

No. 804,363.

PATENTED NOV. 14, 1905.

W. YOULTEN.

TELESCOPIC SIGHT FOR RIFLES AND OTHER ARMS.

APPLICATION FILED MAY 9, 1904.

2 SHEETS—SHEET 1.

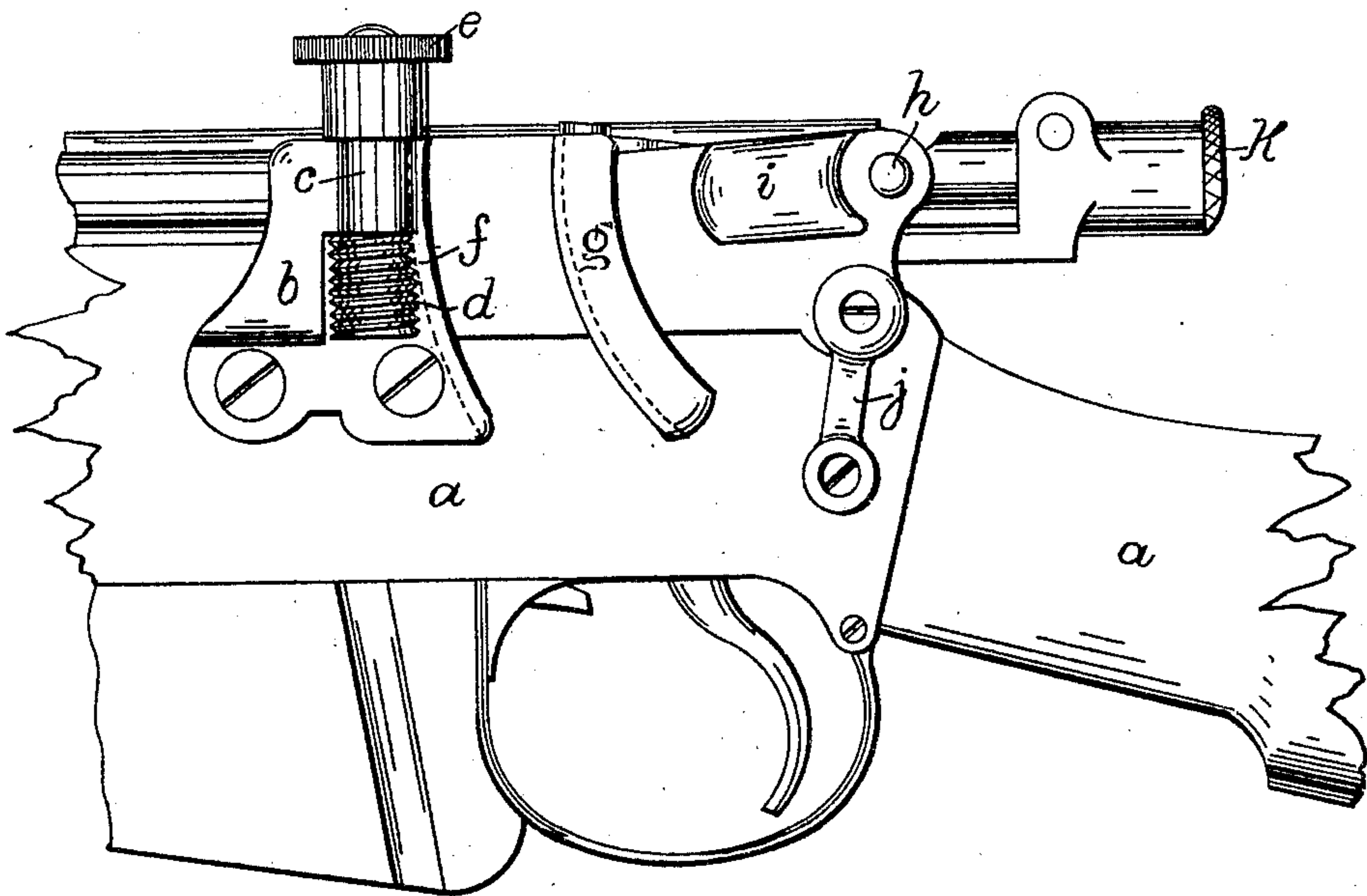


Fig. 1.

