April 29, 1941. B. L. CORN 2,240,391

EAR PROTECTOR

Filed July 29, 1940

Fig. 1.

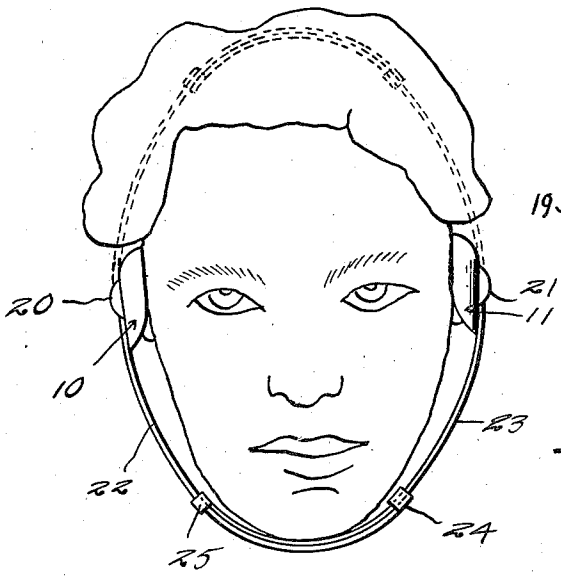


Fig. 5.

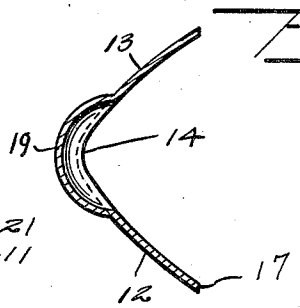


Fig. 4.

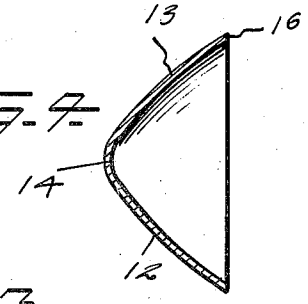


Fig. 2.

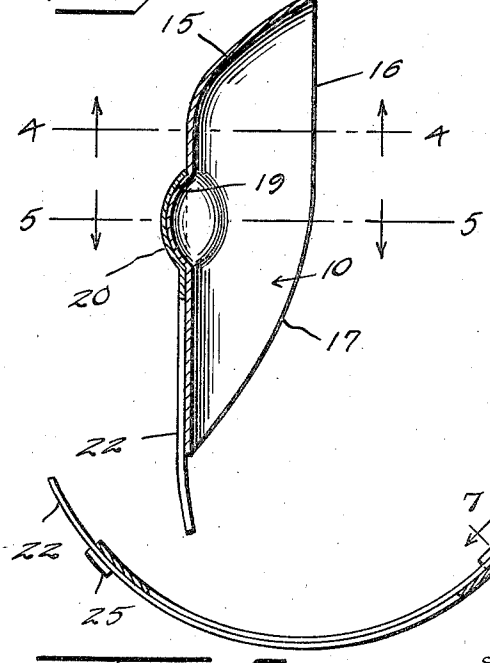


Fig. 3.

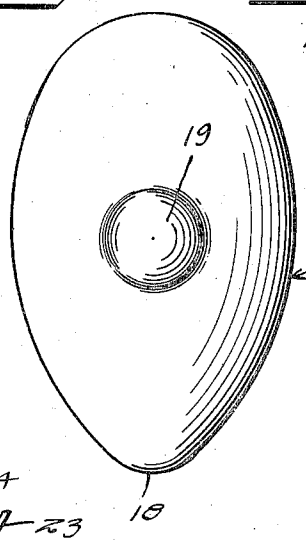


Fig. 7.



Fig. 6.

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EAR PROTECTOR

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Application July 29, 1940, Serial No. 348,300

6 Claims. (Cl. 132—45)

This invention relates to ear protectors and more particularly to a device for protecting the ears during beauty treatment.

An object of this invention is to provide a pair of ear protecting devices which are adapted to encompass the ears so as to prevent heat or liquids from contacting the ears during beauty treatment operations.

