

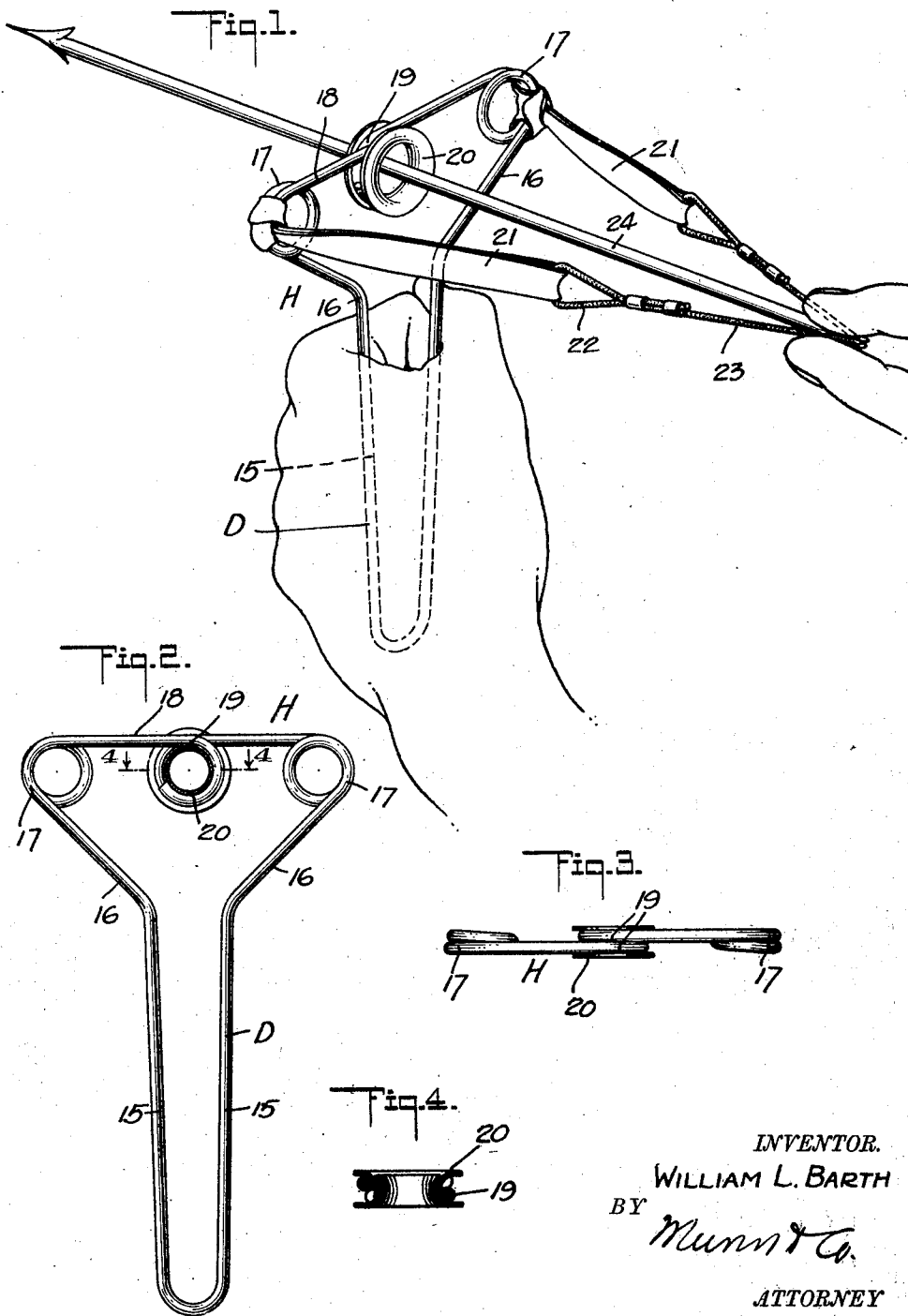
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CATAPULT

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CATAPULT.

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To all whom it may concern:

Be it known that I, WILLIAM L. BARTH, a citizen of the United States, and a resident of Venice, in the county of Los Angeles and State of California, have invented certain new and useful Improvements in Catapults, of which the following is a specification.

My invention relates to catapults for the projection of arrows and similar projectile, and the purpose of my invention is the provision of a catapult of this character capable of being manufactured at a relatively low cost and embodying a rigid and durable supporting frame constructed of wire bent to provide a head having attaching rings or eyes to which the arrow impelling members are secured, a third ring or eye functions as a guiding and supporting member for the arrow, and a handle by which the head can be grasped and firmly held in one hand while placing the impelling members under tension with the other hand in the projection of the arrow, whereby the full impelling force of the impelling members can be utilized and the accurate aiming and projecting of the arrow facilitated.

