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OR 2,108,475

Feb. 15, 1938. L. W. COOPER 2,108,475

COMBINED FIREARM AND SPOTLIGHT

Filed April 21, 1936

Fig. 1

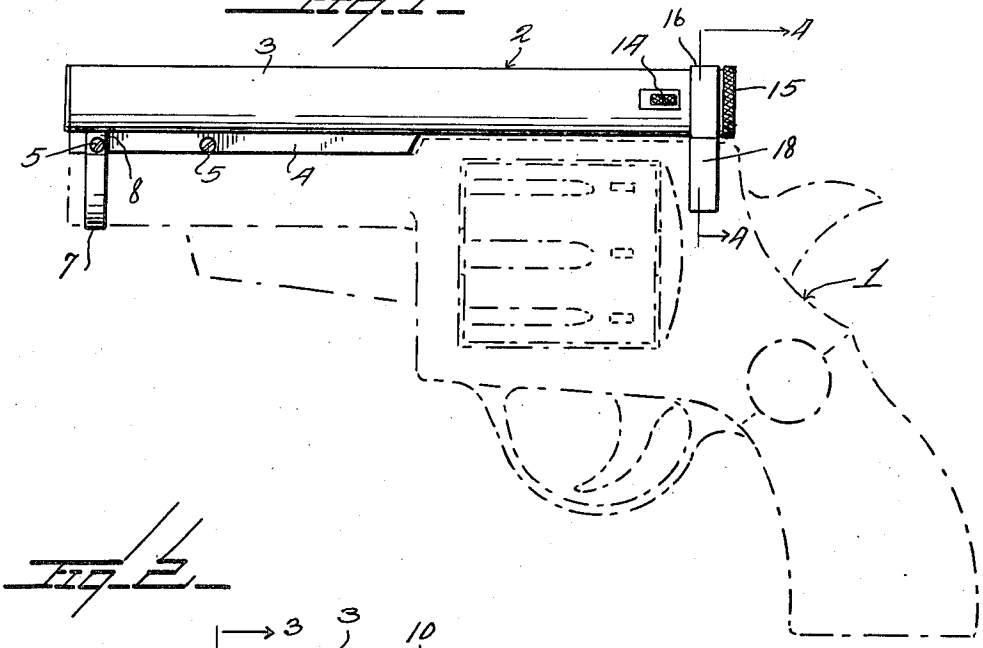


Fig. 2

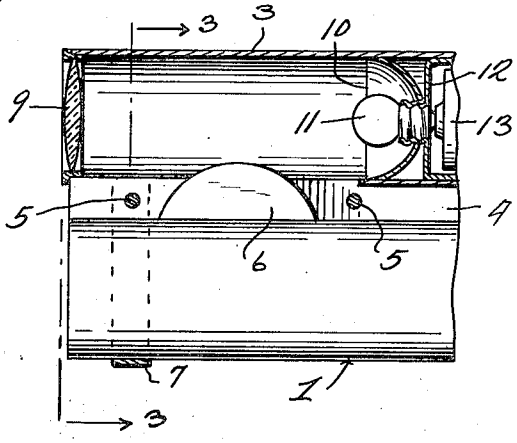


Fig. 3

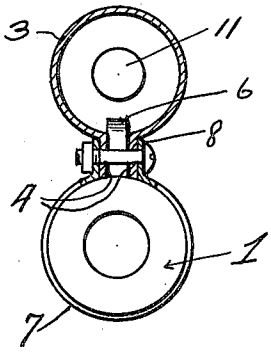
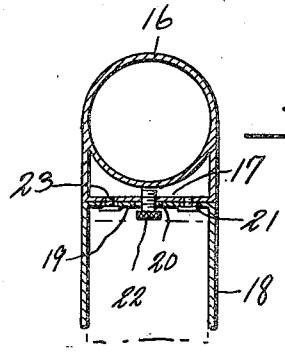


Fig. 4



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Search Room
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Patented Feb. 15, 1938 2,108,475

UNITED STATES PATENT OFFICE

2,108,475

COMBINED FIREARM AND SPOTLIGHT

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Application April 21, 1936, Serial No. 75,638

3 Claims. (Cl. 240—6.41)

This invention relates to the class of firearms and pertains particularly to an improved combination with a firearm such as a pistol, of a spotlight producing device.

