SHOOTING RESTS FOR SUPPORTING FIREARMS AND METHODS FOR MANUFACTURING SHOOTING RESTS

Inventors: Larry Potterfield, Columbia, MO (US); Tim Morrow, Jefferson City, MO (US); Russell A. Potterfield, Columbia, MO (US)

Assignee: Battenfeld Technologies, Inc., Columbia, MO

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ABSTRACT

Shooting rests for supporting firearms and methods for manufacturing shooting rests are disclosed herein. In one embodiment, a shooting rest includes a base and a support assembly pivotally coupled to the base. The support assembly is configured to carry the firearm such that the recoil of the firearm pivots the support assembly about an axis in a first direction. The shooting rest further includes a resilient member coupled to the base and the support assembly and a triggering mechanism coupled to the support assembly. The resilient member is configured to urge the support assembly about the axis in a second direction opposite the first direction. The triggering mechanism is configured to selectively actuate the trigger of the firearm.
SHOOTING RESTS FOR SUPPORTING FIREARMS AND METHODS FOR MANUFACTURING SHOOTING RESTS
CROSS-REFERENCES TO RELATED APPLICATION

[0001] This application claims the benefit of U.S. Provisional Application No. 60/778,028, filed on Mar. 1, 2006, entitled "Shooting Rest," which is incorporated by reference herein.

TECHNICAL FIELD

[0002] The present invention relates to shooting rests for supporting firearms and methods of manufacturing shooting rests for supporting firearms.

BACKGROUND

[0003] Many shooters accrue their firearms to increase the firearm's consistency. Because most modern firearms are mass produced with interchangeable parts that have a range of acceptable tolerances, accruing an individual firearm can significantly improve its accuracy. The goal of accruing a firearm is to improve the consistency of firing each projectile (e.g., bullet). The accuracy and consistency of a firearm are typically determined by (a) placing the firearm in a shooting rest to eliminate human movement, (b) firing several shots at a target, and (c) measuring the distance between the two holes that are spaced apart by the largest distance (i.e., the group size).

[0004] FIG. 1 is an isometric view of a conventional shooting rest for testing a firearm 90 in accordance with the prior art. The shooting rest 1 includes a base 10, a pivot arm 30 attached to the base 10 and pivotable about an axis Z, a spring 58 attached to the base 10 and the pivot arm 30, and a trigger release 60 attached to the pivot arm 30. When the shooter actuates the trigger release 60 and discharges the firearm 90, the recoil of the firearm 90 pivots the pivot arm 30 and the firearm 90 in a direction S about the axis Z from the firing position (shown in FIG. 1) to a recoil position in which the firearm 90 is aimed upward. The spring 58 slows and eventually stops the rotation of the pivot arm 30 and the firearm 90 about the axis Z in the direction S so that the pivot arm 30 and the firearm 90 remain in the recoil position. After discharge, the shooter manually pivots the pivot arm 30 and the firearm 90 from the recoil position back to the firing position to discharge another shot.

[0005] The conventional shooting rest 1 has several drawbacks. First, the shooting rest 1 requires the shooter to manually pivot the firearm 90 from the discharge position to the firing position after each shot. This process is time consuming and presents a safety hazard because the shooter must approach the firearm 90 when the firearm 90 is loaded and aimed upward. Second, the trigger release 60 requires the shooter to place his hand close to the firearm 90 to discharge the firearm 90, which also presents safety issues. Third, the base 10 of the shooting rest 1 is expensive to manufacture because it has three different plates with separate knobs to adjust the horizontal aim or windage of the firearm 90. Accordingly, there exists a need to improve shooting rests for testing firearms.

BRIEF DESCRIPTION OF THE DRAWINGS

[0006] FIG. 1 is an isometric view of a conventional shooting rest in accordance with the prior art.

[0007] FIG. 2 is a top isometric view of a shooting rest in accordance with one embodiment of the invention.

[0008] FIG. 3 is a side elevational view of the shooting rest illustrated in FIG. 2 with the support assembly in the discharge position.

[0009] FIG. 4 is a side elevational view of the shooting rest illustrated in FIG. 2 with the support assembly in the recoil position.

[0010] FIG. 5 is a top isometric view of a shooting rest in accordance with another embodiment of the invention.

[0011] FIG. 6 is a top isometric view of a shooting rest in accordance with another embodiment of the invention.

