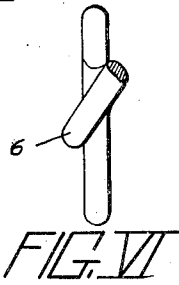
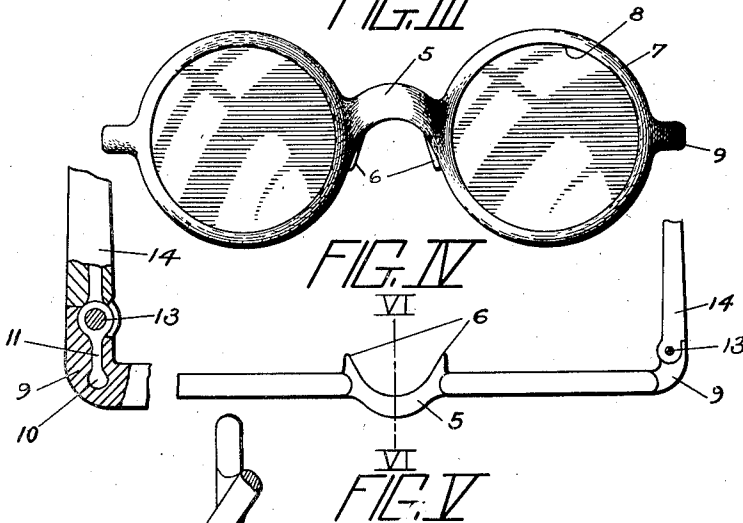
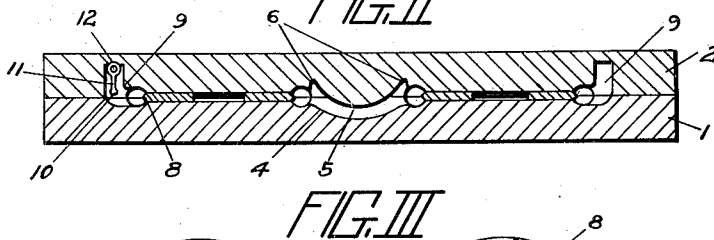
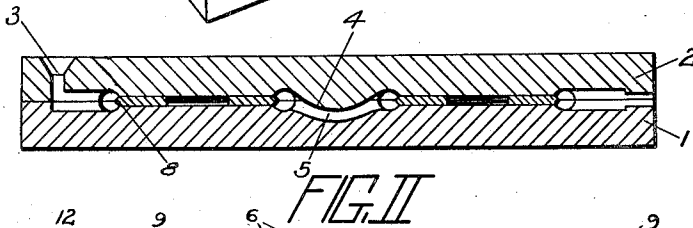
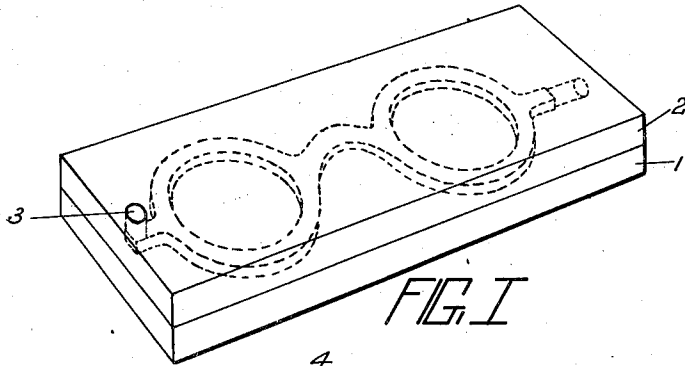


Sept. 30, 1924.

1,510,001

W. A. GUNNING
OPHTHALMIC MOUNTING
Filed March 3, 1922



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UNITED STATES PATENT OFFICE.

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OPHTHALMIC MOUNTING.

Application filed March 3, 1922. Serial No. 540,698.

To all whom it may concern:

Be it known that I, WILLIAM A. GUNNING, 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, of which the following is a specification.

This invention relates to improvements in ophthalmic mountings and in the process of producing such mountings.

One of the principal objects of the present invention is the provision of a novel and improved process for the construction of ophthalmic mounting in which the various parts of the mounting may be constructed of different shapes, thicknesses, and the like, as desired, in the initial formation of the frame, and in which various bends or configurations may be produced which will have an initial set or tendency to hold the form in which they are produced and resist any variation therefrom, in place of the parts being bent into such position against an initial set in some other position, as has been the case in prior art constructions of a similar general appearance.

A further object of the present invention is the provision of a process of constructing ophthalmic mountings embodying both metallic and non-metallic parts, and in which the metallic parts shall be initially formed in position within the non-metallic parts and may be concealed as desired by the said non-metallic material.

Other objects and advantages of my improved process should be apparent by reference to the following specification taken in connection with the accompanying drawings, and it will be understood that I may make any modifications in the specific details of construction shown and described within the scope of the appended claims without departing from or exceeding the spirit of my invention.

