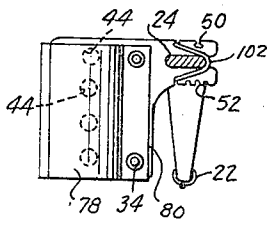
Jan. 20, 1970 J. C. RAMSEY 3,490,662

QUIVER ATTACHMENT FOR AN ARCHER'S BOW

Filed Aug. 17 1967 2 Sheets-Sheet 1

FIG. 3.



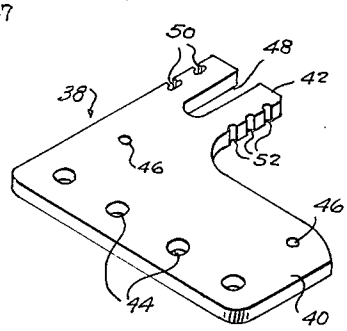


FIG. 5.

FIG. 6.

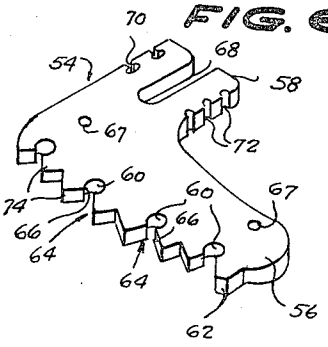


FIG. 1.

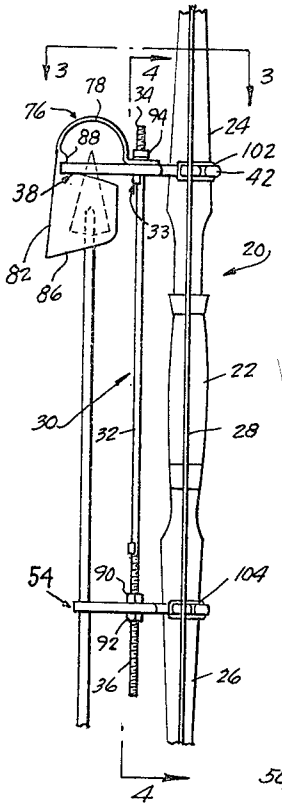


FIG. 2.

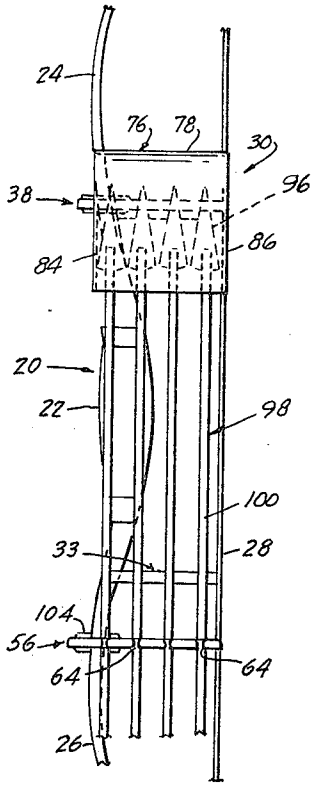


FIG. 4.

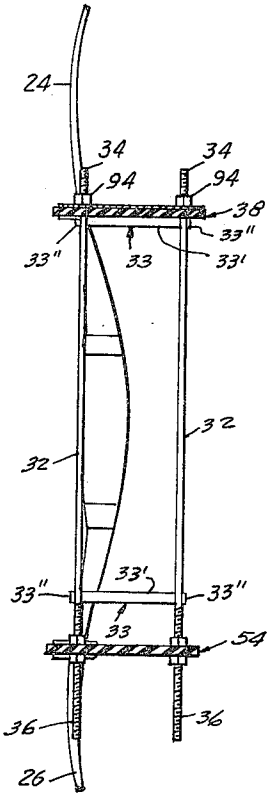
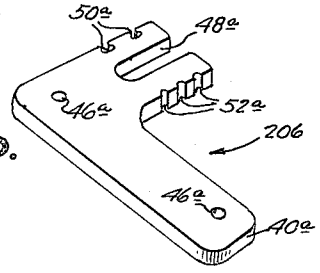


FIG. 10.



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QUIVER ATTACHMENT FOR AN ARCHER'S BOW

Filed Aug. 17 1967 2 Sheets-Sheet 2

FIG. 7.

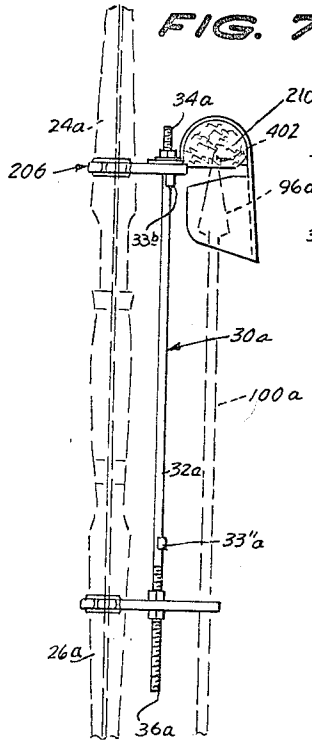


FIG. 8.

