

Aug. 30, 1938.

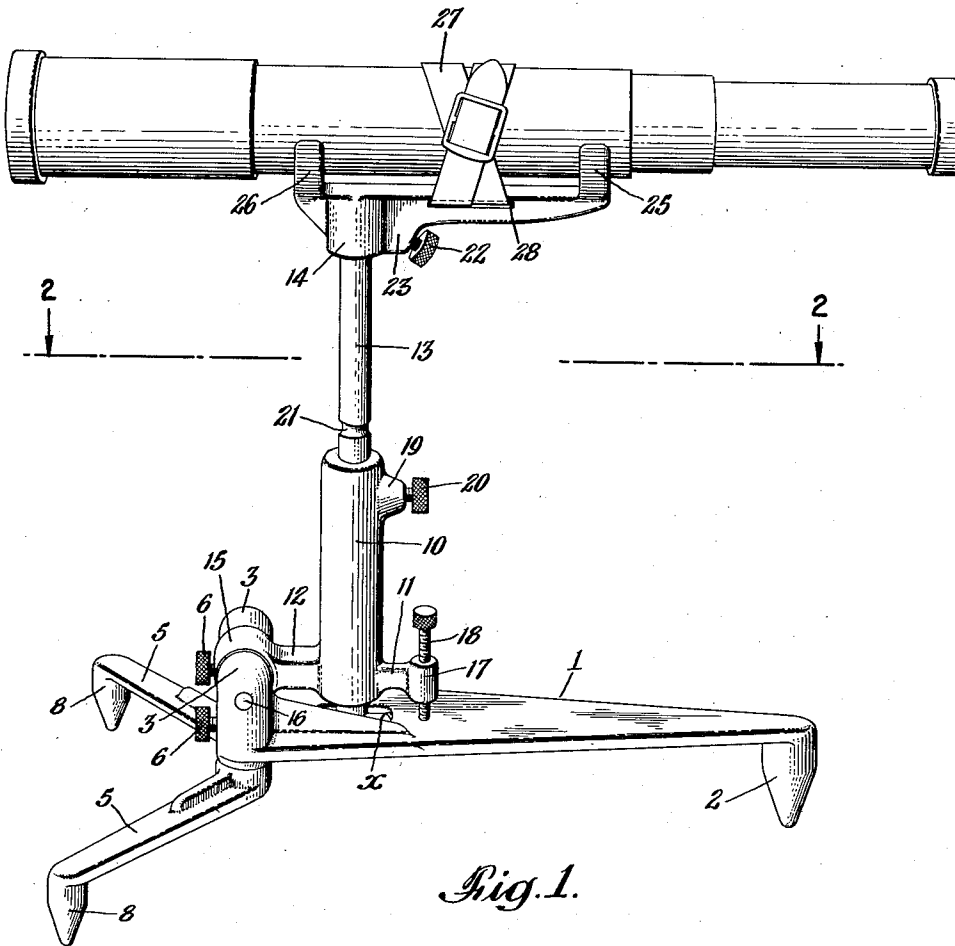
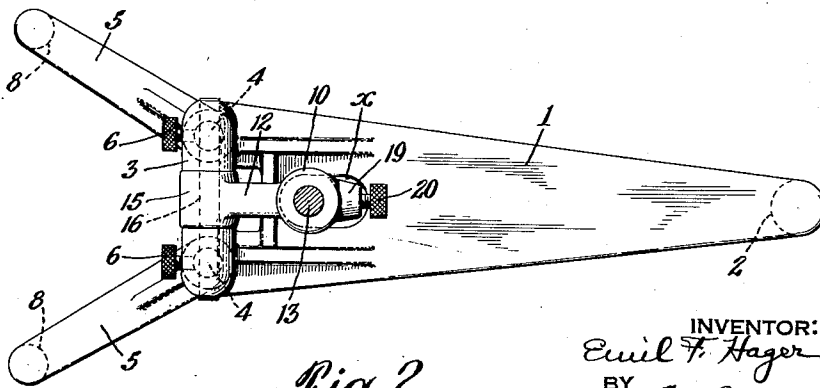
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2,128,409

SCOPE STAND

Filed Aug. 28, 1936

2 Sheets-Sheet 1



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Fig. 3.

