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3,291,111

MOUTH SUPPORTED ANCHOR NOCK FOR BOW STRING

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Fig. 1.

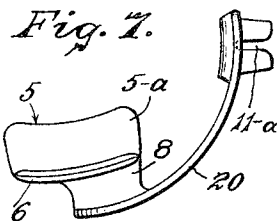
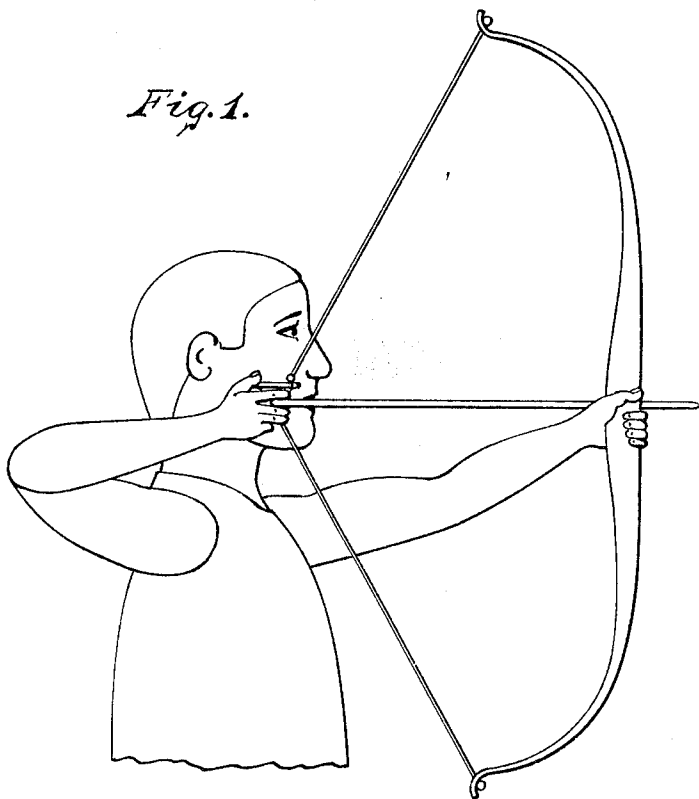


Fig. 8.

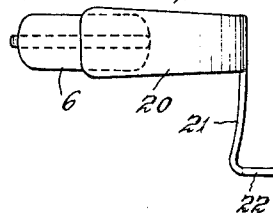


Fig. 2.

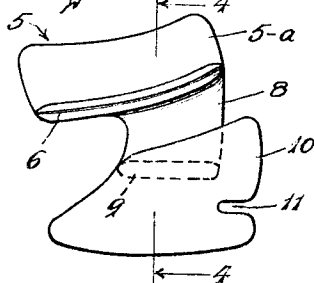


Fig. 3.

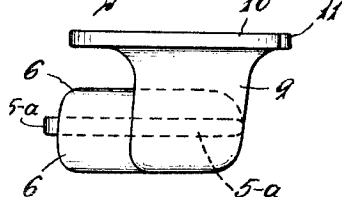


Fig. 6.

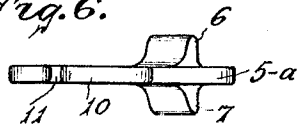


Fig. 5.

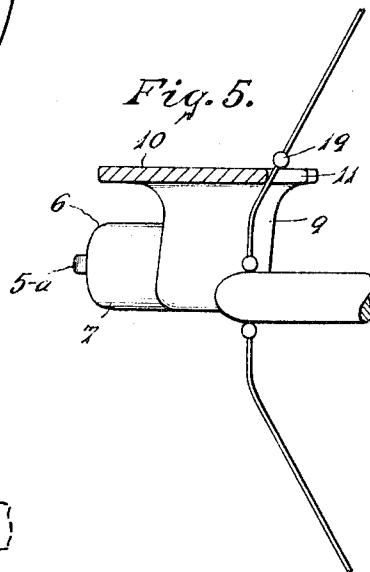
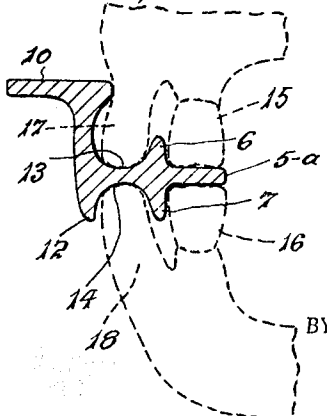


Fig. 4.



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MOUTH SUPPORTED ANCHOR NOCK FOR BOW STRING

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1 Claim. (Cl. 124-23)

This invention relates to what may correctly be called an Anchor Lock Nock for Archery, and more particularly a simple device for locating a fixed point of the bow string (known in archery circles as "anchor point") to which a bow string is drawn in the act of shooting an arrow from a bow.

An object of this invention is to provide such a device for defining the distance to which the bow string is to be pulled back so as to enable the archer to draw the said bow string back to the identical position each and every time the bow is shot; thereby providing uniform power application to the arrows and insuring constant velocity in flight for each shot.

A further object is to provide such a device which is adapted for right and left deflection control of the flight of an arrow by providing a fixed position for the nock end of the arrow at the limit of the draw length and at the moment of release of the bow string.

A still further object is to provide such a device for the vertical and horizontal positioning of the fingers of the hand pulling the bowstring by providing a slot into which the bowstring is drawn and a shelf, or stop, against which a fixed point installed on the bowstring is located; thereby preventing inadvertent misalignment of the drawing hand at the moment of release.

