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(54) **ADJUSTABLE NIGHT SIGHTS FOR USE ON ASSAULT RIFLES OR OTHER INSTRUMENTS INCLUDING TANGENT SIGHT MOUNTS**

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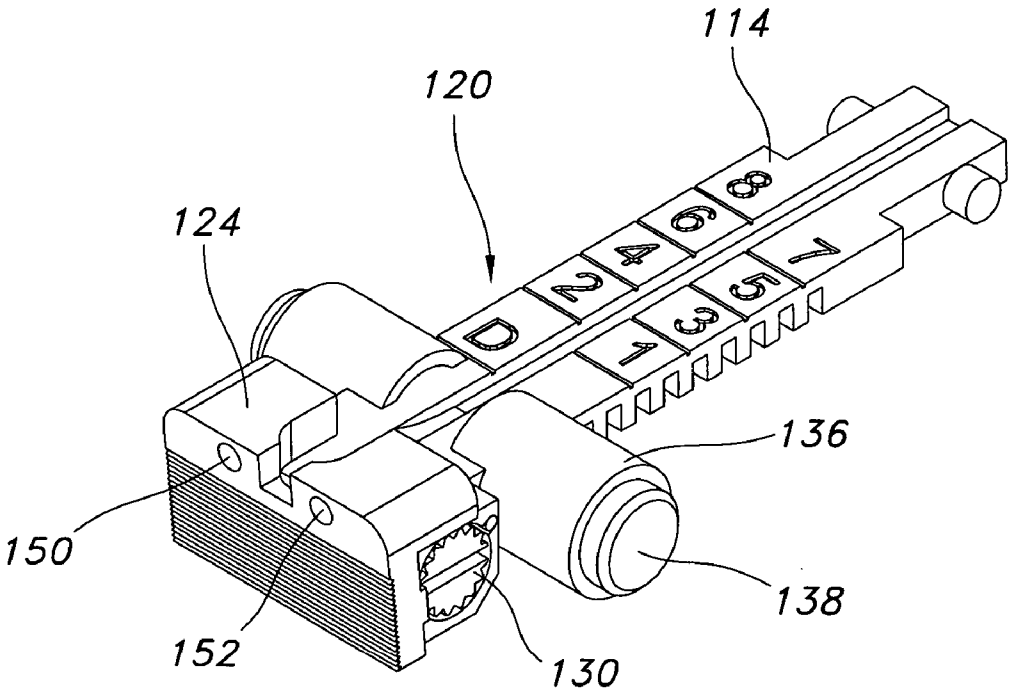
F41G 1/16 (2006.01)
F41G 1/32 (2006.01)

(52) **U.S. Cl.** **42/145**; 42/139

(57) **ABSTRACT**

A method and apparatus to optimize windage adjustment allows the user to leave the front sight post centered and adjust windage using a rugged, compact traversing leaf on the rear sight by replacing the traditionally non-moving rear sight notch with a click adjustable notch of a configuration similar to that seen on a target pistol. A rugged, compact click adjustable mechanism adjusts the windage on the rear sight and the sight leaf contains two or three luminescent elements such as tritium vials in one of three configurations, thereby adding a night sight capability to the rifles.



