

H. GUNN.
SIGHT FOR FIREARMS.
APPLICATION FILED APR. 6, 1905.

Fig. 1

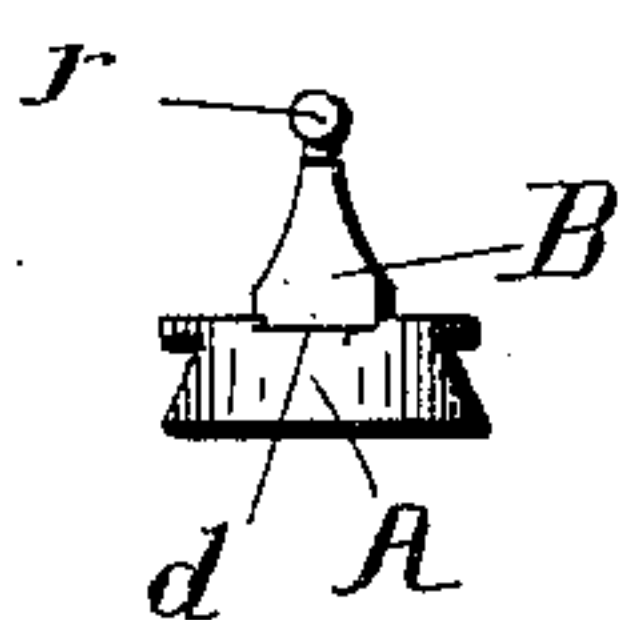


Fig. 2

