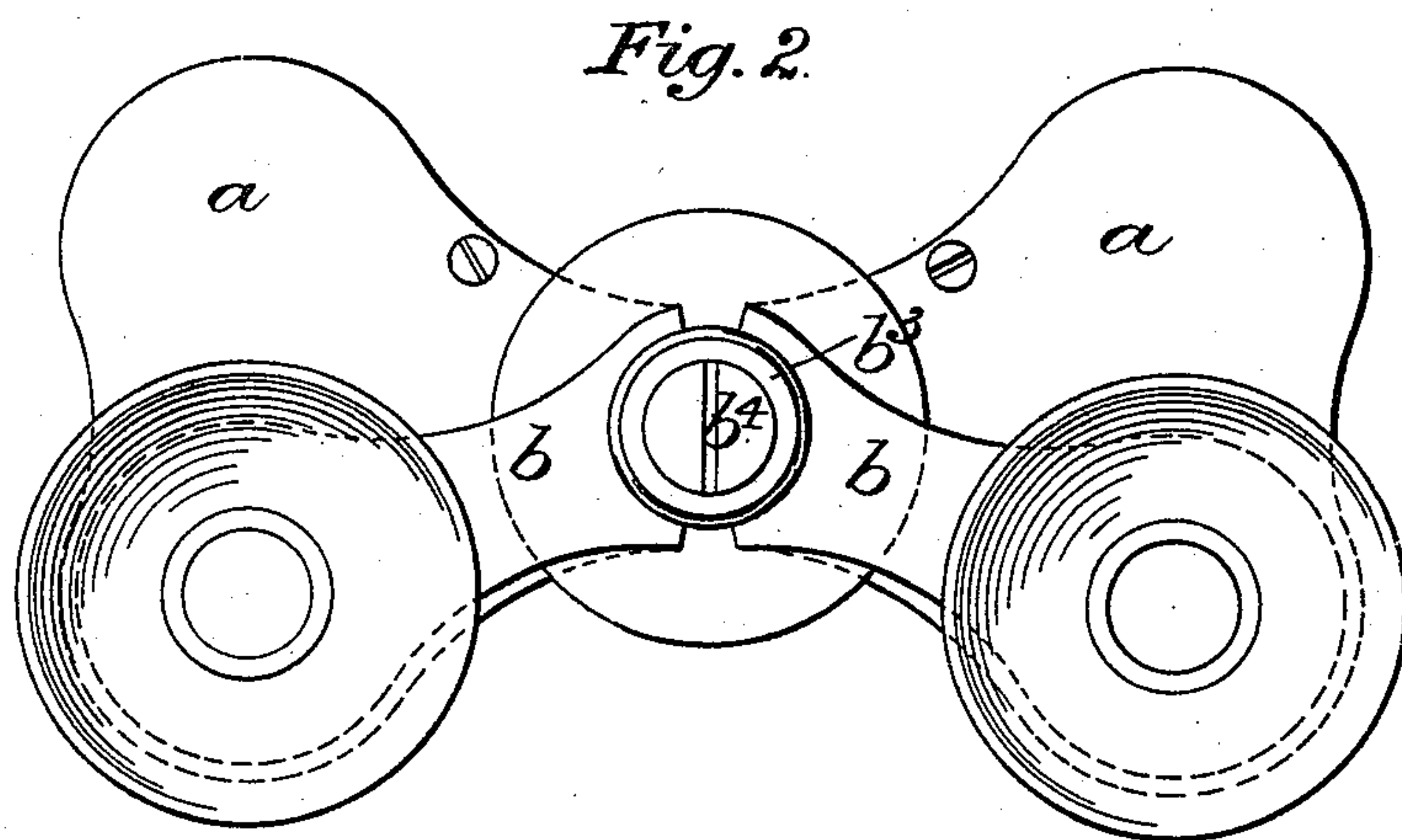
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3 Sheets—Sheet 2.



