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F. FRASER

OPHTHALMIC MOUNTING AND METHOD OF MAKING

Filed Oct. 25, 1923

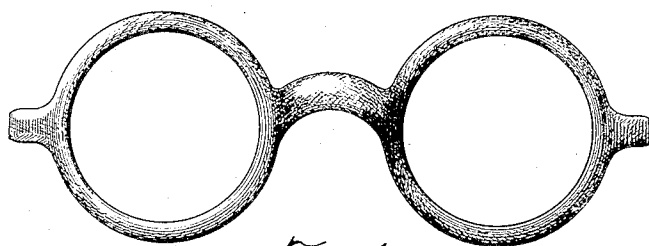


Fig. 1.

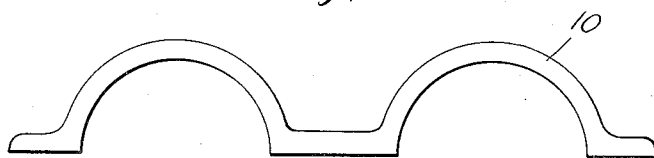


Fig. 2.

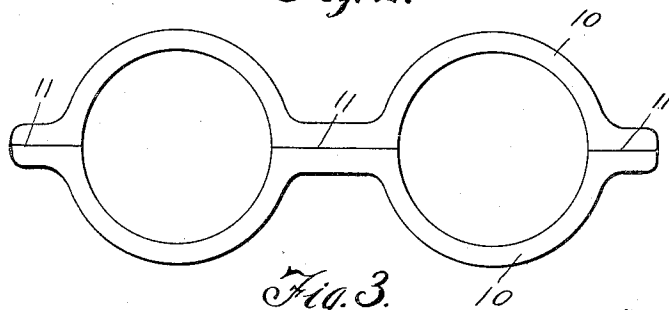


Fig. 3.

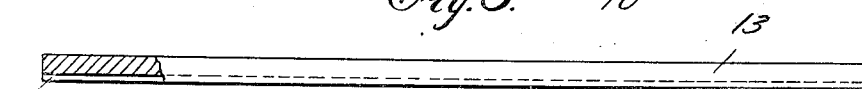


Fig. 4.

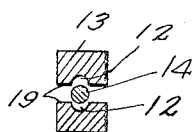


Fig. 7.

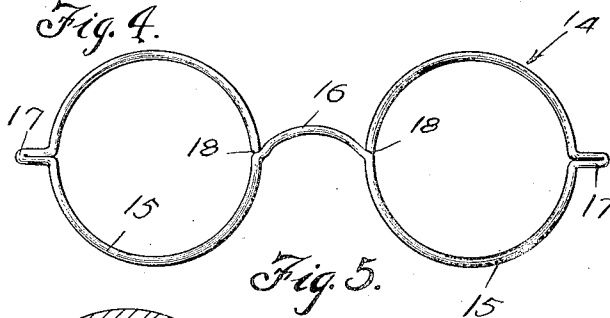


Fig. 5.

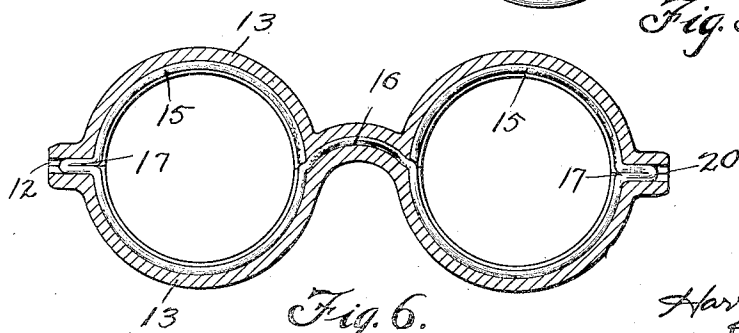


Fig. 6.

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FRANK FRASER, OF SOUTHBIDGE, MASSACHUSETTS, ASSIGNOR TO AMERICAN OPTICAL COMPANY, OF SOUTHBIDGE, MASSACHUSETTS, A VOLUNTARY ASSOCIATION OF MASSACHUSETTS.

OPHTHALMIC MOUNTING AND METHOD OF MAKING.

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To all whom it may concern:

Be it known that I, FRANK FRASER, a citizen of the United States, residing at Southbridge, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Ophthalmic Mountings and Methods of Making, of which the following is a specification.

The present invention relates to an improved ophthalmic mounting and the method or process of making the same, and has particular reference to the so-called all celluloid frames or other cellulose or composition frames.

A very important object of the invention is to provide a reinforced mounting that will give the necessary added strength to such forms of frames, thus decreasing or entirely obviating the possibility of warping by climatic conditions.

Heretofore similar mountings or blanks have been cut from flat stock, but it is impossible to cut blanks out without a lot of waste due to the shape thereof, and as a cellulose composition is a very expensive product the cost of manufacture is extremely high.

