ABSTRACT

A bow having an upper limb, a lower limb, a riser body, a sight window for mounting a plurality of sight pins, and an arrow rest, such as a whisker biscuit. The whisker biscuit is mounted in a whisker biscuit mount. The sight window and the whisker biscuit mount are integrally formed in the riser body, such that the sight window and the whisker mount are generally vertically aligned and do not extend horizontally from the riser body.
BOW RISER WITH INTEGRATED SIGHT AND WHISKER BISCUIT MOUNT

RELATED APPLICATION

[0001] The present application is a non-provisional utility application and claims priority benefit, with regard to all common subject matter, of earlier-filed U.S. Provisional patent application entitled “BOW RISER WITH INTEGRATED BOW SIGHT AND WHISKER BISCUIT,” Ser. No. 61/783,584, filed Mar. 14, 2013. The identified earlier-filed provisional application is hereby incorporated by reference into the present application in its entirety.

BACKGROUND

[0002] 1. Field

[0003] Embodiments of the invention are directed to a bow riser with an integrated bow sight and whisker biscuit mount. In particular, embodiments of the invention are directed to a bow riser, for use with a plurality of bow types, that includes an integrated bow sight for aiming the bow and a whisker biscuit mount for mounting a whisker biscuit for supporting an arrow, and where the bow sight and whisker biscuit mount are generally vertically aligned and integrated into the bow riser.

[0004] 2. Related Art

[0005] Bows commonly include a bow sight to assist in aiming an arrow through the bow and an arrow rest for resting the arrow in a generally horizontal orientation during the act of shooting the bow. Bow sights may include pin sights, optical sights, laser sights, or the like. Many bows incorporate the use of a window sight comprising a window-shaped opening with a plurality of fiber optic sighting pins positioned within an interior section of the opening. The arrow rest holds an arrow in place while the bow is being sighted and while the arrow is being shot from the bow. A common type of arrow rest is a whisker biscuit, which is a generally ring-shaped piece of material that includes a plurality of bristles extending inwardly from the ring-shaped material. The whisker biscuit includes an opening at its center between tips of the plurality of bristles, such that an arrow can be placed in the center of the whisker biscuit and can rest on the tips of the plurality of bristles.

[0006] In typical configurations, the bow sight and a whisker biscuit mount are individual components that are attached to a bow by way of brackets, screws, or other fasteners. For instance, a rectangular or circular window sight with individual sight pins included therein is often attached to a riser of the bow via a mounting bracket, such that the widow sight extends laterally (i.e., horizontally) away from the riser. Similarly, a circular whisker biscuit is often attached to the riser of the bow via a similar mounting bracket, such that the whisker biscuit extends laterally away from the riser.

SUMMARY

[0007] Embodiments of the invention relate to a bow, such as compound bows, having a bow riser with a sight window, e.g., a sight guard, and an arrow rest, e.g., a whisker biscuit, integrated in the bow riser. In embodiments, the bow broadly comprises an upper limb, a lower limb, and an elongated riser body extending along a generally vertical axis and positioned between the upper and lower limbs. The riser body has an upper limb section for coupling to the upper limb of the bow and a lower limb section axially opposite the upper limb section for coupling to the lower limb of the bow. The riser body further includes a handle section extending axially upwards from the lower limb section and configured to be grasped by a user during an act of shooting the bow. A central section of the riser body extends axially downwards from the upper limb section.

[0008] In embodiments, the riser body includes a sight window formed in the central section for mounting at least one sight pin, and a whisker biscuit mount formed in the central section vertically below the sight window and for mounting a whisker biscuit used to steady an arrow during the act of shooting the bow. A general centerline of the sight window generally lies along a general centerline of the whisker biscuit mount, such that the sight window and whisker biscuit mount are generally vertically aligned. The sight window and whisker biscuit mount are integrally formed in the riser body.

[0009] This summary is provided to introduce a selection of concepts in a simplified form that are further described below in the detailed description. This summary is not intended to identify key features or essential features of the claimed subject matter, nor is it intended to be used to limit the scope of the claimed subject matter. Other aspects and advantages of the present invention will be apparent from the following detailed description of the embodiments and the accompanying drawing figures.

