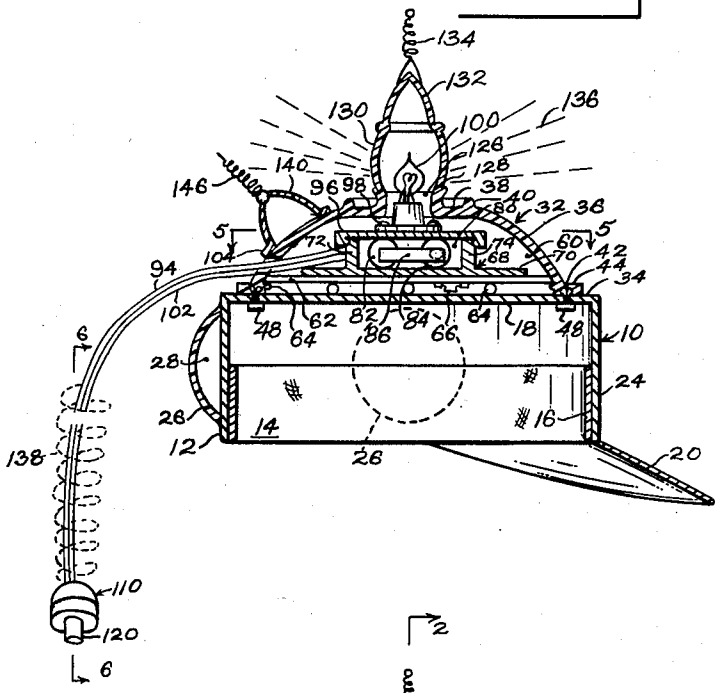
June 28, 1960 L. J. WEISS 2,943,186

HAT

Filed Sept. 4, 1953 2 Sheets-Sheet 1

Fig. 2



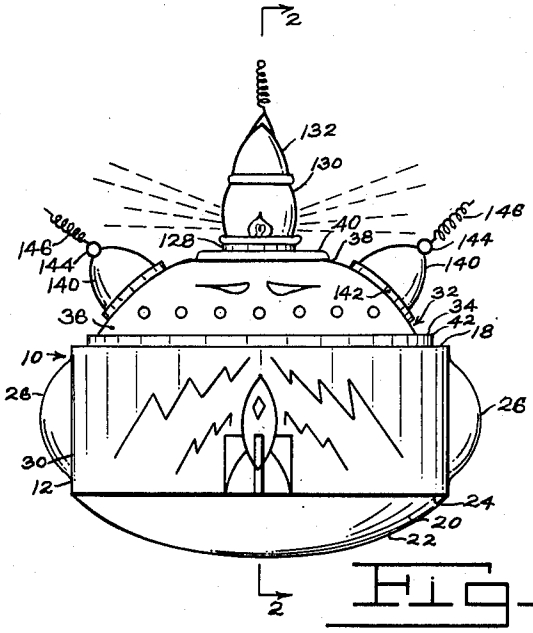


Fig. 1

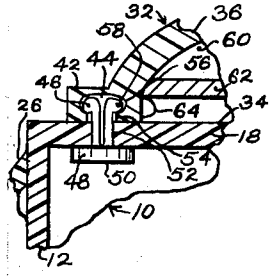


Fig. 3

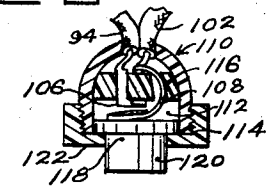
INVENTOR.
Leopold J. Weiss
BY
Peter Fries, Jr.
ATTORNEY