I will describe only one form of catapult embodying my invention and will then point out the novel features thereof in claims.

In the accompanying drawings—

Figure 1 is a view showing in perspective one form of catapult embodying my invention illustrating the manner in which it is used for the projection of arrows.

Figure 2 is a view showing in side elevation and partly in section the supporting frame embodied in the catapult shown in Figure 1, the guiding spool of the device being shown in section.

Figure 3 is a top plan view of the supporting frame shown in Figure 2.

Figure 4 is a horizontal sectional view taken on the line 4—4 of Figure 2.

Referring specifically to the drawings, in which similar reference characters refer to similar parts in each of the views, my invention in its present embodiment comprises a supporting frame constructed of relatively heavy wire, such wire in the present instance being of a single length and bent to provide a head H of substantially triangular form, and a handle D of substantially U-form depending from the head and

adapted to be gripped in the hand of the operator in the manner illustrated in Figure 1. In the formation of the frame, the wire is bent medially of its ends to form the handle D, the side strips 15 of the handle slightly converging with respect to each other and having their ends extended to form two sides 16 of the triangular head H. Beyond the side portion 16 the wire is looped upon itself at the two corners of the triangle to form rings or eyes 17, and beyond the loops, the wire is extended tangentially and toward each other to form the other side 18 of the triangular head, such head constituting a bridge. The ends of the portion 18 are bent upon themselves as clearly shown in Figures 2 and 3 to form registering loops 19 which co-operate to provide an eye or ring disposed centrally between the ring 17 and in vertical alinement with the handle D.

In order to permanently connect and secure the loops 19 in registering relation, a spool 20 is extended through the loops. This spool as clearly shown in Figure 4 consists of two ringlike sections of concavo-convex form in cross section and extended one within the other so that their inner portions are disposed in overlapped and interlocked relation to each other. Their outer portions are shaped to prevent inward displacement of the sections so that the spool as a unit is firmly secured within the loops.

As clearly shown in Figure 1, impelling members 21 are attached to the rings or eyes 17, these impelling members in the present instance being elastic bands which are looped about the rings so as to secure one of their ends to the rings, the opposite ends being permanently attached to the looped ends of a cord 23.

In practice, the curved end of an arrow 24 receives the cord 23 in the manner shown in Figure 1, the arrow being extended through the guiding spool 20 so as to be centrally positioned between the ring 17. By grasping the handle D with one hand, the supporting frame can be rigidly held, the other hand simultaneously gripping the cord and arrow, and by pulling rearwardly and placing the impelling members 21 under tension. By simultaneously releasing the cord and arrow, the members 21 function to impel or project the arrow forwardly through the guiding spool, the latter functioning to

guide the arrow in its forward movement so that the latter is caused to describe a straight path.

Although I have herein shown and described only one form of catapult embodying my invention, it is to be understood that various changes and modifications may be made therein without departing from the spirit of the invention and the spirit and scope of the appended claims.

What I claim is:

1. A catapult comprising a supporting frame constructed of a single length wire bent to provide a head and a handle depending therefrom, the head being formed with a pair of end rings and a centrally disposed ring extending in horizontal alinement with the other of said rings, and impelling members secured to the first two rings at their ends and connected to each other at the other end, the central ring being adapted to slidably receive a projectile for the purpose described.

2. A catapult comprising a supporting frame constructed from a single length of wire bent to provide a handle of U-form, one end of the handle being extended to form a head of elongated form with the wire at the ends of the head being looped to form rings and the ends of the wire being extended from the rings inwardly and looped to form a ring disposed in horizontal alinement with the other rings, and impelling members secured to the first rings and connected to each

other for the projection of an arrow received in the second mentioned ring.

3. A catapult as embodied in claim 2 wherein a spool is secured within the second mentioned ring to retain the looped ends of the wire in loop forming position.

4. A catapult as embodied in claim 2 wherein a spool is secured within the second mentioned ring to retain the looped ends of the wire in loop forming position, said spool being formed of sections inserted one within the other and secured to each other.

5. A catapult as embodied in claim 1 wherein a spool is secured within the loop formed by bending the end portions of the wire.

6. A catapult comprising a supporting frame formed of a single length of wire bent to provide a substantially triangular head and a handle depending from the head, the wire defining the upper boundary of the head being looped to form a pair of end rings and a centrally disposed ring in horizontal alinement with the other rings, and impelling members secured to the first rings and connected to each other for the projection of an arrow received in the centrally disposed ring.

7. A catapult as embodied in claim 6 wherein a sectional spool is secured within the last mentioned ring to retain the ends of the wire in ring forming position.

WILLIAM L. BARTH.