July 13, 1948. JOHN-ERIK MATTSSON ET AL 2,445,230

FRAME FOR CAPS

Filed Oct. 24, 1945

FIG. 1

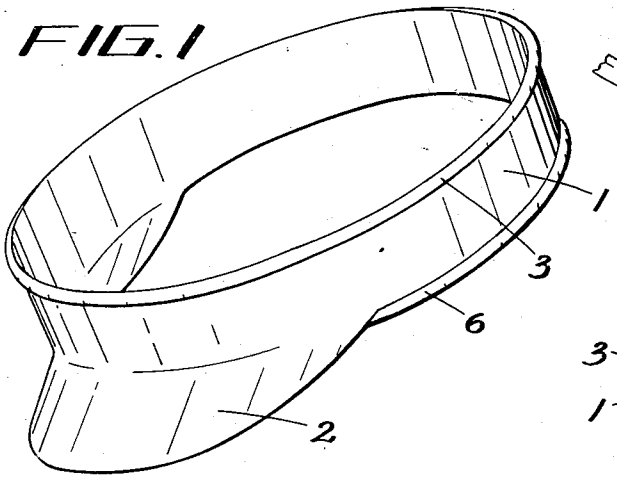


FIG. 3

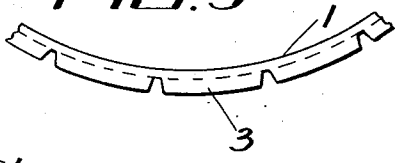


FIG. 4

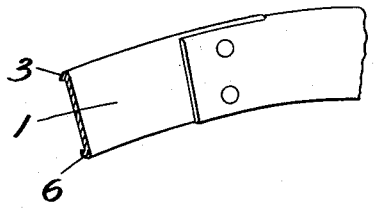


FIG. 5

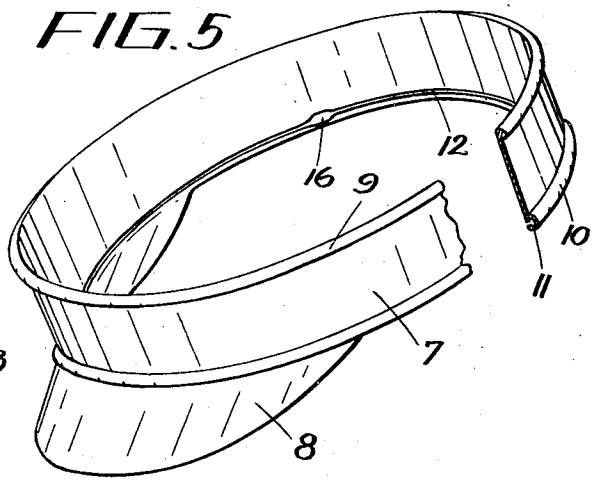


FIG. 2

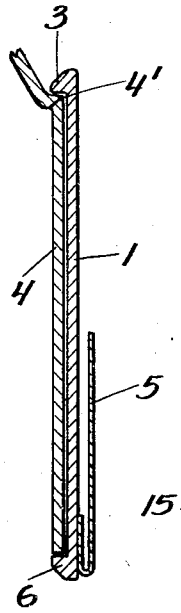


FIG. 6

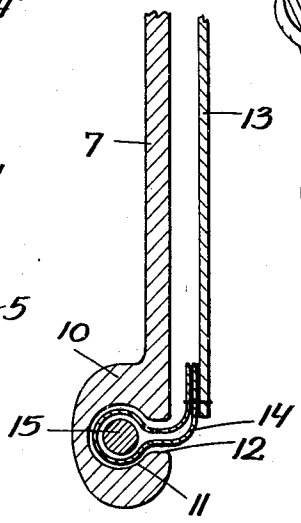
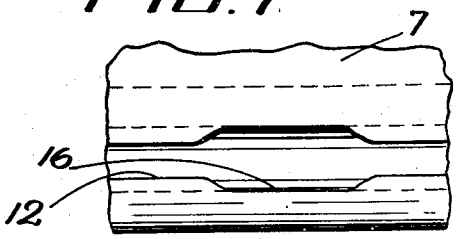


FIG. 7



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FRAME FOR CAPS

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3 Claims. (Cl. 2—195)

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The present invention refers to caps, more particularly to caps of the type which are mounted on a frame made of flexible strip material, and more particularly still to peaked caps of said type, such as service caps.

