A. SCHACHENMAYR.

DOUBLE TELESCOPE.

APPLICATION FILED AUG. 25, 1909.

956,182. Patented Apr. 26, 1910.

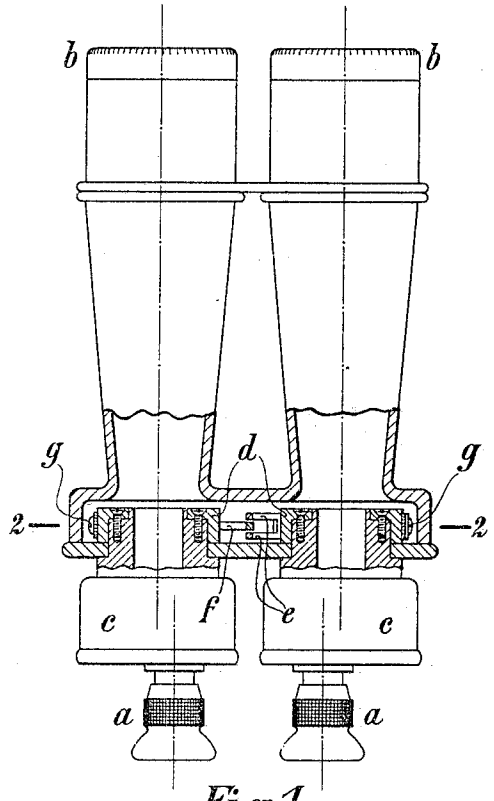

Fig. 1

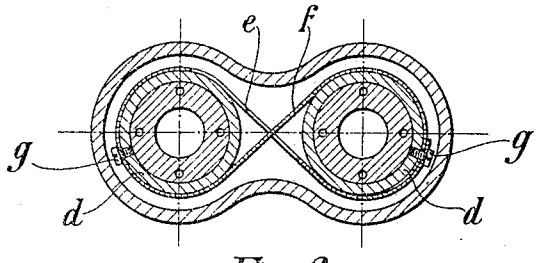

Fig. 2

Witnesses:
Paul Krüger
Richard Hahn

Inventor:
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UNITED STATES PATENT OFFICE.

ALBERT SCHACHENMAYR, OF JENA, GERMANY, ASSIGNOR TO THE FIRM OF CARL ZEISS, OF JENA, GERMANY.

DOUBLE TELESCOPE.

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Application filed August 25, 1909. | Serial No. 514,579.

To all whom it may concern:

Be it known that I, ALBERT SCHACHENMAYR, a citizen of the German Empire, and residing at Carl-Zeiss strasse, Jena, in the Grand Duchy of Saxe-Weimar, Germany, have invented a new and useful Double Telescope, of which the following is a specification.

The invention relates to double telescopes the oculars of which, for being adaptable to the interpupillary distance of the observer, are mounted so as to be each rotatable about an axis parallel to the axis of the emerging rays. In most cases, the two oculars of such a double telescope are connected in such a manner that by rotating one of them about its eccentric axis of rotation the other is taken along by an equal angle in the opposite direction. The most simple connection hitherto employed for this purpose consists in each ocular being fitted with a toothed rim concentric to its axis of rotation and engaging the corresponding rim of the other ocular.

The present invention consists in particularly simple and cheap means for connecting the oculars. The toothed rims concentric to the axes of rotation of the oculars are replaced by likewise concentric drums and crossed bands fixed on these drums.

In the annexed drawing: Figure 1 is a sectional plan view of a double telescope constructed according to the invention. Fig. 2 is a vertical section on the line 2—2 of Fig. 1.

The axes of rotation of the oculars *a* coincide with the axes of the objectives *b*. In each ocular, the eccentricity of the exit axis to the axis of rotation may result from an image-erecting prism system arranged in the case *c*. There are two drums *d* concentric to the axes of rotation of the oculars *a* and rigidly connected with the latter. In the example shown, each drum comprises only a single drum surface. The two crossed bands *e* and *f* are shown as being made in one piece, *e* being slotted in its middle portion and *f* narrowed in the same portion, so that, in the crossing point, *f* can pass through the slot of *e*. The bands are fixed to the drums *d* by means of screws *g*.

I claim:

1. The combination, with the optical parts of a double telescope, of two front casings rigidly connected together, two hinder casings rotatably mounted on the front casings, the axis of rotation of each hinder casing being eccentric to the optical exit axis, and both eccentricities being equal, two drums having the same diameter and being mounted on the hinder casings concentrically to the axes of rotation and crossing bands fixed to both drums.

2. The combination, with the optical parts of a double telescope, of two front casings rigidly connected together, two hinder casings rotatably mounted on the front casing, the axis of rotation of each hinder casing being eccentric to the optical exit axis, and both eccentricities being equal, two drums having the same diameter and being mounted on the hinder casings concentrically to the axes of rotation and crossing bands fixed to both drums and made in one piece, the middle portion of one band being slotted and the middle portion of the other band narrowed.

ALBERT SCHACHENMAYR.

Witnesses:
PAUL KRÜGER,
RICHARD HAHN.