

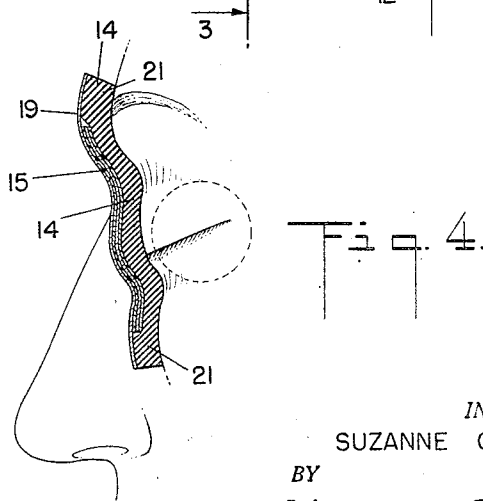
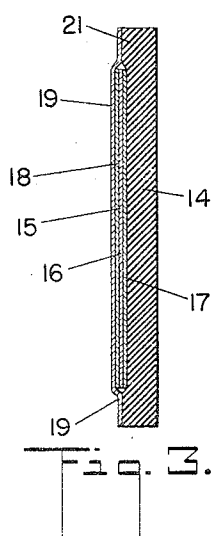
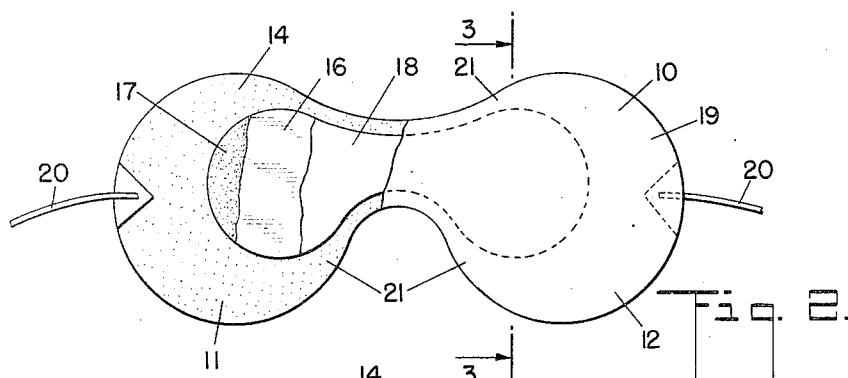
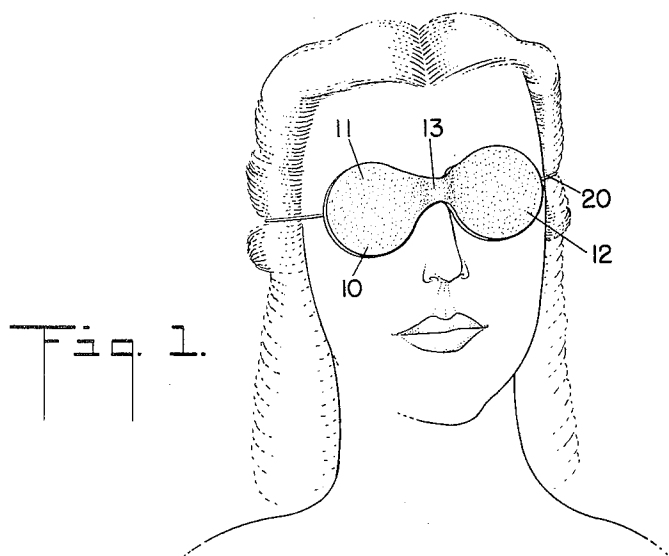
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EYE MASK

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EYE MASK

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The invention relates to an eye mask or medicine or lotion applicator, for use either medically or cosmetically.

