Aug. 15, 1961 W. VANCE 2,996,059

WRIST ATTACHMENT FOR USE IN DRAWING A BOW STRING

Filed Feb. 7, 1958

FIG-1

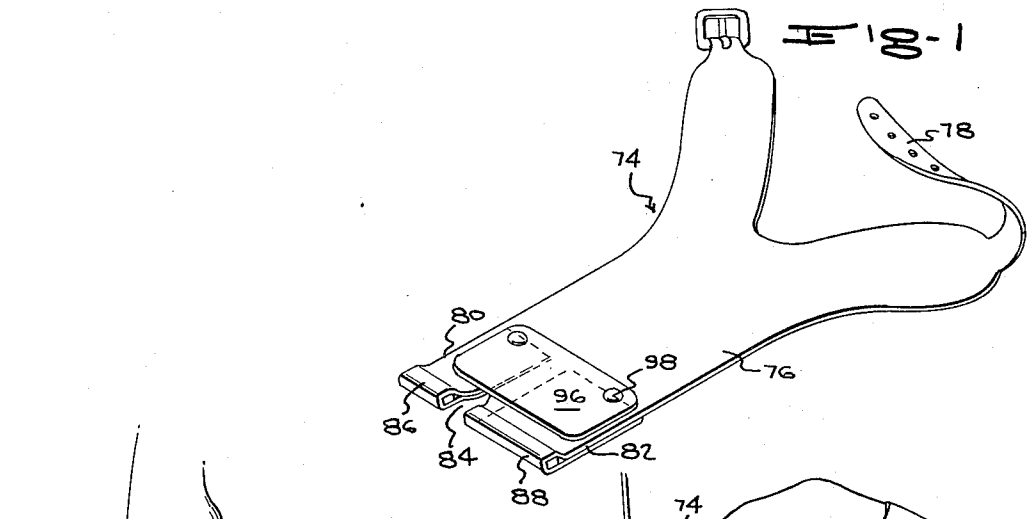


FIG-2

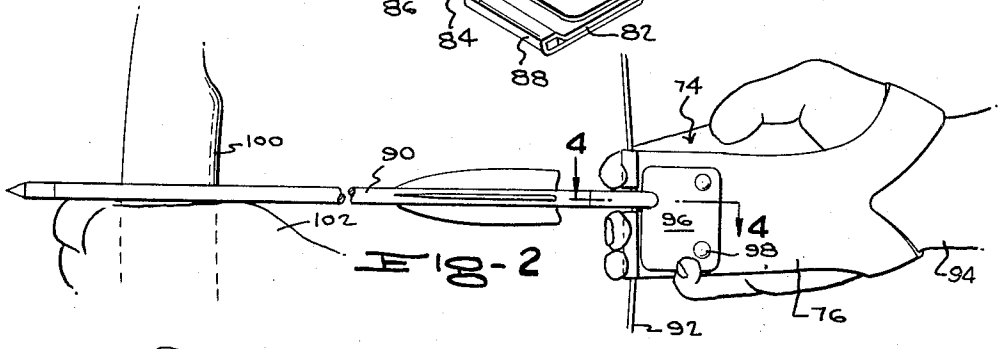


FIG-3

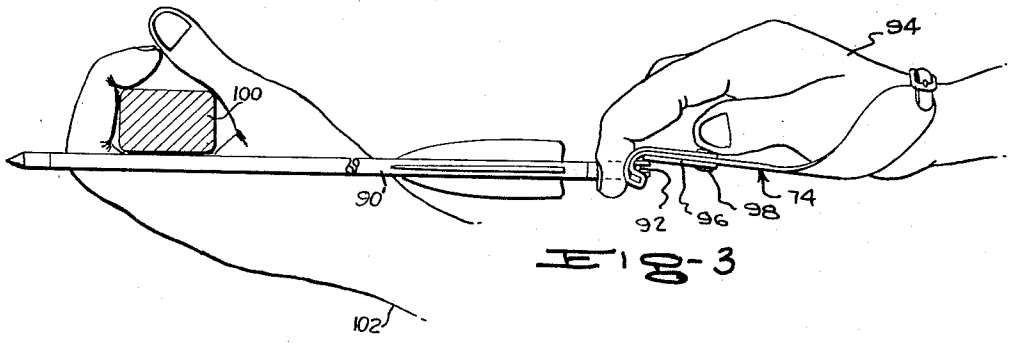
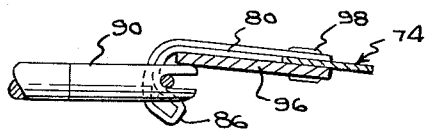


FIG-4



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WRIST ATTACHMENT FOR USE IN DRAWING A BOW STRING

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2 Claims. (Cl. 124—35)

The present invention relates to new and useful improvements in the art of archery and, more particularly, relates to a wrist attachment which is designed for use in facilitating the drawing of a bow string.