BRIEF DESCRIPTION OF THE DRAWING FIGURES

[0010] Embodiments of the present invention are described in detail below with reference to the attached drawing figures, wherein:

[0011] FIG. 1 is a rear perspective view of a bow and a bow riser of embodiments of the invention;

[0012] FIG. 2 is a rear perspective view of the bow riser of FIG. 1;

[0013] FIG. 3 is a front perspective view of the bow riser of FIG. 1;

[0014] FIG. 4 is a left side view of the bow riser of embodiments of the invention;

[0015] FIG. 5 is a right side view of the bow riser of embodiments of the invention;

[0016] FIG. 6 is a front end view of the bow riser of embodiments of the invention;

[0017] FIG. 7 is a rear end view of the bow riser of embodiments of the invention;

[0018] FIG. 8 is top end view of the bow riser of embodiments of the invention; and

[0019] FIG. 9 is a bottom end view of the bow riser of embodiments of the invention.

[0020] The drawing figures do not limit the invention to the specific embodiments disclosed and described herein. The drawings are not necessarily to scale, emphasis instead being placed upon clearly illustrating the principles of the invention.

DETAILED DESCRIPTION

[0021] The following detailed description of embodiments of the invention references the accompanying drawings that illustrate specific embodiments in which the invention can be practiced. The embodiments are intended to describe aspects of the invention in sufficient detail to enable those skilled in the art to practice the invention. Other embodiments can be
utilized and changes can be made without departing from the scope of the present invention. The following detailed description is, therefore, not to be taken in a limiting sense. The scope of the invention is defined only by the appended claims, along with the full scope of equivalents to which such claims are entitled.

In this description, references to “one embodiment,” “an embodiment,” or “embodiments” mean that the feature or features being referred to are included in at least one embodiment of the technology. Separate references to “one embodiment,” “an embodiment,” or “embodiments” in this description do not necessarily refer to the same embodiment and are also not mutually exclusive unless so stated and/or except as will be readily apparent to those skilled in the art from the description. For example, a feature, structure, act, etc., described in one embodiment may also be included in other embodiments but is not necessarily included. Thus, the present technology can include a variety of combinations and/or integrations of the embodiments described herein.

Embodiments of the invention are a bow riser 10 for a bow 12, such as a compound bow. The bow 12 comprises an upper limb 14, a lower limb 16, a buss cable 18 connected between the upper and lower limbs 14, 16, an idler wheel 20 and a cam 22 connecting the buss cable 18, a bow string (not shown), and the bow riser 10. The bow 12 illustrated in the Figures is a compound bow. However, it is to be appreciated that the bow riser 10 of embodiments of the invention may be used with a variety of bow types, including recurve bows, reflex bows, self bows, straight bows, longbows, and composite bows. Therefore, reference to a compound bow herein is not intended to be limiting. Moreover, a single-cam compound bow is illustrated herein, but it should be appreciated that different types of compound bows also could be used with embodiments of the bow riser 10 of the invention.

As illustrated in FIG. 1, the buss cable 22 (and the bow string 28, which is not shown) faces towards a user when the user is shooting the bow 12. The user will place their hand (for a right-handed user, the user will place their left hand) on the bow riser 10. The user will steady an arrow (not shown) against the bow string, pull the bow string towards the user with the user’s right hand, and then release the bow string to shoot the arrow. The compound bow of FIG. 1 is intended to illustrate primary features of a bow 12 that can be used with the bow riser 10 of the invention, but as may be appreciated, the bow may include other accessories or structure, such as dampeners to limit vibration, silencers to limit the sound of the bow string being drawn, a peep hole on the bow string to provide more accurate shooting, etc.

As noted above, when in the shooting position, the buss cable 18 and the bow string face the user. The bow riser 10 is positioned away from the user. As used herein, the term forward (or front) or derivations thereof is intended to define a direction away or distal from the user, and the term rearward (or back) or derivations thereof is intended to define a direction towards or proximate the user. In FIG. 1, the forward direction is identified by the area F, and the rearward direction is identified by the area R. As can be appreciated, forward and rearward directions or areas are with respect to the bow 12 but may also be explained herein relative to the user for reference. Left and right sides, as discussed herein are when viewing the bow 12 from its rear end.