In the manufacture of peaked caps it has hitherto been necessary to produce said frame or strip and the peak as separate parts from different materials and to fasten the peak to the frame by manual sewing. Since a cap-peak usually consists of thick patent leather or similar material, and a cap strip is made from leather board, the sewing of the peak on to the strip is a very exacting work which requires long training to give good results. Nevertheless, the fastening of the peak is not quite reliable, but the peak tends to come loose from the cap. Besides this, the transition between peak and strip will be uneven, and the peak will exert a pressure on the bearer's forehead.

A principal object of the present invention is to overcome the above-mentioned drawbacks by providing a frame for peaked caps having a peak made integral therewith. It is a further object to provide a frame and peak of said type by moulding or pressing a plastic material.

While it is common practice to sew the cap cloth on to the frame or strip of a cap by stitches through the latter, this method is laborious and time-wasting, particularly when the frame is made of a dense material formed by moulding. The present invention therefore also contemplates as a principal object to provide a cap frame or strip having means formed thereon for holding the cloth of the cap in a fixed position over the outside of the frame without sewing.

Still another object of the present invention is to provide a frame or strip for peaked caps in the form of a ring of predetermined circumference and having a peak adherent thereto.

Furthermore, it is an object of the invention to provide an open-ended strip for peaked caps having a peak formed integrally therewith and adapted to have its ends fastened together to form a frame of any desired circumference.

When using a frame or strip according to the present invention in the manufacture of caps, the usual sweat-band may be fastened to the inside of the frame by any well-known means, including the method of gluing the sweat-band direct to the frame near its lower edge. However, such methods involve considerable difficulties and drawbacks. In the case of gluing, for instance, the sweat-band easily tends to come loose, particularly after some time's use of the

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cap, owing to the dissolving action of the sweat on the glue and to the fact that glue in general has but little capacity of penetrating into a dense and compact material, such as a plastic material formed by moulding. In view of these difficulties and drawbacks, it is another object of the invention to provide novel means, whereby it will be possible to fasten a sweat-band to the cap frame readily and conveniently without using either stitches or glue.

Further objects of the invention will appear as the description thereof proceeds.

By way of example, the invention will be described in detail with reference to specific embodiments thereof which are illustrated in the accompanying drawings, in which:

Fig. 1 is a perspective view of a cap frame, provided with a peak, constructed in accordance with the invention.

Fig. 2 is a sectional view of the frame with attached cap cloth.

Fig. 3 is a fragmentary view of the frame seen in the direction towards the edge.

Fig. 4 is a fragmentary perspective view of a frame made of an open-ended strip, whose ends are riveted together.

Fig. 5 is a perspective view of a cap frame of a modified form.

Fig. 6 is a section through the frame of Fig. 5 with attached sweat-band.

Fig. 7 is a fragmentary view of the frame of Fig. 5 seen from the inside.

Referring to the drawings, in Fig. 1, 1 designates the cap frame proper or strip and 2 the peak formed integrally therewith. The material used for the frame and the peak is, as described above, a suitable plastic material, such as Celluloid or Bakelite, capable of being cast or pressed into any desired form. On account of the fact that the frame 1 shall be rather flexible to form after the bearer's head, whereas the peak shall preferably be of rather great stiffness, the thicknesses of the frame and the peak are therefore chosen correspondingly different in the pressing or casting operation. Alternately, materials of different composition may also be chosen for the frame 1 and the peak 2, as it is not difficult to introduce the ordinary powdered starting materials of different composition into different parts of the cavity of the mould, and then fuse them into a unitary piece during the pressing operation.

The frame shown in Fig. 1 is in the form of a complete ring. It is clear that it is necessary to have a sufficient number of moulds available

to manufacture all current cap sizes. Alternately, however, the frame may be made in the form of an open strip with adherent peak, the free ends of the frame or strip being fastened together afterwards, e. g. by means of rivets, as shown in Fig. 4, when it is possible to give the frame any desired size. In either case, the frame maintains the size once imparted to it, as the material, as distinguished from the material hitherto used, has no tendency to shrink.

During the moulding operation, it is possible to give the peak any desired curvature and a certain angle in relation to the strip, varying according to the model of the cap.

