

931,571.

A. E. COVELLE.
BIFOCAL LENS.
APPLICATION FILED AUG. 3, 1908.

Patented Aug. 17, 1909.

Fig. 1.

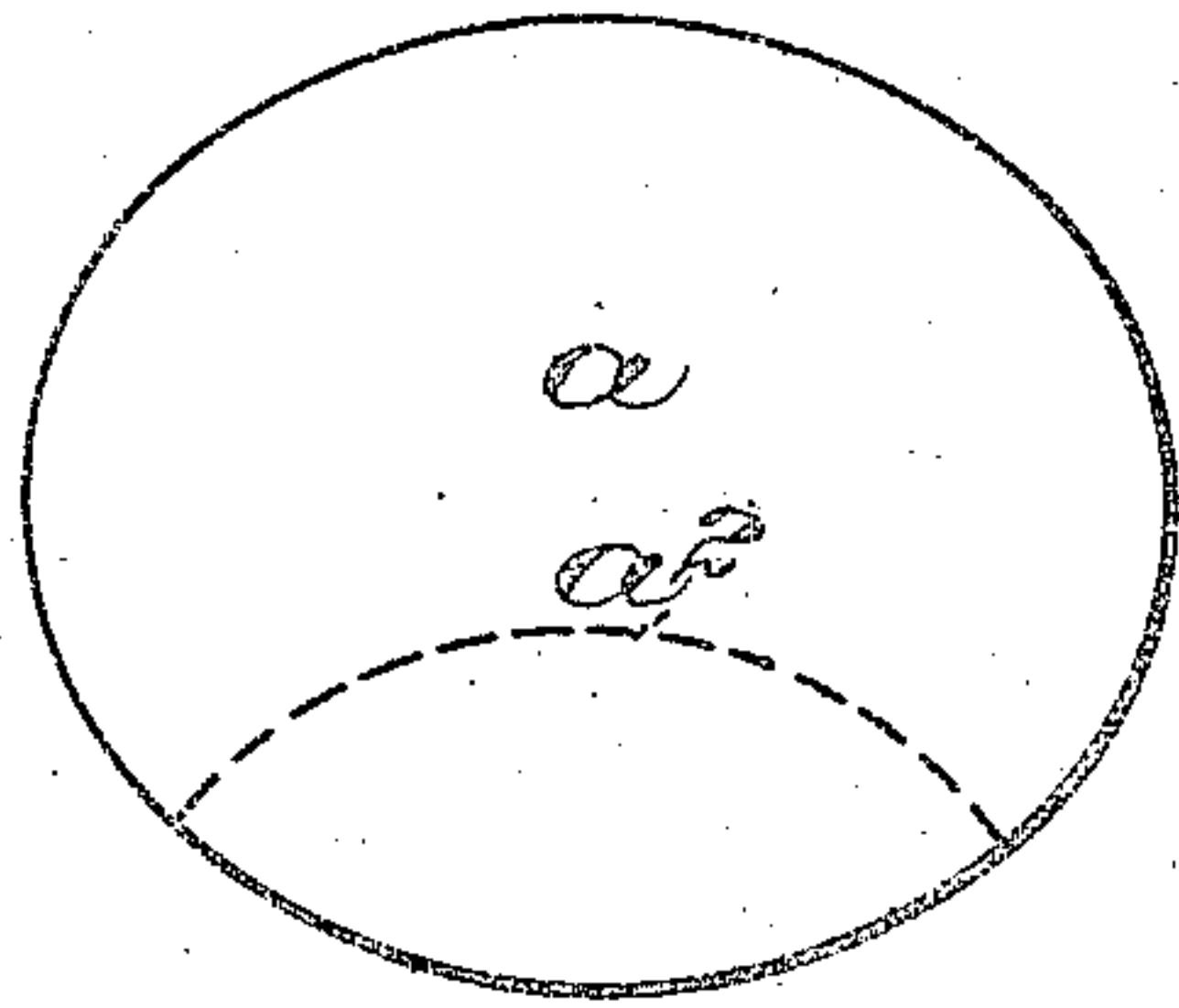


Fig. 2.