Referring to FIGS. 1-3, the bow riser 10 of embodiments of the invention comprises an elongated riser body 24 extending along a generally vertical axis. The bow riser 10 has an upper end 26 and a lower end 28, and a length of the bow riser body 24 is measured from the upper end 26 to the lower end 28. The bow riser body 24 further has a width along a horizontal or lateral axis as measured from the front to the rear of the bow 12. The bow riser body 24 broadly comprises an upper limb section 30 at the upper end 26, a lower limb section 32 at the lower end 28, a handle section 34, and a central section 36. It is to be appreciated that the bow riser body 24 may have some curvature along a vertical axis and is not necessarily completely straight from the lower end 28 to the upper end 26. For example and referring to FIG. 2, a portion of the lower limb section 32 of the body 24 and a portion of the upper limb section 30 of the body 24 are generally curved forwardly for mounting to the respective upper and lower limbs 14, 16. Reference to a vertical axis of the bow riser body 24 is reference to the vertical axis that extends through a majority of a length of the bow riser body 24.

Embodiments of the invention provide for the bow riser 10 to be formed from a plurality of types of composition materials. In general, the bow riser 10 may be formed from rigid metals or metal alloys, such as aluminum or magnesium. In additional embodiments, the bow riser 10 may be formed from polymer composites, such as fiberglass, carbon fiber, Kevlar, or the like. In even further embodiments, the bow riser 10 may be formed from natural materials, such as wood from ash, oak, maple, elm, or similar tree types. Regardless of the composition material forming the bow riser 10, certain embodiments of the invention provide for the bow riser to be formed from a single, unitary, and monolithic piece of material, such that each of the components of the bow riser 10 is presented as a single, continuous unit. The unitary bow riser will be discussed in more detail below.

The upper limb section 30 includes an upper mounting bracket 38 for mounting the upper limb section 30 to the upper limb 14 of the bow 12, and similarly, the lower limb section 32 includes a lower mounting bracket 40 for mounting the lower limb section 32 to the lower limb 16 of the bow 12. Both the upper and lower mounting brackets 38, 40 may be secured to the respective upper and lower limbs 14, 16 via one or more screws (not shown), and the respective mounting brackets 38, 40 include one or more openings 42 for receiving the screws (see, FIG. 3). Because embodiments of the invention are provided for use with generally any type of upper and lower limbs 14, 16 of a bow, the upper and lower mounting brackets 38, 40 of the bow riser 10 may include mounting components specifically for mounting the bow riser to a particular type of upper and lower limbs.

The handle section 34 of the bow riser body 24 extends vertically upwards from the lower limb section 32. The handle section 34 provides a location where a user may place their hand when shooting the bow 12. For a right-handed user, the user will place their left hand on the handle section 34, and for a left-handed user, the user will place their right hand on the handle section 34. The handle section 34 may include a bulbous grip, a round grip, a pistol grip, or the like. The handle section 34 may include a gripping material (not shown) on an exterior portion of the handle section, so as to provide additional friction while the user is gripping the handle section. For instance, the gripping material may be formed from polymer or rubber composite and may include ridges or protrusion for facilitating gripping. In addition, the handle section 34 may include ornamental features or visual designs.
The central section 36 of the bow riser body 24 has a sight window 44 and a whisker biscuit mount 46. The sight window 44 is configured to mount at least one sight pin 48 for sighting the arrow during shooting. As is known, sight pins (also known as optic pins) indicate a distance to a target for aiming purposes. If multiple sight pins 48 are mounted within the sight window 44, each sight pin may respectively indicate 20 yards, 30 yards, and 40 yards, although the pins are adjustable, and more or less sight pins may be mounted within the sight window or the pins may indicate different yardages. Additionally, the sight pins 48 can be moved vertically for obtaining different yardage distances for targeting. Embodiments of the invention provide advantages when aiming and viewing the sight pins 48, as described in more detail below.