The primary object of the present invention is to provide a firearm having associated therewith a light-forming means which is designed to throw a light beam in such a manner as to direct the aim of the user of the firearm accurately toward the object at which the firearm is pointed.

Another object of the invention is to provide an improved spotlight producing unit which is adapted primarily for application to a pistol or revolver.

A further object of the invention is to provide an improved spotlight forming device having a novel means associated therewith for effecting its attachment to the muzzle of a pistol or revolver in such a way as to coact with the forward sight to maintain the light producing device in position.

A still further object of the invention is to provide in a device of the above described character, novel means for coupling the device at its front and rear ends with the firearm whereby vertical and lateral adjustments may readily be made so as to accurately direct the spot of light for coaction with the firearm whereby a bullet discharged therefrom may be made to strike the sighted object in the center of the light spot when it is trained on the object.

The invention will be best understood from a consideration of the following detailed description taken in connection with the accompanying drawing forming part of this specification, with the understanding, however, that the invention is not confined to any strict conformity with the showing of the drawing but may be changed or modified so long as such changes or modifications mark no material departure from the salient features of the invention as expressed in the appended claims.

In the drawing:—

Figure 1 is a view illustrating the application of the present invention to a revolver, the latter being shown in dotted outline;

Figure 2 is a vertical longitudinal sectional view through the forward end portion of the spotlight, showing the revolver muzzle in elevation;

Figure 3 is a section taken substantially upon the line 3—3 of Figure 2;

Figure 4 is a sectional view taken substantially upon the line 4—4 of Figure 1.

Referring now more particularly to the drawing wherein like numerals designate corresponding parts throughout the several views, the numeral 1 indicates generally a firearm to which the spotlight is shown attached. This firearm is here illustrated as being a revolver but it is to be understood that it may represent a pistol or a rifle or any other type of device of this character.

In carrying out the present invention, there is provided a spotlight unit which is indicated generally by the numeral 2, and which comprises a cylinder or barrel 3, which is preferably of approximately the same diameter as the barrel of the firearm. This barrel 3 is longitudinally split or divided and has formed integral with the edges of the longitudinal device, from one end through a portion of the length of the barrel, the outwardly or downwardly directed spaced longitudinal jaw flanges 4.

In adapting the spotlight device to a pistol or revolver, it is preferred that its length be substantially the same as the length of the revolver from the breech end to the muzzle end, and the flanges 4 are preferably of approximately the length of the barrel from the front end rearwardly to the point where it joins the frame of the gun, at which point the frame usually projects slightly above the barrel. The width of the gripping flanges 4 is made so that when their edges are resting upon the body of the gun barrel, the rear portion of the barrel 3 will rest upon the top of the gun frame in the manner illustrated.

The flanges 4 are connected by the spaced screws or bolts 5. These are disposed adjacent the forward end of the barrel 3 and are located so as to have the front sight 6 of the firearm disposed therebetween so that when the flanges 4 are drawn together by the bolts or screws 5, they will grip the sight 6 therebetween and thus hold the spotlight casing or barrel 3 firmly in position upon the gun barrel. In addition, in order to prevent the forward end of the spotlight barrel 3 from lifting from the gun barrel, there is provided the split band 7 which surrounds the gun barrel and has the spaced upwardly extending ends 8 through which one of the screws 5 passes.

The casing 3 constitutes a housing of the usual character for a lens 9 which is at the front end of the casing, as shown in Figure 2, a reflector 10 spaced behind the lens, an incandescent lamp 11 disposed in the reflector and supported in a suitable carrying frame 12 and a source of electric

potential, such as a battery 13. At the rear end of the housing 3, a switch 14 is placed to be conveniently engaged by the thumb of the hand holding the gun so as to control the flow of electric current to the incandescent lamp 11. The details of this switch are not illustrated, as the same are well known in all forms of flashlight. The rear end of the housing 3 is closed by a removable cap 15 so as to retain the batteries in position therein.