Another object of this invention is to provide a pair of ear protecting devices and an improved means for releasably clamping the devices upon the ears, the clamping means being so constructed that it may be disposed in different selected positions where the clamping means will not interfere with the hair treatment.

A further object of this invention is to provide a pair of cup-shaped ear protectors which may be made out of material which is easily sterilized so that the protectors may be used indefinitely, the material from which the protectors are constructed being referably of a cellulose base.

To the foregoing objects and to others which may hereinafter appear, the invention consists of the novel construction, combination and arrangement of parts as will be more specifically referred to and illustrated in the accompanying drawing wherein are shown embodiments of the invention, but it is to be understood that changes, variations and modifications may be resorted to which fall within the scope of the invention as claimed.

In the drawing—

Figure 1 is a detail front elevation of a device in applied position.

Figure 2 is a vertical section through one of the ear protecting devices.

Figure 3 is a detail side elevation of one of the ear protecting devices.

Figure 4 is a sectional view taken on the line 4—4 of Figure 2.

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

Figure 6 is a fragmentary front elevation partly broken away and in section of the lower portion of the adjustable clamping means.

Figure 7 is a sectional view taken on the line 7—7 of Figure 6.

Referring to the drawing, the numerals 10 and 11 designate generally a pair of ear protecting and ear encompassing members which are adapted to engage about the ears and which are adapted to protect the ears from moisture or from heat. Each ear protecting member is of like construction and the detail description of one of these members will apply equally as well to the other member.

The ear protecting member 10 comprises a relatively thin sheet of material which may be preferably molded or pressed into the desired configuration. The material from which the protecting members 10 and 11 is formed may have a cellulosive base or may be formed of any other suitable material which does not readily transmit heat. The protecting member 10 comprises a pair of side walls 12 and 13 which are in inwardly divergent relation and which are connected together at their outer edges by an arcuate connecting wall 14.

In transverse section the protecting member 10 is of substantially parabolic configuration. The side walls 12 and 13 of the protector are connected together at their upper ends as shown in Figure 2 by a transversely and longitudinally arcuate wall 15 which forms the top wall of the protector. The inner edges of the side walls 12 and 13 are formed with a substantially straight edge 16 from the upper ends of the side walls 12 and 13 and this straight edge 16 merges into an outwardly curved lower edge 17 thus forming an open bottom for the protector and permitting the ready entrance of air into the interior of the device when it is in applied position.

As shown in Figure 3, the protector 10 in side elevation is of substantially ovoid configuration with the lower end 18 thereof smaller than the upper end.

The protector 10 at a point intermediate the upper and lower ends of the arcuate connecting wall 14 is formed with an outwardly offset concavo-convex button or projection 19. The convex surface of this projection 19, the latter being of substantially semi-spherical contour is outermost and this projection 19 forms a pivot or holding element for the clamping device to be hereinafter described. The two protectors 10 and 11 are adapted to be held in applied position on the head of the wearer by means of a pair of cup-shaped clamping members 20 and 21. The clamping members 20 and 21 are adapted to engage the projections 19 of the two protecting members 10 and 11 and the cup-shaped member 20 has fixed thereto an elongated narrow resilient strip 22. The strip 22 is longitudinally bowed and is biased in its bowed form so that when the cup 20 is in applied position, the strip 22 will be outwardly bent against the normal configuration thereof.

The clamping member or cup 21 has fixed thereto an elongated resilient strip 23 which is

also longitudinally bowed being of substantially similar construction to the resilient strip **22**. The strip **22** at the end thereof opposite from the clamping member **20** has formed therewith a split guide loop **24** through which the resilient strip **23** is adapted to slidably engage. The strip **23** has formed at the end thereof opposite from the clamping member **21**, a guide loop **25** through which the strip **22** is adapted to slidably engage.

The loops **24** and **25** are of like construction and are similar to the construction shown in Figure 7.