WITNESSES

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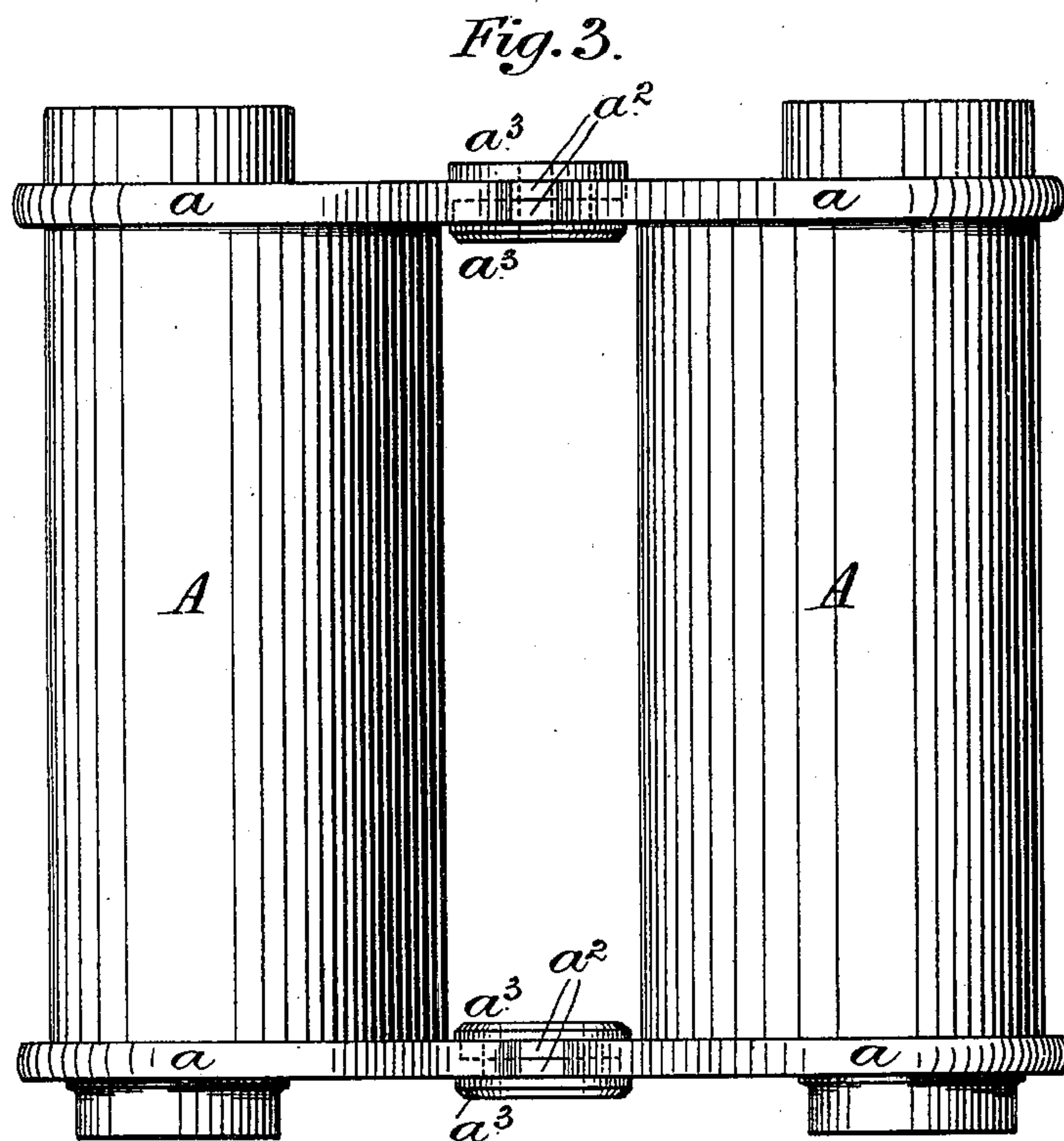
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WITNESSES

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# UNITED STATES PATENT OFFICE.

JOHN WILLIAM HASSELKUS, OF LONDON, ENGLAND, ASSIGNOR TO THE  
ROSS, LIMITED, OF SAME PLACE.

## PRISMATIC BINOCULAR GLASSES.

SPECIFICATION forming part of Letters Patent No. 659,526, dated October 9, 1900.

Application filed August 10, 1900. Serial No. 26,499. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN WILLIAM HASSELKUS, a subject of the Emperor of Germany, and a resident of 3 North Side, Clapham Common, London, England, have invented certain new and useful Improvements in Prismatic Binocular Glasses, (for which a British patent has been applied for, No. 12,538, dated July 11, 1900,) which invention is fully set forth in the following specification.