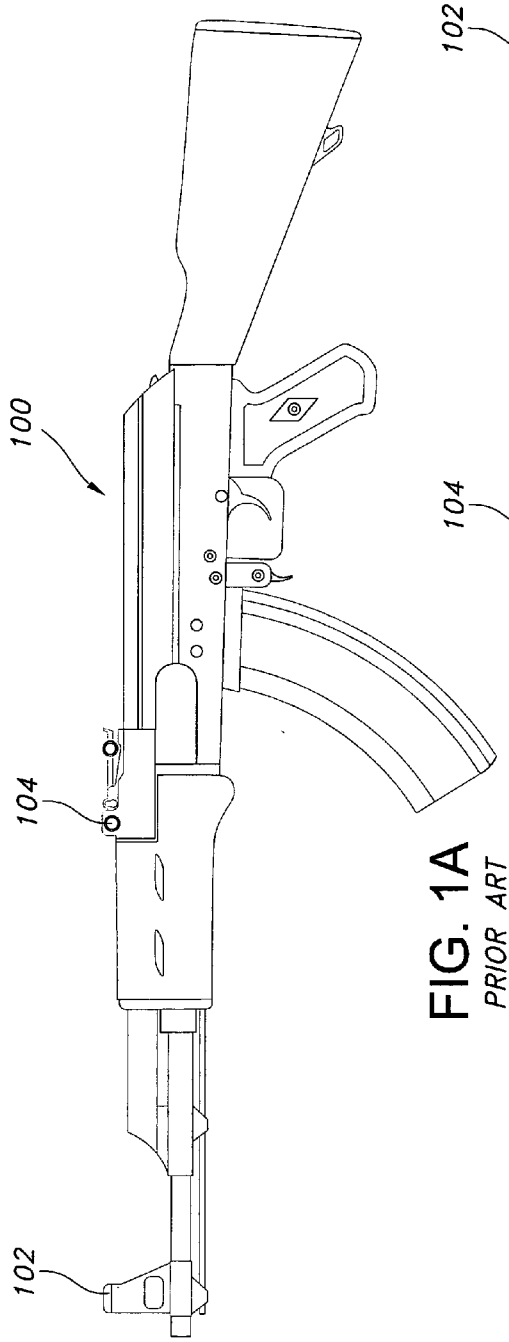


FIG. 1A
PRIOR ART

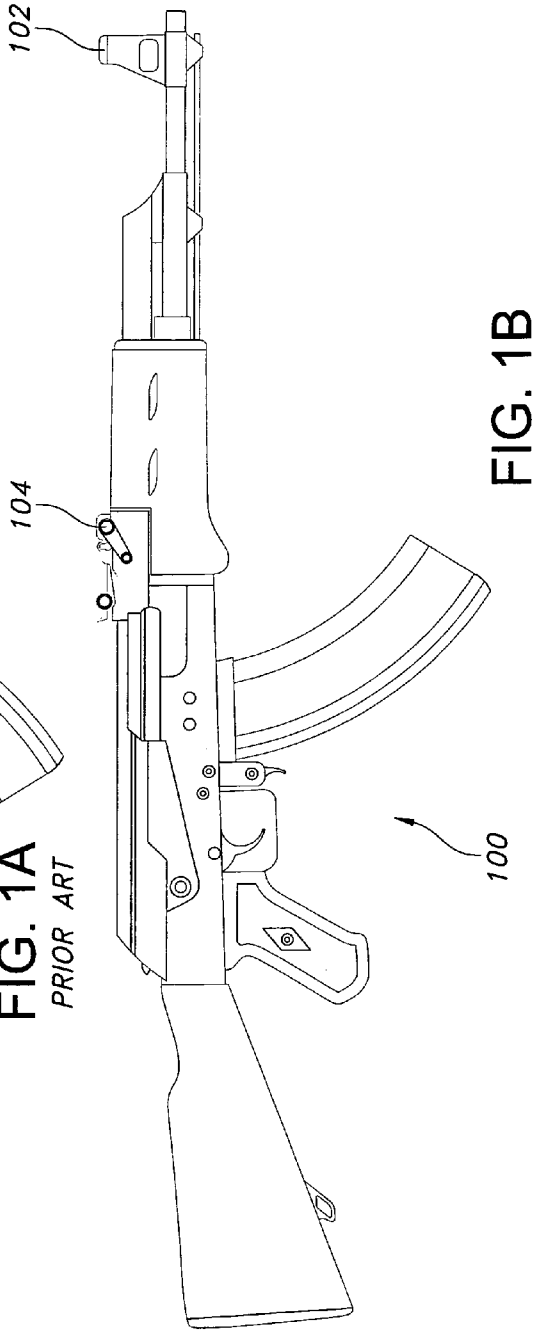


FIG. 1B
PRIOR ART

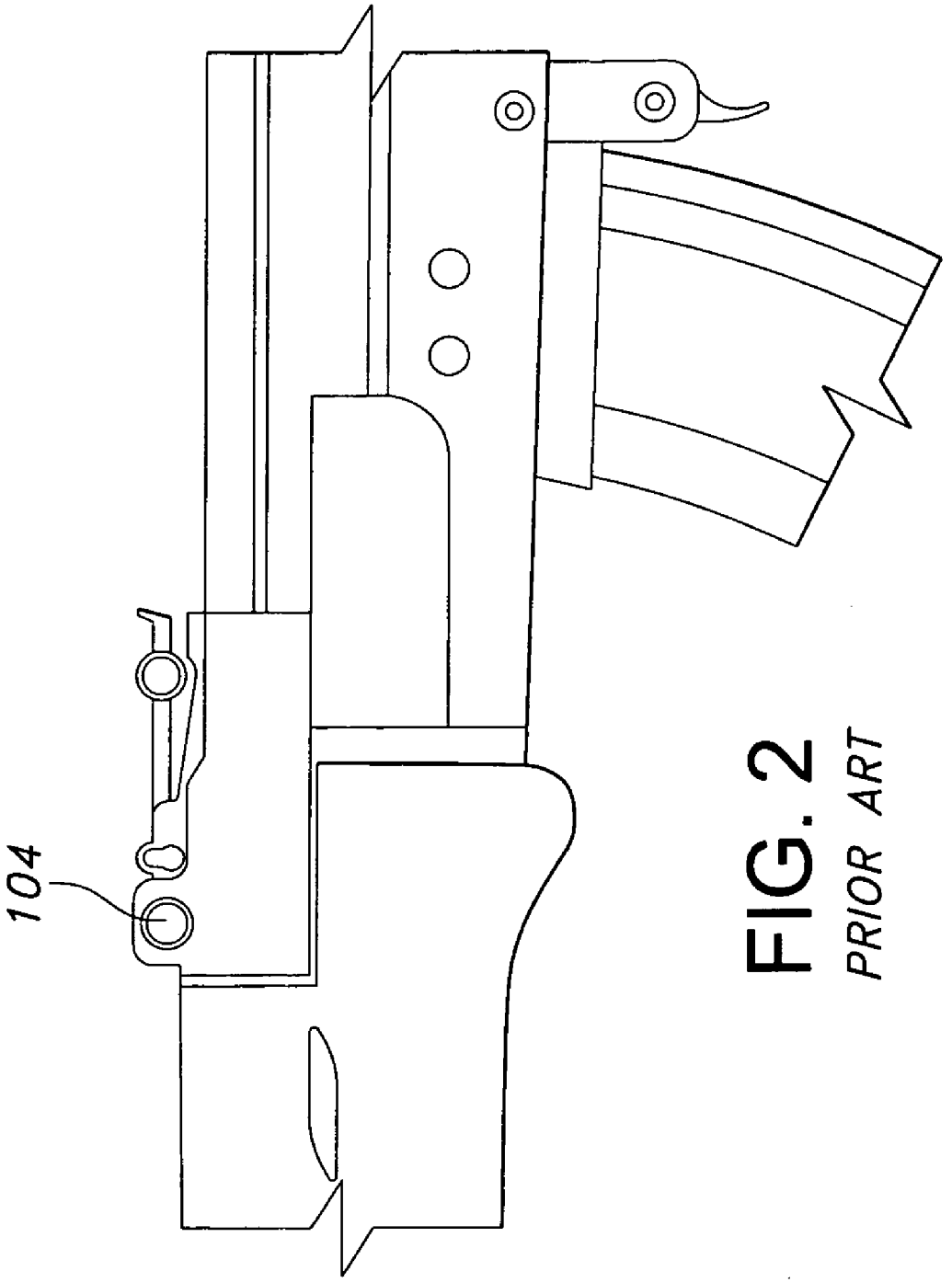


FIG. 2
PRIOR ART

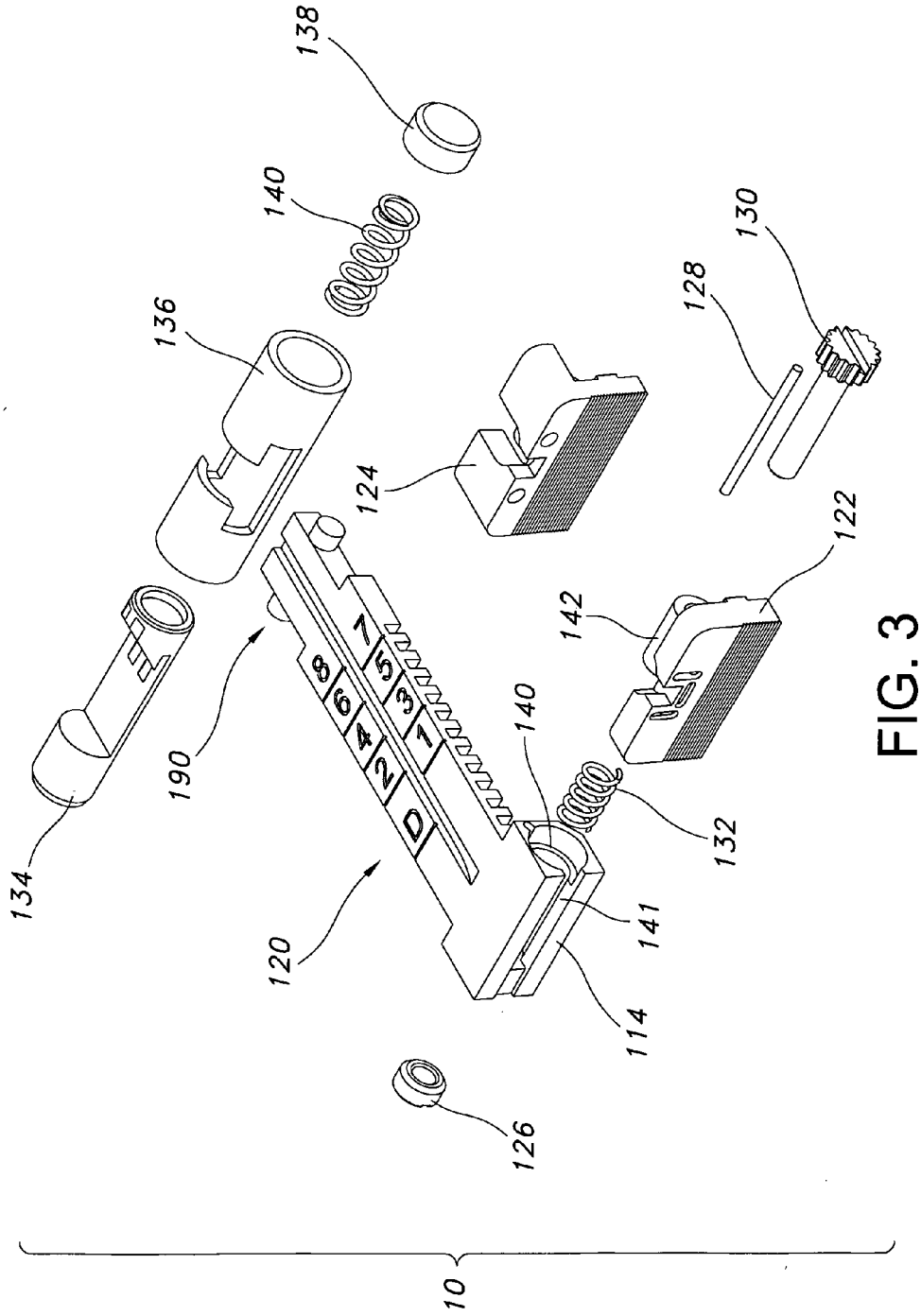

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FIG. 3

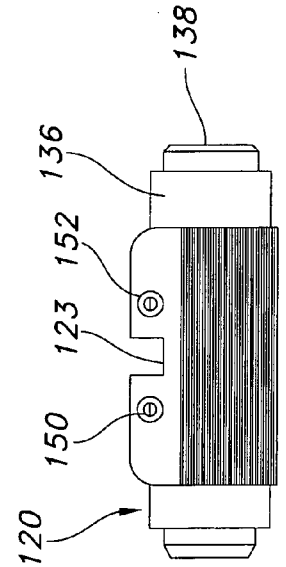

FIG. 4C

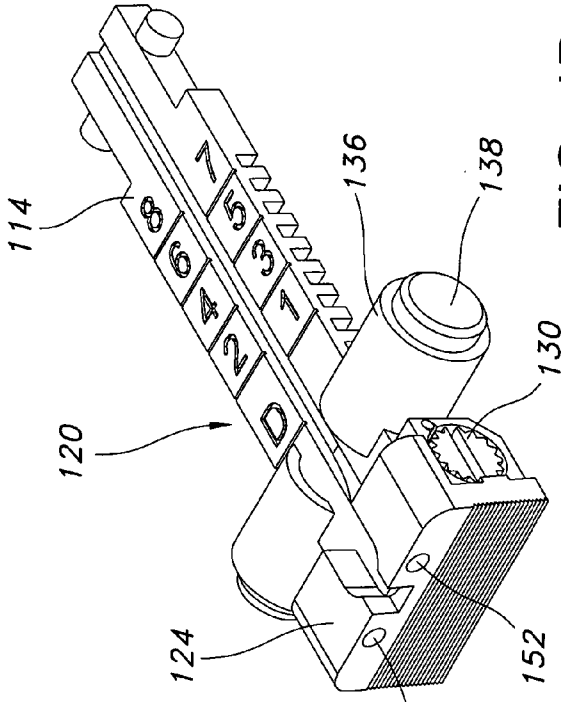

FIG. 4D

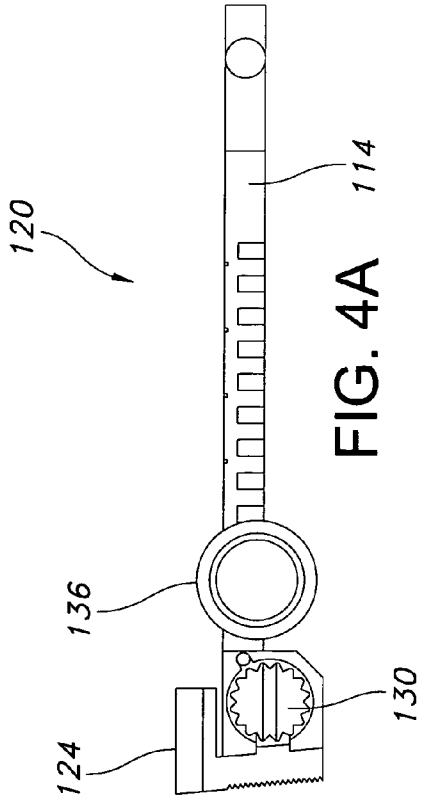

FIG. 4A

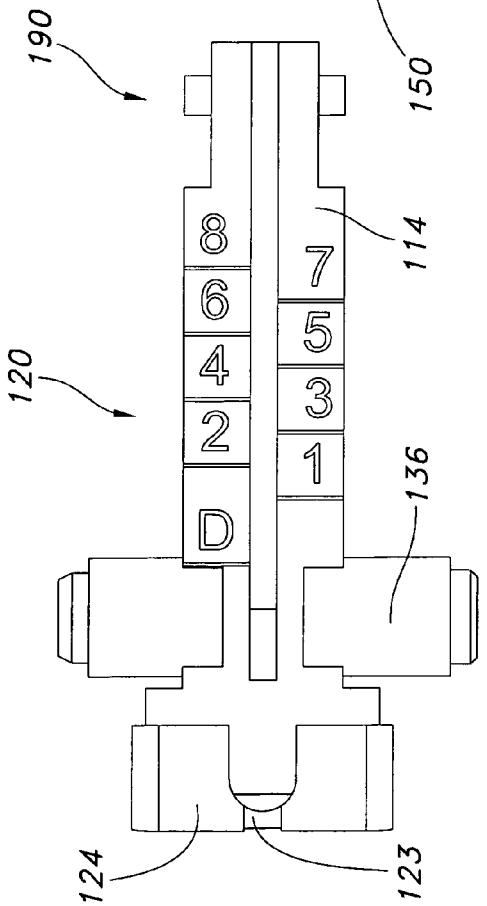

FIG. 4B

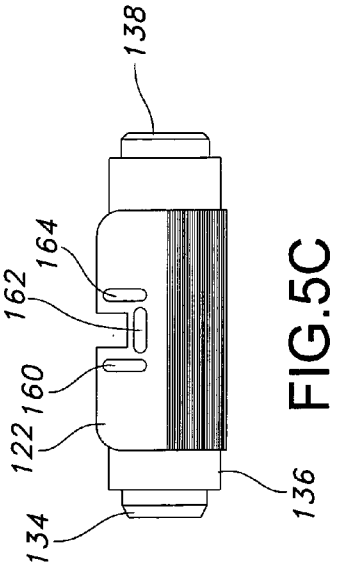

FIG.5C

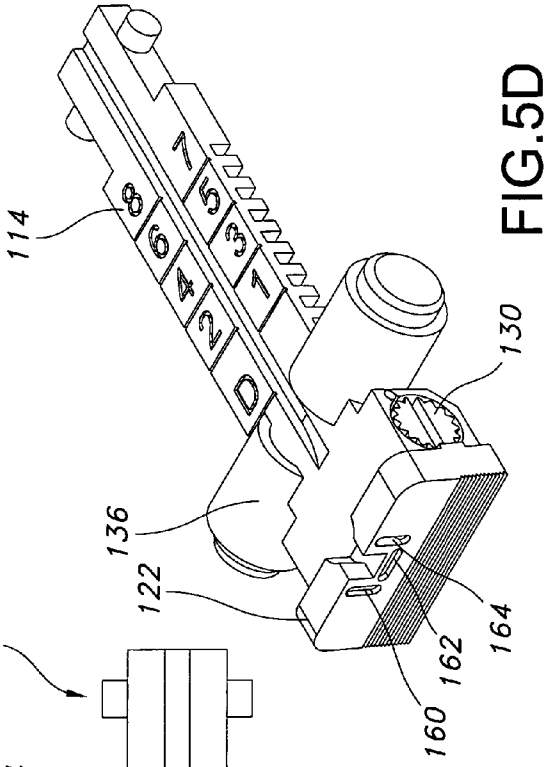

FIG.5D

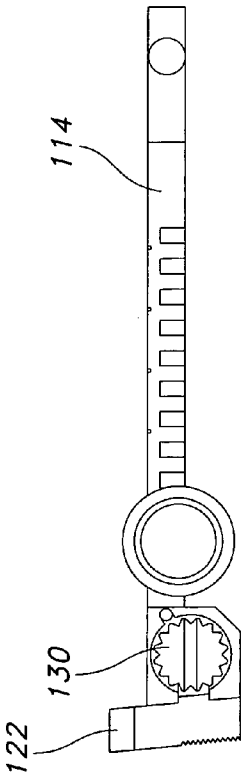

FIG. 5A

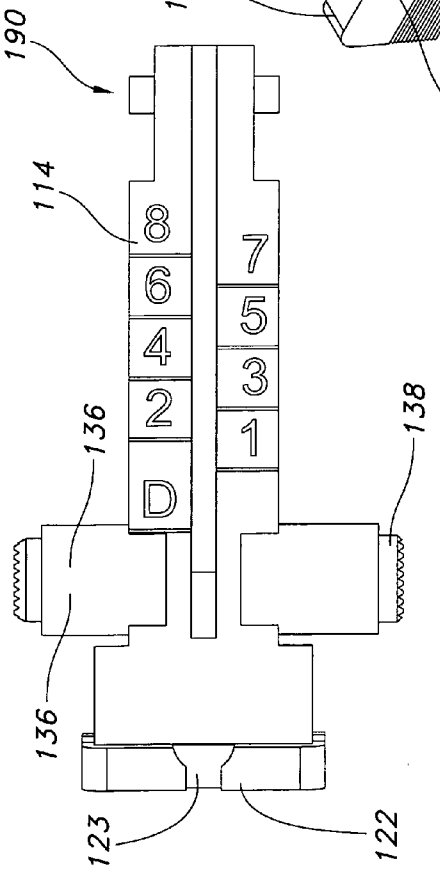

