BOW WITH MAGNETIC RETRACTABLE ARROW REST

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This invention relates to archery equipment and more particularly to an arrow rest or support to be used in conjunction with a bow having a cut out sight window and an arrow shelf.

Modern bows are provided with a shelf for supporting an arrow as it is drawn and released from the bow. The shelf has been found to function relatively well for its purpose, however, on occasion the lowermost fletch on an arrow will contact the shelf and cause the arrow to deflect from its intended course and the fletch may be damaged.

When archers are using fletch of a plastic, non-yielding material, as is often done, it is impossible to avoid the contact and all arrows are deflected to varying degrees thus making accuracy impossible.

The object of the present invention is to prevent arrow damage and/or in accuracy occasioned by engagement of an arrow fletched with the shelf. More particularly, it is the object of the invention to provide means for supporting an arrow out of contact with the bow shelf while the arrow is being drawn and aimed, with the supporting means automatically moving clear of the arrow immediately upon release of the bow string so that the arrow moves past the bow on its intended flight path without at any time contacting the bow shelf and being deflected and with the supporting means returning automatically to its shooting position immediately and without bow movement thus readying the bow for the next shot.

Other objects and their attendant advantages will become apparent as the following detailed description is read in conjunction with the accompanying drawing herein.

FIG. 1 shows a side elevational view of a drawn bow in shooting position.

FIG. 2 shows a broken enlarged view of center portion of bow with arrow supported by means of the present invention.

FIG. 3 is a cross sectional view taken on a line substantially corresponding to 3--3 with arm in shooting position.

FIG. 4 is similar to FIG. 3 except it shows arm in pivoted position.

FIG. 5 is two enlarged views of main assembly.

FIG. 6 is rear view of arrow support arm.

FIG. 7 is unit cover/arrow point contact.

Referring now to the drawing:

FIG. 1 is a side elevational view of a conventional bow 10 with a conventional arrow 12 in shooting position on string 14. The bow has a conventional cut-out sight window 16 with a shelf 18. When shot in the conventional manner, the arrow is rested on the shelf 18 and bow is drawn and released. As the arrow 12 passes forward, the fletching 20, consisting of turkey feathers or in the case of a tournament archer, a plastic material, on occasion will strike the shelf 18 and deflect from its intended course causing a miss and a broken plastic.

This device will prevent the arrow from touching or striking any portion of the bow from the moment of release until the arrow is clear of the bow.

Referring again to the drawing:

FIG. 1 shows bow drawn and in shooting position. FIG. 2 shows blow-up of center section with device in place 22 and arrow 12 resting on rest clear of shelf 18. FIG. 3 shows section through FIG. 2 substantially corresponding to the line 3--3 with unit installed in bow. Unit consists of a cylinder 24 of suitable material with a slot cut across it and a permanent magnetic 26 installed in it. In slot, an arrow supporting arm 28 is assembled on a pivot 30. After installing in bow, unit is covered by a thin piece of suitable material 32 with an opening for arm 28 to protrude through. This figure shows arm in shooting position. FIG. 4 shows same as FIG. 3 except arm 28 is shown in pivoted position or position it would assume when arrow is shot thus allowing complete clearance of fletching 20. Therefore, no deflection of arrow from intended course would occur. FIG. 5 shows blow-up of main unit showing cylinder 24, arm 28, magnet 26 and pivot 30. FIG. 6 shows rear view of arm support arm 28. FIG. 7 shows unit cover 32 with raised bump or arrow reference point to provide point contact for consistency of arrow placement 36 and opening for arm 34.

I claim:

1. In combination, an archery bow having a hand grip, an arrow rest pivoted on the side of said bow above said hand grip and for movement between a retracted position and a position extending laterally of said bow, magnetic means fixedly mounted on the side of said bow adjacent said arrow rest, said arrow rest having means thereon for supporting an arrow when said rest is in its laterally extending position, said arrow rest having magnetic means thereon, one of said magnetic means being permanently magnetized, whereby the magnetic means on said rest will be attracted to the magnetic means on said bow to normally retain said rest in its laterally extending position, and whereby contact of the feathers of an arrow with said arrow supporting means will pivot said rest to its retracted position.

2. The device of claim 1 in which said arrow rest includes an arrow supporting arm connected to a short arm on which said magnetic means of said rest is carried.

References Cited

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