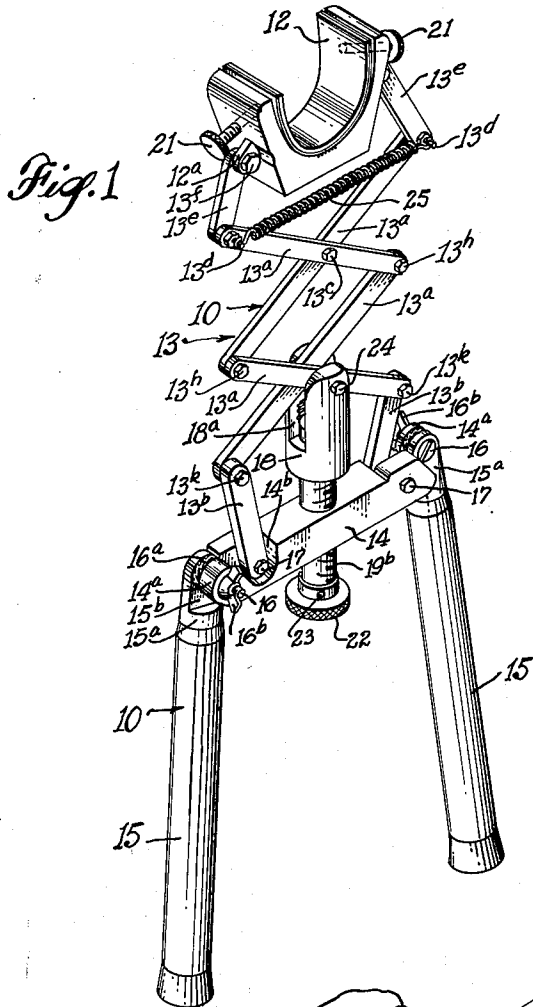
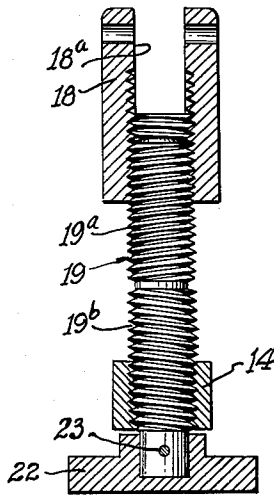
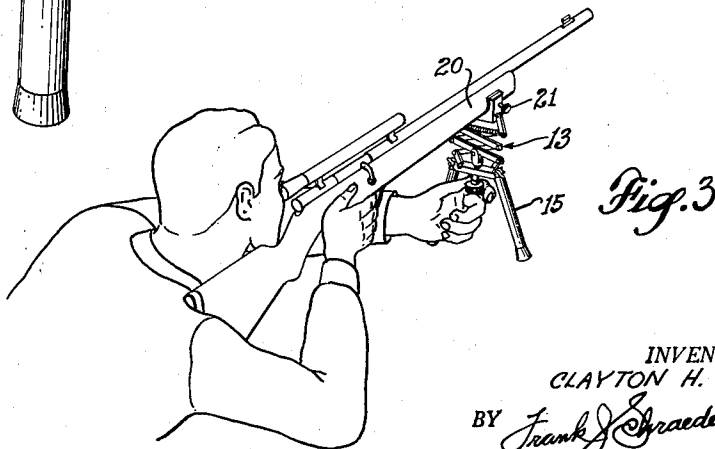


July 11, 1961

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FAST ADJUSTING BIPOD FOR STILL HUNTING
AND TARGET SHOOTING
Filed Nov. 4, 1959

2,991,579



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FAST ADJUSTING BIPOD FOR STILL HUNTING AND TARGET SHOOTING

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Filed Nov. 4, 1959, Ser. No. 850,894

3 Claims. (Cl. 42-94)

My improved bipod is particularly adaptable for varmint hunting where the hunter must remain motionless in a prone position especially in hunting varmints such as woodchucks, prairie dogs, ground hogs and the like. An excellent example of a cautious, suspicious, clever and cunning varmint is a woodchuck and experienced hunters of varmints such as woodchucks well know that they can often locate a hunter by the jar of his footsteps and, although their eyesight is not as keen as their hearing, they can detect even a quick movement a long distance away as they are naturally very suspicious creatures quickly responsive to sounds and motions foreign or strange to their normal habitat and thus are subject only to still hunting to which my improved bipod is especially adaptable.

One of the objects of my invention is found in the provision of a quickly adjustable bipod for supporting a rifle in a steady, stable, stationary position to permit the hunter to survey a field for accurately spotting or locating and sighting a desired target and thereafter quickly and conveniently actuating the rifle to discharge its projectile with a minimum of movement of the hunter and his rifle while the rifle is being sighted on the target.

