United States Patent [19]

Sands

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[54] **RIFLE SHOOTING STAND**

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[52] **U.S. Cl.** **42/94**

[51] **Int. Cl.** **F41c 29/00**

[58] **Field of Search** 42/94; 248/441, 175, 248/442, 107, 153; 16/192; D83/1

[56] **References Cited**

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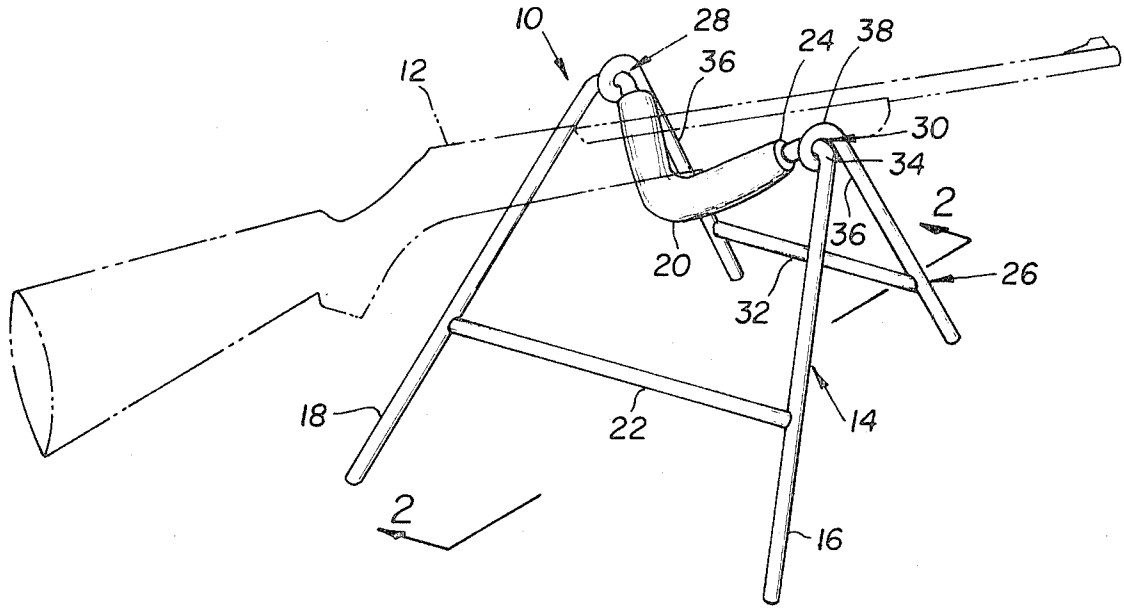
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[57] **ABSTRACT**

A rifle shooting stand formed of two stand members, each preferably consisting of machine-bendable wire. The stand members are pivotally connected together to unfold into a spread position preparatory to serving as a support for a rifle in shooting position thereon. A V-shaped bend in one stand member is adapted to supportingly receive the rifle and also effectively prevents relative sliding movement of the two stand members. Thus, the stand construction, by which the two stand members are confined solely to pivotal movements, is simple and yet provides sturdy support for the rifle.

