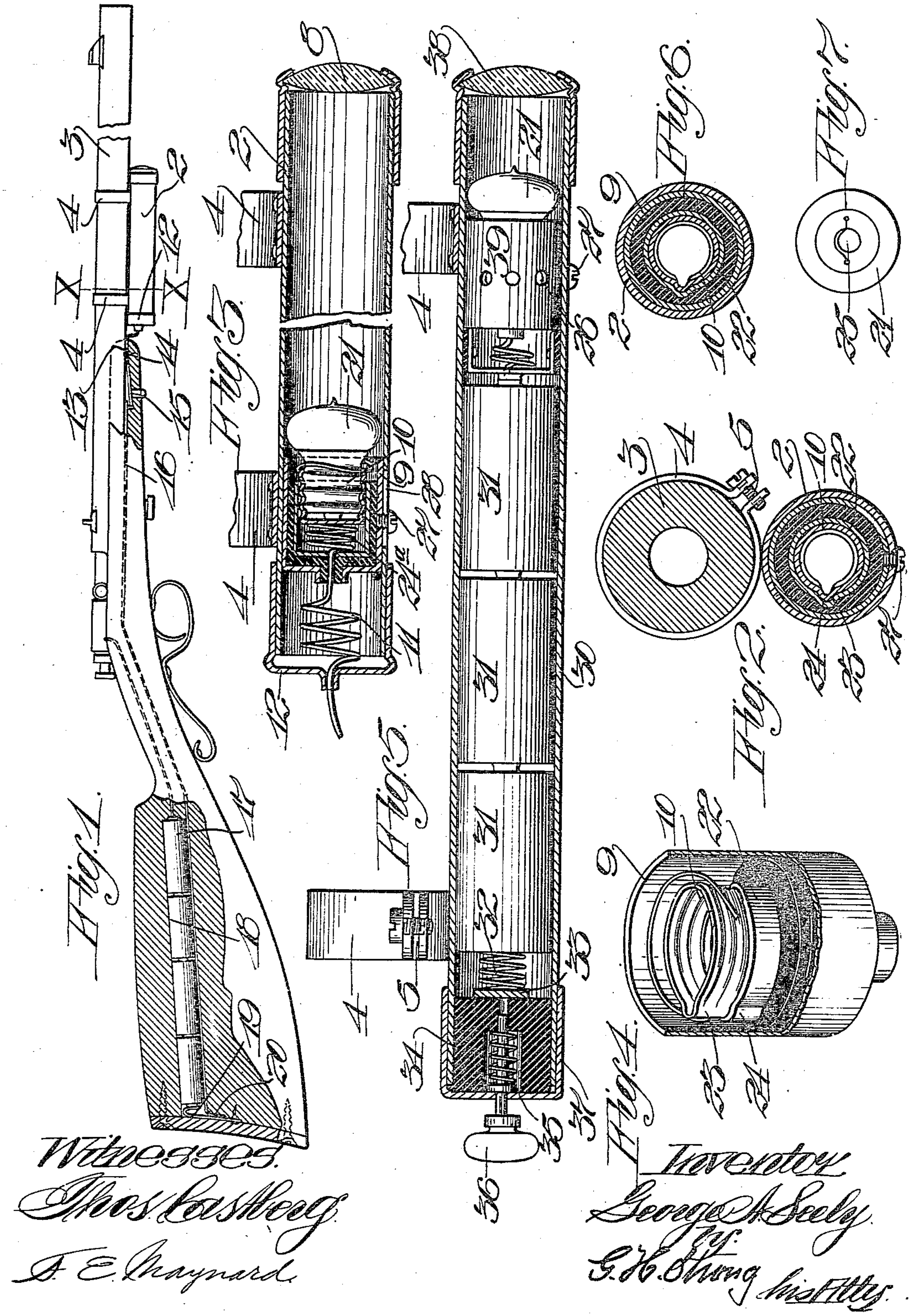
G. A. SEELY.
NIGHT SIGHT FOR FIREARMS.
APPLICATION FILED OCT. 2, 1911.

1,029,951. Patented June 18, 1912.



UNITED STATES PATENT OFFICE.

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NIGHT-SIGHT FOR FIREARMS.

1,029,951. Specification of Letters Patent. Patented June 18, 1912.

Application filed October 2, 1911. Serial No. 652,346.

To all whom it may concern:

Be it known that I, GEORGE A. SEELY, citizen of the United States, residing in the city and county of San Francisco and State of California, have invented new and useful Improvements in Night-Sights for Firearms, of which the following is a specification.