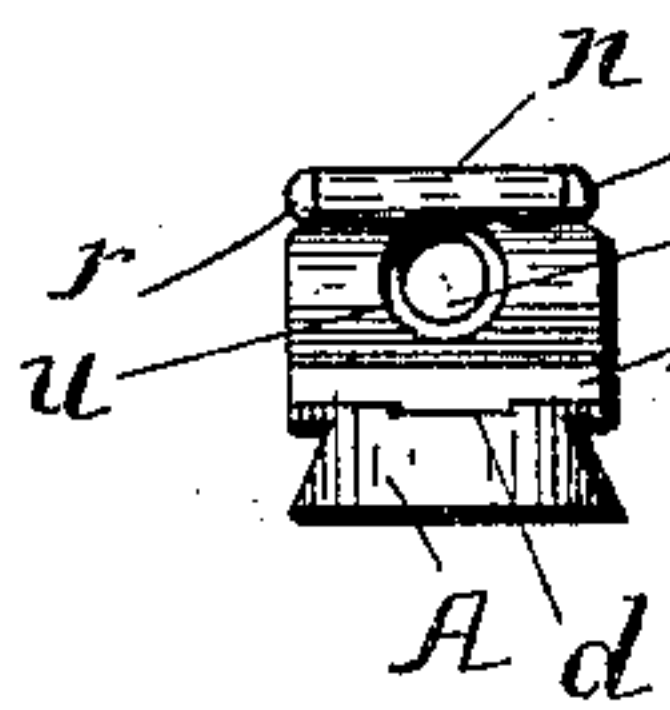


Fig. 3

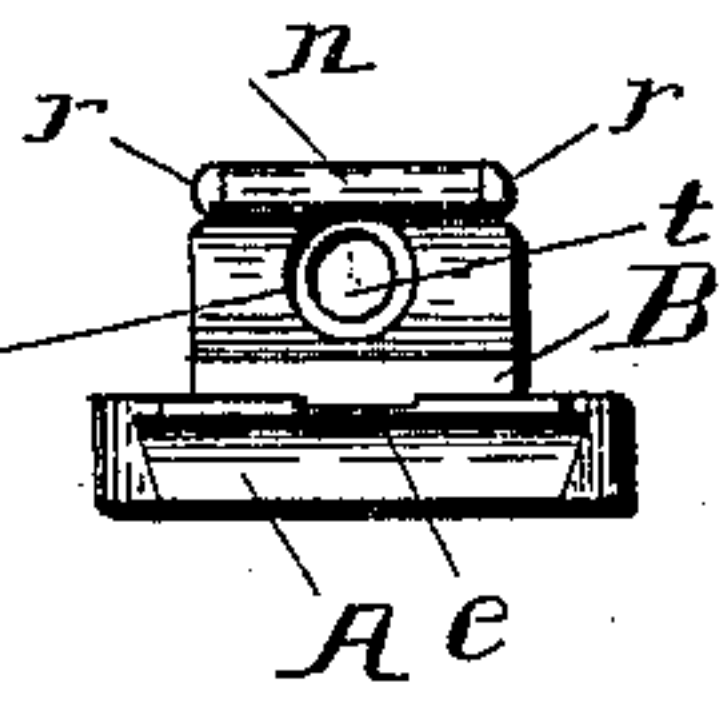


Fig. 4

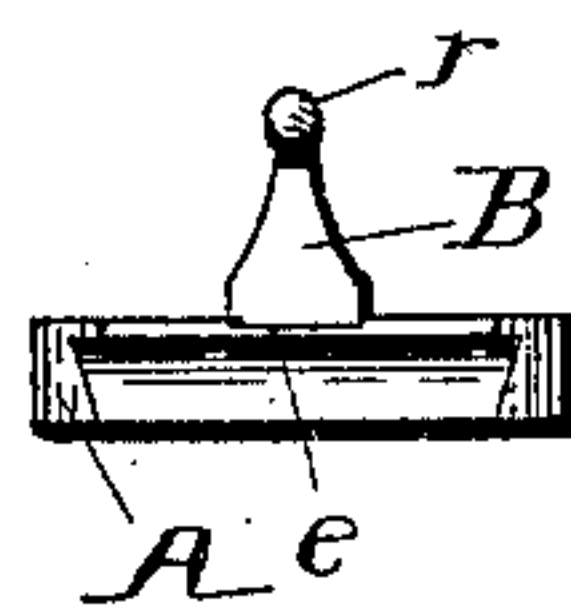