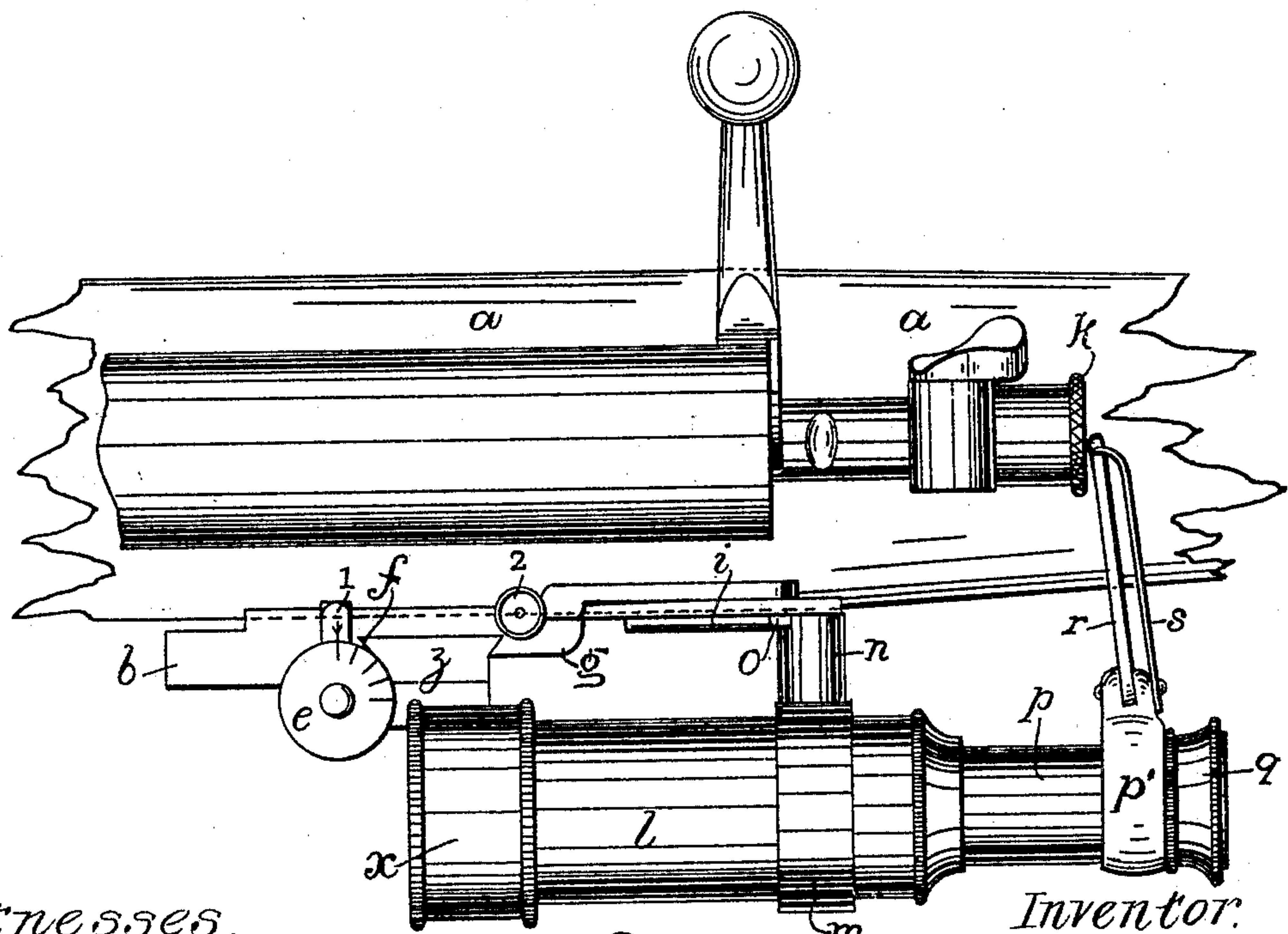


Fig. 2.

Witnesses.