An important object of this invention is to provide a process of making an ophthalmic mounting of the class described that will cut down to a large extent the amount of material that has heretofore been wasted and the time that has been consumed in making the blanks.

Another very important object of the invention is to provide an improved process of making an ophthalmic blank that will greatly reduce the cost of manufacture and that will not add any more time in producing the desired blank.

Other objects and advantages of the invention will become apparent during the course of the following description.

In the drawings, wherein like numerals are employed to designate like parts throughout the same:

Figure 1 is a front elevation of the finished mounting.

Figure 2 is a front elevation of one-half of a blank used in accordance with the present invention.

Figure 3 is a front elevation of two blanks similar to that shown in Figure 2 after

they have been assembled in accordance with the invention.

Figure 4 illustrates a flat piece of a rectangular strip of cellulose composition having a groove formed in one face thereof.

Figure 5 is a front elevation of the metallic frame that may be used in conjunction with the finished ophthalmic mounting.

Figure 6 is a longitudinal vertical section taken through an ophthalmic mounting constructed in accordance with the present invention, illustrating a metallic frame in elevation.

Figure 7 is a vertical transverse section taken through the bridge of the mounting, illustrating the various parts in separated relation.

In the drawings, wherein for the purpose of illustration is shown the preferred embodiment of the present invention, the numeral 10 designates a blank that may be cut from flat sheet stock of cellulose composition and comprises a single half of a blank as is ordinarily stamped. I prefer to stamp the mountings as illustrated in Figure 2, due to the fact that less waste occurs as the stampings may be arranged more closely, and in addition it is not necessary to cut out the circles as has heretofore been done. After each half has been stamped out they are placed together as is shown in Figure 3, and are cemented as at the points 11, a very satisfactory cement being liquid celluloid, a celluloid solvent and cement very well known in the art and exploited commercially as such. The cemented blank is every bit as strong, if done properly, as a blank stamped in its entirety, and in view of the fact that the cementing does not weaken the frame and that considerable material is saved in this manner, it will be found to be exceptionally desirable on a production basis. After the sections have been cemented together the blank may then be handled as is ordinarily done when the blank is stamped in its entirety, namely, trimming down, grooving for the lenses, and polishing.

In Figure 4 is illustrated a strip of cellulose composition which has provided on one face the semi-circular groove 12. The strip 13 is soaked in hot water to render it pliable, but it is to be understood that any means may be used so that the strip may be

handled as is required in accordance with this invention.

In Figure 5 the metallic frame is shown, and it will be seen that the frame 14 is constructed from a single length of wire, preferably circular in cross section, and comprises the eyes 15, bridge 16, and the end pieces 17. As is shown, the ends will be soldered as at 18. In forming of the blank in this manner, two strips 13 are made plastic and are wrapped around the wire frame 14 in such a manner that the frame 14 will seat in the grooves 12 so that the faces 19 will contact as at 20. The strips 13 are then cemented at the bridge portion and the end portions, thus making a completed blank having a metallic reinforcing element without having wasted any expensive material. Of course, after the sections have been cemented and have properly set, the blank is properly shaped and polished to give the finished product.

Of course, it is not absolutely necessary that the metallic reinforcing element be used as the eye portions can be readily formed by suitable formers and after the frame has sufficiently hardened or set up it will be entirely as strong as though it were stamped from a single sheet of material. It is perfectly obvious that the saving in such a process of manufacture will be great, but it is to be understood that the length of time consumed will not be longer than in former processes. With respect to the metallic reinforcing member 14, the eyes 15 if desired may be provided with V-shaped grooves to form suitable seats for the lenses when the lenses are inserted in position for use.

It is to be understood that the form of my invention herewith shown and described is to be taken as the preferred embodiment of same, and that various changes in the

size, shape and arrangement of parts may be resorted to without departing from the spirit of the invention or the scope of the sub-joined claims.

Having thus described my invention, what I claim is:

1. An ophthalmic mounting of the character described, comprising two longitudinally divided half sections, each section having two half end pieces, two half eye sections, and a half bridge portion, and a cementitious medium uniting the two sections along the longitudinal division line.

2. The process of forming an ophthalmic mounting consisting of forming two halves thereof from composition stock, placing two halves together, cementing the halves at their contacting faces, forming grooves in the eye portion thereof, and polishing the cemented blank.

3. The process of forming an ophthalmic mounting consisting of stamping halves thereof from sheet stock, placing two halves together, cementing the halves at their contacting faces, forming grooves therein, and polishing the cemented blank.

4. The process of forming an ophthalmic mounting consisting of forming a frame member from metallic stock, wrapping two grooved plastic celluloid composition strips around the frame member whereby said frame member will be received within the grooves of said strips, and cementing the strips at their contacting faces.

5. The process of forming an ophthalmic mounting consisting of forming a frame member from a length of wire, wrapping two grooved plastic cellulose composition strips around the frame member whereby said frame member will be received within the grooves of said strips, and cementing the strips at their contacting faces.

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