March 24, 1953 G. A. LYON 2,632,174

PLASTIC HELMET

Filed Aug. 13, 1949

Fig. 1

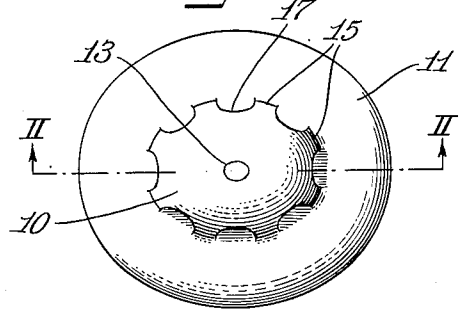


Fig. 2

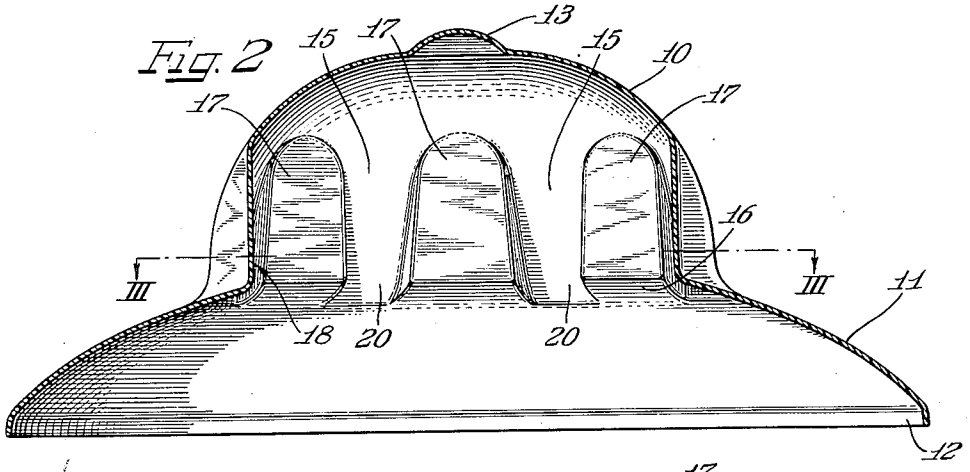


Fig. 4

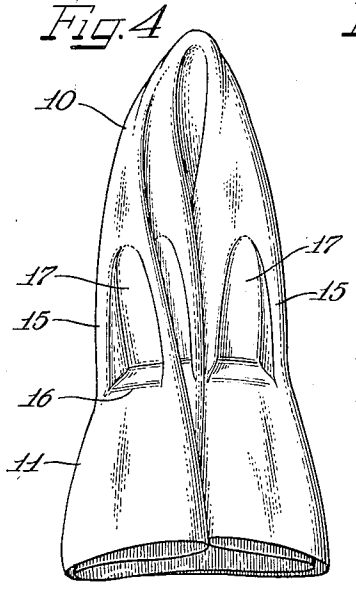
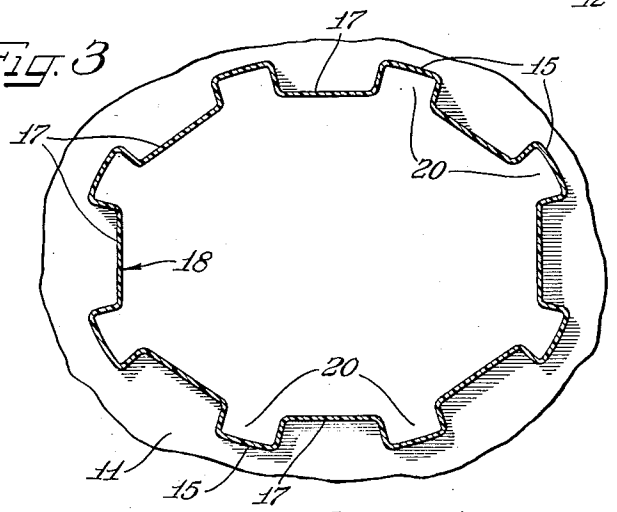


Fig. 3



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2,632,174

PLASTIC HELMET

George Albert Lyon, Detroit, Mich.

Application August 13, 1949, Serial No. 110,094

2 Claims. (Cl. 2—176)

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This invention relates to a head gear and more particularly to a plastic helmet especially adapted for use in summer and tropical weather.

An object of this invention is to provide a plastic head gear which is readily collapsible for packing and shipping.