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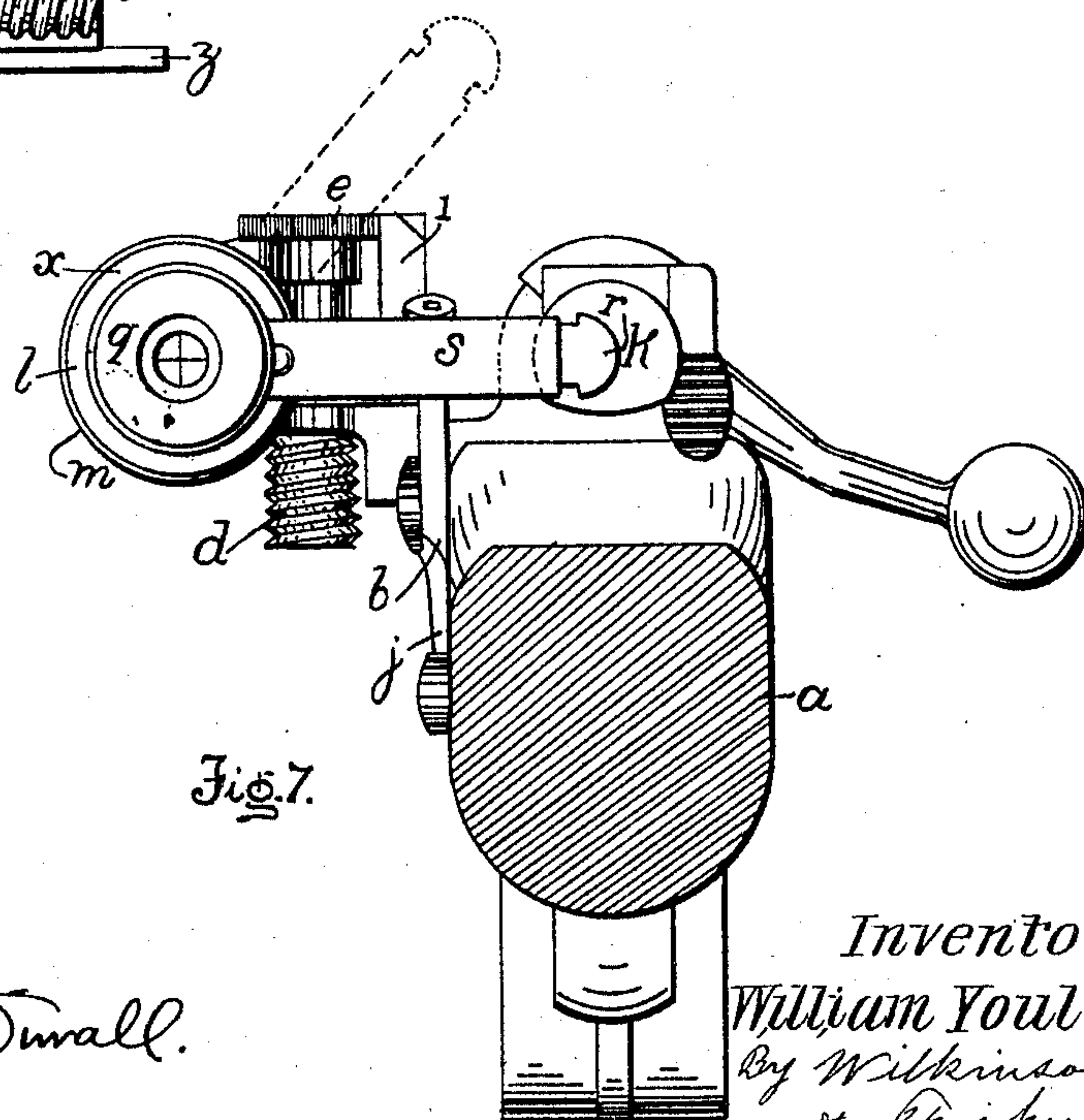
