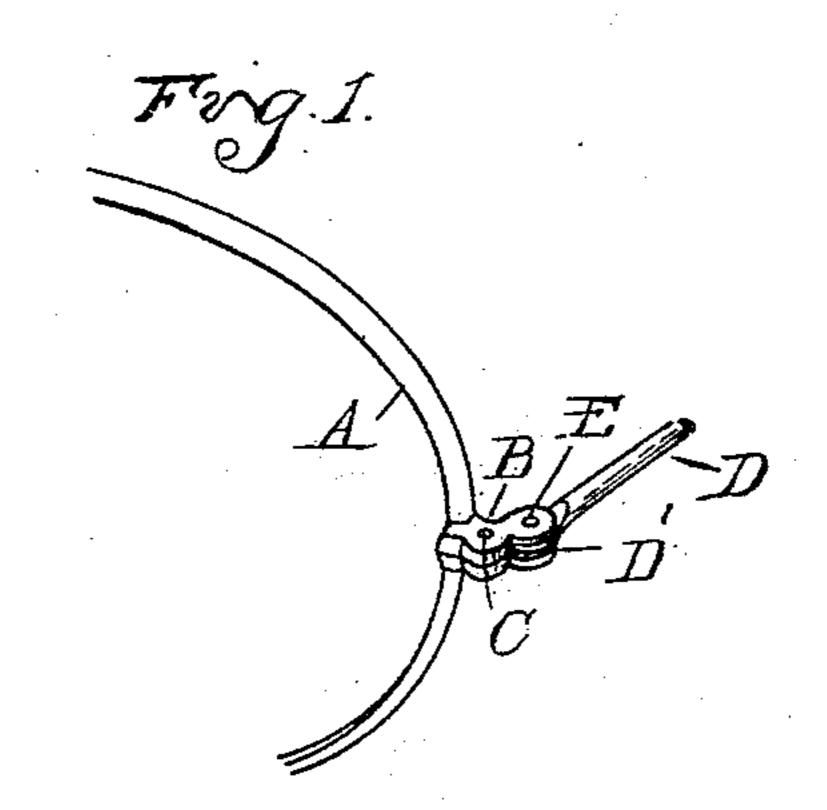
No. 618,118.

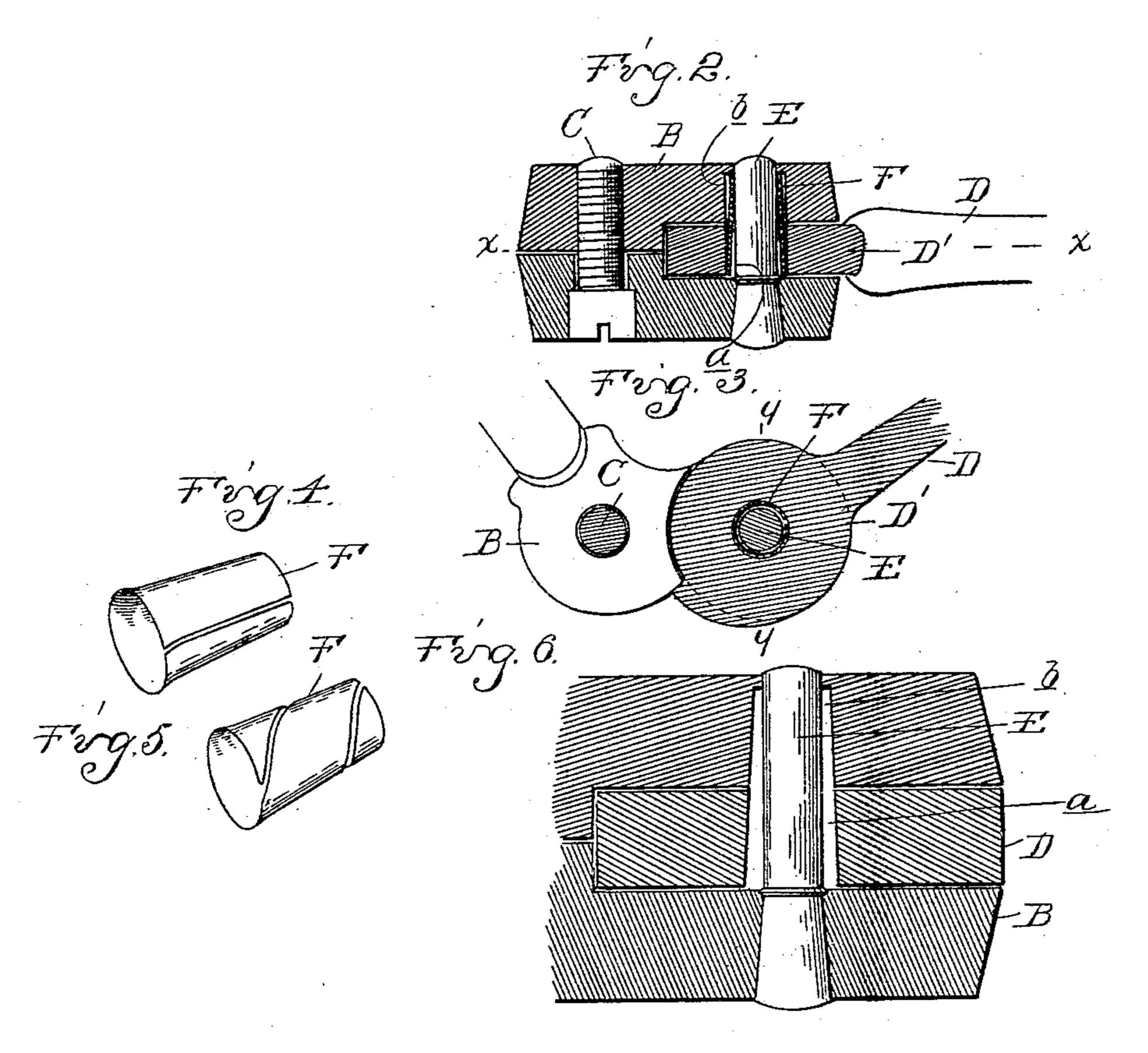
Patented Jan. 24, 1899.

