May 13, 1958 A. E. FARMES 2,834,018

FINGER PROTECTORS

Filed May 23, 1955

FIG. 4

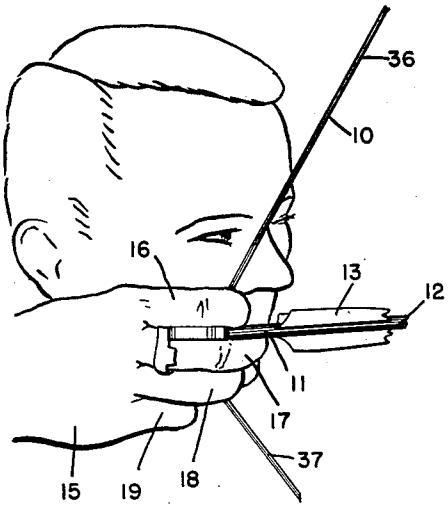


FIG. 5

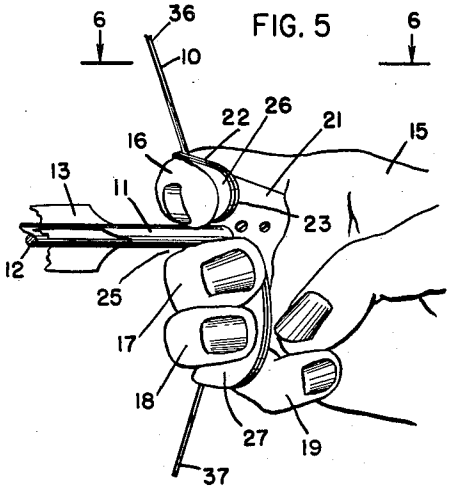


FIG. 1

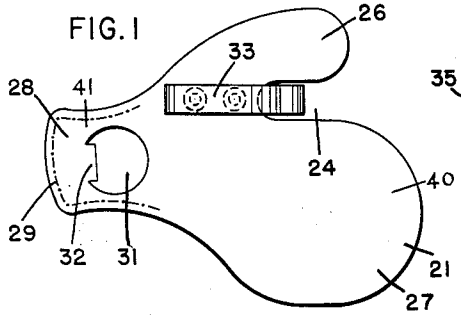


FIG. 2

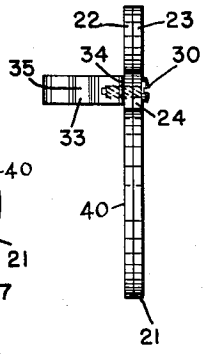


FIG. 6

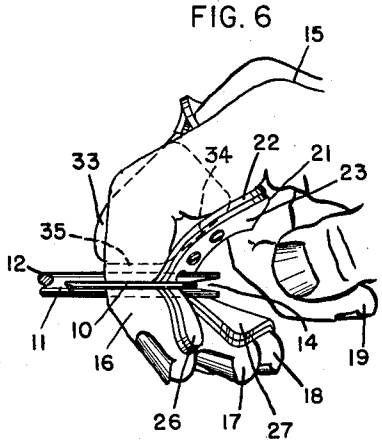


FIG. 3

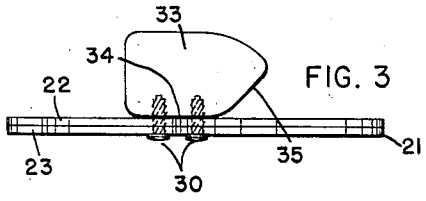
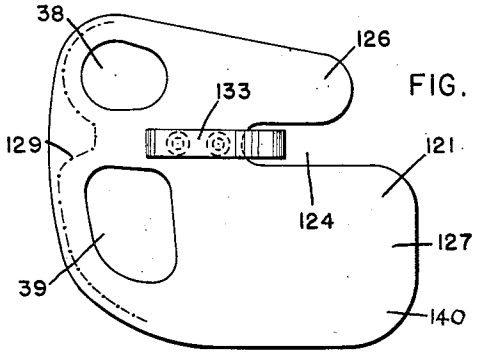


FIG. 7



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FINGER PROTECTORS

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6 Claims. (Cl. 2—21)

The herein disclosed invention relates to finger protectors for archers and particularly to a protector for protecting the fingers used in drawing the bow string.

