Nov. 14, 1967 V. G. BURGER, SR 3,352,296

RIGID ARCHERY BOW STRINGING DEVICE

Filed March 3, 1965

FIG. 1

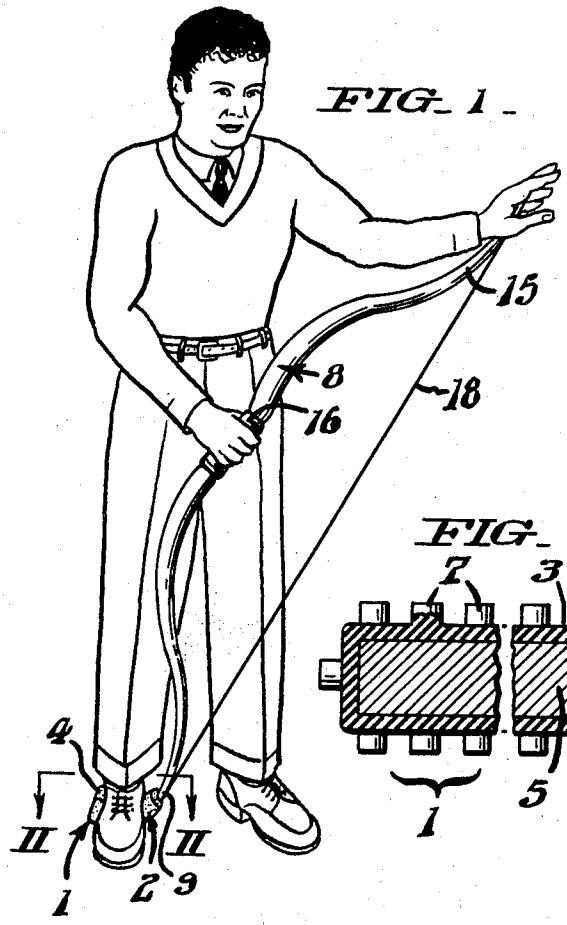


FIG. 2

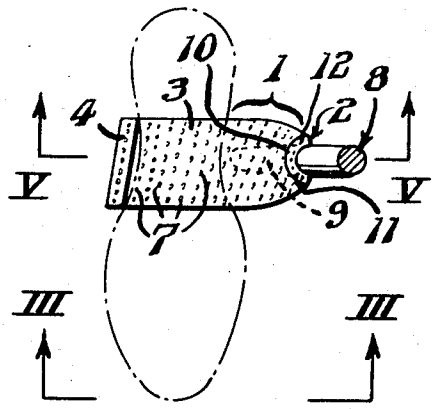


FIG. 7

FIG. 3

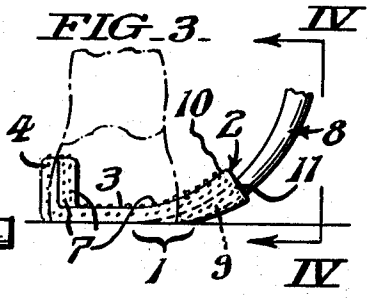


FIG. 4

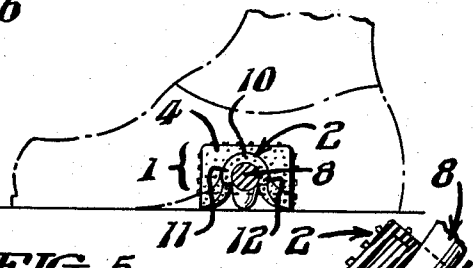


FIG. 6

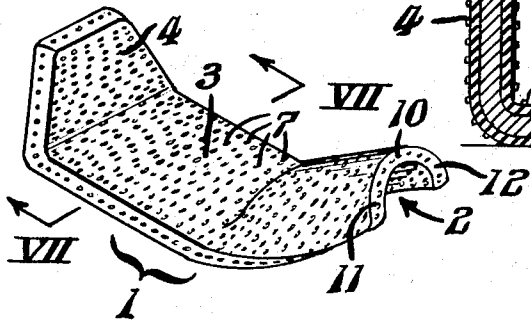
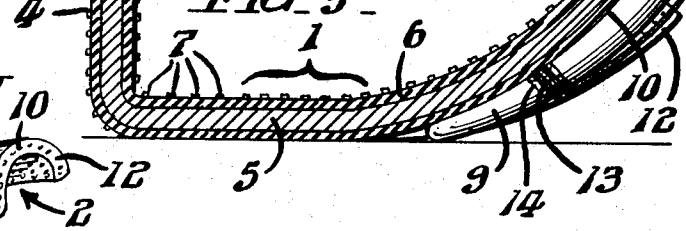


FIG. 5



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RIGID ARCHERY BOW STRINGING DEVICE

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ABSTRACT OF THE DISCLOSURE

A rubber-covered, all-metal unitary archery bow stringer device having a flat foot receiving portion and an upwardly sloping socket for receiving the tip of the archery bow.