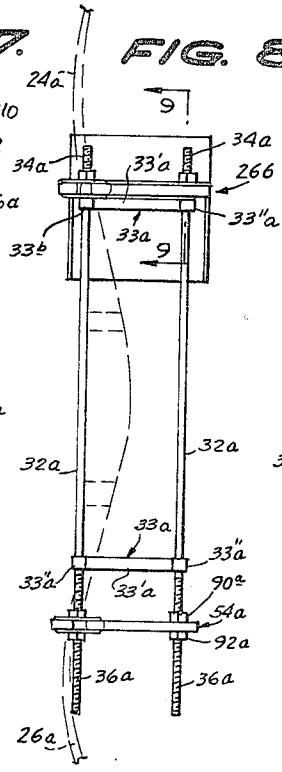


FIG. 9.

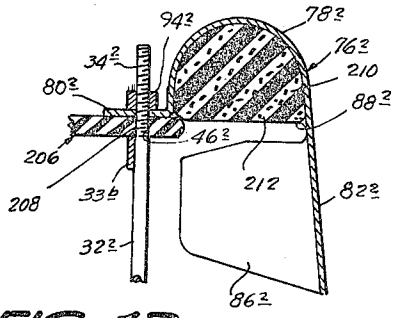


FIG. 13.

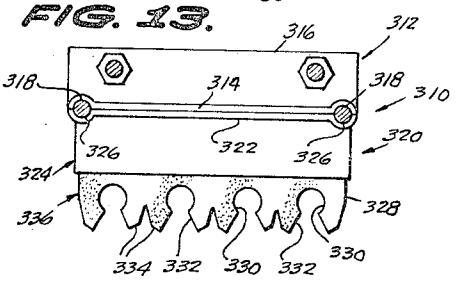


FIG. 15.

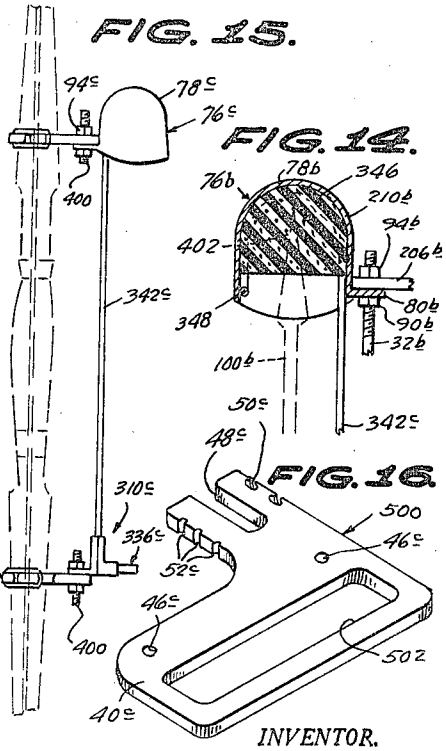


FIG. 11.

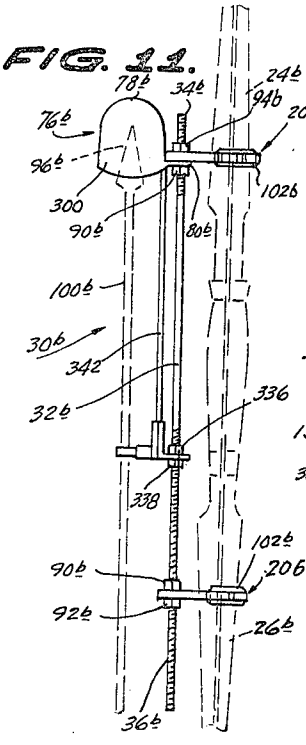


FIG. 12.

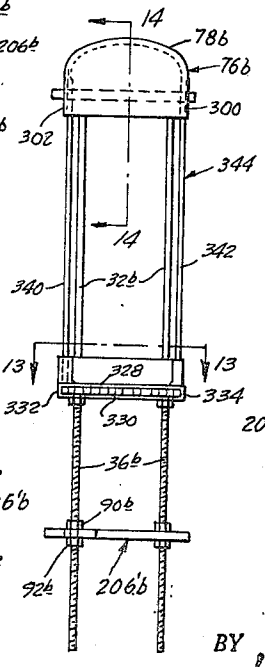


FIG. 14.

FIG. 16.

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Patented Jan. 20, 1970

3,490,662

QUIVER ATTACHMENT FOR AN ARCHER'S BOW

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Filed Aug. 17, 1967, Ser. No. 661,302
Int. Cl. F41b 5/06
U.S. Cl. 224—1 1 Claim

ABSTRACT OF THE DISCLOSURE

Apparatus comprising a substantially open frame including a pair of longitudinally spaced substantially parallel arrow mounting plates, the plates releasably receiving the arrow shafts adjacent their fletched and headed ends, respectively, and including cap guard means associated with the last referred to plate to prevent inadvertent or accidental injury to the archer and/or damage to the arrow heads. The frame means of the apparatus also includes means for releasably securing the same on a bow for extension longitudinally thereof, and the mounting means are so constructed as to permit the apparatus to be used with equal facility by right or left handed bowmen.