DETAILED DESCRIPTION

A. Overview

[0012] The following disclosure describes several embodiments of shooting rests for supporting firearms and methods for manufacturing such shooting rests. In one embodiment, a shooting rest includes a base and a support assembly pivotally coupled to the base. The support assembly is configured to carry the firearm such that the recoil of the firearm pivots the support assembly about an axis in a first direction. The shooting rest further includes a resilient member coupled to the base and the support assembly and a triggering mechanism coupled to the support assembly. The resilient member is configured to urge the support assembly about the axis in a second direction opposite the first direction. The resilient member can be an axially-extendable spring, a torsional spring, or another suitable device. The triggering mechanism is configured to selectively actuate the trigger of the firearm when the firearm is carried by the support assembly.

[0013] In another embodiment, a shooting rest includes a base, a support assembly for carrying the firearm, and a remotely actuated triggering mechanism for selectively actuating the trigger of the firearm. The support assembly is pivotably coupled to the base. The remotely actuated triggering mechanism includes a first portion positioned at least proximate to the trigger of the firearm and a second portion spaced apart from the support assembly such that an individual can actuate the triggering mechanism without placing a hand over the base and proximate to the support assembly. The remotely actuated triggering mechanism can be coupled to the support assembly.

[0014] In another embodiment, a shooting rest includes a base, a support assembly coupled to the base for supporting the firearm, and a remotely actuated triggering mechanism for selectively actuating the trigger of the firearm. The remotely actuated triggering mechanism includes a flexible filament, such as a wire, cable, or fiber. The triggering mechanism may further include a plunger coupled to an end of the filament and a housing around at least part of the plunger.

[0015] In another embodiment, a shooting rest includes a base and a support assembly for carrying the firearm. The support assembly is pivotably coupled to the base such that the recoil of the firearm pivots the support assembly about an axis in a first direction. The shooting rest further includes (a) a resilient member for urging the support assembly to
pivot about the axis in a second direction opposite the first direction, and (b) an inhibiting member positioned to inhibit rotation of the support assembly about the axis in the first direction.

[0016] Another aspect of the invention is directed to methods for manufacturing shooting rests for supporting firearms. In one embodiment, a method includes (a) pivotally coupling a support assembly to a base with the support assembly configured to carry the firearm such that the recoil of the firearm pivots the support assembly about an axis in a first direction, (b) attaching a resilient member to the base and the support assembly for urging the support assembly to pivot about the axis in a second direction opposite the first direction, and (c) coupling a triggering mechanism to the support assembly for selectively actuating the trigger of the firearm when the firearm is carried by the support assembly.

[0017] Specific details of several embodiments of the invention are described below with reference to shooting rests for supporting handguns, but in other embodiments the shooting rests can be configured to support rifles and other firearms with longer barrels. Several details describing well-known structures or processes often associated with shooting rests and firearms are not set forth in the following description for purposes of brevity and clarity. Also, several other embodiments of the invention can have different configurations, components, or procedures than those described in this section. A person of ordinary skill in the art, therefore, will accordingly understand that the invention may have other embodiments with additional elements, or the invention may have other embodiments without several of the elements shown and described below with reference to FIGS. 2-6. Where the context permits, singular or plural terms may also include the plural or singular term, respectively. Moreover, unless the word “or” is expressly limited to mean only a single item exclusive from other items in reference to a list of at least two items, then the use of “or” in such a list is to be interpreted as including (a) any single item in the list, (b) all of the items in the list, or (c) any combination of the items in the list. Additionally, the term “comprising” is used throughout to mean including at least the recited feature(s) such that any greater number of the same features and/or other types of features and components are not precluded.

B. Embodiments of Shooting Rests

[0018] FIG. 2 is a top isometric view of a shooting rest 100 for supporting a firearm 190 in accordance with one embodiment of the invention. The shooting rest 100 includes a base 110 and a support assembly 130 attached to the base 110 and pivotable about a first axis A-A between a discharge position (shown in FIGS. 2 and 3) and a recoil position (shown in FIG. 4). The illustrated base 110 includes a first portion 112 and a second portion 116 rotatably coupled to the first portion 112. The first portion 112 is configured to contact a table, bench, or other support surface and may include skid-reducing feet (not shown) to inhibit movement of the shooting rest 100 relative to the surface when the firearm 190 is discharged. The second portion 116 includes a projection 117 attached to the support assembly 130. As a result, the second portion 116 and the support assembly 130 can pivot relative to the first portion 112 about a second axis B-B. The pivotable base 110 advantageously allows a shooter to adjust the windage or horizontal aim of the firearm 190 without picking up the entire shooting rest 100. In other embodiments, the base 110 may not include pivotable components. In additional embodiments, the base 110 may not include the first portion 112, but can have a different mechanism for adjusting windage.