The use of the frame now described in the manufacture of caps involves another mode of procedure in the attachment of the cap cloth, than is usually applied in the cap manufacture. The cap cloth and its lining are sewn together as a unit, which is then pulled over the strip. To hold the cloth in position on the strip, the strip is advantageously formed, during the moulding operation, with a bead 3 along its upper edge, as shown in Figs. 1 and 2, the tension in the cloth 4 preventing it from being pulled off over the bead 3. Stitchings along the strip are therefore dispensed with. The lining of the cap may suitably end at 4' (Fig. 2) just below the bead 3. The inside of the frame 1 will thus be free from lining as distinguished from the arrangement in ordinary caps where the lining is pulled down the inside of the strip and sewn on thereto. As shown in Fig. 2, it is hereby possible to glue a sweat-band 5 direct onto the strip 1. Preferably, the lower edge of the frame 1 is also provided with a bead 6, so that the cap cloth is not pulled down over this edge, and so as to give the cap an appearance which is more like the ordinary, it being customary to insert a so-called sweat edging between the strip and the sweat-band. In the finished caps this sweat edging resembles a narrow rounded-off bead and enhances the appearance of the cap but it is unnecessary in caps built up on a frame according to the invention.

If the frame 1 should be too stiff as a result of the beads 3 and 6, these may be notched as shown in Fig. 3.

The edge of the peak 2 may also be formed with a bead (not shown in the drawing) forming the base for lining the peak with wax-cloth or the like material, or solely to enhance the appearance of the peak.

The general appearance of the cap frame shown in Figs. 5–7, resembles that according to Figs. 1–4 and comprises a frame 7 and a peak 8 formed integrally therewith of the same material as described above. On the outside, near its upper edge, the frame 7 is provided with a bead 9 and at its lower edge with a bead 10 for holding the cap cloth.

In this modified form of the cap frame, the bead 10 extending all round the circumference of the frame is, however, made hollow, and its cavity 11 is open towards the inside of the frame, as shown in Fig. 6, by means of a slot 12 which is narrower than the width of the cavity 11. The groove thus formed in the bead 10 serves to hold a sweat-band 13 in position by means of a flexible strip 14 of cloth or waxcloth, a so-called braid, which is attached in doubled condition at

the lower edge of the sweat-band 13, by means of a seam, and encloses a core 15, of rattan, forming an enlargement at the free end of the doubled strip 14. This enlargement may be passed into the cavity 11 through a local extension 16 (Fig. 7) of the slot 12. The sweat-band may thus be applied without the aid of glue, and there is no risk of its coming unstuck. At the same time it is easy to remove it any time and to put on a new sweat-band.

What we desire to secure by Letters Patent is:

1. A frame structure for caps, comprising an annular flexible strip and a visor integral therewith, said strip having a peripheral groove extending along its lower edge and opening towards the inside thereof, the width of said groove being reduced at the mouth thereof, a sweat-band placed along the inner face of said strip, a ribbon fastened with a marginal portion to the lower edge of said sweat-band, the opposite marginal portion of said ribbon being enlarged and adapted to enter said groove to fasten said sweat-band to said strip.

2. A frame structure for caps, comprising an annular flexible strip and a visor integral therewith, a bead formed at the lower edge of said strip and serving as means for holding the marginal portion of a cap cloth in a fixed position on said strip, said strip having a peripheral groove opening towards the inside thereof and extending within said bead, the width of said groove being reduced at the mouth thereof, a sweat-band placed along the inner face of said strip, a ribbon fastened with a marginal portion to the lower edge of said sweat-band, the opposite marginal portion of said ribbon being enlarged and adapted to enter said groove to fasten said sweat-band to said strip.

3. A frame structure for caps, comprising an annular flexible strip and a visor integral therewith, a bead formed at the lower edge of said strip and serving as means for holding the marginal portion of a cap cloth in a fixed position on said strip, said strip having a peripheral groove opening towards the inside thereof and extending within said bead, the width of said groove being reduced at the mouth thereof, a sweat-band placed along the inner face of said strip, a ribbon fastened with a marginal portion to the lower edge of said sweat-band, the opposite marginal portion of said ribbon being enlarged, the said reduced mouth portion of the said groove having an enlarged opening therein for insertion of the said enlarged marginal portion of said ribbon whereby the said ribbon and said sweat-band will be securely fastened to said strip.

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