D. J. REAGAN.

GOGGLES.

APPLICATION FILED JUNE 25, 1915.

1,235,842. Patented Aug. 7, 1917.

Fig. 1.

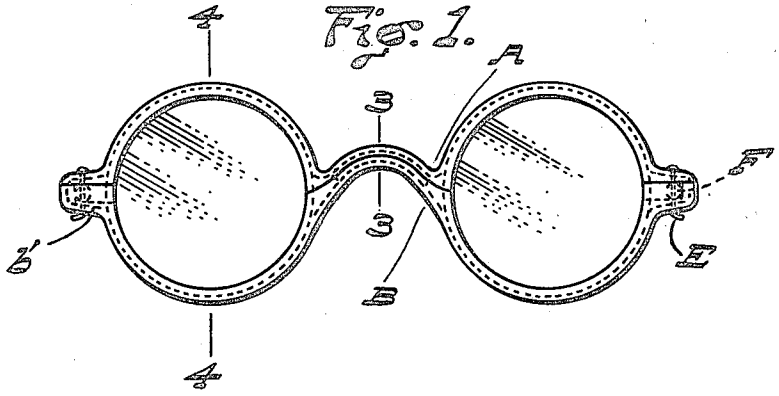



Fig. 2.

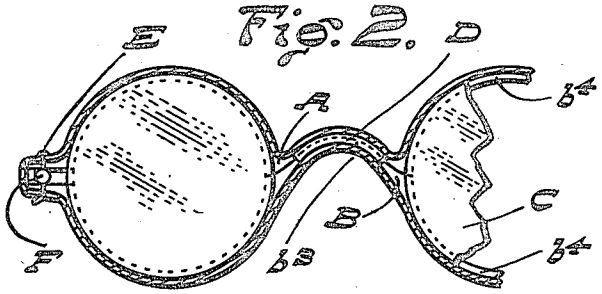



Fig. 3.

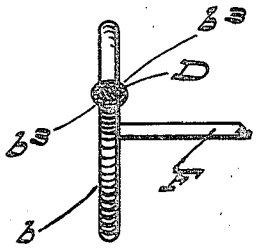



Fig. 4.

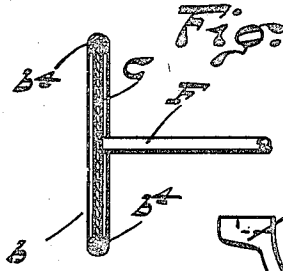
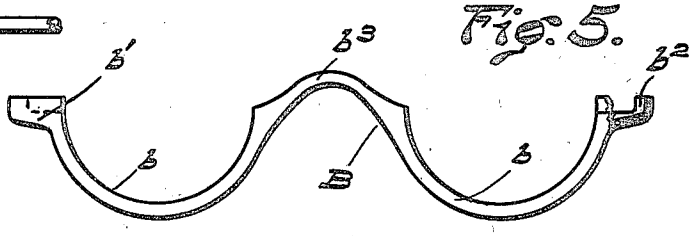



Fig. 5.




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# UNITED STATES PATENT OFFICE.

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## GOGGLES.

1,235,842. Specification of Letters Patent. Patented Aug. 7, 1917.

Application filed June 25, 1915. Serial No. 36,357.

*To all whom it may concern:*

Be it known that I, DANIEL J. REAGAN, a citizen of the United States, residing at Leominster, in the county of Worcester and State of Massachusetts, have invented a new and useful Improvement in Goggles, of which the following is a specification.

This invention relates to a pair of goggles, so-called, although some features of the invention are capable of use in the manufacture of spectacles. The type of goggles to which this invention relates is the kind which most nearly resembles a pair of spectacles and in which the frame consists of celluloid, the eye-pieces being formed of amber or other tinted celluloid or glass.

The principal objects of the invention are to provide an improved construction of frame in which thin sheet celluloid can be used instead of the round wire form that has recently been put on the market; in which the construction is strong; in which the manufacture is so cheap and expeditious that the article can be sold at a very small price; and glass eye-pieces can be used instead of celluloid if desired. The invention also involves several features of construction as will appear.

Reference is to be had to the accompanying drawings in which,

Figure 1 is a front elevation of a pair of goggles constructed in accordance with this invention;

Fig. 2 is a central sectional view through the bridge on a plane parallel with the front of the goggles;

Fig. 3 is a sectional view through the bridge on the line 3—3 of Fig. 1;

Fig. 4 is a sectional view through the center of one of the eye-pieces through the line 4—4 of Fig. 1; and

Fig. 5 is a side view of one of the blanks of which the frames are made, with parts broken away.

