

June 4, 1957

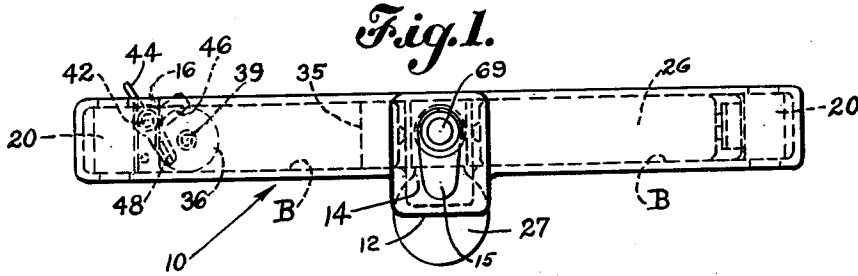
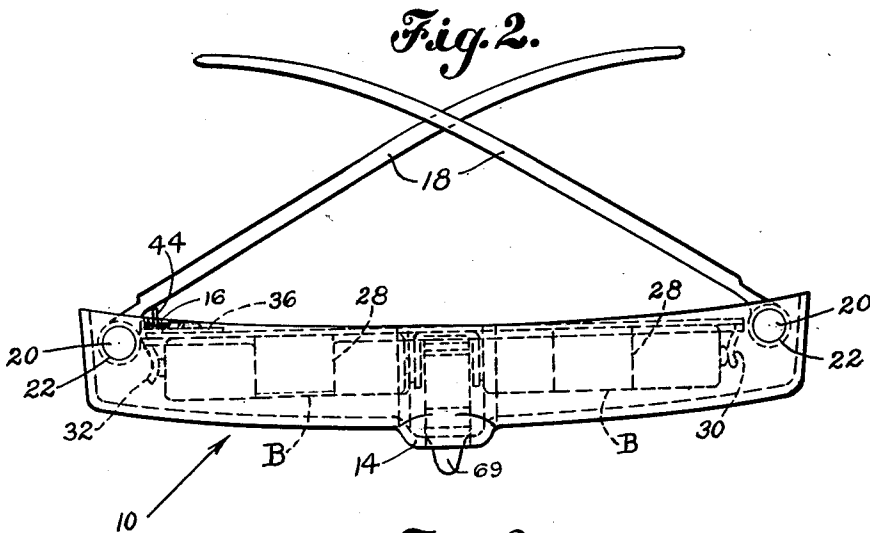
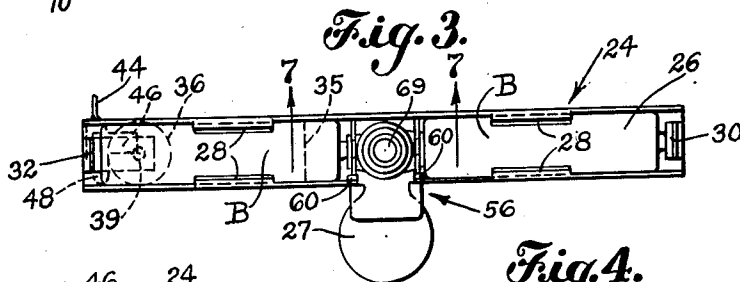
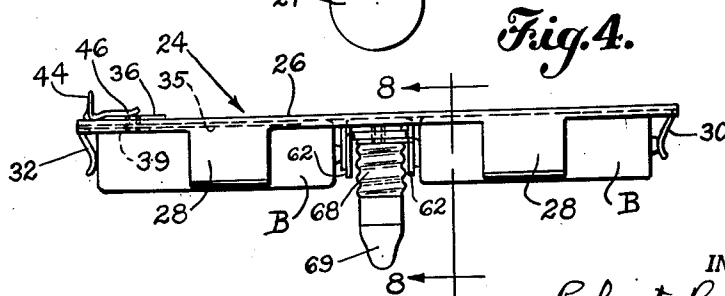
R. P. EVANS

