

[54] FLASHLIGHT ATTACHMENT CLIP FOR SPECTACLES

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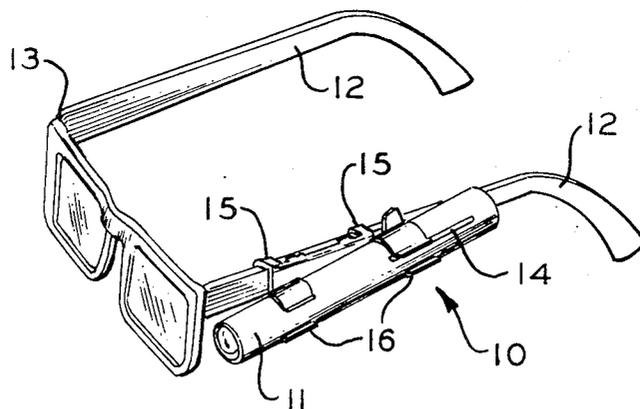
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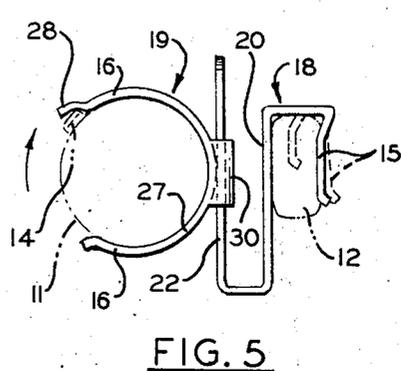
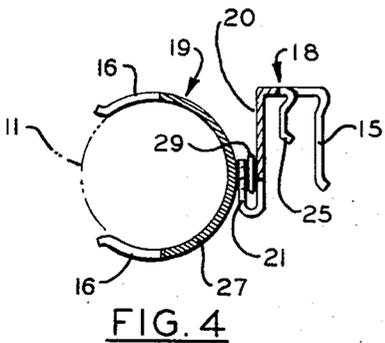
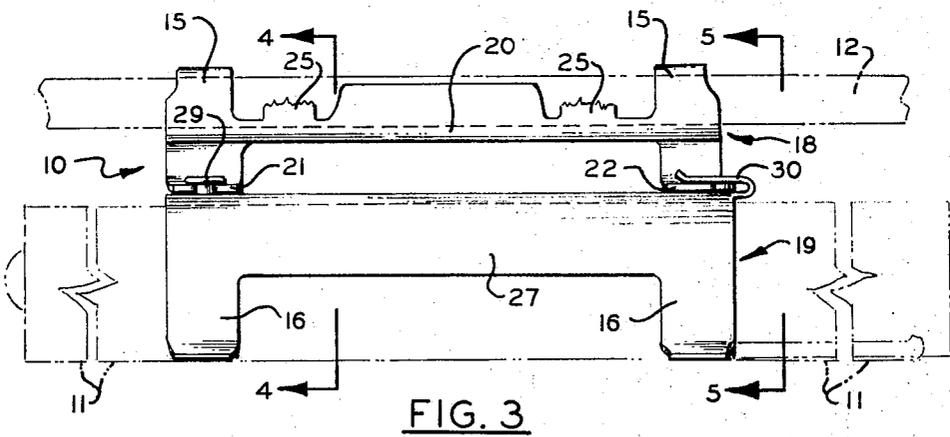
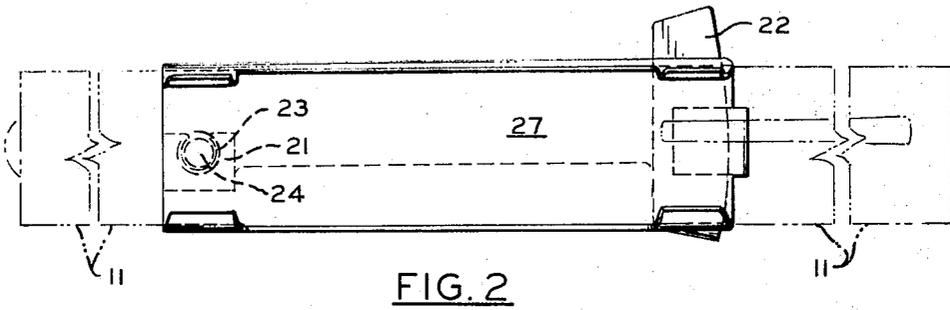
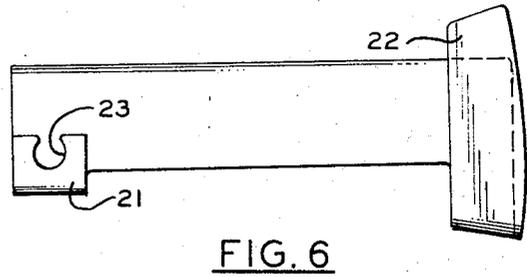
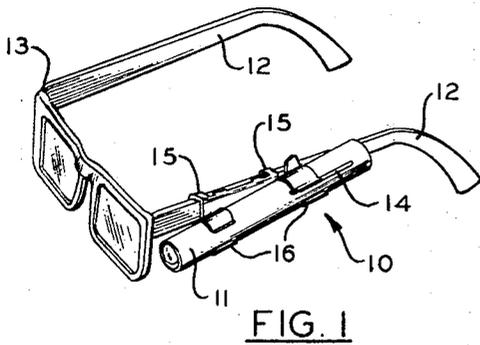
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[57] ABSTRACT