The sight window 44 may also include various accessories to assist the user in aiming. For example, the sight window 44 may include a sight ring (not shown) that is colored (for example, colored yellow or orange), fiber optics surrounding the sight window for illuminating the sight pins 48 to assist with aiming at night or at dusk, and a bubble level (not shown). Additionally, the sight pins 48 may be moved or changed by accessing the sight window 44, as described below.

The sight window 44 has a body 50 or frame that is hollowed to present an opening 52 that serves as a window through which the sight pins are 48 viewed during aiming. In the Figures, the sight window body 50 is shown as being generally rectangular, with a major axis of the rectangular body being along the vertical axis of the bow riser 10. In alternative embodiments, the sight window body 50 may be square-shaped, circular shaped, oblong shaped (e.g., oval), or any other shape that provides an unobstructed view to the sight pins 48. A size of the sight window 44 is dependent on several factors, including a number and size of sight pins 48 to be mounted in the sight window 44, an amount of light that is desired to enter the sight window 44, and a sufficient amount of material forming the sight window 44 to provide structural integrity to the bow riser body 24.

A front side 54 and a rear side 56 of the sight window 44 (see, FIGS. 4 and 5) are generally completely open, such that the user can see directly through the opening 52 that is the window. Thus, the sight window 44 is formed as an opening or cutout through a thickness of the central section 36 of the bow riser body 24. A left side 58 and a right side 60 of the sight window 44 (see, FIGS. 6 and 7) may be closed but include a plurality of openings 62. Additionally, each of the left and right sides 58, 60 of the sight window 44 may include a vertically elongated opening 64 extending along the major axis of the sight window 44. The at least one sight pin 48 can then be fed through the elongated opening 64 to extend horizontally through the sight window 44. In embodiments, the sight pins 48 may be mounted to a plate 66 (see, FIG. 3) and extend horizontally from the plate 66. The sight pins 48 may then be movable up and down along the elongated opening 64 for varying distances to target. As illustrated in the Figures, the combination plate 66 and sight pin 48 is mounted in the elongated opening 64 on the right side 60 of the sight window 44. In alternative embodiments, the pins 48 may be mounted on the left side 58 of the sight window 44. The plurality of openings 62 may be provided for aesthetic purposes, for allowing light to enter the sight window 44, or for providing an access point for accessing the sight pins 48 and moving them within the sight window 44.

The whisker biscuit mount 46 is positioned axially below (i.e., vertically below) the sight window 44. As is known in the art, a whisker biscuit is a type of arrow rest that allows the user of the bow 12 to rest and steady the arrow during the act of shooting.

As with the sight window 44, the whisker biscuit mount 46 has a body 70 that is generally formed as an opening (or cutout) through the thickness of the central section 36 of the bow riser body 24. In the Figures, the whisker biscuit mount body 70 is shown as being generally circular when viewed from a front or rear side. In alternative embodiments, the whisker biscuit mount body 70 may be square-shaped, oblong shaped (e.g., oval), or any other shape that provides room to mount the whisker biscuit 68. As with the sight window 44, a size of the whisker biscuit mount body 70 may vary as necessary for functional requirements; however, the whisker biscuit mount body 70 must maintain a sufficient amount of composition material so as to maintain structural integrity and stiffness during operation of the bow 12.

The whisker biscuit 68 is mounted in the whisker biscuit mount 46, as illustrated in FIGS. 2-3. The whisker biscuit 68 may include a plurality of bristles 72 that extend from a circumference of the whisker biscuit 68 inwards towards a center of the whisker biscuit 68. The bristles 72 may be made from composite plastics, animal hair, or the like. In certain embodiments, the bristles 72 do not extend entirely to the center of the whisker biscuit 68, such that an opening 74 is presented in the center of the whisker biscuit 68. The opening 74 is sized to receive a partial length of an arrow that is horizontally (i.e., laterally) positioned within the opening 74. In additional embodiments, the whisker biscuit 68 may include a notch 76, such as a V-shaped cutout, that extends from a portion of the circumference of the whisker biscuit 68 inwards toward the center of the whisker biscuit 68. The notch 76 is sized such that the arrow can be passed through the notch 76 and positioned within the opening 74 of the whisker biscuit 68. In use, the user holds the arrow generally horizontally, slides the partial length of the arrow through the notch 76 and into the opening 74 in the center of the bristles 72. The arrow will then rest within the whisker biscuit 68 until the user is ready to shoot the arrow.