[0019] In the illustrated embodiment, the base 110 further includes a range of motion mechanism 118 for limiting and controlling the pivot of the second portion 116. The illustrated range of motion mechanism 118 includes an arcuate slot 120 in the second portion 116, a pin 122 attached to the first portion 112 and received in the slot 120, and a head 124 attached to the pin 122 and positioned external to the slot 120. The arcuate slot 120 is centered about the second axis B-B so that the pin 122 slides in the slot 120 as the second portion 116 pivots relative to the first portion 112. When the pin 122 contacts one of the ends of the slot 120, the range of motion mechanism 118 prevents further movement of the second portion 116 in that particular direction about the second axis B-B. As such, the B-B length of the slot 120 defines the maximum range of motion of the second portion 116. The head 124 selectively contacts the second portion 116 to prevent the pin 122 from moving within the slot 120. For example, the pin 122 can have a threaded end and the head 124 can be a threaded nut that screws onto the threaded end of the pin 122. In this embodiment, the shooter can rotate the nut about the pin 122 such that the nut contacts the second portion 116 and prevents the pin 122 from moving in the slot 120. The range of motion mechanism 118 accordingly controls and limits the relative movement of the first and second portions 112 and 116 of the base 110. In several applications, the range of motion mechanism 118 further includes a plurality of marks 128 on the second portion 116 that enable the shooter to identify the precise location of the pin 122 within the slot 120. In other embodiments, the range of motion mechanism 118 may have a different configuration, or the base 110 may not include a range of motion mechanism.

[0020] The support assembly 130 is pivotally attached to the base 110 and configured to engage the firearm 190. The illustrated support assembly 130 includes a pivot arm 132 attached to the projection 117 of the second portion 116, a plate 140 detachably coupled to the pivot arm 132, and first and second insert 148a-b positioned between the pivot arm 132 and the plate 140. The pivot arm 132, the plate 140, and the inserts 148 include a plurality of aligned holes 139 for receiving corresponding fasteners (not shown) to secure the components together. The illustrated holes 139 in the pivot arm 132 have a hexagonal shape for receiving a fastener with a hexagonal head to facilitate attachment of the components. In other embodiments, however, the pivot arm 132, the plate 140, and the inserts 148 may include a different arrangement of holes or be secured together with a different device.

[0021] The illustrated inserts 148 have an inner surface (not shown) with a contour corresponding to the shape of the firearm 190. As such, the firearm 190 can be placed between the first and second inserts 148a-b and secured in a fixed position relative to the support assembly 130 such that the recoil of the firearm 190 causes the entire support assembly 130 to pivot in a first direction S1 about the first axis A-A from the discharge position (shown in FIGS. 2 and 3) to the recoil position (shown in FIG. 4). In other embodiments, the shooting rest 100 can include different inserts with various
surface contours to secure firearms in other configurations. In additional embodiments, the shooting rest \textit{100} may not include the first and second inserts \textit{148a-b}, but rather the firearm \textit{190} can be secured to the pivot arm \textit{132} with a different mechanism. For example, the firearm \textit{190} can be bolted directly to the pivot arm \textit{132}. In either case, the support assembly \textit{130} releasably secures the firearm \textit{190} and pivots with the firearm \textit{190} about the first axis \textit{A-A}.\[0022\]

FIG. 3 is a side elevational view of the shooting rest \textit{100} illustrated in FIG. 2. The illustrated support assembly \textit{130} further includes a stop \textit{134} for limiting the pivot of the support assembly \textit{130} about the first axis \textit{A}. The illustrated stop \textit{134} is an integral portion of the pivot arm \textit{132} and projects radially outward from the first axis \textit{A}. The stop \textit{134} can be positioned to contact the second portion \textit{116} of the base \textit{110} when the support assembly \textit{130} pivots about the first axis \textit{A} in the first direction \textit{S} and to a maximum desired distance. The stop \textit{134} can be a separate component attached to the pivot arm \textit{132} in other embodiments.

