

[54] FLASHLIGHT HOLDER

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[51] Int. Cl. F21I 15/16
[58] Field of Search....248/205 A, 205 R, 206 A, 206
R, 248/224; 211/DIG. 1; 240/52.15, 52.5;
24/201 B

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[57] ABSTRACT

A holder for a flashlight and the like comprising a per-
manent magnet on the flashlight body and a magneti-
cally attractable bracket having a base with a resilient
pad and having an adhesive backing adapted to adhere
the bracket, preferably in an upright position, to an as-
sociated support structure, the bracket having a
peripheral flange along its upright lateral sides and
along its bottom edge guiding the magnet and prevent-
ing it from gravitating out of the bracket from vibra-
tions ungendered in the supporting structure which
may be the frame of an automobile. The pad serves to
absorb contact shocks to preserve the magnet and to
absorb vibrations.

7 Claims, 5 Drawing Figures

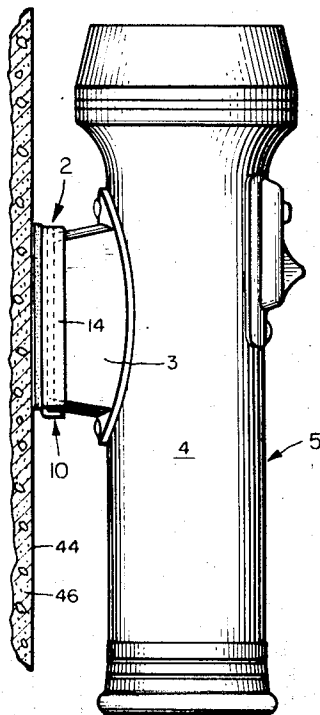


FIG. 1

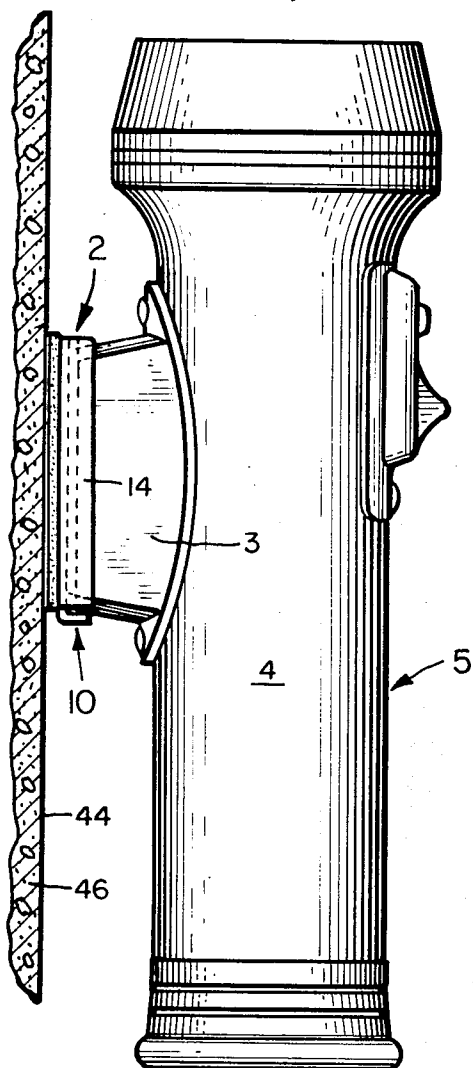


FIG. 3

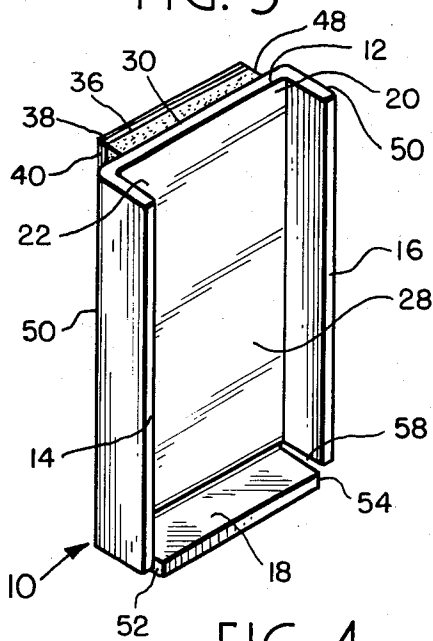


FIG. 4

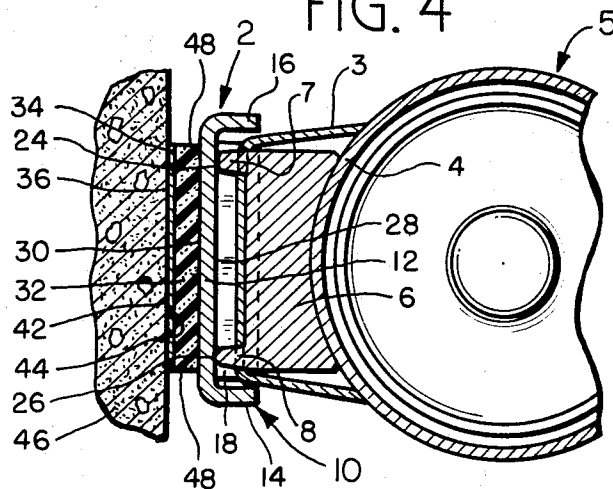


FIG. 5

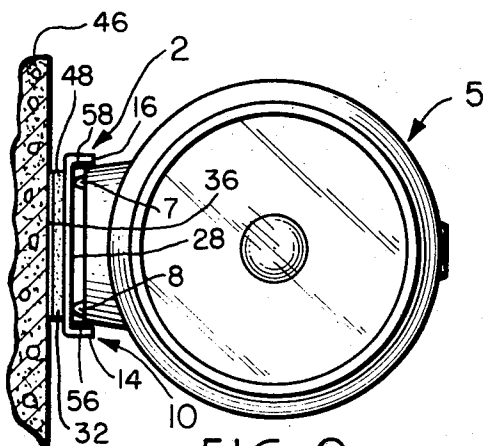
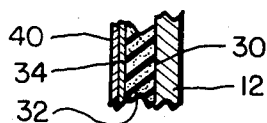


FIG. 2

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FLASHLIGHT HOLDER

BACKGROUND OF THE INVENTION

The use of magnets to support various objects is well known. However, several serious objections arise. The adherence of a magnet to a susceptible metal portion of a support is frequently in an undesirable location, or the adherence is such that vibrations tend to loosen the hold and the object being supported gravitates or shifts its position to a location where it is eventually jarred loose. If the hold is adequate then the article is difficult to dislodge and on painted areas the sliding of the magnet causes the paint to be scratched. Frequently the location where the user would prefer to mount the light does not have a magnetically attractable surface. Furthermore, frequently contact and separation causes the magnet to lose its magnetism.

SUMMARY OF THE INVENTION