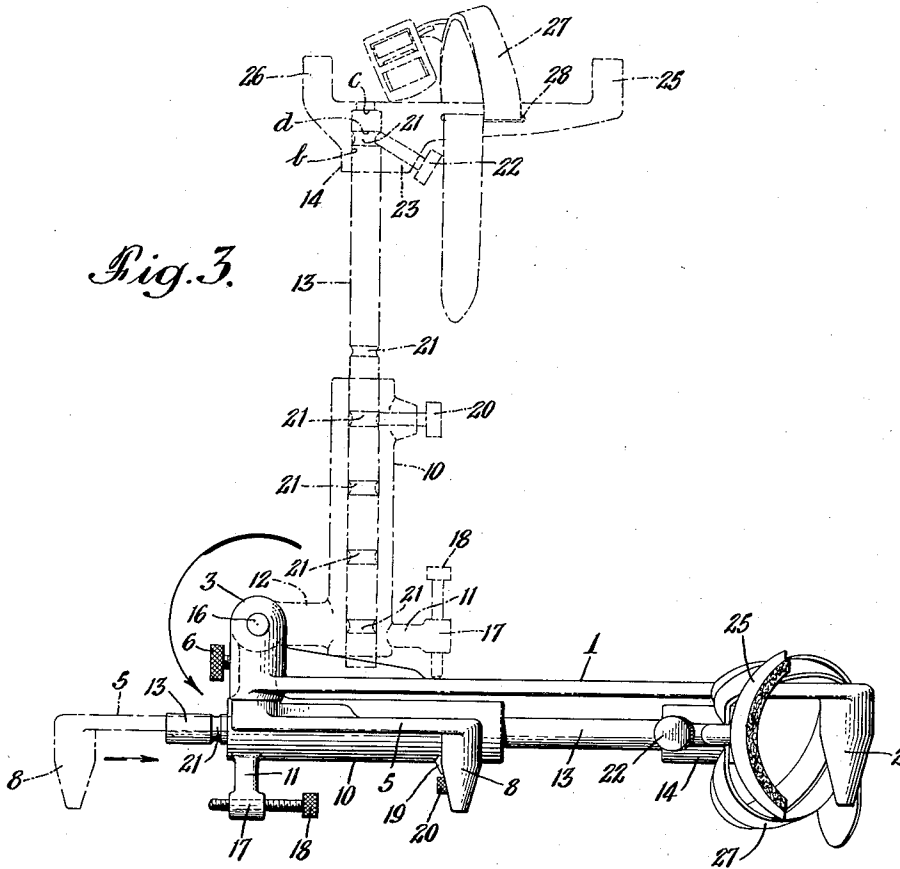


Fig. 4.

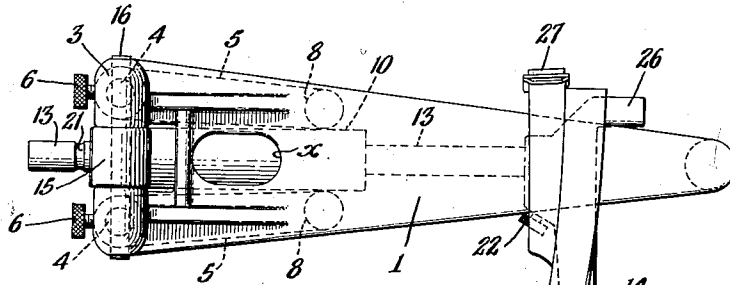
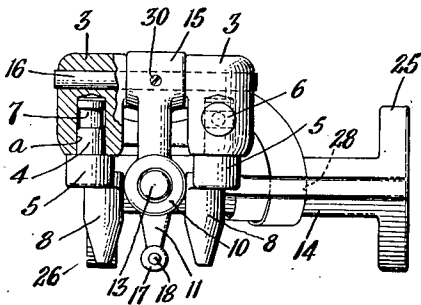


Fig. 5.



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UNITED STATES PATENT OFFICE

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SCOPE STAND

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2 Claims. (Cl. 248—158)

This invention relates to scope stands for use in rifle practice on rifle ranges and has for its particular objects the provision of a compact, cheap, sturdy and conveniently adjustable support or rest for a target-observation telescope and which stand can be readily collapsed into a compact form besides having other advantages hereinafter set forth.