Embodiments of the invention provide for the sight window 44 and the whisker biscuit mount 46 to be integral to the bow riser body 24. As discussed previously, most prior art whisker biscuit mounts and sight guards for mounting sight pins extend horizontally from the bow riser. They are frequently separate fixtures that are mechanically coupled to the bow riser via screws or other fasteners. Embodiments of the invention integrate the sight window 44 and the whisker biscuit mount 46 in the bow riser body 24, such that the sight window 44 and whisker biscuit mount 46 are inline of the bow riser body 24, i.e., lie along the same general vertical axis as the bow riser body. As such, the sight window and whisker biscuit mount of embodiments of the invention do not extend horizontally from the bow riser body.

In more detail, embodiments of the invention provide that a vertical centerline of the sight window 44 generally lies along a generally vertical axis of the bow riser body 24. Thus, the vertical centerline through the sight window 44, i.e., the vertical axis through a general center of the sight window (both along the sight window’s width and length), is the same axis as any vertical axis through the bow riser body. Embodiments further provide for the centerline of the sight.
window 44 to be the same axis as a centerline of the bow riser body 24, i.e., that the centerline of the sight window is inline with the centerline of the bow riser body. It is appreciated that determining the centerline of the bow riser body 24 may not be immediately evident due to the curvature of the body 24 at the upper and lower limb sections 30,32 and further due to the undulations of the body 24 along its length. Therefore, the centerline of the bow riser body 24 is the vertical axis through the body that encompasses a majority of the riser body along the body’s length and that is generally midline along the body’s width for the encompassed majority of length.

[0039] In alternative embodiments, the sight window 44 and the whisker biscuit mount 46 are generally vertically aligned. In yet further embodiments, a centerline of the sight window is the same axis as a centerline of the whisker biscuit mount. Additionally, when measuring along a horizontal axis relative to the vertical length of the riser body, seven, five, three, or two or less inches separates any vertical axis through the whisker biscuit mount 46 and any vertical axis through the sight window 44. Thus, for example, a vertical axis through a frontmost edge 78 of the sight window 44 (see, FIG. 4) is seven, five, three, or two or less inches from a rearmost edge 80 of the whisker biscuit mount 46 (or vice-versa). In yet further embodiments, the sight window 44 and the whisker biscuit mount 46 are generally vertically aligned and further are generally vertically inline with the handle section 34 of the bow riser body 24. In embodiments of the invention, the whisker biscuit mount 46 is positioned vertically below the sight window 44 on the bow riser body 24, but in other embodiments, the whisker biscuit mount 46 may be positioned vertically above the sight window 44.

[0040] As noted above, the sight window 44 and the whisker biscuit mount 46 are integrally formed in the riser body 24 and specifically, the central section 36 of the riser body 24. As such, the sight window 44 and the whisker biscuit mount 46 are a monolithic unit with the upper limb section 30, the handle section 34, and the lower limb section 32 of the riser body 24. In alternative embodiments, the sight window 44 is a monolithic structure with the upper limb section 30 of the bow riser body 24. Alternatively or in addition, the sight window 44 is a monolithic structure with the whisker biscuit mount 46. In embodiments, the whisker biscuit mount 46 is a monolithic structure with the handle section 34.

[0041] In yet further embodiments, the sight window 44 and the whisker biscuit mount 36 are generally vertically aligned, but the sight window 44 is not integral with the upper limb section 30 of the riser body 24 and is instead mechanically coupled to the upper limb section 30 via screws, fasteners, brackets, or other mounting mechanisms (not shown). Similarly, the whisker biscuit mount 46 may not be integral with the handle section 34 but instead may be mechanically coupled to the handle section 34 via screws, fasteners, brackets or other mounting mechanisms (not shown). In these embodiments, the sight window 44 and the whisker biscuit mount 46 remain generally vertically aligned.