This invention relates to a device for use in stringing and unstringing archery bows.

In stringing or unstringing an archery bow, the bow must be bent. Customarily, the bending of the bow is accomplished by placing the lower tip of the bow adjacent the instep of the archer's shoe and then applying a suitable bending force upon the upper and central portions of the bow. During the bending of the bow it is necessary that the lower tip remain in place.

The weakness in the above procedure is that the bow is difficult to control because the lower tip may easily slip from the desired position adjacent the archer's foot. When this happens, the archer at least must reposition the bow and start the cumbersome procedure anew, all at the waste of time and effort. More seriously, the unwanted displacement of the lower tip can also result in damage to the bow itself. It is quite common, for example, that the lower portion of the bow is permanently twisted so that the bow becomes useless. Most important of all, the sudden slippage of the lower bow-tip can be hazardous to the archer himself if the bow snaps back against his body.

The object of the present invention is to provide a device which can be used by the archer during stringing or unstringing of the bow to overcome the above disadvantages.

More particularly, it is an object of the present invention to provide an attachment operable for holding the lower tip of an archer's bow securely in place during the stringing or unstringing thereof.

As will appear from the more detailed description below and from the drawings, the device of my invention may be generally characterized as a rigid structure having a socket into which the bow-tip may be inserted and securely retained, and another portion connected to the socket upon which the archer's foot may be placed in order to prevent movement of the device while in use.

Turning now to the drawings, which illustrate a preferred embodiment of the device of my invention:

FIG. 1 is a perspective view showing the device as used by an archer in stringing a bow of the recurved type.

FIG. 2 is a view of the device taken along the lines II—II of FIG. 1 showing the lower tip of the bow in the socket. The upper portion of the bow is omitted and the archer's shoe is indicated by the dot-dash lines.

FIG. 3 is a front elevation of the device taken along the lines III—III of FIG. 2.

FIG. 4 is a side elevation of the device taken along the line IV—IV of FIG. 3.

FIG. 5 is a sectional view of the device taken along the line V—V of FIG. 2.

FIG. 6 is an enlarged perspective view of the device shown in FIG. 1.

FIG. 7 is an enlarged foreshortened sectional view taken along the lines VII—VII of FIG. 6 showing the projections on the surface of the device in detail.

In describing the preferred embodiment of the invention illustrated in the drawing, specific terminology has been resorted to for the sake of clarity. However, it is not the intention to be limited to the specific terms so selected, and it is to be understood that each specific term includes all technical equivalents which operate in a similar manner to accomplish a similar purpose.

Referring initially to the perspective view of one preferred embodiment of the invention shown in FIGURE 6, it can be seen that the device, which is generally indicated by the reference numeral **1** throughout the drawings, comprises a bow-tip receiving socket **2** at one end, a flat hold-down midportion **3**, and an upstanding abutment flange **4** at the other end.

The device is formed of a rigid material **5** such as aluminum or other metal, is preferably unitary, and preferably is covered with a coating **6** of a friction material such as rubber. As shown in FIGURE 7, the coating may be provided with upstanding projections **7** to further increase the resistance of the surface.

As shown in FIGURES 1–4, the archer places his foot on the flat mid-portion **3**, which I term the hold-down portion. The purpose of the flange **4** is to provide an abutment for the side of the archer's shoe and thereby to prevent lateral displacement of the device while in use. As best shown in FIGURE 2, the flange **4** is preferably disposed at a slight angle with respect to the longitudinal axis of the mid-portion **3** to conform to the decrease in width of the archer's shoe.

As illustrated in FIGS. 1–5, the archer inserts the lower tip **9** of a bow **8** into the bow-tip receiving socket **2** of the device during the stringing or unstringing of the bow. In the embodiment of the invention illustrated, the socket **2** slopes upwardly from mid-portion **3**. More particularly, the socket is formed by an extension of the mid-portion **3** having an upwardly sloping arcuate roof portion **10** and downwardly depending side walls **11, 12**.

