Dec. 12, 1967 R. C. WIEGANDT 3,357,026

CAP BILL STIFFENER

Filed July 2, 1965

Fig. 1

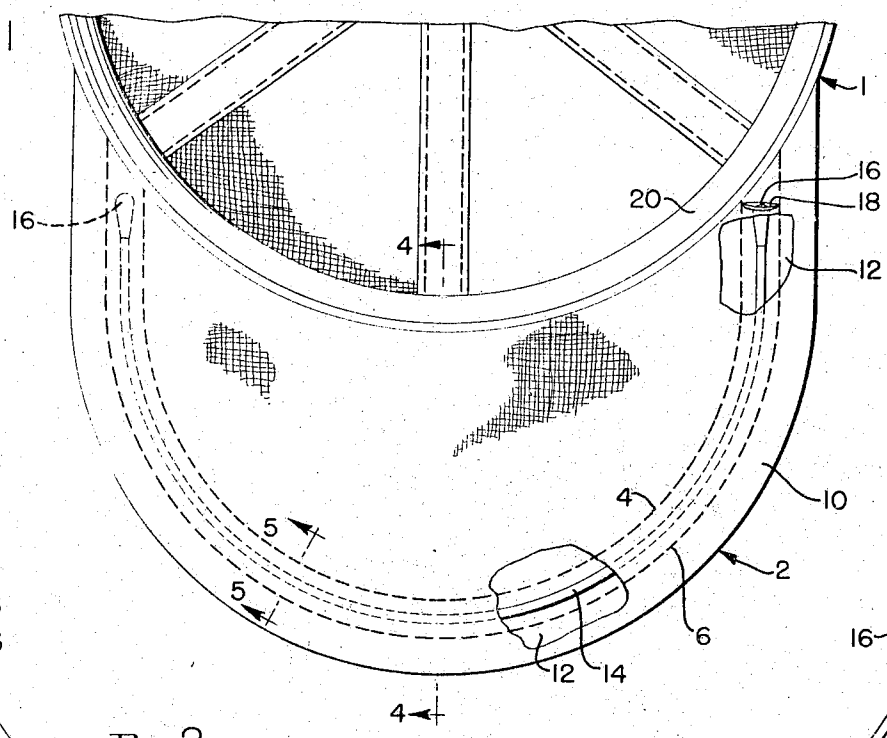


Fig. 2

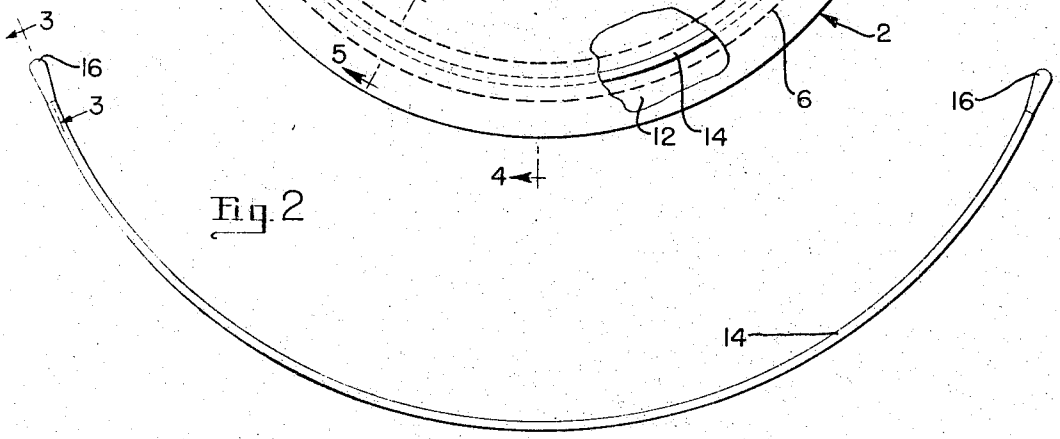


Fig. 3



Fig. 4

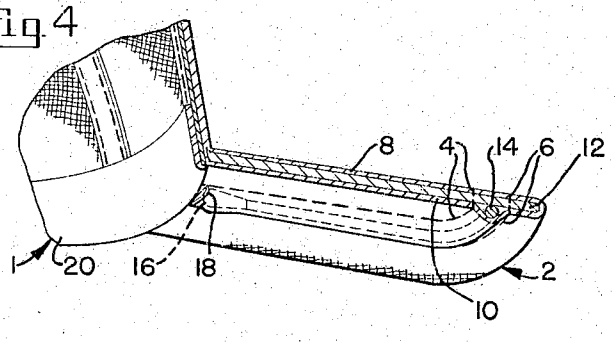
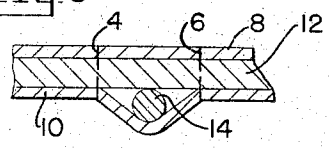


