June 4, 1963 R. L. MOWER 3,092,103

EYE PATCH

Filed Nov. 13, 1959

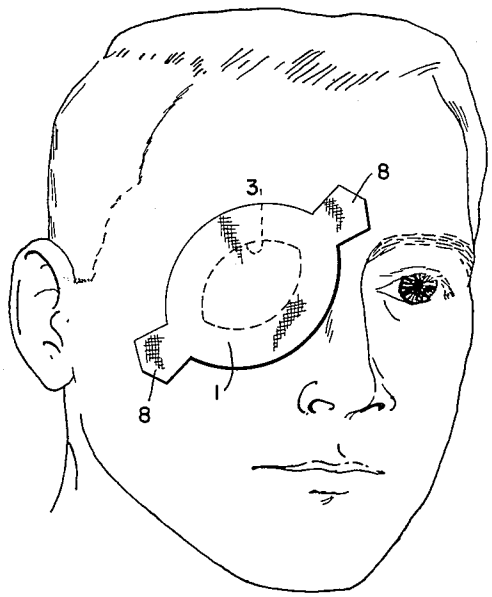

FIG. 1

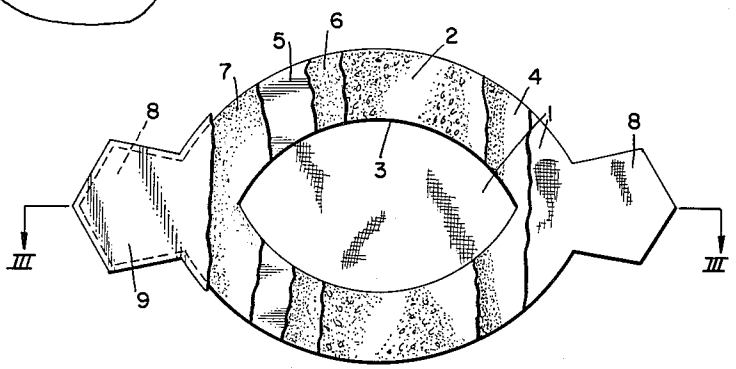

FIG. 2

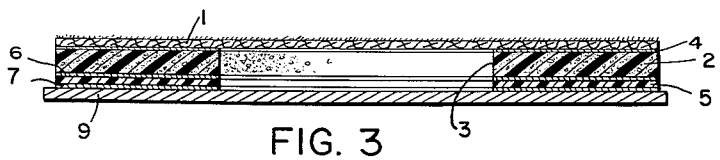

FIG. 3

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EYE PATCH

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1 Claim. (Cl. 128—132)

This invention relates to improvements in an eye patch, and more particularly to a self-adhering eye patch for attachment to the face of a user over an injured or afflicted eye to cushion the same from shock, protect, and completely conceal the eye, although the invention may have other uses and purposes as will be apparent to one skilled in the art.

In the past, many and various types of eye patches have been developed and in most cases the eye patch was held over the eye by means of a tie cord or elastic headband which interfered to an objectionable extent with the wearing of hats and other headgear since the band frequently became dislodged or misplaced. Also, in most cases eye patches heretofore made were of relatively rigid material and did not effectively obscure light from the injured or afflicted eye unless the patch was adjusted in an uncomfortably tight manner. Perhaps even more important, eye patches heretofore known did not effectively permit the ready opening and closing of the eye under the patch, and in many cases did not permit the eye to naturally nictitate or wink under the patch. Many times it is desired to have an injured or afflicted eye remain open, even though vision may be blocked by an eye patch, as long as the other eye is in use. That, however, was virtually impossible with many forms of eye patches heretofore known, and it was incumbent upon the user to maintain the injured or afflicted eye in closed position.

With the foregoing in mind, it is an important object of the instant invention to provide an eye patch that is extremely soft and flexible and so constructed as to provide a shock absorbing wall or lift to be located around the eye socket.

Another object of the instant invention is to provide a soft and flexible eye patch having a shock absorbing wall or lift incorporated therein of sufficient depth to permit the eyelid to be readily opened and closed without interference beneath the patch.

It is also a feature of this invention to provide a soft shock absorbing eye patch that is self adhering in character, being adhesively secured to the face of the user with the elimination of any elastic headbands, tie cords, and the like.

A further feature of this invention is the provision of an eye patch comprising a cover to completely overlay the eye, with a surrounding cushioning wall beneath that cover carrying on its undersurface an adhesive by means of which the eye patch is attached to the face of the user very readily and in a manner to completely block the entrance of light underneath the edge of the patch.

Still a further object of the instant invention is the provision of an eye patch having a general oval shape, with a surrounding shock absorbing wall underneath a cover portion, the wall carrying adhesive on its underface to attach the patch the the face of the user, and there being an integral extension of both the wall and cover at each end of the long axis of the oval to insure better anchorage of the patch in position on the user's face.

