No. 818,014.

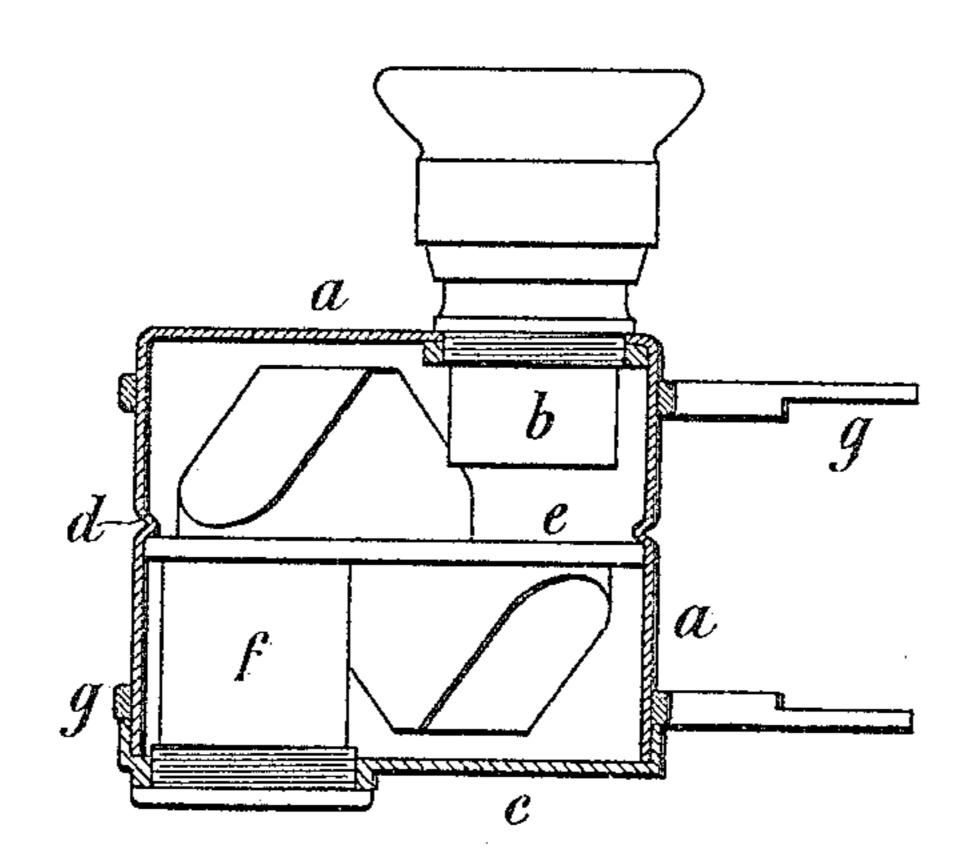
PATENTED APR. 17, 1906.

M. BERGER.

PRISM TELESCOPE CASING.

APPLICATION FILED MAY 20, 1905.

To the state of



Witnesses;

Lane Muigis Fritz Jander

Inventor. Max Berger

## STATES PATENT OFFICE.

MAX BERGER, OF JENA, GERMANY, ASSIGNOR TO THE FIRM OF CARL ZEISS, OF JENA, GERMANY.

## PRISM-TELESCOPE CASING.

No. 818,014.

Specification of Letters Patent.

Patented April 17, 1906.

Application filed May 20, 1905. Serial No. 261,288.

To all whom it may concern:

Be it known that I, Max Berger, engineer, a citizen of the German Empire, residing at Carl Zeiss strasse, Jena, in the Grand 5 Duchy of Saxe-Weimar, Germany, have invented a new and useful Prism-Telescope Casing, of which the following is a specifica-

tion. The invention relates to such casings of 10 binocular prism telescopes, and particularly of prism field-glasses, which carry or support the arms of the hinge connecting both single telescopes. Such a casing should possess great rigidity in order to resist accidental 15 mechanical strains, which otherwise would alter the position of the optical system secured in and upon the casing, and thereby disturb the parallelism of the optical axes of both single telescopes. In addition thereto 20 the casing should be of light weight, since the prisms already give an undesirable total weight to the field-glass. Hitherto both conditions have not yet been simultaneously fulfilled.

present invention great strength and small weight are both realized. This is effected by the shell to which the hinge-arms are fastened and one end plate of the casing being cupped, 30 punched, or similarly formed in one piece

from sheet metal.

In the accompanying drawing a longitudinal section is shown of a casing constructed

according to the invention.

In the example shown the shell and bottom piece a, made of sheet metal and bearing the ocular b, does not become wider toward the opening closed in by the cover-plate c, but has an unchanged transverse section.

However, half-way down the shell are in- 40 dents d, pressed in from the outside, which projecting inside serve as rabbets for the seat e of the prisms. They are to be preferred to the screwed-in rabbets, as the shell need not be pierced. The seat is held in position 45 from the other side by the objective f. The arms g also, which show the casing to belong to a binocular field-glass, are attached to the shell without having to pierce it, as they completely encircle it and are secured by 50 shrinkage or otherwise.

What I claim as my invention, and desire

to secure by Letters Patent, is—

1. In a binocular prism field-glass two casings, each comprising a shell and bottom 55 piece made of sheet metal, a cover-plate closing the open end of the shell and bottom piece and two hinge-arms fastened to the shell, the bottom and the cover-plate having each a hole for receiving the eyepiece and 60 objective respectively.

2. In a binocular prism field-glass two casings, each comprising a shell and bottom In the casing constructed according to the | piece made of sheet metal, a cover-plate closing the open end of the shell and bottom 65 piece and two hinge-arms, each of which completely encircles an unpierced zone of the shell, the bottom and the cover-plate having each a hole for receiving the eyepiece and objective respectively.

In testimony whereof I have signed my name to this specification in the presence of

two subscribing witnesses.

MAX BERGER.

Witnesses:

PAUL KRÜGER, FRITZ SANDER.