Recently a form of goggles has been put on the market in which the frame is made of celluloid in the round wire form and this has been gotten up to sell at a very low price. It involves, however, some rather difficult work to form the ends in such a way as to provide a uniform straight anchorage for the temples and to seal them over so as to give them an attractive and finished appearance, and furthermore, it requires not only the bending of the wire into proper shape, but the grooving of it to form a safe anchorage for the celluloid disks constituting the eye-pieces, and this groove has to be made so shallow that there is some danger of the eye-pieces being dislodged.

In the present invention, the frame is made of sheet celluloid which, in the act of bending it into shape, is doubled over so as to form a deep groove for the receipt of the edges of the eye-pieces and this results in so securely holding them in position that even glass eye-pieces can be used with safety. Furthermore, the bridge parts can be secured together more firmly than in the other case above described, the ends can be finished so as to have a neat appearance, and the temples can be held accurately in position without undue expense in manufacture. Furthermore, the bridge can be strengthened by an additional piece if desired.

Referring to the drawings, it will be seen that the frame of the goggles is made of two pieces of celluloid A and B. Each one of these, as shown in Fig. 5, is formed of a sheet of thin celluloid formed up to shape in dies. The general characteristics of the two pieces are substantially the same with certain differences in shape, and I will proceed to describe the one shown in Fig. 5.

This is provided with two semi-circular portions $b$, each one of which at the end is provided with a radial projection $b'$ which in this case is provided with an edge flange having a notch $b^2$ for a purpose to be described. A bridge piece $b^3$ is shown connecting the two portions $b$ and this is shaped to the proper shape for the bottom of the bridge piece, but the corresponding part in the other member is provided with the opposite shape.

It will be seen that this whole member B, being formed of sheet material, is bent in the act of forming it into shape, into a form having a U-shaped cross section throughout so as to furnish a groove $b^4$ for the eye-pieces C which are to be applied. This groove throughout the semi-circular portion is uniform and for convenience in manufacture it may be uniform also throughout the projection $b'$. However, in the bridge portion $b^3$ this is widened out materially at the center for the purpose of affording a rigid construction at this point. Furthermore, it will be seen that while the edges of this U-shaped portion throughout the semi-circu-

lar parts have no function except to overlap the edges of the eye-pieces and hold them in position, yet on the projection $b'$ and the bridge piece $b^3$, these edges come into contact with the corresponding edges of the other member A. It is along these edges that the two parts are cemented together by any of the methods usually employed in uniting pieces of celluloid. This construction in itself furnishes a very strong and rigid bridge piece which is not likely to bend or give way in any direction in practice. However, when it is desired to strengthen it still further, a solid piece of celluloid, wood, or other material D is inserted through the bridge piece when the parts are put together and it may be cemented to both the upper and lower part if desired.

In the manufacture of the device, after the bridge piece is cemented together, the eye-pieces C are put into place and then the end pieces $b'$ are brought together, edge to edge, and cemented in the same way as the bridge piece, but in this case it will be seen that one of them, the one connected with the lower member B, is provided with a comparatively wide flange in which is the notch $b^2$. Before these parts are cemented together edge to edge, a couple of pins E are put through and the temples F are pivoted on the pins when they are inserted.

An additional advantage of this construction is that no projection has to be provided on the temple to furnish a stop for preventing its being moved out too far. Its surface simply comes against the edge of the notch $b^2$ and this forms a sufficient stop for it. In this way a comparatively neat form of temple can be used.

It will be seen, also, that the end of the member B is continuous with the corresponding projection on the other member and their edges are cemented together where they come in contact so that a finish of neat appearance is provided. I have found in practice that on acount of the deep groove into which the eye-pieces are inserted, it is possible to use glass eye-pieces in these inexpensive celluloid frames, but of course celluloid eye-pieces can be used whenever desired.

Although I have illustrated and described only a single form of the invention, I am aware of the fact that many modifications can be made therein by any person skilled in the art without departing from the scope of the invention as expressed in the claims. Therefore, I do not wish to be limited to all the details of construction herein shown and described, but what I do claim is:—

1. As an article of manufacture a frame for goggles or spectacles consisting of two pieces of celluloid in sheet form, each of said pieces being longitudinally grooved so as to provide two side flanges parallel with each other and each having two half eye-pieces and a bridge piece, said bridge pieces having their outer edges abutting against each other and cemented together so as to furnish a hollow bridge piece, the eye-pieces having concave projections extending therefrom spaced apart, and temples located in the spaces between them.

2. As an article of manufacture, a pair of goggles comprising a frame formed of two members, each member consisting of a single piece of sheet celluloid formed into shape and having a groove at the inner side to afford a place for receiving the eye-piece, and provided with end projections continuous with the main bodies of said members, to which temples are pivoted, the main portion of said projections being spaced apart to receive the temples between them and being continuous and flush on the front with the bodies of said members, and also having a continuation of the groove extending into them.

In testimony whereof I have hereunto set my hand, in the presence of two subscribing witnesses.

DANIEL J. REAGAN.

Witnesses:
GRACE A. BROWN,
P. J. MOORE.