May 21, 1968 R. I. BAUER 3,383,709

ADJUSTABLE HEADPIECE

Filed June 16, 1966 2 Sheets-Sheet 1

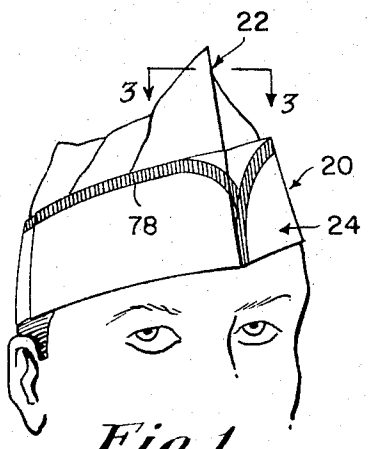


Fig. 1.

Fig. 3.

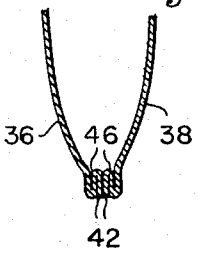
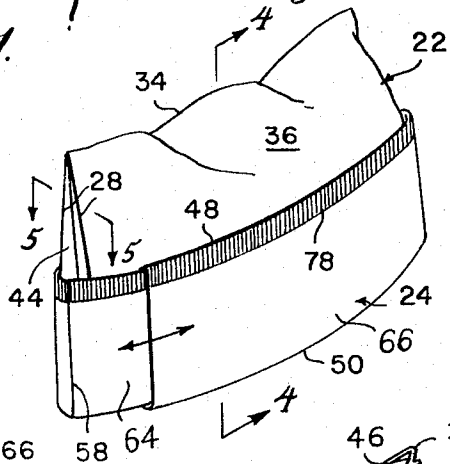


Fig. 2.



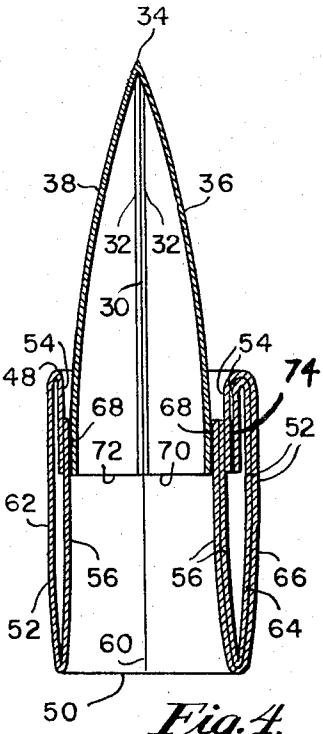


Fig. 4.

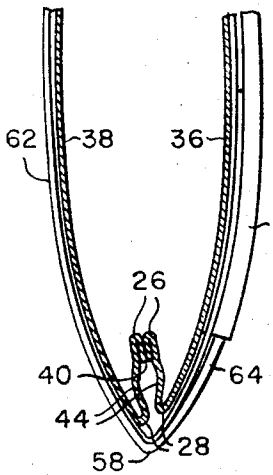


Fig. 5.