In the shooting of an arrow the arrow is placed between the forefinger and middle finger with the bow string received in the nock of the arrow shaft and the string is run across the forefinger, middle finger and third finger and drawn outwardly from the bow. This causes the forefinger and middle finger to be pressed against the arrow causing discomfort and frequently soreness to the archer in the shooting of the arrows.

An object of the invention resides in providing a protector which overcomes the discomfort and soreness arising in the shooting of an arrow in the customary manner.

A still further object of the invention resides in providing a spacer insertable between the fingers between which the arrow is held while drawing the bow string and holding the fingers apart while shooting.

Another object of the invention resides in providing a covering for the fingers overlying the surfaces thereof across which the bow string is placed and in attaching the spacer to the covering.

An object of the invention resides in the specific arrangement of the spacer with reference to the parts of the covering.

A feature of the invention resides in providing a construction adaptable to use with any type of covering such as an archer's pad or glove.

An object of the invention resides in the specific construction of the spacer.

Other objects of the invention reside in the novel combination and arrangement of parts and in the details of construction hereinafter illustrated and/or described.

In the drawings:

Fig. 1 is an elevational view of a finger protector illustrating an embodiment of the invention.

Fig. 2 is an end view of the structure shown in Fig. 1.

Fig. 3 is a plan view of the structure shown in Fig. 1.

Fig. 4 is an elevational view showing the method of using the invention and viewed in the direction toward the archer.

Fig. 5 is a view of the hand only of the archer viewed from the opposite direction and drawn to a greater scale.

Fig. 6 is a plan view taken on line 6—6 of Fig. 5 and showing the arrangement of the parts.

Fig. 7 is a view similar to Fig. 1 of a modification of the invention.

For the purpose of illustrating the invention, the bow string **10** of a bow has been shown and in drawn position, it being readily comprehended that the said string forms part of an ordinary bow not illustrated. In like manner, the shaft **11** of an arrow **12** has been shown and which is provided with the usual feathers **13**. The shaft **11** is additionally formed with a nock **14** in which the bow string **10** is disposed while the bow string is being drawn. In Figs. 4, 5 and 6 the archer's hand is shown at **15** and the forefinger, middle finger, third finger and little finger are designated by the reference numerals **16, 17, 18** and 19 respectively.

The invention proper comprises a covering **21** which is adapted to overlie the surfaces of the fingers **16, 17** and **18** on the palm side of the hand. This covering consists of two layers of leather **22** and **23** which overlie one another and which are of the same size and shape. This covering is formed with a longitudinal slot **24** which is adapted to be disposed in register with the space **25** between the forefinger **16** and the middle finger **17** of the archer's hand. This construction provides a flap **26** which overlies the forefinger **16** and another flap **27** which overlies the fingers **17** and **18**. The covering **21**, in the form of the invention shown in Fig. 1, is reduced in width at its end opposite the flaps **26** and **27** to form a neck **28**. The two layers **22** and **23** of the covering are stitched together by means of stitches **29** and which extend throughout a portion only of the neck **28**. In the neck **28** is formed a circular opening **31** and through which the middle finger **17** may be projected. A tab **32** is formed on the neck **28** and which projects into the opening **31**. The covering is applied by inserting the middle finger through the opening **31** and from the underside of the covering, as shown in Fig. 1. This brings the flaps **26** and **27** upon the inner side of the hand and the said flaps in overlying position in respect to the fingers **16, 17** and **18**. The portion **41** of the neck **28** encircling the opening **31** and the tab **32** is in the nature of a band and forms a holding means for holding the protector applied to the hand of the archer.

