Aug. 16, 1966 E. J. DE VILLERS ETAL 3,266,056

DISPOSABLE VISOR CAP CONSTRUCTION

Filed Sept. 28, 1960

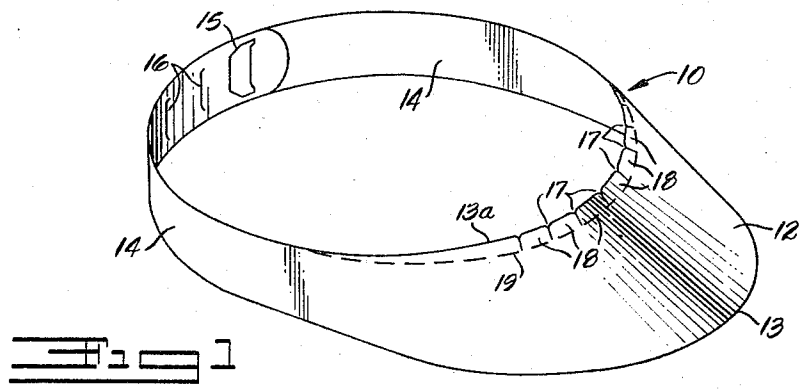


Fig. 1

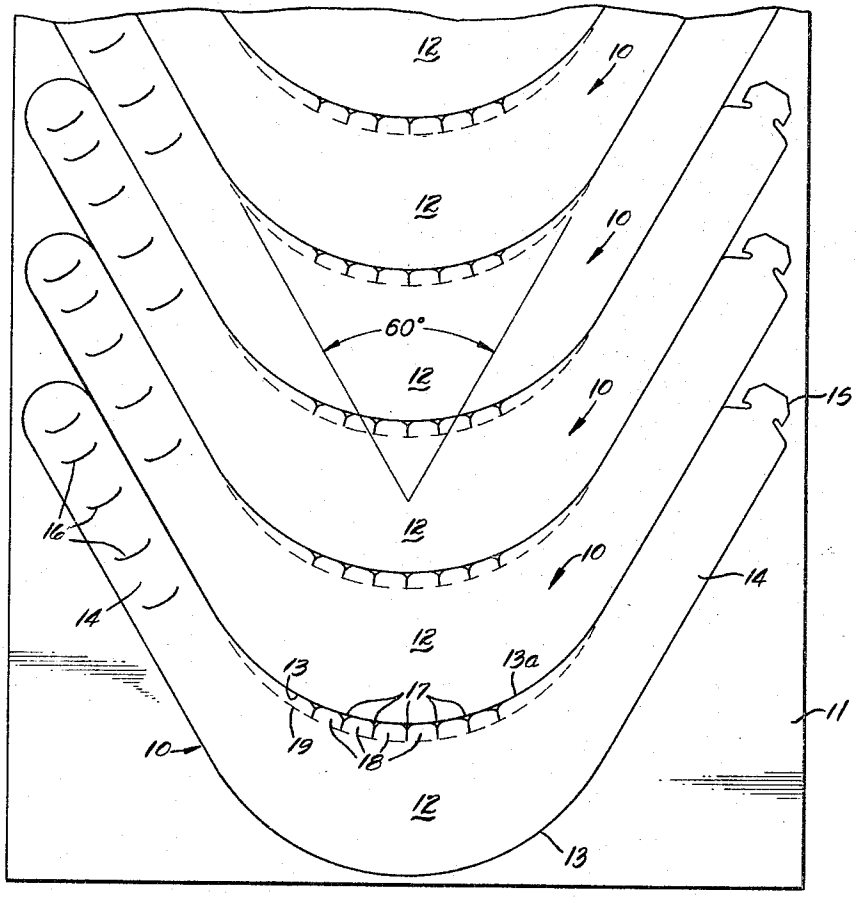


Fig. 2

INVENTORS.
EDMUND J. DeVILLERS
CHARLES H. WORCH
BY
MAHONEY, MILLER & RAMBO
BY W. J. Rambo
ATTORNEYS.

United States Patent Office 3,266,056 Patented August 16, 1966

3,266,056

DISPOSABLE VISOR CAP CONSTRUCTION

Edmund J. De Villers and Charles H. Worch, Columbus, Ohio, assignors to Paperlynen Company, Columbus, Ohio, a corporation of Ohio

Filed Sept. 28, 1960, Ser. No. 59,099
3 Claims. (Cl. 2—12)

This invention relates generally to visor-type caps and more particularly to an improved, inexpensive, readily disposable visor cap construction.

Various visor-type caps have previously been devised for protecting the eyes of persons wearing the same from sunlight or glare of artificial light. One widely known additional purpose of so-called disposable or throw-away types of visor caps is to provide an advertising medium suitable for wear by spectators at outdoor sporting events. Previously devised visor caps of this general construction have several disadvantages or objections which are overcome by the present visor cap. One major disadvantage of previously known types of disposable visor caps is their relatively high cost of manufacture resulting primarily from the wastage of the stock material from which such caps are cut and formed. The costs of such caps are further increased due to the use of extraneous fastening devices, such as elastic bands, adhesive materials or additional headband web sections and their associated fasteners. Increased costs also result from the requirement of loose, bulky packaging methods with a consequent increase of storage, handling and transportation facilities. Another characteristics disadvantage of previous visor caps is that they are not capable of readily obtaining a comfortable, accurate fit with the contours of the wearer's head, or of maintaining a desired position on the forehead of the wearer.