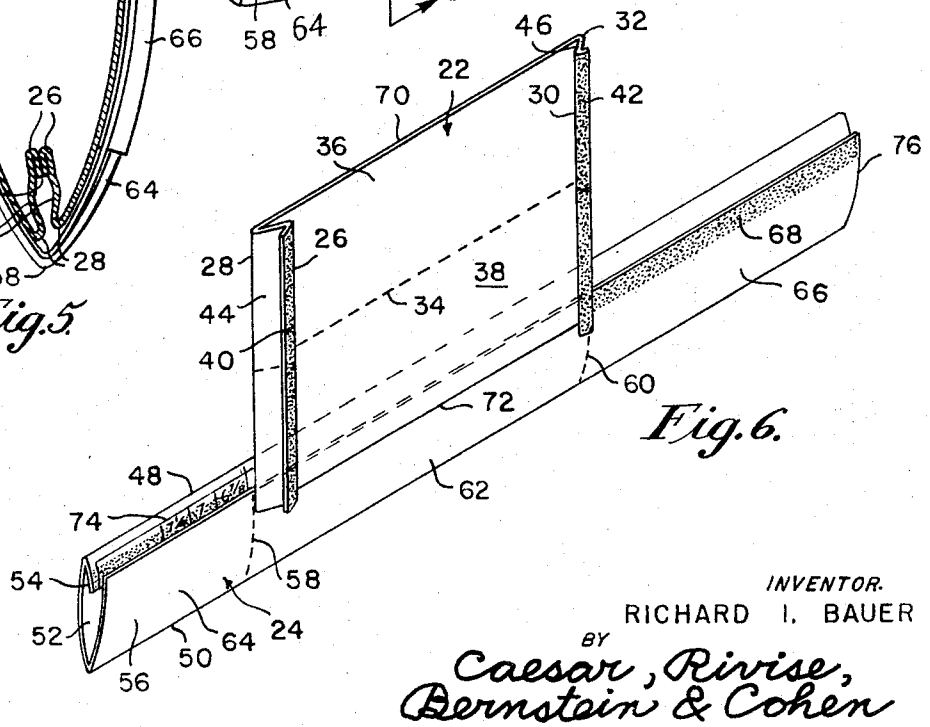


Fig. 6.

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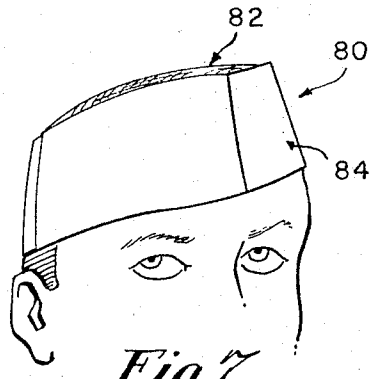


Fig. 7.

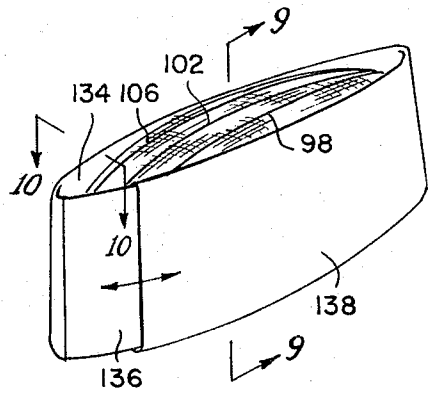


Fig. 8.

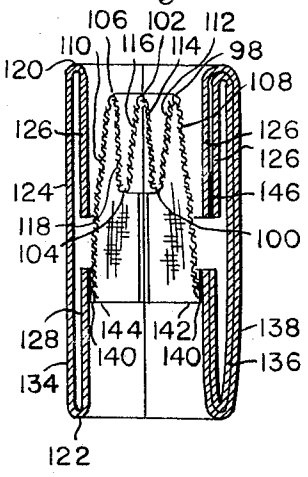


Fig. 9.

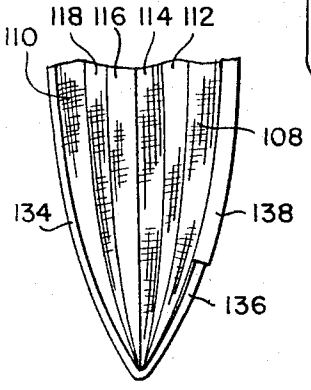


Fig. 10.