A clip for attaching a small flashlight to one of the temples of a spectacle frame is made in two parts, one part being adapted to be mounted on a spectacle temple and the other part supports a small penlight. The first part has a temple-engaging portion and two clips projecting therefrom to closely embrace a temple. The light support part has a light-engaging portion having two pairs of substantially semicircular spring arms for embracing the substantially round penlight and has a projecting headed stud at one end adapted to be engaged in a supporting socket which is supported by the temple-engaging portion. The light-engaging portion has a spring-tongue bent back against itself adapted to adjustably and frictionally engage a vertically disposed projection supported by the temple-engaging portion. When the flashlight used has a pocket clip switch adapted to turn the light on when pressed, the light may be controlled by turning it in the encircling spring arms to depress the clip switch.

3 Claims, 6 Drawing Figures





## FLASHLIGHT ATTACHMENT CLIP FOR SPECTACLES

### BACKGROUND OF THE INVENTION

This invention relates generally to illumination devices and more particularly it pertains to a two-part clip adapted to support a penlight secured to a spectacles temple, the penlight being angularly adjustable.

Clips for securing flashlights to various articles of clothing have heretofore been known and various forms of means for carrying a head lamp attached to the wearer's spectacles have also been known. Such spectacle-attached lamps have been complicated devices built into the spectacle frame or difficult to install and remove and have been unduly expensive.

For hospital personnel, and others who must adjust complicated equipment in badly illuminated places, there has long been a need for such a light which is easily installed on spectacle frames, which is light in weight, economically made, and easily adjustable to focus the light on an area in front of the eyes while leaving the hands free.

### SUMMARY OF THE INVENTION

Small, lightweight flashlights, known as penlights, are now readily available and this invention contemplates clip means for securing such a penlight to one of the temples of a spectacle frame. When the light is substantially aligned with the temple, light is directed on an area in front of the wearer's eyes.

A two-part clip is provided with provision made for angularly adjusting the beam of light from the penlight up or down. One part, the clip part, has a portion adapted to lie along and contact the temple and has a pair of clips projecting from this portion adapted to overlie the temple and which are then bent downward to embrace the temple. Two pairs of clips are provided, one pair sized to embrace a relatively narrow metallic temple. These clips can be deformed or broken off and another larger pair of clips is integrally provided to embrace a comparatively wider temple of plastic material.

