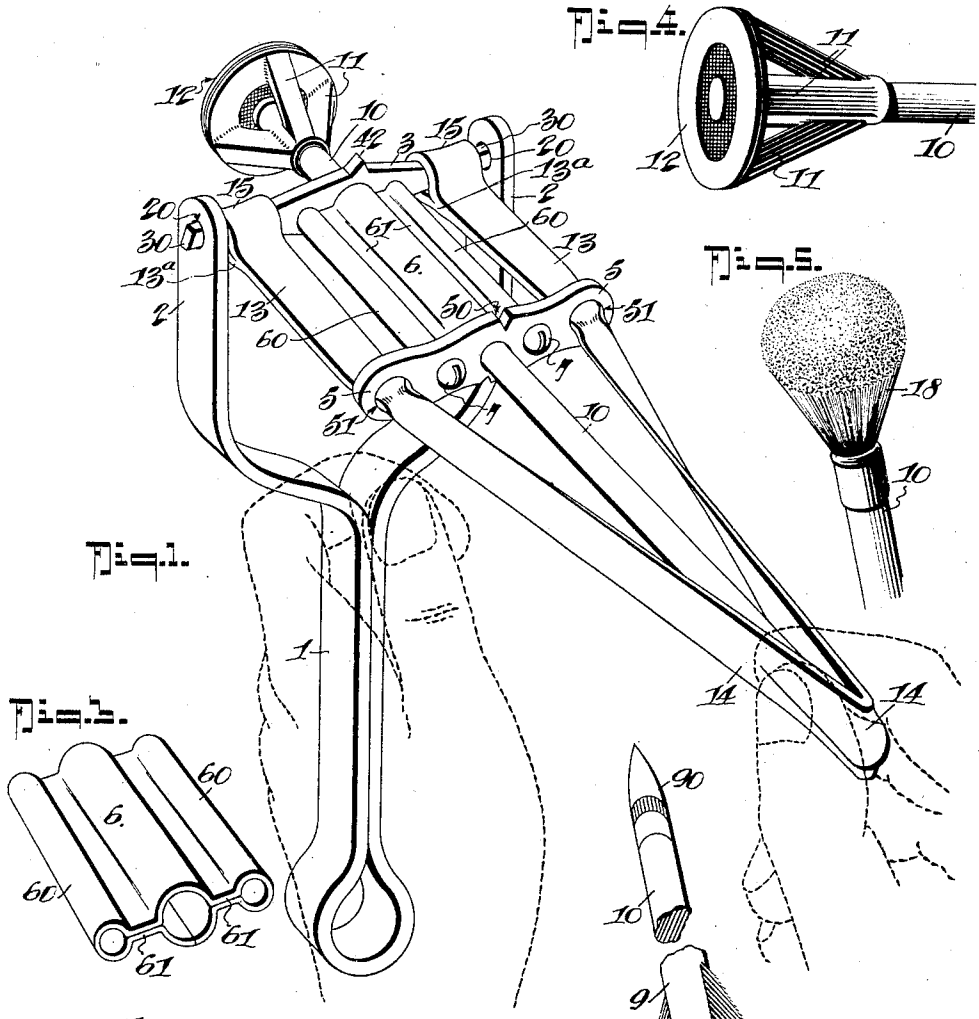
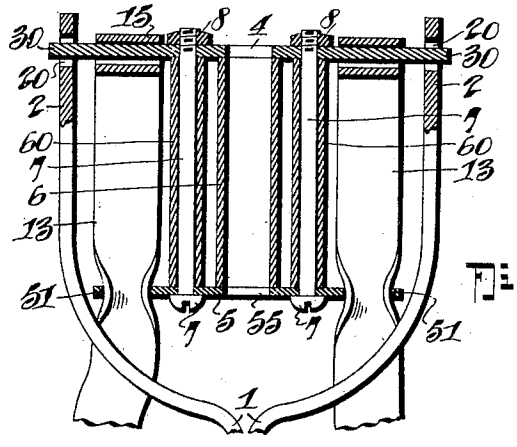
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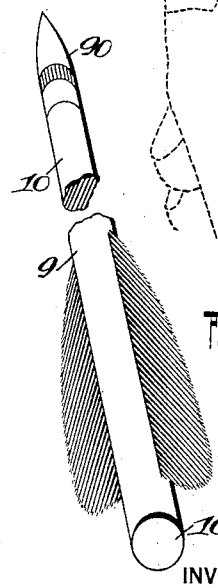
TOY CATAPULT.

