April 10, 1962 R. M. SUTTON, JR 3,028,852

BOW STRING PULLING DEVICE FOR ARCHERS

Filed Aug. 5, 1959

Fig. 1.

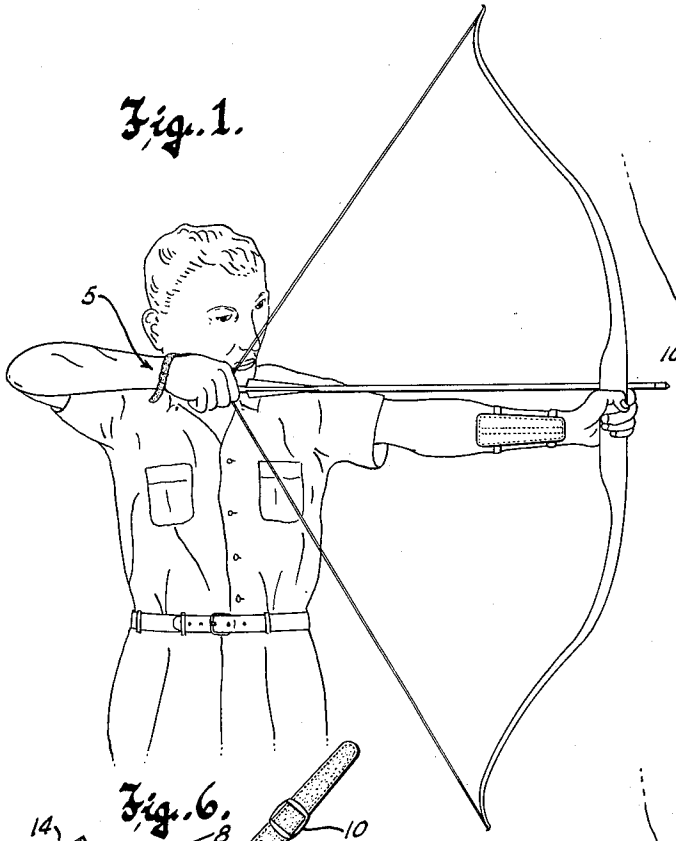


Fig. 2.

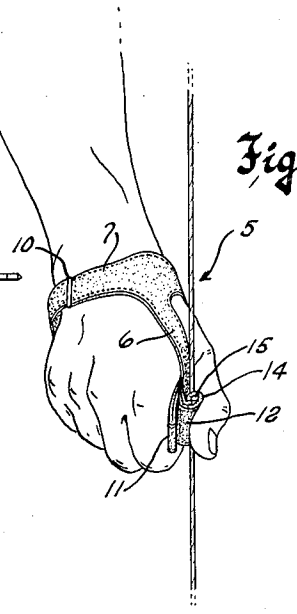


Fig. 6.

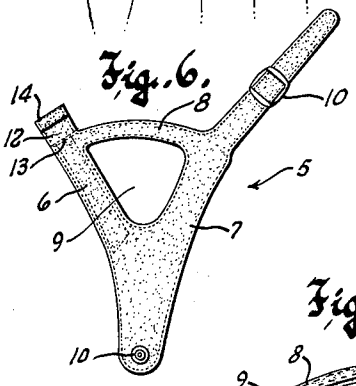


Fig. 3.

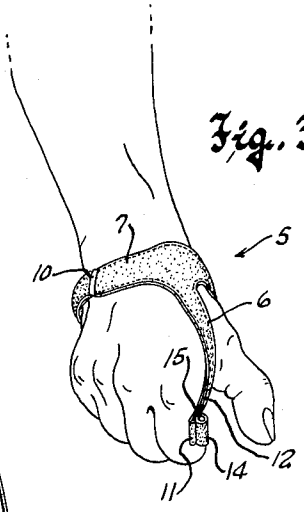


Fig. 4.