Fig. 5



RALPH C. WIEGANDT
INVENTOR.

BY

Wayland D. Keith

HIS AGENT

United States Patent Office 3,357,026
Patented Dec. 12, 1967

3,357,026

CAP BILL STIFFENER

Ralph C. Wiegandt, Lawton, Okla.
(201 Jackson Ave., Lexington, Va. 24450)

Filed July 2, 1965, Ser. No. 469,089
2 Claims. (Cl. 2—195)

This invention relates to improvements in cap bill formers, and more particularly to a resilient stay which may be inserted between the covering of the bill and the inner lining thereof in such manner as to enable the bill to be smartly conformed for appearance and for shading the eyes, which will maintain the bill in formed condition without the aid of starch or commercial sizing, and without the aid of a hard, stiff inner layer of material within the cap bill.

Various formers for hat brims and for cap bills have been proposed heretofore, these however, for the most part, were made integral with the hat or cap or had to be attached thereto as by stitching.

The present resilient cap bill former is so constructed of resilient material, such as spring steel or resilient plastic, that it may be inserted through the outer rim portion of a cap bill and an inner layer thereof through a small slit in the underside of the outer covering of the bill, between properly placed rows of stitching thereon. The bill may be brought into the desired conformed shape; which enables a relatively soft form of cap bill to be used, then, by the removal of the resilient stay, the cap may be rolled or folded into a small package to be carried in the pocket, or the cap may be laundered without the bill becoming misshaped or too soft for normal use.

An object of this invention is to provide a resilient stay for a cap bill which may be readily inserted, through a slit in the covering of the bill, between the covering and the lining, and between properly spaced rows of stitching, so the bill may be shaped or curved to the desired conformation.

Another object of the invention is to provide a yieldable stay for a cap bill, which stay is of resilient material, such as plastic, spring steel, or other metal, which may be readily inserted through a slit in the exterior covering of the bill of a cap, such as used by baseball players and in other sports, which stay will hold the bill in the desired shaped conformation.

Still another object of the invention is to provide a resilient stay for a cap bill, which stay has rounded ends, which may readily be inserted through a slit in the exterior covering of the bill, between the covering and the inner lining of the bill, between properly spaced rows of stitching on the bill, thereby to hold the bill in a desired shape.

Still another object of the invention is to provide a resilient stay for a cap bill, which stay may be of plastic, metal or the like, with slightly enlarged, rounded tips, to enable the stay to be readily threaded into a slit in the outer covering of the bill, between the covering and an inner lining, between rows of stitching around the bill, the rounded ends of which stay prevent the material of the cap or the padding of the bill to be cut thereby, and to allow it to be more easily removed.

Yet another object of the invention is to provide a cap bill stay, which is simple in construction, easy to make, easy to insert into and to remove from the cap, and low in the cost of production.

With these objects in view and others which will become manifest as the description proceeds, reference is to be had to the accompanying drawings, in which like reference characters designate like parts in the several views therein, in which:

FIG. 1 is a bottom plan view of a fragmentary portion of a cap, with parts broken away, and showing a resilient stay inserted between rows of stitching and beneath the covering of the bill of the cap;

FIG. 2 is an elevational view showing the curved, resilient stay apart from the bill of a cap;

FIG. 3 is a sectional view taken on line 3—3 of FIG. 2, lookng in the direction indicated by the arrows, with parts thereof being shown in elevation;

FIG. 4 is a fragmentary, sectional view taken on line 4—4 of FIG. 1, looking in the direction indicated by the arrows; and

FIG. 5 is an enlarged fragmentary, sectional view taken on line 5—5 of FIG. 1, looking in the direction indicated by the arrows.