[0042] In embodiments of the invention and as briefly noted above, the sight window 44 and/or the whisker biscuit mount 46 do not extend horizontally from the riser body 24. Because it is appreciated that the sight window 44 and whisker biscuit mount 46 necessarily encompass a width of the riser body 24, and that what is defined as the riser body 24 for a particular riser may be dependent on the shape of the riser 10, the no horizontal extension is further described herein. In particular, the frontmost edge 78 of the sight window 44 presents either a frontmost edge of the riser body or does not extend forward of the frontmost edge of the riser body 24. In such a case where the whisker biscuit mount 46 is integrated into the bow riser body 24, a frontmost edge of the whisker biscuit mount 46 may, in some circumstances, be the frontmost edge of the bow riser body 24. Similarly, a rearmost edge 82 of the sight window 44 presents either a rearmost edge of the riser body 24 or does not extend rearward of the rearmost edge of the riser body 24. In such a case where the whisker biscuit mount 46 is integrated into the bow riser body 24, the rearmost edge 80 of the whisker biscuit mount 46 may, in some circumstances, be the rearmost edge of the bow riser body 24. In yet further embodiments, a frontmost edge of the whisker biscuit mount presents either a frontmost edge of the riser body or does not extend forward of the frontmost edge of the riser body. In such a case where the sight window 44 is integrated into the bow riser body 24, the frontmost edge 78 of the sight window 44 may, in some circumstances, be the frontmost edge of the bow riser body 24. Similarly, the rearmost edge 80 of the whisker biscuit mount 46 presents either a rearmost edge of the riser body 24 or does not extend rearward of the rearmost edge of the riser body 24. In such a case where the sight window 44 is integrated into the bow riser body 24, the rearmost edge 82 of the sight window 44 may, in some circumstances, be the rearmost edge of the bow riser body 24.

[0043] Mounting the sight window 44 and whisker biscuit mount 46 in the riser body 24 provides several advantages. First, the general vertical alignment of the sight window 44 and the whisker biscuit mount 46 provides for efficient sighting, balancing, and aiming of the bow 12 and the arrow with a selected target. The bow 12 does not experience off-side weight due to the sight window 44 and/or the whisker biscuit mount 46 or the riser body 24 moves the sight window 44 closer to the user’s eye, as the sight window is normally mounted forward of the riser. Third, mounting the whisker biscuit mount 46 in the bow riser body 24 removes the mounts as an obstruction to the user, as the whisker biscuit mount is normally mounted rearward of the riser. Fourth, because the window sight 44 and the whisker biscuit mount 46 are integrally formed with the bow riser body 24, the bow riser 10 has reduced weight, increased balance, and an increased mobility. For instance, reducing the number of components that extend out away from the bow riser reduces the potential for components to be caught on surrounding items, such as tree branches, clothing, or the like, which is especially beneficial during hunting.

[0044] Although the invention has been described with reference to the embodiments illustrated in the attached drawing figures, it is noted that equivalents may be employed and substitutions made herein without departing from the scope of the invention as recited in the claims. For example, it is known that a whisker biscuit mount is a type of arrow rest. Embodiments of the invention may be used with other types of arrow rests, such that an alternative arrow rest is mounted in the bow riser as described above. Therefore, the invention should not be limited to only mounting a whisker biscuit type of arrow rest. As another alternative, embodiments of the invention may only have an integrated sight window or only an integrated whisker biscuit mount. Having thus described various embodiments of the invention, what is claimed as new and desired to be protected by Letters Patent includes the following:
1. A bow riser for a bow comprising:
an elongated riser body extending along a generally vertical axis, the riser body having an upper limb section for coupling to an upper limb of the bow, a lower limb section axially opposite the upper limb section for coupling to a lower limb of the bow, a handle section extending axially upwards from the lower limb section and configured to be grasped by a user during an action of shooting the bow, and a central section extending axially downwards from the upper limb section;
a sight window formed in the central section for mounting at least one sight pin, wherein a vertical centerline of the sight window generally lies along the generally vertical axis of the riser body; and
a whisker biscuit mount formed in the central section vertically below the sight window and for mounting a whisker biscuit used to steady an arrow during the act of shooting the bow.

2. The bow riser of claim 1, wherein both the sight window and the whisker biscuit mount are integrally formed in the central section.