1 Claim, 3 Drawing Figures



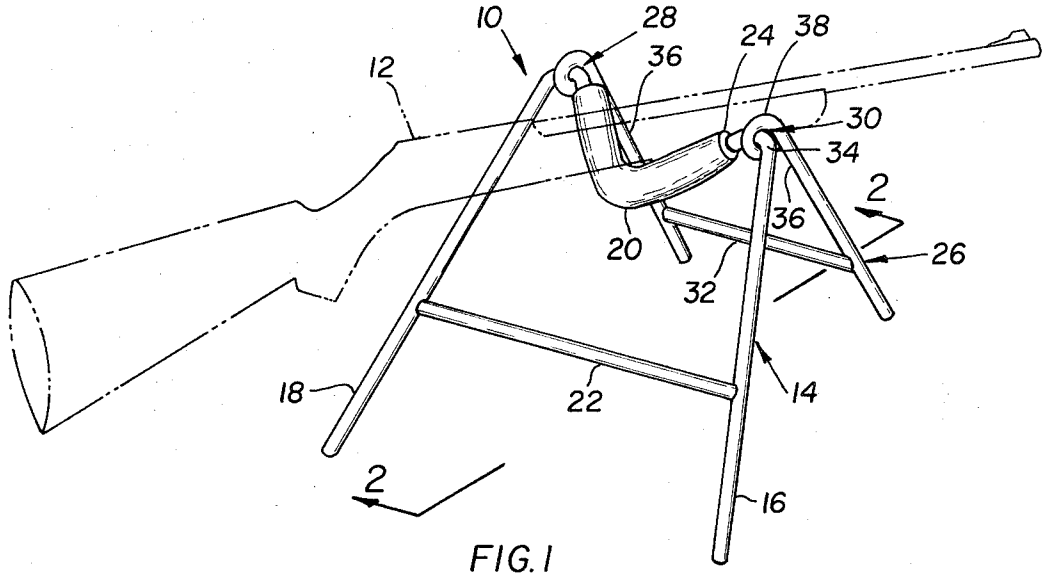


FIG. 1

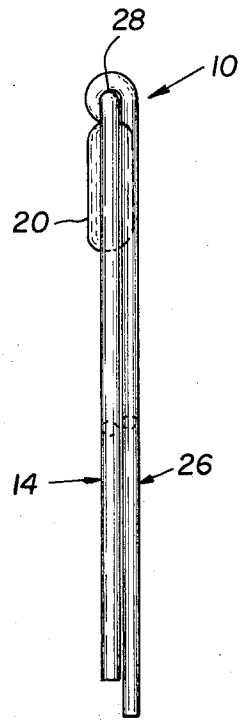


FIG. 3

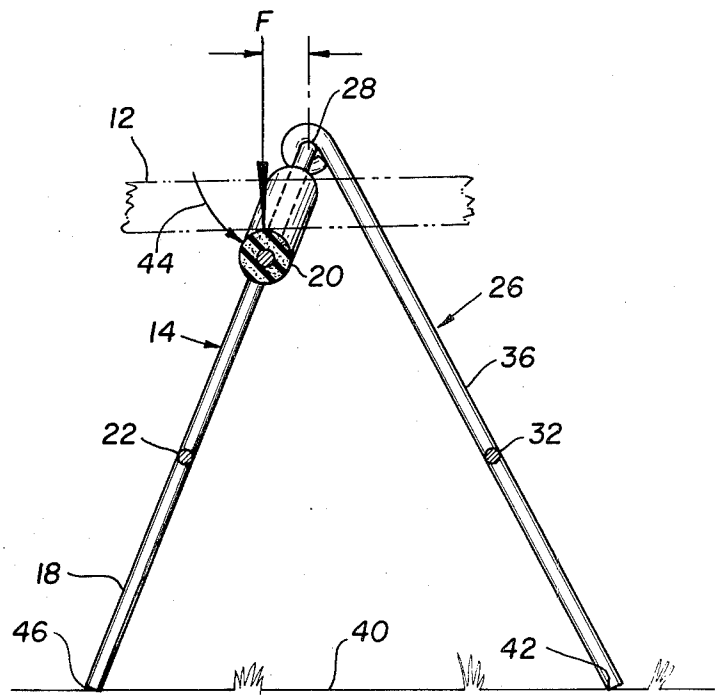


FIG. 2

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RIFLE SHOOTING STAND

The present invention relates generally to shooting stands for rifles and the like, and more particularly to an improved, portable rifle shooting stand characterized by a simplified construction.

It is already well known to utilize as rifle shooting stands tri-pod constructions or the like, such as is exemplified in U.S. Pat. No. 3,016,802. Undoubtedly because these prior art constructions must provide steady and sturdy support for the rifle during sighting, and also withstand recoil forces, they are comprised of numerous machined parts and otherwise are somewhat complicated in their construction.

Broadly, it is an object of the present invention to provide an improved rifle shooting stand overcoming the foregoing and other shortcomings of the prior art. Specifically, it is an object to provide a stand in which the rifle-supporting structure, in the shape of a V, also contributes significantly to simplifying the construction of the stand. Additionally, the rifle-supporting structure is advantageously located in a depending relation to the pivot axis of the stand so that the weight of the rifle thereon tends to force the stand members together rather than apart. This contributes to the sturdiness of the stand.

A rifle supporting structure demonstrating objects and advantages of the present invention includes two wire or rod-like pivotally connected stand numbers which, in use, are spread apart to provide an erect stand or support for the rifle. Specifically, the rifle is seated in a V-notch which is located in one stand member below the pivotal connection of the stand members, the V-notch also being between the two pivotal connection points of the members. Thus, the change in curviture which forms the V-notch prevents one stand from slipping off the other, and the location thereof below the pivot axis also contributes to minimizing collapse of the stand during use.

The above brief description, as well as further objects, features and advantages of the present invention, will be more fully appreciated by reference to the following detailed description of a presently preferred, but nonetheless illustrative embodiment in accordance with the present invention, when taken in conjunction with the accompanying drawings, wherein:

FIG. 1 is a perspective view of the rifle shooting stand hereof in its operative erect condition supporting a rifle in shooting position which is illustrated in phantom perspective;

FIG. 2 is a side elevational view, in section, taken on lines 2—2 of FIG. 1, illustrating further details of the stand; and

FIG. 3 is a side elevational view illustrating the stand in its closed position.