This invention relates to firearms, and particularly to an illuminating sight therefor.

The object of the present invention is to provide an effective, reliable, convenient and simple night sight for various types of firearms; and to provide a device readily attachable to and adjustable on the firearms, and which is so constructed as to be protected against injury by the vibration of the piece when discharged.

The invention consists of the parts and the construction and combination of parts as hereinafter more fully described and claimed, having reference to the accompanying drawings, in which—

Figure 1 is a partial side view of a gun partly in section with the illuminating sight in position. Fig. 2 is a cross section on line X—X Fig. 1. Fig. 3 is an enlarged view of the sight. Fig. 4 is a detail showing the yieldable socket. Fig. 5 is a longitudinal sectional view of a modified form of sight structure. Fig. 6 is a cross section of the socket structure and tube. Fig. 7 is a front elevation of the lamp.

In the illustrated embodiment of the device, a tube 2 is shown as attached to a rifle barrel 3 by flexible ring-like clamps 4 which are preferably split to form adjacent terminals 5. The clamps, 4 are passed over the end of the gun with a lens 8, and removably secured in the tube is a bushing 9 carrying a lamp socket 10. A conductor 11 runs from the socket-back through the bushing 9 and cap 12 and extends into the gun-stock 13 where it engages a contact piece 14 engageable by a push-pin 15 mounted in and adjacent to the end of the gun-stock. The contact-piece, 14, is connected by a wire or appropriate conductor 16 to an electric battery 17 arranged in a chamber 18 in the gun-stock butt.

If several cells are employed in the battery, they are forced into contact by a spring 19 to which is connected conductor 16, the innermost battery contacting with a wire 20 running through the gun-stock and grounding current by contact with the metal work. Thus a circuit will include the tube 2 and its bushing 9, the gun-barrel, the ground wire 20, spring 19, the batteries and thence through the conductor 16 to switch 15. When the switch is operated it sends current from contact piece 14 and wire 11 to the socket 10, said sockets being electrically connected to the bushing, 9, by a flexible device, as wire, 9′.

A very important feature of my invention is the provision of a structure designed to guard the small electric bulb 21 in socket 10 against destruction by the shock of the gun when discharged. This safe guard comprises a tubular bearing or shell 22, insulated from and secured in the bushing 9, in which the socket 10 may move axially but not circumferentially; the latter movement being prevented by a rib or flange 23 thereon fitting a channel 24 in the shell 22.

The socket is yieldably connected to the back of the bushing by a coil 24^a connected to the conductor 11, and the outer end of the socket is connected by a wire 11 of one or more turns to the bushing and thus completing an electric circuit with the tube 2. By preventing the socket from turning in the shell 22 a bulb can easily be screwed in and there is no danger of the lamp filament 25 being destroyed by shock because of the spring or yielding element 24^a.

Preferably the filament 25 is made circular in plan, as in Fig. 7, and in order to obtain the maximum efficiency from the light, I form a series of threaded holes 26 in the circumference of the bushing so that this may be turned or adjusted to best concentrate the rays of light and then fastened by a screw 27 projecting through a slot 28 in the tube 2. The slot permits the bushing to be adjusted to or from the lens as may be required.

A modified form of the invention includes a tube 30 of sufficient length to contain a series of battery cells 31, against one of which acts a coil 32 having a plate 33 seated against an insulating block 34. This block fits the tube and contains a spring 35 effective to force a button 36 outwardly. The button projects through a cap 37 on the end of the tube and, when pressed, closes an electric circuit from the cells 31, coil 32 to the tube 30. The front end of the tube is

provided with a lens 38, and located in rear of this is a lamp socket 39 of similar construction to that previously described.

Having thus described my invention, what I claim and desire to secure by Letters Patent is—

1. An illuminating sight for firearms, including a lens-carrying tube, means for securing the same upon the arm, an electric lamp yieldably supported in the tube to be protected from shock, a source of electrical energy connected to the lamp, and a controlling switch.

2. An illuminating sight for firearms, including a tube, means for adjusting it upon a firearm, a lens in said tube, a circumferentially adjustable bushing mounted in the tube and having a yieldable lamp and socket, a source of electricity related to the socket and bushing, and a switch controlling the energization of the lamp.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

GEORGE A. SEELY.

Witnesses:
CHARLES EDELMAN,
E. FLOYD JONES.