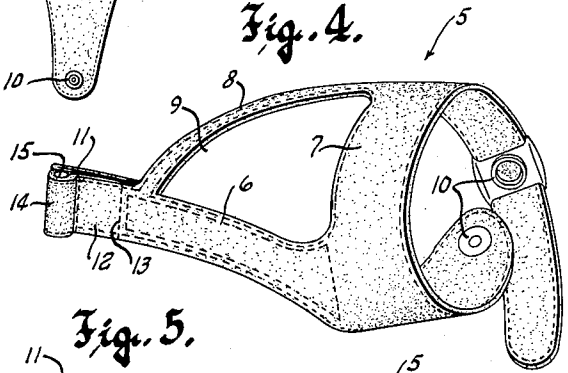
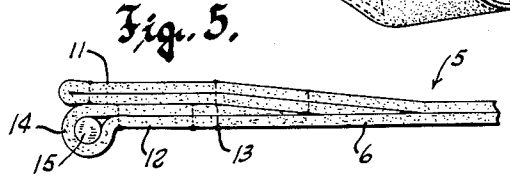


Fig. 5.



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BOW STRING PULLING DEVICE FOR ARCHERS

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1 Claim. (Cl. 124—35)

This invention relates to archery, and has as its purpose to provide a bow string pulling device to be worn on the string pulling hand of the archer to facilitate grasping and drawing back the bow string.

More particularly, it is an object of this invention to provide a bow string pulling device adapted to be worn by archers, which will assure a smooth, fast, uniform release of the bow string every time an arrow is shot; will eliminate finger pinch; and do away with so-called arrow hop-up.

Another object of this invention is to provide a bow string pulling device which can be worn over gloves or mittens for cold weather shooting without entailing any change in the manner of releasing the bow string.

Still another object of this invention is to provide a bow string pulling device which makes it possible to successfully draw and release the bow string even in the event of loss of digits on the bow string pulling hand.

With the above and other objects in view which will appear as the description proceeds, this invention resides in the novel construction, combination and arrangement of parts substantially as hereinafter described and more particularly defined by the appended claim, it being understood that such changes in the precise embodiment of the hereindisclosed invention may be made as come within the scope of the claim.

The accompanying drawing illustrates one complete example of the physical embodiment of the invention constructed according to the best mode so far devised for the practical application of the principles thereof, and in which:

FIGURE 1 illustrates an archer using the device of this invention;

FIGURE 2 is an enlarged perspective view of the bow string pulling hand with the device of this invention thereon and showing the manner in which the device is used to grasp the bow string;

FIGURE 3 is a view similar to FIGURE 2, but showing the hand and the device thereon directly after the bow string has been released;

FIGURE 4 is a perspective view of the bow string pulling device per se;

FIGURE 5 is a top view of a portion of the device to illustrate particularly the part thereof which is engaged about the bow string; and

FIGURE 6 is a view of the device laid flat.

Referring to the accompanying drawing, the numeral 5 designates generaly the bow string pulling device of this invention. As shown, this device is adapted to be applied to or worn on the archer's string pulling hand, and when in position thereon as shown particularly, in FIGURE 2, facilitates gripping of the bow string and achieving a smooth fast release of the string.

The device is made of leather, or any other suitably pliable material, and preferably is built up from a number of pieces sewn together. It comprises a main strap 6 connected at one end to a wrist band 7, and a cross strap 8 which connects the outer end portion of the main strap with the wrist band and coacts with these two parts to form a loop 9 through which the thumb passes when the device is in position on the hand, as shown in FIGURES 2 and 3. The wrist band 7 is equipped with snap fastener means 10, or any other suitable device to fasten the same snugly about the wrist, one element of the snap fastener being adjustable along the length of the wrist band.

The described and illustrated formation of the device is such that when laid flat it has substantially the shape of the letter Y, as shown particularly in FIGURE 6. The stem of the Y is formed by one end of the wrist band which is somewhat curved and extends outwardly to form one arm of the Y. The remainder of the wrist band constitutes an endwise extension of this arm of the Y; and the other arm of the Y is formed by the main strap 6. The cross strap 8 which connects the arms of the Y is also slightly curved, as shown, to achieve a better fit of the device on the hand.