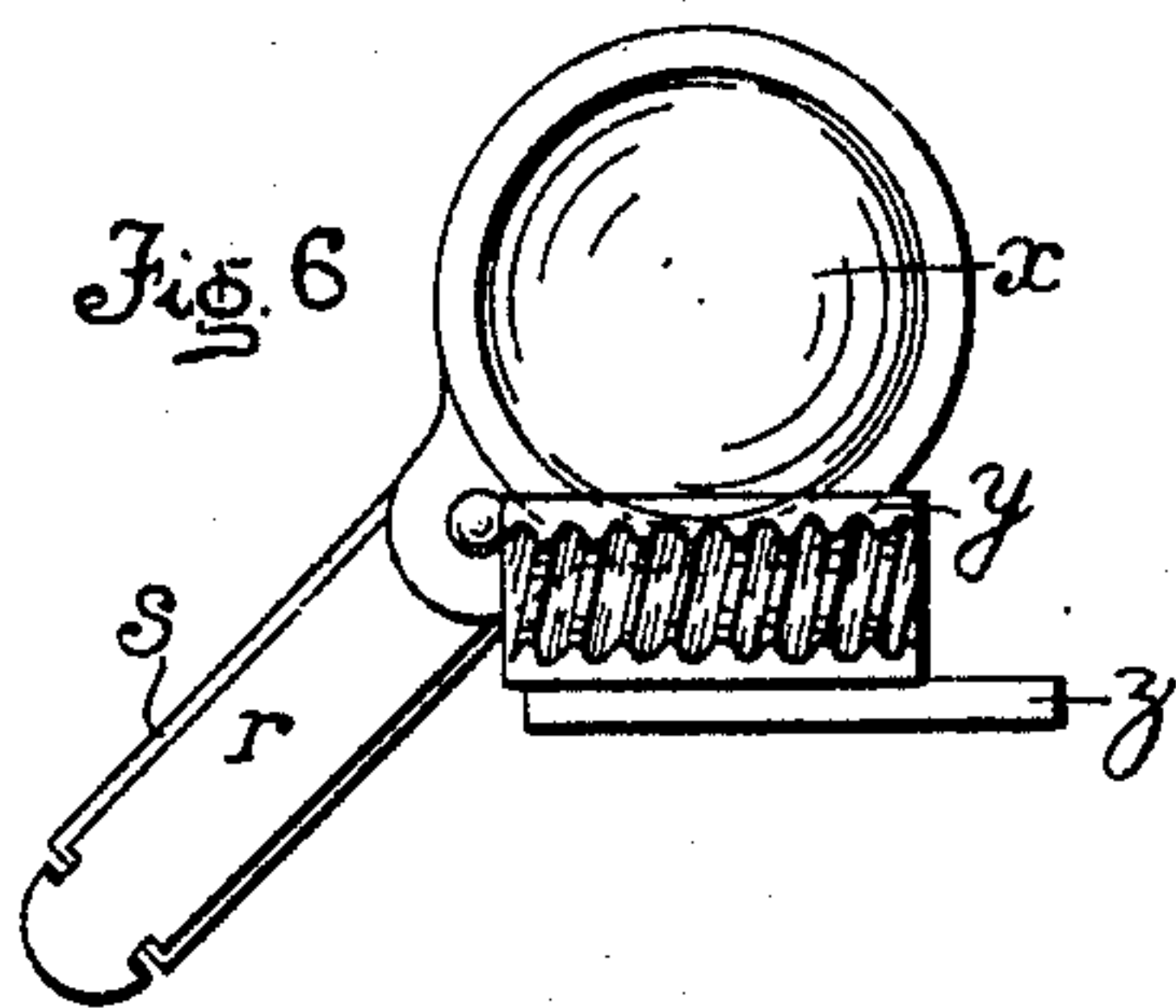
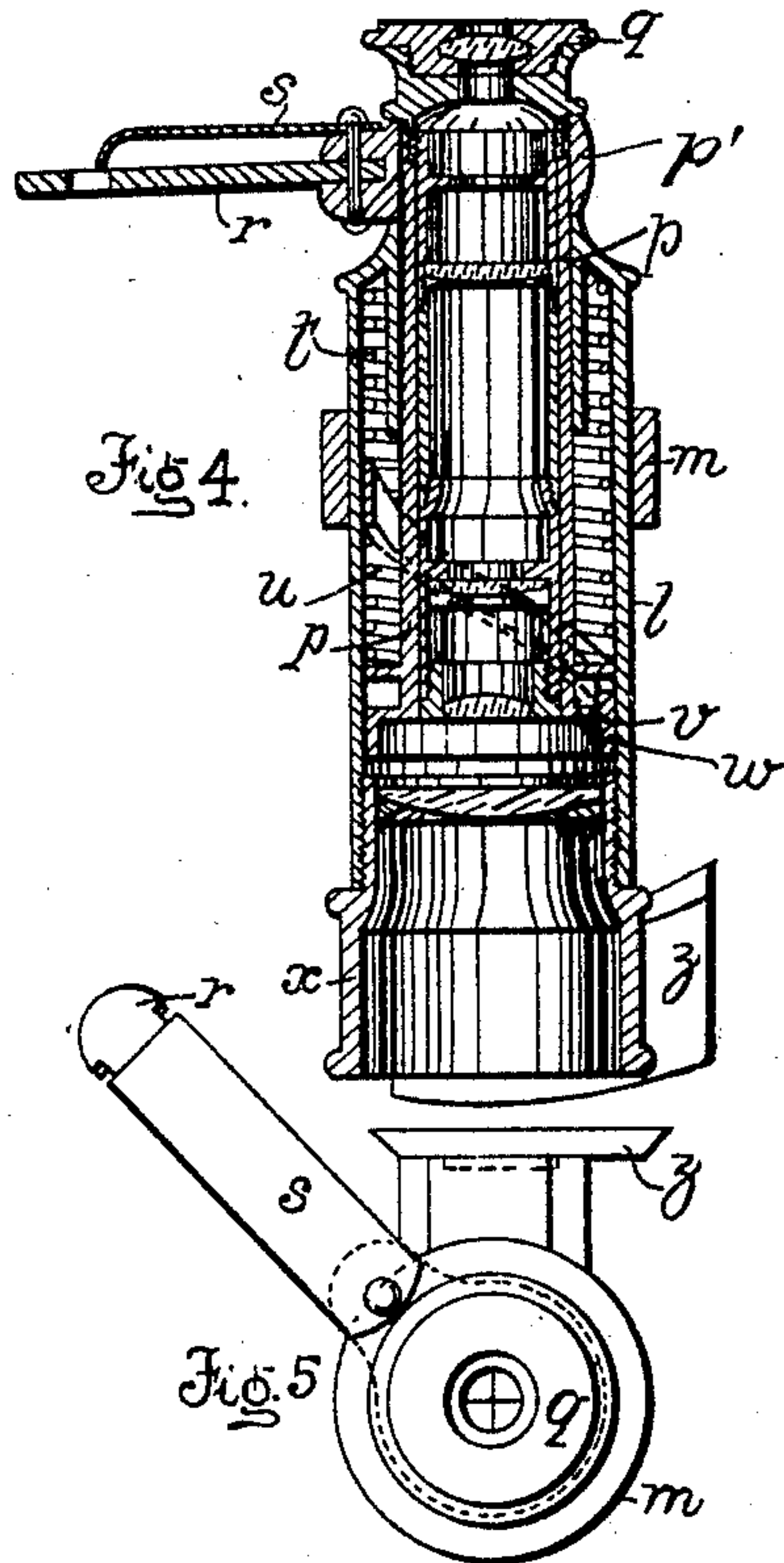
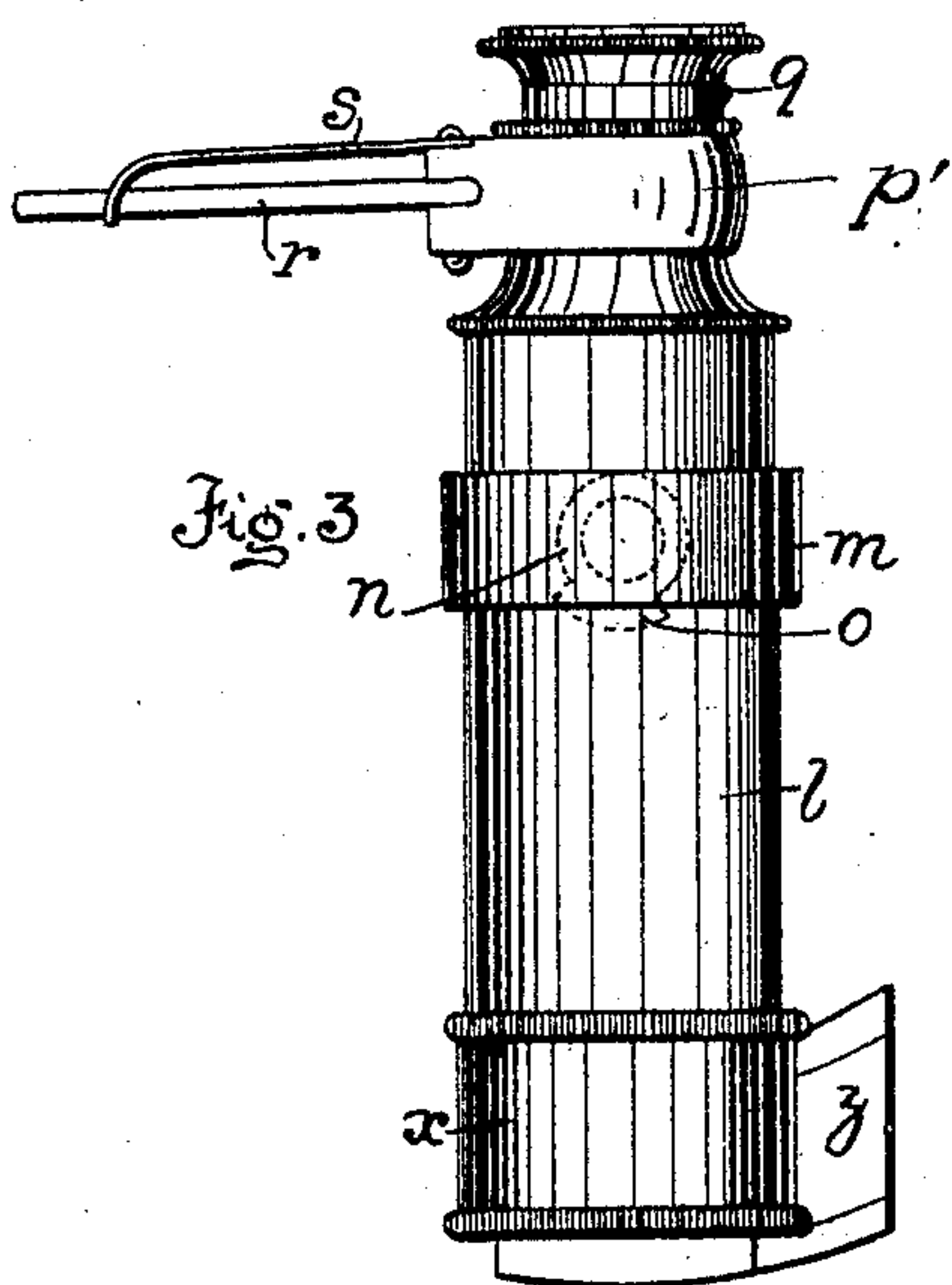
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UNITED STATES PATENT OFFICE.