To use the device, the archer places it on the ground in the position shown in FIGS. 1–6. He then places his foot upon the mid-portion **3** so that the flange **4** abuts the outside of the shoe as shown in FIGS. 1–3.

When the above is accomplished, the bow **8** is ready to be strung or unstrung. For example, if the bow is to be strung, the lower loop **13** of the bow string **18** is first inserted in the lower notch **14** formed near the end of lower tip **9** of the bow **8**. Then the archer inserts the lower tip **9** of the bow **8** into the bow-tip receiving socket **2** of the device **1** of the present invention. When the bow-tip is inserted, the archer shifts his weight slightly so as to exert downward force upon the bow-tip **9**. It will be understood that the projections or corrugations **7** on the rubber-coated surface **6** of the device **1** thus are forced into close contact with the bow-tip **9** and serve to restrain the tip from movement. Because the side walls **11, 12** do not extend all the way to the ground in this embodiment of the invention, the device as a whole may also be tilted slightly as the archer shifts his weight to force the bow-tip socket **2** closer to the ground, i.e. in a clockwise direction of FIG 3. Thus, it is possible to press the socket **2** more firmly against the bow-tip **9** to ensure that the latter does not slip out during the stringing or unstringing of the bow.

When the above has been accomplished, the archer strings the bow in the customary fashion. Thus, where a recurved bow is being used as in the present illustration, the archer places one hand on the central portion **16** of the bow **8** and the other hand on the upper part **15** of the bow **8** while also holding the free upper end of the bow string **18** in the latter hand. Then the archer pushes the upper portion of the bow away from his body while at the same time pulling the central portion **16** in a

direction towards his body to bend the bow until it reaches a position where the loop at the upper end of the bow string **18** (not shown) may be inserted over the notch (not shown) adjacent the upper tip of the bow.

From the above, it will be understood that, by use of this invention, the lower tip **9** of the bow **8** can be held securely in place during the stringing or unstringing of the bow. Accordingly, the bow is fully under the control of the archer at such times and the disadvantages occasioned by the unwanted displacement of the lower tip of the bow are avoided. Thus, for example, the use of this device avoids the possibility of the bow becoming permanently twisted or of injury to the archer due to snap-back resulting from a sudden slippage of the lower bow-tip. In addition, the device serves to hold the lower loop **13** of the bow string **18** securely in the notch **14** at the lower tip **9** of the bow **8** in the position desired for proper stringing.

It will be understood that various modifications of my invention are possible without departing from the true scope thereof. For example, although the sidewalls **11** and **12** of the preferred embodiment shown herein do not extend to ground level, they may be so extended if desired. In addition, although the socket **2** is shown as generally arcuate in shape, any other shape may be used which will accomplish the function of receiving the bow-tip. Moreover, the socket may be completely enclosed by provision of a base connected to the depending sidewalls **11** and **12**. Also, the flange **4** may be of various shapes, or it may be eliminated.

It is also to be clearly understood that the terms and expressions used herein are employed as terms of description and not of limitation, and that there is no intention in using such terms and expressions to exclude any equivalents of the features described. It is also to be clearly understood that what is specifically shown and described herein represents a preferred embodiment only of the invention, and that various changes and equivalents, in addition to those mentioned may be resorted to without departing from the principles of the invention or the scope of the claims hereof. Accordingly, it is intended to claim the present invention broadly, as well as specifically, as indicated in the appended claims.

Having thus described my invention, I claim:

1. As an article of manufacture, a bow stringing device comprising a rigid unitary member having

(a) a substantially flat hold-down mid-portion forming means for receiving the underside of an archer's shoe,

(b) an upstanding flange forming means at the one end for abutting the side of the archer's shoe, and

(c) said mid-portion extending outwardly and upwardly to form a generally convex opening facing downwardly to form a bow-tip receiving socket at the other end.

2. The invention of claim **1** wherein the rigid member is also provided with a cover of friction material.

3. An archery bow stringing device comprising a unitary substantially rigid member having

(a) a flat foot portion,

(b) an upstanding abutment flange at one end of the foot portion, and

(c) a bow-tip receiving socket at the other end of the flat foot portion, said socket consisting of a substantially arcuate roof slanting upwardly from the foot portion and downwardly depending sidewalls connected to either side of the roof portion.

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