The invention is directed to a novel mounting bracket which has a base with an adhesive applied thereto and sealed from the atmosphere by a peelable overleaf. The overleaf is adapted to be removed to expose the adhesive, which then is pressed against the intended support surface, which may be material or metal of magnetizable or non-magnetizable characteristics. The bracket is of magnetically attractable material and has a peripheral flange on three sides and an opening on the remaining side to permit ingress and egress of the magnet on the light etc.

The flange serves to prevent the magnet from drifting off the base due to vibrations and holds the article in intended position.

A general object of the invention is to provide a novel guide bracket which is easily attached to associated supporting structure.

A further object is to provide a novel bracket and magnet support assembly wherein the bracket provides means for preventing accidental release of the magnet from the bracket.

Another object is to provide a novel bracket and magnet assembly in which means are provided for facile permanent mounting of the bracket and wherein the release of the magnet from the bracket when desired by the user is simplified.

A still further object is to provide a mounting bracket which has a sponge rubber backing to minimize impact shocks.

These and other objects and advantages inherent in and encompassed by the invention will become more readily apparent from the specifications and the drawings wherein

FIG. 1 is a side elevational view of the novel bracket and flashlight assembly;

FIG. 2 is a top view of the structure of FIG. 1;

FIG. 3 is a perspective view of the bracket;

FIG. 4 is an enlarged cross-sectional view of the bracket and light;

FIG. 5 is a fragmentary sectional view of a portion of the backing.

DESCRIPTION OF THE INVENTION

Describing the invention in detail, the mounting assembly generally designated 2 comprises a stand-off bracket 3 which is affixed to the side of a body 4 of a

flashlight generally designated 5. A permanent magnet 6 is secured to the body by the bracket and comprises a pair of laterally spaced outwardly projecting contacts 7 and 8.

