April 25, 1950 M. P. GAAB 2,505,537

JUVENILE BEACON HAT

Filed Dec. 17, 1948

FIG. 1.

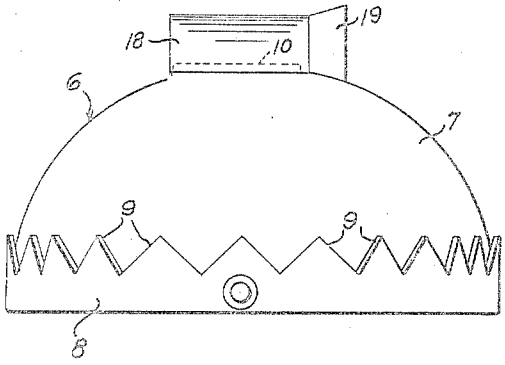


FIG. 2.

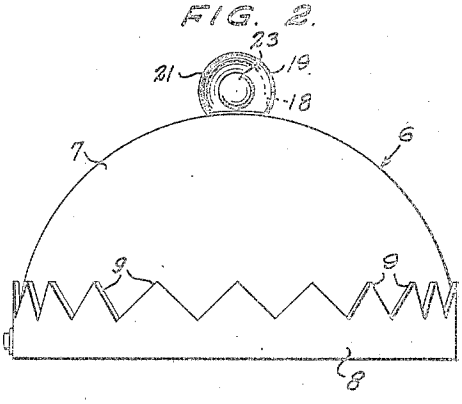


FIG. 3.

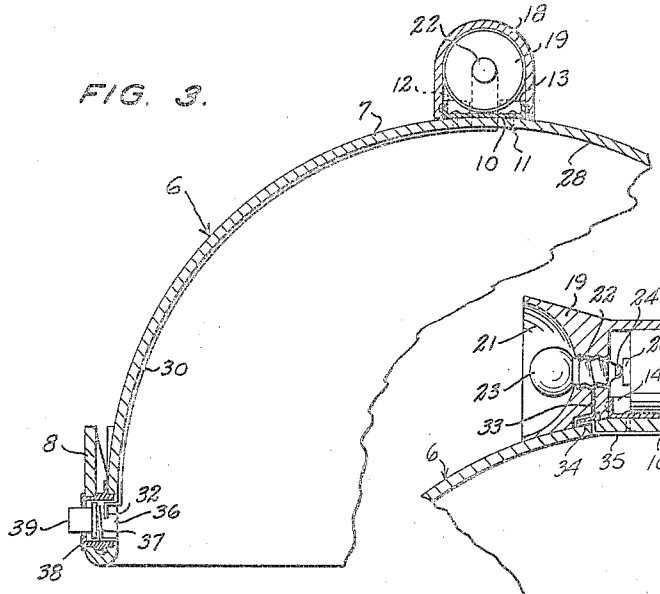


FIG. 4.

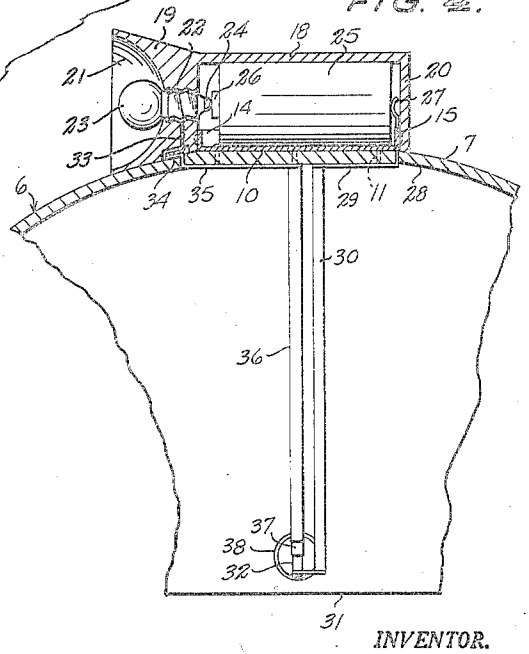
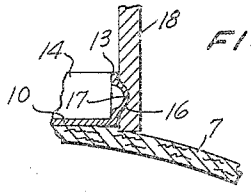


FIG. 5.



INVENTOR.
MATHIAS P. GAAB,
BY
McMorrow, Berman & Davidson
ATTORNEYS.

