Sept. 21, 1965 B. W. BROWNING ETAL 3,207,145

BOW STRINGER

Filed Sept. 19, 1962

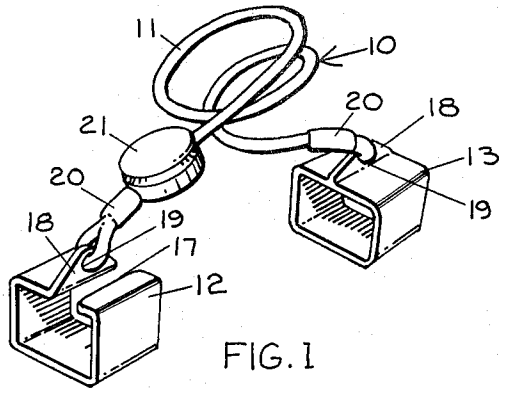


FIG. 1

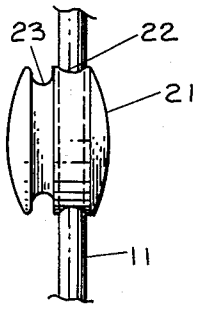


FIG. 2

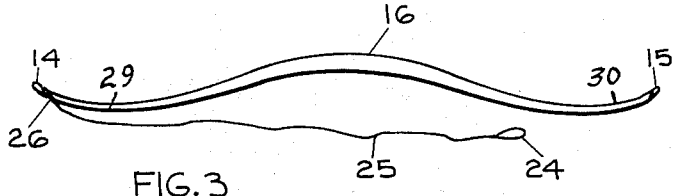


FIG. 3

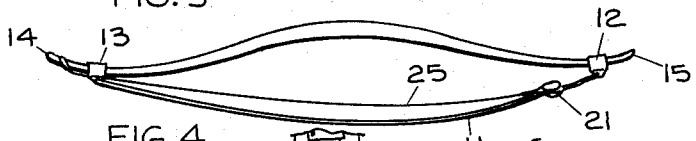


FIG. 4

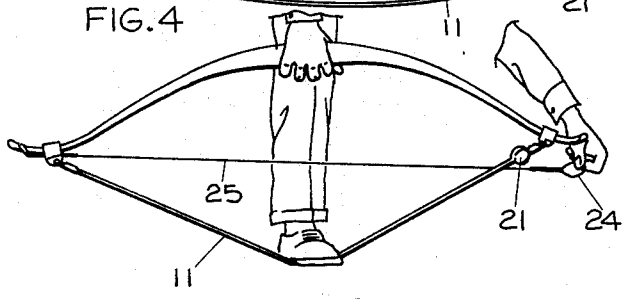


FIG. 5

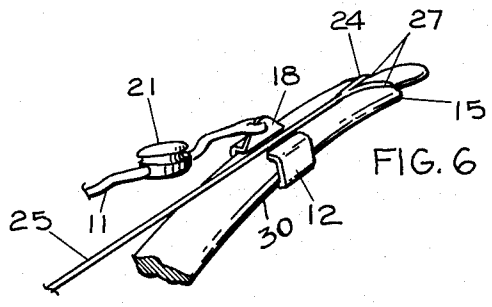


FIG. 6

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BOW STRINGER

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This device relates to archery bows and is more particularly directed to a bow stringing device.

With the advent of archery as an extremely popular sport participated in by men, women and children, the undertaking of stringing and unstringing a bow has become quite a chore and problem. Many devices and techniques have been developed in order to prevent persons stringing and unstringing bows of large draw weight especially from hurting themselves or from injuring the bows. However, it has been noted that these techniques are involved and had to be learned in order to be followed properly, while the devices used are bulky and difficult to handle in accordance with the instructions concerned. The danger of failing to apply the proper technique, or to follow the instructions while using the particular device in stringing and unstringing a bow, is manifold that results either from the lack of skill in the user thereof or in his failure to learn the technique properly.

Therefore, it is a principal object of the present invention to provide a bow stringer for stringing and unstringing archery bows, which device is simple in design and construction, inexpensive in cost and very readily learned by the archer in its proper use.

Another object of the present invention is to provide a bow stringer for archery bows which is extremely safe in its use by archers and that notwithstanding lack of skill of the user or failure to use the device properly, the user does not endanger himself nor the possibility of damaging the bow.

A further object of the present invention is to provide a device for stringing and unstringing an archery bow which is so compact that it can be carried by the user in his pocket when the bow has been strung or on the bow itself when not strung, so that it renders the device readily available for use at all times.

