The present invention relates to improvements in a combination arrow and slingshot and contemplates particularly certain improvements in an arrow which renders the same better adapted for use in connection with a modified slingshot frame structure.

It has been proposed heretofore to provide various means in which a conventional slingshot frame can be modified to provide a suitable arrow seat so that the slingshot may be used for projecting arrows instead of smaller objects such as pebbles, marbles and the like.

Certain adapters for a slingshot frame have been claimed and described in my co-pending application Serial Number 189,953 filed on the 13th day of October, 1950, now Patent No. 2,619,658. In slingshots of the character described it is customary to use an elastic sling in the form of a relatively wide band, and if an arrow is to be used in connection with a slingshot frame, it becomes necessary to grip the rear end of the arrow through a central hilt in the band.

In the conventional construction of an arrow the rear end is of the same diameter as the body of the arrow and is formed with a slit adapted to engage over a bow string.

A rear end of this character is difficult to grip through the hilt in a relatively wide sling, and it is proposed in the present invention to provide an enlargement at the extreme rear end of the arrow so as to form a better gripping surface and to prevent accidental slipping of the arrow when the sling is under considerable tension.

The conventional arrow is also usually provided with an annular series of feathers immediately adjacent the rear end thereof, the feathers tending to guide the arrow through the air.

Where the arrow is intended to be used in connection with a slingshot frame, the feathers in their conventional location would be caught between the converging stretches of the sling immediately adjacent the hilt and would soon become shapeless.

It is therefore proposed, as a further object of the present invention, to set the feathers forward along the length of the arrow body so that they will clear the converging stretches of the sling adjacent the hilt.

Further objects and advantages of my invention will appear as the specification proceeds, and the novel features of my invention will be fully defined in the claims attached hereto.

The preferred form of my invention is illustrated in the accompanying drawing, in which Figure 1 shows a side view of an arrow made in accordance with my invention.

Figures 2, an enlarged side view of the same arrow, with a considerable portion broken away.

Figure 3, a section taken along line 3—3 of Figure 2, and

Figure 4, a perspective view illustrating the use of my improved arrow with a slingshot frame having an arrow rest embodied therein.

While I have shown only the preferred form of my invention, I wish to have it understood that various changes and modifications may be made within the scope of the claims attached hereto without departing from the spirit of the invention.

Referring to the drawing in detail, my arrow may have a body 2 of conventional form, with a suitable tip 3 at the forward end of the body.

The rear end of the arrow is formed with a preferably ball-shaped enlargement 4 to facilitate gripping of the rear end through the hilt of a slingshot, and the feathers 5 Conventionally applied to the body of the arrow immediately adjacent the rear end thereof, are set forward a suitable distance, say about three or four inches, where the total length of the arrow is approximately two feet or more. This will bring the feathers substantially midway of the length of the tenoned hilt, as shown in Figure 4.

Figure 4 illustrates the manner in which the arrow is to be used in connection with a slingshot. The latter is shown as comprising a body portion 6 having a handle 7 and a pair of spaced legs 8 having an arrow adapter 9 mounted thereon, with an open top arrow rest 10 mounted between the legs. The arrow adapter may be made according to the teachings of the co-pending application, or for the purposes of the present invention may form an integral part of the slingshot frame. An elastic band 11 or sling has its ends secured upon the slingshot frame on opposite sides of the arrow rest and the central portion of the sling may be gripped to form a fold 12 in which the enlarged rear end of my arrow may be accommodated. As the fold is retracted in the manner shown to place the sling under tension, the stretches on opposite sides of the fold converge to form a very acute angle, and it will be seen from the drawing that the advancing of the feathers along the length of the arrow body causes the feathers to clear the extreme end of the fold.

It will thus be seen that the enlargement at the end of the arrow insures a firmer grip through...
the fold while the advancing of the feathers along the arrow body allow the latter to clear the extreme end of the fold. Since the enlarged end of the arrow has to pass the seat or rest 10, the latter is made in the form of an open groove which allows the arrow to free itself for the passing of the enlargement.

I claim:

1. In combination, a slingshot frame having a handle and an open-top arrow rest mounted opposite the handle, an elastic sling having opposite ends secured to the frame on opposite sides of the rest and adapted to form a fold intermediate the length thereof, the sling being in the form of a band having a width greatly in excess of its thickness at the fold, and an arrow having a rounded shaft adapted for lying on the rest and having an enlargement at the rear end thereof adapted to lodge within the sling fold, the enlargement being substantially ball-shaped to present a rounded rear face to the sling material at the fold, and a closely related rounded front face adapted to be gripped through the sling material by finger tips used for tensioning the sling.

2. In combination, a slingshot frame having a handle and an open-top arrow rest mounted opposite the handle, an elastic sling having opposite ends secured to the frame on opposite sides of the rest and adapted to form a fold intermediate the length thereof, the sling being in the form of a band having a width greatly in excess of its thickness at the fold, and an arrow having a rounded shaft adapted for lying on the rest and having an enlargement at the rear end thereof adapted to lodge within the sling fold, the enlargement being substantially ball-shaped to present a rounded rear face to the sling material at the fold, and a closely related rounded front face adapted to be gripped through the sling material by finger tips used for tensioning the sling, and the arrow shaft having feathers thereon substantially midway of the length of the tensioned sling so as to cause the feathers to clear converging stretches of the sling adjacent the fold.

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