FIG. 5B

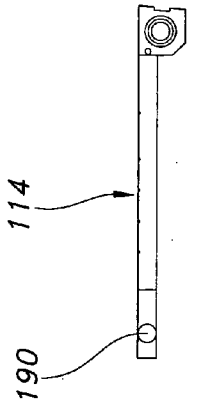

FIG. 6G

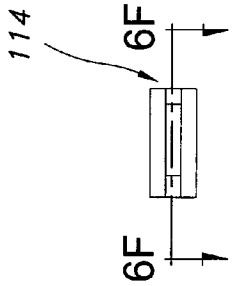

FIG. 6E

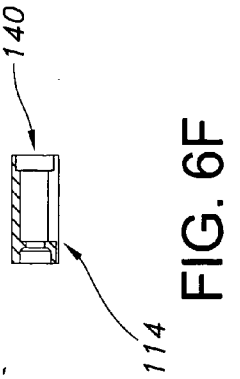

FIG. 6F

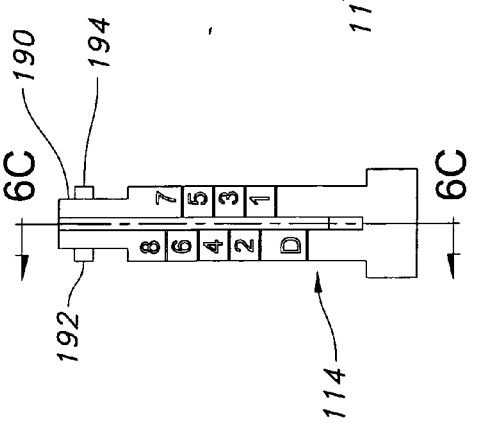

FIG. 6B

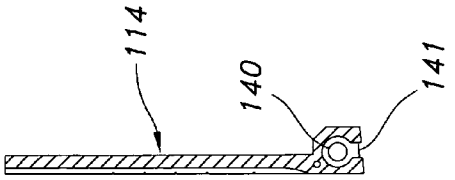

FIG. 6C

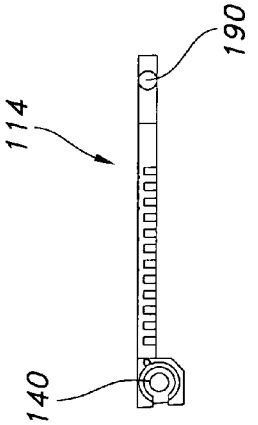

FIG. 6D

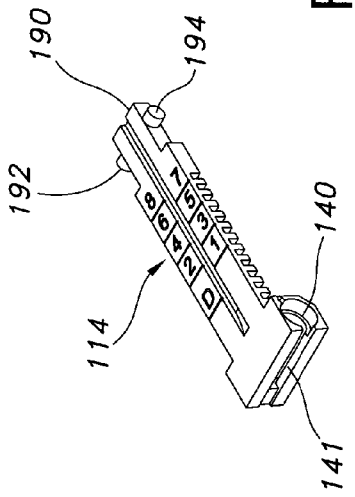

FIG. 6A

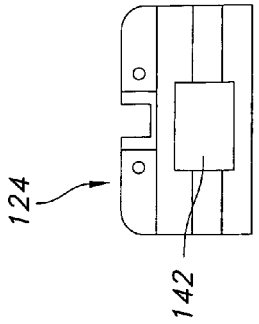

FIG. 7G

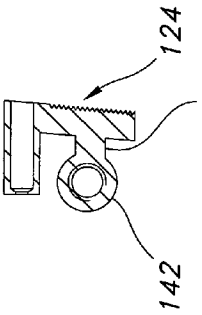

FIG. 7F

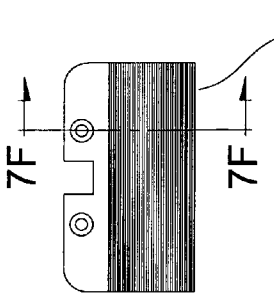

FIG. 7E

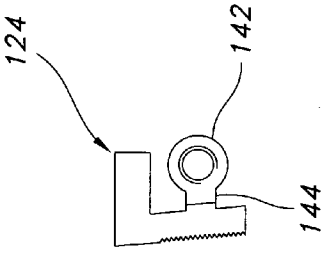

FIG. 7B

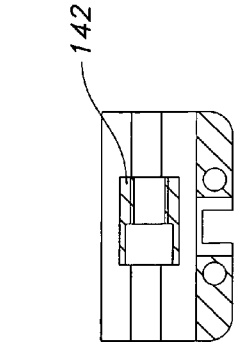

FIG. 7D

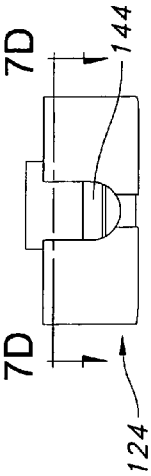

FIG. 7C

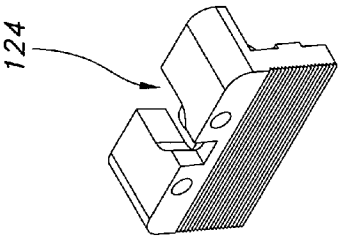

