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(54) **SIGHT TRAINING AID ATTACHMENT**

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(57) **ABSTRACT**

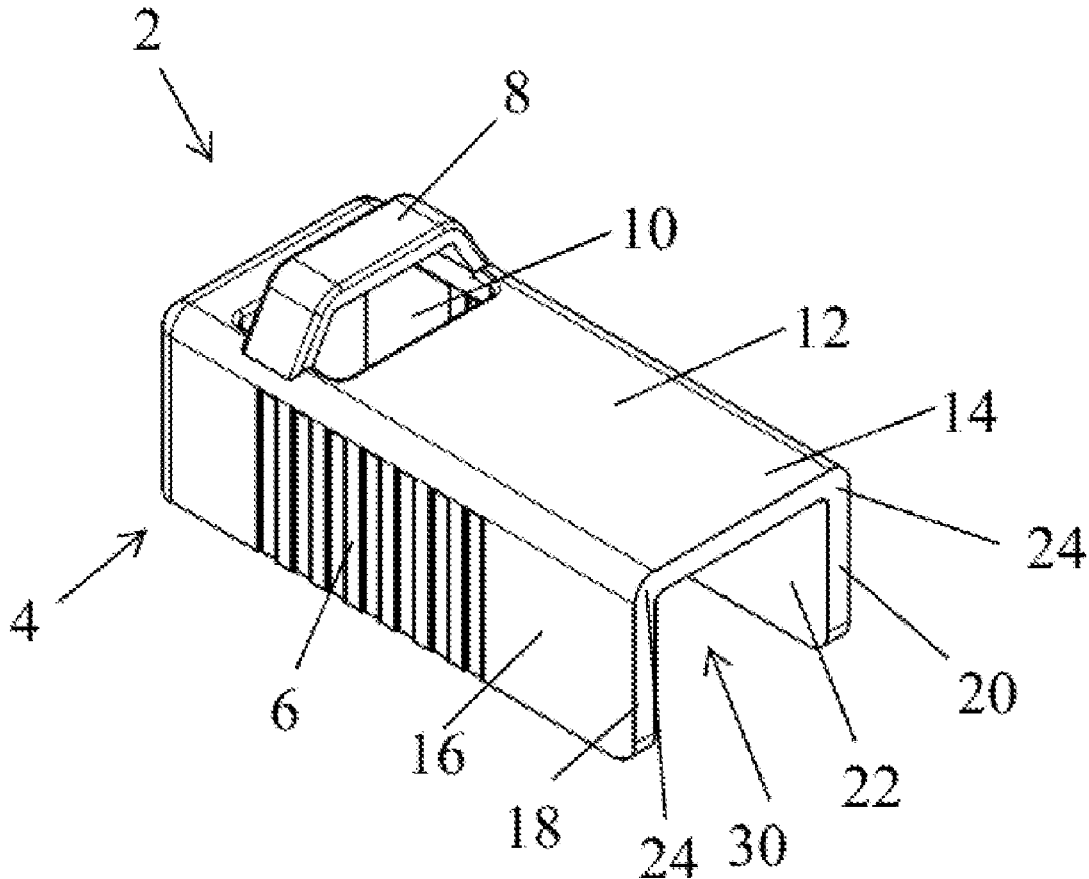
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When a firearm user aims down the slide of semi-automatic handgun needs to align the front sight between the two posts of the rear sight. This is the hardest thing for an instructor to correct not being able to see what the student is looking at. This aid will provide a reference point for the shooter to keep the front sight below, this helps promote proper sight acquisition. This is a hood that slides over top of the rear sight and over the slide. The shooter is able to shoot with this aid on the firearm.

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Related U.S. Application Data

(60) Provisional application No. 62/651,779, filed on Apr. 3, 2018.