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TOY CATAPULT.

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To all whom it may concern:

Be it known that I, HENRY D. BUYS, a citizen of the United States, residing at Emmett, in the county of Gem and State of Idaho, have invented a new and Improved Toy Catapult, of which the following is a specification.

This invention relates to toy shooting devices of the conventional "bean shooter" or catapult type designed for impelling projectiles, and my said invention seeks to provide a toy shooter of the general character stated, of a very simple and inexpensive nature, that can be used with safety by children to "swat the fly" by shooting a rubber tip flat head arrow for hitting the fly and which is also adapted for grown-ups for target shooting, to serve as a means of amusement, especially for women, since in the use of my construction of toy, there is no noise to shock the nerves.

Another object of my invention is to provide a shooting toy for impelling stick shaped arrows, including a rubber sling impeller and in which provision is also made for sustaining the projectile and the projectile impelling rubber sling in the direction of the object or target point selected and in such longitudinal relation with respect to the head portion of the hand hold of the device, whereby more accurate shooting of the projectile is made possible, and in which the several parts are capable of being so connected together for forming the complete device, that they may be easily stamped or otherwise made up from bendable metal, special provision being also provided for so fastening the rubber or elastic sling that it will not be easily broken or worn out and so that the act of aiming and shooting the projectile can be done in such a way that accuracy in shooting the said projectile is easily obtained.

With other objects in view that will be hereinafter referred to, my invention consists of a shooting toy or catapult, that embodies the peculiar features of construction and novel arrangement of parts, all of which will be fully stated in the following detailed explanation, specifically pointed out in the appended claims and illustrated in the accompanying drawings, in which:

Figure 1 is a perspective view of my shooting toy, the same being indicated as in the position for ejecting a projectile in the nature of a stick with a rubber covered head especially adapted for killing flies.

Fig. 2 is a vertical section of the head portion of my toy shooting device, parts being in elevation, portions of the rubber ejector sling being broken away.

Fig. 3 is a detail view of the combined spacer and guide member for the arrow or projectile, hereinafter specifically referred to.

Fig. 4 is a detail perspective view of the outer end of a projectile particularly adapted for killing flies.

Fig. 5 is a similar view of a portion of a projectile with a fluffy or yieldable head.

Fig. 6 is a perspective view of an arrow-like projectile with a steel point for target shooting.

In the practical development of my invention, a frame formed of a metal strap is bent upon itself to constitute a handle 1 and with its free ends separated laterally and bent up to form the opposite sides 2—2 of a yoke or head, each of the upper ends thereof having an aperture 20, the said apertures constituting the bearings for receiving the opposite ends 30 of a cross member 3 composed of a flat piece of metal having a relatively wide central portion and tapering from the said central portion to the journal-like ends that rockably engage the apertures 20—20 in the members 2, as shown.

5 designates a cross member that is similar to the cross member 3 and the said member 5 constitutes a guide for the opposite ends of the rubber sling presently again referred to. The member 5 is attached to one end of a spacer device that is bent from a sheet metal blank to the shape best shown in Fig. 3 of the drawings, by reference to which it will be noticed the said spacer device includes a central tubular guide 6,

tubular side portions 60—60 and web portions 61—61 that join the said side portions and the central guide 6, as shown.

When the parts are assembled in the completed form, as shown in Figs. 1 and 2, the side guides 60 receive fastening screw bolts 7—7 that pass through apertures formed in the said outer cross member 5 and through registering apertures in the cross member 3 that is rockably mounted between the side arms of the handle frame, to which member 3, the bolts are rigidly secured by clamp nuts 8 that engage the threaded ends of the bolts 7, see Fig. 2.