The object of this invention is to construct prismatic binocular glasses so that their prisms can be readily adjusted for coincidence of the images seen through the two eyepieces and so that the instrument is not liable to become disarranged in ordinary use after adjustment, the construction generally being improved and simplified and allowing of simultaneous longitudinal movement of the tubes carrying the eyepieces being effected by means of a central screw without interfering with the facility with which the testing and adjustment of the prisms can be effected. The binoculars to which this invention relates are such as have the two body parts hinged together by connecting-plates, so that the distance between the eyepieces can be altered to suit different users.

In the accompanying drawings, Figure 1 represents in side view, with the mid-part in section, a binocular glass made in accordance with this invention. Fig. 2 is an end view. Fig. 3 shows the body parts and their hinged connection separately from the eyepieces and tubes and the adjusting-screw, which are shown in Fig. 4.

A are the body parts of the instrument, carrying the objectives and the prisms, and B are the tubes carrying the eyepieces. The body parts A have secured to their ends the plates  $a$ , which are provided with tubes for the objectives at one end and for the eyepiece-tubes at the other end, the said body parts A being connected together by hinge-joints consisting of parts  $a^2$ , cut away so as to overlap each other and secured together by collets  $a^3$ , connected by the screws  $a^4$ . The tubes B are connected together by the bars  $b$ , similarly hinged together by cut-away

and overlapping parts  $b^2$ , secured by the collets  $b^3$ , one on the screw-stem C and one on the other side, these collets being secured together by the screw  $b^4$ . The screw  $c$ , carried by the screw-stem C, engages in a screw-nut carried by the hollow shaft D, which carries a milled head  $d^2$  and is secured against longitudinal movement by a screw or screws  $e$ , secured through the sleeve E and engaging with the said shaft D. The sleeve E is confined between the upper and lower inner collets and is held in position by the hollow shaft D and by an end piece  $d^3$ , which is engaged by a pin  $f^2$  at the end of the screw  $f$ .  $g$  and  $g^2$  are the ordinary plate and spring-catch arrangement, the catch engaging in a notch in the plate for indicating the proper adjustment to suit any particular user; but these need not be employed unless desired. The frictional bearing of the sleeve E, hollow shaft D, and screw-stem C, and of the collets  $b^3$ , with the orifice through the hinged arms  $b$ , are respectively such as to allow the nut  $d$  to rotate to operate the screw for longitudinal adjustment; but overwinding of the screw will not cause injury to the parts, as if the operation of the milled head  $d^2$  be continued after the screw is fully moved longitudinally in either direction the said screw-stem C, hollow shaft D, and sleeve E will rotate together by the rotation of the stem C and collets in the orifice through the hinge of the arms  $b$ . In order to insure proper frictional contact between the arms  $b$  and the collet  $b^3$ , the said collet may have in its face next the arms a groove, in which a spring may be placed, so as to bear against the arms and compensate for any wear between the parts in contact.

To adjust the instrument for coincidence of the images of the two eyepieces, the screw  $f$  is removed and also the screw  $e$ , and then the parts shown in Fig. 4 can be removed lengthwise, and the sleeve E can also be taken out sidewise, and then the bodies A of the instrument, hinged together, are free of the other parts, as shown in Fig. 3, and can be placed in the adjusting instrument, which will have center pivots or pins to truly fit into the openings through the collets  $a^3$  of the hinges, and a telescopic arrangement and crosswise im-



ages in a line truly parallel with the line of the said pivots are viewed and the prisms adjusted, and when adjustment of the prisms is effected the parts are all secured together again, as shown in Figs. 1 and 2.

Having now particularly described and ascertained the nature of the said invention and in what manner the same is to be performed, I declare that what I claim is—

10 A prismatic binocular glass consisting of body parts provided with connecting-plates hinged together by centrally-perforated hinges and eyepiece-tubes connected together by a similarly-perforated hinge, a  
15 screw-stem secured in the perforation of the last-named hinge, a hollow shaft secured centrally with the perforations of the hinges and provided with a milled head and a screw-nut

for engaging the screw on the said screw-stem and a sleeve also secured centrally with the perforations of the hinges by a securing device and connected with the shaft by a securing device so as to be capable of being removed from between the hinged arms of the body parts when the securing devices are removed and the screw-stem and hollow shaft are withdrawn all substantially as hereinbefore described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

JOHN WILLIAM HASSELKUS.

Witnesses:

WILLIAM JOHN WEEKS,  
JOHN EDWARD NEWTON.