Oct. 12, 1954 D. E. TOMPKINS 2,691,399

QUIVER CONSTRUCTION

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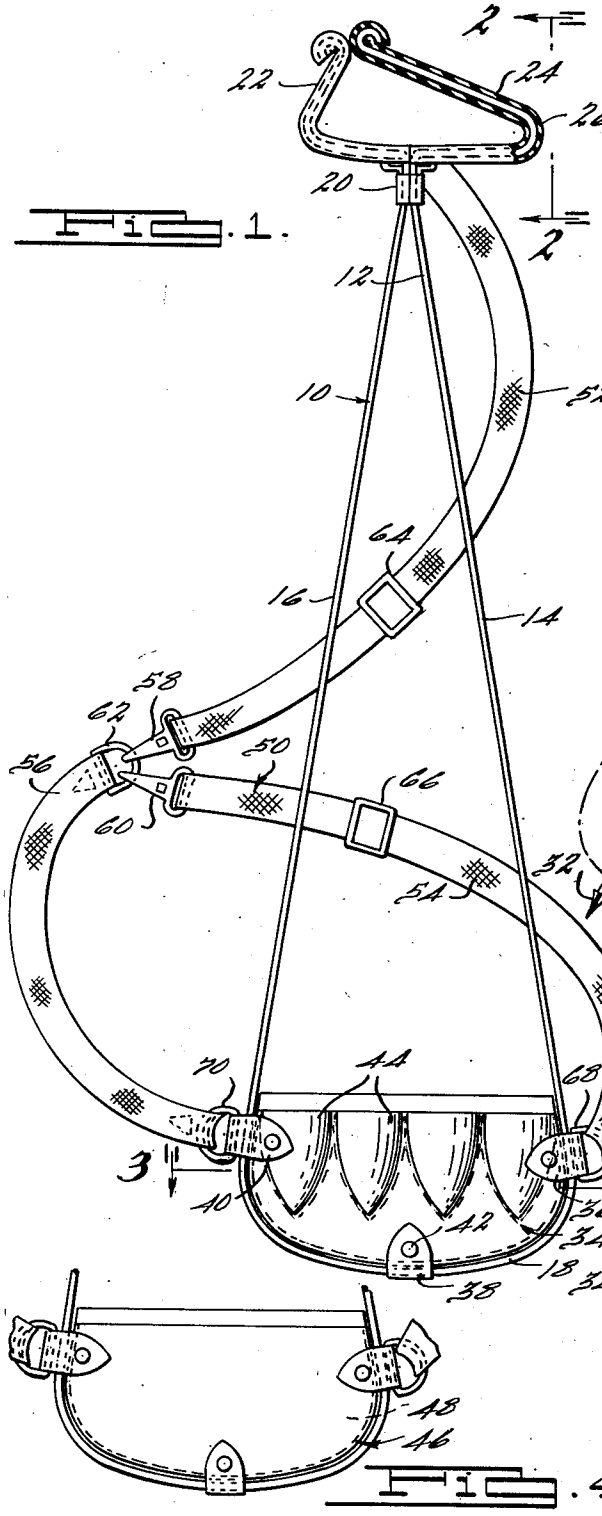


Fig. 1.

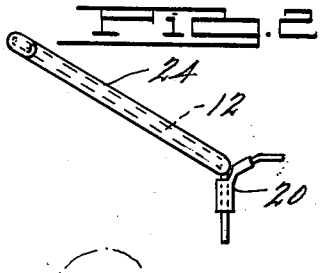


Fig. 2.

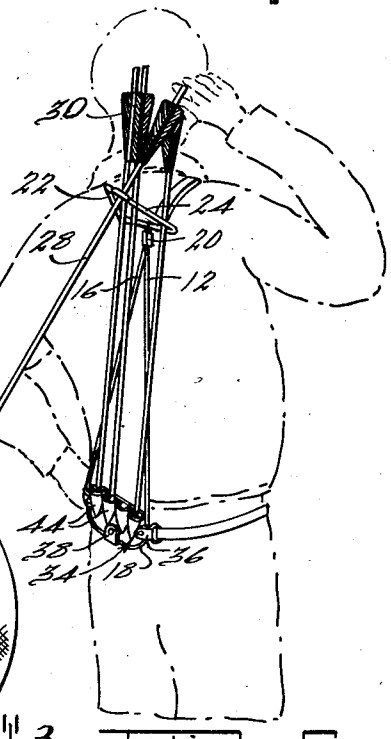


Fig. 5.