June 28, 1960 L. J. WEISS 2,943,186

HAT

Filed Sept. 4, 1953 2 Sheets-Sheet 2

Fig. 6



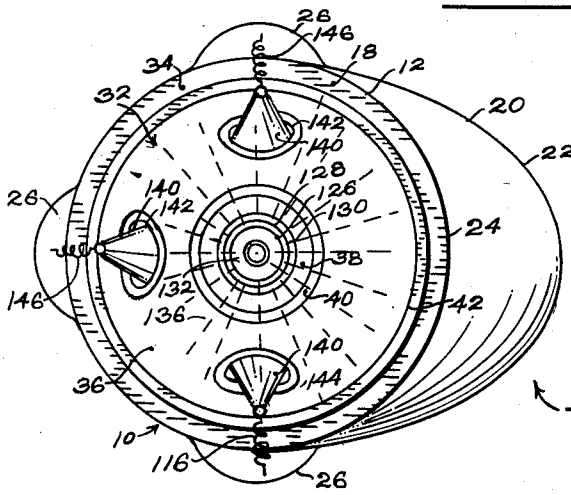


Fig. 4

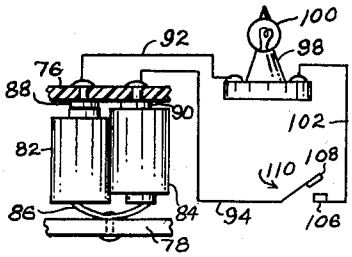


Fig. 7

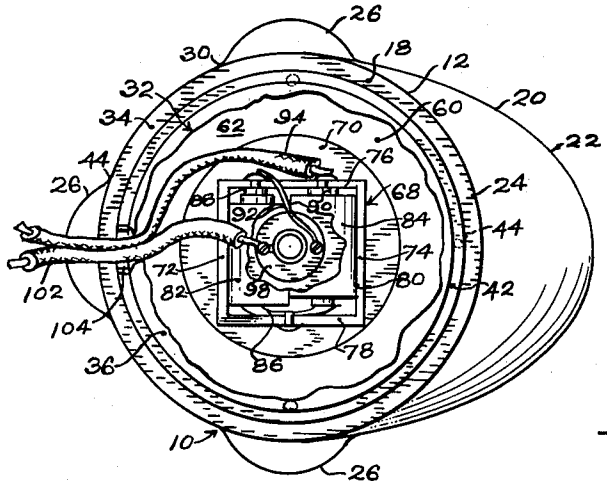


Fig. 5

INVENTOR.
Leopold J. Weiss
BY
Peter Fries, Jr
ATTORNEY

United States Patent Office 2,943,186 Patented June 28, 1960

2,943,186

HAT

Leopold J. Weiss, Brooklyn, N.Y., assignor to Cornelius Weiss Company, Brooklyn, N.Y., a firm

Filed Sept. 4, 1953, Ser. No. 378,587

3 Claims. (Cl. 240—60)

This invention relates to improvements in articles of apparel, particularly headwear.

An object of the invention is to provide a novel and improved article of headwear, which is provided with novel constructional features including illumination means controllable by the wearer of the headwear.

Another object of the invention is to provide a novel and improved article of apparel, in the nature of headwear and the like, in which there is a hat, with a crown portion thereof, surmounted by a source of illumination, and carrying a source of electrical energy for actuating the source of illumination, and wire means forming a circuit including the sources of energy and illumination, so that the illumination means may be actuated at any time, upon closing of the switch means by the wearer, the switch means being interposed in the wire means and arranged for extension within convenient reach by the wearer.

A further object of the invention is to provide a novel and improved article of apparel in the nature of a hat and the like, which carries self contained therein or thereon, in inconspicuous concealed disposition, battery means forming a source of electrical energy for lighting the illuminating lamp or lamps of the hat, the battery means being concealed in a compartment within the hat crown, so as to be easily reached when needed for inserting or removing batteries.

Still another object of the invention is to provide a novel and improved hat in which there is a lower crown body and an upper crown body, the lower body being readily fitted to the head of the wearer, and optionally including a visor secured to a forward portion thereof, and the upper body including a hollow casing or housing for containing the batteries, and having readily releasable fastening means for securing the upper body to the lower body while allowing them to be quickly and easily separated as desired, without the use of any special tools, the construction being quite compact and light in weight.

Still a further object of the invention is to provide a novel and improved self illuminating hat, in which illuminating means extends into a transparent or translucent light housing or dome, from which rays of light may be cast in any desired directions, by closing a switch carried on an extension cable, with added novel arrays of domes and cones with antennae of striking appearance, and which is inexpensive to manufacture and simple in design.