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ILLUMINATING DEVICE ATTACHABLE TO A PERSON'S HEAD

Filed Jan. 5, 1954

2 Sheets-Sheet 1



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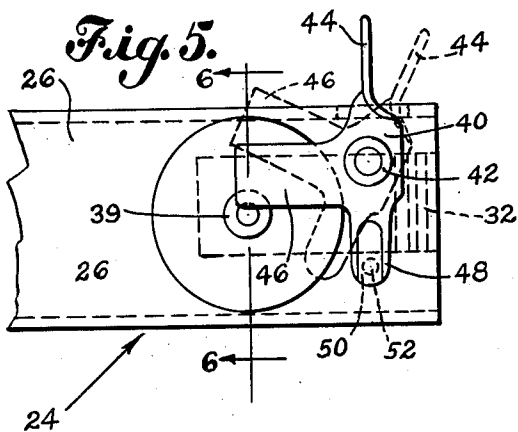
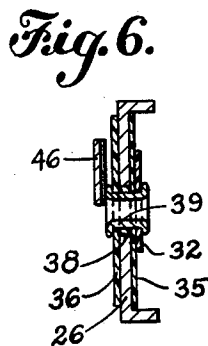
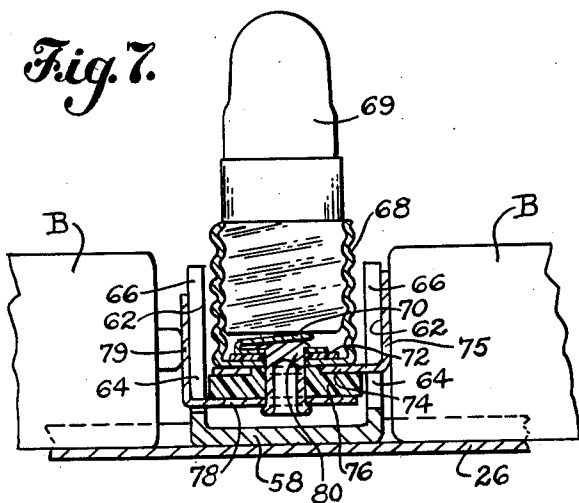
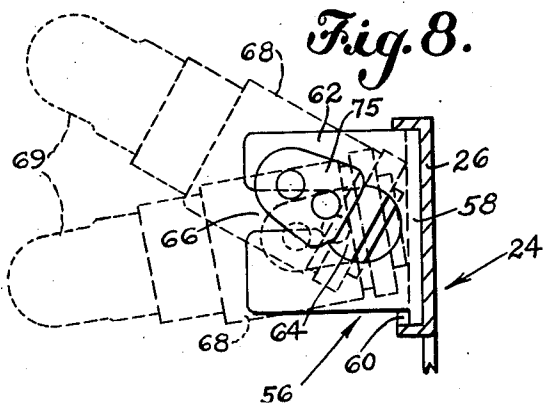
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ILLUMINATING DEVICE ATTACHABLE TO A PERSON'S HEAD

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6 Claims. (Cl. 240—59)

This invention relates to an illuminating device attachable to a person's head.

One object of my invention is to provide an illuminating device which, in use, rests on the forehead or brow, and has a light bulb adjustably mounted so its position can be changed, as for instance, to bring it into the line of vision.

Another object is to provide such a device with mechanism that firmly holds batteries and a bulb in operative position, yet permits their ready removal and replacement.

A further object is to provide such a device formed of parts that can be economically manufactured and assembled, and readily be replaced.

The foregoing and other objects which will appear as the nature of the invention is better understood, may be accomplished by a construction, combination and arrangement of parts such as is disclosed by the drawings. The nature of the invention is such as to render it susceptible to various changes and modifications, and therefore, I am not to be limited to the construction disclosed by the drawings nor to the particular parts described in the specification; but am entitled to all such changes therefrom as fall within the scope of my claims.

In the drawings:

Figure 1 is a front elevational view of my illuminating device.

Figure 2 is a top plan view thereof.

Figure 3 is a front elevational view of the holder and lighting mechanism therein.

Figure 4 is a top plan view of the holder and lighting mechanism therein.

Figure 5 is an enlarged rear elevational view of the electric switch mechanism on the holder, the latter being shown broken away.

Figure 6 is a sectional view taken on the line 6—6 of Figure 6.

Figure 7 is an enlarged sectional view taken on the line 7—7 of Figure 3.

Figure 8 is an enlarged sectional view taken on the line 8—8 of Figure 4.

As illustrated, I provide a housing 10 having an offset portion 12 providing an offset chamber or cavity in a lower wall of said housing. A bulging portion 14 in said housing 10 at the front wall thereof has an opening 15 therein and it provides another offset cavity that communicates with said chamber or cavity in offset portion 12. A slot 16 is provided in a top housing wall to receive part of a switch member later described.

Temples 18 are pivotally attached to said housing 10 at opposite sides by means of integral pin members 20 which movably fit into holes 22 in said housing. These temples serve to hold my device in position on the head although other well known means could serve the purpose.

An electrical assembly supported by said housing includes a holder 24, which may be made of sheet metal having an elongated plate 26 that fits in said housing 10, and it has a centrally located, recessed nose-piece 27 that

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extends below said housing in position of use. Integral with said plate 26 are two pairs of battery retaining clips 28 that are spaced in opposite directions from the center of said holder plate 26. These retaining clips 28, at an intermediate point flare outwardly slightly to aid in retaining, by a friction fit, said holder 24 in said housing 10. At one end of the holder plate 26 is a spring contact member 30 integral herewith, while at the opposite end is a separate, right-angled, spring contact member 32 which is attached by a metal rivet 39 to said holder 24. A thin insulating sheet 35 lies on the surface of the latter while on the opposite surface is an insulating washer 36 having a neck portion 38 which is next to and covered by said sheet 35. Said rivet 39 extends through said washer 36, neck portion 38, holder plate 26, insulating sheet 35 and spring contact member 32, being headed over at opposite ends, and serving as a contact member.