It is, therefore, a primary object of this invention to provide as an article of manufacture a simple visor-type cap which may be easily cut or blanked in closely fitting multiples from a single sheet of inexpensive material, such as paperboard, and which is adjustable to fit various head sizes, and of such form that a minimum of stock material is discarded in its manufacture.

A further object of this invention is to provide an integrally formed, flat visor cap blank made from inexpensive sheet material and having a crescent-shaped bill-forming section with headband-forming webs extending outwardly from opposite ends of the bill-forming section in an angularly divergent manner and having adjustable interlocking tabs and slots formed in the outer ends of the headband-forming webs.

A still further object of this invention is to provide an integrally formed visor cap blank which is flat, and which is thus capable of being compactly packaged in large quantities, thus reducing the cubage required for shipment or storage.

Another object of this invention is to provide an integrally formed visor cap which is capable of readily receiving advertisement or other printed material and thereby greatly increasing its usefulness as an advertising medium.

These and other objects and advantages of our invention will more fully appear from the following description made in connection with the accompanying drawings.

FIG. 1 is a perspective view of the present visor cap with the headband webs in a locked position ready for wearing.

FIG. 2 is a plan view of a segment of paperboard sheet material illustrating a preferred method of making visor caps in accordance with this invention.

The accompanying drawing discloses a preferred form

of the present visor cap which is designated as an entity by the numeral **10**. Advantageously, the present visor cap is formed from an integral, one-piece blank which may be cut or stamped in multiples from a continuous web or single sheet **11** of paperboard, or other inexpensive flexible sheet material, with a minimum wastage of such material. The cap blank comprises a bill-forming section **12** of generally crescent shape having oppositely disposed, arcuately curved outer and inner edges **13** and **13***a*. The outer and inner edges **13** and **13***a* of the bill-forming section **12** have the same radius of curvature. The blank further includes a pair of headband-forming webs **14** which are integrally formed with the bill-forming section **12** and extend outwardly in an angularly divergent manner from the opposite ends of the bill-forming section **12**. Each of the headband-forming webs **14** are of uniform width and have their longitudinal edges disposed in parallel relation to one another and in tangential relation to the arcuately curved outer and inner edges **13** and **13***a* of the crescent-shaped bill-forming section **12**. As such, the headband-forming webs **14** form smooth, uninterrupted continuations of the bill section **12**.

A preferred embodiment of the present cap blank utilizes an angular relationship of 60 degrees between the divergent headband-forming webs **14**. Other angular relationships may be used and the illustration of **60** degrees is not to be considered a limitation. Greater or less angular displacement may be used to obtain varying shapes or contours of the bill section **12** and a correspondingly varying angular disposition thereof to the wearer's face. The outer ends of the headband-forming webs **14** are formed to provide, respectively, a tab **15** and a plurality of size-adjusting slots or slits **16**. The tab **15** is arranged for interlocking insertion within a selected one of the slits **16** to assemble the cap-forming blank into a finished visor cap. Advantageously, the slits **16** may be arranged and suitably marked to correspond to various head sizes, and a wearer may insert the tab **15** into the particular slit **16** which corresponds to his or her head size.

A plurality of serrations **17** form a plurality of tabs **18**, preferably with rounded corners, extending over the central portion of inner edge **13***a* of bill-forming section **12**. These serrations **17** extend inwardly from inner edge **13***a* and terminate along a common arcuate, scored fold line **19**.

The present visor cap is completed when the wearer inserts interlocking tab **15** into an appropriate size-adjusting slot **16** resulting in a headband web of generally cylindrical nature with a forewardly disposed, integrally formed bill section as illustrated by FIG. 1. A wearer, in placing this visor cap on his head with the headband webs interlocked, pulls it down to a desired position on his forehead. In thus positioning the visor cap, tabs **18** will be forced outwardly in conformation with the head contour. Because of the resiliently flexible nature of tabs **18**, a person wearing the present visor cap will obtain a more accurate and comfortable fit. This also results in holding the cap snugly, yet comfortably, in the desired position on the head.

A visor-cap blank constructed in accordance with our invention greatly reduces stock wastage incurred during manufacture and also decreases the number of cutting or stamping operations required. These consequential savings obtained by the use of our improved visor-cap blank result from the utilization of equal radii for outer and inner edges **13** and **13***a* of bill-forming section **12** and having headband-forming webs **14** integrally formed therewith by relatively parallel tangential extensions of arcuately curved edges **13** and **13***a*. This improved form

thus permits the simultaneous formation of outer and inner edges **13** and **13***a* of adjacent visor-cap blanks with a consequent reduction in manufacturing cost. Waste or discarded material is thereby reduced to that portion of sheet stock **11** lying external to a series of adjacently formed blanks **10**. Further advantage is obtained in that the visor blank may be produced by either single or multiple cutting or stamping operations from either flat or roll sheet stock of a suitable flexible material, such as common paperboard or synthetic resin. This preferred form permits shipment of the cap-forming blanks flat and compactly in boxes, greatly facilitating the handling thereof. The flat integral form of the blank permits a printing operation to be combined with the stamping operation or facilitates a later printing operation of advertisements or descriptive material on the visor.

