Dec. 23, 1930. J. PILATES 1,785,876

CATAPULT

Filed Oct. 3, 1928

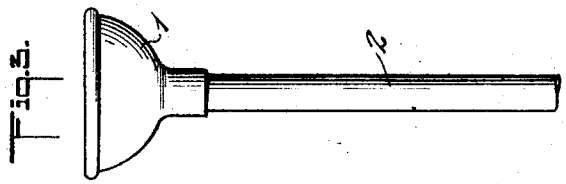


Fig.3.

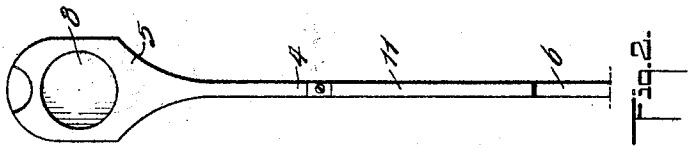


Fig.2.

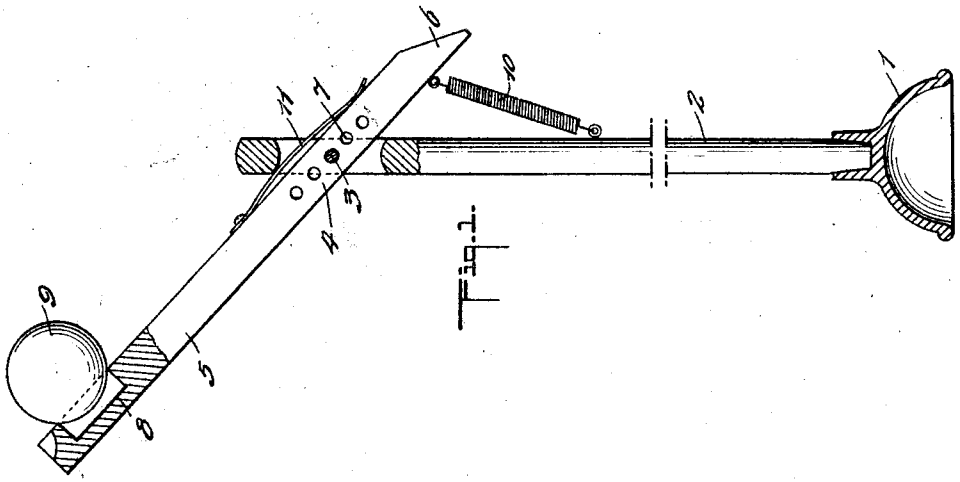


Fig.1.

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UNITED STATES PATENT OFFICE

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CATAPULT

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This invention relates to catapults used in throwing projectiles, balls or other objects, and has for its primary object to provide an improved throwing device whereby missiles or other objects may be hurled any distances with very slight expense. A further object is to provide a game which will be amusing and interesting to the player or players.

A further object of the invention is to provide a game or toy that is easy and inexpensive to manufacture.

Other objects of the invention will appear as the construction is more full disclosed.

For the purpose of rendering the invention clear, reference is had to the accompanying drawings, in which:

Fig. 1 shows one form of the invention in structural relation with a ball ready to be released after the swinging arm has been operated.

Figs. 2 and 3 respectively show separate views of the swinging member and the holding member.

In Fig. 1 of the drawings, 1 denotes a cup-shaped member or base which may be removable if desired from the one end of a holding member 2, or which may be connected thereto by means permitting swivelling thereof. The other end of the holding member 2 pivotally supports by means of member 3 a member 4 comprising arms 5 and 6, which member is preferably provided with holes 7 whereby the member 4 may be fixed in various positions of adjustment relative to the member 2, whereby the throwing distance may be accordingly varied in this manner. The arm 5 carries at its outer end a cup or receiving socket 8 for convenience in positioning a missile or ball 9 therein. Preferably, an operating spring 10 is connected to the other arm 6, said spring having its other end connected to the holding member 2. It will be readily seen that by positioning of the ball 9 within the socket 8 and rearwardly depressing the arm 5, shown in Fig. 1 of the drawings, the spring 10 will be placed under tension and upon releasing of the arm 5, the arm will swing forwardly throwing the ball 9 in the desired direction. The tension of the spring 10 may be slightly adjusted in any suitable manner as for example by displacing one end of its attachment relative to the holding member 2 or the arm 6.

If desired, the spring 10 may be replaced by a spring having its ends attached to the arm 5 and the holding member 2 respectively so that when the arm 5 is swung rearwardly, the latter acts to compress the spring whereby when the arm is released the spring will act to throw the free end of the arm 5 upwardly and forwardly discharging the ball 9 in the desired direction. This spring, however, may be arranged in cooperation with the spring 10 so as to assist the initial upward and forward swinging movement of the arm 5 during the operation of the device.

It will be understood that the distance the ball will be thrown will depend largely on the angle at which the arm 5 is held when the latter is released. Thus, by practice a ball can be thrown at any point desired within range of the throwing power of the operating spring or springs.

It will be further understood that the catapult may be used without the base portion 1; the base being used when it is desired to support the device on a table or the like. By holding the cup member 1 as shown in Fig. 3 the ball may be caught in its return from a wall or the like against which it has been pitched, or in its return from the discharging of the ball into the air.

The device can be used in such a way as to discharge a ball toward a distant board. This board may be provided with numerous holes or receptacles of different values to receive or catch the ball. A game may also be played with the device by a number of players formed into two sides, and the players on one side catching the balls projected by the players on the other side by merely reversing the device so as to catch the ball in the cup-shaped member or base 1. A bowed spring 11 may be provided on member 4 to take the reaction of the arm 5 when retracting to normal position under the influence of the operative spring or springs.

While I have illustrated and described my invention in connection with only one embodiment thereof, it will be understood that

I do not intend to limit myself to the specific embodiment shown, but I reserve the right to all changes within the spirit and scope of the appended claims.

Claims:

1. A catapult comprising an elongated member, a substantially horizontal throwing member pivotally and adjustably supported on said elongated member, yieldable operating means connecting said members and capable of imparting force thereto when operated, and means mounted on said elongated member whereby a discharged object may be caught therein.

2. A catapult comprising a non-swinging member, a substantially horizontal throwing member pivotally and adjustably supported on said non-swinging member, yieldable operating means connecting said members and capable of imparting force thereto when operated, and a cup-shaped member at the base of said non-swinging member adapted to serve as a receptacle for receiving a discharged object.

In testimony whereof I affix my signature.

JOSEPH PILATES.