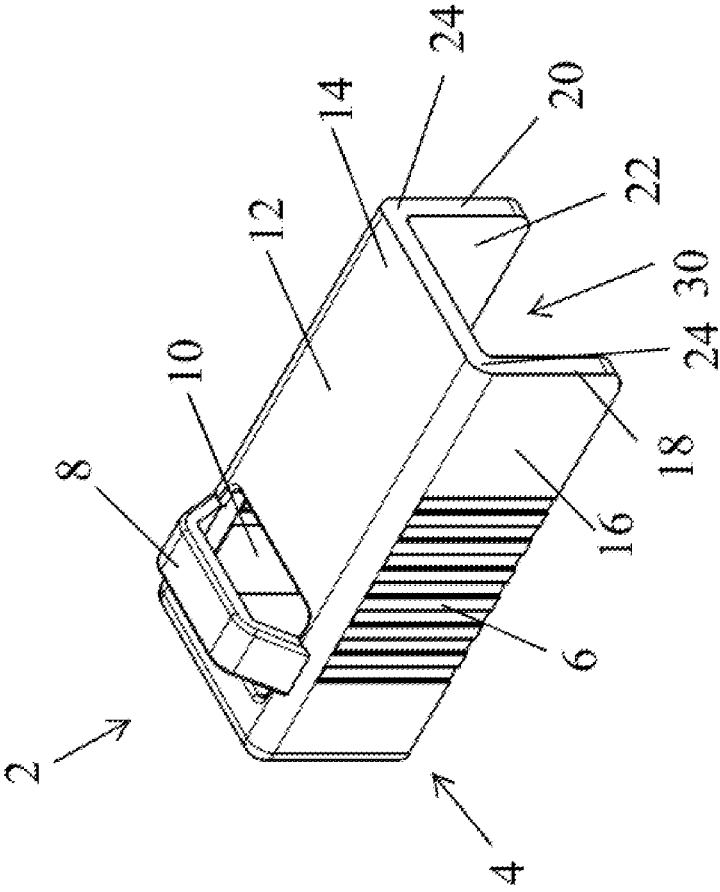


Fig. 1

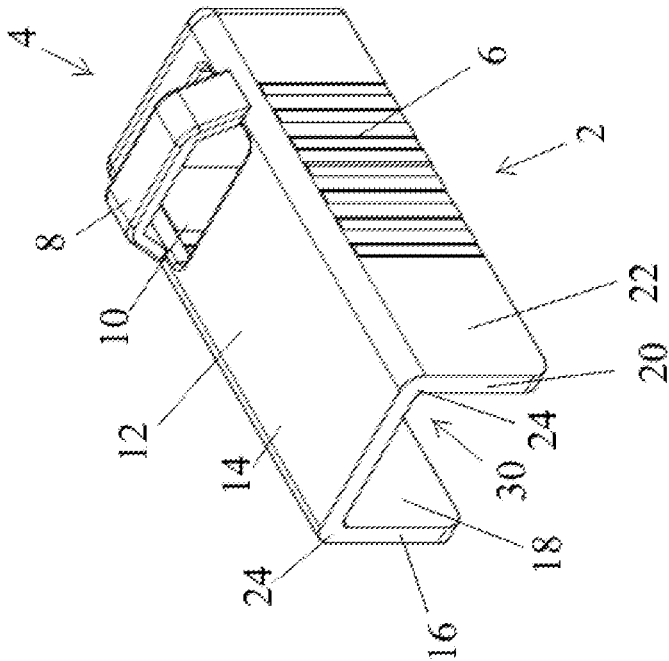


Fig. 2

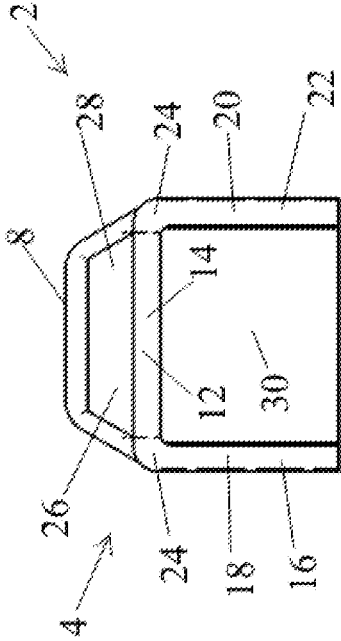


Fig. 3

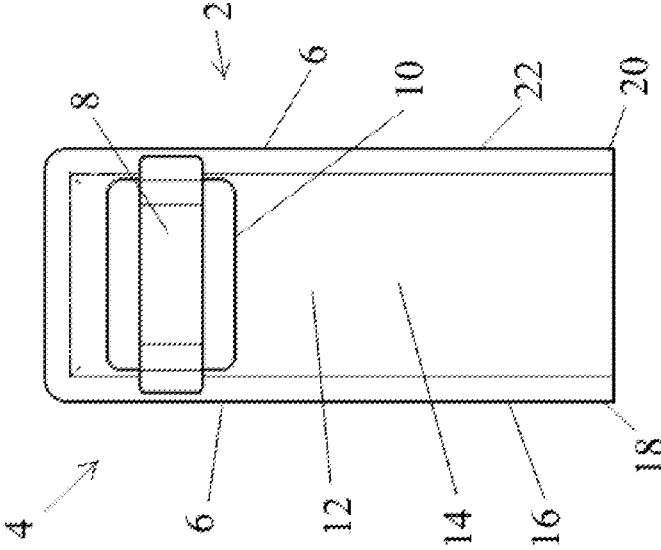


Fig. 4

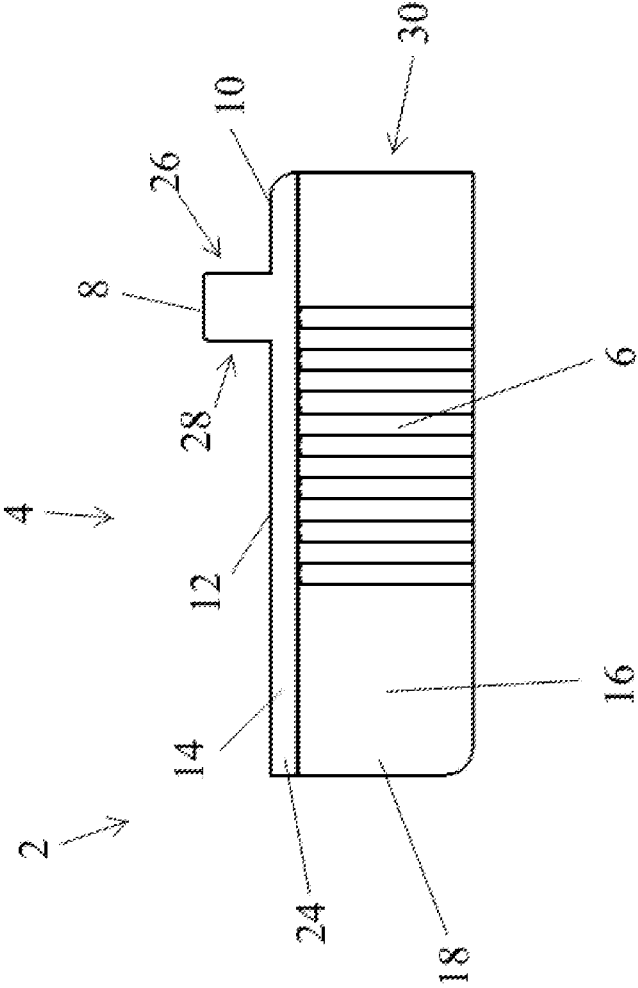


Fig. 5

SIGHT TRAINING AID ATTACHMENT

CROSS-REFERENCE

[0001] This application claims the benefit of U.S. Provisional Application No. 62/651,779, filed Apr. 3, 2018, which application is incorporated herein by reference.

BACKGROUND OF THE INVENTION

[0002] Using a firearm is an acquired skill that requires an understanding of how a firearm operates. Fundamentals like loading, unloading, aiming and firing. One of the most important aspects of using a firearm is learning how to use a sight properly.

[0003] A typical fire arm sights consists of two basic components, a rear sight and a front sight. On most firearms, the rear sight includes a notch while the front sight includes a riser. A properly aimed sight occurs when the firearm is oriented such that the front riser is lined up evenly in the horizontal axis within the notch and the tip of the riser is level with the tip of the notch. In such a configuration, the projectile's trajectory will be towards wherever the front and rear sight are fixed upon.

[0004] A common error is to align the rear sight lower than the front sight, thereby firing high of the intended target. Different types of rear sights have been made in order to address this common issue. For example, scopes, reflex sights, laser sights, and the like are commonly used. While these help novice users acquire the target properly but they do not instill the proper fundamentals into the novice user. These known devices are also expensive and are not simple to attach to hand-held firearms sometimes requiring modification to the firearm.

[0005] What is therefore needed is a sight training aid for a firearm that assists novice users develop proper sight fundamentals. What is also needed is a sight training aid that is easily attachable to the firearm. Additionally, what is needed is a low-cost sight training aid that is simple to manufacture. Finally, what is needed is a sight training aid that may be attached to a multitude of different firearms without modification to the firearm.