FIG. 4 is a side elevational view of the shooting rest \textit{100} with the support assembly \textit{130} in the recoil position and with the stop \textit{134} contacting the second portion \textit{116} of the base \textit{110} to prevent additional rotation of the support assembly \textit{130} about the first axis \textit{A} in the first direction \textit{S}. In several applications, the recoil of the firearm \textit{190} may not cause the support assembly \textit{130} to pivot about the first axis \textit{A} in the first direction \textit{S}, such that the stop \textit{134} contacts the base \textit{110}. In other embodiments, the stop can have a different configuration, or the shooting rest \textit{100} may not include a stop.

[0023]

Referring back to FIG. 3, the illustrated shooting rest \textit{100} further includes an angle adjustment mechanism \textit{150} for adjusting the elevation or vertical aim of the firearm \textit{190}. The illustrated angle adjustment mechanism \textit{150} includes a threaded shaft \textit{152}, a head \textit{153} carried by the shaft \textit{152}, and a nut \textit{154} threadably coupled to the shaft \textit{152}. The shaft \textit{152} projects from the second portion \textit{116} of the base \textit{110}, and the head \textit{153} is positioned to contact a projection \textit{136} on the pivot arm \textit{132} to prevent the support assembly \textit{130} from pivoting about the first axis \textit{A} in a second direction \textit{S}. The nut \textit{154} is positioned against the second portion \textit{116} of the base \textit{110} and can be rotated on the shaft \textit{152} to drive the shaft \textit{152} upward in a direction \textit{D}, or downward in a direction \textit{D}. Because the projection \textit{136} rests on the head \textit{153} of the support assembly \textit{130} is in the discharge position, the upward or downward movement of the shaft \textit{152} pivots the support assembly \textit{130} about the first axis \textit{A} and, consequently, adjusts the elevation of the firearm \textit{190}. In other embodiments, the shooting rest \textit{100} may include other mechanisms for adjusting the angle of the firearm \textit{190}.

[0024]

In the illustrated embodiment, the shooting rest \textit{100} further includes a resilient member \textit{180} for urging the support assembly \textit{130} about the first axis \textit{A} in the second direction \textit{S}. The illustrated resilient member \textit{180} includes a first end portion \textit{182} pivotably attached to the second portion \textit{116} of the base \textit{110} and a second end portion \textit{184} pivotably attached to the pivot arm \textit{132} of the support assembly \textit{130}. The resilient member \textit{180} is extendable between a first length when the support assembly \textit{130} is in the discharge position (shown in FIG. 3) and a second length when the support assembly \textit{130} is in the recoil position (shown in FIG. 4). The resilient member \textit{180} can be an axially-extendable spring (e.g., a gas spring, a cord spring, or a shock chord) or other suitable member. In either case, the resilient member \textit{180} places a force on the support assembly \textit{130} to urge the assembly \textit{130} to pivot about the first axis \textit{A} in the second direction \textit{S}. As such, the resilient member \textit{180} maintains the support assembly \textit{130} in the discharge position until the firearm \textit{190} is discharged or another external force acts on the support assembly \textit{130}. After discharge, the recoil of the firearm \textit{190} drives the support assembly \textit{130} about the first axis \textit{A} in the first direction \textit{S}, and the resilient member \textit{180} slows and eventually stops the rotation of the support assembly \textit{130} and returns the support assembly \textit{130} and the firearm \textit{190} to the discharge position. In additional embodiments, the resilient member \textit{180} can have other configurations. For example, a resilient member can be attached to (a) the pivot arm \textit{132} and (b) the second portion \textit{116} of the base \textit{110} proximate to the range of motion mechanism \textit{118}. As such, the resilient member can push the pivot arm \textit{132} to urge the assembly \textit{130} to pivot about the first axis \textit{A} in the second direction \textit{S}. Alternatively, as described below with reference to FIG. 5, the shooting rest may include a torsional resilient member in lieu of an axially-extendable resilient member. In other embodiments, the shooting rest \textit{100} may not include a resilient member for returning the support assembly \textit{130} to the discharge position.