Reference is now made to the drawings wherein there is shown a rifle shooting stand, generally designated 10, deomonstrating objects and advantages of the present invention. Stand 10 is advantageously used by being set up on the ground 40 or other support surface in the erect position illustrated in FIG. 1 in which it effectively supports a front end of a rifle 12 in the shooting position illustrated. Stand 10 thus steadies the rifle during its use.

In the preferred embodiment of the rifle stand 10 as illustrated herein, the same includes a first stand member, generally designated 14, which preferably has a

body fabricated out of a machine-bendable wire. Stand 14 is generally a flat or planar member and has an overall M-shape which provides two legs 16 and 18 and intermediate these legs a generally V-shaped rifle-supporting section 20. Cross piece 22 adds rigidity to stand 14.

Shock-sbsorbing material 24, in cylindrical shape, is advantageously disposed along section 20 prior to the bending thereof into its final shape. The advantageous location of the shock-absorbing material 24 along the rifle-supporting section 20 cushions the recoil of the rifle 12.

The other significant part of the stand 10 is a second stand member, generally designated 26, which is pivotally connected, as at the points 28 and 30, to stand member 14. Stand member 26 also includes a cross piece or brace 32 and has a body also preferably fabricated out of a machine-bendable wire.

As is illustrated in FIG. 1, the two stand members 14 and 26 are pivotally connected to each other in a simplified, noteworthy manner. Specifically, the V-shape of the rifle-supporting section 20 cooperates with each adjacent leg 16, 18 to produce a small radius bend 34 at the two pivotal connection points 28, 30. As a consequence, the attachment of the upper ends of each of the legs 36 of the stand member 26 to the stand 14 at the pivotal connection points 28 and 30 is greatly facilitated. The upper ends of the legs 36 are merely bent in an appropriate circular shape 38 about the curvature or bends 34 in the body of the stand 14 and, in an obvious manner, freely permits uminpeded pivotal movement between the two stand members 14 and 26. At the same time, however, any relative sliding movement between the stand members 14 and 26 as would tend to disengage these two members is prevented because of the small radius bends 34 which prevent sliding movement of the stand member 26 relative to the stand member 14.

In addition to the erect shooting position of stand 10 as illustrated in FIG. 1, the stand members 14 and 26 can be closed upon each other, as illustrated in FIG. 3, which greatly contributes to the portability of the stand 10.

Another noteworthy feature of stand 10 is its inherent ability to withstand forces tending to cause it to collapse from its erect position as illustrated in FIG. 1 flat against its supporting surface 14. This tendency manifests itself in a typical prior art stand because the supporting legs thereof, under the weight of the rifle being supported, is under pressure to spread or move further away from each other. In contrast, the weight of the rifle 12 on the rifle-supporting section 20 which occupies an advantageous depending relation to the imaginary horizontally oriented pivot axis of pivot points 28 and 30 has the tendency of urging the spread legs 16, 18 and 36 of the respective stand members through movement towards each other. That is, as best illustrated in FIG. 2, the angular inclination of stand member 14 of necessity presents the rifle-supporting section 20 in a corresponding angularly inclined orientation beneath the rifle 12 being supported. Further, section 20, as previously indicated, is below the pivot axis, as exemplified by pivot point 28 in FIG. 2. Assuming stand member 26 is firmly engaged in the support surface 40 as at 42, the weight F of rifle 12 appears, in practice, to introduce a turning movement 44 in the other stand member 14 which has a tendency of caus-

ing closing movement of stand **14** towards stand member **26.** Stated another way, movement **44** minimizes the tendency of stand member **14** to slip at its point of engagement with the support surface **40** and thereby result in the collapsing of the stand **10.** Thus, despite the simple construction of stand **10,** it has been found in practice to be very sturdy and a steady support for a rifle during shooting.

A latitude of modification, change and substitution is intended in the foregoing disclosure, and in some instances some features of the invention will be employed without a corresponding use of other features. Accordingly, it is appropriate that the appended claims be construed broadly and in a manner consistent with the spirit and scope of the invention herein.

What is claimed is:

1. A rifle shooting stand comprising a pair of generally planar first and second stand members, a rifle-supporting section formed in said first stand member as a general V-shape between spaced apart opposite small radius bends and terminating in outwardly diverging legs, means pivotally connecting operative ends of said second stand member to said first stand member at said small radius bends thereof so as to define a generally horizontally oriented pivot axis for said shooting stand and to minimize disengaging sliding movement of one stand member relative to the other stand member while permitting unrestricted pivotal movement therebetween, said first and second stand members being pivotally movable about said pivot axis from positions adjacent each other into spread positions preparatory to providing an upright rifle-supporting condition to said shooting stand, said V-shape of said first stand being located adjacent and in depending relation to said pivot axis so that the weight of the rifle thereon induces closing movement of said first stand member relative to said second stand member, and shock-absorbing material disposed about said V-shape.

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