SUMMARY OF THE INVENTION

[0006] A firearm rear sight attachment includes a removable attachment configured for engagement with a firearm. The attachment is semi-permanently attached to the firearm with a frictional or adhesive engagement.

[0007] The attachment comprises of a first leg that forms one side of the attachment and a second leg that forms the opposite side of the attachment. The first leg and the second leg are connected by a surface that forms the third side of the attachment. A slot is formed between the first, second and third sides where the firearm slide is inserted in order to attach the training aid to the firearm. A window is formed on a portion of the third surface through which the rear sight passes when the attachment is secured to a firearm.

[0008] A hoop is formed by a projected connection of the first and second legs of the attachment over the window. This hoop at least partially covers the area above the window and forms a tunnel along the longitudinal axis of the firearm. The hoop of the attachment is in contact with at least some portion of the rear sight so that the user has to correctly align the front and rear sight to view through the tunnel of the

attachment. The attachment thus compels the user to correctly use the front and rear sights of the firearm.

INCORPORATION BY REFERENCE

[0009] All publications, patents, and patent applications mentioned in this specification are herein incorporated by reference to the same extent as if each individual publication, patent, or patent application was specifically and individually indicated to be incorporated by reference.

BRIEF DESCRIPTION OF THE DRAWINGS

[0010] The novel features of the invention are set forth with particularity in the appended claims. A better understanding of the features and advantages of the present invention will be obtained by reference to the following detailed description that sets forth illustrative embodiments, in which the principles of the invention are utilized, and the accompanying drawings of which:

[0011] FIG. 1 is an illustration of a raised, left side perspective view of a sight training aid attachment.

[0012] FIG. 2 is an illustration of a raised, right side perspective view of a sight training aid attachment.

[0013] FIG. 3 is an illustration of the rear view of a sight training aid attachment.

[0014] FIG. 4 is an illustration of the top view of a sight training aid attachment.

[0015] FIG. 5 is an illustration of the side view of a sight training aid attachment.

DETAILED DESCRIPTION OF THE INVENTION

[0016] While preferred embodiments of the present invention have been shown and described herein, it will be obvious to those skilled in the art that such embodiments are provided by way of example only. Numerous variations, changes, and substitutions will now occur to those skilled in the art without departing from the invention. It should be understood that various alternatives to the embodiments of the invention described herein may be employed in practicing the invention. It is intended that the following claims define the scope of the invention and that methods and structures within the scope of these claims and their equivalents be covered thereby.

[0017] Referring to FIGS. 1-5, the training aid (2) is shown. The training aid (2) is also an attachment 4 designed to interlock with any firearm. In some embodiments, the training aid (2) may be attached to a long gun. In some embodiments, the training aid (2) may be attached to a rifle. In some embodiments, the training aid (2) may be attached to a revolver. In some embodiments, the training aid (2) may be attached to a hand gun. In some embodiments, the training aid (2) may be attached to a semi-automatic firearm. In some embodiments, the training aid may be attached to a semi-automatic handgun.

[0018] The training aid (2) can be made of a material that can withstand heat and is elastic. In some embodiments, it can be made of an elastic polymer. In some embodiments, it can be made of rubber. In some embodiments, it can be made of plastic. In some embodiments it can be made of metal. In some embodiments it can be made of a ferromagnetic metal.

[0019] In some embodiments, the training aid (2) may be attached to the slide of a firearm over the front sight. In some

preferred embodiments, the training aid (2) attaches to the slide of a firearm over the rear sight.

[0020] Training aid (2) comprises of a first leg (18) that forms a first surface (16), a second leg (20) that forms a second surface (22) opposite to the first surface and a third side (12) that is connected to the first leg (18) and second leg (20) at intersections (24). The third side forms a center surface (14) which is connected to the first (16) and second surfaces (2). The center surface is also referred to as the center. The three surfaces (16), (24), and (14) form a slot (30) where the firearm slide is inserted to attach the training aid (2) to a firearm.

[0021] The angles of the intersections (24) depend on the firearm to which the training aid (2) is attached. In some embodiments, the intersections (24) are obtuse angles. In some embodiments, the intersections (24) are acute angles. In some embodiments, the intersections (24) are approximately right angles. In some preferred embodiments, both intersections are right angles.

