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2,725,870

ARROW CRADLE

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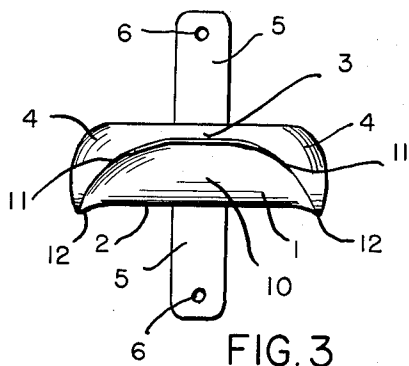


FIG. 3

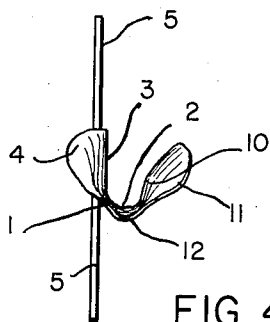


FIG. 4

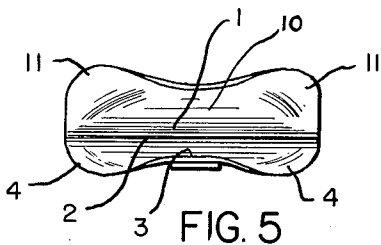


FIG. 5

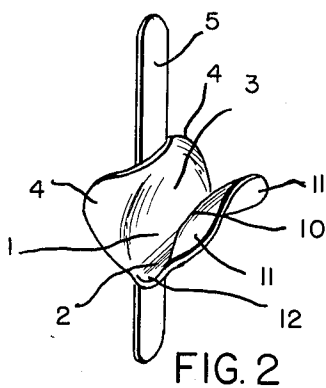


FIG. 2

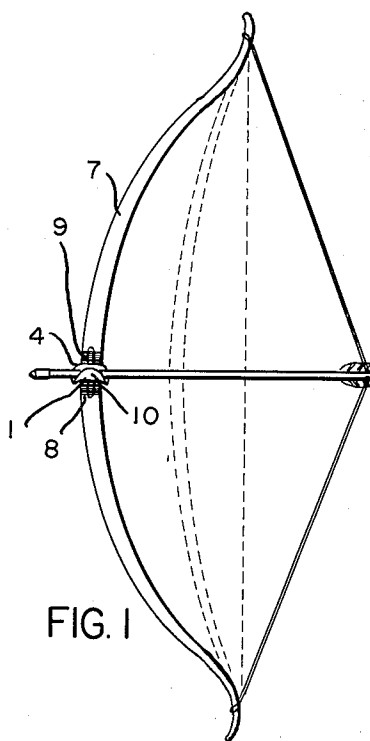


FIG. 1

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ARROW CRADLE

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2 Claims. (Cl. 124—41)

This invention relates to the art of archery and has special reference to an improved arrow cradle.

It is well known that archers have long been troubled with the need for proper locating or placement of the arrow relative to the bow and to the bow string in order to obtain any degree of accuracy in their shots. In order to facilitate the alinement of the arrow relative to the bow and the bow string, archers have made it a custom to provide a mark, such as a colored dot, on the side of the bow adjacent the hand grip to indicate the position past which the arrow should travel when released. In addition the bow strings are usually provided with a colored wrapping or the like, which indicates the position for the nock of the arrow. In this manner the proper arrow alinement is supposed to be obtained.

With this arrangement it is necessary for an archer to carefully place his arrow before each shot in order to insure accuracy. However, when hunting with a bow and arrow it is inconvenient to have to take your eyes from the game in order to place an arrow for the shot at the game for it might be difficult to pick up the sight of the game again. Quite often one only can have one shot at game and this only, if he carries his bow with the arrow already in position.

Another disadvantage of present bows is that the rib of the feathers on the arrows sometimes injure an archer's hand as the feathers pass over the hand when the arrow is released. These injuries are painful, of course, and make additional shooting very uncomfortable to say the least.

Another disadvantage of present bows is that the feathers are sometimes sheared off of an arrow as the arrow is shot.

There have been devices patented to guide arrows and to guard hands of archers. However, none of these devices has proven successful, and none has gained acceptance among archers. Some of these devices that have been made and patented require notching of a bow. Obviously, this creates a production problem in order to obtain and maintain proper action of the bow. Other patented devices cannot be used by both left or right handed shooters.

There has been a long time search for some means to facilitate the alinement of an arrow for proper shooting from a bow and one which will save one's hand from injury and protect the arrows' feathers from being damaged, and at the same time provide maximum accuracy in shooting of a bow and arrow.

It is, therefore, one of the principal objects of my invention to fulfill this long felt need for both left handed and right handed shooting.

Another more specific object is to provide an arrow cradle which will permit instant alinement of an arrow relative to the bow string and bow for accurate shooting consistently.

Another object is to provide such a device which can be easily mounted on a bow by any average archer.

Another object is to provide an arrow cradle which will

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permit speedy shooting so that hunting of wild game will be facilitated materially.

Another object of this invention is to provide an arrow cradle which will make it possible to hold a bow more comfortably and conveniently when shooting, thereby to overcome necessity of cocking one's hand slightly to one side to provide a shallow angle or groove between one's hand and the bow so as to hold the arrow against the bow when shooting. With my invention one can shoot a bow without this awkward cocking of one's hand which has become second nature with some archers but which nevertheless interferes with their accuracy and comfort when shooting.

These and other objects and advantages of my invention will become more apparent as the description proceeds. In the accompanying drawing forming a part of this application:

Figure 1 is a view showing a bow with my device installed thereon.

Figure 2 is a perspective view of the device alone.

Figure 3 is a side view of Figure 2.

Figure 4 is an end view of Figure 3.