FIG. 7A

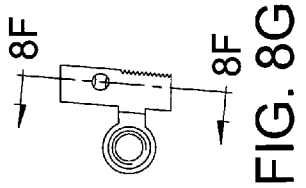

FIG. 8G

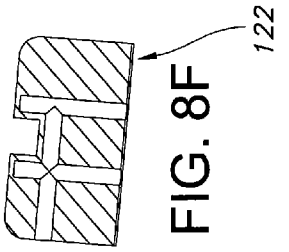

FIG. 8F

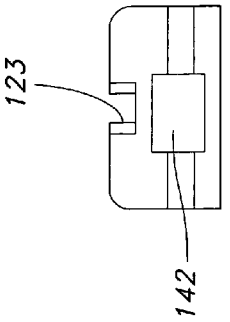

FIG. 8H

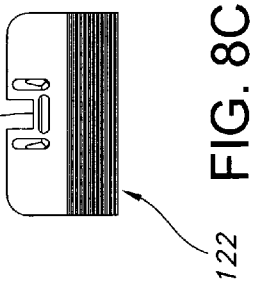

FIG. 8B

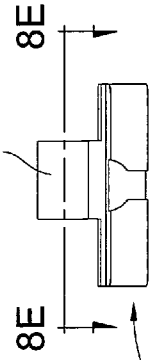

FIG. 8C

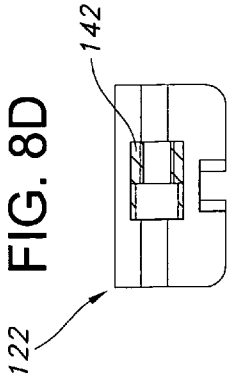

FIG. 8D

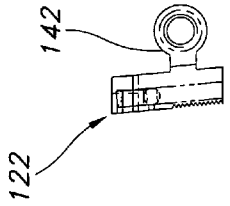

FIG. 8A

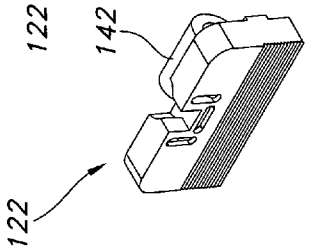

FIG. 8E

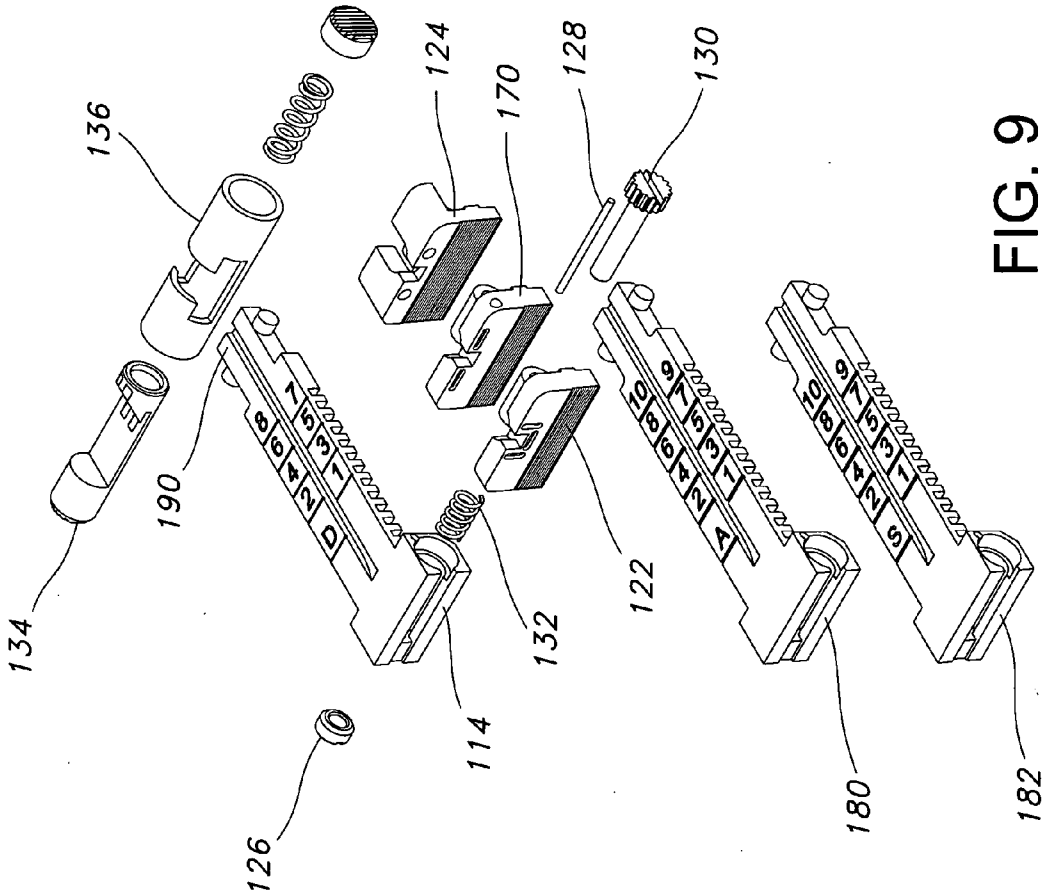

FIG. 9

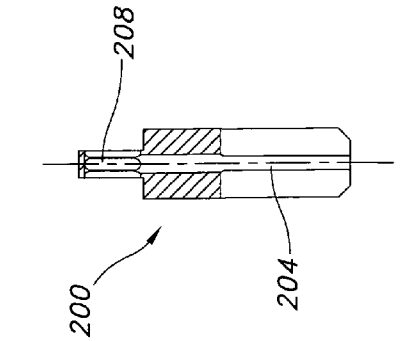

FIG. 10D

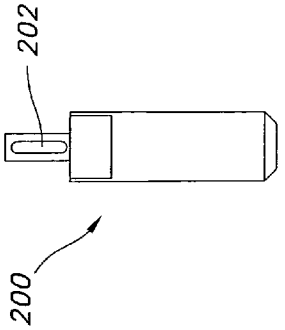

FIG. 10C

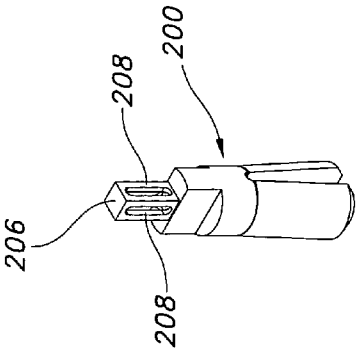

FIG. 10E

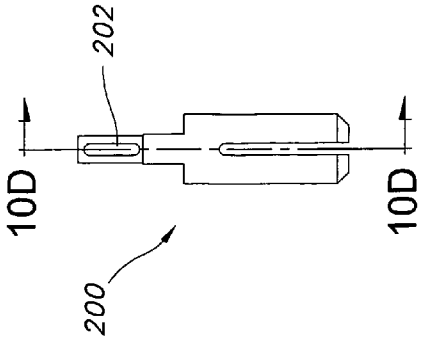