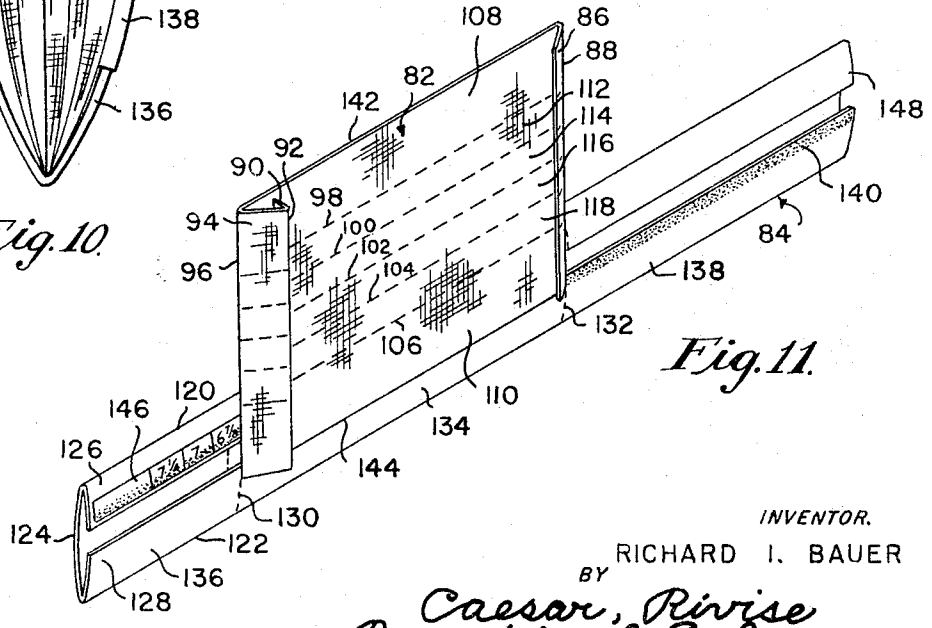


Fig. 11.

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3,383,709

ADJUSTABLE HEADPIECE

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Filed June 16, 1966, Ser. No. 557,975
4 Claims. (Cl. 2—197)

ABSTRACT OF THE DISCLOSURE

An adjustable headpiece which includes a crown and an adjustable band. The band comprises an elongated sheet having a pair of substantially parallel longitudinally extending fold lines. The sheet is folded about the fold lines to form a continuous outer panel and upper and lower inner panels. The band also includes a pair of substantially parallel transversely extending fold lines and the band is folded about these transversely extending fold lines to form a central section and two end sections. A first of the end sections of the band is slidably inserted in the other end section of the band so that the first end is movable with respect to the other end. The crown comprises an elongated sheet which is folded thereby providing a pair of longitudinally extending edges. A first of the edges is secured to the inner lower panel of the central section and the other edge is secured to the inner lower panel of the other section. The first end section remains free so that the size of the headpiece is adjustable without deformation of the headpiece.

This invention relates generally to paper headpieces and more particularly to an adjustable headpiece for persons employed in the preparation and serving of food.

In restaurants, cafeterias and hotels, it is normally required that the persons employed in the preparation and service of food wear caps to cover their heads. Since many of these persons are exposed to the guests of the food establishment, these hats should be neat, attractive and most importantly clean. Therefore, cloth caps become rather expensive in that these hats are soiled easily and are therefore in need of cleaning after very few wearings. It is also necessary to have a large stock of caps in that the hats are not adjustable and in order to provide a cap for each person who may be employed, extra caps must be kept on hand. Where the caps are adjustable, the caps usually are deformed when an adjustment is made. Thus, only those people having a size head for which the cap was specifically designed, will have a neat looking cap.

It is therefore an object of the invention to overcome the aforementioned disadvantages.

Another object of the invention is to provide a new and improved paper headpiece which is adjustable yet the cap remains neat and attractive when adjusted in size.

Another object of the invention is to provide a new and improved paper cap which is attractive, adjustable and disposable yet inexpensive to produce.

Still another object of the invention is to provide a new and improved paper overseas cap which is adjustable.

Another object of the invention is to provide a new and improved paper skull cap which is adjustable.

Another object of the invention is to provide a new and improved adjustable headpiece having size graduations marked for convenient adjustment of the cap prior to placement on the head.

These and other objects of the invention are achieved by providing a disposable headpiece comprising a crown and an adjustable band, said band comprising an elongated sheet which is folded along a pair of substantially parallel longitudinally extending fold lines to form a continuous outer panel and an upper and lower inner panel,

said band being folded along a pair of substantially parallel, transversely extending fold lines to form a central section and two end sections with a first of said end sections of said band being slidably inserted in the other end section of said band so that said first end is movable with respect to said other end, said crown comprising an elongated sheet which is folded to provide a pair of longitudinally extending edges, a first of said edges being secured to the inner lower panel of said central section and the other edge being secured to the inner lower panel of said other end section so that the size of said headpiece is adjustable without deformation thereof.