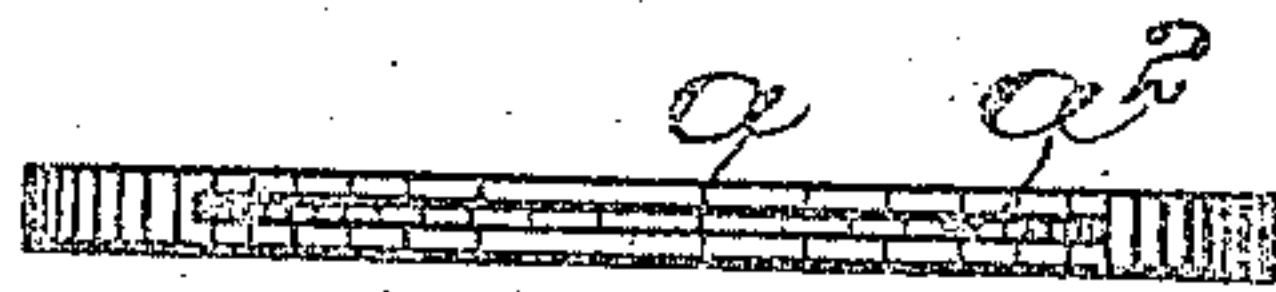


Fig. 3.



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UNITED STATES PATENT OFFICE.

ALBERT E. COVELLE, OF MEDFORD, MASSACHUSETTS.

BIFOCAL LENS.

No. 931,571.

Specification of Letters Patent.

Patented Aug. 17, 1909.

Application filed August 3, 1908. Serial No. 446,525.

To all whom it may concern:

Be it known that I, ALBERT E. COVELLE, a citizen of the United States, residing in Medford, in the county of Middlesex and State of Massachusetts, have invented an Improvement in Bifocal Lenses, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

The present invention relates to a bifocal lens, and is embodied in a lens in which the thin, supplemental lens, commonly known as the wafer, is secured in a slot or recess cut in the body of the main lens, instead of being secured by cement to the surface of the lens.

The most common form of bifocal lens in use consists of a main lens having a wafer secured to one surface thereof by means of cement, the objection to this construction being that the supplemental lens portion is not only detrimental to the appearance of the glasses, but is subject to the action of air, dust, &c., so that the lens becomes soiled, while the cement is likely to deteriorate, thereby spoiling the glasses for use.

It is the purpose of the present invention to provide the lens with a wafer secured by cement which will be perfectly invisible, and, at the same time, amply protected from the action of the air, so that the cement will not deteriorate, while there is no chance for dust to collect, since the surfaces of the main lens are unbroken.

In carrying out the invention, the edge of the main lens is provided with a slot cut to the right shape to receive the wafer, and the wafer is then inserted in the slot with a thin film of cement which serves to hold the wafer in place, and to seal the same and prevent the entrance of any impurities.

Figure 1 is a plan view of a lens embodying the invention, the location of the wafer or supplemental lens being indicated by a dotted line; Fig. 2 is an edge view of the same showing the slot which is arranged to receive the wafer; and Fig. 3 is a plan view of the wafer itself.

The lens *a* is of the usual construction and consists of a single piece of transparent material having its opposite surfaces ground to the proper curvature.

In order to produce a bifocal lens, so called, in which a portion differs in character from the main portion, it is customary to provide the main lens with a thin supplemental lens, commonly known as a wafer, such supplemental lens or wafer being indicated in Fig. 3 by the reference letter *b*. In accordance with the present invention, the wafer *b* is arranged to be secured to the lens *a* between the surfaces thereof, the said lens being provided with a slot or recess *a*² cut into the edge thereof, the said slot being of sufficient width to receive the wafer *b*, and being of such shape (indicated by the dotted line *a*², Fig. 1) as to conform to said wafer *b*, which latter will substantially fit in said slot when the lens has been completed.

The wafer *b* may be secured in the slot *a*² by means of the cement which is commonly employed in connecting the wafers now in use with the surface of the lens, and when the wafer and lens are thus assembled, the wafer will be substantially invisible, and at the same time, protected from the air, while there is no ridge on the surface of the lens to collect dust.

Claims.

1. A bifocal lens consisting of a main lens formed of a single piece of material provided with a slot or recess located between the opposite surfaces of the lens, combined with a wafer or supplemental lens contained in said slot or recess, substantially as described.

2. The combination with a lens formed of a single piece of material provided with a slot or recess cut in the edge thereof between the opposite surfaces of the lens; of a supplemental lens or wafer adapted to fit said slot or recess, and transparent cement to hold said wafer in said slot or recess, substantially as described.

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses:

ALBERT E. COVELLE.

Witnesses:

JAS. J. MALONEY,
M. E. COVENEY.