FIG. 10B

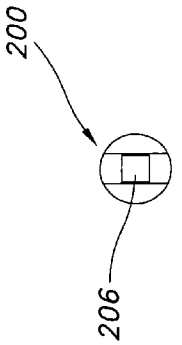

FIG. 10A

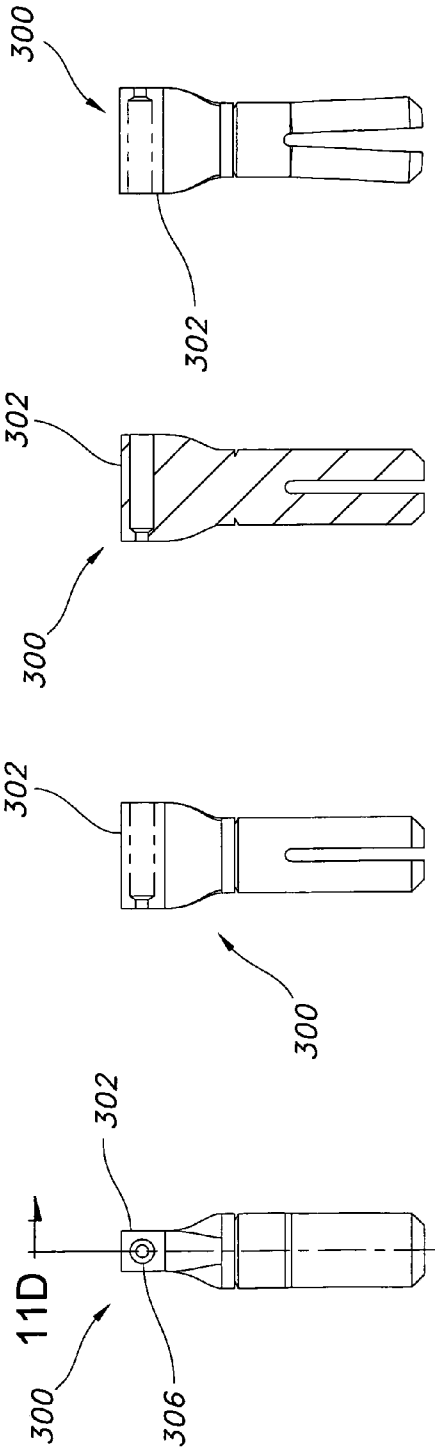

FIG. 11A

FIG. 11C

FIG. 11D

FIG. 11E

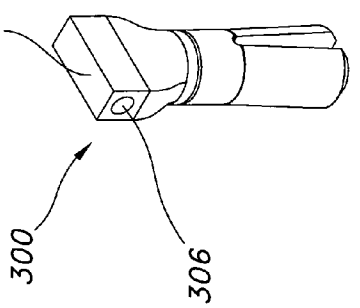

FIG. 11F

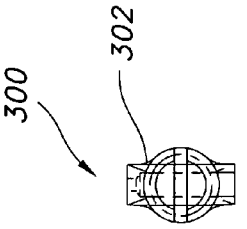

FIG. 11B

ADJUSTABLE NIGHT SIGHTS FOR USE ON ASSAULT RIFLES OR OTHER INSTRUMENTS INCLUDING TANGENT SIGHT MOUNTS

[0001] This application claims priority to provisional patent application No. 60/748,180, filed Dec. 8, 2005, the entire disclosure of which is incorporated herein by reference. This application is also related to U.S. application Ser. No. 10/922,918, filed Aug. 23, 2004, the entire disclosure of which is incorporated herein by reference.