My invention is set forth in detail in the following description and drawings forming a part thereof, in which

Figure 1 is a perspective view of my improved scope-rest showing the "scope" in position thereon;

Fig. 2 is a plan view taken on the line 2—2 of Fig. 1;

Fig. 3 is a longitudinal elevation; Fig. 4 a plan view and Fig. 5 an end elevation of such scope rest showing the parts in a folded position.

Referring to the drawings and the construction shown therein, the reference numeral 1 designates an apertured base member, the same being triangular in shape and having an integral depending toe 2 at one end thereof and opposing, upwardly-projecting spaced bosses 3 at the opposite end thereof, these latter bosses being provided with cored or drilled apertures *a* for the reception of shanks 4 of legs 5 that are pivotally mounted in said bosses. Set screws 6, which are adapted to project into peripheral grooves 7 formed on said shanks, serve to lock said shank in any desired position. Integral depending toes 8 are formed on the ends of said legs 5, these toes being preferably somewhat smaller and shorter than the aforesaid toe 2.

A sleeve 10, having lateral lugs 11 and 12 projecting from the opposite sides thereof, serves to receive the shank 13 of the scope support or rest 14. The lug 12 has an enlarged terminal boss 15 which is drilled to receive a pivot pin 16 and, as shown, said boss is of a length to snugly fit between the opposite bosses 3 formed on the base 1, whereby said latter lugs serve to maintain the alignment of the sleeve 10 during the movement thereof in a vertical plane about said pin 16.

The lug 11 is also provided with a terminal boss 17 which is tapped to receive an adjusting screw 18. A boss 19 is formed on the upper end of said sleeve 10, the same being tapped to receive a set screw 20, which latter is adapted to enter one of several peripheral grooves 21 that are provided on said shank 13 and thereby admits of the free rotation of the scope rest in a horizontal plane when desired while also per-

mitting of locking such scope rest in any particular adjusted position in such horizontal plane.

The said base is provided with a substantially elliptical aperture *x* which is of sufficient size to receive the lower end of the shank 13 of the scope rest and to admit of the limited movement of such shank for the purpose of adjustment thereof by means of the adjusting screw 18.

The scope rest 14 has a cored or drilled bore *b* which is adapted to receive the upper end of the shank 13 but which bore is reduced in cross-section at its upper end to form a shoulder *c* that prevents the passage of the end of the shank upwardly through said bore. A diagonally disposed adjusting screw 22 is tapped into a boss 23 formed on the lower end of said rest 14 and the inner end of said screw is adapted to angularly be projected into the upper groove 21 an insufficient distance to impinge against and exert pressure upon the upper face *d* of the upper groove 21, the scope rest will be held in position vertically on said shank but will be free to rotate until such time as the screw 22 is screwed home into pressure engagement with the said face *d* as indicated in dot and dash lines in Fig. 3. Thereupon, owing to the angular relation of the screw with respect to said upper groove 21, a wedging effect will be exerted which will draw the shank and the shoulder *c* tightly together. As a consequence, the rest 14 will be firmly held against rotation both by the pressure contact between the upper end of shank 13 with the shoulder *c* combined with the pressure engagement of the inner end of screw with the face *d* of the upper groove 21.

Said rest has front and rear arcuate arms 25 and 26 formed thereon which are adapted to receive the sighting telescope of the type commonly used on rifle ranges for sighting purposes and also a strap 27, which is threaded through a slit 28, for fastening said scope rest in position on said arm.

My improved scope stand, as is apparent from the foregoing description, lends itself to ready rotary adjustment of the scope in any desired position within reasonable limits in a horizontal or vertical plane as well as the vertical adjustment of said rest with respect to the base. Furthermore, the legs 5 being adjustable, both during the rotation of same about their pivots as well as vertically, the stand adapts itself readily to uneven ground and also lends itself to being folded into a compact form (see Figs. 3-5). Moreover, owing to the fact that the scope rest, the shank thereof and the pivotal legs are sep-

arate members which can be quickly assembled, the stand is peculiarly adapted for large scale production.

The aforesaid scope stand is peculiarly suitable for use in practice on rifle ranges when no target attendants are available and because of the convenient location of the adjusting screws, it is unnecessary for the gunner, once the scope is sighted on the target, to shift his body when lying prone in order to observe the exact point of penetration of the previous shot.