The primary object of the present invention is to provide a wrist attachment for use in drawing a bow string whereby the pull of the bow string is directly transmitted to the wrist and the arm muscles while the control of the bow string and arrow is maintained at the finger tips.

It has been a continuing problem for archers, to provide sufficient protection for the fingers from the bow string. Considerable attention has been given to this problem, and it has been proposed to provide a protective covering for the finger tips, it being further proposed to use finger-held devices for releasing a bow string and for protecting one from the abuses of the bow string, such as the "Chinese thumb ring."

The discomfort suffered at the tips of the fingers results from the fact that a heavy pressure is put on the fingers by the bow string. In carrying out the present invention, it is proposed to provide a device adapted for attachment to one's wrist, which device will relieve this pressure to a marked extent, in a manner such that the discomfort which is presently being suffered will be eliminated, while at the same time there will still be full control of the release of the bow string by the finger tips.

Summarized briefly, the device conceived for the purpose of relieving the pressure and still providing full control includes a wrist band, which, at the heel of the hand, is connected to a flexible element that extends forwardly and terminates in a plurality of boot-like devices, adapted to be extended about the bow string and engaged frictionally against the bow string by the fingers. As a result, when the bow is pulled, half to all of the weight or pressure of the bow string is transferred to the heel of the hand, adjacent the wrist, instead of to the finger tips. At the same time, full control of the release of the bow string by the finger tips is retained.

It has been previously suggested to use archers' gloves, finger-receiving tubular members, and the like, but none of these, so far as is known, have been adapted to provide maximum protection for the fingers; a transfer of all or a very substantial part of the weight or pressure of the bow string to the wrist; ease of the release of the bow string matching that achieved when no wrist draw device is used; and an even greater accuracy as regards the direction of the arrow than is true of conventional arrangements, due to the simplifying of the mechanics of releasing the bow string, this last characteristic being particularly true with bows of a very heavy draw weight.

Another object is to provide a device of the character stated that can be manufactured at very low cost, and can be used either with or without a conventional archers' or shooters' glove.

Still another object is to provide a device as stated in which only a very light touch of the finger will hold a great amount of weight, with the fingers being reduced primarily to means for the holding of a point of friction between the material of the device and the bow string.

The foregoing and ancillary objects are attained by this invention, the preferred embodiments of which are set forth in the following description and illustrated in the accompanying drawings, wherein:

FIGURE 1 is an enlarged perspective view of a wrist attachment in accordance with the present invention;

FIGURE 2 is a side elevational view of the wrist attachment of FIGURE 1 and showing the same in a position of use;

FIGURE 3 is a top plan view of the wrist attachment, shown in FIGURES 1 and 2; and,

FIGURE 4 is a detailed longitudinal sectional view, taken on line 4—4 of FIGURE 2.

Referring to FIGURES 1 to 4, inclusive, a wrist attachment for an archer is shown and is generally designated by the reference numeral **74**. The wrist attachment **74** comprises a flexible strip **76** which has a wrist band or wrist engaging means **78** formed integrally on one end.

A pair of tongues **80** and **82** are defined on the opposing end of the strip **76** by an axial end slot **84**. A rolled enlargement **86** extends along the distal end of the tongue **80** and a similar rolled enlargement **88** extends along the distal end of the tongue **82**. The slot or space **84** is of a width and size to have the nock of an arrow shaft **90** extended therethrough, with the tongues **80** and **82** partially extended about the bow string **92** with the enlarged ends **86** and **88** on the side of the bow string **92** remote from the palm of the hand of the user, the hand being designated in FIGURES 2 and 3 by the reference numeral **94**.