These and other objects and advantages of the invention will become apparent from the following description of a preferred embodiment thereof, as illustrated in the accompanying drawings, forming a part hereof, and in which,

Figure 1 is a front elevational view showing one form of hat according to the invention.

Figure 2 is a sectional elevational view taken substantially on plane 2—2 of Figure 1 of the hat illustrated therein.

Figure 3 is a sectional elevational view on an enlarged scale, in fragment, of a left middle portion of the structure shown in Figure 2.

Figure 4 is a top plan view of the hat shown in Figure 2.

Figure 5 is a top plan view similar to that of Figure 4, the view being sectioned or broken out substantially on plane 5—5 of Figure 2, to illustrate the construction thereof.

Figure 6 is a sectional elevational view taken substantially on plane 6—6 of Figure 2, and showing the interior construction of the signaling switch of the device, the parts being shown in switch-open position.

Figure 7 is a schematic diagram showing the electrical conections of one form of the illuminating means shown in Figures 2 and 5.

In connection with the design, construction and use of articles of apparel in the nature of hats and the like, it is quite important that the hat be of novel appearance and construction, and one which will fit to the head of the wearer with the utmost of comfort. The present invention discloses a novel article of headwear, which is not only novel in outward appearance and quite convenient and comfortable in use, but also which includes several unusual constructional features.

In order to understand clearly the nature of the invention and the best means for carrying it out, reference may now be had to the drawings, in which like numerals denote similar parts throughout the several views.

As shown, there is a hat crown or body generally indicated at 10, and including upstanding side walls 12 which may be curved to define an interior chamber 14 to receive and interfit snugly with the head of the wearer, the chamber 14 being thus made downwardly open as seen in Figure 2 for this purpose. A sweatband 16 may be formed by upfolding the lower marginal portion or edge of the side walls 12 of the hat crown or body, or a separate sweatband or lining 16 may be provided, for integration by stitching, adhesion or otherwise to the interior of the walls 12 for the comfort and convenience and fit of the hat to the wearer. The chamber 14 is closed at the top by means of the integral ceiling or roof member or wall 18, which may be plane to protect the upper portion of chamber 14 and thus the head of the wearer.

A cap visor or peak member 20, having a curved front edge 22, is secured in any suitable manner to the front portion 24 or edge of the cap crown, so as to project therefrom in any desired manner over the eyes of the wearer, and stitching, adhesion or other fastening means may be employed therefor. A number of curved domes 26, formed of dome shaped plastic or other suitable materials, transparent or translucent, and having hollow interior chambers 28 for lightness in weight, may be secured by their edges or flanges 30 to the sides of the hat crown or body 10, at regularly spaced intervals around the same as shown. If desired, illuminating means may be provided inside each of these domes also, in addition to other illuminating means described herein, such as by mounting incandescent lamps therein, or otherwise. The domes may be secured in position by means of adhesives, or clips, or other suitable means may be provided.

A cap upper crown body generally indicated at 32, is mounted on the upper surface 34 of the hat crown 10, and includes an upcurved body wall 36 which is upwardly smoothly convergent and merges into the radially inwardly extending ceiling or dome portion 38, which may be defined by an upstanding ring or collar or rim 40 preferably integral therewith. The cap upper crown body also has a circumferentially extending lower annular flange portion 42, which lies directly upon the upper surface 34 of the roof member 18 of the lower cap crown 10, and has several downwardly open sockets or female recesses 44 formed therein, as seen best in Figure 3, for

the reception of the upwardly extending prongs or bifurcations **46** of the flexible expansible rivet-like fastening members **48**, which prongs extend upwardly from their enlarged head portion **50** through openings **52** formed through the roof member **18** of the lower hat crown **10**, therebelow. As seen best in Figure 3, the socket recesses **44** in the flanges of the upper hat crown body **32**, have cylindrical portions **54** communicating with enlarged bulge portions **56**, so that the enlarged feet **58** on the bifurcations of the members **48** resiliently expand into the enlarged bulge portions **56**, and thus firmly secure the upper crown body **32** to the lower crown body **10**. Similarly, to remove the upper crown **32** from engagement with the lower crown **10**, it is only necessary to pry the button members **48** downwardly from the wall **18** of the lower crown, which separates these members without need for use of any tools.