The clip part is provided with a bent-up flange spaced from the temple contacting portion having an upwardly opening socket therein. Another bent-up longer flange is also spaced from the temple contacting portion to provide for the vertical adjustment of the beam of light.

The second part of the two-part clip, the light support, has a light-contacting portion which is arcuate in cross section and adapted to contact the central portion of the penlight. A pair of opposite arms at each end of the light-contacting portion project therefrom. These arms are arcuate, like the light-contacting portion, and are of such length as to encircle more than half the perimeter of the penlight so that the penlight may be forced therebetween to be therein frictionally secured.

At one end the light-contacting part has a headed stud projecting therefrom adapted to be pivotally engaged in the flange socket of the clip part. At its other end, the light-contacting portion has a spring tongue bent back therealong and the longer flange of the clip part is adapted to be frictionally engaged between the spring tongue and the light-engaging portion of the second part. This second part, therefore, is adapted to be angularly adjusted with respect to the temple by sliding the spring tongue up or down on its engaged longer clip flange.

When the penlight has an on and off switch operated by the penlight pocket clip, the light may be placed in its support part so that rotation of the pen in its support forces the pocket clip against one of the arcuate arms so that the pocket clip is pressed against the penlight turning the latter on.

### BRIEF DESCRIPTION OF THE DRAWING

FIG. 1 is a perspective view of an attachment clip embodying the invention, securing a penlight to one of the temples of a pair of spectacles;

FIG. 2 is an enlarged side elevational view thereof the penlight being shown fragmentarily and in phantom lines;

FIG. 3 is a plan view of the parts shown in FIG. 2, the pair of clips provided for metallic temples being shown broken off and the penlight and temple being shown fragmentarily and in phantom lines;

FIG. 4 is a sectional view thereof on the line 4—4 of FIG. 3 the penlight being shown in phantom lines;

FIG. 5 is an end view thereof as viewed in the direction of the arrows 5—5 of FIG. 3 the penlight and temple being shown in phantom lines; and

FIG. 6 is a side-elevational view of the temple-engaging part of the clip.

### DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to FIG. 1, a clip device 10 is shown supporting a penlight 11 on one of the temples 12 of a pair of spectacles 13. The temples 12 are shown as of the "tortoise shell" or plastic type and the penlight has a pocket clip 14 forming part of the on-off switch for the light, as is usual.

Two clip arms 15—15 project out from a portion of clip 10, overlie the temple and are bent sharply down around the temple to secure clip 10 to temple 12. Two other pairs of arms 16—16, arcuate in cross section, project in the opposite direction for partially encircling the light 11, as shown.

To obtain angular adjustment of the light 11, the clip device 10 is made in two parts, the temple-engaging part 18 and the light-engaging part 19, best seen in FIG. 3.

Portion 18 has a substantially flat body strip 20 adapted to lie alongside the temple 12, as shown in FIGS. 4 and 5, from which the clip arms 15 project to overlie and partially encircle the temple. At each end the body strip has a flange projecting downward, then outward and then struck upward to terminate in a smaller flange 21 at one end and a longer flange 22 at the other.

Flange 21 has an upwardly opening slot or socket hole 23 therethrough adapted to pivotally receive a stud from part 19. Flange 22 is flat and is adapted to be frictionally engaged by a clamp at the end of part 19.

To provide for engagement with relatively thin metal temples two additional smaller clip arms 25—25 project from the body 20 between arms 15—15 to overlie a thinner metal temple and are struck downward to contact the inner surface of the metal temple. As shown in FIG. 4 the arms 25—25 are spaced more narrowly from the body 20 than the arms 15—15.

When the clip device 10 is used with a comparatively thicker plastic temple the arms 25—25 can be bent upward or broken off, as shown in FIG. 3.

The penlight supporting part 19 has an elongated body 27 substantially semicircular in cross section, as shown in FIG. 4, with the pairs of arcuate arms extending at either end as clip extension arms 16. At least one of the arms 16 at one end preferably may terminate in a camming lug 28 extending at an angle away from the penlight 11 gripped by arms 16 from its point of tangency thereto so as to be adapted to cam the end of the pocket clip 14 against the penlight to turn it on when the penlight is rotated, as shown in broken lines in FIG. 5.