BACKGROUND OF THE INVENTION

This invention relates to the general field of archery and more specifically, the instant invention pertains to quiver means for detachable connection to an archer's bow.

Archery is now fast becoming a popular sport and hobby and is rapidly gaining wide acceptance not only among hunters, but also with those who prefer to exercise their marksmanship on stationary or immovable inanimate targets or objects.

As a consequence, there has been born an increasing public demand for improved equipment as manufactured in accordance with present day techniques. The popular demand for such improved archery equipment has led to the development of superior bows and modified quivers, but with respect to the latter, satisfactory developments which will meet substantially all conditions of usage have been relatively slow in evolving.

Archers, like other sportsmen, constantly seek to improve their tackle, and as among those who hunt, the quiver component holding the reserve arrows presents a problem when in the field or forest. Generally quivers holding a reserve supply of six or more arrows are usually slung or strapped to the archer's back or side. This constitutes an awkward placement when it is desired to quickly reach and draw an arrow while stalking game or while the hunter is under cover. Obviously such quivers cannot be worn when riding in an automobile, and the fact that with most modern equipment the bow and quiver constitute separate components, and by virtue of such usage the bow and its complementing arrows are also separated, the arrangement is most unsatisfactory. The clear-cut answer to this problem is to effect a combination of the quiver with the bow.

This solution has suggested itself to others as well as myself (see my Patent No. 2,969,898, filed May 15, 1958, Ser. No. 735,465, which issued on Jan. 31, 1961, and is entitled "Arrow Holder"), but despite the fact that various forms of such equipment are being produced and supplied to archers, they all have one or the other of these two serious disadvantages. If the quiver is simply formed of but two seperate shaft holding plates, one for each bow limb, so that they may be attached to either the right or the left side of a bow for use by either a right-handed or a left-handed archer, the quiver does not carry as a part of itself a much needed guard to cover the arrow

heads of the arrows held by the plates to protect the user from injury by them. Or if the quiver is made with the desired guard to cover the heads of the arrows carried in it, the same one quiver will not fit on both the right side of the bow for a right-handed archer, and on the left side of the bow for a left-handed shooter. A right-hand form of the quiver has to be supplied for a right-handed archer, and a left-hand form for the person who shoots the bow left-handed. This calls for two forms of the same quiver, and increases manufacturing costs, as well as the costs to the user.

It is, therefore, one of the primary objects of this invention to provide a simple low cost bow quiver having a guard means over the heads of the arrows carried in it, the quiver being readily and easily assembled so as to fit on the right side of a bow for a right-handed archer, or so assembled that it will fit on the left side of a bow for a person who shoots left-handed.

Another object of this invention is to provide a bow quiver having means for easily and quickly detachably connecting the same to an archer's bow without the requirement of tools of any kind, and with the quiver being either empty or loaded with arrows.

A further object of this invention is to provide an arrow quiver for connection with an archer's bow and wherein the quiver may be formed of a relatively light weight material to avoid adding excessive weight to the bow.

This invention has, as a still further object thereof, the provision of an arrow quiver for mounting on an archer's bow and wherein the effective length of the quiver may be adjusted to accommodate bows having unbending handle sections of different lengths.

This invention contemplates, as a still further object thereof, the provision of an arrow quiver which is non-complex in construction and assembly, inexpensive to manufacture and maintain, and which is rugged and durable in use.

Other and further objects and advantages of the instant invention will become more manifest from a consideration of the following specification when read in conjunction with the annexed drawings.

In the drawings:

FIGURE 1 is an end elevational view of an arrow quiver constructed in accordance with this invention, FIGURE 1 showing the quiver in its mounted and operative position on the left side of a conventional archer's bow, for use by a left-handed archer;

FIGURE 2 is a side elevational view of the quiver means shown in FIGURE 1;

FIGURE 3 is a top plan view of the quiver assembly, FIGURE 3 being taken substantially on the horizontal plane of line 3—3 of FIGURE 1, looking in the direction of the arrows;

FIGURE 4 is a detail cross-sectional view of the quiver, FIGURE 4 being taken substantially on the vertical plane of line 4—4 of FIGURE 1, looking in the direction of the arrows;

FIGURE 5 is an enlarged perspective view of the top quiver plate;

FIGURE 6 is an enlarged perspective view of the lower quiver plate;

FIGURE 7 is an end elevational view of a second embodiment of the arrow quiver assembly;

FIGURE 8 is a side elevational view of the quiver assembly shown in FIGURE 7;

FIGURE 9 is an enlarged fragmentary detail cross-sectional view, FIGURE 9 being taken substantially on the vertical plane line of 9—9 of FIGURE 8, looking in the direction of the arrows;

FIGURE 10 is an enlarged perspective view of a modified top plate;

FIGURE 11 is an end elevational view of a third embodiment of this invention;

FIGURE 12 is a side elevational view of the modification shown in FIGURE 11;

FIGURE 13 is an enlarged detail cross-sectional view, FIGURE 13 being taken substantially on the horizontal plane of line **13—13** of FIGURE 12, looking in the direction of the arrows;

FIGURE 14 is an enlarged fragmentary detail cross-sectional view, FIGURE 14 being taken substantially on the vertical plane of line **14—14** of FIGURE 12, looking in the direction of the arrows;

FIGURE 15 is an end elevational view of a fourth embodiment of this invention; and

FIGURE 16 is an enlarged perspective view of a further modification of a top plate constructed in accordance with this invention.