Figure 5 is a top plan view of Figure 3.

In the drawing the reference numeral 1 indicates a shallow trough which may be made from sheet metal, plastic, or the like to the shape here shown. The trough 1 has a substantially straight bottom 2 which is formed to a substantially semi-circular channel as shown. The inner wall 3 is substantially, vertically disposed as shown centrally thereof and has its opposite upper corners flared outwardly from the channel 2 as at 4. The mounting member 5 is securely fastened to or made integral with the vertical inner wall 3, and serves as a means for attaching the cradle to the bow. Suitable openings 6—6 can be employed for permitting the use of small screws to fasten the cradle to the bow 7, adjacent the hand grip 8 thereof as desired. However, it is preferred that string or cord windings 9 be employed and wrapped around the bow and the mounting member 5, to securely fasten the cradle in place. The mounting member 5 preferably extends above and below the limits of the cradle as shown to provide stability in the mounting of the cradle on the bow.

The outer wall 10, of the cradle extends upwardly and is flared outwardly from the upper end of the semi-circular channel 2, as shown, and has its opposed upper corners 11—11 flared outwardly and away from the channel as shown.

Each end of the channel 2 is flared outwardly as at 12—12, the purpose of which will become apparent.

The cradle is mounted on the bow with the bottom of the channel 2 lying opposite the conventional dot or mark on the bow which indicates the proper position for the arrow to lie when shooting and so fastened that the straight bottom of the channel lies in the plane in which the arrow is to travel when released. The alinement of the cradle is readily accomplished by means of the colored bead or indicator mark on the bow string. It is deemed apparent from the above that any archer could readily mount one of my cradles on his own bow without much difficulty, and of course manufacturers will be capable of mounting same at the factory accurately.

With the cradle mounted as above pointed out, an arrow may readily be placed in the cradle, and because of the elongated straight bottomed channel 2, the arrow will assume proper alinement in its desired plane of travel immediately and the nock of the arrow can be mounted on the bow string quickly and accurately. The archer can then pull the bow string and release the arrow and be sure that his arrow will fly from the bow in its desired path each time he shoots, whereas with conventional shooting it is quite easy for the arrow to be slightly above

or slightly below the position it had with the last shot either at the bow or at the bead or indicator on the bow string without the archers being able to detect the slight variance in arrow position. Therefore, conventional archery shots cannot be as accurate as those made using my device.

The flaring of the ends 4—4, 11—11, and the ends 12—12, provides for the uniform compression and release of the feathers on an arrow as they pass into, through, and from the cradle so that there is the least possible interference or deflection of the arrow when passing through the cradle and the arrow may travel around the bow each time in the same manner and with uniform action, and this feature makes the device usable to both left and right handed shooters.

In addition it is deemed apparent that an archer's hand which holds the bow, is below the cradle and the feathers and ribbing of the feathers cannot injure the archer's hand. This latter feature is important, for it is well known that many archers flinch when shooting an arrow, much in the manner of a man shooting a gun. In the case of an archer's flinching, the cause is usually the possible injury or pain he may feel from the arrow feathers as they pass over his hand, whereas the gunner is often afraid of the recoil or the noise of the gun. Flinching in either case destroys accuracy and must be eliminated in order to obtain efficient shooting. With my cradle mounted on a bow there is no need for flinching and more accurate shooting can be expected.

Another feature of my cradle is that because of its length being such as to level or aline an arrow, it permits an archer to draw his bow to the full pile each time he shoots. In other words an archer may pull his bow until the arrow tip touches the end of the cradle extending outwardly from the bow and the cradle will provide a stop to indicate the maximum pile so that each shot has the same force applied thereto and trajectory of each arrow will be the same and accuracy will be uniform. It is well known that archers using conventional methods of shooting do not pull all of their arrows to full pile because the arrow tip will often cut or injure one's hand if the archer pulls it back far enough to engage the hand. Thus archers usually try to estimate the full pile but are not able to do so accurately, of course.

From the above it is deemed apparent that I have

provided an improvement in archery which will make it possible for more people to shoot accurately, consistently.

Having thus described my invention, what I claim is:

1. An arrow cradle for mounting on an archer's bow comprising a body member having an elongated straight bottom portion of arcuate shape in cross section to cradle an arrow longitudinally thereof, means for mounting said body member on said bow on one side thereof with said bottom extending in a plane substantially normal to said bow to serve as an automatic means to aline an arrow in shooting position on said bow, an inner wall on said body portion extending substantially vertically from said body portion so as to lie closely against said bow when mounted thereon, an outer wall extending upwardly and flared outwardly from said bottom, said outer and inner walls forming with said bottom an arcuate V-shaped trough in cross section, and the upper corners of said inner and outer walls being bent outwardly at both ends of said trough to regulate the compressing and releasing of the guide feathers of an arrow as it passes through the trough along said straight bottom.

2. An arrow cradle for mounting on an archer's bow comprising a body member having an elongated straight bottom portion of arcuate shape in cross section, said bottom being disposed at substantially right angles to said bow and serving to aline an arrow relative to said bow for proper shooting position, an inner wall extending upwardly from said bottom substantially vertically so as to lie against the bow when secured thereto, an outer wall extending upwardly and flared outwardly from said bottom, said walls and bottom forming an arcuate V-shaped trough in cross section, the upper corners of said inner and outer walls being flared outwardly at both ends of the trough to control the compression and release of arrow feathers as an arrow passes the trough, and means for securing said body member to said bow.

References Cited in the file of this patent

UNITED STATES PATENTS

224,114	Streeter	Feb. 3, 1880
736,051	Adams	Aug. 11, 1903
1,605,300	Thompson	Nov. 2, 1926
2,186,386	Lowell	Jan. 9, 1940