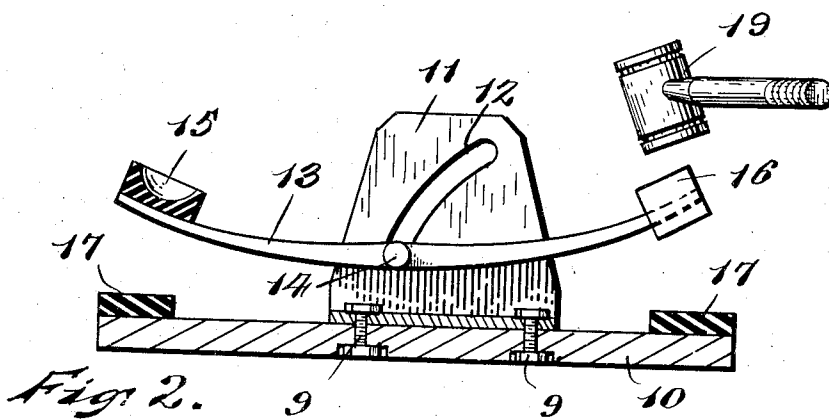
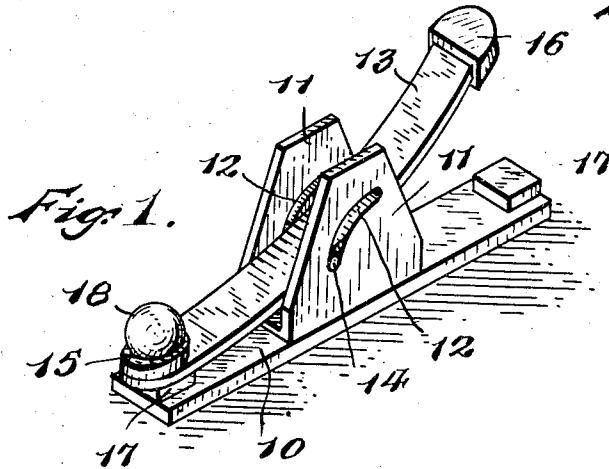
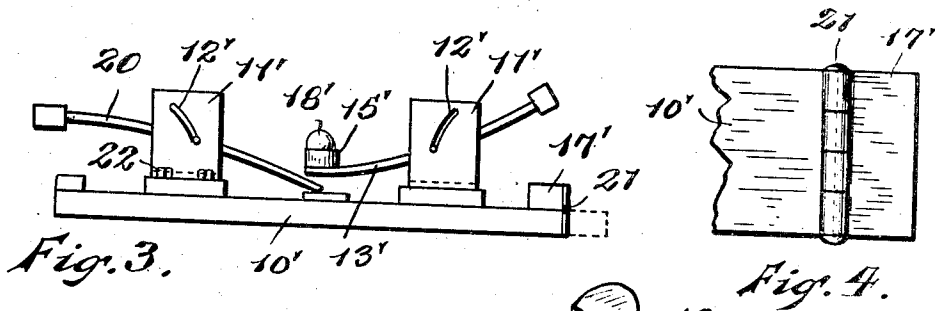


Feb. 7, 1939.

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CATAPULT GAME OR TOY

2,146,156

Filed Oct. 15, 1937



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2,146,156

CATAPULT GAME OR TOY

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Application October 15, 1937, Serial No. 169,262

3 Claims. (Cl. 124-4)

Our invention relates to a game and toy apparatus and more particularly to a means for throwing a missile or the like, and it consists in the constructions, arrangements and combinations herein described and claimed.

It is an object of the invention to provide a catapult device in which a projector lever is pivotally mounted upon a support and including means between the lever and its support permitting the lever to follow the trajectory of the missile for a limited extent, thereby effecting a longer propulsion of the missile than has been possible in devices of this character, and further to increase stability of the device.

It is also an object of the invention to provide means upon the base of the device for cushioning the ends of the lever, reducing shock.

Additional objects, advantages and features of invention will be apparent from the following description, considered in conjunction with the accompanying drawing, wherein

Figure 1 is a perspective view of the device.

Figure 2 is a vertical sectional view.

Figure 3 is a side elevation of the device in which an auxiliary driving lever is employed.

Figure 4 is a fragmentary detail of a cushioning means.

