No. 810,192. PATENTED JAN. 16, 1906.

G. DANINGER.

SMALL ARM.

APPLICATION FILED MAY 27, 1905.

Fig. 1.

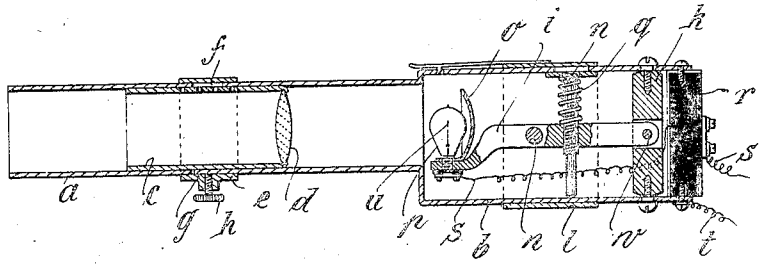


Fig. 2.

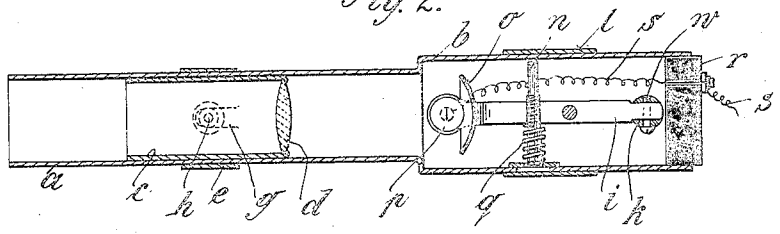
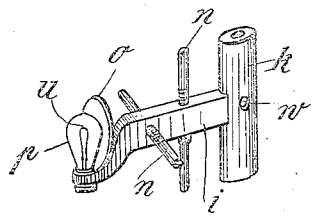


Fig. 3.



Witnesses:
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UNITED STATES PATENT OFFICE.

GOTTFRIED DANINGER, OF PRZEMYSL, AUSTRIA-HUNGARY.

SMALL-ARM.

No. 810,192. Specification of Letters Patent. Patented Jan. 16, 1906.

Application filed May 27, 1905. Serial No. 262,593.

To all whom it may concern:

Be it known that I, GOTTFRIED DANINGER, a subject of the Emperor of Austria-Hungary, residing at Przemysl, in the Empire of Austria-Hungary, captain of the Third Regiment of Artillery, have invented certain new and useful Improvements Relating to Small-Arms, of which the following is a specification.

Small-arms, and more particularly revolvers and pistols, lose their value when it is desired to make use of them at night, as owing to the darkness neither the mark nor object aimed at nor the sights are visible. Even if the objective is partially visible the sights cannot be found, while if, on the other hand, the sights are artificially illuminated the objective disappears from sight. It must therefore be attributed to chance if the objective is struck. In accordance with the present invention these defects are obviated owing to the fact that during darkness the sights are not employed; but the objective is artificially illuminated, and by this means the position of the point which may be expected to be struck is rendered especially distinguishable. In accordance with the invention these objects are attained by means of a device which consists, broadly, of a tube fixed upon the barrel of the revolver or the like parallel with its axis, this tube containing a reflector, an incandescent electric lamp, and an adjustable convex lens, so that the image of the incandescing filament is magnified by the lens and appears reversed upon the surface of the mark. The reflector is adjustable with the lamp in such a manner that the image of the arc of light may be properly placed upon the mark relatively to the line of sight. By this means it is possible for the lowest point of the inverted image of the luminous arc upon the objective, which corresponds with the summit of the luminous arc in the lamp, to invariably lie in a line parallel with the line of sight and passing through the center of the lens.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 shows a constructional form of the device in vertical section. Fig. 2 represents the same in horizontal section, and Fig. 3 is a perspective view of the holder for the incandescent lamp.

A tube *a* widens out toward its rear into a rectangular casing *b*, which is passed and fixed upon the barrel of the weapon with which the device is to be used parallel with the axis of the bore of this barrel by means of a socket fitting this latter. In a tube *c*, mounted in the cylindrical portion of the fitting *a b*, is placed a convex lens *d*. The tube *c* is adjustable by the displacement of the collar *e* along the slot *f* and may be fixed in the desired position by means of the screw *h*, acting upon the tongue *g* of the tube *a*. A holder *i*, one end of which is fitted into a pillar *k* by means of a pin *w*, is mounted in the casing *b* in such a manner as to be displaceable horizontally and vertically by means of the screws *n n*, which are accessible after the displacement of the sleeve *l*. At its free end it carries a reflector *o* and in front of this an incandescent electric lamp *p*. Over one-half of each of the screws *n* is passed a spring *q*, which when the lamp *p* has been adjusted renders the lamp-holder immovable. In the free extremity of the casing *b* a disk *r* of insulating material is inserted, and through it the one conducting-wire *s*, led directly into the lamp, is passed. The other wire *t* is fixed upon the metal case *b* and is connected with the lamp-fitting by the lamp-holder.

The lamp *p* is arranged in front of the reflector at such a height that the summit *u* of the incandescing filament is situated close below the focus of the mirror *o*.

The lens throws upon the objective a sharp inverted and magnified image of the incandescing filament, while the reflected rays not passing through the focus give a light of less intensity around the luminous arc. As the lamp is adjusted in such a manner that the ray of light at the lowest point of the luminous arc is directed parallel with the line of sight, owing to the small interval between the latter and the ray of light the objective point and the lowest point of the luminous arc nearly coincide.

If it is desired to hit an objective, it is readily found by the radiated light. The lowest point of the intense luminous arc likewise shows where the shot will strike. Owing to this, it is unnecessary to sight the mark and the weapon may be used without bringing it into the aiming position.

The electric current is supplied to the device from some convenient source of electricity carried by the user or in the butt. In the former case it may advantageously be conducted through a thin flexible cable inserted in the revolver-sling or woven into the same. The contact device may be arranged in

any convenient position upon the butt in accordance with the wishes of the purchaser.

What I claim, and desire to secure by Letters Patent of the United States, is—

1. In a device for the purpose described, a tube mounted parallel with the barrel of the weapon, a source of light within said tube, a reflector, a support for said reflector and source of light mounted for movement vertically and horizontally and a convex lens interposed between the reflector and the outer end of the tube, whereby the rays from said source of light are thrown upon the mark by the lens and the image of the light properly placed upon the mark relatively to the line of sight.

2. In a device for the purpose described, a tube mounted parallel with the barrel of the weapon, a lens in the fore part of said tube, a holder adjustable horizontally and vertically in the rear part of said tube, a reflector supported in said holder, and an electric lamp in front of said reflector.

3. In a device for the purpose described, a tube mounted parallel with the barrel of the weapon, a lens in the fore part of said tube, a holder adjustable horizontally and vertically in the rear part of said tube, a reflector supported in said holder, and an electric lamp in front of said reflector and springs bearing in different directions on said holder.

4. In a device for the purpose described, a tube mounted parallel with the barrel of the weapon, a lens in the fore part of said tube, a holder adjustable horizontally and vertically in the rear part of said tube, a reflector supported in said holder, and an electric lamp in front of said reflector, screws disposed at right angles to each other and passed through said holder, and springs surrounding said screws for adjustment of said holder.

In testimony whereof I have hereunto set my hand, in presence of two subscribing witnesses, this 10th day of May, 1905.

GOTTFRIED DANINGER.

Witnesses:

ALVESTO S. HOGUE,

AUGUST FUGGER.