In the use of this ear protecting means, the ear encompassing members **10** and **11** are adapted to be applied over the ears with the open ends thereof lowermost. If it is desired to curl the hair under heat, the resilient strips **22** and **23**, which with the cup members **20** and **21** comprise the clamping means for the protecting members, may be disposed in a dependent position as shown in full lines in Figure 1. In this position the protecting members **10** and **11** are firmly and snugly clamped against the head of the wearer and about the ears, whereas the hair of the wearer is unencumbered by the strips **22** and **23**. The protecting devices **10** and **11** may also be used during shampoo operations or for other treatment of the hair and if desired during the drying operation, or at any other time, the strips **22** and **23** may be inverted to the position shown in dotted lines in Figure 1.

The ear protecting devices **10** and **11** are preferably made out of material which can be readily sterilized or cleaned so that these devices may be used indefinitely. Preferably the material of which these devices are constructed is such that it will not be unduly affected by any heat which is used in the treatment of the hair.

What I claim is:

1. An ear protector means comprising a pair of substantially cup-shaped members adapted to encompass the ears, each member having a rounded outwardly offset anchoring element formed therewith, and resilient clamping means for holding said members in ear encompassing position, said clamping means including a pair of cup shaped elements shiftably mounted on said anchoring elements, a pair of elongated resilient longitudinally bent strips secured one to each cup shaped element, said cup-shaped elements coacting with said anchoring elements for holding the strips, through the cup-shaped elements shiftably mounted on the anchoring elements, said strips having their adjacent ends overlapping each other, and a resilient guide carried by each strip through which the adjacent end of the other strip is adapted to adjustably engage.

2. An ear protecting means comprising a pair of ear encompassing members and clamping means for detachably clamping said members on the ears, each member comprising a thin walled body of substantially parabolic-shape in transverse section, having one end thereof closed and of concavo-convex shape, and with the other end open, each member including an outwardly offset button-like projection, a cup-shaped clamp pivoted on and shiftable relative to each projection, a longitudinally bowed resilient strip fixed to each clamp, and means adjustably connecting said strips together.

3. An ear protecting means comprising a pair of ear encompassing members and clamping means for detachably clamping said members on the ears, each member comprising a thin walled body of substantially parabolic-shape in transverse section, having one end thereof closed and of concavo-convex shape, and with the other end open, each member including an outwardly offset button-like projection, a cup-shaped clamp pivoted on and shiftable relative to each projection, a longitudinally bowed resilient strip fixed to each clamp, and means adjustably connecting said strips together, said adjustable means including a pair of guide loops carried one by each strip, one of said strips slidably engaging through a guide loop of the other strip, said strips being normally biased with the ends thereof fixed to said clamping members normally urged toward each other whereby outward bending of said strips will cause said loops to bind said strips against movement relative to each other.

4. In an ear protecting means, a pair of substantially cup-shaped ear encompassing members open at their lower ends and each formed on its outer face with an outwardly directed substantially semi-spherical projection disposed intermediate its ends and spaced from its sides, and oppositely disposed resilient means having parts pivotally mounted on and shiftable relative to said projections for clamping said members in ear protecting position.

5. An ear protector including a hollow member for clamping about the ear and having an open bottom, said member including a top wall inclining upwardly from its outer to its inner end and of arcuate contour in transverse cross section, a front wall having oppositely disposed rounded sides and decreasing in width from its transverse median to its lower end and a pair of side walls merging into the top and front walls and each having portions thereof gradually decreasing in width towards their lower ends, said member in cross section being substantially of parabolic contour, and said front wall being formed with an outwardly directed rounded projection for pivotally supporting a clamping means for said member, said projection being of convexo-concave contour in diametric section.

6. An ear protecting device including a pair of oppositely disposed cup-shaped members for enclosing the ears of a person and closed at their tops and open at their bottoms, said members being vertically elongated lengthwise and each being formed intermediate its top and bottom and spaced from its sides with an outwardly directed projection of substantially semi-spherical contour, and resilient means for clamping said members about the ears including cup-shaped parts encompassing and pivotally mounted on said projections to provide for the shifting of said means relative to said members and for disposing said members against the head of the wearer about the ears.

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