It is known at present to treat persons' eyes over night either simply by keeping them closed by bandages and otherwise and by applying certain medicaments and cosmetics there for different purposes. Numerous ways have been suggested to maintain medicine, lotions, salves and the like, hereinafter generically called "lotions," used in such situations in position over the closed eyeballs, and in such way as to avoid leakage therefrom and at the same time to maintain the medicaments, salves and the like in position in or on the mask in position to be applied to the face surface under treatment, and also to permit the masks and applicators to be worn with comfort to the user as she sleeps.

The invention also is intended for use as blinders without medication by those persons who are particularly sensitive to the effects of early morning light. Numerous forms of such blinders and the like have been suggested for use in preventing the infiltration of light to the eyes, but they all have certain inherent objections, particularly in that they do not always provide for a perfect light obstructing shield permitting light to filter into the covered areas and in other cases are cumbersome, and thus not comfortable to the user.

In certain prescribed treatments for the eye it has been found that it is desirable to bridge across the eyeballs with an opaque shield disposed so as to avoid actually touching the eyes, but to provide a more or less rigid but cushioned contact with the eyeball and with the tissues outlining the eyeball, and under other treatments gentle and cushioned pressure uniformly over the entire eyeball with or without any lotions is prescribed for the treatment of the eyes during sleeping hours.

The primary object of the invention is to provide a simple form of eye mask capable of assisting in practicing the peculiarities of the different treatments above suggested; to provide a combined eye mask and medicament applicator which will be comfortable to the user and which will be capable of being laundered without deleterious results; which can function efficiently as a light screen or blinders and which can be used repeatedly over and over again without necessity of refitting after having been fitted.

Broadly I attain these objectives by providing a mask of over-sized goggle-like form in which the portion designed to over-lap both eyes is formed of a soft cushioning material backed in

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the part which is intended to over-lap the eyes, as well as the part which is intended to bridge the nose therebetween by a thin, relatively small sized and easily distortable sheet metal form of reinforcement which will tend to give rigidity to the portion so reinforced, and which at the same time shall be sufficiently pliable so as to be molded to shape easily by manual manipulation so as to custom fit the particular facial contour for the time being under treatment. While the device features relatively stiff but cushioned eye-covering portions, it does provide as part of the complete cushion marginal rim which is of such soft and reinforced material that it will act as a highly flexible marginal cushion to engage the skin of the face about the eyes without stretching the skin. It is also an objective of the invention to provide an eye mask which can when once accurately adjusted into position on the face of any particular user will thereafter act as a light shield to prevent the infiltration of light to the eyes for which it was so adjusted.

Various other objects and advantages of the invention will be in part obvious from an inspection of the accompanying drawings and in part will be more fully set forth in the following particular description of one form of device embodying the invention, and the invention also consists in certain new and novel features of construction and combination of parts hereinafter set forth and claimed.

In the accompanying drawings:

Fig. 1 is a view of a pair of goggles constituting a preferred embodiment of the invention shown in operative position custom adjusted to fit on a person's face;

Fig. 2 is a plan view of the goggles shown in Fig. 1 with parts broken away in succession to show the different layers which make up the internal construction of the eye mask;

Fig. 3 is an enlarged view in transverse section taken on the line 3—3 of Fig. 2 and showing the device in its flat, unmanipulated form as initially manufactured and prior to being pretreated and packed for sale; and

Fig. 4 is a view similar to Fig. 3 showing the mask and particularly its metallic core structure bent out of its normal position shown in Fig. 1 to custom fit the same against an eye of the user.

In the drawings there is shown an eye mask in the form of an over-sized pair of goggles and including a pair of large eye covering ends 11 and 12 each of somewhat circular form connected by a relatively narrow nose bridging section 13.