Encircling the rear end of the battery casing or barrel 3 is a collar 16 having a base frame portion 17 which is straight and disposed horizontally across the top of the gun frame at the rear thereof, as shown in Figure 1. Abutting this base frame 17 is an inverted substantially U-shaped clip 18, which has a straight yoke portion 19, which engages the underside of the frame 17 and has a central longitudinal slot 20 and two lateral longitudinal slots 21. A vertical adjusting screw 22 passes through the center slot 20 and is threaded into an aperture in frame 17, and smaller securing screws 23 pass through the lateral slots 21 and are threaded in suitable receiving openings in the frame 17 at the sides of the lifting or adjusting screw 22. By this means, the spotlight may be sighted by raising the rear end thereof, after loosening the screws 5 slightly, to allow the forward end of the spotlight to pivot upon the forward one of the screws 5. After the rear end of the spotlight has been raised together with the collar and the clip 18, the screws 23 may be loosened so as to permit the lateral adjustment of the rear end of the casing 3 and the collar 16 relative to the clip 18, and any vertical adjustment which is necessary in connection with the casing 3 relative to the top of the rear part of the firearm, is made by turning the vertical adjusting screw 22 so that when the clip 18 is lowered over the firearm frame, the head of the screw in engaging the top of the frame will maintain the rear end of the spotlight unit at the proper or desired elevation.

From the foregoing, it will be readily apparent that the invention herein disclosed provides a novel means of mounting a spotlight upon a pistol, revolver or other firearm, by means of which the aim of the firearm is greatly facilitated, because after the proper adjustment of the spotlight is made, the accurate use of the firearm at night is made possible, because of the fact that it is merely necessary to locate the spot of light projected by the lighting unit upon the object which it is desired to hit, and if the proper aiming adjustment of the spotlight has been made, the bullet projected from the firearm will strike in the area defined by the light spot. A unit of this character is particularly desirable for use on firearms carried by officers of the law or other persons who have occasion to use firearms at night, as it gives them a decided advantage over persons to be apprehended who are not provided with similar means for quickly aiming a gun.

What is claimed is:—

1. In a firearm having a frame body, a barrel extending therefrom and a sight on the muzzle end of the barrel, in which the top of the barrel is lower than the top of the frame body, a target lighting means comprising a tube longitudinally divided from one end through a portion of its length, a pair of flanges extending longitudinally of the tube and each bordering an edge of the tube division, said flanges extending the length of the division and forming tube supports adapted to rest upon said barrel and having a width sufficient to maintain the tube at an elevation permitting the unflanged portion of the tube to extend lengthwise upon the top of the frame body, said sight being disposed between the flanges, means coupling the flanges and drawing the same together into gripping relation with the sight, and light producing means disposed within the tube and arranged to project a light beam from the forward end of the tube.

2. In a firearm having a frame body, a barrel extending therefrom and a sight on the muzzle end of the barrel, the top of the barrel being lower than the top of the frame body, a target lighting means comprising a tube adapted to position over the barrel and the body and to extend parallel with the barrel, means extending longitudinally of the tube from one end for engagement with the top of the barrel whereby to support the tube at an elevation to permit the rear end of the tube to position over and longitudinally of the frame body, the forward end of the tube being open for the discharge of light rays, said tube carrying a light projecting means by which light rays are projected through the tube end, means securing the forward end of the tube to the muzzle end of said barrel, a frame forming a saddle-like yoke over said frame body, a collar encircling the rear end of said tube and resting on the yoke, means coupling said collar with said yoke to hold the rear end of the tube with the collar in an adjusted position to which they may have been shifted transversely of the frame body, and means carried by the collar and passing freely through the underlying portion of the yoke to contact the frame adapted to raise and lower the rear end of the tube relative to the frame.

3. In a firearm having a frame body and a barrel extending therefrom, a target lighting means comprising a tube disposed above and parallel with the barrel, the rear end of said tube lying over said body, means coupling the forward end of the tube with the muzzle end of the barrel, a collar encircling the rear end of the tube and having a straight portion disposed across the top of the frame body, a yoke-like supporting frame mounted upon the frame body and having a flat top portion in opposed relation with the straight portion of said collar, a screw extending freely through the flat portion of said last frame and threadably engaging the straight portion of the collar and having its head resting upon the top of the firearm frame body, said screw facilitating the raising and lowering of the rear end of the tube, and light forming means within the tube arranged to project a light beam through the forward end thereof.

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