Referring now more specifically to the drawings, and with particular reference to FIGURES 1 to 5, inclusive, thereof, reference numeral **20** designates a conventional archer's bow having the usual centrally located handle portion **22** from the opposed ends of which longitudinally project, in diverging directions, the upper and lower bow limb components **24, 26**, respectively. The outer terminal ends, or the remotely disposed ends (not shown) of the limbs **24, 26** are notched or are otherwise provided with conventional anchoring means for the usual bow string **28**, the central portion only of which is shown in FIGURE 1.

Reference numeral **30** denotes, in general, an arrow quiver assembly constructed in accordance with the teachings of one embodiment of this invention. As is illustrated in FIGURES 1 to 5, inclusive, the quiver **30** comprises a substantially open rectangular frame including a pair of elongated, slender, stiff, cylindrical rods **32** disposed in laterally spaced and substantially parallel relation relative to one another. The rods **32** are held in their respective positions by means of a pair of longitudinally spaced and substantially parallel transversely extending brace members **33** (see FIGURES 1 and 4) of identical construction, each member **33** including an elongated substantially rectangular central web portion **33'** having its opposed ends terminating in arcuate sleeves **33'** which are welded or otherwise fixedly connected on the rods **32** inwardly spaced from each adjacent pair of ends thereof. The rods **32**, taken together with the cross braces **33** form the open rigid substantially rectangular frame to which reference was made above. Each rod **32** is externally threaded at its upper end portion **34** and its lower end portion **36** (see FIGURE 4), with the threaded end portions extending inwardly to, substantially, the adjacent one of the sleeves **33***b*.

At **38** (see FIGURE 5) is designated the upper or arrow head receiving quiver plate having a substantially L-shaped configuration. The plate **38** includes an elongated substantially rectangular leg portion **40** and a laterally projecting substantially rectangular foot portion **42** integral therewith. The outer longitudinally extending marginal edge of leg portion **40** is formed with a plurality of transversely extending arrow head receiving openings **44** at regularly spaced intervals therealong. Spaced inwardly from the openings **44** and adjacent the other longitudinally extending marginal edge portion of the leg **40** is a pair of longitudinally spaced transversely extending openings **46**, the function of the latter to be described more fully below.

The foot section **42** is formed with a centrally located U-shaped slot **48** which opens outwardly of its free end. The remotely disposed edges of the foot section **42** are each formed with a set of transversely extending notches **50, 52**, respectively, the slot **48** and notches **50, 52** all serving functions to be described infra.

The assembly **30** also includes a lower or bottom plate bearing the general reference numeral **54** which is also L-shaped in configuration and comprises an elongated leg

portion **56** and a laterally projecting foot section **58** (see FIGURE 6). The leg portion **56** adjacent its outer longitudinally extending marginal edge is provided with a plurality of inwardly spaced transversely extending arrow shaft receiving openings **60** which open into the plane of its outer edge **62** via the truncated U-shaped slot **64**. If desired, the plane of the outer edge **62** may be formed on a slight arc.

The width of each slot **64** at its truncated end **66** is, of course, appreciably less than the diameter of the associated opening **60**. The openings **60** correspond in number to the number of openings **44**, and the leg portion **56** is also formed with a pair of longitudinally spaced transverse openings **67** which are spaced inwardly from the openings **60**.

The foot section **58** is formed with a centrally located U-shaped slot **68** which opens outwardly of its free end. As in the case of the plate **38**, the foot section **58** is also provided with sets of notches **70, 72**, respectively, formed in side edges adjacent the slot **68**. The sets of notches **70, 72** extend transversely of the foot section **54** and correspond in number to the sets **50, 52** heretofore described and serve a function together with the slot **68** to which further reference will be made below.

Both slots **48** and **68** are somewhat wider at their respective inner ends, and, optionally, the positions of the sets of slots **50, 52** and **70, 72**, respectively, may be reversed relative to their respective foot sections **42, 58**. Additionally, each of the plates **38, 54** is preferably stamped or formed of a good grade of live rubber, or rubber compound or plastic materials. The material should be sufficiently rigid or stiff and be possessed of substantial strength so as when connected with its bow, as will be described infra, the plates will stand away from the bowed ends at substantially right angles with respect thereto. The rubber material, natural, synthetic, or other plastic from which the plates are formed must be sufficiently elastic and resilient enough to resist the cracking or splitting thereof at the inner ends of the slots **48, 68**.