Other objects and many of the attendant advantages of this invention will be readily appreciated as the same becomes better understood by reference to the following detailed description when considered in connection with the accompanying drawings wherein:

FIG. 1 is a perspective view of a person wearing a paper headpiece embodying the invention of the overseas cap type;

FIG. 2 is a perspective view of the cap per se;

FIG. 3 is an enlarged sectional view taken along the line 3—3 in FIG. 1;

FIG. 4 is an enlarged sectional view taken along the line 4—4 in FIG. 2;

FIG. 5 is an enlarged sectional view taken along the line 5—5 in FIG. 2;

FIG. 6 is a perspective view of a partial assembly of the overseas cap prior to the final folding and securing steps;

FIG. 7 is a perspective view of a person wearing a paper headpiece embodying the invention of the skull cap type;

FIG. 8 is a perspective view of the skull cap per se;

FIG. 9 is an enlarged sectional view taken along the line 9—9 in FIG. 8;

FIG. 10 is a fragmentary plan view taken along the line 10—10 in FIG. 8; and

FIG. 11 is a perspective view of the partial assembly of the skull cap prior to final folding and securing.

Referring now in greater detail to the various figures of the drawings wherein similar reference characters refer to similar parts, a paper headpiece embodying the invention is shown generally at **20**.

Paper headpiece **20** is of the overseas cap type and basically comprises a crown **22** and a band **24**. As best seen in FIG. 6, the crown **22** is formed of an elongated rectangular sheet of paper which is folded as shown along transversely extending fold lines **26**, **28**, **30** and **32**. The crown **22** is then folded together along longitudinally extending fold line **34**, shown in phantom in FIG. 6, to fold the crown in half.

By folding the sheet of paper forming the crown along the fold lines **26**, **28**, **30** and **32**, there results a pair of longitudinally extending rectangular side panels **36** and **38**, a pair of transversely extending end strips **40** and **42** and a transversely extending intermediate strip **44** at the first end of the crown and a transversely extending intermediate strip **46** at the other end.

As best seen in FIG. 3, the front end of the crown **22** is formed by the folding of strip **42** in half along fold line **34** and securing the inner surfaces thereof together. The opposite surfaces of strip **42** are adhesively secured to the facing surface of strip **46**. And, the opposite surface of strip **46** is adhesively secured to the facing surface of the side panels **36** and **38**. The construction of the front edge in this manner enables a sharp crease to be formed in the front edge of the cap for a neat appearance at all times.

Referring now to FIG. 5, it can be seen that the rear edge of the crown is formed by the folding of strip **40** in

half along fold line 34 and adhesively securing the facing surfaces. Also, the facing surfaces of strip 40 and strip 44 are secured adhesively together. The remaining portion of strip 44 which is not adhesively secured to strip 40 forms a gusset in the rear which enables the size of the crown to be adjusted without any substantial deformation thereof as will hereinafter be seen.

Band 24 is formed of a rectangular longitudinally extending sheet of paper which is folded along a pair of longitudinally extending fold lines 48 and 50 which are substantially parallel. The result of folding along lines 48 and 50 is an outer panel 52, an upper inner panel 54, and a lower inner panel 56. The band is then folded along a pair of parallel, transversely extending fold lines 58 and 60 which are shown in phantom in FIG. 6. This folding results in a central section 62, a first end section 64 and a second end section 66.

As best seen in FIG. 4, the end section 64 is inserted into section 66. The end of section 64 is movable with respect to the end of section 66 so that the band may be adjusted in size. A permanent adhesive 68 is provided along the outer surface of lower inner panel 56 adjacent the top edge. As best seen in FIG. 4, adhesive 68 secures the central section 62 and end section 66 of the band 24 to the longitudinally extending edges 70 and 72 of the crown 22.

Referring to FIG. 6, it can be seen that the band 24 also includes in section 64 a strip 74 which is provided along the outer surface of upper inner panel 54. The strip 74 is comprised of a non-permanent pressure sensitive adhesive. The strip 74 further includes identifying indicia (6⅞, 7, 7¼ . . .) next to graduations for indicating the size of the adjusted cap. That is, as the end section 64 is inserted into section 68, the identifying indicia adjacent the end 76 of section 66 indicates the size head which the band is adjusted to fit. The inner panel 54 of both the first end section 64 and the second end section 66 may then be pressed together so that strip 74 prevents slipping of the sections. The size of the cap is thus fixed until the panels 54 of sections 64 and 66 are separated. The non-permanent adhesive enables the cap to be adjusted a number of times.

As the section 64 is drawn out of the section 68, the gusset formed of strip 44 and the adjacent panels separates and thereby enables both the crown and the band to be enlarged to conform with a larger head. The enlarging of the gusset also inhibits deformation of the remainder of the cap when adjusted. A colored strip 78 is provided along the top edge of band 24 to add to the attractiveness of its appearance.