A switch member has a body 40 that is pivotally attached to said holder 24 by a rivet 42. It also has an actuating finger 44, movable by a person's finger that extends through and beyond said housing slot 16, a contact member 46 and a stop member 48 having a recessed portion 50, all of which are integral, since said switch is formed of a single piece of metal. When said switch is in "on" position as shown in said Figure 3, said contact member 46 is on said rivet 39 to thus establish an electrical circuit in the usual way through said contact member 32. In that "on" position said stop member recessed portion 50 rests on a projection 52 on said holder plate 26, which retains it at that predetermined point until forcibly moved therefrom.

A cradle 56 of insulating material with a base 58 is fastened to said holder plate 26 by bent ears 60 integral with the latter. This base 58 extends beyond said holder 24 overlying part of said nose piece 27 and bearing against the rear edge of said offset portion 12. Extending at a right angle to said base 58 at opposite sides thereof are two insulating brackets 62 each having an arcuate slot 64 therein and a slot 66 from an outer extremity communicating therewith.

An electric light socket 68 holds the usual bulb 69 and has an inner contact member 70 inside and an insulating member 72 below it. Outside said socket 68 at the closed end is a pivoting metal contact member in the form of a substantial right angle, one angular part 74 of which underlies said socket 68 and the other angular part 75 provides a pivoting contact with a said cradle bracket 62 at the outside of the latter. Then comes an insulating washer 76, next to and outside of which is another pivoting right-angle, metal contact member, an angular part 78 of which underlies said socket 68 and another angular part 79 of which provides a pivoting contact with the other said cradle bracket 62.

Said contact parts 74 and 78 movably extend into said arcuate slots 64 and 66 in said brackets 62, bearing against the latter. This arrangement provides a pivotal mounting for said socket 68 and the friction contact of said pivoting parts on said brackets 62 holds the socket 68 in whatever position it is moved to, thus enabling one to direct the light from the bulb 69 wherever desired.

Said bulb 69 projects into said opening 15 and beyond said bulging portion cavity 14, and said offset portion cavity 12 also provides ample space for any desired pivoting movement thereof. A contact member 80 extends through said contact parts 74 and 78 and said insulating washer 76, and enters said socket 68, contacting said inner contact member 70. Said insulating washer insulates said member 80 from said part 74.

Batteries B are held to said holder 24 by said retaining clips 28, being positioned to make the desired contacts with said pivoting contact parts 75 and 79 and said spring

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contact members 30 and 32, as illustrated in Figures 3 and 4 of the drawings.

When said switch contact is moved to "on" position, an electrical circuit is established in the usual way.

What I claim is:

1. An illuminating device to be worn on the head, comprising an elongate housing, temples connected thereto, said housing having a front wall and a lower wall, the latter having a downwardly extending offset forming a chamber, said front wall having an opening in communication with said chamber, and an electric light assembly fitted in said housing embodying a pivotally mounted electric light socket for a light bulb, said socket having electrical contact means maintained in electrical connection with a source of electricity in all pivotal positions, said chamber permitting pivotal movement of a said bulb, said assembly having supporting means for a battery to provide a source of electricity.

2. An illuminating device as defined in claim 1 in which the assembly includes a cradle having brackets, and said contact means embodies two parts, each part having portions at an angle to each other, one portion of each part being pivotally mounted in one of said brackets and the other extending outside said one bracket to provide said electrical connection.

3. An illuminating device as defined in claim 1 in which the assembly includes a cradle having two brackets at opposite sides thereof, and said contact means embodies two right-angled members, one part of one of said members being pivotally mounted in one of said brackets and another part thereof extending outside said bracket to provide a said electrical connection, one part of the other said right-angled member being pivotally mounted in the other said bracket and another part thereof extending outside said other bracket to provide another said electrical connection.

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4. An illuminating device as defined in claim 3 in which portions of said two pivotally mounted parts are directly below said socket, and including an insulating member between said two latter portions.

5. An illuminating device as defined in claim 1 in which said battery supporting means has two retaining clips opposite each other to hold a said battery and having compressible portions spaced apart a distance farther than the interior width of said housing and being adapted to enter said housing interior when compressed and to frictionally fit therein.

6. An illuminating device as defined in claim 3 in which said battery supporting means has two retaining clips opposite each other to hold a said battery at one side of said socket and two retaining clips opposite each other to hold a said battery at the opposite side of said socket, said clips having compressible portions spaced apart a distance farther than the interior width of said housing and being adapted to enter said housing interior when compressed and to frictionally fit therein, said battery supporting means embodying a switch and spring contacts, said right-angled members adapted to bear against batteries supported by said supporting means, and supporting means providing electricity conducting means attached to and electrically connecting said spring contact members, said switch engaging one of said batteries and being movable into and away from contact with said latter means.

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