3. The bow riser of claim 2, wherein the sight window is a monolithic structure with the upper limb section of the bow riser.

4. The bow riser of claim 2, wherein the sight window is a monolithic structure with the whisker biscuit mount.

5. The bow riser of claim 2, wherein the whisker biscuit mount is a monolithic structure with the handle section.

6. The bow riser of claim 2, wherein the upper limb section, the lower limb section, the handle section, and the central section are integral to present a monolithic structure.

7. The bow riser of claim 1, wherein the sight window and the whisker biscuit mount are generally vertically aligned.

8. The bow riser of claim 7, wherein five or less inches, when measured along a horizontal axis, separates any vertical axis through the whisker biscuit mount and any vertical axis through the sight window.

9. The bow riser of claim 1, wherein the whisker biscuit mount is not separately coupled to and horizontally extending from the riser body, and wherein the sight window is not separately coupled to and horizontally extending from the riser body.

10. A bow riser for a bow comprising:
an elongated riser body extending along a generally vertical axis, the riser body having an upper limb section for coupling to an upper limb of the bow, a lower limb section axially opposite the upper limb section for coupling to a lower limb of the bow, a handle section extending axially upwards from the lower limb section and configured to be grasped by a user during an action of shooting the bow, and a central section extending axially downwards from the upper limb section;
a sight window for mounting at least one sight pin, wherein the sight window does not extend horizontally from the riser body; and
a whisker biscuit mount formed in the central section vertically below the sight window and for mounting a whisker biscuit used to steady an arrow during the act of shooting the bow, wherein the whisker biscuit mount is positioned inline of a vertical axis of the sight window, such that the whisker biscuit mount does not extend horizontally from the riser body.

11. The bow riser of claim 10, wherein the sight window is a hollowed body integrally formed in the central section of the riser body, and wherein the whisker biscuit mount is integrally formed in the central section of the riser body.

12. The bow riser of claim 11, wherein the sight window is a monolithic structure with the upper limb section of the bow riser, wherein the sight window is a monolithic structure with the whisker biscuit mount, and wherein the whisker biscuit mount is a monolithic structure with the handle section.

13. The bow riser of claim 10, wherein the upper limb section, the lower limb section, the handle section, and the central section are integral to present a monolithic structure.

14. The bow riser of claim 10, wherein three or less inches, when measured along a horizontal axis, separates any vertical axis through the whisker biscuit mount and any vertical axis through the sight window.

15. The bow riser of claim 10, wherein the whisker biscuit mount is not separately coupled to and horizontally extending from the riser body, and wherein the sight window is not separately coupled to and horizontally extending from the riser body.

16. A bow comprising:
an upper limb;
a lower limb; and
an elongated riser body extending along a generally vertical axis, the riser body having an upper limb section for coupling to the upper limb of the bow, a lower limb section axially opposite the upper limb section for coupling to the lower limb of the bow, a handle section extending axially upwards from the lower limb section and configured to be grasped by a user during an action of shooting the bow, and a central section extending axially downwards from the upper limb section, said riser body further including—
a sight window formed in the central section for mounting at least one sight pin, and
a whisker biscuit mount formed in the central section vertically below the sight window and for mounting a whisker biscuit used to steady an arrow during the act of shooting the bow, wherein a general centerline of the sight window generally lies along a general centerline of the whisker biscuit mount, such that the sight window and whisker biscuit mount are generally vertically aligned.

17. The bow of claim 16, wherein both the sight window and the whisker biscuit mount are integrally formed in the central section.

18. The bow of claim 16, wherein the sight window is a monolithic structure with the upper limb section of the bow riser, wherein the sight window is a monolithic structure with the whisker biscuit mount, and wherein the whisker biscuit mount is a monolithic structure with the handle section.

19. The bow of claim 16, wherein a frontmost edge of the sight window presents either a frontmost edge of the riser body or does not extend forward of the frontmost edge of the riser body, and
wherein a rearmost edge of the sight window presents either a rearmost edge of the riser body or does not extend rearward of the rearmost edge of the riser body.

20. The bow of claim 16, wherein five or less inches, when measured along a horizontal axis, separates any vertical axis through the whisker biscuit mount and any vertical axis through the sight window.

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