A still further object is to provide such a device in a form adapted to be held in position by being gripped between the teeth of the archer, which will not encumber the bow by being attached thereto and which is so small that it may be carried in a pocket when not in use.

A still further object is to provide such a device for the placement of the bowstring in an identical vertical plane each time the bow is shot; thereby improving the vertical alignment of the bowstring with the intended line of flight of the arrow at the moment of release.

A still further object is to provide such a device in a form that will protect the archer's lips, nose, chin and cheek from injury by the bowstring by reason of faulty release of the bowstring by the archer in the act of shooting an arrow.

Further objects and advantages of my invention will be more clearly understood from the following description and the accompanying drawing in which;

FIG. 1 is an elevational side view illustrating the manner in which my improved anchor lock nock is used.

FIG. 2 is a plan view of said anchor lock nock.

FIG. 3 is a side view thereof.

FIG. 4 is a sectional front view thereof, on line 4-4 of FIG. 2, illustrating the manner in which said anchor lock nock is held in position by being gripped between the teeth (shown in dotted lines) of the archer when in use.

FIG. 5 is a sectional side view illustrating the position of the bow string when pulled back into said anchor lock nock.

FIG. 6 is a front view of a modified form of said anchor lock nock.

FIG. 7 is a plan view of a further modified form of said anchor lock nock.

FIG. 8 is a side view of the anchor lock nock shown in FIG. 7.

As shown in the drawings, my novel anchor lock nock 5 is preferably constructed of a suitable plastic material and comprises a horizontal flat portion 5-a having up-

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wardly and downwardly extending vertical ribs 6 and 7, respectively, spaced from the inner edge of said grip portion.

A horizontal support portion 8 extends outwardly from 5 and on a plane with said grip portion beyond the ribs 6 and 7 and supports a vertical post portion 9 having at its top a horizontal plate or stop portion 10. Said plate portion has therein what in archery is commonly called a "nock," or notch, 11 opening forwardly at the front edge of said plate portion and spaced from its inner edge.

The said post portion 9 also extends below the support portion, at 12, and is spaced from the ribs 6 and 7 by upper and lower grooves 13 and 14, respectively.

As illustrated in FIG. 4, the said anchor lock nock is 15 formed to fit with the inner edge of the plate portion 10 against the side of an archer's face and is held in operative position by being gripped between the upper and lower teeth 15 and 16, respectively, with the ribs 6 and 7 disposed against the outer sides of said teeth for locating the said grip portion relatively thereto. The side of the archer's upper lip 17 will then fit into the groove 13 and his lower lip 18 will fit into the groove 14. When so held in position, the notch 11 will open forwardly along the side of the archer's face.

In order to facilitate the locating of a fixed anchor point 25 on the bow string within the notch 11, a small abutment in the form of a bead 19 may be attached to the bow string at said point so that it will abut the surface of the plate or stop portion 10 when the bow string is in correct position.

In the use of my novel anchor lock nock, the archer simply grips it between his teeth, as shown, and then uses the bow and arrow in the regular manner, merely pulling back the bow string into the notch 11 until the 35 bead 19, at the anchor point thereof, is in abutment with the stop portion 10. This will insure that the same amount of power is applied to the arrow each time one is shot so that it will attain uniform velocity in flight.

The distance to which the arrow is to be projected is 40 controlled by the archer by simply raising or lowering the bow so that the height of the trajectory may be varied to obtain the desired distance.

The plate portion 10 may be located at different heights 45 with respect to the grip portion 5-a to accommodate the preference of an archer in drawing the arrow to a high or low, and a right, left, or center position with respect to his mouth.

FIG. 6 shows a modified form of anchor lock nock which is particularly designed for an archer who prefers 50 to draw the arrow to a plane close to the level of his mouth.

FIGS. 7 and 8 show a further modified form of my invention which is particularly designed for an archer who 55 prefers to draw the anchor portion of the bow string back to a position in the center of his face and below his mouth, or just below his chin. In this form, as shown, the support portion 8 mounts a bar portion 20 which curves around the front of the archer's face and has a downward extension 21 that locates a forwardly projecting stop portion 22 thereon just below his chin. The said 60 portion 22 has a notch 11-a of the same shape as the above described notch 11 to receive the anchor portion of the bow string adjacent the end of the arrow.

It will be noted that the said notches 11 and 11-a have 65 straight parallel sides which aim directly forward from the archer and serve to guide the bow string accurately in the direction the arrow is aimed. Also, the said notches will prevent accidental sideways displacement of said bow string, as it is released by the archer, and thereby avoid possible injury.

By the use of my invention, an archer's aim will be 70 greatly improved, since he is assured that the same amount

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of power is being applied to the arrow each time one is shot, and all he has to do is simply draw the bow string into the notch 11 and aim the arrow for the desired distance and direction.

I claim:

For an archery bow string, an integral anchor lock nock comprising a grip portion adapted to be gripped between the upper and lower teeth of an archer, a pair of oppositely extending ribs along said grip portion and spaced from the inner edge thereof to engage the outer sides of said teeth and locate said grip portion relatively thereto, a flat support portion extending from said grip portion on a plane therewith and beyond the said ribs to project between the upper and lower lips of said archer, a vertical post portion extending from said support portion, and a

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flat horizontal plate portion extending from said post portion; said plate portion having a notch in the front edge portion thereof and spaced from its inner edge to receive and locate said bow string.

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