In conjunction with the covering **21**, a spacer **33** is employed. This spacer may be constructed of wood, plastic, or any other suitable material having sufficient rigidity for the purpose. The spacer illustrated is plate-like in form, as shown in Figs. 1 and 2, and has an edge **34** adapted to overlie the outer surface **40** of the layer **22** of the covering **21**. Drive screws **30** extend through both of the layers **22** and **23** and are driven into the spacer **33**. If desired, nails or ordinary screws may be used for the purpose, or the same secured to the covering by any other suitable fasteners. The spacer **33** also has an edge **35** which forms an angle with respect to the edge **34** and which serves a purpose to be presently described. The thickness of the spacer **33** is equal to or slightly greater than the diameter of the shaft **11** at the end of the same in which the nock **14** is formed. The covering **21** serves as an attaching means for attaching the spacer to the hand of the archer.

The finger protector is used in the following manner: As previously stated, the middle finger of the archer is inserted through the hole **31** in the covering **21** bringing the flaps **26** and **27** opposite the fingers **16, 17** and **18** and the slot **24** opposite the space **25** between the fingers **16** and **17**. At the same time the spacer **33** is inserted into this space and separates these two fingers. The arrow is now grasped by the shaft **11** and applied to the bow string **10** with the same extending into the nock **14**. The bow string is then placed upon the surface **40** and across the flaps **26** and **27** with the shaft **11** held in the space **25** between the fingers and extending through the slot **24**. The string is now drawn back in the customary manner. The position of the parts when the string has been properly drawn is shown in Figs. 4, 5 and 6. It will be noted that the two reaches **36** and **37** of the bow string **10** form an angle and that the fingers of the archer are disposed at the bight of the angle. This causes the fingers to be forced together and against the spacer **33** instead of the arrow. When the string is subsequently released the arrow slides through the space **25** and along the edge **35** of the spacer **33** as shown in Fig. 6 and is projected. By means of the spacer **33** the fingers are kept apart and the friction between the arrow and the archer's fingers ordinarily resulting in releasing the arrow is eliminated.

In Fig. 7 a modification has been shown. In this form of the invention the covering differs from that shown in Fig. 1. Due to the similarity of the protectors, description of the corresponding parts will not be repeated and such parts will be indicated by the same reference numerals preceded by the digit "1." In this form of the invention the flaps **126** and **127** and the slot **124** remain the same. The back end of the covering **121**, however, is not reduced to form a neck as shown in Fig. 1 but is of a width sufficient to receive two finger holes **38** and **39**. The finger hole **38** is for the reception of the forefinger **16** of the archer while the opening **39** is of sufficient dimension to receive the middle finger and the third finger. The spacer **133** with this form of the invention may be identical with that disclosed in Figs. 1, 2 and 3. The method of using this form of the invention is the same as that described in connection with the protector shown in Figs. 1, 2 and 3 excepting that all three of the fingers **16**, **17** and **18** are inserted through the holes in the covering instead of the finger **17** only.

The advantages of the invention are manifest. The finger protector prevents soreness, abrasion, and other discomfort produced in shooting arrows in the customary manner. The finger protector is used in exactly the same manner as pads or gloves ordinarily employed for protecting the fingers of the archer. The spacer may be utilized with any type of finger covering now available for the protection of the archer's fingers. The manner of shooting the arrow is identically the same as the conventional manner of shooting arrows and no change in technique is required in the use of the instant invention. The device can be constructed at a nominal expense.

Changes in the specific form of the invention, as herein described, may be made within the scope of what is claimed without departing from the spirit of the invention.

Having described the invention, what is claimed as new and desired to be protected by Letters Patent is:

1. An archer's finger protector comprising a finger covering constructed of flexible material and adapted to overlie the portions of the fingers of the archer which grasp the bow string, said covering having a slot therein adapted to register with the space between the fingers through which the arrow slides and a spacer, plate-like in form having an edge overlying a portion of said covering and substantially in alignment with said slot, said spacer being constructed of a rigid material, fasteners extending through said covering and into said spacer for holding the spacer through said edge attached to the covering, and holding means on said covering and adapted to engage portions of the fingers of the user to hold the covering and spacer in operative position.