[0026]

Referring back to FIG. 2, the illustrated shooting rest \textit{100} further includes a triggering mechanism \textit{160} for remotely actuating a trigger \textit{192} of the firearm \textit{190}. The illustrated triggering mechanism \textit{160} includes a linkage \textit{162} pivotally coupled to the support assembly \textit{130} and positioned to contact the trigger \textit{192}. The linkage \textit{162} includes a lever \textit{164} attached to the pivot arm \textit{132} and pivotable about a third axis \textit{C-C}, a link \textit{166} attached to the lever \textit{164}, and a spur \textit{168} projecting from the link \textit{166} and positioned proximate to the trigger \textit{192}. The lever \textit{164} includes a first end portion \textit{165a} attached to the link \textit{166} and a second end portion \textit{165b} opposite the first end portion \textit{165a}. The illustrated link \textit{166} has a plurality of holes \textit{167} so that the link \textit{166} can be attached to the lever \textit{164} at several different places to adjust the position of the spur \textit{168} and accommodate various configurations of firearms.

[0027]

The illustrated triggering mechanism \textit{160} further includes a housing \textit{172}, a plunger \textit{174} disposed at least partially within the housing \textit{172}, a flexible filament \textit{176} (not shown) extending between the plunger \textit{174} and the linkage \textit{162}, and a tube \textit{178} encasing the flexible filament \textit{176}. The housing \textit{172} is configured to inhibit accidental actuation of the plunger \textit{174}. The housing \textit{172} includes two flanges \textit{173} positioned so that a shooter can place two fingers on corresponding flanges \textit{173} and press the plunger \textit{174} in a direction \textit{X} relative to the housing \textit{172}. The filament \textit{176} has a first end \textit{177a} attached to the plunger \textit{174} and a second end \textit{177b} attached to the second end portion \textit{165b} of the lever \textit{164} with a wire clamp \textit{170}. The filament \textit{176} can be a fiber, cable, wire, or other flexible member that enables a shooter to move the housing \textit{172} to a comfortable position spaced apart from the firearm \textit{190}. In operation, the shooter presses the plunger \textit{174} in the direction \textit{X} to move the filament \textit{176} within the tube \textit{178}, which drives the second end portion \textit{165b} of the lever \textit{164} in a direction \textit{X} and pivots the lever \textit{164} in a direction \textit{S} about the third axis \textit{C-C}, so that the spur \textit{168} contacts and actuates the trigger \textit{192} of the firearm \textit{190}. In other embodiments, the shooting rest \textit{100}
can include other triggering mechanisms that may or may not be remotely actuated. In additional embodiments, the shooting rest 100 may not include a triggering mechanism for actuating the trigger 192 of the firearm 190.

[0028] The illustrated shooting rest 100 further includes an inhibiting member 158 for inhibiting rotation of the support assembly 130 about the first axis A-A in the first direction S1. The illustrated inhibiting member 158 is a spacer (e.g., nylon washer) aligned with the first axis A-A and positioned between the pivot arm 132 and the projection 117 of the base 110. The inhibiting member 158 creates resistance and/or friction between the pivot arm 132 and the projection 117 that inhibits the support assembly 130 from pivoting about the first axis A-A. The shooter can adjust the resistance by changing the tension of the fastener 129 that connects these components together. Although the illustrated inhibiting member 158 does not include a spring, in other embodiments, the inhibiting member 158 can be a torsional spring, such as the spring 58 illustrated in FIG. 1, or have a different configuration. In additional embodiments, the shooting rest 100 may not include an inhibiting member for inhibiting rotation of the support assembly 130 about the first axis A-A.

[0029] One feature of the shooting rest 100 described above with reference to FIGS. 2-4 is that the resilient member 180 automatically pivots the support assembly 130 and the firearm 190 from the recoil position to the discharge position after each shot. An advantage of this feature is that the shooting rest 100 is safer to operate than conventional shooting rests, such as the shooting rest 100 illustrated in FIG. 1, because the shooter does not need to approach the firearm 190 after discharge. Moreover, the shooting rest 100 enables a shooter to fire multiple shots more quickly because the shooter need not manually pivot the firearm 190 from the recoil position to the discharge position after each shot.

[0030] Another feature of the shooting rest 100 described above with reference to FIGS. 2-4 is that the triggering mechanism 360 allows a shooter to remotely actuate the trigger 192 of the firearm 190. An advantage of this feature is that the shooter can select a comfortable position from which to discharge the firearm 190. Another advantage of this feature is that the shooting rest 100 is safer to operate than conventional shooting rests, such as the shooting rest 100 illustrated in FIG. 1, because the shooter need not place his hand next to the firearm 190 and over the base 110 to discharge the firearm 190. Rather, the shooter can discharge the firearm 190 in the shooting rest 100 from a safe position spaced apart from the firearm 190.

