Sept. 17, 1963 F. J. ROGOWSKI 3,103,667

SAFETY FACE SHIELD AND MASK

Filed May 12, 1961

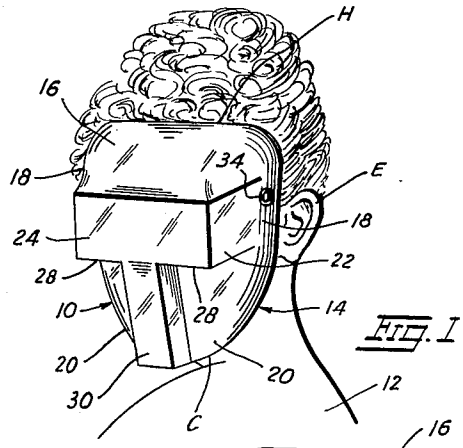


FIG. 1

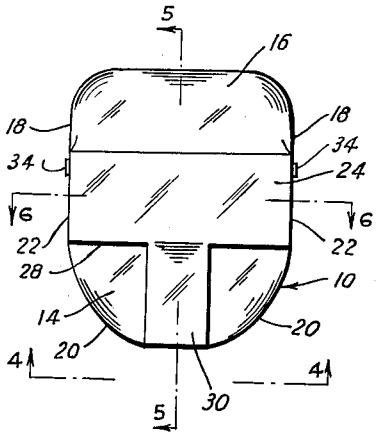


FIG. 2

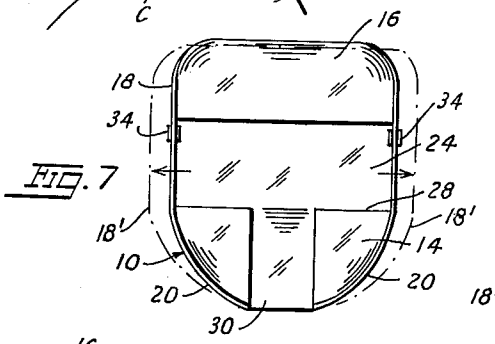


FIG. 7

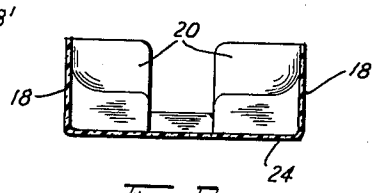


FIG. 8

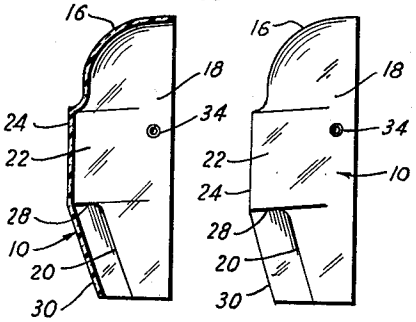


FIG. 5 FIG. 3

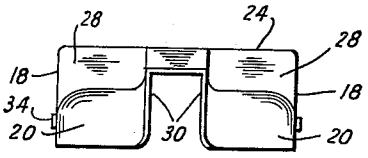


FIG. 4

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SAFETY FACE SHIELD AND MASK

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2 Claims. (Cl. 2—9)

This invention relates to safety facial masks and particularly to a mask for shielding a person's face during beauty treatments or while performing household or industrial tasks in a dusty or spray-laden atmosphere and this invention is an improvement over the safety facial mask disclosed in my copending application Serial Number 43,909 filed on July 17, 1960, now Patent No. 3,015,105.

According to the present invention there is provided a form-fitting mask for the face adapted to fit the contours of the face. The mask is a one-piece structure of transparent plastic material such as acetate, vinyl, acrylic or other synthetic resin. It is moisture-proof, rigid or semi-rigid, resistant to acids, dyes and other chemicals, warm to the touch, light in weight and resistant to cracking and breakage. A clearance is provided in the mask for receiving the wearer's nose and defining a passage for air, and permitting the wearer to breathe freely. The mask fits around the face up to the ears, up to the hairline at the forehead and under the chin. Earpieces may be provided to hold the mask on the face. When in use, beauty treatments can be applied such as hair spraying and the like without disturbing the makeup on the face. The user can wear the mask while performing tasks in a dusty atmosphere. It can also be used as a safety mask when spraying paint, when working around machinery such as grinders, saw milling machines, and the like. Since the mask is transparent the wearer can see clearly therethrough while wearing it.

It is, therefore, a principal object of the present invention to provide a one-piece self-contained safety facial mask in the form of a contoured transparent shell adapted to fit the curvatures of the human face.

It is also an object of the invention to provide a safety facial mask that is adapted to stay in position on the face of the wearer without the use of extraneous fastening elements.

Another object of the present invention is to provide a safety facial mask that permits greater vision from the sides of the eyes.

A further object is to provide a safety facial mask that is simple in construction, economical to manufacture and highly efficient for the purposes intended.

For further comprehension of the invention, and of the objects and advantages thereof, reference will be had to the following description and accompanying drawings, and to the appended claims in which the various novel features of the invention are more particularly set forth.