A still further object of the present invention is to provide a bow stringer which renders a person capable of stringing and unstringing bows of heavy draw weights easily that heretofore required the use of two experienced archers who, during the stringing and unstringing procedure exposed themselves to possible injury and to the possibility of damaging the bow.

With these and other objects in view, the invention will be best understood from a consideration of the following detailed description taken in connection with the accompanying drawing forming a part of this specification, with the understanding, however, that the invention is not confined to any strict conformity with the showing of the drawing but may be changed or modified so long as such changes or modifications mark no material departure from the salient features of the invention as expressed in the appended claims.

In the drawing:

FIGURE 1 is a perspective view of my bow stringing device.

FIGURE 2 is a fragmentary side view of a bow string retaining button.

FIGURES 3–5 inclusive are side views of the steps in the manner of using the bow stringer for stringing a bow.

FIGURE 6 is a fragmentary perspective view of bow after having been strung and prior to the removal of the bow stringer from the bow tip.

Referring to the drawing wherein like numerals are

used to designate similar parts throughout the several views, the numeral **10** referes generally to my bow stringing device which consists of a length of high strength cord **11** such as woven nylon having its ends attached to brackets **12** and **13**. The cord **11** is of convenient length that will permit slipping the brackets **12** and **13** over the tips **14** and **15** and onto the limbs **29** and **30** without necessity of flexing the bow **16**, as is explained in detail hereinafter.

The bracket **13** is a tapered rectangularly shaped sleeve having an opening substantially equal to the cross section of the limb **29** of the bow **16** at preferably 3 to 4 inches from the free end of the tip **14** so that the bracket **13** will become wedged on the limb **29** at that distance from the free end thereof. The bracket **12** is similar in size and shape to the bracket **13** except that the former is provided with a slot **17** extending the full length of the tapered bracket **12**. Both of the brackets **12** and **13** are provided with tabs **18** having openings **19** for receiving the ends of the cord **11** that are bound thereto by lashing **20**. In order to prevent the brackets **12** and **13** from injuring or marring the surface of the limbs **29** and **30** as they slide along the limbs into position, the brackets **12** and **13** are provided with a coat of resilient plastic material or covered with leather.

Threaded on the cord **11** is a loop retaining button **21** of cylindrical shape and having a radially disposed bore **22** through which the cord **11** is threaded. The size of the bore **22** is such that the cord **11** fits extremely tightly therein so that the button **21** can be moved along the cord **11** only when a great deal of force is applied. The button **21** is provided also with a peripheral groove **23** for receiving a loop **24** of a bow string **25**, the other end having a loop **26**. Adjacent the ends of the tips **14** and **15** there are provided the conventional notches **27** for receiving the loops **24** and **26** of the bow string **25**.

In the normal use of the bow stringer **10** for stringing the bow string **25** on the bow **16**, the loop **26** of the bow string **25** is slipped over the end of the tip **14** of the bow **16** and made to engage the notches **27** thereon. The bracket **13** of the bow stringer **10** is then slipped over the end of the bow tip **14** until it becomes wedged on the limb **29** as shown by FIGURE 4. The other bracket **12** is then slipped over the end of the tip **15** and made to slide along the limb **30** until it becomes wedged thereon.

A person then taken the bow **16** in his hand and holds the bow horizontally with the belly of the bow **16** extending downwardly. He steps on the cord **11** and pulls upwardly on the bow **16** as shown by FIGURE 5 to cause the bow **16** to flex. The distance between the ends of the bow tips **14** and **15** becomes foreshortened permitting the loop **24** of the bow string **25** to be slipped over the end of the bow tip **15** and become engaged by the notches **27**. Now the upward pull applied by the person on the bow **16** is released slowly causing the bow string **25** to become tightened on the bow **16**. The cord **11** of the bow stringer **10** will now be hanging loosely on the bow **16**. The bracket **12** is then slid along the bow limb **30** and as the bow string **25** passes through the slot **17** the bracket **12** is removed from the tip **15**. The bracket **13** is then slipped off the tip **14** thereby removing the bow stringer **10** from the bow **16**.