Although a single preferred embodiment of our invention is herein shown and described, it is to be understood that it is susceptible to various changes fully comprehended by the spirit of the invention without departing from the scope of the following claims.

Having thus described our invention, what we claim is:

1. A disposable visor cap blank comprising a one-piece, substantially flat body of flexible sheet material formed with a forwardly disposed bill-forming section of generally crescent shape and a pair of rearwardly projecting, angularly divergent headband-forming webs extending respectively from opposite ends of said bill-forming section, the bill-forming section of said body having oppositely disposed, arcuately curved outer and inner edges each having an identical radius of curvature along the entire periphery of said curved outer and inner edges of said bill-forming section, and each of said headband-forming webs having opposite, relatively parallel, longitudinal edges disposed, respectively, in tangential relation to the outer and inner edges of said bill-forming section and forming smooth, uninterrupted continuations thereof, whereby a plurality of such bodies may be cut from a single sheet of material with the curved inner edge of one of said bodies disposed in contiguous, nesting relationship to the curved outer edge of an adjacent body, and said headband-forming webs being provided toward the outer ends thereof with relatively engageable tab and slot means by which said headband-forming webs may be detachably interlocked with one another when said body is positioned about the head of a wearer.

2. A visor cap blank comprising a one-piece, substantially flat body of flexible sheet material formed with a forwardly disposed bill-forming section of generally crescent shape and a pair of rearwardly projecting, angularly divergent headband-forming webs extending respectively from opposite ends of said bill-forming section, the bill-forming section of said body having oppositely disposed, arcuately curved outer and inner edges each having an identical radius of curvature along the entire periphery of said curved outer and inner edges of said bill-forming section, and each of said headband-forming webs having opposite, relatively parallel longitudinal edges disposed respectively in tangential relation to the outer and inner edges of said bill-forming section and forming smooth, uninterrupted continuations thereof, said inner arcuately curved edge of said bill-forming section having a plurality of serrations forming a plurality of resiliently flexible tabs over a central portion thereof, whereby a plurality of such bodies may be cut from a single sheet of material with the curved inner edge of one of said bodies disposed in contiguous, nesting relationship to the curved outer edge of an adjacent body, and said headband-forming webs being provided toward the outer ends thereof with relatively engageable tab and slot means by which said headband-forming webs may be detachably interlocked with one another when said body is positioned about the head of the wearer.

3. A visor cap blank comprising a one-piece substantially flat body of flexible sheet material formed with a forwardly disposed bill-forming section of generally crescent shape and a pair of rearwardly projecting, angularly divergent headband-forming webs extending respectively from opposite ends of said bill-forming section, the bill-forming section of said body having oppositely disposed, arcuately curved outer and inner edges each having an identical radius of curvature along the entire periphery of said curved outer and inner edges of said bill-forming section, and each of said headband-forming webs having opposite, relatively parallel, longitudinal edges disposed respectively in tangential relation to the outer and inner edges of said bill-forming section and forming smooth uninterrupted continuations thereof, whereby a plurality of such bodies may be cut from a single sheet of material with the curved inner edge of one of said bodies disposed in contiguous, nesting relationship to the curved outer edge of an adjacent body, said bill-forming section being formed with an arcuately curved fold line disposed in inwardly spaced relation to the inner arcuately curved edge thereof, and the inner arcuately curved edge of said bill-forming section having a plurality of serrations extending inwardly to said fold line, thereby forming a plurality of tabs along the central portion of said inner edge, and said headband-forming webs being provided toward the outer ends thereof with relatively engageable tab and slot means by which said headband-forming webs may be detachably interlocked with one another when said body is positioned about the head of the wearer.

References Cited by the Examiner

UNITED STATES PATENTS

2,056,276	10/1936	Katz	2—197 X
2,373,855	4/1945	Shaw	223—83
2,410,158	10/1946	Gardner	2—197 X
2,629,869	3/1953	Locken	2—197 X
2,682,668	7/1954	Hoeflich	2—200 X
2,827,636	3/1958	Hoeflich	2—195
2,883,094	4/1959	Calder	223—83

FOREIGN PATENTS

1,067,580	1/1954	France.
258,359	9/1926	Great Britain.

OTHER REFERENCES

Copyright to M. J. Ferguson, Registration Number K5844, December 15, 1958.

JORDAN FRANKLIN, *Primary Examiner.*

DAVID J. WILLIAMOWSKY, THOMAS A. HICKEY, *Examiners.*

G. H. KRIZMANICH, *Assistant Examiner.*