WILLIAM YOULTEN, OF WESTMINSTER, ENGLAND.

TELESCOPIC SIGHT FOR RIFLES AND OTHER ARMS.

No. 804,363.

Specification of Letters Patent.

Patented Nov. 14, 1905.

Application filed May 9, 1904. Serial No. 207,119.

To all whom it may concern:

Be it known that I, WILLIAM YOULTEN, a subject of the King of England, residing at 159 Victoria street, Westminster, in the county of London, England, have invented certain new and useful Improvements in Telescopic Sights for Rifles and other Arms; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The object of this invention is a telescopic sight which will insure the safety of the marksman's eye at the moment of recoil of the weapon. The said telescopic sight is, moreover, so constructed that it may be rapidly attached to and detached from the rifle or other weapon and in such a way that any existing ordinary sights on a rifle, for instance, may be used as an alternative to or in place of the sighting system special to the telescope.

A further object is to provide an attachment or device of this character which will be simple, strong and durable, inexpensive, and well adapted to the use for which it is designed.

To the accomplishment of these objects and such others as may hereinafter appear the invention comprises the novel construction and combinations of parts hereinafter described, and particularly pointed out in the appended claims, reference being had to the accompanying drawings, forming a part hereof, which show one way of applying my invention to a rifle, the same reference characters designating like parts throughout the several views, in which—

Figure 1 shows elevation of portion of a rifle with the telescopic sight detached in order to show the means which I provide for attaching the said sight to the rifle. Fig. 2 shows plan of the telescopic sight attached and in position ready for firing. Fig. 3 shows the telescopic sight detached, but in position ready for attachment to the rifle. Fig. 4 shows a vertical section of Fig. 3. Fig. 5 shows outside plan of the telescope with attachment. Fig. 6 shows an inverted plan of same. Fig. 7 shows end view of rifle with telescopic sight attached, the stock of the rifle being broken away behind the sight, and in this figure the position assumed by the sliding portion of the sight when the rifle is discharged is shown in dotted lines.