BACKGROUND OF THE INVENTION

[0002] 1. Field of the Invention

[0003] The present invention relates to adjustable sights for use with assault rifles or other rifles or instruments including tangent sight mounts

[0004] 2. Discussion of the Prior Art

[0005] Many military rifles, military surplus rifles and assault rifles including, for example, the AK-47, AKM and AK-74, have both a front and rear sight, and by aligning the sights on a target using the appropriate "sight picture", one can aim the rifle. There are a variety of prior art sight configurations for the AK family assault weapons.

[0006] Many military rifles, military surplus rifles and assault rifles have a rear sight of the configuration known as a "tangent" sight, having a sight base carrying an elongated hinged, pivoting arm or "leaf" adapted to rotate about a distal transverse axis to raise and lower the rear-most or proximal end of the arm carrying a surface defining the rear sight notch. The pivoting leaf is an elongate graduated rail-like structure carrying a sliding member or "slide" that can be placed at a selected position along the arm's length, and the slide has laterally projecting extensions that rest upon left and right sidewalls projecting upwardly from the sight base, each sidewall having a gradually rising upper edge, so that the slide's extensions are "tangent to" the sidewall's upper edges. The leaf is marked with a series of range-indicating graduations that can be used to position the slide along the leaf such that the leaf raises or lowers the sight notch to a selected elevation corresponding to a target's range.

[0007] A serious drawback on the AK family of weapons is that the rear sight adjustment is limited to pre-calculated elevation graduations for selected distances-to-target or ranges (e.g., (a) from 100 to 800 meters in the case of Chinese AKS to the earlier Russian AK 47 and (b) **0** or actually 100 meters to 1,000 meters on the later Soviet block AKM variations and also on the last AK 74 variation). All of the rifles in the AK family share a common trait, namely, lack of any lateral or windage adjustment on the rear sight. All fine tuning of the sights is done on the front sight. The elevation is adjusted on the prior art front sight by screwing the sight down or up from the housing, screwing the sight in to lower the front sight post and unscrewing it to raise the front sight post. Many military firearms are adjusted by raising or lowering the top edge of the front sight post, including the M16 class of rifles.

[0008] The windage adjustment remains a problem since, for the AK class of rifles, to adjust windage the front sight base is pushed or drifted to the left or right. In some cases, it is necessary to adjust or drift the front sight literally all the way to the one side or another where the front sight post is resting against the inside of the front sight protective hood and so becomes nearly impossible to use. Adjusting the front sight for windage in this way is not a desirable solution for many shooters.

[0009] Many AK style surplus rifles never had a night-sight capability and those that were equipped with prior-art night sights are now not usable due to limited shelf life and the twelve year half-life of the tritium illumination sources. The latest Warsaw Pact or eastern block guns made in 1989 (just prior to the fall of the Berlin Wall) have non-adjustable sights that don't glow at night; they are not leaking, but are not functional as night sights any longer.

[0010] There is a need, therefore, for a method and apparatus for providing a windage adjustable night-sight set for use on military and surplus rifles.

OBJECTS AND SUMMARY OF THE INVENTION

[0011] Accordingly, it is a primary object of the present invention to overcome the above mentioned difficulties by providing an improved set of windage adjustable night sights.

[0012] It is also an object of the present invention to provide an improved method for mounting and using rifle sights.

[0013] The aforesaid objects are achieved individually and in combination, and it is not intended that the present invention be construed as requiring two or more of the objects to be combined.

[0014] In accordance with the present invention, the way to optimize windage adjustment is to allow the user to leave the front sight post dead center in the protected hood and then to adjust windage using a traversing leaf on the rear sight by replacing the traditionally non-moving rear sight notch with a click adjustable notch of a configuration similar to that seen on a target pistol. A click adjustable mechanism adjusts the windage on the rear sight and the sight leaf contains or holds either two or three tritium vials in one of three configuration embodiments and that adds a night sight capability to the rifles.

[0015] The invention is an assault rifle night sight set adapted for use on a class of rifles including, for example, the AK-47, AKM and AK-74, including, preferably, both a front and rear sight. A list of components is included in the attached drawings and there are a couple of different bases. There are a variety of configurations for the AK family assault weapons.

[0016] The above and still further objects, features and advantages of the present invention will become apparent upon consideration of the following detailed description of a specific embodiment thereof, particularly when taken in conjunction with the accompanying drawings, wherein like reference numerals in the various figures are utilized to designate like components.

BRIEF DESCRIPTION OF THE DRAWINGS

[0017] FIGS. **1***a* and **1***b* illustrate the left and right sides, in elevation prior art AK family rifle, showing where the front and rear sight mounting bases are located.

[0018] FIG. **2** illustrates the left side, in elevation, of the prior art AK family rifle's tangent sight mounting base.

[0019] FIG. **3** illustrates, in an exploded perspective view, a sight with interchangeable night sight blades, in accordance with the present invention.

[0020] FIGS. **4***a*, **4***b*, **4***c* and **4***d* illustrate in four views a "two dot" night sight assembly configured for use with a rifle having the tangent sight base of FIGS. **1** and **2**, in accordance with the present invention.

[0021] FIGS. **5***a*, **5***b*, **5***c* and **5***d* illustrate in four views a "ball in bucket" night sight assembly configured for use with a rifle having a tangent sight base, in accordance with the present invention.

[0022] FIGS. **6***a*, **6***b*, **6***c*, **6***d*, **6***e*, **6***f*, **6***g* and **6***f* illustrate various views of a sight assembly's elongate rail member or leaf, in accordance with the present invention.

[0023] FIGS. **7***a*, **7***b*, **7***c*, **7***d*, **7***e*, **7***f*, and **7***g* illustrate various views of a sight assembly's "two dot" sight blade, in accordance with the present invention.

[0024] FIGS. **8***a*, **8***b*, **8***c*, **8***d*, **8***e*, **8***f*, **8***g* and **8***h* illustrate various views of a sight assembly's "ball in bucket" sight blade, in accordance with the present invention.

[0025] FIG. **9** illustrates, in an exploded perspective view, a kit including sight assemblies with three leafs adapted to fit three rifles in the AK family of rifles with interchangeable night sight blades having the "two dot" configuration, the "dash-dot-dash" configuration and the "ball in bucket" configuration, in accordance with the present invention.

[0026] FIGS. **10***a*-**10***e* illustrates, in five views, a front sight having a four-sided elongated luminescent tritium insert, in accordance with the present invention.

[0027] FIGS. **11***a*-**11***f* illustrates, in five views, a front sight having a one-sided circular, ball or dot shaped luminescent tritium insert, in accordance with the present invention.

DESCRIPTION OF THE PREFERRED EMBODIMENT

[0028] Referring to FIGS. **1**-**11***f*, an assault rifle night sight set adapted for use on a class of rifles comprising the AK-47, AKM and AK-74, include, preferably, both a front and rear sight.