Patented Apr. 25, 1950

2,505,537

UNITED STATES PATENT OFFICE

2,505,537

JUVENILE BEACON HAT

Mathias P. Gaab, Mandan, N. Dak.

Application December 17, 1948, Serial No. 65,847

2 Claims. (Cl. 240—60)

1

This invention relates to hats and caps of the children's play type, and particularly to an illuminated headgear preferably termed a "juvenile beacon hat."

The main object of my invention is to provide a hat for children with means for illuminating the scene before the child wearing the hat, or for signalling by the child at will.

Another object is to mount upon the top of a child's hat a special casing adapted to receive a battery or cell and an electric lamp in the forward portion thereof.

A further object is to mount a readily-accessible switch on the side of the hat connected with the battery in the casing by means of unobtrusive conducting tapes within the hat.

It is also an object to make the battery casing upon the hat small and light weight and detachable for removal of the electric cell therein in convenient manner.

A practical object is, of course, to provide such an illuminated juvenile beacon hat in such simple form as to be reasonable in cost in order to be available to the public and especially to children everywhere.

Other objects and advantages of the invention will appear in further detail as the specification proceeds.

In order to facilitate ready comprehension of this invention for a proper appreciation of the salient features thereof, the invention is illustrated on the accompanying drawing forming part hereof, and in which:

Figure 1 is a side elevation of a juvenile beacon hat made according to the invention and embodying the same in a practical form;

Figure 2 is a front elevation of the same juvenile beacon hat as seen from the right in Figure 1;

Figure 3 is an enlarged fragmentary section taken substantially vertically and centrally in Figure 1 to disclose structural details;

Figure 4 is another fragmentary enlarged section taken substantially vertically and centrally in Figure 2;

Figure 5 is an enlarged fragmentary sectional detail.

In the views the same reference numerals indicate the same or like parts.

For games and play, children frequently require certain equipment which is often meager enough, and when playing various games outdoors, particularly in the twilight and in the dark of early evening, illuminated signals and lights serve various purposes. Flashlights are

2

often bulky and all too easily mislaid, not to mention that they are too expensive to be used by children generally when at play, and even then are not fully satisfactory, but form a limitation on the play.

Upon considering this problem, it has occurred to me that a child's play hat should be available with a small battery and a lamp mounted thereon, with means for illuminating the lamp at will. As a result, I have succeeded in producing a juvenile beacon hat, as already outlined, which will now be more fully described.

Hence, in the practice of my invention, and referring again to the drawing, a child's hat, generally indicated at 6, primarily includes a typical domed portion 7 of felt, cellulosic material, or any material suitable for the purpose having preferably a rim 8 which may be provided with a series of upwardly-extending similar teeth 9, 9, or be formed into a brim of any shape desired. As shown, the hat is of as simple a form as is practicable.

Mounted upon the upper central portion of the dome 7 which serves as the top of the hat is a plate 10 secured by rivets 11 to the crown of the hat and having a pair of side flanges 12 and 13 and front and rear flanges 14 and 15, the plate 10 being substantially rectangular in form and the various flanges 12 to 15 virtually forming a single bounding wall or flange about the four edges thereof.

However, each of the flanges upon plate 10 is provided with outwardly-pressed projections 16, as best seen in enlarged form in Figure 5, adapted to engage in recesses 17 in the interior walls of a casing 18, which is generally of rounded form upon the upper half thereof and substantially rectangular upon the lower portion with one end enlarged at 19, the other end 20 being closed while the enlarged end 19 is provided with a concave reflecting portion 21 and a metal socket 22 for receiving the lamp 23 with its inner central contact 24 directed inwardly of the casing 18. The latter is adapted to hold an electric cell 25 in such position that its center contact or pole 26 is directed forwardly against the center contact 24 of lamp 23, while within the rear end 20 of casing 18 is an upwardly-extending metal lug 27 extending upwardly from the under side 28 of crown 7 of the hat. Upon the mentioned under side 28, the contact lug 27 is continued in the form of a flat metal conductor or ribbon 29 which is directed downwardly along one side at 30 toward the lower edge 31 of the hat, at which

point the band 30 terminates in a switch contact 32.