As seen, the upper crown **32** forms a dome defining an interior chamber **60** which is downwardly open according to a preferred form of the invention. The chamber **60** is provided with a floor member or wall **62**, which may be circular in plan, to fit snugly in position as shown in Figure 2, and may be secured removably in such position by means of projections or lugs **64** carried by or integral with the inside of the wall **36**, the beads or lugs **64** projecting only sufficiently to provide bearing support for the edges of the floor **62**, and to allow the same to snap therepast upon insertion or removal of the floor **62** from its shown position. According to a modified form of the invention, small notches may be cut in the margin of the edges of the floor **62**, to allow passage past the lugs **64**, the floor being then turned slightly so that the notches are displaced from the lugs, and thus the floor is supported thereon. One or more small pull handles **66** may be provided to aid in removal of floor **62**.

A battery housing **68** is disposed inside the chamber **60**, and may have a floor wall **70** carried by or integral with the floor wall **62**, with upstanding side walls **72** and **74** carried by or integral with floor **70**. Front and rear end walls **76** and **78**, also carried by or integral with the floor **70**, intersect at their edges with the side walls **72** and **74**, to define a battery receiving chamber **80** for the reception of dry cell batteries such as **82** and **84**. As seen best in Figures 2 and 5, the wall **78** may carry a bus strap of flexible resilient copper, brass or bronze, as at **86**, for electrically interconnecting the negative terminal of battery **82** with the positive terminal of battery **84**, where they are to be connected in series, thus giving about three volts available across the remaining terminals of the batteries, which connect with terminals **88** and **90** extending through openings formed in wall **76**, and ultimately to wires **92** and **94**.

A top platform wall or ceiling **96** fits securely onto the top of the battery housing **68**, and may have depending edge flanges to effect snap engagement with ribs or lugs projecting from the walls such as **72** and **74** of the battery housing. As seen best in Figure 2, a lamp socket **98** is mounted on the cover **96**, so as to receive an incandescent lamp bulb **100** projecting thereabove. As seen best in Figure 5 and the schematic diagram Figure 7, the terminal **88** is connected by wire **92** to one terminal of the socket **98**, and the wire **102** is connected to the other terminal of the socket. Both wires **94** and **102** form a pair extending outwardly through an opening **104** in the wall **36** of the upper crown **32**, and ultimately are connected to the terminals **106** and **108** inside the normally open switch housing **110**. As shown best in Figure 6, the switch **110** includes a main housing defining a chamber **112** closed by a threaded cap member or collar **114**. An insulating terminal block **116** has mounted thereon the two electrical terminals **106** and **108** which are connected to wires **94** and **102** as shown. From the view it is seen that the terminal **108** may be made of highly resilient copper, bronze, or the like, or beryllium copper, so that it takes on the characteristics of a spring also, and

is normally spaced from the stationary terminal **106**. It is also seen that the terminal **108** is curved, with its outer end portion bearing outwardly against the inner surface of the push button **118**, the shank **120** of which is slidable in the opening **122** formed through cap **114**. As a result, when the push button **118** is pressed inwardly, overcoming the resilient bias of the spring terminal **108**, contact is effected between the terminals **108** and **106**, closing the circuit, and energizing and illuminating the lamp bulb **100**.

As seen best in Figures 1 and 2, the lamp bulb **100** extends upwardly through an opening **126** formed through the top portion **38** of the upper dome body **32**, and is thus surrounded by an upstanding collar or ring **128**, sufficiently large to allow free passage of the lamp bulb therethrough. A transparent lamp housing **130** is carried by or integral with the collar **128**, and may be surmounted by a closing top dome **132** secured to or integral with its upper end portion, and topped by a coiled wire antenna-like construction or member **134**.