Further, and still concerning the material or composition of the plate **38**, the same should be capable of resisting cutting by the arrow heads received in the openings **44**, and the material of the plate **54** must be sufficiently elastic and resilient so as to permit the adjacent fingers **74** to be forced open to pass an arrow through the slots **64** into the opening **60** and to thereafter squeeze back to lock the arrows therein and to hold them snugly and securely in place in such a manner that there may be no inadvertent axial movement of the arrow shaft relative to its associated opening. Again, the rubber or other material must have such a composition as to yield only under the application of force by the user's fingers to displace the arrow shaft from its opening **60** and slot **64**, and also be so composed as not to crumble or wear unduly as the arrow shafts are inserted and removed therefrom.

At **76** is generally denoted an arrow head shield or guard which may be formed of any suitable plastic or metal having sufficient strength to withstand shock, denting and other misadventure. The shield **76** includes an axially elongated arcuate dome **78** as its main body portion (see FIGURES 1 and 3) from a longitudinally extending marginal edge of which laterally and outwardly projects an elongated substantially rectangular flange **80** suitably apertured (not shown) adjacent each of its opposed ends. These two apertures are spaced apart a distance exactly corresponding to the distance between the two openings **46** in the plate **38** and the two openings **67** in the plate **54** so as to readily accept the ends of the quiver frame rods **32** in the assembly to be described, infra. The opposed edge of dome **78** continues into an elongated skirt **82** having opposed ends which are folded inwardly towards the flange **80** to form oppositely disposed end walls **84, 86** disposed below the dome or main body portion **78**. Integral with the main body portion **78** and at each end thereof is located a stop lug **88** disposed

in space confronting relation relative to the adjacent edge of the most proximate end wall **84, 86.**

The arrow head shield or guard **76** should be molded or formed of a good substantial plastic material or of a suitable metal. The dome portion **78** should be sufficiently thick, hard and rigid enough that it will not become dented or bent out of shape or permit the tips of the arrow head to penetrate the same.

The plastic material, if the shield **76** is made therefrom, should have such a composition that it will not become brittle or crack up in cold weather, nor should it be formed of any plastic composition which will enable the same to become so soft in hot weather as not to hold its predetermined and rigid configuration.

The material of the shield **76** should be treated to cut down reflection of light that might alert or startle the game being hunted and, therefore, the outer surface of this shield should be of a non-reflecting dark gray, brownish or dull green color, or of a comminglement of such colors for camouflage effect.

With the basic components of the first embodiment of this invention described with particularity above, it is readily apparent that the elements will lend themselves to packaging as a kit in knock-down form for retail sale and subsequent assembly by the purchaser. To assemble the quiver it is only necessary for the user to thread one of the nuts **90** on the lower threaded end portions **36** of each of the elongated rods **32.** Thereafter, the outer ends of the upper end portions **34** of each of the rods **32** are passed through the openings **46** formed in the plate **38,** and the lower threaded end portions **36** are passed through the corresponding openings **67** formed in the lower plate **54.** A nut **92** is then threaded on each of the lower end portions **36** to jam against the adjacent side of the lower plate **54** and to clamp the plate **54** against the adjacent side of the proximate nuts **90.**

The shield or guard **76** is now mounted by passing the dome **78** and its associated flange **80** over the upper side of the upper plate **38** in such a manner as to cause the outer free longitudinally extending marginal edge thereof to engage below the lugs **88** and the adjacent edges of the side walls **84, 86,** all in the manner shown in FIGURE 1 of the drawings. In effecting this assembly, the rods **32** may be threaded downwardly through the plate **38** a sufficient distance so that the outer free upper ends **34** of each of the rods **32** may extend through the openings (not shown) formed in the flange **80** and to which reference has been previously made. Thereafter, nuts **94** are threaded downwardly on the upper threaded ends **34** of each of the rods **32** to engage and clamp the flange **80** and adjacent portions of the plate **38** against the upper edge of the upper cross brace **33.**

The archer may, thereafter, insert one or more of the arrow heads **96** of a plurality of arrows **98** having shafts **100** into a selected one or ones of the openings **44** and push the shafts **100** thereof through the slots **64** and into their associated openings **60.**

From the foregoing description it is clear that the plates **38, 54** may be varied in the spacing therebetween in accordance with the type and length of the unbending bow handle section of the bow used.

With the quiver assembled in the manner described, it is a simple operation to mount the same on a conventional bow such as is illustrated by reference numeral **20.** In the construction given it is only necessary for the user to engage the upper limb **24** within the slot **48** of the plate **38** and to thereafter engage a rubber band or **102** other similar elastic flexible component within a selected one of the notches **50** and **52** and in so doing to traverse that edge of the limb **24** which lies immediately adjacent the open end of the slot **48,** all in the manner shown in FIGURES 1 and 3 of the drawings. The lower limb **26** may be then engaged within the slot **68** of the plate **54** and a similar elastic member **104** is engaged in a selected one of the slots **70** and **72** to pass around that edge of the lower limb **26** which lies adjacent the open end of the slot **68.**

As described above, each of the slots **48, 68** is provided with a slight taper whereby the upper and lower limbs **24, 26** when inserted therein become tightly wedged. The wedging is not sufficient, however, as to cause any indentation or marking on the bow limbs.