Fig. 3.

Fig. 4.

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QUIVER CONSTRUCTION

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5 Claims. (Cl. 150—1.5)

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This invention relates to a quiver and, more particularly, to an improved hunting quiver of the type carried on an archer's back.

In quivers of this type, the arrows are commonly carried with the shafts lying against the archer's back and the nock ends projecting upwardly above the top portion of the quiver where they may be easily grasped by the archer. Many archers prefer such quivers since they are inobtrusive and do not obstruct or impede the archer's movements. However, prior quivers of this type are subject to the defect that the motion necessary to remove an arrow requires the archer to raise his hand above his head in order to extract the full length of the arrow, including the arrowhead, through the top portion of the quiver. Such quivers are especially objectionable when hunting since the game must be carefully stalked and the hand motion is very likely to frighten the game.

Accordingly, an object of the present invention is to overcome the disadvantages present with quivers of the type above referred to and to provide a light weight quiver adapted to be carried on an archer's back and from which arrows may be easily removed without pulling the full length of the arrow and the arrowhead through the top portion of the quiver.

Another object of the present invention is to provide an improved quiver having simple and efficient means for quietly retaining a plurality of arrows and particularly adapted to facilitate quiet, random extraction of such arrows with a minimum of vertical motion.

A still further object of the invention is to provide a durable hunting quiver which is simple in construction, economical of manufacture, pleasing in appearance, and which may be readily repaired in the field.

A still further object of the invention is to provide a weather resistant quiver that can be easily and quickly secured for maximum carrying convenience on an archer's back and which has detachable, interchangeable arrowhead holding and protecting means.

Still another object of the invention is to provide an improved quiver which may be readily adapted for either right-hand or left-hand use and from which arrows may be quietly extracted without marring or cutting adjacent arrows.

The above as well as other and in certain cases more detailed objects will become apparent from the following description and the appended claims. Preferred, but illustrative, embodiments of the invention are illustrated in the accompanying drawing throughout the several views of which corresponding reference characters designate corresponding parts and wherein:

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Figure 1 is a rear elevational view of one form of the invention;

Fig. 2 is a fragmentary side view taken on the line 2—2 of Fig. 1;

Fig. 3 is a sectional view taken on the line 3—3 of Fig. 1;

Fig. 4 is a fragmentary rear elevational view showing another form of the invention;

Fig. 5 is a perspective view of the form of the invention shown in Fig. 1, secured to an archer's back and showing a partially withdrawn arrow.

Referring to the drawings, a frame generally designated 10 is provided, formed of a single piece of wire bent in the form of an elongated, tapered loop lying in a substantially vertical plane and having relatively long side portions 14 and 16 joined at the lower end by an integral bight portion 18, the upper end portion of the loop being joined at a position near, but spaced from, the ends of the wire 12 by a clip 20 which is crimped over the wire. While the wire may be of any suitable metal so long as it has a limited spring capacity, it is preferred to form the loop of relatively heavy aluminum wire. Eight gauge wire has been found satisfactory.

As perhaps best seen in Figure 2, the upper end portions of the wire 12, which project above the clip 20, are bent in the form of cooperating arms 22 and 24 which project laterally away from each other and then rearwardly and upwardly toward each other, the arm 22 being slightly shorter than the arm 24. The arms 22 and 24 are covered by resilient tubing 26, which may be made of rubber or other suitable material, and serve as a yieldable retainer which embraces the shafts 28 of the arrows adjacent but below the fletching 30, as best seen in Fig. 5. Arms 22 and 24 are under sufficient tension to retain the full weight of the arrows, but may be separated when relatively little additional rearward pressure is exerted thereon by an arrow shaft so as to form an opening through which the arrow shaft may be withdrawn.