Fig. 5

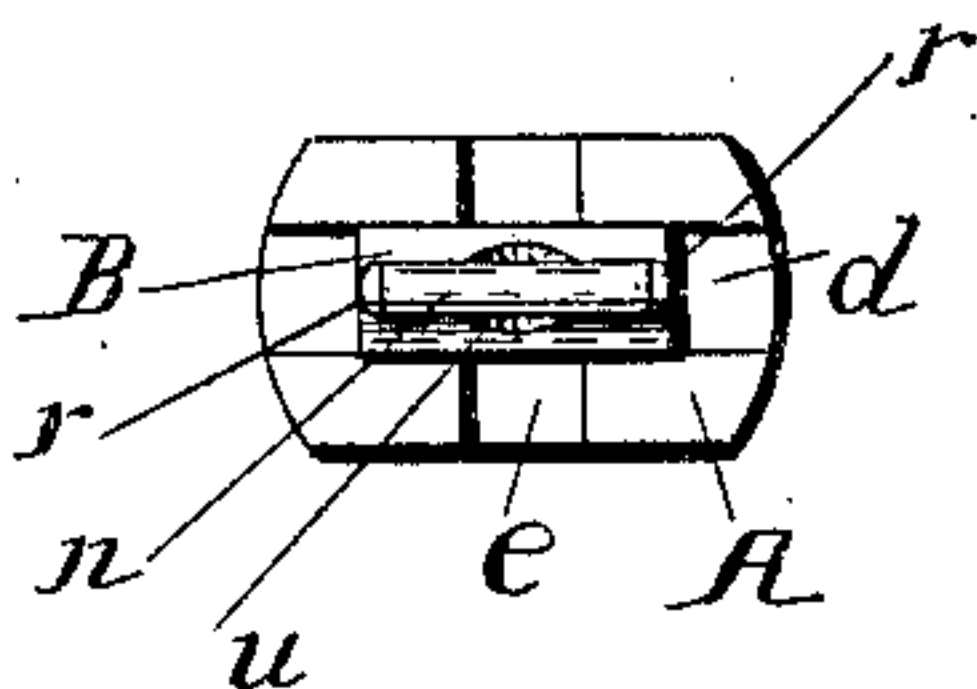


Fig. 6

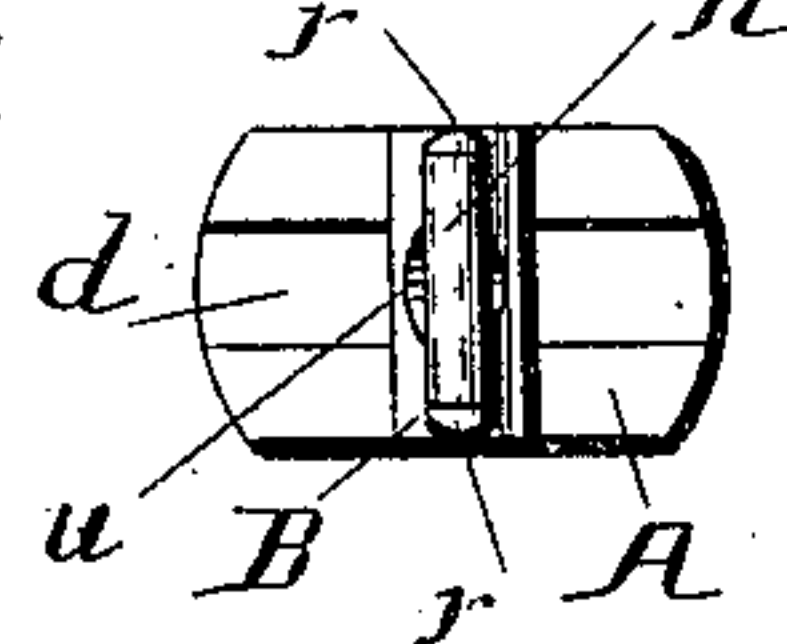


Fig. 7

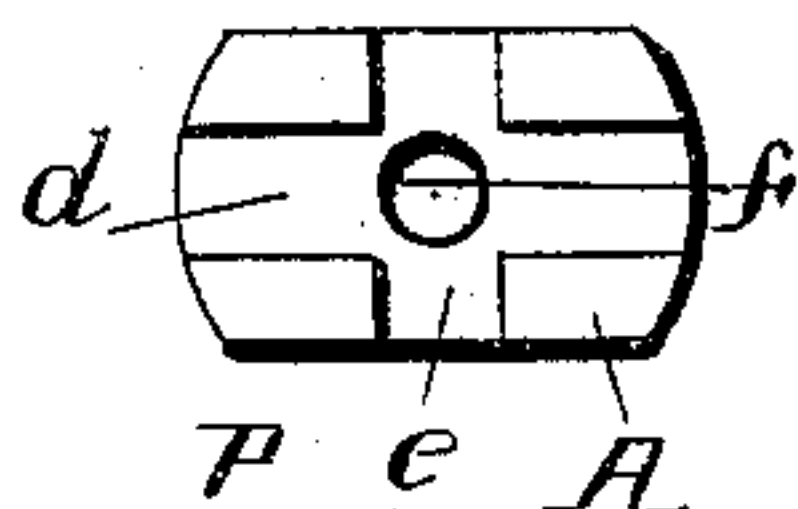