Another object of my invention resides in the provision of a novel bipod, adapted for adjustably supporting a rifle while sighting a target, comprising a saddle for the rifle, a laterally extending base bar, a pair of supporting legs pivotally connected to the opposite ends of the base bar, a lazy tongs device pivotally supported on the base bar and extending between the base bar and the saddle, and means carried on the base bar for extending and contracting the lazy tongs device to thereby raise and lower the saddle to selectively vary the sighting facility of the rifle.

Still another object of the invention is found in the provision of a novel rifle-supporting bipod having a saddle for supporting the rifle in target sighting position including a laterally disposed base bar carried on a pair of supporting legs pivotally connected to the ends of the base bar, a lazy tongs device extending between the saddle and the lateral base bar and pivotally connected to the saddle and to the lateral base bar, and manually adjustable means carried on the lateral base bar for extending and contracting the lazy tongs to thereby vary the elevation of the saddle for selectively varying the sighting facility of the rifle, said manually adjustable means comprising a tubular head having a screw-threaded interior and a transverse slot in its upper end adapted to receive therein the intersecting medial portions of a pair of elongated bars having ends pivotally connected to a pair of links which are pivotally carried on the ends of the lateral base bar and including a pivot pin carried in the upper end of the head extending through the intersecting medial portions of said elongated bars, and a manually adjustable threaded bolt member in threaded engagement with the lateral base bar and with the threaded interior of the head.

A further object of the invention consists of that object stated in the preceding paragraph and wherein the stem of said manually adjustable bolt member is provided with axially aligned relatively oppositely threaded portions; the upper portion of the stem being provided with right-hand threads and the lower portion with left-hand threads. The upper right-hand-threaded portion being in threaded engagement with the tubular head and

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the lower left-hand-threaded portion being in threaded engagement with the lazy tongs device base bar.

A still further object of the invention is found in the provision of a tension spring having its opposite ends connected to a pair of pivot pins carried in corresponding ends of a pair of intersecting bars of the lazy tongs device whereby said spring functions to counterbalance the weight of the rifle on the lazy tongs device while it is actuated by the manually adjustable bolt member to cause the saddle to be raised while supporting thereon the weight of the rifle.

The various features of novelty will hereinafter be pointed out in the claims; but, for a full understanding of the invention and of its objects and advantages, reference may be had to the following detailed description taken in connection with the accompanying drawing, wherein:

FIG. 1 is a perspective view of a rifle-supporting bipod embodying my invention;

FIG. 2 is a vertical section through the lazy tongs adjusting bolt member; and

FIG. 3 shows a rifleman utilizing my invention in aiming a rifle.

As shown in the drawing, which discloses a preferred embodiment of my invention, the improved bipod, generally designated by numeral 10, comprises an arcuate substantially semi-circular cast saddle 12 movably supported on the upper end of a lazy tongs device 13 pivotally carried on a laterally disposed base bar 14 which is pivotally supported on a pair of tubular legs 15. The base bar 14 is provided at its opposite ends with integral ears 14^a which are perforated to receive pivot pins 16 that pivotally secure the caps 15^a of legs 15 to the base bar 14; each cap 15^a being recessed at 15^b to receive a serrated-faced washer 16^a mounted on the pin 16 between the perforated portion of cap 15^a and the ear 14^a to securely frictionally lock the leg 15 in selectively adjusted position when the wing nut 16^b is tightened.

Adjacently to each ear 14^a, the base bar 14 is recessed at 14^b and perforated thereat to receive the pivot pin 17; the pins 17 pivotally securing the lower links 13^b of the lazy tongs to the base bar 14.

The lazy tongs 13 comprise a plurality of flat metal bars 13^a arranged in crossed pairs, the upper pair being connected at their point of intersection by pin 13^c and at their upper ends by suitable pins 13^d with the lower ends of a pair of links 13^e having their upper ends pivotally connected by pins 13^f with a pair of ears 12^a cast integrally with the arcuate saddle 12, which is adapted to support the front portion of the rifle stock 20, as illustrated in FIG. 3, while the screws 21 frictionally secure the rifle to the saddle 12.

The lower pair of bars 13^a have their upper ends pivotally connected with the lower ends of the upper pair of bars 13^a by pins 13^b and have their lower ends pivotally connected by pins 13^k with the upper ends of a pair of links 13^b which are pivotally carried on the base bar 14.