In the accompanying drawings forming a material part of this disclosure:

FIG. 1 is a front perspective view of a safety facial mask embodying my invention in operative position on a person's face.

FIG. 2 is a front elevational view of the mask per se.

FIG. 3 is a side elevational view thereof.

FIG. 4 is an end view as seen from the line 4—4 of FIG. 2.

FIG. 5 is a vertical sectional view taken on the line 5—5 of FIG. 2.

FIG. 6 is a cross-sectional view taken on the line 6—6 of FIG. 2.

FIG. 7 is a rear view of the mask showing it expanded in dot-dash lines.

Referring in detail to the drawings, in FIG. 1 a safety facial mask **10** made in accordance with the present invention is shown in position on the head and over the face of a person **12** wearing the same. The mask is preferably formed of suitable transparent plastic material and is light in weight. The mask comprises a thin body in the form of a shell **14** molded to conform to the shape of the face of a person. The body includes a front curved upper portion **16** conformable to the forehead of a person, flat sides **18, 18** conformable to the sides of the face of a person. The flat sides terminate in receding inwardly bottom portions **20, 20** conformable to the cheeks of a person.

At the front below the curved forehead portion **16** the side portions **18, 18** extend or bulge forwardly as indicated at **22, 22** and the extending portions are connected at the front by a rectangular flat portion **24** which is positioned over the eyes of a wearer and protrudes slightly forwardly of the curved forehead portion. The side portions **18, 18** and connecting front portion **24** also protrude forwardly of the cheek portions **20, 20** and are joined to the cheek portions by a horizontal straight portion **28**.

A channel-shaped portion **30** extends from the juncture of the front portion **24** and the bottom horizontal straight portion **28** to the bottom end of the mask and tapers downwardly and inwardly as shown in FIGS. 1 and 3. The top of the channel-shaped portion **30** starts at about the bridge of the nose of the wearer and extends over the nose and mouth of the wearer to the chin. The channel-shaped portion **30** is open at the bottom.

In order to place the mask over the face the sides of the mask are expanded as indicated at **18'** in dot-dash lines in FIG. 7 and the mask is then easily placed over the face of the wearer and when the expanding pressure is released, the side portions **18** will grip the temples of the wearer, the resiliency of the material of the mask permitting this operation and holding the mask in position. No other fastening elements are needed but eyelets **34** may be provided in the side portions **18** for receiving flexible fastening elements (not shown) for tying the mask around the head for additional security if desired.

When the mask is in position on the face of the wearer, the upper curved portion **16** is in contact with the forehead of the wearer, the rectangular front portion **24** is in front of the eyes and the channel-shaped portion **30** is over the nose and mouth of the wearer. The extending portions **22** and cross connecting piece **24** provide clearance for a pair of eyeglasses on the eyes of the wearer of the device. The position and dimensions of the side extensions **22** and the rectangular front portion **24** also provide the wearer a wide expanse of view. At the same time, the channel-shaped portion **30** permits easy breathing and allows the wearer to speak.

The channel-shaped portion **30** serves as a ready handle for putting the mask on and taking it off the wearer.

When the mask is worn, the wearer can easily see through the transparent walls. The mask fits snugly at the hairline H, at the ears E and just under the chin C. Thus, makeup worn on the face of the wearer is protected by the mask. The face is also shielded from adverse ambient conditions of dust, paint, dye and chemical sprays and the like.

The body of the mask is preferably made of thermoplastic material so that by heating sufficiently its contour can be changed if required to conform to a particular wearer's face. The mask is light and comfortable to wear. It can be manufactured economically by well-known mass production plastic molding methods.

It is to be understood that the safety facial mask is sanitary and it can be readily washed. The mask protects the facial makeup, eyes, nostrils and the entire face of the wearer.

While I have illustrated and described the preferred

embodiment of my invention, it is to be understood that I do not limit myself to the precise construction herein disclosed and that various changes and modifications may be made within the scope of the invention as defined in the appended claims.

Having thus described my invention, what I claim as new, and desire to secure by United States Letters Patent is:

1. A one-piece facial mask for protecting the face of a person while being worn, comprising a generally concave one-piece shell of transparent material, said shell having a rear edge being shaped to fit the contour of the person's face, said shell having forwardly extending flat portions at the sides thereof in line with the eyes of the wearer when worn, a flat portion connecting the forward ends of the extensions disposed in front of the eyes of the wearer and a channel-shaped portion extending from the center of the flat portion perpendicularly of the flat portion to the chin of the wearer, said flat portions being dimensioned so as to provide clearance for eyeglasess worn by the user of the mask.

2. A one-piece facial mask for protecting the face of a person comprising a one-piece generally concave shell of transparent plastic material, said shell shaped to fit the contour of the person's face, said shell having forward flat side extensions, a flat cross piece connecting said side extensions, and a protruding channel-shaped portion extending from the cross piece at its center to the chin of the wearer, said channel-shaped portion being open at the bottom end, said forward side extensions and cross piece positionable in front of the eyes of the wearer to provide a clearance for a pair of glasses worn by the wearer of the mask.

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