With more specific reference to the drawing, the numeral **1** designates generally the crown portion of a cap having an outwardly extending bill portion **2** attached thereto which is secured thereto in the conventional manner. The bill portion in the present cap has at least two rows of stitching as indicated at **4** and **6** near the peripheral edge thereof, which rows stitching are curved and spaced apart. Only two rows of stitching are shown, which stitching passes through the upper covering portion **8** of the bill, the lower covering portion **10**, and padding portion **12**. The bills of sport caps, such as baseball caps, usually employ a soft padding portion **12** therein which can be of various materials. However, this is usually made of nylon or other relatively soft material and does not readily hold the bill **2** in a curved shape above the normal line of sight of the wearer. Some cap bills are so flexible that they tend to drop down and obscure the line of vision, especially if the wind is blowing thereagainst.

A resilient stay **14** of plastic, spring steel or metal wire has rounded ends **16**. The ends **16**, of the stay, may be tipped with such material as plastic so as to give a rounded teardrop shape. The stay **14** is preferably curved as indicated in FIG. 2, and is usually made of spring steel wire, hard plastic or had metallic wire.

When it is desired to form the bill **2** into a curved shape, a slit **18** is made in the bill covering **10**, on the lower side thereof so that the slit will be relatively close to the head band **20** of the cap **1**, which slit **18** is intermediate the rows of stitching **4** and **6** to enable one end of the resilient stay **14** to be inserted through slit **18** and the rounded plastic cover end **16** will be guided between the stitchings **4** and **6** until it will occupy a position as indicated in dotted and full outline in FIGS. 1 and 4. With the stay in this position the presence thereof cannot be detected, except by inspecting the lower side of bill **2**. This stay will hold the bill in the proper curved relation wihout the use of starch and without employing a heavy, rigid filler board **12** within the bill **2** of the cap. The slit in the cap bill may be a button-hold eyelet or the edges may be protected by commercial glue or plasticized sizing.

When it is desired to remove the resilient stay **14** from between the covering **10** and pad **12** of the cap bill, the stay and cap bill are gripped tightly a spaced distance from the edge and from the rounded end **16** of the stay adjacent the slit **18**. The bill **2** is then deformed to push the end of the stay out through slit **18** to such an extent that it may be grasped between a thumb and finger. It can then be removed by pulling the stay longitudinally outward from the slot formed by the rows of stitching. With the stay removed from the bill, the cap and bill may be readily folded or rolled to place in a small place, such as a pocket or the cap with the bill thereon may be laundered in the conventional manner. The stay **14** may be reinserted through the slit **18** between the rows of stitching **4** and **6** when it is desired to reuse the cap, and may be removed without danger to the cap or bill, except for the

small slit which is originally formed in the lower covering **10** on the lower side of bill **2**.

Having thus clearly shown and described the invention, what is claimed as new and desired to be secured by Letters Patent is:

1. In combination with a cap having a lower edge and a generally crescent-shaped flexible bill attached at said lower edge, said bill having a covering on the upper and lower surfaces thereof;

curvilinear spaced apart rows of stitching adjacent the outer peripheral edge of the bill securing said bill and said covering together and extending in a continuous manner adjacent said outer peripheral edge forming an elongated pocket between said covering and said bill;

said elongated pocket having ends terminating adjacent to the lower edge of the cap;

means forming an aperture in said covering of the lower surface of said bill intermediate said spaced apart rows of stitching and near one end of said pocket;

an elongated deformable resilient stay inserted through said aperture and into said pocket; whereby:

said stay may be deformed to arcuately shape said bill and said stay may be readily removed from said pocket to thereby facilitate storing and laundering of the cap.

2. The combination of claim **1** wherein said stay has tear-drop shaped ends.

References Cited

UNITED STATES PATENTS

2,716,753	9/1955	Gordon	2—195
2,717,393	9/1955	Portis	2—172
2,931,046	4/1960	Klein	2—195

FOREIGN PATENTS

3,627	12/1900	Austria.
461,664	6/1928	Germany.
187,553	10/1922	Great Britain.

JORDAN FRANKLIN, *Primary Examiner.*

G. H. KRYZMANICH, *Assistant Examiner.*