It is thus clear that the wearer of the novel hat may cause rays of light to issue from the dome **130**, as at **136**, by pressing push button **118**, thus closing the electrical circuit as seen in Figure 7. Upon release of such pressure, the switch opens automatically, and opens the circuit, extinguishing the light. For convenience, the wire pair **94** and **102** may be formed with an inherent coiling tendency, as at **138**, so that it is normally quite short in apparent length, yet is easily pulled out to any desired length, for being reached by the hands of the wearer, with ease. Such modes of coiling wires are well known in the art, one method being to insert a light metal coiled spring as a part of the wire pair, and will not be otherwise described in detail. Another method is to encase the wire pair in a continuous plastic coil of spiral plastic material, which has an inherent tendency to form a larger spiral coil, this being commonly used for protecting telephone receiver wires by giving them this inherent coiling effect. Where used here, such plastic material may be variously colored, to enhance the decorative effect.

As shown in Figures 1, 2 and 4, the upper crown **32** may also carry a number of angularly projecting quasi-cones or domes **140**, which may be hollow transparent or translucent plastic and formed with flanges **142** at their bases, for ready mounting on the surface of the crown **32** in angularly spaced disposition. These cones **140** may have small ball tops **144** forming the bases for coiled antennas **146** projecting therefrom. The cones **140** may also be provided with lamps for illuminating them from inside, and connected to the batteries as shown, or may be separately energized and actuated.

The cap may be suitably ornamented in any desired manner, one example of which is shown in Figure 1, although I do not wish to be limited thereto, since other forms of such ornamentation may be used also.

Although I have described a preferred form of my invention in specific terms, it is understood that various changes may be made in size, shape, materials and arrangement without departing from the spirit and scope of the invention as claimed.

It will also be understood that by use of miniature dry cell batteries or a single such battery, the battery energy supply for the lamp or lamps may be disposed in the base of the lamp socket or sockets shown, or in any of the domes such as **130**, **140** or **26**, and they may also be carried on the cable **94–104**, or within the switch housing **110**, which may be enlarged to accommodate the same. According to a modified form of the invention, where the domes **140** are not too small, they may be made to threadedly engage the dome **36**, being easily removable to allow insertion of one or more batteries therein. Similarly, I do not wish to be restricted to use of the lower hat body **10** shown, since according to other modified forms of the invention, other hats, such as bean-

ies, skull caps, sailor hats, yachting hats or the like are usable.

I claim:

1. An article of headwear comprising a lower hat body defining a recess to receive the head of the wearer, visor means carried by said lower hat body, at least one hollow side dome carried by said lower hat body on a side wall thereof, and comprising an upper ceiling wall closing said recess at the top, a smoothly upwardly convergent upper hat body carried by said upper ceiling wall and defining a downwardly open chamber therein, fastening means releasably securing said upper hat body to the said ceiling wall of said lower hat body, upstanding walls carried in said chamber and defining a battery housing, closure wall means carried by said battery housing for closing said battery housing chamber for containing batteries therein, electrodes for making contact with batteries when contained therein, lamp socket means carried by said battery housing closure wall means, a lamp carried by said lamp socket means, dome window means carried by said upper hat body and constructed and arranged to allow rays of light from said lamp to project therethrough outwardly of said dome window means, cable means interconnecting said battery electrodes and said lamp socket means, said cable means extending outwardly substantially from said upper hat body, normally

open switch means carried by said cable means and interposed therein, for controlling the actuation of said lamp means, said switch means being arranged for being within reach of the hand of the user.

2. An article of headwear according to claim 1, wherein said cable means is provided with spiral forming means for maintaining said cable means in a releasable spiral contour, for easy flexing along its axis to extend the effective length of said cable means.

3. The construction according to claim 1, wherein said lamp means comprises a plurality of lamp bulbs, there being one bulb for each dome window, and wherein said dome window means comprises a plurality of dome windows carried by said upper hat body.

References Cited in the file of this patent

UNITED STATES PATENTS

1,206,356	Norton	Nov. 28, 1916
2,131,617	Cowden	Sept. 27, 1938
2,320,222	Crupi	May 25, 1943
2,473,394	Scott	June 14, 1949
2,501,006	Rothchild	Mar. 21, 1950
2,593,188	Rikelman	Apr. 15, 1952
2,640,980	Prupis	June 2, 1953