One end of the light-contacting body 27 is provided with a headed stud 29, as shown in FIGS. 3 and 4, which may be snapped into pivotal engagement with the socket hole 23 through the narrowed hole opening at the top of flange 21. The other end of the body 27 has a tongue 30 bent back on itself, as shown in FIG. 3, to form a clamp to frictionally engage the longer flange 22 of part 18. It will be apparent that the clamp formed by tongue 30 may be raised and lowered along the flange 22 to adjust the angle of the penlight up or down.

Parts 18 and 19 are preferably of a spring-like material so that arms 15,16 and 25 and tongue 30 are resilient, as indicated in broken lines in FIG. 5 for the arm 15.

It will now be apparent that part 18 may be quickly secured to temple 12 and part 19 to penlight 11. Part 19 then may be quickly secured to part 18 and, after the spectacles 13 are in place, the angle of the penlight may be adjusted and the penlight turned on and off by rotation.

I claim:

1. A clip of resilient material for supporting a penlight alongside of a spectacle temple, comprising a first temple-engaging part and a second penlight-engaging part, the first part having a substantially flat body portion adapted to lie alongside and contact one side of the temple, at least two flat arms projecting from the body portion and adapted to overlie the temple, the ends of the arms being bent sharply downward to engage and grip the other side of the temple, the second part having an arcuate body portion adapted to conform to and lie in contact with a substantially semicylindrical portion of the penlight, a pair of opposite arcuate arms at each end of the arcuate body portion adapted to embrace and grip therebetween a further portion of the perimeter of the penlight, the first part having a relatively short upturned flange at one end spaced from the flat body portion and having a socket hole therethrough, the second part having a cooperating headed

stud for pivotal engagement in the socket hole, the first part having a relatively longer flat upturned flange at its other end spaced from the flat body portion, and the second part having a cooperating tongue bent back on itself for frictional engagement with the longer upturned flange, whereby the second part may be angularly adjusted with respect to the first part for adjusting light from the penlight up and down.

2. In combination, a spectacle frame having temples, a lightweight penlight having a switch including a pocket clip, the switch being turned on when the pocket clip end is pushed against the penlight, and a two part clip of resilient material, the first part having an elongated flat body portion adapted to lie along one side of a temple in contact therewith, the first clip part having at least two flat arms adapted to overlie the temple, the ends of the arms being bent sharply downward to engage and grip the other side of the temple, the second clip part having an arcuate body portion adapted to conform to and lie in contact with a substantially semi-cylindrical portion of the penlight, the arcuate body portion having a pair of opposite arcuate arms at each end adapted to embrace and grip therebetween a further portion of the perimeter of the penlight, the first part having a relatively short upturned flange at one end spaced from the flat body portion and having a socket hole therethrough, the second part having a cooperating headed stud for pivotal engagement in the socket hole, the first part having a relatively longer flat upturned flange at its other end spaced from the flat body portion, and the second part having a cooperating tongue bent back on itself for frictional engagement with the longer upturned flange, and at least one of the arcuate arms of the second part terminating in a portion projecting angularly away from the penlight from its point of tangency thereto when the penlight is engaged between the arcuate arms with its pocket clip aligned with the portion projecting away from the penlight, whereby the pocket clip is cammed against the penlight for turning it on when the penlight is rotated.

3. The combination of spectacle frame, penlight and two part clip defined in claim 2 having two pairs of flat arms, a first pair of flat arms having bent down ends spaced relatively narrowly from the flat body portion for gripping a comparatively narrow temple of metal, and a second pair of flat arms having bent down ends spaced relatively wider from the flat body portion for gripping a comparatively wider temple of plastic material, whereby the first pair of arms may be removed when the clip is used with a plastic temple.

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