Fig. 8

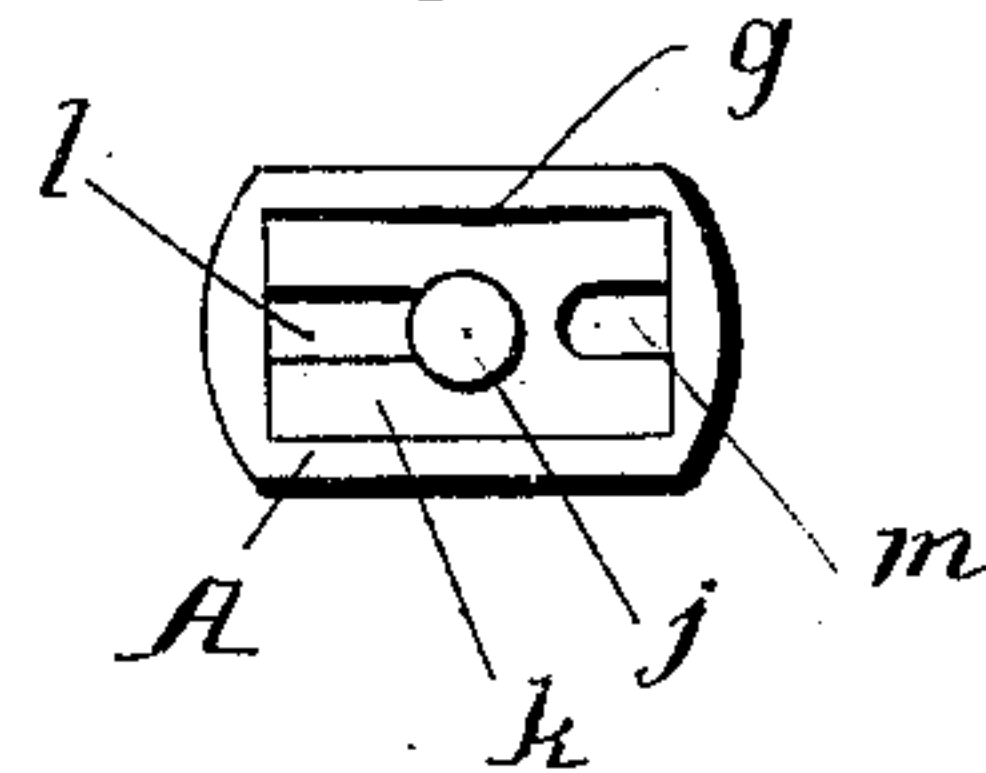


Fig. 9

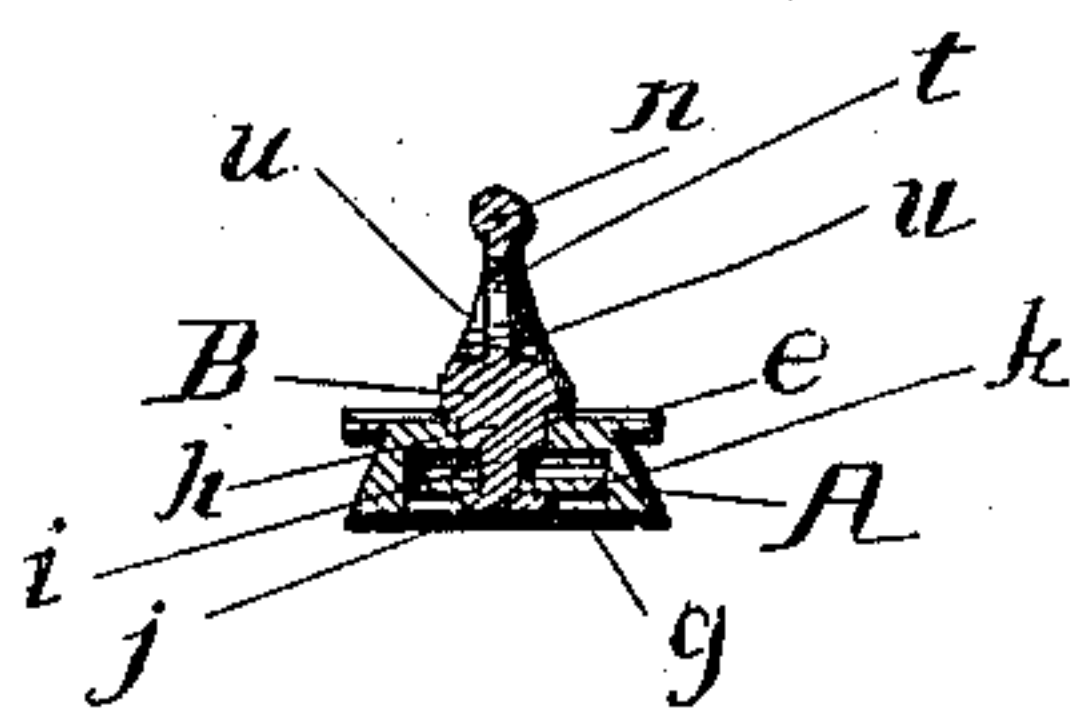


Fig. 10