To remove the bow string **25** from the bow **16** known as unbracing the bow, as must be done on heavy reflex bows when not in use, the procedure described hereinabove is now reversed. The brackets **12** and **13** are slipped on the limps **30** and **29** respectively with the cord **11** extending loosely therebetween. The bow **16** is grasped while the bow **16** is held horizontally with the belly of the bow extending downwardly. The person steps on the cord **11** and pulls up-

wardly on the bow **16** as shown by FIGURE 5 until the bow string **25** hangs loosely on the bow **16**. The loop **24** of the bow string **25** is then slipped off the bow tip **15** and then slipped over the button **21** and made to lie in the peripheral groove **23** as shown by FIGURE 4. The bow **16** is now unstrung and may be stowed away with the bow stringer **10** and the bow string **25** attached thereto as shown. The bow **16** is in its non-flexed condition with the bow stringer **10** and bow string **25** attached thereon ready for stringing the bow **16** when desired. The button **21** produces the additional function of preventing the bow string **25** whose loop **24** is engaged in the groove **23** from untwisting and thereby affect its proper fistmele or bracing height. The fistmele is the distance from the bow string to the bow at time of release of the arrow when shooting same. When an archer has decided on this distance as being most desirable for him, he does not want it to vary as he strings or unstrings his bow.

It can readily be noted from the above explanation of bow stringer **10** and its application to the bow **16**, that the bow stringer **10** is a compact device of simple construction and expedient in its use to string and unstring a bow. Any person can readily use the bow stringer **10** without any danger to himself or to the surface finish of the bow. Also, there is no danger of damaging the bow during the stringing or unstringing of the bow with the bow stringer **10** as the same forces are applied to the bow during this stringing operation as during the shooting of an arrow, which forces the bow is built to resist.

Having disclosed our invention, what we claim as new and desire to secure by Letters Patent of the United States is:

1. In combination, an archery bow, and a bow stringer for stringing a bow string and said bow comprising first bow limb engaging means, elongated means having one end secured to said first bow limb engaging means, and a second bow limb engaging means secured to the other end of said elongated means, said second bow limb engaging means having a longitudinally disposed slot extending along an outer portion and the full length of said second bow limb engaging means permitting the bow string of the bow to pass therethrough after said bow has been strung and upon said second bow limb engaging means being removed from said bow.

2. In combination, an archery bow, and a bow stringer comprising sleeve means for engaging a bow tip positioned at one end of said bow, elongated means secured at one end to said sleeve means, said elongated means being substantially the same length as said bow to be strung, second sleeve means secured to the other end of said elongated means for engaging a second bow tip positioned at the opposite end of said bow, said second sleeve means having a slotted portion for permitting the bow string of said bow to pass therethrough and loop engaging means mounted on said elongated means in proximity of said second sleeve means for receiving the loop of a bow string.

3. In combination, an archery bow, and a bow stringer comprising a substantially rectangular shaped sleeve, said sleeve being tapered for sliding on one of the tips of said bow and becoming wedged thereon in proximity of the free end of said bow tip, a tab mounted on an outer surface of said sleeve, a cord secured at one end to said tab, said cord being substantially the same length as the bow being strung, a second substantially rectangular shaped sleeve having a tab secured at the other end of said cord, said second sleeve being substantially similarly tapered as said first sleeve for sliding on the other of said bow tips of said bow, said second sleeve having a slot extending along its full length adjacent to said tab for permitting the bow string to pass therethrough after said bow has been strung and upon the removal of said second sleeve from said bow tip.

4. In combination, an archery bow, and a bow stringer comprising a substantially rectangular shaped sleeve, said sleeve being tapered for sliding on a tip of said bow and becoming wedged thereon in proximity of the free end of said tip, a tab mounted on said sleeve, a cord secured at one end to said tab, said cord being substantially the same length as the bow being strung, a second substantially rectangular shaped sleeve having a tab secured at the other end of said cord, said second sleeve being similarly tapered as said first sleeve, and having a slot extending along its full length adjacent to said tab for permitting the bow string to pass therethrough and loop engaging means mounted on said cord in proximity of said second sleeve for receiving the loop of a bow string.

5. The structure as recited by claim **4** wherein said loop engaging means comprises a member having a bore for receiving said cord and a peripheral groove for receiving said loop of said bow string.

6. In combination, an archery bow, and a bow stringer for stringing a bow string on said archery bow having limb portions comprising an elongated portion of sufficient length to extend substantially the full length of said bow to be strung, limb engaging means secured on each end of said bow stringer, one of said limb engaging means having a longitudinally disposed slot on an outer surface and extending the full length of said one of said limb engaging means whereby upon mounting one end of said bow string on one of said limb portions and said limb engaging means on said limbs of said archery bow with said bow extending horizontally, said elongated portion of said bow stringer will extend in a direction away from said bow at its mid-portion for readily flexing said bow to permit the easy mounting of the other end of said bow string on the other of said limb portions of said flexed bow and upon the release of said elongated portion and removal of said one of said limb engaging means said longitudinally disposed slot will permit the passing of said bow string therethrough to remove said bow stringer from said bow.

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