For the purpose of receiving and holding the heads of the arrows, such as 32, a pocket member 34 is provided adjacent the bight portion 18 of the frame. Pocket member 34 may be made of leather, fabric, plastic, or other suitable material, and is releasably secured to the frame by flaps 36, 38, and 40 having conventional fastening means such as snaps 42.

As shown in Figure 3, pocket member 34 is

provided with a plurality of relatively shallow pockets, such as 44, each shaped to fit snugly a single arrowhead. It will be appreciated that the relative size and shape of the pockets will vary with the particular size and type of head carried by the arrow shafts, and therefore different pocket members are required for different types of hunting heads. It will be apparent that such a construction provides full protection for the sharpened arrowheads; ample protection for the shafts and fletching; and permits the archer to interchange the pocket members to accommodate particular arrowheads. Such a construction also permits the archer to economically replace pocket members when they are no longer serviceable. In Figure 4, a detachable pocket member 46 is shown having one large pocket 48 particularly adapted to receive and hold a relatively large number of field, blunt, or target heads.

Frame 10 is releasably secured to the archer's back, with the bight portion 18 projecting downwardly and the side portions 14 and 16 lying against his back, by means of the adjustable harness 50. Harness 50 is comprised of three straps, 52, 54, and 56 releasably joined at one end by fasteners 58 and 60 and D-ring 62. The straps may be made of leather, webbing, plastic, or other suitable material and are provided with buckles 64 and 66 to facilitate adjustment of the harness to the particular requirements of the individual archer.

The other ends of the straps 54 and 56 are releasably secured to the lower portion of the frame 10 by D-rings 68 and 70 retained by the flaps 36 and 40, and the clip 20 is crimped over the end portion of the strap 52 to secure the strap 52 to the top portion of the frame.

When the present invention is used by a right-handed archer, it may be secured to his back by passing the strap 52 over his right shoulder and joining it by means of the fastener 58 to the straps 54 and 56 which pass around his waist and are joined by means of fastener 60 and D-ring 62. It will be appreciated that such a construction permits an archer to walk, crawl, bend, or twist while stalking the game and obviates the tendency of the quiver to become misaligned because of such movements.

The archer may withdraw arrows, which have been previously placed in the quiver, by reaching over the right shoulder and grasping any arrow at random at the nock end of the shaft. He then lifts the shaft sufficiently to extract the arrowhead from the relatively shallow pocket and then swings the head portion of the shaft rearwardly upwardly and angularly as illustrated in Figure 5. As previously mentioned, the arms 22 and 24 are inclined rearwardly and upwardly and when the shaft is extending at an angle approximately perpendicular to the plane of the arms, the slight rearward pressure exerted by the shaft is sufficient to separate the arms so as to form an opening through which the shaft passes. The arrow may then be drawn horizontally over the archer's shoulder and positioned on the bow. It will be appreciated that the archer is thus able to withdraw an arrow from the quiver and position it on the bow without at any time raising the arrow or his hand above his head.

Because of the upward inclination of arms 22 and 24 a greater force must be exerted by an arrow to separate the arms when the arrowhead is in a pocket than is required when the arrow occupies the inclined position illustrated in Fig. 5 during removal. This prevents accidental dislodgment. The snug fit of the pockets on the arrowheads also resists rearward movement of the nock ends of the arrows and holds the arrows against the archer's back.

Obvious changes may be made in the above described construction to adapt the present invention for use by a left-handed archer.

It is to be understood that the above-described arrangements are illustrative of the application of the principles of the invention. Numerous other arrangements may be devised by those skilled in the art without departing from the scope and spirit of the invention.

