This invention concerns a device for supporting and steadying a rifle while it is being fired.

A principal object of the invention is to provide a rifle support or rifle rest which will steady the rifle, prevent it from vibrating, and enable it to be aimed and fired with more accuracy and with better control than is otherwise possible.

Another object is to provide a rifle support or rifle rest which can be mounted on any suitable surface such as the ground, a bench or table top, a tree limb, etc.

A further object is to provide a rifle support or rifle rest with adjustable means for holding the rifle at various elevations while permitting the rifle to be turned in horizontal and vertical planes.

For further comprehension of the invention, and of the objects and advantages thereof, reference will be had to the following description and accompanying drawings and to the appended claims in which the various novel features of the invention are more particularly set forth.

In the accompanying drawings forming a material part of this disclosure:

FIG. 1 is a perspective view of a device embodying the invention.

FIG. 2 is an enlarged sectional view taken on line 2—2 of FIG. 1, parts being broken away.

FIG. 3 is a reduced side view of the device shown mounted on a bench.

FIG. 4 is a side view of part of another device embodying a modification of the invention.

FIG. 5 is a sectional view taken on line 5—5 of FIG. 4.

FIG. 6 is a perspective view of a device embodying another form of the invention.

FIG. 7 is a sectional view taken on line 7—7 of FIG. 6.

Referring first to FIGS. 1 and 2, there is shown a rifle support or rifle rest 10 including an inverted, dished base plate 12. The plate has a central threaded hole 14 in which is screwed the bottom threaded end of a post 16. This post has a series of axially spaced holes 18. The post fits telescopically in a tube 19. Near the bottom of tube 19 is a threaded boss 20. A wing screw 22 is screwed into the boss and extends into the tube 19. A collar 24 is axially and rotationally disposed on the boss 20. When the wing screw is withdrawn from the interior bore 23 of the tube, the tube can move axially up or down. Then the wing screw can be screwed in until it engages in one of the holes 18. By complete tightening of the wing screw, the tube 19 can be locked against axial and rotational movement.

Axially aligned with the tube 19 is an upper tube 24. The upper end of tube 24 is internally threaded and tightly engaged on a threaded stud 26 depending from and secured to a rifle cradle 30. The lower end of tube 24 is externally threaded and engaged in an internally threaded collar 32. A wing screw 34 is engaged in a threaded hole 35 near the top of the collar to lock the collar and tube 24 against relative rotation. Another wing screw 36 is screwed in a threaded hole 38 near the bottom of the collar and engages in circumferential groove 39 near the top of tube 19. Tube 19 is locked against rotation on post 16 by wing screw 22. If tube 24 is held and prevented from rotating while wing screws 34 and 36 are loose, then tube 24 will move up or down axially with respect to tube 19 while collar 32 is manually turned in one direction or another.

The arrangement described enables the elevation of cradle 30 with respect to the base 12 to be made grossly by positioning of tube 19 along post 16 so as to align the wing screw 22 with any desired hole 18. The wing screw 22 will be tightened at the desired hole 18. Then the collar 32 can be turned to effect a fine or vernier adjustment of elevation of the cradle 30 with respect to stationary tube 19 and post 16. Wing screw 34 will then be tightened to fix the axial length of tube 19, collar 32 and tube 24. Wing screw 36 can be left loose but engaged in groove 39. This will permit the cradle to be turned in a horizontal plane with tube 24 and collar 32 while the tube 19 and post 16 are remaining stationary.

If desired the wing screw 36 can be tightened to lock the tube 24 against rotation when the cradle is properly positioned with respect to a distant target.

A rifle R can be placed in the axially horizontal cradle which is cylindrical in form and open at the top. The cradle includes a metal shell 40 to which stud 26 is welded. The cradle is lined with a resilient rubber or plastic gasket 41 which acts as a shock absorber and which frictionally engages the sides of a rifle which is placed in the cradle with its muzzle in a horizontal position.

The base plate 12 has a plurality of threaded holes 42 into which can be screwed a number of pegs 44. The pegs have pointed lower ends 43 to enable them to be thrust into the ground. The plate has a bottom, peripheral lip 45 which will rest on the ground to stabilize the rifle rest 10. Lock nuts 46 can be engaged on the pegs underneath the plate 12. A lock nut 48 can also be engaged on the bottom end of the post under the plate to lock the plate 12 and post together.

In FIG. 3, the rifle rest 10 is shown mounted on a bench B. The pegs 44 have been removed and in their place a plurality of bolts 50 have been passed through holes 51 in the bench and engaged in the threaded holes 42 in the base plate 12. The rifle R is shown in dotted lines supported on the bench to be fired in test purposes. The post 16 extends through both tubes 19 and 24 so that the height of the device is a minimum.