Another object of this invention is to provide a collapsible plastic head gear of the helmet type which can be economically manufactured on a large production basis.

Still another object of this invention is to provide a collapsible plastic helmet which is so formed on its interior as to provide ventilating passageways to assist in maintaining cool the head of the wearer.

Yet another object of this invention is to provide a collapsible plastic helmet with a generally vertical rib formation for fitting about the head of the wearer and which alternates with air passageways for assisting in cooling the head of the wearer.

In accordance with the general features of the invention there is provided a head gear including a crown and a brim formed of one piece of pliable synthetic plastic material, the crown being provided with spaced ribs which alternate with internal passageways through which air can circulate about the head of the wearer to assist in keeping the head of the wearer cool.

Other objects and features of this invention will more fully appear from the following detailed description taken in connection with the accompanying drawing which illustrates several embodiments thereof and in which:

Figure 1 is a plan view of my novel head gear or helmet;

Figure 2 is an enlarged cross-sectional view taken substantially along the line II—II of Figure 1 looking upwardly;

Figure 3 is a sectional view taken on the line III—III of Figure 2 looking downwardly; and

Figure 4 is a view of the helmet showing it in collapsed condition.

As shown on the drawings:

The hat shown includes a crown 10 and a brim 11, both of which portions are integral and preferably made from a single piece of relatively thin synthetic thermoplastic material. The plastic used must be sufficiently flexible that the entire hat may be collapsed upon itself, as shown in Figure 4, without rupturing the plastic. Excellent results may be obtained by using any one of a number of thermo-plastic materials on the market such as a vinyl resin plastic, cellulose acetate plastic, etc. Also, I preferably use a white plastic material as white will best reflect

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the heat away from the head of the wearer and thereby assist in keeping the head cool.

Referring to the drawing, it will be perceived that the brim 11 may be provided with a slightly turned edge 12 and the center of the crown 10 may be provided with a button simulating knob 13.

An improved feature of this invention relates to providing the crown portion 10 with generally vertically upwardly projecting spaced ribs 15 which terminate at their lower portions at the junction of the crown and brim portion as indicated at 16 in Figure 2. The ribs alternate with inwardly depressed portions 17, the inner surfaces 18 of which are arranged so that they together conform generally to the shape of the wearer. While the ribs 15 tend to reinforce the crown, they are sufficiently yieldable so that the surfaces 18 of the depressions 17 can yield in causing the crown to tightly fit the head of the wearer.

As is clearly shown in Figure 3, the ribs 15 between the depressions 17 define air circulating passageways 20 through which air can circulate to assist additionally in cooling the head of the wearer.

My novel plastic head gear can be formed from one piece of material by any suitable plastic molding or fabrication apparatus and hence lends itself to economical manufacture on a large production pasis.

The present application is a continuation-in-part of my copending application Serial No. 37,995, filed July 10, 1948.

I claim as my invention:

1. In a tropical helmet, crown and brim portions comprising a one piece unit of thin sheet-like shape-retaining resiliently flexible plastic, the crown portion being provided with a series of circumferentially spaced generally vertical inset areas extending to the brim, said inset areas being separated by portions of the crown providing vertically extending hollow ribs merging at their lower ends with the brim portion, said ribs being defined by respective outer walls of substantial width disposed as downward continuations of the upper portion of the crown, and generally radially extending side walls on the ribs angular to and joining said outer walls and said inset areas, said crown and brim portions being readily foldable on longitudinal lines through said inset areas and said rib outer walls into a small elongated package from which the crown and brim portions will readily return to normal shape when opened from folded condition.

2. In a tropical helmet, crown and brim portions comprising a one piece unit of thin sheet-like shape-retaining resiliently flexible plastic, the crown portion being provided with a series of circumferentially spaced generally vertical inset areas extending to the brim, said inset areas being separated by portions of the crown providing vertically extending hollow ribs merging at their lower ends with the brim portion, said ribs being defined by respective outer walls of substantial width disposed as downward continuations of the upper portion of the crown, and generally radially extending side walls on the ribs angular to and joining said outer walls and said inset areas, said crown and brim portions being readily foldable on longitudinal lines through said inset areas and said rib outer walls into a small elongated package from which the crown and brim portions will readily return to normal shape when opened from folded condition, said inset areas being wider than the ribs and at their upper ends joining the upper portions of the crown on arcuate junctures.

GEORGE ALBERT LYON.

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