This formation of the device assures that when it is in place on the hand the main strap 6 occupies a position substantially diagonally across the palm of the hand and substantially in line with the direction of pull on the bow string so that the load is carried directly back to the wrist. This relieves the thumb and fingers of much of the strain attendant to the conventional way of using a bow and arrow. Accordingly, the bow can be held fully drawn for a longer time without tiring the muscles.

The outer free end portion of the main strap has a pair of complementary overlying free end portions or flaps 11 and 12. These free end portions or flaps are secured together adjacent to the junction of the main strap with the cross strap 8 as by a transverse row of stitches 13 or the like; and are freely movable toward and from one another.

The flap portion 11 lies flat against the base portion of the forefinger and the flap portion 12 is adjacent to the thumb. The extremity of the flap portion 12 is formed into a loop 14 and snugly received in this loop is a pin 15 of wood or the like. The loop 14, wtih the pin 15 thereinforms an abrupt knob-like enlargement on the extremity of the flap portion 12, and in use, when the flap portion 12 is wrapped about the string, as shown particularly in FIGURE 2, this enlargement occupies a position directly behind the bow string.

Assuming that the device has been properly fastened to the bow string pulling hand of the archer in the manner shown and described hereinbefore, the archer then wraps the flap portion 12 about the bow string in an outwardly fashion, that is, away from the other flap 11 and thereby places the knob-like enlargement at the extremity of the flap portion 12 behind the bow string. With his thumb, the archer then presses upon the knob-like enlargement and thereby keeps the flap portion 12 wrapped about the bow string until he is ready to release the bow string and shoot the arrow. Very little thumb pressure is needed to hold the flap portion 12 around the string, and by virtue of the location of the flap portions 11 and 12, that is, between the thumb and the base of the adjacent forefinger, it follows that the remaining digits on the string pulling hand are not at all needed. Consequently, even if the archer had the misfortune of having lost most of the digits on that hand he could still draw the bow string and release it.

The release of the bow string is accomplished by simply moving the thumb away from its clamping position, and when this occurs the flap portion 12, with its enlarged extremity slaps back to its normal flat position, but without discomfort to the archer since the impact thereof is upon the other flap portion 11 and not directly upon the forefinger.

Not only does the bow string pulling device of this invention facilitate the gripping and releasing of the bow string, but it also has the advantage of making it easier to hold the arrow in proper position on the bow string until the actual instant of release. This follows from the fact that in using the device the knob-like enlargement on the flap 12 engages tightly against the bottom of the arrow nock and thereby holds the arrow against the knot on the bow string.

From the foregoing description taken in connection with the accompanying drawing, it will be apparent to those skilled in the art that the bow string pulling device of this invention constitutes a valuable archery adjunct which will make it easy for an archer to improve his skill with the bow and arrow, and with which even archers lacking one or more digits on the string pulling hand may continue the sport with no loss of satisfaction.

What is claimed as my invention is:

A bow string pulling device for archers, adapted to be attached to the hand to facilitate pulling back and releasing a bow string, said device comprising: a piece of pliable sheet material having a generally Y-shaped formation when lying flat, one arm of the Y being extended to cooperate with the stem of the Y in forming a wrist band securable about the wrist of a user; cooperating readily releasable fastening means on the remote end portions of said arm of the Y and the stem of the Y for detachably securing the wrist band about the wrist of a user; said piece of flexible material further having a strip connecting the remote end portions of the arms of the

Y to form with said arms of the Y a loop through which the thumb of a user's hand can project; a pair of flaps on the extremity of the other arm of the Y, one of which normally overlies the other and is flatwise swingable toward and from said other about an axis transverse to said other arm of the Y, said overlying flaps occupying a position between the thumb and the adjacent portion of the fore-finger when the device is in position on the hand; the flap nearest the thumb having a loop at its extremity; and a pin inserted in said loop to provide an abrupt enlargement on the extremity of the flap, said enlargement being positionable behind the bow string when the flap having the enlargement is wrapped about the string preparatory to exerting a pull upon the bow string.

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