a shows the stock of the rifle.

b is a plate provided with a tubular piece *c*, carrying a screw *d*, provided with a milled head *e*, upon the surface of which head graduations are marked to indicate elevations, as hereinafter described. The screw *d* is so formed that it rotates in the tubular piece *c* without screwing out of same. The plate *b* is so made that the parts *f* and *g* form a dove-tailed groove the edges of which are concentric with respect to the pin *h*, which acts as a pivot for the telescope.

i is a piece projecting above the surface of the plate *b* and so cut away as to form between itself and the pin *h* a groove, which is enlarged at the part nearer to the surface of the plate for the purpose hereinafter described.

j is a link for rendering the attachment of the plate *b* to the rifle more secure.

k is the back of the ordinary bolt.

l shows the telescope.

m is a band attached to the telescope *l* and provided with a tubular piece *n* of a size suitable to take over the pin *h*, such tubular piece *n* being provided with a portion of a circular flange *o*, which takes into the groove formed between the pin *h* and the raised portion *i* of the plate *b*.

p is the sliding tube of the telescope, carrying the eyepiece *q*. Over the sliding tube *p* is fastened, preferably by frictional engagement therewith, as shown by Figs. 3 and 4, a collar *p'*, carrying a tail *r*, formed, preferably, of a thin strip of metal, with a spring *s* attached to its back, thus exerting a forward pressure thereon.

t is a secondary tube for keeping the sliding tube *p* in position by providing a satisfactory bearing-surface for the said tube to pass through.

u is a helical spring for drawing the sliding tube *p* back into the principal tube *l* of the telescope.

v is a plate fixed spirally on the inside of the tube *l*, and *w* is a piece attached to the inner end of the sliding tube *p* and so cut away that it takes over the edges of the spiral piece *v*.

x is a band attached to the main tube *l* of the telescope near the object-glass. The band *x* has attached to it a piece *y*, provided with a portion of a screw-thread cut on its surface to engage with the screw *d*.

z is a plate so formed that it will slide in the

groove formed between the parts f and g on the plate b as the telescope is turned on h as a pivot.

1 is a pointer coming opposite the graduations on the milled head e .

2 is the pin-hole sight, which is attached to the plate b and can be turned up into position when required.

In placing the instrument in position the tubular piece n is slipped over the pin h and the telescope rotated, so that the portion of the circular flange o takes into the groove and cavity formed between the pin h and the raised portion i of the plate b . As it is rotated the plate z slides into the groove formed between the parts f and g on the plate b . The screwed portion of the plate y is then engaged with the screw d , which is turned, drawing the telescope into position for the range required, as indicated by the graduations on the milled head e coming opposite the pointer 1.

To set the telescopic sight, the breech-bolt is pushed over in the ordinary manner, and the tail r , connected with the sliding tube p , is pulled back, drawing with it the tube p . As the tube p is retracted tail r is rotated downward, and in order to prevent its contacting with the breech-bolt through such movement before it reaches a point in the rear thereof the collar p' may be rotated slightly on its frictional bearing with tube p , or a simple method would be to flex tail r backward during its rotation enough to enable it to clear the end of the breech-bolt. When the tail r is placed in position resting on the head of the bolt k , the eyepiece is in the correct position for sighting. When aim is taken and the trigger pulled, the bolt k springs forward in the ordinary way, and the tail r being no longer supported the tube p flies inward under the action of the spring u , and the eyepiece recedes from the marksman's eye at the moment of recoil. The tail r is carried clear of the head of the bolt k through the rotary motion imparted to the sliding tube p on account of the piece w taking over the edges of the spiral piece v .

I do not desire to be understood as limiting myself to the details of construction and arrangement of parts as herein described and illustrated, as it is manifest that numerous variations and modifications may be made in the features of construction and arrangement in the adaptation of the sight to various conditions of use without departing from the spirit and scope of my invention and improvements. I therefore reserve the right to all such variations and modifications as properly fall within the scope of my invention and the terms of the following claims.