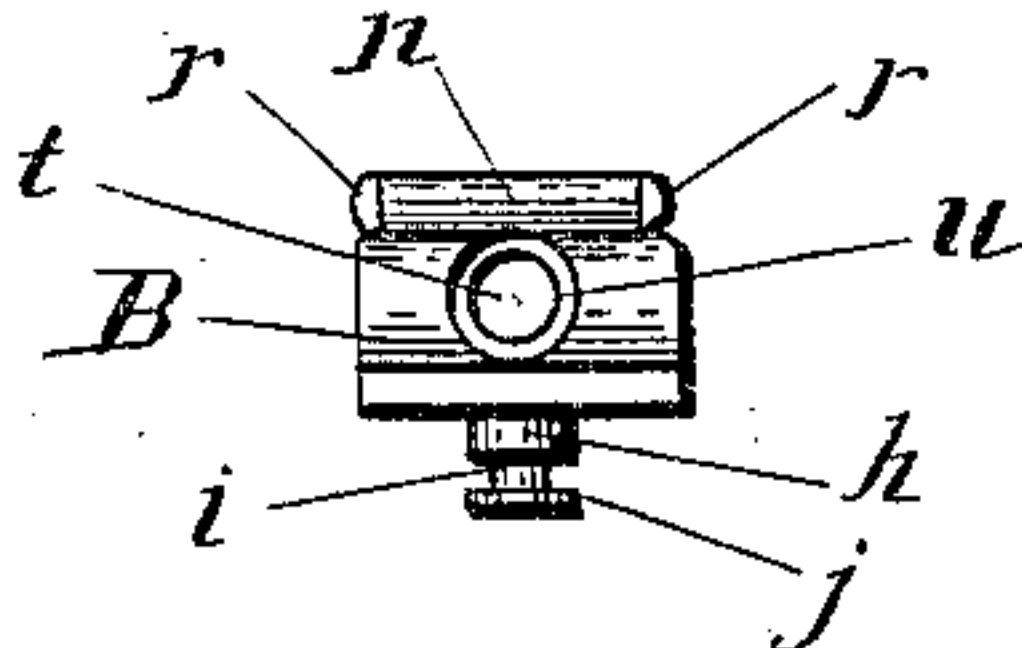


Fig. 11

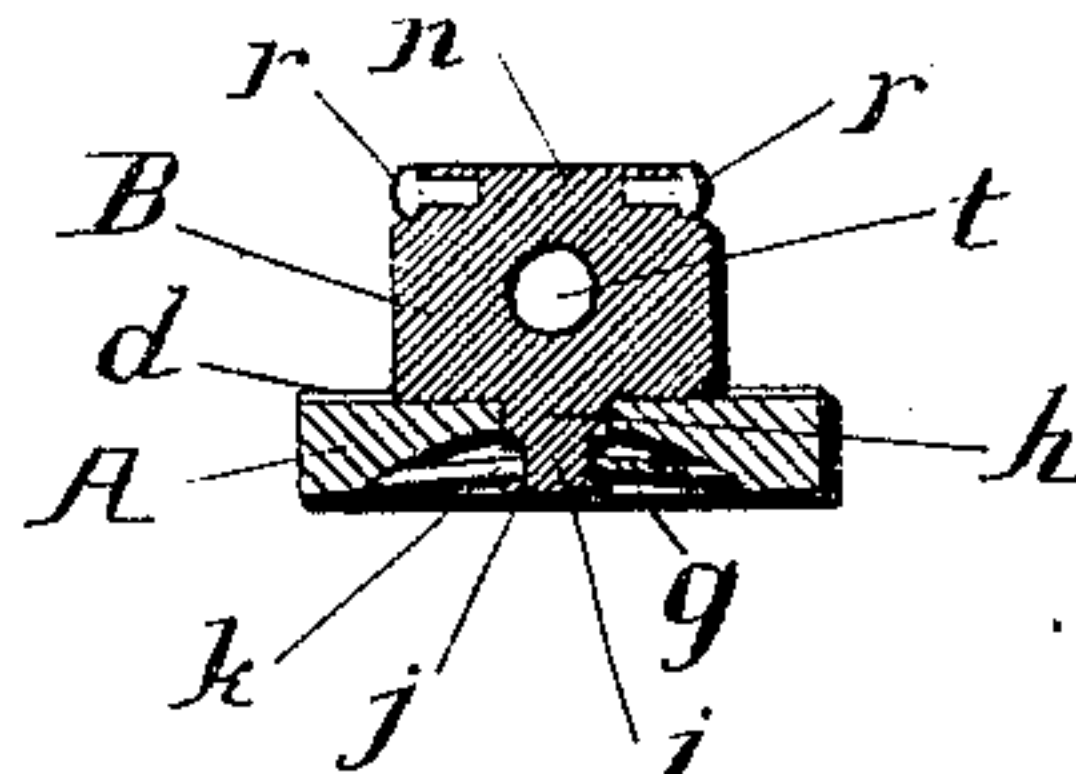


Fig. 12

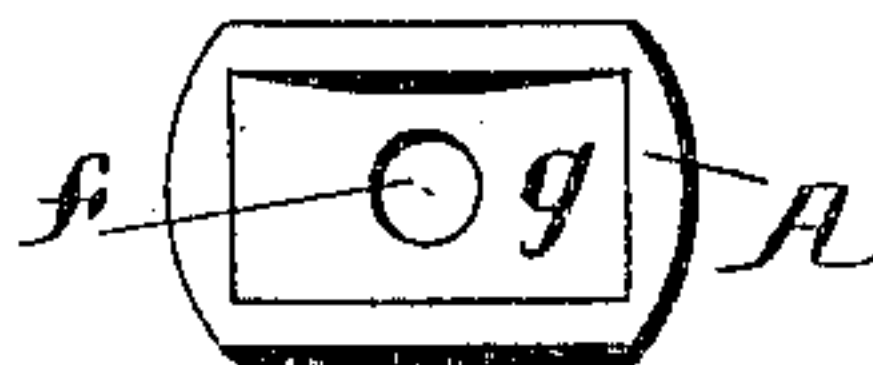