C. Additional Embodiments of Shooting Rests

[0031] FIG. 5 is a top isometric view of a shooting rest 200 in accordance with another embodiment of the invention. The illustrated shooting rest 200 is generally similar to the shooting rest 100 described above with reference to FIGS. 2-4. For example, the shooting rest 200 includes a base 110, a support assembly 130 pivotably coupled to the base 110, and a triggering mechanism 360 for selectively actuating the trigger 192 of the firearm 190. The illustrated shooting rest 200, however, includes a torsional resilient member 280 for urging the support assembly 130 about the first axis A-A in the second direction S2. The torsional resilient member 280 can be a torsional spring that is aligned with the first axis A-A and attached to the support assembly 130 and the base 110. In other embodiments, the shooting rest 200 may not include the torsional resilient member 280.

[0032] The illustrated shooting rest 200 further includes a handle 246 attached to the plate 140 for enabling the shooter to (a) pivot the support assembly 130 about the first axis A-A, and/or (b) hold the support assembly 130 in the recoil position. As a result, the shooter can grasp the handle 246, pivot the support assembly 130, hold the support assembly 130 in the recoil position, and change the magazine in the firearm 190 without removing the firearm 190 from the shooting rest 200. In other embodiments, the shooting rest 200 may not include the handle 246. In additional embodiments, the shooting rest 200 may further include a kickstand (not shown) or other device that selectively maintains the support assembly 130 in the recoil position so that the shooter may release the handle 246 while changing the magazine in the firearm 190.

[0033] FIG. 6 is a top isometric view of a shooting rest 300 in accordance with another embodiment of the invention. The illustrated shooting rest 300 is generally similar to the shooting rest 100 described above with reference to FIGS. 2-4. For example, the shooting rest 300 includes a base 110 and a support assembly 130 pivotably coupled to the base 110. The illustrated shooting rest 300, however, does not include a resilient member for urging the support assembly 130 about the first axis A-A. Rather, a shooter manually pivots the support assembly 130 from the recoil position to the discharge position after discharging the firearm 190. In additional embodiments, the shooting rest 300 may include a resilient member for urging the support assembly 130 about the first axis A-A.

[0034] The illustrated shooting rest 300 further includes a triggering mechanism 360 for selectively actuating the trigger 192 of the firearm 190. The triggering mechanism 360 includes a lever 364 pivotably attached to the support assembly 130, a link 166 attached to the lever 364, and a spur 168 projecting from the link 166 and positioned proximate to the trigger 192. The lever 364 is pivotable about a third axis C-C and includes a first end portion 365a attached to the link 166 and a second end portion 365b opposite the first end portion 365a. The second end portion 365b projects away from the pivot arm 132 to enable a shooter to easily press the second end portion 365b in a direction X to actuate the triggering mechanism 360 and discharge the firearm 190. In other embodiments, the shooting rest 300 can have triggering mechanisms 360 with different configurations.

[0035] The illustrated shooting rest 300 further includes a sighting tube 388 attached to the plate 140 and a plurality of marks 319 (identified as 319a-b) on the base 110 and the support assembly 130. The sighting tube 388 is positioned parallel to the bore of the firearm 190 so that a shooter can look through the sighting tube 388 and determine the aim of the firearm 190 in the shooting rest 300. The marks 319 on the base 110 and the support assembly 130 enable the shooter to compare the recoil of different firearms. In the illustrated embodiment, the pivoting arm 132 includes a single mark 319a and the projection 117 includes a plurality of second marks 319b. In other embodiments, the shooting rest 300 may not include the sighting tube 388 and/or the marks 319.

[0036] From the foregoing, it will be appreciated that specific embodiments of the invention have been described
herein for purposes of illustration, but that various modifications may be made without deviating from the spirit and scope of the invention. For example, many of the elements of one embodiment can be combined with other embodiments in addition to or in lieu of the elements of the other embodiments. Accordingly, the invention is not limited except as by the appended claims.

1. We claim:
   1. A shooting rest for supporting a firearm with a trigger, the shooting rest comprising:
      a base;
      a support assembly movably coupled to the base, the support assembly being configured to carry the firearm such that the recoil of the firearm moves the support assembly about an axis in a first direction;
      a resilient member coupled to the base and the support assembly, the resilient member configured to pivot the support assembly about the axis in a second direction opposite the first direction; and
      a triggering mechanism for selectively actuating the trigger of the firearm when the firearm is carried by the support assembly.