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

1. A rifle telescopic sight, consisting essentially of a tube carrying the object-glass, and

a secondary tube sliding with respect to the first tube, and carrying the eyepiece, in combination with means for retaining the second tube in the extended position when the rifle is being sighted and withdrawing it from the marksman's eye when the trigger is pulled.

2. A rifle telescopic sight consisting essentially of a main tube carrying the object-glass into which a secondary tube carrying the eyepiece slides, in combination with a spring for drawing the secondary tube into the first tube and a tail to take over the bolt of the rifle, all for the purposes set forth.

3. The combination with a rifle or other weapon, of a telescopic sight mounted thereon, and means affording provision for withdrawing said sight from the marksman's eye when the weapon is discharged.

4. The combination with a rifle or other weapon, of a telescopic sight mounted thereon provided with means for withdrawing said sight from the marksman's eye when the rifle is discharged.

5. The combination with a rifle or other weapon, of a telescopic sight mounted to engage with a moving part of the rifle mechanism, and means for withdrawing said sight from the marksman's eye when disengaged from said moving part.

6. The combination with a rifle or other weapon, of a telescopic sight mounted to engage with the breech-bolt, and means for withdrawing said sight from the marksman's eye when said bolt is withdrawn from its engagement by the discharge of the rifle.

7. The combination with a rifle or other weapon, of a telescopic sight mounted thereon, means on said sight for engaging with a moving part of the rifle mechanism, and means for withdrawing said sight from the marksman's eye and for moving said engaging means out of alinement with said moving part when disengaged therefrom.

8. The combination with a rifle or other weapon, of a telescopic sight mounted thereon, means on said sight for engaging with the breech-bolt, and means for withdrawing said sight from the marksman's eye and for moving said engaging means out of alinement with said bolt when the rifle is discharged.

9. A telescopic sight for rifles or other weapons, comprising a plurality of tubes, means on one of said tubes for engaging with the rifle to retain said sight in extended position, and means attached to said sight for collapsing the same when the trigger is pulled.

10. A telescopic sight for rifles or other weapons, comprising a plurality of tubes, means on one of said tubes for engaging with the rifle to retain said sight in extended position, and a helical spring attached to one of said tubes for collapsing the sight when the trigger is pulled.

11. A telescopic sight for rifles and other weapons, comprising outer and inner tubes,

and means attached to said sight for keeping the same normally in collapsed condition and for imparting a rotary motion to one of said tubes when the focus is changed.

5 12. A telescopic sight for rifles and other weapons, comprising outer and inner tubes, a helical spring attached to one of said tubes normally tending to collapse the sight and connecting means between the two tubes constructed to give a rotary motion to one of
10 them when the focus is changed.

13. A telescopic sight for rifles and other weapons, comprising outer and inner tubes, means attached to said sight for keeping the
15 same normally in collapsed condition, a helical guide on one of said tubes and means on the other tube for engaging said guide whereby a rotary motion is imparted to one of said tubes when the focus is changed.

20 14. The combination with a rifle or other weapon, provided with a projecting pin and a groove, the sides of which are formed by striking circles with said pin as a center, of a telescopic sight provided with a sleeve and a
25 plate adapted respectively to pivot on said pin and slide in said groove, and means for locking said sight when so mounted in any desired angular position.

15. The combination with a rifle or other

weapon, of a telescopic sight, means for con- 30
necting the two comprising a plate mounted on the rifle provided with a horizontally-arranged pivot-pin and a vertically-arranged groove, the sides of which are formed by striking circles with said pin as a center, a
35 sleeve on said sight constructed to fit on said pin, and a plate on said sight adapted to slide in said groove and means for locking said sight when so connected in any desired angular position. 40

16. The combination with a rifle or other weapon, of a telescopic sight, means for connecting the two comprising a plate mounted on the rifle provided with a pivot-pin and a groove, the sides of which are formed by
45 striking circles with said pin as a center, a sleeve on said sight constructed to fit on said pin, and a plate on said sight adapted to slide in said groove, and means for locking said sight in any angular position when so con- 50
nected comprising a screw on said plate adapted to engage a threaded socket on said sight.

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

WM. YOULTEN.

Witnesses:

A. E. VIDAL,

A. BROWNE.