With respect to the assembly steps referred to above, the related sequential order thereof need not be followed for the assembly steps for the bow quiver **30** may take place in the sequential order of the user's preference.

Before terminating the description of this embodiment of the bow quiver illustrated in FIGURES 1 to 5, inclusive, it is stressed that the two cylindrical brace members **32** are essential and very necessary, for without these rods the quiver would not function properly and would be quite useless. That such components must be provided becomes clear when it is considered that in the use of the bow quiver, and when the heads of the arrows are forced up into the arrow head bores **44** formed in the plate **38,** they would soon push the plate **38** up out of its proper location on the upper end of the unbending bow handle section, and the jarring action or effect of the bow when being shot would cause the lower plate **54** to slide down on the lower bow limb **26** further than it should thereby destroying the effectiveness of this bow quiver construction. It is necessary and essential that the rods **32,** together with the component elements assembled thereon, must hold the upper and lower plates in their proper spaced distance relative to one another. Further, with the right-hand and left-hand assembling feature of this quiver, the rods **32** and complementing assembly must hold the hood **78** in fixed position on whichever side of the plate **54** the hood **78** and the plate are assembled and connected together. Reiterating, the rods **32** and component accessories are necessary to provide the user with means to vary the spacing between the plates **38** and **54** in accordance with the type and length of the unbending handle section of the bow being used.

FIGURES 7 to 10, inclusive, illustrate a second embodiment of this invention wherein component elements finding their counterpart in the precluding embodiment bear the same reference numeral but to which has been added the reference letter "a." The principal changes in construction involve the provision of a modified top plate **206,** the details of construction of which are shown in FIGURE 10, and the inclusion of an elongated block of sponge rubber **210,** to which further reference will be made, the latter being adapted to be seated within the shield **76*a*** to receive arrow heads therein. Otherwise the quiver construction is essentially the same as that described above including the necessary open frame construction comprising the pair of laterally spaced rods **32*a*** having threaded end portions **34*a*** and **36*a,*** the rods being held in their spaced and parallel relationship by means of the cross braces **33*a,*** as before, and the latter are formed, of course, of a stiff metal securely welded or otherwise fixedly connected to their associated rods **32*a*** immediately adjacent the inner ends thereof at the inner terminal of the threaded end portions **34*a*** and **36*a.*** This provides a quiver frame assembly with a suitable degree of rigidity.

The top plate **206** (see FIGURE 10) is similar to the plate **38** (see FIGURE 5) with the exception that the width of the leg portion **40** has been reduced and the openings **44** eliminated. Otherwise the two plates **38, 206,** are identical in construction, one with respect to the other. The lower plate **54*a*** is identical with respect to the construction of the plate **54** and requires no further description.

The plate **206** is fitted on the rods **32*a*** by passing the threaded ends **34*a*** through the openings **46*a*** in the same manner as described above, the plate in this embodiment of the invention coming to rest on the upper edge of the

uppermost one of the brace members **33***a*. The flange **80***a* of the shield **76***a* is mounted on the upper threaded ends **34***a*, exactly as described in the preceding embodiment, the threaded upper ends **34***a* of the rod **32***a* each passing through one of the openings formed in the flange **80***a* described above and here assigned the reference numeral **208** as is shown in FIGURE 9 of the drawings. The nuts **94***a* maintain this top assembly with component elements thereof releasably retained in their described positions.

The shield **76***a* has the same component construction as the shield **76** of the preceding embodiment with the exception that the dome or arcuate shaped main body portion **78**a is now completely filled and is occupied by a block of sponge rubber **210** or other similar elastic and resilient material. As is seen in FIGURE 9 of the drawings, the exposed side of the block **210** is substantially planar in configuration and at its opposed ends the block **210** engages the lugs **88**a which serve as stops to prevent the inadvertent displacement of the sponge rubber block **210** from the main body portion **78***a*. The shield construction **76***a* is otherwise identical with respect to the shield **76**.

The lower plate **54***a* is identical in construction with respect to the plate **54** of the preceding embodiment and is mounted on the rods **32** in the manner heretofore described; and, the plates **206** and **54***a* are engaged with the upper and lower bow limbs **24***a*, **26***a* in the exact manner presented above.

The arrow shafts **100***a* are engaged in the openings of the lower plate **54***a* exactly as described above, and the arrow heads **96***a* are caused to releasably penetrate within the sponge rubber block **210** in the manner shown in FIGURE 7.

At this point it is deemed important to note that the bow quivers **30** and **30***a* are shown as being mounted on their respective bows for use by either left or right-handed archers. The quivers are easily changed from the proper right side of the bow attachment and use assembly to the proper assembly for attachment and use on the left side of the bow, and vice versa, through the simple expedient of inverting the plates **38**, **54** and **206**, **54***a* and reversing the ends of the guard **76** or **76***a* and securing them back in their proper places on the quiver frame rods **32** or **32***a*. This feature of the invention is clearly demonstrated through a comparison of FIGURE 1 with FIGURE 7 of the drawings.