   2. The shooting rest of claim 1 wherein:
      the resilient member comprises an axially-extendable spring;
      the axis is a first axis;
      the base comprises a first portion attached to the support assembly and a second portion pivotally coupled to the first portion, the first and second portions being pivotable relative to each other about a second axis generally perpendicular to the first axis;
      the shooting rest further comprises an inhibiting member positioned to inhibit rotation of the support assembly about the axis in the first direction; and
      the triggering mechanism comprises a remotely actuated triggering mechanism including (a) a first portion positioned at least proximate to the trigger of the firearm when the firearm is carried by the support assembly, and (b) a second portion spaced apart from the support assembly such that an individual can actuate the triggering mechanism without placing a hand over the base and proximate to the support assembly.

   3. The shooting rest of claim 1 wherein the triggering mechanism comprises a remotely actuated triggering mechanism including (a) a first portion positioned at least proximate to the trigger of the firearm when the firearm is carried by the support assembly, and (b) a second portion spaced apart from the support assembly such that an individual can actuate the triggering mechanism without placing a hand over the base and proximate to the support assembly.

   4. The shooting rest of claim 1 wherein the triggering mechanism comprises a remotely actuated triggering mechanism including a flexible filament.

   5. The shooting rest of claim 1 wherein the triggering mechanism comprises a remotely actuated triggering mechanism including a housing, a plunger disposed at least partially within the housing, and a flexible filament coupled to the plunger.

   6. The shooting rest of claim 1 wherein the resilient member comprises a torsional spring.

   7. The shooting rest of claim 1 wherein the resilient member comprises an axially-extendable spring.

   8. The shooting rest of claim 1 wherein the axis is a first axis, wherein the base comprises a first portion attached to the support assembly and a second portion pivotally coupled to the first portion, and wherein the first and second portions are pivotable relative to each other about a second axis generally perpendicular to the first axis.

   9. The shooting rest of claim 1 wherein the support assembly comprises a stop for limiting the range of pivot of the support assembly.

   10. The shooting rest of claim 1 wherein the triggering mechanism is attached to the support assembly.

   11. The shooting rest of claim 1, further comprising an inhibiting member positioned to inhibit rotation of the support assembly about the axis in the first direction.

   12. The shooting rest of claim 1, further comprising a handle projecting from the support assembly.

   13. A shooting rest for supporting a firearm with a trigger, the shooting rest comprising:
      a base;
      a support assembly for carrying the firearm, the support assembly being pivotally coupled to the base; and
      a remotely actuated triggering mechanism for selectively actuating the trigger of the firearm, the remotely actuated triggering mechanism including a first portion positioned at least proximate to the trigger of the firearm when the firearm is carried by the support assembly, and a second portion spaced apart from the support assembly such that an individual can actuate the triggering mechanism without placing a hand over the base and proximate to the support assembly.

   14. The shooting rest of claim 13 wherein the remotely actuated triggering mechanism is coupled to the support assembly.

   15. The shooting rest of claim 13 wherein the support assembly is pivotally coupled to the base such that the recoil of the firearm pivots the support assembly about an axis.

   16. The shooting rest of claim 13 wherein:
      the support assembly is pivotally coupled to the base such that the recoil of the firearm pivots the support assembly about an axis in a first direction; and
      the shooting rest further comprises a resilient member coupled to the base and the support assembly, the resilient member being configured to urge the support assembly about the axis in a second direction opposite the first direction.

   17. The shooting rest of claim 13 wherein the remotely actuated triggering mechanism further comprises a flexible filament.

   18. The shooting rest of claim 13 wherein the remotely actuated triggering mechanism further comprises a housing, a plunger disposed at least partially within the housing, and a flexible filament coupled to the plunger.

   19. A shooting rest for supporting a firearm with a trigger, the shooting rest comprising:
      a base;
      a support assembly coupled to the base for supporting the firearm; and
      a remotely actuated triggering mechanism for selectively actuating the trigger of the firearm when the firearm is
carried by the support assembly, the remotely actuated triggering mechanism including a flexible filament.

20. The shooting rest of claim 19 wherein the support assembly is pivotably coupled to the base such that the recoil of the firearm pivots the support assembly about an axis.