P. MOEWS. SPECTACLES.

(Application filed **May** 18, 1898.)

(No Model.)





Watervesses J Maddeyhorty. Inventor Pawl Moews By Hos Spragues Syn Attys:

United States Patent Office.

PAUL MOEWS, OF DETROIT, MICHIGAN, ASSIGNOR TO THE MICHIGAN OPTICAL COMPANY, OF SAME PLACE.

SPECTACLES.

SPECIFICATION forming part of Letters Patent No. 618,118, dated January 24, 1899.

Application filed May 18, 1898. Serial No. 681,030. (No model.)

To all whom it may concern:

Be it known that I, PAUL MOEWS, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Spectacles, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention refers more specifically to an improved pivot connection of the temples with the eye-frame; and the object of the invention is to prevent the temples from becoming loose and shaky through wear.

To this end the invention consists in the peculiar construction whereby a sleeve on the pivot-pin compensates for the wear which takes place in the parts, all as more fully hereinafter described, and shown in the draw-

ings, in which—

Figure 1 is a perspective view of a portion of one of the eye-frames with the end pieces and temple connected thereto. Fig. 2 is a vertical section through the end pieces in the plane of the axis of the pivot-pin and screw.

Fig. 3 is a horizontal section on line x x, Fig. 1.

Fig. 4 is a detached perspective view of the spring-sleeve of the pivot connection, and Fig. 5 is a similar view of a modified form of sleeve. Fig. 6 is a cross-section on line y y, 30 Fig. 3, with the sleeve omitted.

A represents part of the eye-frame.

B B are the separable end pieces; C, the screw which clamps the end pieces together; D, the temple; D', the end piece or arm of the temple in which the pivot-hole is formed, and E the pivot-pin of the temple, all arranged and constructed in the usual manner, except as hereinafter more fully described.

The pivot-pin E is fixedly secured at one 40 end in one of the end pieces in any suitable manner, while the remaining part of the pivot-pin projects loosely through the pivot-eye a of the temple and through a hole b formed coincident therewith in the other end piece.

The pivot-eye a is formed of a larger diameter than the pivot-pin, and the inner end

of the coincident hole b in the end piece is correspondingly enlarged, while the outer end of the hole b is of the same diameter as the pivot-pin. In this manner an annular recess 50 (preferably of slightly-tapering form) is provided around a portion of the pivot-pin, and in this recess is inclosed a split taper-sleeve F. This split taper-sleeve is made of thin spring metal, and its size is such that when 55 secured in position in the recess its larger end has a tendency to expand in the eye of the temple, while the smaller end has a tendency to contract upon the pivot-pin. In this mannerit will compensate for any wear which 60 might take place in the pivot and keep the temple from becoming loose and shaky between the end pieces.

Instead of forming the split sleeve as shown in Fig. 4 it may be formed with a spiral slit, 65 as shown in Fig. 5, or in any other known

manner.

What I claim as my invention is-

1. In spectacles, the combination of the separable end pieces, one of which has a pivot-70 pin and the other a hole registering therewith, the inner end of which is enlarged, a temple having a correspondingly-enlarged pivot-eye and a split taper-sleeve upon the pivot-pin, one end of which engages with the walls of 75 said pivot-eye and the other with the pivot-pin.

2. In spectacles, the combination with the separable end pieces, of the pivot-pin, secured in one of said end pieces a hole in the other 80 end piece registering therewith and of a larger diameter than the pivot-pin and a seat for said pin at its outer end, a temple having its pivot-eye correspondingly enlarged and a split taper-sleeve upon the pivot-pin engaging with the walls of the eye of the temple.

In testimony whereof I affix my signature in presence of two witnesses.

PAUL MOEWS.

Witnesses:

M. B. O'DOGHERTY, OTTO F. BARTHEL.