Fig. 14

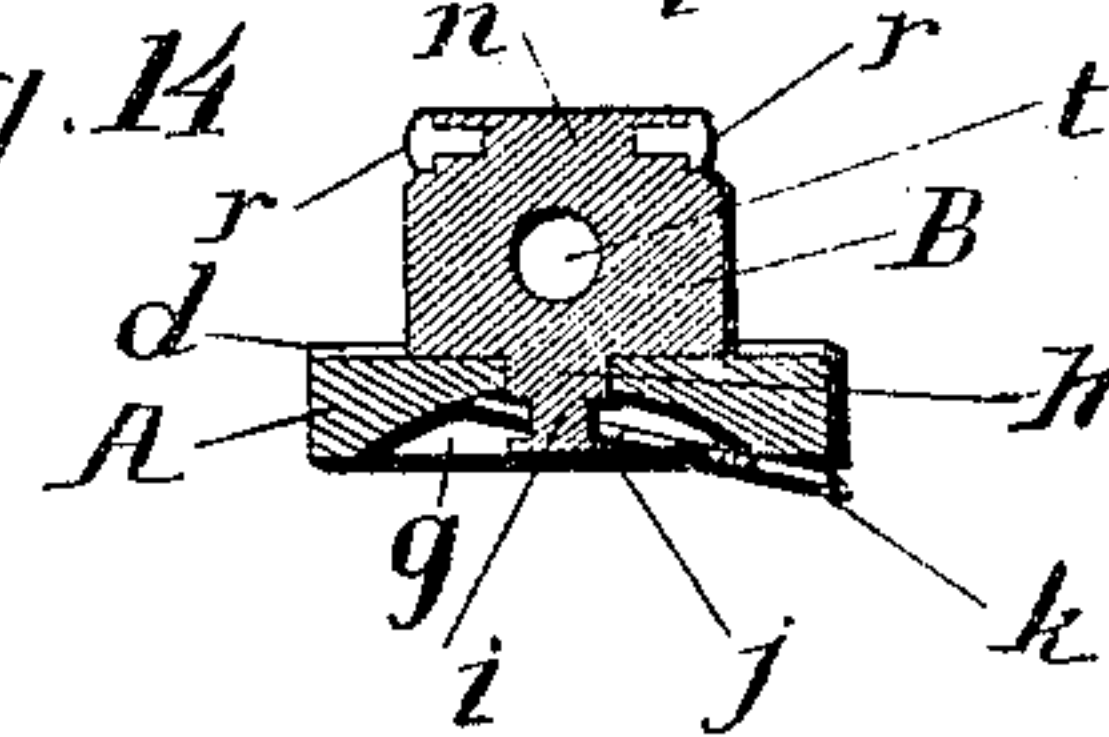
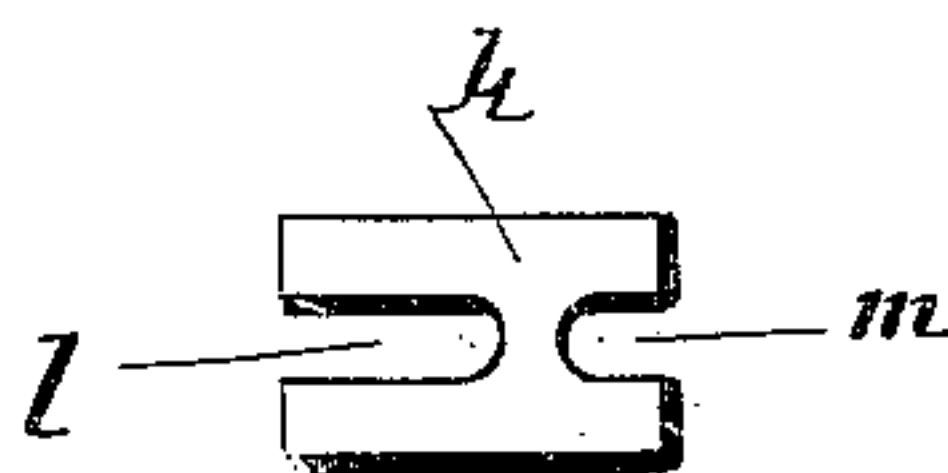


Fig. 13



Witnesses

Fred Otto Berner.