[0029] FIGS. **1***a* and **1***b* illustrate the left and right sides of an AK family rifle **100**, specifically an AK-47 carrying a distal front sight mounting base **102** near the rifle's muzzle and a proximal or rear tangent sight mounting base **104** on the rifle's receiver. FIG. **2** illustrates the left side, in elevation, of the rifle's tangent sight mounting base **104**. The particulars of this rifles features are well known among those having skill in the art, since many millions of copies of S. Kalashnikov's designs have been made and used around the world.

[0030] Referring now to the exemplary embodiment illustrated in FIG. **3**, a night sight kit **110** preferably includes a sight **120** with a selection of compact, rugged, interchangeable windage-adjustable night sight blades **122**, **124**. Sight base or leaf **114** is shaped like an elongated rail structure having graduated indicia on its upper surface and spaced indentations along at least one side. Leaf **114** slidably supports slide or tube **136**. Slide **136** has an interior lumen that receives lock **134**, biasing spring **140** and actuation button **138**, where lock **134** has teeth dimensioned to engage indentations in the side of leaf **114**, and then is releasably held in place by the force of biasing spring **140**. Sight kit **110** preferably includes a plurality of sights for different applications such as U-bracket combat night sight **122**, having first second and third luminescent tritium vial segments arrayed around the sighting notch, and night combat sight **124** having first and second circular tritium vial ends visible on wither side of the sighting notch.

[0031] Windage adjustable night sight **120** has a rugged and compact windage adjustment mechanism built into the proximal end of leaf **114**, which has, a proximal end segment with a larger square or rectangular cross section in which is defined a transverse bore **140** that communicates with an axially aligned proximal slot opening **141**. Each of the rear sight blades (e.g., **122**, **124**) have a distal projection **144** carrying a transverse cylindrical segment **142** having a threaded interior lumen dimensioned to receive and cooperate with the threaded windage adjustment screw **130**. The lateral or transverse position of the rear sight is stabilized by biasing spring **132** and the adjustment is stabilized by resilient detent pin **128**, which is biased against and engages the scalloped head of windage adjustment screw **130**. The sight blade's cylindrical segment, the biasing spring and the windage adjustment screw are all coaxially nested to work together within transverse bore **140** and are held in place during operation of the windage adjustment mechanism by threaded nut **126**, when affixed to the threaded end of windage adjustment screw **130**.

[0032] There are a variety of configurations for the AK family assault weapons. In the present invention, the way to optimize windage adjustment is to leave the front sight post dead center in the protected hood (optionally replacing the standard issue front sight with a luminescent tritium front sight as shown in FIGS. **1***a*-**11***f* and then to adjust windage using a traversing blade (e.g., such as **122**) on the rear sight by replacing the traditionally non-moving rear sight notch with a click-adjustable notch of a configuration similar to that seen on a target pistol. A click adjustable mechanism adjusts the windage on the rear sight and the sight leaf contains or holds either two or three tritium vials in one of three configuration embodiments, adding a night sight capability to the rifles.

[0033] In accordance one embodiment of the present invention, as shown in FIGS. **4***a*-**4***d*, a night combat sight configuration has essentially two circular tritium end faces of cylindrical vials **150**, **152**.

[0034] In a second embodiment, a "U bracket combat" configuration **122** includes three vials **160**, **162**, **164** (as shown in FIGS. **5***a*-**5***d*) permitting a view of the tritium through the transparent sides of the vials allowing a sight picture where the shooter puts the front sight inside what would appear to be a three-sided bucket or cup.

[0035] A third sight configuration (**170**, as shown in FIG. **9**) designated for a sight picture called "dashes" or "dash dot dash", when used with a tritium equipped front sight post such as the front sight post **300** shown in FIGS. **11***a*-**11***f*.

[0036] FIG. **9** illustrates, in an exploded perspective view, a kit **200** including sight assemblies with first, second and

third leafs (**114**, **180** and **182**, respectively) adapted to fit three rifles in the AK family of rifles, including a selection of three interchangeable night sight blades **124**, **170** and **122** having the "two dot" configuration, the "dash-dot-dash" configuration and the "ball in bucket" configuration, in accordance with the present invention.

[**0037**] Selection from among the sight configurations is going to be a matter of subjective choice, depending on the shooter's or user's preference. The traditional night sight has just two tritium vials in the rear and one in the front to provide a three dot picture . . . all three dots being green. That sight picture has lost favor in some circles allegedly because one can actually laterally mis-align the rifle and get the dots mixed up, taking a little bit longer to line up all three dots, so, in accordance with the present invention, one solution is providing the rear sight dots in a different color of tritium. For example, rear sights including Orange dots provide an orange-green-orange sight picture, making it a little bit easier to figure out which dot is in the front sight and which dots are in the rear.

[**0038**] An alternative sight configuration is the "_._" or "dash-dot-dash" configuration using rear sight **170** as shown in FIG. **9**; that configuration is fast to acquire and visually obvious to align, since there is no way of confusing the front (dot) and rear (dash) luminescent elements.

[**0039**] Another configuration includes the "U shaped" rear sight **122**, providing another sight picture that is rapidly acquired. Some users or shooters actually prefer the rear luminescent elements or tritium vials to be dimmer or less luminous than the front dot, and so those users may not prefer the U shaped rear sight **122**, since it has three bars which may be perceived as overpowering. Those users are likely to prefer using the two dot configuration.

[**0040**] One embodiment of a luminous front sight **200** is shown in FIGS. **10***a*-**10***e*. Luminous front sight **200** has a tubular vial of tritium **202** that is retained in a vertical bore **204**. The sight is usable from many different angular orientations and so can be threadably screwed down into the front sight receiving member (e.g., at **102** in FIGS. **1***a* and **1***b*), being visible from any side. In the embodiment illustrated in FIGS. **10***a*-**10***e*, the front sight post **206** is square in cross section and has four sides, each with an elongated vertical slot **208** defined therein, to expose vial **202** when affixed in vertical bore **204**. Front sight **200** has slots or square cut outs showing the side of vial in four vertically aligned illuminating segments, where at least one segment is viewable to the shooter every quarter turn.

[**0041**] Another luminescent front sight **300** has a blade or front post **302** having only one illuminated side **304** where one dot or circular tritium vial end **306** is carried in a lateral bore **308**. When threading front sight **300** into front sight support (e.g., at **102** in FIGS. **1***a* and **1***b*) dot **306** is viewable to the shooter only once every full turn.

[**0042**] Several rear-front-rear sight picture dot configurations are possible, including green-green-green or orange-green-orange or yellow-green-orange or yellow-green-yellow, and other combinations are also possible, using the sights of the present invention.

[**0043**] The sights of the present invention can also be adapted for use on other military surplus rifles, including the K98 Mauser pattern rifle, the SKS, the Moissan Nagant or any other rifle including a tangent rear sight. Some military surplus rifles don't provide user-friendly way of adjusting the front sight. One can drift a dove tail side-to-side for windage on the front but on the front there is no way of adjusting for elevation at all.

[**0044**] On older lever action rifles, (e.g., for a Marlin) the prior art sight has a contoured lock or piece that slides underneath the sight, and so there is no way to adjust for windage short of just knocking the whole thing to the left or right with a hammer. An adjustable sight using the windage adjustment mechanism for rear sight windage (e.g. like **120**) may optionally resembles an 1890 style semi buck-horn style sight.

