

[54] CAP WITH ADJUSTABLE FACE MASK
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[51] Int. Cl.A42b 1/06
[58] Field of Search.....2/201, 202, 203, 204, 205, 2/206, 173, 3 R, 9

[56] References Cited

UNITED STATES PATENTS			
768,626	8/1904	Rautenberg	2/205
3,531,952	10/1970	Chesebro	2/202
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FOREIGN PATENTS OR APPLICATIONS
176,007 6/1935 Switzerland2/201

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[57] ABSTRACT

A cap formed of stretchable knitted material and having a face mask portion with a single eye opening. The eye opening may be enlarged by stretching of the material to expose the entire lower face portion of the wearer. Releasable fastening means are provided at mid points along the upper and lower edges of the opening so that when maximum protection against the weather is desired, the fasteners may be connected to bring the fabric completely over the wearer's nose and expose only his eyes.

5 Claims, 4 Drawing Figures

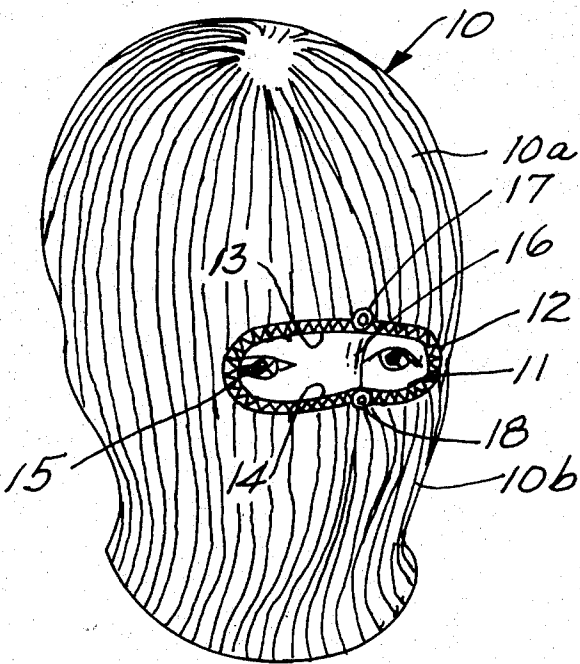


FIG. 1

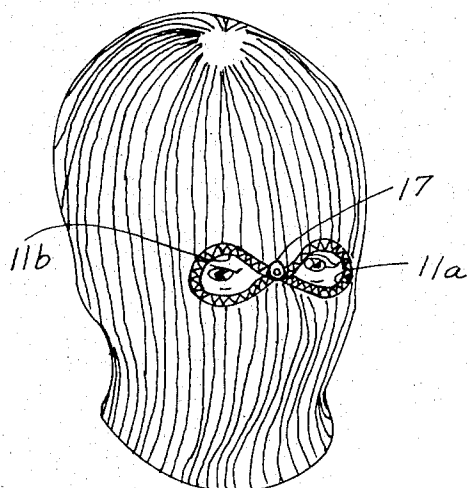


FIG. 2

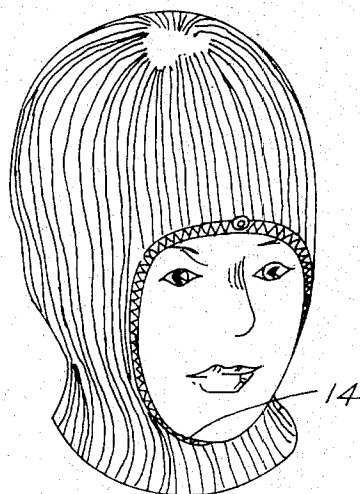


FIG. 3

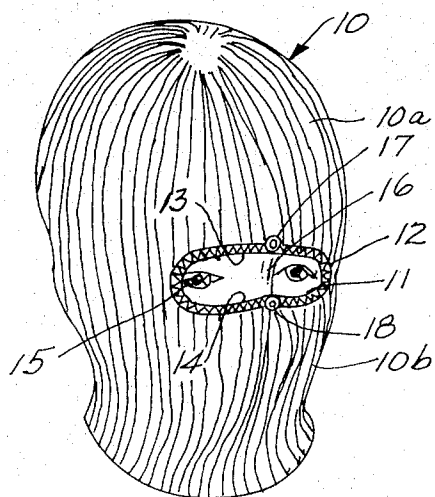
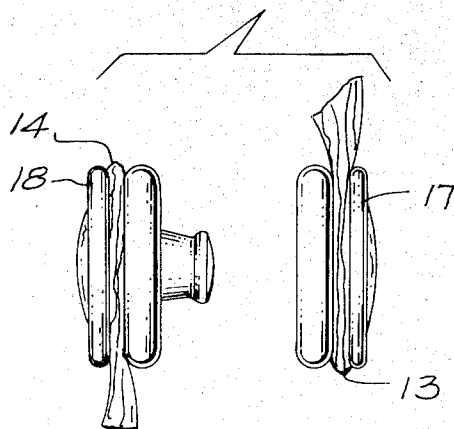


FIG. 4



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CAP WITH ADJUSTABLE FACE MASK

BACKGROUND

Caps with knitted face masks are well known and in common use. Such a cap is disclosed in Schuessler U.S. Pat. No. 2,998,611. While the mask disclosed in that patent is formed integrally with the remainder of the cap and is provided with a mouth opening as well as an eye opening; however, the mouth opening may be omitted (the wearer simply breathing and talking through the porous knitted fabric) when greater protection is desired. With the material of the cap in an unstretched state, the mask covers almost the entire face of the wearer exposing only his eyes and the bridge of his nose and, in the instance of a mask with a mouth opening, also exposing the wearer's mouth. However, by stretching the fabric along the lower edge of the opening, the opening may be progressively enlarged to expose the nose, cheeks, mouth, and chin of the wearer. When climatic conditions do not require maximum face protection, a wearer may simply stretch the lower edge of the opening beneath his chin, thereby exposing almost all of his face.

A disadvantage of such a construction is that later, when a greater degree of protection is desired, the stretched material may not recover completely, especially if the material of the mask is knitted, as is commonly the case, and if such knitted material has picked up moisture because of exposure to snow, sleet, or rain.