Normally, during transportation of the scope to the particular location on the range where it is desired to set the same up, said scope is detached from the scope stand and the latter while being so transported is in a folded position as shown in the solid lines of Figs. 3 to 5. When such location is reached the straps are unfastened so as to admit of the scope support being swung from the position thereof shown in solid lines in Fig. 3, through an angle of 270° and into the dot and dash line position shown in that figure.

The legs 5 are then swung outwardly approximately into the position shown in Figs. 1 and 2, the scope is mounted on the rest 25 and 26 and strapped into position as shown in Fig. 1, the shank 13 is adjusted to the desired vertical position within the sleeve 10, care being taken that one of the grooves 21 is at the proper elevation to receive the end of the screw 20 and then prior to locking said latter screw 20, the scope support is adjusted by means of the adjusting screw 18 and by rotation of the scope in a horizontal plane so that the scope is accurately cited on the target, the parts of the scope itself being longitudinally adjusted in the usual manner to insure a sharp image of such target. Thereupon the screw 20 is screwed inwardly to lock the shank 13 against further rotary movement. After each shot is fired the gunner merely by a slight movement of his head takes the desired observations of the target through the scope and at the same time if desired effects the movement of the scope in a vertical plane by means of the adjusting screw 18. Due to the fact that the center of gravity of the support is to one side of the pivot 16, there will be a constant pressure engagement, due to gravity, of the lower end of the screw 18 with the upper face of the base and consequently as such screw is turned upwardly the front end of the scope will be correspondingly raised in a vertical plane and vice versa. Preferably the pivot 16, after the parts have been assembled, is located in position by means of the set screw 30 shown in Fig. 5 and consequently the same will move with the boss 15 during the adjustment in a vertical plane of the scope support.

Among the additional advantages of my scope stand is the arrangement of the legs thereof as contrasted with the ordinary tripod arrangement, since in my improved stand the legs 5 and all the toes are so disposed that they normally lie below the level of the top surface of the base 1 and consequently when the toes are embedded in the ground as is customary when setting up

the stand on a rifle range, virtually no obstruction is afforded to the arm of the gunner when he reclines close to the stand with his arm crooked and the gun in position thereon. Accordingly, without changing the position of his body or of his arm he can quickly glance through the scope after each shot and make the desired observations. On the other hand, where the usual tripod arrangement is employed with each leg approximately 120° distance from the other, at least one of such legs is in a position to prevent the gunner from assuming a prone position in close proximity to the stand and therefore it is necessary in order to make the desired observation to move his entire body and his arm as well from the position assumed when shooting at such target.

Various modifications of the foregoing construction, within the scope of the appended claims, may be made without departing from the spirit of 20 my invention.

Having thus described my invention, what I claim and desire to obtain by United States Letters Patent is:

1. In a folding stand for rifle range telescopes, the combination comprising a base member, a plurality of vertically adjustable legs pivotally secured thereto and capable of limited rotation in a plane substantially parallel to the plane of said base, a pair of opposing terminal boss members carried by said base, a pivot member extending across the gap between said bosses and projecting into each of the same, a scope support including a sleeve member, a shank and a scope rest, said sleeve having a pair of opposing lateral lugs adjacent the lower end thereof, one of said lugs being mounted on said pivot and snugly fitting between said bosses in such a manner as to confine said sleeve in a single plane during the rotation thereof about said pivot, an upwardly projecting adjusting screw threaded into the other lug and projecting below the same for effecting accurate adjustment of the position of said scope in a vertical plane and means including a set screw carried by said sleeve and a peripheral groove formed in said shank for permitting of the adjustment of the latter to different elevations with respect to said sleeve while admitting of the rotation of the scope rest when said shank is so adjusted and preventing the longitudinal sliding movement of said shank and said sleeve.

2. In a folding stand for rifle range telescopes, the combination comprising a base member, a plurality of vertically adjustable legs pivotally connected thereto, a scope support including a rest member, a shank member and a supporting sleeve, the latter being pivotally secured to said support and means, including an obliquely disposed adjusting screw and a peripheral groove formed on said shank member, for effecting the wedging of the upper end of the shank member against the said rest member and thereby preventing accidental relative rotation of the two latter members.

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