In the enlarged forward end 19 of casing 18, a conductor 33, preferably in the form of a strip of metal, extends from socket 22 downwardly and makes contact with an exposed end 34 of a second ribbon conductor 35 upon the under side 28 of the hat, the end 34 being extended through the hat to the top thereof into a position exposing it to direct contact with the strip or conductor 33 when the housing 18 is placed in position over plate 10. The conductor 35 is directed downwardly at 36 in general parallelism with the formerly-described conductor 30 and terminates in a second switch contact 37 within a switch casing 38 extending through the upwardly-projecting brim 8 of the hat and through to the interior 28 thereof. In the switch casing 38 is mounted a push button or manually-operable switch member 39 engaging against contact 37 and adapted to bring the same inwardly into contact with the previously-mentioned contact 32 when the circuit of lamp 23 and cell 25 will be closed and the lamp will be illuminated.

When the cell 25 is exhausted, it is a simple matter to lift casing 18 off plate 10 which operation disengages the protuberances 16 on the flanges 13, 14, etc., from the recesses 17 in the walls of casing 18, and the cell 25 may then be removed and replaced by a new cell, merely observing the precautions that the center pole 26 of the new cell engages against the rear center contact 24 of lamp 23 and the rear end of the cell is disposed in position to be engaged with the contact or lug 27 when the casing 18 is replaced in position upon plate 10. It is self-evident that whenever the button 39 is pressed by the child wearing the hat, the lamp 23 will be illuminated for as long or short period as the button remains pressed and intermittent signals may thus be made by lighting and extinguishing the lamp frequently or according to any predetermined code when the children are playing in the twilight or in the dark.

While plate 10 is preferably of metal, the casing 18 and its parts may readily be made of plastic or any other suitable material, and the ribbon conductors 30 and 36, etc., may be made of strip metal, whether or not the same be covered with insulation, as by enameling or covering with paper or fabric, inasmuch as the current is so low that insulation is of secondary importance. On the other hand, some or all of conductors 29, 30, 33, 35 and 36 may well consist of flexible wires enclosed within fabric tape similar to bias tape, which are readily sewed or cemented in place within the hat.

The electric cell 25 forming the source of current for illuminating the lamp 23 has been shown and described as having a center contact 26 which is characteristic of flashlight cells, but this type of cell merely forms a non-limiting example of current source. Instead of cell 25 shown, the type of electric cells used in miniature radios may be used in the casing 18 for the purpose of the invention, if desired, such small radio cells being very light and compact.

Manifestly, variations may be resorted to and parts and features may be modified or used without others within the scope of the invention, as defined in the appended claims.

Having now fully described my invention, I claim:

1. In a juvenile beacon hat, comprising a hat proper having a crown portion, a plate secured upon the crown portion, flange means on the plate, a downwardly-open and hollow battery casing fitting detachably upon the flange means over said plate, said battery casing having a flaring opening in one end with an electric lamp located in said opening and the casing serving to retain an electric cell in effective position to make electrical contact by one pole thereof with a contact on the lamp, a connection to the other contact on said lamp and a further contact to said cell, a pair of conductors leading from the two last-mentioned contacts past the plate down within said hat to one side thereof, and a switch upon said one side of said hat having a manually-operated switch member accessible upon said side of said hat for closing and opening the circuit of said lamp by bringing said conductors together at will.

2. In a juvenile beacon hat, comprising a hat proper having a crown portion, a substantially rectangular plate secured upon the crown portion of the hat, side and end flanges on the plate, locking projections on the flanges, a hollow battery casing having an open bottom adapted to fit exteriorly upon said flanges and having recesses within the open bottom for receiving said locking projections, and a flaring opening in one end of the battery casing for receiving an electric lamp therein, the casing serving to retain an electric cell in effective position to make electrical contact by one pole thereof with a contact on the lamp, a connection in said casing to the other contact on said lamp and a further contact therein to said cell, a pair of flat ribbon conductors leading within said hat from said last-mentioned two connections past the plate down to the side of said hat, and a manually-operated switch connected to said two flat ribbon conductors and having a manually-operable switch member accessible upon said side of said hat for closing and opening the circuit of said lamp by bringing said conductors into and out of contact at will.

MATHIAS P. GAAB.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
897,588	Cogswell et al.	Sept. 1, 1908
1,517,180	Timlin	Nov. 25, 1924
1,749,998	Collins	Mar. 11, 1930
1,914,429	Houlihan et al.	June 20, 1933
2,131,617	Cowden	Sept. 27, 1938