It can therefore be seen that a new and improved paper headpiece is provided which is both attractive and inexpensive to produce. The cap is adjustable yet adjustability is maintained without losing the neat appearance of the cap. Thus, a restaurant's needs are satisfied by purchasing caps of only a single size. Therefore, provision of extra caps is unnecessary in that all of the caps will be used.

An alternate paper head piece embodying the invention is shown in FIGS. 7 through 11. The adjustable head piece shown therein is of the skull cap type. The skull cap is generally shown at 80 and basically comprises a crown 82 and a band 84. The crown 82 of the skull cap is comprised of a rectangular elongated sheet of porous material such as cheesecloth or paper.

Referring now to FIG. 11, it can be seen that the crown 82 includes a transversely extending end strip 86 which is formed by folding along a transversely extending fold line 88. The crown also includes another transversely extending end strip 90 which is formed by folding along transversely extending fold line 92. An intermediate strip 94 is formed between the end strip 90 and the main portion of the crown 82 by folding along transversely extending fold line 96. The crown is further folded along longitudinally extending and substantially parallel fold lines 98, 100, 102, 104 and 106 which are shown in phantom in FIG. 11. By folding the sheet as shown in FIG. 9, there results a pair of side panels 108 and 110 and four longitudinally extending panels 112, 114, 116 and 118. The panels are folded in an accordian pleat. The side panels 108 and 110 are thus movably spaced with respect to each other so that they may be spaced to conform to the top surface of the head of a wearer of the cap. The side panels 108 and 110 are each secured to a portion of the band as will be seen hereinafter.

Band 84 is also best seen in FIG. 11 and is comprised of an elongated rectangular sheet of paper which is folded along a pair of longitudinally extending substantially parallel fold lines 120 and 122. The folding thereof results in a rectangular elongated outer panel 124, a longitudinally extending upper inner panel 126, and a longitudinally extending lower inner panel 128. The band 84 is also folded along fold lines 130 and 132 which are also shown in phantom in FIG. 11. This results in a central section 134, a first end section 136 and a second end section 138. The section 136 is inserted inside section 138 substantially as shown in FIG. 9. The ends thereof are movable with respect to each other and enable adjustability of the band.

A strip of permanent adhesive 140 is provided along the outer surface of lower inner panel 136 along the central section 134 and end section 138. The longitudinally extending edges 142 and 144 of the crown 82 are placed against the permanent adhesive strip 140 in the central section 134 and the end section 138 to secure the crown to band 84. Thus, the side panels 108 and 110 of the crown are effectively secured adjacent each other at the forward end of the cap. The other ends of the panels are movable with respect to each other. The relative spacing between the other ends of the panels being determined by the length of first end section 136 which is inserted in section 138. The accordian pleat formed by panels 112, 114, 116 and 118 enable the spacing of the side panels 108 and 110 without deforming the cap. Thus, the size of the cap is adjustable without deformation in that the accordian pleat takes up the space between the ends of panels 108 and 110.

The band 84 also includes a strip 146 comprising a non-permanent pressure sensitive adhesive which is secured to the outer surface of upper inner panel 126 of section 136 of the band. The strip contains a plurality of identifying indicia (6⅞, 7, 7¼ . . .) and graduations. The band may be adjusted by the length of section 136 which is inserted into section 138. The size is determined by comparing the closest indicia to edge 148 of section 138. When the desired size is reached by adjustment of the insertion of section 136, the panel 126 of section 136 is pressed against panel 126 of section 138 and a semi-permanent securement is achieved between the sections. The maintenance of the size is enhanced by the pressure of the wearer's head inside the band. When the cap is worn, the central and end sections of the band are separated; therefore, the crown 82 expands and conforms to the wearer's head.

It can be seen therefore that the advantages inherent in the overseas cap 20 are maintained in the skull cap 80. The cap maintains a neat appearance and is not deformed by adjustment thereof. It is inexpensive to produce and is therefore inexpensive to replace.

In a preferred embodiment of this invention, the bands in both the overseas cap 20 and the skull cap 80 are approximately 26½ inches long by 6½ inches wide when unfolded. In the overseas cap 20, the outer panel 52 is 3 inches wide; whereas, in the skull cap 80, the outer panel 124 is 3½ inches wide. The upper inner panel 54 is 1 inch wide; where, the upper inner panel 126 is 1½ inches wide. Lower inner panel 56 is 2½ inches wide; whereas, the lower inner panel 128 is 1½ inches wide. Thus, in the overseas cap, the panels 54 and 56 overlap; whereas, in the skull cap, the panels are spaced from each other.