The problem is particularly serious for skiers or for snowmobile drivers who may prefer to wear the cap with the lower edge of the opening stretched beneath their chins except when they are actually on the move. Because of the frequent stretching of the opening, the lower edge tends to droop more and more when the fabric is returned to its original untensioned state, with the result that protection tends to diminish when it is needed most.

SUMMARY

A main aspect of this invention is to overcome the aforementioned defects and disadvantages of prior cap constructions. Specifically, it is an object to provide a cap formed of knitted material, or other highly stretchable material, which has a face mask provided with a single face or eye opening. Because of the stretchable nature of the material from which the mask is formed, the lower edge of the opening may be stretched beneath a wearer's chin in the manner described above. However, when full protection is subsequently needed, such protection is not dependent entirely upon the extent of recovery of the stretched material. Releasable fastening means are provided at the mid points of the upper and lower edges of the eye opening so that when full protection is required, the fastening elements may be connected to bring the material over the bridge of the wearer's nose and to provide two relatively small eye openings on each side of the fastening means.

DRAWINGS

FIG. 1 is a perspective view of a cap embodying the present invention, such cap being illustrated in a state of adjustment providing maximum face protection;

FIG. 2 is a perspective view similar to FIG. 1 but showing the cap with the face opening stretched to expose most of the wearer's face;

FIG. 3 is a perspective view similar to FIGS. 1 and 2 but illustrating the fastening means in a released condition;

FIG. 4 is a fragmentary and enlarged side elevational view illustrating the fastening elements in disconnected condition.

DESCRIPTION

Referring first to FIG. 3, the cap embodying the present invention is designated generally by the numeral 10 and comprises a crown-covering portion 10a and a lower face mask or hood portion 10b. The cap may be formed of tubular material as disclosed in U.S. Pat. No. 2,998,611 and, if desired, may be provided with a cuff of the type disclosed in that patent. It is also to be understood that the crown and face mask portions need not be integrally formed and, in fact, the crown portion may even be made from a relatively non-stretchable material. It is essential, however, that the face mask portion be formed of a material that is highly stretchable and porous or "breathable." Knitted wool or synthetic materials have been found particularly suitable but it is conceivable that other stretchable and porous materials might be used.