In FIGS. 4 and 5, rifle rest 10a has a swivel joint arrangement at the closed top of tube 24 which is otherwise identical to tube 24. The joint includes a stud 52 secured to the closed top 51 of the tube and a yoke 54 welded to the underside of cradle shell 40. A pintle 53 extends through the legs of the yoke and through the stud 52 so that the cradle 30 can be pivoted on the top of the tube in a vertical plane.

A thumb screw 56 extends through arcuate slot 58 in one leg of the yoke and engages in threaded bore 59 in the stud. When the thumb screw is tightened, the cradle can be locked in any position in which its axis is angularly disposed to the axis of the post 24 as shown by dotted lines in FIG. 4.

In FIGS. 6 and 7, rifle rest 10b has the same assembly of tube 19, collar 32 and post 16 as previously described in connection with the rifle rest 10. The base plate 12 is replaced by a flexible leather or plastic saddle 60 provided with straps 62, 64 at opposite ends. The straps can be engaged with buckles 65, 66' on short straps 66' for mounting the device on a branch or limb L of a tree. Slots 68 are provided in the saddle near its edges for holding the straps. Tube 24' is similar to tube 24 except that it is formed with a ball seat 70 at its upper closed end to receive a ball 72. The bottom end of a stud 75, secured to the underside of cradle 76, is threaded into the ball. The cradle is a cylindrically curved flexible member of rubber or plastic which has resilient side walls to grip frictionally any size of rifle which may be
mounted in it. The ball 72 and seat 70 constitute a universal joint assembly to enable the cradle to be tilted and rotated in any desired direction. A locking wing screw 80 is inserted in a threaded hole 82 in the seat 70 to engage the ball 72 for holding it non-rotatably in the seat.

If desired, the tilting swivel joint arrangement of device 10b can be used in place of the universal joint of device 10b and vice versa. Either type of joint can be provided in the device 10 of FIGS. 1, 2. It will be noted that all the devices 10, 10a, and 10b can be taken apart for convenience in storage and transportation and for replacement of worn parts when required.

If desired, rectangular or other shaped base plates can be used. Other sizes and shapes of rifle cradles can be provided. If the cheaper and less adjustable rifle rests are desired, the swivel and universal joint arrangements can be omitted along with the adjustable collar for vernier height adjustment.

By use of the rifle rests described, marksmanship can be considerably improved and bench tests can be made more quickly and accurately. The rifle rests described will be found useful accessories by hunters, competitors in rifle shooting competitions, and others concerned with rifle shooting.

While we have illustrated and described the preferred embodiments of our invention, it is to be understood that we do not limit ourselves to the precise constructions herein disclosed and that various changes and modifications may be made within the scope of the invention as defined in the appended claims.

What is claimed is:

1. A rifle rest, comprising a base, a post extending vertically upward from the base, a first tube telescopically receiving the post, means for adjustably securing the tube on the post in any one of a plurality of predetermined positions axially of the post, a second tube axially aligned with the first tube, a threaded collar connecting the first and second tube for adjustably spacing the tubes axially of each other, means rotatably engaging the collar on one of the tubes at a certain position so that the collar remains at said certain position while rotating around said one tube, a cradle generally U-shaped in cross section for supporting the rifle, joint means connecting the second tube and cradle, and means for anchoring the base on a support.

2. A rifle rest, comprising a base, a post extending vertically upward from the base, a first tube telescopically receiving the post, means for adjustably securing the tube on the post in any one of a plurality of predetermined positions axially of the post, a second tube axially aligned with the first tube, a threaded collar connecting the first and second tube for adjustably spacing the tubes axially of each other, means rotatably engaging the collar on one of the tubes at a certain position so that the collar remains at said certain position while rotating around said one tube, a cradle generally U-shaped in cross section for supporting the rifle, a universal joint connecting the second tube and cradle so that the cradle is rotatable and tiltable on the second tube, means for locking said joint so that the cradle is fixed on the second tube, and means for anchoring the base on a support.

3. A rifle rest, comprising a base, a post extending vertically upward from the base, a first tube telescopically receiving the post, means for adjustably securing the tube on the post in any one of a plurality of predetermined positions axially of the post, a second tube axially aligned with the first tube, a threaded collar connecting the first and second tube for adjustably spacing the tubes axially of each other, means rotatably engaging the collar on one of the tubes at a certain position so that the collar remains at said certain position while rotating around said one tube, a cradle generally U-shaped in cross section for supporting the rifle, a universal joint connecting the second tube and cradle so that the cradle is rotatable and tiltable on the second tube, means for locking said joint so that the cradle is fixed on the second tube, and means for anchoring the base on a support.

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