The magnet is preferably rectangular and fits into a rectangular bracket 10 which is made of magnetically susceptible material such as steel. The bracket is a rectangular structure comprising a flat base wall 12 which is encompassed by laterally spaced side flanges 14, 16 and a bottom flange 18 forming a pocket for receiving the magnet therein. The upper edge 20 of the bracket provides a passageway 22 for egress and ingress of the magnet to facilitate mounting and demounting of the light. This entryway 22 allows the user to slide the magnet with the light upwardly for easy removal and to bring the magnet into the pocket downwardly without excessive shock. The magnet in holding position adheres as at 24 and 26 to the outer flat face 28 of the base wall 12 as best seen in FIG. 4.

The inner or rear face 20 of the base wall is secured by any suitable adhesive to one side or front face of a pad or wafer 32 of soft elastomeric material such as sponge rubber or polyurethane which serves as a stand-off of shock and vibration absorbing means. The rear face 34 of the pad is coated with a fast drying pressure sensitive adhesive layer 36 which has its external contact face 38 sealed by a backing sheet 40 of paper or plastic which is adapted to be peeled off to expose an adherent surface 42 on the adhesive for application to any support surface as 44 of a support structure 46. The adhesive provides a permanent bond of the pad to the support surface.

In use the pad serves to absorb vibrations to inhibit the magnet from being shaken off the contacting surface. In the event the magnet does slide down, the bottom flange 18 functions as a stop. In removing and applying the magnet to the bracket the user moves the magnet through the upper passageway and thus slides the magnet onto and off the base wall. The attraction of the magnet and base wall to each other is accommodated by the tensile loading (stretch) of the pad transversely of the base wall so that the shock blows between the magnet and the base wall are modulated to an acceptable level such as will not destroy the magnetic qualities or flux density of the magnet. The pad also functions in compression to absorb the shocks attendant to the magnet being applied directly to the bracket to clamp thereto.

The pad is also loaded in shear in supporting the light and when it is removed or inserted into the pocket through the upper end passage. It will be noted that the edges 48 of the pad are offset inwardly from the edges 50 of the bracket to enhance coating of the bracket during application and removal of the light to inhibit tearing of the pad. The side flanges 14 and 16 are spaced outwardly of the ends 52 and 54 of the flange and defuse dirt sifting slots 56 and 58 therewith.

Thus a novel and effective mounting assembly has been provided of excellent longevity and which is functional and easy to use.

I claim:

1. In combination a separable and connectible mounting and a structure to be supported by said mounting having a magnet thereon, a bracket comprising means for attracting and holding said magnet

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thereto, a pad of elastomer material secured to the bracket, means for securing the pad to an associated support, said pad being flexible and composed of soft sponge-like material and effective to absorb contact shocks of the magnet engaging said attracting means to inhibit disorientation of magnetic properties of the magnet to maximize the longevity of said properties, and said bracket being made of magnetically susceptible metal and providing a flat external face for adherence by said magnet thereto, and peripheral upstanding flange means on said bracket about the periphery of said face providing an abutment to prevent the magnet from sliding off said face, and means providing a passage for the magnet through said flange means.

2. The invention according to claim 1 and said securing means comprising a quick-setting pressure sensitive adhesive.

3. The invention according to claim 1 and said pad having marginal edges offset inwardly from corresponding edges of said bracket for enhancing canting movements of the bracket with respect to the pad.

4. The invention according to claim 2 and a protective backing sheet covering said adhesive serving as a

barrier to the exposure of said adhesive to air and adapted to be peeled off to expose said adhesive for application to the support.

5. The invention according to claim 1 and said pad being offset inwardly of said slots.

6. The invention according to claim 5 and said vertical flanges defining an entry and exit passage for the magnet for sliding the same onto and off said base and said pad providing a stand-off mounting for the bracket with respect to the support and accommodating canting of the bracket attendant to the magnet being positioned adjacent to the entry and exit passage to facilitate application and removal of the magnet with respect to said base.

7. The invention according to claim 1 and said bracket adapted to be vertically mounted and being substantially rectangular and said face comprising a base wall and said flange means comprising a side flange along each vertical edge of the wall and a bottom flange along the lower edge of the wall and having ends spaced from the bottom ends of said side flanges and defining debris discharge slot therebetween.

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