

March 17, 1970

W. A. MADDEN

3,501,628

ILLUMINATED HAIR ORNAMENT

Filed July 28, 1967

Fig. 1

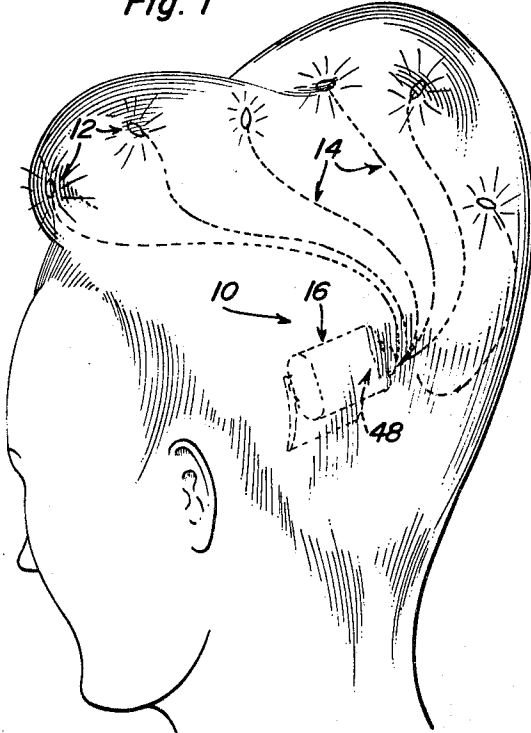


Fig. 2

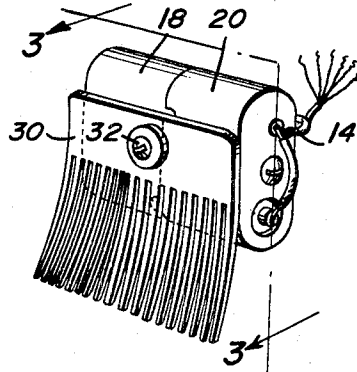


Fig. 4

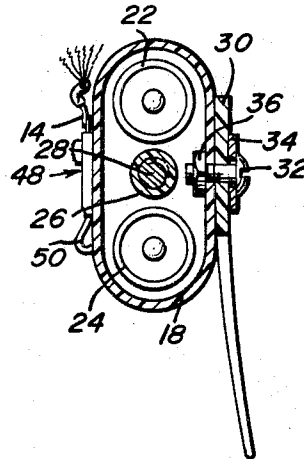


Fig. 3

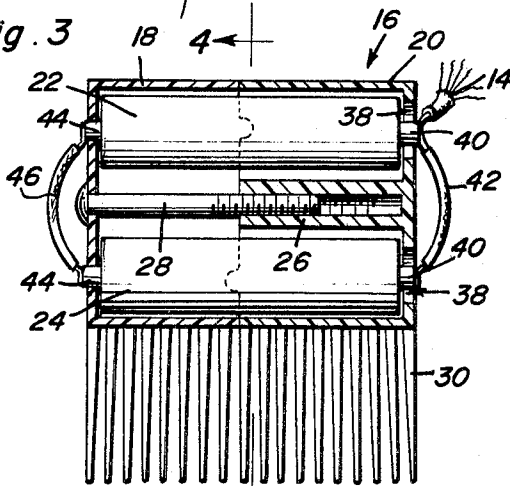
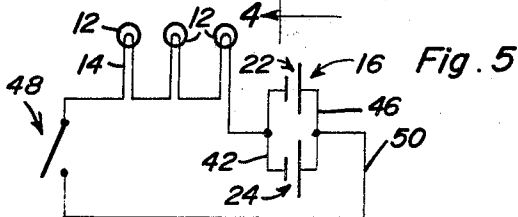


Fig. 5



William A. Madden

INVENTOR.

BY *Oliver W. P. Simon*  
and *Harvey B. Jacobson*  
Attorneys

1

2

3,501,628

**ILLUMINATED HAIR ORNAMENT**

William A. Madden, 21 Nantucket,  
San Francisco, Calif. 94112

Filed July 28, 1967, Ser. No. 656,759

Int. Cl. F21v 33/00

U.S. Cl. 240—6.4

1 Claim

**ABSTRACT OF THE DISCLOSURE**

A battery housing is attached to a comb adapted to be concealed in a woman's coiffure. Wires are connected to the battery housing for energizing tiny lights at the free ends of the wires. The wires are concealed in the coiffure so that only the tiny lamps are visible. A switch is mounted to the housing for manually causing illumination of the tiny lights.

The present invention relates to an illuminated hair ornament and more particularly to an illuminated hair ornament including a plurality of miniaturized electric lamps adapted to be selectively positioned in a woman's coiffure.

It is therefore a primary object of the present invention to provide a novel construction for a highly decorative illuminated hair ornament.

Another object of the present invention is to provide a novel construction for an illuminated hair ornament wherein a plurality of miniaturized electric lamps selectively positionable about a woman's coiffure so as to impart a sparkle to the coiffure are connected by a plurality of concealed wires to a battery means concealed within the coiffure.