It is again believed to be necessary to reemphasize the utility of the two brace rods **32***a*. In the absence of these rods, the successive insertion of the heads of the arrows up into the sponge rubber block **210** would soon cause the plate **206** to be pushed upwardly out of its proper place on the upper end of the unbending bow handle section, all as has been explained above, and this would be attended by the disadvantages which have been noted, supra.

In FIGURES 11 to 14, inclusive, is illustrated a third embodiment of this invention. Again, and in these figures, the component elements of this embodiment of the invention which find their counterpart in the preceding embodiments have been assigned the same reference numerals but to which has been added the differentiating identification letter "*b*." In this embodiment of the invention the quiver assembly **30***b* is seen to include the pair of laterally spaced substantially parallel elongated rods each bearing the reference designation **32***b*, and each rod is threaded at its respective upper end as is indicated by reference numeral **34***b*. The lower ends of the rods are also threaded as designated by **36***b*, but in this instance the threads **36***b* extend over a greater axial length of each of its associated rods than as in the preceding embodiments.

The quiver **30***b* is provided with an upper and lower mounting plate bearing the reference numerals **206***b* and **206'***b*, respectively, which are identical in construction with respect to the plate **206**. Each of the plates **206***b* **206'***b* is mounted on the rods **32***b* and is held in adjusted position by means of the nuts **90***b*, **92***b* and **94***b*, all as heretofore described. The plates **206***b* and **206'***b* engage, respectively the upper and lower bow limbs **24***b*, **26***b* and are held securely thereon as by the elastic bands **102***b*.

The shield **76***b* of this embodiment of the invention includes the axially elongated dome shaped wall **78***b* from the longitudinally extending marginal edge of which laterally projects the aforedescribed substantially rectangular and elongated mounting flange **80***b*. In this embodiment of the invention it is preferable that the shield **76***b* be provided with opposed closing end walls **300**, **302** and the receptacle formed by the dome shaped wall **78***b* and the side walls **300**, **302** is substantially filled and occupied by a block of sponge rubber **210***b* (see FIGURE 14). The flange **80***b* is mounted over the threaded upper ends **34***b* of the rods **32***b* and is held in place by the aforedescribed nuts **90***b*, **94***b*.

The lower arrow shaft gripping plate in this modification bears the general reference numeral **310** and is, in effect, a compound member. The lower plate **310** is seen to comprise a substantially L-shaped back member **312** having a normally upright leg portion **314** from the lower end of which laterally projects a foot section **316**. The leg portion **314**, adjacent each end thereof, is provided with an arcuate recess **318** having its longidinal axis perpendicular to the plane of the foot section **316**. The plate **310** further includes a front member also having a substantially L-shaped configuration which includes a normally upright leg portion **322** from the lower end of which projects a substantially hollow rectangular housing forming the foot section **324**. The leg portion **322**, as in the leg portion **314**, is formed adjacent each end thereof with a substantially upright arcuate recess **326** adjacent each end thereof, and the back and front members **312**, **320**, respectively, are juxtaposed relative to one another with their respective foot portions **314**, **322** being imposed against one another in surface-to-surface engagement.

The housing **324** includes the top and bottom walls **328**, **330** (see FIGURE 12) which are disposed in vertically spaced and substantially parallel relationship relative to one another, and these plates are held in their respective positions by means of the connecting side walls **332**, **334**. The back of the housing **324** is, of course, closed by the lower end of the leg portion **322**.

Disposed within the housing **324** and fixedly secured therein by conventional means is an insert **336**, the insert **336** including an outer end portion **328** which projects beyond the outer longitudinally extending marginal edges of the top and bottom walls **328**, **330**, respectively. This insert is formed of substantially the same material as is the plate **54** and is provided with related construction details such as, for example, the arrow receiving openings **330** which extend transversely through the projecting end and to which access is gained via the slots or notches **332**. The sides of the slots or notches **332** are provided with the manually operable fingers **334** which serve substantially the same function as fingers **74**.

The back member **312** is suitably apertured to receive therethrough adjacent each end thereof one of the rods **32***b* (see FIGURES 11, 12 and 13), and the plate **310** is held in adjusted axial relationship relative to the rods **32***b* by means of the adjusting and securing nuts **336**, **338**, which engage on opposite sides of the foot section **316**.

Disposed and fixedly secured within the substantially hollow cylindrical sleeves formed by the confronting concave recesses **318**, **326** are the remotely disposed ends of the arms **340**, **342** of a substantially U-shaped brace **344**. These remotely disposed ends of the arms **340**, **342** are fixedly secured within the defined above-mentioned sleeves and project upwardly from the lower plate **310** and into the shield **76***b* adjacent each end thereof. The

upper end of each arm **340**, **342** is arcuately bent to follow the configuration of the dome shaped wall **78***b* (see FIGURE 14) and continues transversely thereacross from one longitudinally extending marginal edge to the other whereupon the inner terminal ends of the arcuately shaped portions **346** are bent laterally at right angles to the longitudinal axis of the arms **340**, **342** to form a connecting bight **348**. The purpose of the wire frame member **344** is, of course, to provide some rigidity and stability to the connecting elements.