Figure I represents a perspective view illustrating one manner of constructing my improved frame.

Figure II represents a longitudinal sectional view.

Figure III represents a similar view showing the production of a different form of construction.

Figure IV represents a front view of one

type of frame produced in accordance with my invention.

Figure V represents a plan view thereof.

Figure VI represents a sectional view as on the line VI—VI of Figure V.

Prior to my invention it has been customary in the formation of ophthalmic mountings from what is known as composition material, to stamp or cut the frames from sheet material and to subsequently bend up the bridge, end piece and other portions into desired form. Certain difficulty has here been experienced due to the fact that while the material employed is such as can be softened under the influence of heat, or the like, it has the peculiar property that although supposedly set in its new form, it will, due to climatic conditions or other heat and time effects, tend to resume its original state or flat sheet form unless it is in some way held or secured thereagainst.

It is, therefore, the purpose of my invention to provide a structure in which the initial set will be in the final form of the mounting so that there will be no tendency for the same to vary or alter its shape under normal or abnormal conditions. In the accomplishment of this result I make use of the pair of die members 1 and 2. These members, it is to be noted, have therebetween the communicating recesses or cavities arranged in complementary position so as to suitably enclose a space of the size and shape of a completed ophthalmic mounting, and in addition have one or more receiving passages 3 communicating with the frame forming configurations 4.

It is the purpose of my invention to take the material for forming the frame direct in liquid form, either as cellulose composition material, phenol condensation products, or other material, which is pressed or forced through the aperture 3 between the die members 1 and 2, which shape and mold it into its completed form. This may be of any desired configuration, as shown in Figure III and following, comprising a bridge portion 5 having integral depending nose bearing members 6, the lens receiving rims 7 provided with the lens seats or grooves 8 and the end pieces 9, which are rearwardly curved or extended. It is to be noted that in Figure III, I have shown

these end piece members 9 as bending backward at right angles to the body of the frame and as having embedded therein the metallic anchors 10 provided with stems 11 terminating in the pivot ears 12, these members being suitably held in position within the dies, and the material holding the frame being forced therearound to securely interlock therewith and render the member an integral part of the frame. The additional advantage here accomplished is that not only is this end piece member 12 which serves to carry the pivot 13 for the temple member 14 securely embedded and interlocked with the end piece, but in addition the material of the end piece is formed around the pivot eye at the upper and lower portions to more clearly conceal this pivot ear and at the same time to provide an increased thickness of material so that a larger and heavier pivot ear may be employed than it has been possible to employ in concealed relation when the frame was bent up or formed from sheet stock.

I claim:

1. The process of producing a non-metallic ophthalmic frame consisting in forming dies having the necessary configurations, and forcing the frame material in liquid form between the dies to produce the finished article.

2. The process of producing a composition frame having integral non-bearing portions and rearwardly bent end piece members consisting in molding the frame as an entirety from liquid material.

3. The process of producing a composition ophthalmic frame consisting of placing metallic reinforcements for the frame within a mold, and then forcing a liquid cellulose composition material into the mold, then allowing the molded composition to set, whereby the metallic reinforcements will be carried by the frame.

4. The process of producing a reinforced non-metallic spectacle frame consisting in preparing shaping dies having metallic reinforcement steadying portions, and forcing liquid composition material between the dies and around the metallic reinforcements as held thereby.

5. The process of producing a composition ophthalmic mounting consisting in molding fluid composition into the form of a spectacle frame having lens receiving rims and integral depending nose engaging portions and a bridge connecting the rims and nose engaging portions of opposite sides of the mounting.

6. The process of producing a composition ophthalmic mounting consisting in molding fluid composition into the form of a spectacle frame having lens receiving rims and integral depending nose engaging portions and a bridge connecting the rims and nose engaging portions of opposite sides of the mounting, each of said rims being formed with an end piece projection at its outer side extending at right angles to the plane of the adjacent rim.

7. The process of producing a composition ophthalmic mounting consisting in molding fluid composition into the form of a spectacle frame having lens receiving rims and integral depending nose engaging portions, and a bridge connecting the rims and nose engaging portions of opposite sides of the mounting, each of said rims being formed with an end piece projection at its outer side extending at right angles to the plane of the adjacent rim, said end piece portion having a metallic hinge joint member embedded therein while the material was in fluid condition.

8. The process of producing a reinforced non-metallic ophthalmic mounting consisting in preparing die sections having recesses to facilitate the formation of the eye rims, bridge and end pieces, placing hinge connections in the end piece recesses of the molds, and then forcing a liquid cellulose composition material in the mold whereby to form a mounting, then allowing the cellulose composition material to cool whereby the hinge connections will be set in the end pieces of the mounting.

In testimony whereof I have affixed my signature, in presence of two witnesses.

WILLIAM A. GUNNING.

Witnesses:

SUSAN CASAZZA,
ESTHER M. LAFLER.