A further object of the present invention is to provide a novel construction for an illuminated hair ornament which comprises a comb supported miniature battery means operatively connected to a plurality of grain of wheat or rice size miniature electric lamps and including a battery means mounted switch for controlling the illumination of the miniature lamps.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

FIGURE 1 is a rear perspective view of the invention, generally shown in phantom lines, operatively positioned within a woman's coiffure;

FIGURE 2 is an enlarged perspective view of the battery means of the device illustrated in FIGURE 1;

FIGURE 3 is an enlarged transverse cross-sectional view of the battery means of FIGURE 2 taken substantially along the plane of the line 3—3 of FIGURE 2;

FIGURE 4 is a vertical cross-sectional view of the battery means taken substantially along the plane of the line 4—4 of FIGURE 3; and

FIGURE 5 is a schematic wiring diagram of the exemplary form of the illuminated hair ornament illustrated in FIGURE 1.

Referring now in further detail to the drawings it will be seen that the exemplary form of an illuminated hair ornament indicated generally at 10 and constructed in accordance with the principles of the present invention includes a plurality of miniature electric lamps indicated generally at 12 and operatively connected, as by suitable electrical conductors 14, to a battery means 16 comprising a source of electrical power for the lamps 12.

As seen best in FIGURES 2-4 the battery means 16

includes two mating housing portions 18 and 20 which in the exemplary embodiment illustrated are sized so as to hold two size AA 1.4 mercury batteries 22 and 24. The housing portion 20 has a centrally disposed inwardly projecting longitudinally apertured post 26 adapted to receive a clamping bolt 28 passing through a suitable aperture in the end wall of the housing portion 18 and threadably or otherwise suitably fastened within the post 26 so as to releasably secure the housing portions 18 and 20 in the relationship shown. The battery means 16 further includes a support means comprising a comb 30, such as formed of metal or plastic or the like secured to the housing portion 18 by a suitable fastener means including a threaded bolt 32 passing through a washer 34, suitable apertures in the comb 30 and housing portion 18 and secured, in the relationship best seen in FIGURE 4, by a threadably received nut 36.

The housing portion 20 of the battery means 16 is provided with two apertures as indicated at 38 so as to permit the positive terminals 40 of the batteries 22 and 24 to protrude outwardly therefrom so as to permit a conductive wire 42 to be connected therebetween. The housing portion 18 is provided with two integral negative terminals 44 secured within the end wall thereof in conductive relationship to the negative terminals of the batteries 22 and 24 as seen best in FIGURE 3. The negative terminals 44 are interconnected by a conductive wire 46 and thus it will be appreciated, particularly from a consideration of FIGURE 5, that the battery means 16 is wired in parallel. A single pole switch means 48 is preferably secured to the housing portion 18 on the side opposite that provided with the comb 30 so as to position the switch means 48 in an outwardly disposed position when operatively positioned upon the head as seen in FIGURE 1. One terminal of the switch means 48 is connected to the negative wire 46 by a conductor 50 and the other terminal of the switch means 48 is connected to one end of the connector 14 to which the lamps 12 are connected in series, which connector 14 is connected to the positive wire 42.

As indicated heretofore the form of the invention illustrated is merely exemplary and accordingly it will be understood that numerous of the specific details relative to the construction of the battery means 16 may be modified without departing from the principles of the present invention.

In use, the illuminated hair ornament 10 will be operatively positioned within a woman's coiffure by supporting the battery means 16 within the coiffure by utilization of the comb 30, or another suitable support clip utilized in lieu of the comb 30, and the conductors 14, which preferably comprise relatively fine insulated wires, such as of 28 gauge insulated wire or the like, are selectively positioned within the coiffure with the miniaturized lamps 12 positioned adjacent the outer extremity of the coiffure at desired positions such as illustrated in FIGURE 1. In order to illuminate the lamps 12 it is then merely necessary for the wearer to energize the lamps 12 by actuating the switch means 48 to cause electrical energy to flow from the battery means 16 to the lamps 12 in accordance with the schematic diagram illustrated in FIGURE 5. While the battery means 16 and the lamps 12 have been indicated as having given operating voltages it will nevertheless be appreciated that batteries and lamps of varying operating voltages and light outputs may be utilized.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equiva-

3

lents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

1. An illuminated hair ornament for decoratively enhancing a woman's coiffure comprising battery means, a battery holder having terminals thereon, said holder being adapted to be supported by the coiffure, at least one miniaturized electrical lamp, wires connecting the lamp to the terminals for supplying energizing power to the lamp, the lamp being selectively positioned within the coiffure, the wires being entwined in the coiffure to hide them from view, said battery holder having a comb fastened thereto for effecting support of the holder by the coiffure, and switch means mounted to the holder and connected in circuit with the wires to selectively control current flow to the lamp, the battery holder further including two releasably secured housing portions one portion having an aperture formed in an associated transverse end thereof, a threaded cylindrical projection extending axially inwardly from the second transverse end,

4

a threaded fastener passing through the aperture and received in the projection for retaining the portions in secured relation, the terminals extending outwardly from the transverse ends for connection thereto by the wires.

5

References Cited

UNITED STATES PATENTS

|           |        |                      |           |
|-----------|--------|----------------------|-----------|
| 1,216,929 | 2/1917 | Berliner et al. .... | 240—6.4   |
| 2,510,323 | 6/1950 | Taborski .....       | 240—6.4 X |
| 2,546,945 | 3/1951 | Gaffield .....       | 240—6.4   |
| 2,788,439 | 4/1957 | Hesse .....          | 240—6.4 X |
| 3,383,503 | 5/1968 | Montgomery .....     | 240—6.4 X |

10

NORTON ANSHER, Primary Examiner

15

R. A. WINTERCORN, Assistant Examiner

U.S. Cl. X.R.

240—10, 51

20