[0022] The training aid (2) may be used with any firearm, the first leg (18) and the second leg (20) join the center (12) with intersections (24) that form a matching shape of the desired firearm. In some embodiments, if the training aid (2) is to be configured for a hand-held firearm, the slot (30) is shaped such that the slot can snugly mount onto the slide of the firearm in the area of where a rear sight would be located. In some embodiments, the slot (30) is shaped such that the slot can snugly mount onto a shotgun. In some embodiments, the slot (30) can be shaped such that the slot can snugly mount onto a pistol. In some embodiments, the slot (30) is shaped such that the slot can snugly mount onto a rifle. In some embodiments, the slot (30) is shaped such that the slot can snugly mount onto a hand gun. In some embodiments, the slot (30) is shaped such that the slot can snugly mount onto a semi-automatic hand gun.

[0023] The depth of slot (30) may be changed without departing from the invention because the depth of the slot is determined by the width and depth of the firearm slide to which the training aid is attached.

[0024] A preferred embodiment of the invention is configured for use with a firearm such as a handgun (e.g. a Glock® pistol). In order to attach to the rectangular Glock slide, the intersection of the first leg (18) and second leg (20) to the center (12) should form a similar rectangular shape. As a result, the first leg (18) and the second leg (20) form attach to the center (12) forming a rectangular slot (30) which receives the Glock slide.

[0025] The training aid (2) is attached to a firearm by placing the slide of the firearm through the slot (30). In some embodiments, training aid (2) may be attached to the firearm through friction. In some embodiments, training aid (2) may be attached to the firearm using an adhesive. In some embodiments, training aid (2) may be attached to the firearm using magnetic coupling.

[0026] In some embodiments, the training aid may be attached to the firearm through friction by creating grooves on the insides of the training aid surfaces (16) and (22) and an irregular non-smooth surface on the slide of the firearm where the attachment is to be fit. In some embodiments, the training aid (2) may be attached to the firearm through friction by using grooves in the insides of the surfaces (16) and (22) to create friction between the firearm slide and the attachment. In some preferred embodiments, training aid (2) may be attached to a firearm through friction by elastically

expanding the distance between first (18) and the second leg (20) and then inserting the slide of the firearm through the slot (30) for a snug fit. In some embodiments, training aid (2) can be attached to the metal slide of a firearm through friction using one or more magnets on training aid surface (16) and/or (20). In some embodiments, training aid (2) can be attached to the slide of a firearm through friction using one or more clamps on training aid surface (16) and/or (20).

[0027] In some embodiments, the training aid (2) may be attached to the firearm with an adhesive. In some embodiments, an adhesive that can glue together plastic and metal may be used. In some embodiments, an adhesive that can glue together rubber and metal may be used. In some embodiments, an adhesive that can glue together metal and metal may be used. In some embodiments, a resin-based adhesive may be used. In some embodiments, a cyanoacrylate adhesive may be used. In some embodiments, a silicone-based adhesive may be used.

[0028] The training aid (2) is designed to work complimentary with the rear sight of a firearm. A window (10) forms an opening in the center (12). The window (10) is of a shape and size large enough to receive the rear sight of the firearm. A hood (8) is a protruding arch-like structure that connects the first and second legs over the window (10). Preferably, hood (8) forms a pocket (28) that forms a tunnel (26) longitudinally along the slide of the firearm as shown in FIG. 5. The window (10) is of a size that contains the rear sight of the firearm. The hood (8) is of a height that contains the rear sight of the firearm.

[0029] When looking through the tunnel (26) from the rear of the training aid (2), as shown in FIG. 5, the rear sight of the firearm should be seen. With the training aid (2) attached to the firearm, the rear sight abuts the tunnel (26) and is contained within the pocket (28) of the training aid (2). As a result, when trying to view the rear sight, the hood (8) forces a user to look through the rear sight properly. If the user attempts to view the rear sight from a low point, the user will only view the roof of the tunnel (26) and will be unable to see the front sight. If the user tries to view the rear sight from a high point, the user will only see the third surface (14) forming the center (12). The user is therefore compelled to view the rear sight directly behind the rear sight and look through the tunnel (26) and will properly encounter the front sight. Similarly, if the user tries to look through the rear sight from a left or right point, they will not be able to peer properly through the tunnel (26) and will not be able to see the front sight.