The importance of forming the mask or hood portion 10b from porous material is apparent from FIG. 3 where it will be seen that no mouth or nose opening is provided in the mask portion. The wearer must therefore breathe and speak through the porous fabric. Such an arrangement provides a high degree of protection for the nose and mouth of the wearer; however, it also adds to the problem which the construction of the present invention overcomes.

It will be noted that the lower face mask portion 10b of the cap is provided with a single eye or face opening 11. The material along the edges of the opening may be reinforced by elastic stitching 12. As shown in the drawings, the opening is horizontally elongated (when the material is in the untensioned state illustrated in FIG. 3) and the upper and lower edges 13 and 14 extend above and below the eyes 15 of the wearer and expose the bridge portion 16 of the wearer's nose.

Fastening means in the form of complementary portions or elements 17 and 18 are respectively positioned at mid points along the upper and lower edges of the opening 11. Such elements may take the form of conventional snap-fastening elements illustrated in the enlarged view of FIG. 4. Since such a fastener is entirely conventional and well known, a detailed description is believed unnecessary herein. It should suffice to say that in the form illustrated in the drawings, element 17 is the female element and element 18 is the male member. The two parts may be readily connected and disconnected by simply urging them together and pulling them apart in a manner well known and in common usage. It is to be emphasized, however, that while the snap-fastening means illustrated in the drawings has been found highly effective, other types of releasable fasteners, such as clasps or buttons, might conceivably be used.

FIG. 2 illustrates the cap as it would be worn by someone desiring protection for his ears and neck but

preferring to leave his nose, mouth, and the lower part of his face uncovered. Because of the stretchability of the knitted material from which the cap is formed, the user simply pulls the lower edge 14 of the opening downwardly beneath his chin.

FIG. 1 illustrates the cap as it would be worn by a wearer desiring maximum protection. Fastening elements 17 and 18 have been joined together over the bridge of the wearer's nose and the single eye opening 11 has thereby been divided into a pair of openings 11a and 11b.

It is of particular significance that such maximum protection is available to the wearer even when the material of the cap has been stretched, because of frequently enlarging the opening as shown in FIG. 2, so that recovery of the knitted material into the original condition of FIG. 3 will not readily occur, at least until the material of the cap thoroughly dries. Thorough drying of the material is not of course possible if the cap has been worn with the mask covering the nose and mouth, since the knitted material will have been moistened by the wearer's breath, and will not occur if weather conditions are such that the mask has been exposed to snow or sleet. Since those are the conditions under which full protection is usually required, the fastening means 17 and 18 insures that such protection will be available despite the stretched and dampened condition of the material.

The dimensions of the cap and its divisible eye opening will vary according to the size of the cap. However, it has been found that the generally oval opening should have horizontal dimensions within the general range of 4 to 7 inches and vertical dimensions within the range of 0.5 to 2 inches when the knitted material of the mask is in a dry unstretched or untensioned state and the fastening means is released.

While in the foregoing I have disclosed an embodi-

ment of the invention in considerable detail for purposes of illustration, it will be understood by those skilled in the art that many of these details may be varied without departing from the spirit and scope of the invention.

I claim:

1. A cap having a tubular face mask portion formed of highly stretchable porous material and adapted to be fitted over the face, ears and neck of a wearer; said mask portion having an eye opening of generally horizontally-elongated oval configuration when the material about the edge of said opening is in an unstretched state; said material about said opening being stretchable to enlarge the opening to a size sufficient to expose the nose, mouth and chin of a wearer; and releaseable fastening means for joining upper and lower edges of said opening at the mid-points thereof, said fastening means having two complementary fastener portions, one such portion being disposed at a mid-point along the upper edge of said opening and the other portion being located at a mid-point along the lower edge of said opening, said fastener portions when joined together being effective to divide said opening into a pair of separate eye openings with the material of said mask portion about said fastening means being positioned over a wearer's nose.

2. The cap of claim 1 in which said material is a knitted fabric.

3. The cap of claim 1 in which said fastener portions comprise a pair of snap-fastening elements.

4. The cap of claim 1 in which said eye opening is the only face opening provided in the wall of said mask.

5. The cap of claim 1 in which said eye opening has horizontal dimensions within the range of 4 to 7 inches and vertical dimensions within the range of 0.5 to 2 inches when the material of said mask is in an unstretched state and said fastening means is released.

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