By again referring to Figs. 1 and 2, it will be noticed the cross member 5 has its opposite ends extended somewhat beyond the tubular guides 60—60 and the said extended ends have each a large opening 51 that form guides through which the opposite ends 13 of the rubber sling are passed and from which the rubber ends are extended in flatwise shape for being evenly looped over the cross head or member 3, it being understood that the free ends of the rubber that are passed over the member 3 and bent back at 13^a, under the flat rubber portions 13 are welded thereto.

By providing guides for the ends of the rubber sling, as shown and described, the ends of the sling when distended will be held from buckling or twisting around the member 3 and the loop connections 15 will retain their shape and not readily tear or wear out, and furthermore the loop 14 will be caused to draw up in a more direct line and impart a more uniform impelling force to the projectile 10 than would be possible if the ends of the rubber were free from their point of connection with the cross member 3.

It will be noticed in Fig. 2, the member 3 has a large aperture 4 through its central or wide portion that registers with the central tubular guide 6 of the spacer device, the outer cross guide 5 having a similar opening 55 to provide for the free passage of the arrow or projectile 10, which is in the nature of a round stick of suitable length, to permit of pulling the back end of the stick and the loop 14 of the rubber sling to acquire the desired tension in the sling for impelling the member 10, under considerable force at the object it may be aimed at, when the sling is released.

When the toy is to be used indoors, shooting at flies for example, the projectile 10 has a cone-shaped head 11 that offers a large flat impacting surface, which surface has a rubber covering 12, when arranged as shown in Figs. 1 and 4, or it may have a brush-like head, preferably of horse hair, as at 18 in Fig. 5.

For out door uses, shooting at targets, the projectile has an arrow end provided with a tapered hard steel tip 90, and a feather end 9 as shown in Fig. 6.

From the foregoing description taken in connection with the drawings, the construction, the manner of its use and the advantages of my form of toy shooter will be readily apparent.

The swingable frame provides for tilting the projectile at any desired angle, up or down, and also in addition to offering a means for guiding the ends of the sling to pull out in parallelism with the arrow as the two are pulled together, it affords a long steady bearing for the arrow or projectile 10.

To aid in making a proper sight when aiming the toy, the outer cross member 5 has a groove 50 for sighting the projection 42 on the member 4, as is clearly indicated in Fig. 1.

What I claim is:

1. A toy of the character described comprising a projectile guiding and supporting element, a handle frame, means for rockably supporting the projectile guiding element on the handle frame, and an elastic sling secured at its ends to the guiding element whereby as a projectile is placed in the guiding element and it and the sling are pulled back, the sling is under tension and means coöperative with the guiding element to which the opposite ends of the sling are connected for holding portions of the said ends of the sling in position to pull back in parallelism with one another.

2. In a toy of the character described, a handle frame including a hand hold and a yoke-like portion whose opposite ends each have an aperture, a projectile guideway and supporting element, the said element consisting of a cross member whose ends are rockably mounted in the apertured ends of the frame yoke and which has a central aperture, another cross member having a central aperture and an aperture in each end, a spacing device that includes a central tubular guide whose opposite ends aline the central apertures in the two cross members, means for rigidly joining the cross members and the spacer device, an elastic sling whose opposite ends pass through the openings in the outermost cross member and are secured to the opposite ends of the rockably mounted member, and means for securing the cross members and the spacing device whereby the projectile guiding element and the ends of the sling are pivotally sustained, as a unit, on the yoke-like portion of the handle frame.

3. In a toy of the character described, the combination with a frame including a hand hold and a yoke-like portion; of a projectile guideway and supporting element, the said element including an inner cross member rockably sustained in the ends of the yoke-

like portion of the frame, the said member having a central projectile passage, an outer cross member having a central aperture and an aperture in each end thereof, a spacer device which includes a central tubular guideway whose opposite ends aline the central passages in the inner and outer cross members, means for rigidly securing the two cross members and the spacer device to form a single unit rockably supported on the frame yoke, and an elastic sling whose opposite ends are attached to the opposite ends of the inner cross member, extend in parallelism with each other and pass through the apertures in the opposite ends of the outer cross member, whereby the pull tension on the forward ends of the sling will be in parallelism with the direction of movement of the projectile impelled by the spring.

HENRY D. BUYS.