Kate I. Johnson.

Inventor

Herman Gunn

By George L. Barnes
Attorney

UNITED STATES PATENT OFFICE.

HERMAN GUNN, OF AVONMORE, CANADA, ASSIGNOR TO THE LYMAN GUN SIGHT CORPORATION, OF MIDDLEFIELD, CONNECTICUT, A CORPORATION OF CONNECTICUT.

SIGHT FOR FIREARMS.

No. 806,658.

Specification of Letters Patent.

Patented Dec. 5, 1905.

Application filed April 6, 1905. Serial No. 254,228.

To all whom it may concern:

Be it known that I, HERMAN GUNN, a citizen of Canada, residing at Avonmore, in the county of Stormont and Province of Ontario, Canada, have invented new and useful Improvements in Sights for Firearms, of which the following is a specification.

The object of my invention is to provide a front sight for firearms embodying a double or alternative system of reversible bead and aperture sights combined in a construction in which the sight part is swiveled on a vertical axis after the manner of a turret-head and held in its various positions by means of a spring and retaining grooves or seats.

The invention consists in the novel combination of the alternative sight systems and construction of parts, as hereinafter more fully described and claimed.

In the accompanying drawings, forming a part of this specification, Figure 1 is a side elevation of my improved sight with the sight part turned to present an aperture-sight to the line of aim as shown in Fig. 3. Fig. 2 is a similar elevation with a bead-sight presented to the line of aim as shown in Fig. 4. Fig. 3 is a front elevation of Fig. 1, and Fig. 4 is a front elevation of Fig. 2. Fig. 5 is a plan view of Fig. 1. Fig. 6 is a plan view of Fig. 2. Fig. 7 is a plan view of the upper side of the sight part. Fig. 8 is a plan view of the sight viewed from underneath. Fig. 9 is a central vertical cross-section through Figs. 3 and 5. Fig. 10 is a side elevation of the sight part. Fig. 11 is a central vertical lengthwise section through Figs. 1 and 5. Fig. 12 is a plan view of the lower side of the base. Fig. 13 is a plan view of the spring which holds the sight part in its seats. Fig. 14 is a view showing the method of inserting the spring into place in the sight-base.

Referring to the drawings, A designates the base of my improved sight, which is made of the ordinary dovetailed shape in cross-section, as shown, for the purpose of being held in the usual correspondingly - shaped transverse sight-receiving notch of the gun-barrel. The upper flat surface of the base is centrally grooved both longitudinally and transversely to provide the respective seats *d* and *e*, which are placed at exactly right angles to each other and cross or intersect at the center of the base, as shown. At said central point is

a vertical perforation or circular bearing *f*, of somewhat less diameter than the width of the grooves or seats *d* and *e*. On its lower side the base is milled out to provide the parallel-sided and longitudinally-arched recess *g*. (Shown in lengthwise section in Fig. 11.)

The swivel or sight part B is proportioned of the same length as the width of the base A, and its lower portion is of the same width as the grooves or seats *d* and *e*, in which in operation it is adapted to be seated and perfectly fit. Midway of its length the sight part is provided with a depending pivotal part or stud *h*, fitting the circular bearing *f* of the base. Said depending stud projects through into the recess *g*, where it is of reduced diameter, forming a neck *i*, below which a head or shoulder *j* is provided, of the diameter of or slightly smaller than the pivotal part proper above the neck *i*, to permit its being passed through the perforation *f*.

The recess *g* receives a spring *k*, comprising a rectangular plate of spring metal having a longitudinal slot *l* of the width of the neck *i*, extending centrally from one end to the center of the plate, where its end is rounded, as shown, to embrace the said neck. In the operation of assembling the parts of the sight, the pivotal stud of the sight being first inserted through the perforation *f*, the spring-plate can be slipped upon the neck *i*, as shown in Fig. 14, until it is wholly received within the recess *g*, as shown in Fig. 11, in which position the neck *i* is engaged by the end of the slot, with the plate resting upon the shoulder or head *j* and pressing down upon it with tension proportionate to the degree of deflection from the normal assumed in being forced into place in the recess. In this position the spring will yieldingly hold the sight part firmly in its seats in the base and will remain secure against displacement in the recess *g*. The short slot *m* in the spring-plate in alinement with the slot *l* is provided for the purpose of rendering the spring of uniform elasticity throughout its length.