[**0045**] The adjustable sight **120** is adapted for use on a rifle (e.g., **100**) having a tangent sight base **104** and includes, an elongate rail member or leaf (e.g., **114**, **180** or **182**) having a hingedly mountable distal end **190** adapted to be hingedly received within the tangent sight base **104** and a free proximal end adjacent a proximal leaf segment having a transverse bore **140** defined therethrough. The transverse bore **140** is in communication with a transverse slot **141** defined in the proximal end of the leaf. A sight blade (e.g., **122**, **124** or **170**) includes a proximal sight surface defining a sighting notch **123** and a distally projecting cantilever support **144** carrying a transversely aligned cylinder **142** with a threaded interior bore dimensioned to be received within sight leaf's transverse bore **140**. A windage adjustment screw **130** is dimensioned to be coaxially received within the sight leaf's transverse bore **140** and engages the sight blade cylinder's threaded interior bore. The windage adjustment screw **130** has a screw head that projects laterally from an open end of the sight leaf's transverse bore **140** such that when said windage adjustment screw head is rotated, the windage adjustment screw forces the sight blade's cylinder **142** to move laterally in relation to the sight leaf **114**.

[**0046**] The leaf's distal end **190** carries first and second opposing laterally projecting transverse pins **192**, **194**, adapted to hingedly engage pin-receiving indentations in the tangent sight base **104**.

[**0047**] The leaf (e.g., **114**, **180** or **182**) has an upper surface bearing graduated range indicia (e.g., in meters or yards) and each sight blade's proximal sight surface includes at least one, but preferably two or more luminescent elements aligned with the sighting notch **123**.

[**0048**] The sight blade's proximal sight surface optionally includes a plurality of luminescent elements arrayed around said sighting notch. In the embodiment of FIGS. **4***a*-**4***b*, the sight blade's proximal sight surface includes first and second luminescent elements **150**, **152** arrayed around the notch, and in the embodiment **170** of FIG. **9**, the sight blade's proximal sight surface includes first and second elongated or dash-shaped luminescent elements aligned with one another on the left and right sides of sighting notch **123**. In the embodiment of FIGS. **5***a*-**5***d* sight blade's first and second elongated or dash-shaped luminescent elements are positioned on the sighting surface on the left and right sides of the sighting notch such that, when used with a dot-shaped front sight luminescent element, provide the shooter a "dash-dot-dash" alignment well suited for rapid target acquisition in low light situations. The adjustable sight of FIGS. **5***a*-**5***d* have the sight blade's proximal sight surface arrayed with first, second and third elongated or dash-shaped lumi-

nescent elements having the first and second luminescent elements aligned in parallel with one another on the left and right sides of sighting notch **123**, and the third luminescent element is aligned with the bottom of the sighting notch and substantially perpendicular to the first and second parallel luminescent elements to provide a U or bucket-shaped outline of luminescent elements around sighting notch **123**, and when the sight is used with a dot or ball shaped front sight luminescent element (e.g., **306** in FIG. **11**), this alignment provides the shooter a "ball in a bucket" sight picture well suited for rapid target acquisition in low light situations.

[0049] Having described preferred embodiments of a new and improved sight configuration and method, it is believed that other modifications, variations and changes will be suggested to those skilled in the art in view of the teachings set forth herein. It is therefore to be understood that all such variations, modifications and changes are believed to fall within the scope of the present invention as set forth in the claims.

I claim:

1. An adjustable sight adapted for use on a rifle having a tangent sight base, comprising:

(a) an elongate rail member or leaf having a hingedly mountable distal end adapted to be hingedly received within the tangent sight base and a free proximal end adjacent a proximal leaf segment having a transverse bore defined therethrough;

(b) said transverse bore being in communication with a transverse slot defined in the proximal end of said leaf;

(c) a sight blade including a proximal sight surface defining a sighting notch and a distally projecting cantilever support carrying a transversely aligned cylinder, wherein said sight blade cylinder has a threaded interior bore;

(d) wherein said sight blade's cylinder is dimensioned to be received within said sight leaf's transverse bore; and

(e) a windage adjustment screw dimensioned to be coaxially received within said sight leaf's transverse bore and to engage said sight blade cylinder's threaded interior bore, wherein said windage adjustment screw has a screw head that projects laterally from an open end of said sight leaf's transverse bore such that when said windage adjustment screw head is rotated, said windage adjustment screw forces said sight blade's cylinder to move laterally in relation to said sight leaf.

2. The adjustable sight of claim 1, wherein said leaf's distal end carries first and second opposing laterally projecting transverse pins, adapted to hingedly engage pin-receiving indentations in the tangent sight base.

3. The adjustable sight of claim 1, wherein said leaf has a surface including graduated range indicia.

4. The adjustable sight of claim 1, wherein said sight blade's proximal sight surface includes a luminescent elements aligned with said sighting notch.

5. The adjustable sight of claim 1, wherein said sight blade's proximal sight surface includes a plurality of luminescent elements arrayed around said sighting notch.

6. The adjustable sight of claim 1, wherein said sight blade's proximal sight surface includes first and second luminescent elements arrayed around said sighting notch.

7. The adjustable sight of claim 6, wherein said sight blade's proximal sight surface includes first and second circular or dot-shaped luminescent elements aligned on the left and right sides of said sighting notch.

8. The adjustable sight of claim 6, wherein said sight blade's proximal sight surface includes first and second elongated or dash-shaped luminescent elements aligned with one another on the left and right sides of said sighting notch.

9. The adjustable sight of claim 8, wherein said sight blade's first and second elongated or dash-shaped luminescent elements are positioned on said sighting surface on the left and right sides of said sighting notch such that, when used with a dot-shaped front sight luminescent element, provide the shooter a "dash-dot-dash" alignment well suited for rapid target acquisition in low light situations.

10. The adjustable sight of claim 6, wherein said sight blade's proximal sight surface includes first, second and third elongated or dash-shaped luminescent elements having said first and second luminescent elements aligned in parallel with one another on the left and right sides of said sighting notch, and wherein said third luminescent element is aligned with the bottom of the sighting notch and is substantially perpendicular to said first and second parallel luminescent elements to provide a U or bucket shaped outline of luminescent elements around said sighting notch.

11. The adjustable sight of claim 10, wherein said sight blade's first and second elongated or dash-shaped luminescent elements are positioned on said sighting surface on the left and right sides of said sighting notch such that, when used with a dot or ball shaped front sight luminescent element, provide the shooter a "ball in a bucket" alignment well suited for rapid target acquisition in low light situations.

12. The adjustable sight of claim 1, wherein said sight is included in a kit including a plurality of sight blades, each having distinct proximal sight surfaces including either (a) a distinct arrangements of luminescent elements arrayed around said sighting notch or (b) a sight surface without luminescent elements, enabling the user to configure the rifle's sights for a selected application.

13. The adjustable sight of claim 4, wherein said sight blade's luminescent element includes tritium.

14. The adjustable sight of claim 4, wherein said sight blade's luminescent element radiates light in a first selected color, and further comprising a front sight having a front luminescent element radiating light in a second color easily distinguished from said first color.

15. A method for aligning a rifle's the sights, comprising the method steps of:

(a) providing a rear sight having a proximal sight surface including first and second elongated or dash-shaped luminescent elements aligned with one another on the left and right sides of a sighting notch defined in said proximal sighting surface;

(b) providing a front sight including at least one round or circular luminescent element; and

(c) aligning the front sight with the rear sight to provide a sight picture having said front sight's circular element centered between said rear sight's first and second elongated or dash-shaped luminescent elements.

16. A method for aligning a rifle's the sights, comprising the method steps of:

(a) providing a rear sight having a proximal sight surface including first and second elongated or dash-shaped luminescent elements aligned vertically and in parallel with one another on the left and right sides of a sighting notch defined in said proximal sighting surface, and having a third luminescent element aligned horizontally and perpendicular to said first and second luminescent elements, along the bottom of the notch, to define a luminous bucket shape;

(b) providing a front sight including at least one ball-shaped or circular luminescent element; and

(c) aligning the front sight with the rear sight to provide a sight picture having said front sight's circular element centered between said rear sight's first and second vertical luminescent elements, and above said third luminescent element, to provide a 'ball in the bucket' sight picture.

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