Attention is first invited to Figures 1 and 2 of the drawing wherein a base 10 is provided which preferably is of metal, although not necessarily so, adapted to rest upon the ground, floor or other supporting surface.

Intermediate the length of the base, a pair of suitably spaced uprights 11 are secured by bolts 9, or other suitable means. Each of the uprights 11 has formed therein an arcuate slot 12, the slots extending upwardly and forwardly in the direction in which the missile is to be projected.

A lever 13 is pivoted between the uprights 11 and includes oppositely disposed trunnions 14, a trunnion being positioned in respective slots 12. The trunnions 14 are positioned medially of the length of the lever, and at one end of the lever a cup 15 is secured to the upper face thereof, adapted to seat the missile. The other end of the lever has fixed thereto a cushion block 16.

At each end of the base member 10 a cushion block 17 is secured positioned so as to contact respective ends of the lever when the lever is rocked, as will be apparent as the description proceeds.

The lever 13 is preferably in the form of a semi-elliptical spring, although it may be found desirable to form the lever of substantially straight formation and having no flexing qualities.

The operation

The operation will be readily understood from the following explanation, attention being directed to Figure 1, in which a ball 18 is shown seated in the cup 15, one end of the lever 13 being in raised position. A mallet 19 or other suitable device (see Fig. 2) is employed to strike the cushioned end 16 of the lever, causing the opposite end of the lever to swing upwardly, being guided in its movement due to cooperation between the trunnions 14 and slots 12. The ball 18 will be forcibly projected upwardly into the air when the trunnions 14 encounter the terminations of the slots and the lever engages the cushion member 17. It will be seen therefore that the lever 13 is free-acting for a limited distance of movement, relieving the base of sudden jolts which might, in some instances, cause upsetting of the device.

The above description applies to the toy form of the device, and in Figures 3 and 4 we have shown a construction employed in conjunction with a game in which the missile or ball is to be projected in a direction away from the player.

In Figure 3 there is shown a base 10' as before described, upon which two pair of spaced uprights 11' are secured, the uprights being placed in tandem relation. One of the pairs of uprights pivotally support a driven spring lever 13' in a manner as described in Figures 1 and 2. The other pair of uprights 11' support a driving spring lever 20, this latter support being detachable from the base, as will be explained hereinafter. One end of the driving spring 20 is disposed beneath the end of the spring 13' immediately beneath the cup 15' containing the ball.

The slots 12' of the uprights 11' are disposed in opposite directions permitting the necessary "follow-through" movement of the levers when motion is imparted thereto. The base 10' includes a cushion block 17' hingedly connected as at 21, to the end thereof, in advance of the driven spring 13 and functions to cushion contact of the end of the lever in its downward movement. The cushion 17' may be swung to dotted line position shown in Figure 3, if desired.

From the foregoing, it will be apparent that when the outermost end of the lever 20 is struck, the innermost end will be caused to move upwardly, simultaneously forcibly throwing the lever 13' upwardly and away from the player. The ball 18' will be projected accordingly, as soon as the lever 13' has reached the end of its movement through the slot 12'.

This form of the device may be readily converted to a toy, such as described in Figures 1 and 2 by merely detaching the support and driving spring member, and this may be accomplished by removing the bolts 22.

While we have shown and described a preferred construction of game apparatus and toy, this is by way of illustration only, and we consider as our own all such variations in structure as fairly fall within the scope of the appended claims.

We claim:—

1. In a game apparatus, a base, paired upright members fixed thereto in tandem relation, each pair of upright members having an arcuate slot, a lever member positioned between each pair of uprights, each lever having oppositely disposed trunnions, each trunnion being positioned in a respective slot, the end of one lever overlapping the end of the other lever, a cup member on the

uppermost lever, positioned at a point adjacent the overlapped end portions of the lever, the other end portions of the levers projecting beyond respective upright members, and cushion means on the base in line with the projecting end portions of the levers.

2. The structure of claim 1 wherein the cushion means is hingedly mounted upon the base.

3. In a toy device, a base, a pair of parallel upright members fixed thereto, each of the upright members having an arcuate slot, a lever positioned between the upright members, said lever having oppositely disposed trunnions, each trunnion being positioned in respective slots and adapted to travel the length thereof when one end of the lever is struck, a cup washer on one end of the lever and a cushion member on the other.

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