While it is of course not intended that the eye

masks be sold in form contoured and ready for use, it is suggested that as marketed they be preformed at least in a general way so as to minimize the necessary contouring in situ to fit the particular user. For this purpose the bridging section is preformed by being bent into a U for fitting over the nose leaving the ends 11 and 12 more or less flat until custom shaped. This preforming is of advantage in that it tends to prevent the wrong side of the mask being applied to the face of the user. In order to preserve this preformed design until the mask reaches the ultimate user it is suggested that the masks be separately packed and sold in containers designed to maintain the factory set preform. The mask is formed mainly of two layers of material, a large relatively thick soft cushioning layer fashioned to fit against the eyes and adjacent portions of the face, and a smaller relatively thin layer of relatively rigid but flexible metal functioning as a reinforcement to the cushioning layer. Describing the illustrated form of the invention more fully there is disclosed a layer of opaque, thick soft, flexible material 14 in the illustrated case shown to be highly porous sponge rubber, about $\frac{1}{8}$ of an inch thick. The soft material 14 is backed on its outer side by a preformed stiffening sheet 15 formed primarily of sheet metal, designed to reinforce and give at least some slight degree of rigidity to the central portion of the layer of soft material 14. The sheet 15 is secured to the sponge rubber layer 14 by some suitable form of adhesive. In the form of the invention illustrated the reinforcing sheet 15 is a preformed extremely thin unit comprising three layers of material, an inner-most thin, paper-like sheet 16 of sheet aluminum, backed on its inner and outer sides respectively by a thin coating 17 and 18 of rubberized water-proof material. This multi-sheet material with the aluminum sandwiched between its protective coatings can be formed initially as a large sheet and then cut to the desired shape and size as needed.

It is herein suggested that the outer face of the mask be neatly finished. For this purpose a facing covering 19 of some pleasing material, such as a rubberized silk is glued to the marginal portion of the sponge-rubber sheet 14 and sometimes glued to the sheet 15. The eye mask when contoured to fit the face of its users and when otherwise completed is secured in place preferably by means of fastening tapes 20 secured to the outer edges and the mask which may be passed about the head of the user as suggested in Fig. 1 and tied in place.

As the reinforcing sheet 15 with its stiffening insert of sheet aluminum terminates in spaced relation to the perimeter of the sponge rubber sheet 14 there is provided a soft, highly flexible and non-reinforced marginal portion 21 which will bear gently on the skin of the user in the portion of the face about the eyes without any noticeable feeling after a few minutes of use that the mask is in position. In this way the flexible margin of sponge rubber can be caused to engage the surface of the face with light pressure while the more rigid portions covering the eye-balls may be caused to press on the eye-balls with a greater degree of pressure, or not at all. As the mask considered as a whole can conform itself readily to facial surface contours which it is fashioned to fit, there is formed between the outlining marginal portion of the mask and the portion of the face engaging thereby a light tight closed joint which tends to defeat leakage of the medicine or cosmetics from the space covered by the mask and

also acts as a screen or blinders to prevent the infiltration of light into the space.

In operation it will be understood, of course, that each person under treatment, as well as the character of the treatment prescribed, will present a different problem as to how the standard size device herein illustrated may be adapted to the patient's features. The desired contour given the relatively rigid metallic sheet 15 and thus to the mask considered as a whole, will also be controlled by the degree of gentle pressure, if any, which is to be exerted on the closed eyes of the user. The metallic stiffening part is sufficiently pliable so that it may be easily manipulated by finger molding of the operator until the desired shape is attained and when so shaped the mask as a whole has sufficient rigidity to maintain the configuration until manually changed back to the original flat form shown in Fig. 3, or otherwise.

The eye mask is formed of water-proof materials; can be easily laundered and thus can be kept sanitary and can be used repeatedly, over and over again, and even if distorted accidentally in the laundering process can be readily and quickly restored to that position which the user has found to be the most comfortable.