2. An archer's finger protector comprising a finger covering constructed of flexible material and adapted to overlie the portions of the fingers of the archer which grasp the bow string, said covering having a slot therein adapted to register with the space between the fingers through which the arrow slides and a spacer, plate-like in form having an edge overlying a portion of said covering and substantially in alignment with said slot, said spacer being constructed of rigid material, fasteners extending through said covering and into said spacer through said edge for holding the spacer attached to the covering, said spacer having another edge forming an angle with said first named edge and along which the arrow travels, and holding means on said covering and adapted to engage portions of the fingers of the user to hold the covering and spacer in operative position.

3. In an archer's finger protector for application to the hand engaging the draw string, the combination of a finger covering constructed of flexible material and having a portion adapted to overlie the inner surfaces of the forefinger and middle finger of the hand and terminating near the ends of said fingers, said portion having a slot therethrough adapted to extend along the space between said fingers, said slot being open at its outer end and terminating at its inner end in proximity to the outermost nodes of said fingers, a plate-like spacer issuing outwardly from said portion of the covering and lying in alignment with said slot and being disposed inwardly thereof, said spacer having an edge engaging said portion of the covering, fastening means between said covering and said spacer, said spacer being adapted to be inserted between said fingers of the hand and when positioned for use extending across the second nodes of said fingers and toward the digital fold of said fingers, said spacer having an outer edge forming an angle with said first named edge and being positioned in proximity to the first nodes of the fingers, and holding means on said covering adapted to encircle portions of the hand to hold the covering in position for use.

4. An archer's finger protector comprising a covering constructed of flexible sheet-like material and having an edge, said covering having a slot therein extending through said edge and inwardly therefrom, said covering being reduced in width at the portion thereof opposite said slot to form a neck, a finger hole in said neck and disposed to one side of said slot, a plate-like spacer having an edge overlying said covering, said spacer extending outwardly from said covering, said spacer being disposed inwardly of and lying in continuation of said slot, said spacer having an outer edge forming an angle with said first named edge and meeting said first named edge in proximity to the end of said slot and fastening means acting between said spacer and said covering.

5. An archer's finger protector comprising a covering constructed of flexible sheet like material and having an edge, said covering having a slot therein extending through said edge inwardly therefrom, means for attaching said covering to the hand of the user with the covering on the palm side of the hand and with the slot registering with the space between the index finger and the middle finger of the hand, a plate like spacer having a portion with an edge overlying the covering inwardly of the end of said slot and disposed in alignment with said slot, said spacer having another portion with an edge free from said covering and forming a continuation of said first named edge, said second named portion extending over said slot at the inner end thereof, and being in alignment with said slot, and fastening means acting between said spacer and cover and extending through said first named edge of said spacer.

6. An archer's finger protector comprising a covering constructed of flexible sheet like material and having an edge, said covering having a slot therein extending through said edge inwardly therefrom, means for attaching said covering to the hand of the user with the covering on the palm side of the hand and with the slot registering with the space between the index finger and the middle finger of the hand and with the ends of said covering overlying the first section of the index and middle fingers, said slot terminating substantially at the first joints of said fingers, a plate like spacer extending outwardly from said covering and disposed between said index and middle fingers, and attaching means attached to said covering and to said spacer at a locality inwardly from the end of said slot.

References Cited in the file of this patent

UNITED STATES PATENTS

1,149,834	James	Aug. 10, 1915
2,040,137	Jensen	May 12, 1936
2,322,710	Eisendrath	June 22, 1943
2,530,688	Ducot	Nov. 21, 1950
2,769,179	Love	Nov. 6, 1956

OTHER REFERENCES

Ben Pearson, Inc., Catalog No. 25, page 13, No. 803. (A copy is filed in Div. 62, U. S. Patent Office.)