The openings **330** receive the shafts **100***b* of the arrows therein while the heads **96***b* are embedded within the block **210***b*.

In FIGURES 15 and 16 is disclosed the last of the embodiments of this invention to be described and illustrated. This embodiment involves substantially the same components as in the preceding embodiment and again, the elements of this embodiment having counterparts in the preceding embodiments bear the same reference numeral but to effect differentiation therebetween there has been added the further identifying letter "*c*."

Thus, and in referring specifically to FIGURE 15, it is seen that essentially the same components are illustrated therein as are to be found in the preceding embodiment of FIGURES 11 to 14, inclusive. The major modification which distinguishes the embodiment of FIGURE 15 from the embodiment of FIGURES 11 to 14, inculsive, comprises the replacement of the two rods **32***b* with four stub bolts or rods **400**. In effect the embodiment of FIGURE 15 is exactly that of FIGURES 11 to 14, inclusive, with the central portions of the rods **32***b* being removed. In all other respects the two embodiments of the inventive concept are identical. But it here should be noted that in utilizing the embodiment of FIGURE 15 less weight is involved which is a material advantage, and that this is accomplished with but small sacrifice in the strength of the assembly.

In the use of the apparatus described above, it has been found advantageous to preform arrow head receiving bores **402** in those embodiments of this invention which utilize the sponge rubber blocks **210**, **210***b* (see FIGURES 7 and 14), and while this construction is optional due to the nature of the material making up the blocks **210**, **210***b*, some archers prefer this added convenience.

Further, this embodiment of the invention also contemplates the use of a modified top plate **500** as is shown in FIGURE 16. Here again the plate **500** has counterparts which are found in preceding embodiments and these bear the same reference numerals and to which have been assigned the reference letter "*c*". The plate **500** may be readily substituted for the top plate **206** (see FIGURES 7, 9 and 10) if desired. Basically, the plate **500** differs from the plate **206** in that the leg portion **40***a* is wider and is provided with an elongated substantially rectangular transversely extending slot **502**. In assuming the substitution of the top plate **500** for the plate **206**, the assembly is as described above with the exception that the shield or arrow head guard **76***c* is now disposed in overhanging relationship relative to the slot **502** with the lower exposed side of the block **210** superimposed on the selected side (depending upon whether the user is right or left-handed) of the leg portion **40***c* and with the openings **400** registering with the slot **502**.

Having described and illustrated several preferred embodiments of this invention in detail, it will be understood that the same are offered merely by way of example, and that this invention is to be limited only by the scope of the appended claim.

What is claimed is:

1. An arrow quiver for attachment to an archer's bow having a handle and upper and lower bow limbs diverging therefrom and including a pair of opposed sides therefor, said quiver being adapted to releasably receive a plurality of arrows each having an arrow head and shaft, said quiver comprising:

a pair of spaced substantially L-shaped plates including, respectively, a leg portion and a foot section;

means on each of said plates for effecting, respectively, detachable connection on said upper and lower bow limbs with said plates projecting laterally from a selected side thereof, said means being further operable to detachably connect said plates on said bow limbs to project laterally from the other side thereof upon inversion of said plates, each of said foot sections having a transverse slot formed therein extending inwardly from its respective outer end and comprising said detachable connecting means;

a pair of spaced elongated and substantially parallel rods having opposed adjacent pairs of ends, said rods extending transversely through the leg portion of each of said plates to slidably mount said plates for adjustment longitudinally on said rods;

the leg portions of the one of said plates connecting with the upper bow limb having a plurality of openings extending transversely therethrough to receive, respectively, a portion of an arrow head therein;

arrow head shield means comprising an elongated hollow normally downwardly opening arcuate wall having a flange projecting laterally and outwardly from a longitudinally extending marginal edge of said wall, said flange being superimposed on said leg portion of said one plate and slidably mounted on the adjacent pair of ends of said rods, said arcuate wall extending across the outer terminal ends of said arrow heads in spaced relation relative thereto;

said arcuate wall having its other edge projecting below said one plate and continuing into an elongated skirt terminating at each of its ends in end walls extending in the direction of said flange and engaging below said one plate for extension across the inner ends of, respectively, adjacent ones of said arrow heads, and stop lugs projecting laterally from said wall adjacent its said other edge for engagement over said one plate, the adjacent edges of said skirts and lugs cooperating to clamp said one plate against movement therein;

the other of said plates being detachably connected with the lower bow limb and having a plurality of slots extending transversely therethrough and corresponding in number to the number of said openings formed in said one plate and aligned therewith, said slots opening into the adjacent peripheral edge of its associated plate to receive a portion of an arrow shaft therein;

a pair of rigid substantially rectangular cross-braces extending between and having their opposed ends fixedly connected on said rods intermediate said plates;

means on said rods to clamp said flange of said shield and said leg portion of said one plate in adjusted position on said rods; and

means on said rods cooperating with said leg portion of said other of said plates to hold said other plate in an adjusted position on said rods.

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