The invention possesses other objects and features of advantages, some of which, with the foregoing, will be set forth in the following description of the preferred form of the invention which is illustrated in the drawing accompanying and forming part of the specification. It is to be understood, however, that variations in the showing made by the said drawing and description may be adopted within the scope of the invention as set forth in the claim.

FIGURE 1 is a fragmentary view of a patient's head illustrating an eye patch embodying principles of the invention in operative position over an eye.

FIGURE 2 is a bottom plan view of the eye patch of FIGURE 1 with parts broken away to disclose the parts therebeneath.

FIGURE 3 is a transverse vertical sectional view through the structure of FIGURE 2 taken substantially as indicated by the line 3—3 of FIGURE 2 looking in the direction of the arrows.

Referring now to the drawings, in the illustrated embodiment of the instant invention there is disclosed an eye patch comprising a cover **1** having a generally oval shaped center portion in keeping with the general shape of the human eye socket. This cover sheet **1** may be of any satisfactory material, but is preferably a soft flexible material. A highly napped fabric such as moleskin is quite suitable for the purpose, and this may of course be flesh colored, if so desired.

Beneath the cover **1** is a thicker layer or sheet **2** of cushioning material and which has a relatively large oval aperture **3** therein whereby the cushioning sheet defines a marginal wall beneath the oval portion of the cover. The cushioning material **2** may satisfactorily be a foam material, such as foam latex, or a plastic foam of the type of polyvinyl foam or polyurethane foam. This material is sufficiently thick so that when the patch is secured over the eye, the eye may freely be opened and closed, and naturally nictitate, beneath the cover **1** and without interference from the cover.

The cushioning material **2** may be secured to the underface of the cover **1** in any suitable manner, such as by an adhesive **4** which, of course, does not extend over the portion of the cover closing the opening **3** in the cushioning material.

The underface of the cushioning material **2** carries an adhesive spread, preferably of the pressure-sensitive type, by means of which the patch is attached to the face of the user. This adhesive spread may be provided in substantially any suitable manner, a very satisfactory way being to utilize a thin plastic film **5** which is double-faced with adhesive as indicated at **6** and **7**. Such film may be secured to the underside of the cushioning material **2** by adhesive face **6**, leaving the opposite adhesive face **7** exposed for use on the body. The film may satisfactorily be an acetate film, a vinyl film, and a polyester film such as that made from a polyethylene terephthalate resin has proven very satisfactory, particularly because of its outstanding strength and because it can be made extremely thin, this particular material being obtainable in various thicknesses from 0.00025 to 0.0075 inch.

Since the device is to be adhesively attached to the face of the user, in order to insure positive and lasting engagement until removal is desired, a pair of extensions **8—8** are provided integral with both the cushion layer **2** and cover **1**, there being one such extension at each end of the long axis of the oval. In order to preserve the adhesive surface **7** until time for use, a temporary protective covering **9** is preferably disposed over that surface. This protective covering **9** may be of glassine paper, parchmentized paper, plastic coated paper, a plastic film, or any other suitable material that may be readily stripped from the adhesive surface and leave that surface intact for use.

In use, the instant invention is extremely comfortable as well as effective. Preferably the device is adhesively attached to the face somewhat on the slant as seen in FIGURE 1 with one of the projections **8** being on the cheek and the other near the top of the nose. When the device is pressed into place the wall of cushioning material **2** is preferably disposed over the bony formation of the eye socket. The eye itself is free for unimpeded lid move-

ment since the lid will be disposed within the aperture or cavity 3. The adhesive may be pressed against the face, and since the patch is extremely flexible, the adhesive may contact the face intimately beneath the eye and along the side of the nose, as well as elsewhere so that the entrance of light beneath the edge of the patch is totally precluded at all points. The patch being of soft material and with the cushioning wall 2 over the bony structure of the eye socket, any accidental bump adjacent the eye is effectually absorbed by the patch, and there is little or no likelihood of the patch becoming dislodged while in use. Further, the patch has a neat appearance when worn and there is no tie cord or elastic headband to interfere with the proper wearing of headgear needed at any time. The device is also simple and economical in structure and very durable.

It will be understood that modifications and variations may be effected without departing from the scope of the novel concepts of the present invention.

What is claimed is:

An eye patch comprising a substantially imperforate cover sheet of soft material of generally oval shape and with portions thereof forming integral extensions at the long axis of the oval, a thicker substantially planar sheet having a central opening extending therethrough and made of cushioning material and of a form and with substantially integral extensions similar to and complementary with the cover sheet, the thickness of said cushioning sheet and the size of the opening therethrough being such as to permit nictation of the eye when the patch is applied thereover, adhesive means securing the two sheets together with the extensions of the cover sheet in registration wtih and secured to the extensions of the other sheet, and an adhesive carried by said cushioning sheet and the extensions thereof on the surface remote from the surface secured to the cover sheet for attaching the patch to the face of a user, said attaching surface of the cushioning sheet and the extensions thereof all lying in substantially a single plane.

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