The attachment **74** further includes a flexible element **96** which extends across the space between the tongues **80** and **82** inwardly of and disposed in spaced adjacency to the enlargements **86** and **88**. The flexible element **96** is secured to the strip by any suitable means, such as rivets **98**, and is fixedly superimposed on the face of the strip, which is opposite to the face that is in confronting relation to the palm of the hand of the user.

When the shaft **90** is positioned with its nock receiving the bow string **92**, the shaft being extended through the slot or space **84** and disposed between the tongues **80** and **82**, the flexible element underlies and bears against the nock of the arrow shaft, as shown in FIGURE 4. In such position, the flexible element restrains movement of the arrow shaft **90** until released by the fingers of the hand of the archer.

In such position, the flexible element **96**, as shown in FIGURE 4, will bear against the nock of the arrow shaft and serve to prevent movement of the arrow shaft by exerting a slight pressure thereagainst. The slot or space **84** defines a notch extending inwardly from the end of the flexible strip **76** remote from the wrist band **78** and forms the pair of spaced tongues having the rolled enlargement extending along the distal ends thereof, which rolled enlargements extend at least partially about the bow string under the slight finger pressure.

The element **96** restrains movement of the nock of the arrow shaft **90** when it is in its position underlying and bearing against the nock of such shaft. This enables the archer to restrain movement of the arrow shaft **90** until it is desired to release the same and permits the archer to maintain the shaft in true alignment with the target. In FIGURES 2 and 3, the bow is indicated by the numeral **100** and it can be seen that it is held by the other hand **102** of the archer in the conventional manner.

This application is a continuation-in-part of application Serial No. 661,393, filed May 24, 1957, and since matured into Patent No. 2,929,372.

It is believed clear that the invention is not necessarily confined to the specific use or uses thereof described above, since it may be utilized for any purpose to which it may be suited. Nor is the invention to be necessarily limited to the specific construction illustrated and described, since such construction is only intended to be illustrative of the principles of operation and the means presently devised to carry out said principles, it being considered that the invention comprehends any minor change in construction

that may be permitted within the scope of the appended claims.

I claim:

1. A wrist attachment for drawing and releasing a bow string by transmitting the pull of the bow string directly to the wrist and arm muscles of an archer's arm for maintaining the release control of the arrow shaft at the finger tips of the archer's hand, said attachment comprising a flexible strip having opposing flexible ends, a wristband carried by one end of said strip at the inside of the wrist of the archer's hand so that the strip is disposed in confronting relation to the palm of the hand and in substantial straight line relation with the inside of the forearm of the archer's arm, at least two flexible tongues having a space therebetween projecting longitudinally from the other end of said strip, a rolled enlargement extending along the distal end of each of said tongues, the space between said tongues being adapted to have extended therethrough the nock of an arrow shaft with said tongues being partially extended about a bow string of a bow and held against the bow string by the finger tips of an archer when the shaft nock of the arrow has been extended through said space, and a flexible element extending across the space between said tongues inwardly of and adjacent to and spaced from said enlargements and adapted to underlie and bear against the shaft nock of an arrow when extended through said space to restrain the arrow shaft from movement.

2. An archer's wrist attachment for drawing and releasing a bow string by transmitting the pull of the bow string directly to the wrist and arm muscles of an archer's arm while maintaining the release control of the arrow shaft at the finger tips of the archer's hand, said attachment comprising a flexible strip disposed in confronting relation to the palm of the hand of an archer and extending parallel to the fingers, said strip being of a length to extend substantially between the wrist and the finger tips of an archer and having opposing ends, wrist engaging means on one of the ends to attach the end of the strip to the inside of the wrist of an archer so that the strip is disposed in such confronting relation to the palm of the hand and is in substantial straight line relation with the inside of the forearm of the archer's arm, said other end having at least two axially projecting tongues which are spaced laterally apart to define a space therebetween that is of a size to permit the passage between the tongues of the nock of an arrow shaft, said tongues having free flexible ends which are partially extended about the bow string of a bow and held against the bow string by the finger tips of an archer when the nock of the arrow shaft is disposed through the space and receive the bow string whereby the finger tips control the release of the arrow shaft while the pull is directly transmitted through the strip to the wrist of the archer, and a flexible element mounted on the strip and transversely bridging the space and extending between the tongues at their inner ends.

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