I claim:

1. An eye mask in the form of an over-sized pair of goggles for use in applying gentle pressure to the areas forming the closed eyes of the user in treating said areas medicinally or cosmetically, said eye mask including a thin, paper-like sheet of ductile metal, initially substantially flat and sufficiently thin so as to be capable of being easily deformed by manual manipulation, said sheet tending to give the mask a slight degree of rigidity in the portion so reinforced by the metal sheet, said mask in the area containing the metal sheet adapted to be bent by strong digital force to provide a custom fit over the bridge of the nose and fitted snugly against the closed eyes of the user, and a layer of flexible, rubber-like plastic material to which the sheet is secured and tending to take the contour imposed thereon by the manually fitted metallic sheet, and said layer of plastic material extending beyond the perimeter of the metallic sheet to provide a soft flexible non-reinforced marginal portion fashioned to engage the face of the user in the parts thereof about the eyes and substantially encircling each eye with a light-tight fit and thus to form a pair of blinders tending to defeat the infiltration of light to each of the eyes of the user and means for securing the eye-mask in place.

2. An eye mask for use in treating the eyes of the user including a layer of opaque soft, flexible material in the form of an over-sized pair of goggles fashioned at each eye with an outwardly facing annular channel and within the channel with a semi-spherical dome contoured to engage and thus to cover the eye-balls of the user and to extend in all directions beyond the eye-balls, and a sheet of metal of similar goggle-like form secured to the layer of flexible material to reinforce the same and located in spaced relation to the outlining edge of the flexible material to provide a limited degree of stiffness to the mask adjacent its central portion engaging the eye-balls while leaving the marginal edges with the softness characterizing said layer of flexible material, said metal sheet being sufficiently thin to be bent if necessary by manual manipulation to provide a custom fit over the bridge of the nose and contoured to fit snugly over, and if desired,

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to cause the concaved side of the semi-spherical dome to bear gently against the closed eyes of the user and means for securing the mask in place when so custom fitted.

3. An eye mask contoured to cover both eyes 5 of the user and the nose portion of the face between the eyes, said mask including a layer of soft flexible rubber-like plastic material for covering the eye-balls and the adjacent portion of the face surrounding the eye-balls, and a thin 10 sheet of ductile metal secured to one side of the plastic material in inwardly spaced relation to its outlining edge to provide a pair of relatively rigid areas contoured for engaging the eyes of the user and to form a soft marginal non-rigid pliable 15 portion projecting beyond the portion to which the metal sheet is secured and means for securing the eye mask in place.

4. An eye mask in the form of an oversized pair of goggles and comprising a thin sheet of sponge rubber continuous from edge to edge, a sheet of aluminum also continuous from edge to edge secured to one side of the sponge rubber to provide a reinforcement to the eye mask, the edge of said aluminum sheet being spaced from the edge of the sponge rubber sheet to provide a soft cushioning marginal edge to the mask, said mask being initially flat and rigid in the central area thereof containing the sheet of aluminum and said central area being sufficiently pliable to respond to 20 manual manipulation to deform it from its initial flat form to at least an approach to a custom-fit across and about the eyes of the user and means passing about the head of the user for holding the mask in place with the eye-covering 25 portions exerting pressure on the eyes.

5. An eye mask for use in treating the eyes and the portion of the face immediately surrounding the eyes of the user, comprising a layer of soft,

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opaque cushioning material in the form of an oversized pair of goggles dimensioned to overlap each of the eyes of the user and to overlap the portions of the face immediately surrounding each of the eyes and said mask also including a portion for bridging across the nose of the user, with one side forming an inner side fashioned to conform substantially to the contour of the eyes and to the portions of the face surrounding the eyes, and a thin layer of relatively stiff reinforcing material adhering to the outer side of the first-named layer to give the mask rigidity in the portion which overlaps the eyes and the nose of the user, said reinforcing layer being also in the 15 form of a pair of goggles located within the outlines of the layer of cushioning material and spaced from its edges to form a highly flexible, unreinforced cushioning margin to the first-named layer, said margin operative when the device is in use on the face for defeating the infiltration of light to the part of the face overlapped by the reinforcing layer, and means for holding the reinforced portion of the eye mask in pressing engagement with the eyes.

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