The lengths of the three sections of the bands are similar for both in that the central panels **62** and **134** are 11⅜ inches long, the first end panels **64** and **136** are 5⅛ inches long and the section end panels **66** and **138** are 10 inches long. The crowns in both the overseas cap **20** and the skull cap **80** are comprised of a sheet of paper 13 inches long by 8 inches wide. In the overseas cap, the crown is folded in half to provide 4 inch wide side panels. In the skull cap, the crown is folded to provide 2 inch wide side panels and 1 inch internal panels.

Without further elaboration, the foregoing will so fully illustrate my invention, that others may, by applying current knowledge, readily adapt the same for use under various conditions of service.

What is claimed as the invention is:

1. A disposable head piece comprising a crown and an adjustable band, said band comprising an elongated sheet having a pair of substantially parallel longitudinally extending fold lines, said sheet being folded about said fold lines to form a continuous outer panel and upper and lower inner panels, said band further including a pair of substantially parallel, transversely extending fold lines, said band being folded about said transversely extending fold lines to form a central section and two end sections with a first of said end sections of said band being slidably inserted in the other end section of said band so that said first end is movable with respect to said other end, said crown comprising an elongated sheet centrally folded providing a pair of longitudinally extending lower edges, a first of said pair of longitudinally extending lower edges being secured to the inner lower panel of said central section and the other edge being secured to the inner lower panel of said other end section, said first end section remaining free of said crown so that the size of said headpiece is adjustable without deformation of the crown.

2. The invention of claim **1** wherein said band includes a strip of pressure sensitive adhesive, said strip being provided along the upper inner panel of said first end, said strip further including identifying indicia and graduations so that the size of said headpiece may be determined by the length of said first end inserted in said other end.

3. A disposable adjustable headpiece comprising a crown and an adjustable band, said band comprising an elongated sheet having a pair of substantially parallel longitudinally extending fold lines, said sheet being folded about said fold lines to form a continuous outer panel and upper and lower inner panels, said band further including a pair of substantially parallel transversely extending fold lines, said band being folded about said transversely extending fold lines to form a central section and two end sections with a first of said end sections of said band being slidably inserted in the other end section so that said first end is movable with respect to said other end, said crown comprising an elongated sheet folded centrally to form side panels having lower edges and front and back side edges, the back side edges being connected together forming a crease, accordian-like folds connecting the front side edges together, said crown being secured to said band by securing the lower edge of said side panels to the inner lower panel of said central section and to the lower panel of said other end section, said first end section being free for movement with respect to said panel connected to said other end section so that said gusset enables adjustment of said band without deforming said crown.

4. A disposable head piece comprising a crown and an adjustable band, said band comprising an elongated sheet having a pair of substantially parallel longitudinally extending fold lines, said sheet being folded about said fold lines to form a continuous outer panel and upper and lower inner panels, said band further including a pair of parallel transversely extending fold lines, said band being folded about said transversely extending fold lines to form a central section and two end sections with a first of said end sections of said band being slidably inserted in their other end section of said band so that said first end is movable with respect to said other end, said crown comprising a pair of side panels and a plurality of longitudinally extending fold lines, said crown being folded about said longitudinal fold lines to form an expansible section between said side panels, said side panels being secured at their lowest edge to the inner lower panel of said central section and to the inner lower panel of said other end section, said first end section being free for movement with respect to said panel connected to said other end section so that said expansible section enables the size of said headpiece to be adjustable without deforming said crown.

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UNITED STATES PATENT OFFICE

CERTIFICATE OF CORRECTION

Patent No. 3,383,709 May 21, 1968

Richard I. Bauer

It is certified that error appears in the above identified patent and that said Letters Patent are hereby corrected as shown below:

In the heading to the printed specification, lines 3 an 4, "Keystone Adjustable Company," should read -- Keystone Adjustable Cap Company, --. Column 4, line 71, "where" should read -- whereas --.

Signed and sealed this 14th day of October 1969.

(SEAL)
Attest:

Edward M. Fletcher, Jr.
Attesting Officer

WILLIAM E. SCHUYLER, JR.
Commissioner of Patents