The extensible and contractible lazy tongs device 13 is actuable to quickly raise and lower a rifle supported on the saddle 12 by means of an instrumentality comprising a transversely slotted tubular head 18 interiorly threaded to receive therein the right-hand-threaded upper end portion 19^a of the sight-adjusting bolt member 19 the lower end portion of which is provided with left-hand threads 19^b in threaded engagement within the central portion of the base bar 14; the bottom end of the sightadjusting bolt member 19 being provided with a circular operating knob 22 secured by pin 23 to the lower cylindrical end of the adjusting bolt member. As shown in FIG. 1, the intermediate portions of the lower pair of bars 13^a extend into the transverse slot 18^a and at their

intersection are pivotally supported on pivot pin 24 which is carried in the upper end of head 18 and through which pin 24 the vertical movements of the adjusting bolt member 19 are transmitted to the lazy tongs and saddle 12 to thereby adjustably raise and lower the rifle.

A tension spring 25 has its opposite ends connected to pivot pins 13^a.

Reverse rotations of adjusting bolt member 19 by operating knob 22 raises and lowers the saddle 12 and the rifle supported thereon and, during such movements, the spring 25 counterbalances the weight of the rifle for reducing the resistance to the rotation of the threaded adjusting bolt member 19 for adjustably raising or lowering the rifle on its supporting bipod while being aimed at the selected target.

It should be pointed out that fast vertical adjustment of the rifle-supporting saddle 12 on the bipod is attained by means of the adjusting bolt member 19 principally through its axially aligned left and right hand threads respectively at opposite end portions of the bolt member. This double-thread feature enables hunter to selectively raise or lower rifle in half the time and with substantially reduced effort which cannot be accomplished with a standard one-way threaded adjusting bolt member. When in prone position it is more natural and easier to turn adjusting knob 22 to the left and since the rifle is slightly harder to raise than to lower, the adjusting bolt member 19 is made to raise the rifle by turning knob 22, as viewed in FIG. 1, from right to left.

When sighting through a high powered scope, every movement of the bipod adjusting mechanism causes the sights to quiver and therefore fast raising and lowering of rifle is important.

When hunting, a selected target might be on a hillside and bipod would be actuated to raise the rifle to maximum position while the next sighting might be of a target in the valley below so that the rifle would have to be quickly lowered with the least amount of movement and therefore the feature of the double-threaded adjusting bolt member provides that desired fast adjustment.

The production of the reversely threaded adjusting member 19 makes possible a reduced cost of manufacture as compared to the manufacture of a single threaded adjusting bolt member which requires a comparatively expensive bearing to insure the desired free movement of adjustment so necessary in still hunting.

It is obvious that changes may be made in the details of construction without departing from the spirit of the invention as set forth in the appended claims.

I claim:

1. In a bipod, for adjustably supporting a rifle while sighting a target, comprising a saddle, a laterally disposed base bar carried on the upper ends of a pair of legs pivotally connected to the ends of said base bar, a lazy tongs device extending between said saddle and said base bar and having crossed bars pivotally connected to said saddle and to said base bar: the improvement which comprises manually adjustable means carried on said base bar for extending and contracting said lazy tongs device to thereby vary the elevation of said saddle for selectively

varying the sighting facility of the rifle, said manually adjustable means comprising a tubular head having a screw-threaded interior and a transverse slot in the upper end thereof adapted to receive therein the intersecting medial portions of a pair of said crossed bars the ends of which are pivotally connected to a pair of links that are pivotally carried on the ends of said base bar, and including a pivot pin extending transversely through said slot and pivotally supporting therein the intersecting medial portions of said pair of said crossed bars, and a manually adjustable threaded bolt member in threaded engagement with said base bar and with the threaded interior of said head.

2. In a bipod for quickly adjusting the sighting facility of a rifle supported thereon while sighting a target, a saddle for supporting the rifle, means for raising and lowering the saddle comprising a base bar carried on a pair of legs, a vertically movable head pivotally connected with said saddle, and a manually adjustable member comprising a rotatable cylindrical stem having axially aligned oppositely threaded portions of like pitch, the upper threaded portion of said stem being in threaded engagement with said head, the lower threaded portion of said stem being in threaded engagement with said base bar, and a knob on said stem for manually rotating said stem to thereby selectively adjust the elevation of said head.

3. A bipod, for adjustably supporting a rifle while sighting a target, comprising a vertically movable saddle for supporting the rifle, a laterally disposed relatively stationary base bar, a lazy tongs device pivotally supported on said base bar and operatively extending between said base bar and said saddle, said lazy tongs device including at least a pair of crossed intersecting bars pivotally connected at their upper ends with said saddle and at their lower ends pivotally connected with said base bar, means for extending and contracting the lazy tongs device comprising a tubular head having a transverse slot in the upper portion thereof, a pivot pin extending across said slot and through the medial portions of a pair of said intersecting bars, and a manually adjustable bolt member having the lower portion of its stem in threaded engagement with said base bar and having the upper end of its stem rotatively carried in said head, said bolt member being manually rotatable to raise and lower said head relatively to said base bar to cause said lazy tongs device to thereby raise and lower said saddle to selectively vary the sighting facility of the rifle.

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