What is claimed is:

1. A quiver comprising a relatively flat body portion, means for securing the body portion to the back of an archer, shallow pocket means adjacent the lower edge of the body portion for receiving and holding the head ends of arrows with the nock ends projecting upwardly and the shafts exposed on the rear side of the body portion, and yielding retaining means adjacent the top of the body portion for holding the shafts of said arrows against movement away from the body portion, said yielding means including a pair of arms which project rearwardly from the body portion and loosely embrace the upper ends of the arrow shafts, the outer ends of said arms being in contact with each other at a point spaced to a substantial extent rearwardly of the normal position of the arrows, said arms being of yielding construction so that they may be separated by lateral pressure exerted by the shaft of an arrow in a direction away from the archer's back to form an opening through which the shaft of the arrow may be removed without pulling the head end of the shaft above the yielding means.

2. A quiver comprising a relatively flat body portion, means for securing the body portion to the back of an archer, shallow pocket means adjacent the lower edge of the body portion for receiving and holding the head ends of arrows with the nock ends projecting upwardly and the shafts exposed on the rear side of the body portion, and yielding retaining means adjacent the top of the body portion for holding the shafts of said arrows against movement away from the body portion, said yielding means including a pair of arms which project rearwardly and upwardly from the body portion and loosely embrace the upper ends of the arrow shafts, the outer ends of said arms being normally in contact with each other at a point spaced to a substantial extent rearwardly of the normal position of the arrows but being separable by rearward pressure exerted thereon by an arrow shaft to form an opening through which the shaft may be disengaged from the retaining means when the arrow is grasped at its nock end by the archer and the head end swung rearwardly and upwardly toward a position in which the shaft extends horizontally from the archer's shoulder.

3. A quiver comprising a wire frame formed of a single piece of wire in the form of a closed loop lying in a substantially flat plane, said loop having a pair of long side portions joined by a shorter bight portion, means for securing said frame to an archer's back with the bight portion projecting downwardly and the side portions lying against his back, means joining the upper ends of the side portions, means car-

ried by the frame adjacent the bight portion forming shallow pocket means to receive the heads of arrows with the nock ends of said arrows projecting upwardly and the shafts lying against the archer's back, the free ends of said wire projecting beyond said joining means and forming a pair of arms which project rearwardly from the archer's back adjacent the upper ends of the side portions and toward each other to embrace the shafts of arrows adjacent but below the fletching, said arms being yieldable under rearward pressure exerted by an arrow shaft to separate and permit withdrawal of an arrow without pulling the head ends of the shafts upwardly through the embracing arms.

4. A quiver comprising a wire frame formed of a single piece of wire in the form of a closed loop lying in a substantially flat plane, said loop having a pair of long side portions joined by a shorter bight portion, means for securing said frame to an archer's back with the bight portion projecting downwardly and the side portions lying against his back, means joining the upper ends of the side portions, means carried by the frame adjacent the bight portion forming shallow pocket means to receive the heads of arrows with the nock ends of said arrows projecting upwardly and the shafts lying against the archer's back, the free ends of said wire projecting beyond said joining means and forming a pair of arms which project rearwardly and upwardly from the archer's back adjacent the upper ends of the side portions and toward each other to embrace the shafts of arrows adjacent but below the fletching, said arms being yieldable under rearward pressure exerted by an arrow shaft to separate and permit withdrawal of an arrow without pulling the head ends of the shafts upwardly through the embracing arms.

5. A quiver comprising a wire frame formed of a single piece of wire in the form of a closed loop lying in a substantially flat plane, said loop having a pair of long side portions joined by a shorter bight portion, means joining the upper ends of the side portions, removable shallow pocket means adjacent the bight portion for receiving and holding the head ends of arrows with the nock ends projecting upwardly, means for securing said frame to the back of an archer, said securing means comprising a pair of waist straps and a shoulder strap releasably joined at one end, the other ends of said waist straps releasably secured to said frame by said pocket means, the other end of said shoulder strap secured to said frame by said joining means, the free ends of said wire projecting beyond said joining means and forming a pair of arms which project rearwardly and upwardly from the archer's back adjacent the upper ends of the side portions and toward each other to embrace the shafts of arrows adjacent but below the fletching, said arms being yieldable under rearward pressure exerted by an arrow shaft to separate and permit withdrawal of an arrow without pulling the head ends of the shafts upwardly through the embracing arms.

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