21. The shooting rest of claim 19 wherein:

the support assembly is pivotably coupled to the base such that the recoil of the firearm pivots the support assembly about an axis in a first direction; and

the shooting rest further comprises a resilient member coupled to the base and the support assembly, the resilient member being configured to urge the support assembly about the axis in a second direction opposite the first direction.

22. The shooting rest of claim 19 wherein:

the flexible filament comprises a proximal end attached at the support assembly and a distal end opposite the proximal end; and

the remotely actuated triggering mechanism further comprises (a) a housing proximate to the distal end of the filament, and (b) a plunger disposed at least partially within the housing and coupled to the distal end of the filament.

23. A shooting rest for supporting a firearm with a trigger, the shooting rest comprising:

a base;

a support assembly for supporting the firearm, the support assembly being movably coupled to the base such that the recoil of the firearm pivots the support assembly about an axis in a first direction;

means for urging the support assembly about the axis in a second direction opposite the first direction; and

means for selectively actuating the trigger of the firearm when the firearm is supported by the support assembly.

24. The shooting rest of claim 23 wherein the means for urging the support assembly comprise a spring coupled to the support assembly and the base.

25. The shooting rest of claim 23 wherein the means for selectively actuating the trigger comprise a remotely actuated triggering mechanism including (a) a first portion positioned at least proximate to the trigger of the firearm when the firearm is carried by the support assembly, and (b) a second portion spaced apart from the support assembly such that an individual can actuate the triggering mechanism without placing a hand over the base and proximate to the support assembly.

26. The shooting rest of claim 23 wherein the means for selectively actuating the trigger comprise a remotely actuated triggering mechanism including a flexible filament.

27. The shooting rest of claim 23 wherein the means for selectively actuating the trigger comprise a remotely actuated triggering mechanism including a housing, a plunger disposed at least partially within the housing, and a flexible filament coupled to the plunger.

28. A shooting rest for supporting a firearm with a trigger, the shooting rest comprising:

a base;

a support assembly for carrying the firearm, the support assembly being movably coupled to the base such that the recoil of the firearm pivots the support assembly about an axis in a first direction;

a resilient member for urging the support assembly to pivot about the axis in a second direction opposite the first direction, the resilient member being coupled to the base and the support assembly; and

an inhibiting member positioned to inhibit rotation of the support assembly about the axis in the first direction.

29. The shooting rest of claim 28 wherein the inhibiting member is aligned with the axis and positioned between the base and the support assembly.

30. The shooting rest of claim 28 wherein the inhibiting member comprises a spacer.

31. The shooting rest of claim 28 wherein the inhibiting member comprises a torsional spring.

32. The shooting rest of claim 28 wherein the inhibiting member inhibits rotation of the support assembly about the axis in the first direction without a spring.

33. A method for manufacturing a shooting rest for supporting a firearm with a trigger, the method comprising:

pivotably coupling a support assembly to a base with the support assembly configured to carry the firearm such that the recoil of the firearm pivots the support assembly about an axis in a first direction;

attaching a resilient member to the base and the support assembly for urging the support assembly to pivot about the axis in a second direction opposite the first direction; and

coupling a triggering mechanism to the support assembly for selectively actuating the trigger of the firearm when the firearm is carried by the support assembly.

34. The method of claim 33 wherein attaching the resilient member comprises coupling an axially-extendable spring to the base and the support assembly.

35. The method of claim 33 wherein attaching the resilient member comprises coupling a torsional spring to the base and the support assembly.

36. The method of claim 33 wherein coupling the triggering mechanism comprises attaching a remotely actuated triggering mechanism including (a) a first portion positioned at least proximate to the trigger of the firearm when the firearm is carried by the support assembly, and (b) a second portion spaced apart from the support assembly.

37. The method of claim 33 wherein coupling the triggering mechanism comprises attaching a remotely actuated triggering mechanism including a flexible filament.

38. The method of claim 33 wherein coupling the triggering mechanism comprises attaching a remotely actuated triggering mechanism including a housing, a plunger disposed at least partially within the housing, and a flexible filament coupled to the plunger.

39. The method of claim 33, further comprising attaching an inhibiting member to at least one of the support assembly or the base for inhibiting rotation of the support assembly about the axis in the first direction.

40. The method of claim 33 wherein pivotally coupling the support assembly to the base comprises attaching the support assembly to a base having (a) a first portion attached to the support assembly and (b) a second portion pivotably coupled to the first portion.