From its lower or base portion the sight part tapers upwardly in wedge-like form by convergence of its lengthwise sides, and its upper thin part is surmounted by a cylindrical barrel *n*, into the ends of which the bead-sights *r* are inserted, as shown in Fig. 11.

Transversely through the sight part below said barrel is a central perforation *t*, which is slightly counterbored on each side of the sight part to provide the annular surfaces *u* therein. Said perforation comprises an aperture-sight, and its surrounding annular surfaces may be variously colored to contrast effectively with different fields of vision or conditions of light. The two bead-sights may also be differently colored, thus providing two separate sights for each of the two distinct methods of sighting—viz., the bead and aperture systems. For instance, one of the bead-sights *r* may be of pure white ivory, the other red or otherwise tinted, while one of the annular surfaces *u* may be silvered or bronzed and the other blackened, thus providing for four different sighting conditions, either of which may be called into use as required, as hereinafter explained.

Constructed as above described and shown the operation of my improved sight is as follows: Assuming the sight part B in engagement with the lengthwise groove or seat *d* of the base, as shown in Figs. 1 and 5, one of the aperture-sights *u* will be presented in the line of aim, as shown in Fig. 3. If the sight part be then reversed in its seat by being lifted out therefrom against the tension of the yielding spring-plate *k*, which engages the pivot *h*, and turned through a semirevolution, the other or opposite annular surface surrounding the aperture will be brought into the sighting position. Similarly if the sight part be revolved through a quarter-turn it will then engage the groove or seat *e* at a right angle to its former position, and one of the bead-sights *r* will appear in the line of aim, as shown in Fig. 4. By reversing the sight part in the seat *e* the opposite bead-sight *r* will then be brought into view. These movements of the sight part involve only a slight vertical action thereof and deflection of the spring-plate *k* corresponding to the depth of the grooves or seats *d* and *e*. The sight part will remain firmly held in each of the aforesaid positions secure against displacement and in perfect alinement with the axis of the gun-barrel as originally fitted in relation thereto.

The parts are simple in construction, can be readily assembled, and the sight is entirely devoid of screws or other appurtenances that are liable to become misplaced or out of order.

I claim and desire to secure by Letters Patent—

1. A front sight for firearms, comprising in combination the base, A, provided with the

spring-receiving recess, *g*, on its lower side and the lengthwise and transverse grooves or seats, *d* and *e*, on its upper side at right angles to each other, and having the central pivotal bearing, *f*, at the intersection of the grooves, the sight part, B, adapted to engage the grooves or seats of the base and provided with the central pivot-stud, *h*, received bodily through the pivotal bearing of the base and having a reduced portion or neck below the bearing, and the slotted spring-plate *k* received in the recess of the base and engaging the neck of the pivot to lock the parts in place and yieldingly hold the sight part upon the base, substantially as and for the purpose specified.

2. A front sight for firearms, comprising in combination the base having the lengthwise and transverse grooves or seats and a pivotal bearing at the intersection of the grooves, a sight part journaled in said pivotal bearing adapted for engagement with the grooves of the base and provided with a vertical web surmounted by a lengthwise sight-barrel and perforated beneath the barrel to provide a sight-aperture at a right angle therewith, and a retaining-spring engaging the pivotal part of the sight to yieldingly hold the sight upon the base, substantially in the manner and for the purpose specified.

3. A front sight for firearms, comprising in combination the base, A, provided with the spring-receiving recess, *g*, on its lower side and the lengthwise and transverse grooves or seats, *d* and *e*, on its upper side at right angles to each other, and having the central pivotal bearing, *f*, at the intersection of the grooves, the sight part, B, adapted to engage the grooves or seats of the base and provided with the central pivot-stud, *h*, journaled in the bearing and having the neck, *i*, and head or shoulder, *j*, below the journal, and the spring-plate, *k*, having the slot, *l*, and received in the recess of the base in yielding engagement with the neck and shoulder of the pivot-stud, said sight part being provided with a double system of bead-sights, *r*, and alternative system of aperture-sights or central horizontal perforation, *t*, at right angles to the line of the bead-sights, substantially in the manner and for the purpose specified.

In testimony whereof I affix my signature in presence of two subscribing witnesses.

HERMAN GUNN.

Witnesses:

A. E. ZIMMERMAN,
R. JOHNSON.