[0030] The depth of the tunnel (26) and shape of the window (10) may also be changed without departing from the scope of the invention. The object of the invention is to compel the user to properly line up the rear sight with the front sight through the use of a semi-permanently attached training aid (2).

[0031] The training aid preferably can simply be snapped into place by elastically expanding the distance between the first leg (18) and the second leg (20). The rear sight of the firearm may then be placed into the window (10) and the first leg (18) and second leg (20) be released so that the firearm is secured within the slot (30).

[0032] Grips 6 may also be provided along the first leg (18) and the second leg (20) to provide increased frictional resistance. The frictional resistance may be useful when the training aid (2) is used with a semi-automatic firearm such as a Glock® pistol. The grips 6 allow the user properly grip

the slide when chambering a round. The grips may include vertical slots as shown but may also include any other pattern of surface deformations to promote frictional resistance.

What is claimed is:

1. A firearm training aid comprising:
 - a first planar surface configured to abut alongside at least a first portion of a firearm;
 - a second planar surface opposite the first surface configured to abut alongside a second portion of the firearm opposite the first portion of the firearm;
 - a third planar surface joining the first and second planar surfaces thereby forming a 3-sided slot in the training aid which is semi-permanently engaged to the slide of a firearm;
 - a window formed in the third planar surface configured to receive a sight of the firearm; and
 - a hood extending from an intersection of the first and third planar surfaces and from an intersection of the second and third planar surfaces, wherein the hood is configured to shroud the rear sight of the firearm when it is inserted through the window.
2. The firearm training aid according to claim 1, wherein the third planar surface abuts alongside a third portion of the firearm between the first portion and the second portion of the firearm
3. The firearm training aid according to claim 1, wherein the first, second, and third planar surfaces are configured to semi-permanently attach to a slide of a semi-automatic firearm.
4. The firearm training aid according to claim 1, wherein at least some part of the first planar surface contains grooves to create friction between the first planar surface and the first portion of the firearm.
5. The firearm training aid according to claim 1, wherein at least some part of the second planar surface contains grooves to create friction between the second planar surface and the second portion of the firearm.
6. The firearm training aid according to claim 1, wherein the first planar surface contains one or more magnets to create friction to attach the first planar surface to the first portion of the metal slide of the firearm.
7. The firearm training aid according to claim 1, wherein the second planar surface contains one or more magnets to create friction to attach the second planar surface to the second portion of the metal slide of the firearm.
8. The firearm training aid according to claim 1, wherein the first planar surface is connected to the first portion of the firearm with a clamp.
9. The firearm training aid according to claim 1, wherein the second planar surface is connected to the second portion of the firearm with a clamp.
10. The firearm training aid according to claim 1, wherein at least some part of the inside of the first planar surface contains an adhesive to attach the first planar surface to the first portion of the firearm.
11. The firearm training aid according to claim 1, wherein at least some part of the inside of the second planar surface contains an adhesive to attach the second planar surface to the second portion of the firearm.
12. A gun sight cover for a firearm comprising:
 - a 3-sided cover including a first leg, a second leg, and a center plane which is attached semi-permanently to the slide of a firearm;
 - a window formed on a one side of the cover configured to expose at least a portion of the slide when the cover is attached to the slide of a firearm;
 - a hood extending above some part of the window that creates a tunnel like structure between the hood and the window along the longitudinal axis of the slide of the firearm.
13. The gun sight cover according to claim 9, wherein the first leg and second leg are connected to the center plane to at least partially conceal the slide of a firearm.
14. The gun sight cover according to claim 19, wherein the first leg and second leg are configured to engage opposing sides of the slide of a firearm.
15. The gun sight cover according to claim 19, wherein the window is configured to receive a sight of the firearm.
16. The gun sight cover according to claim 19, wherein the hood is of a height such that it contacts at least a portion of the sight to which it is attached.
17. The gun sight cover according to claim 19, wherein at least some part of the first leg has grooves to create friction between the first leg and the first portion of the firearm.
18. The gun sight cover according to claim 19, wherein at least some part of the second leg contains grooves to create friction between the second leg and the second portion of the firearm.
19. The gun sight cover according to claim 19, wherein the first leg contains one or more magnets to create friction to attach the first leg to the first portion of the metal slide of the firearm.
20. The gun sight cover according to claim 19, wherein the second leg contains one or more magnets to create friction to attach the second leg to the second portion of the metal slide of the firearm.

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