Dec. 31, 1957 G. J. GILBERTSON 2,818,260

CATAPULT TOY

Filed Aug. 15, 1956

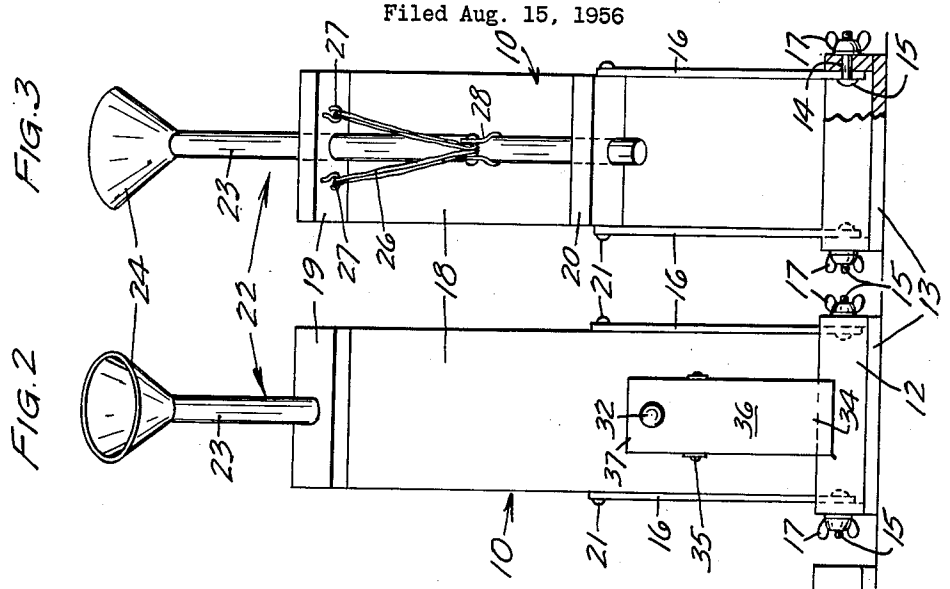


FIG. 3

FIG. 2

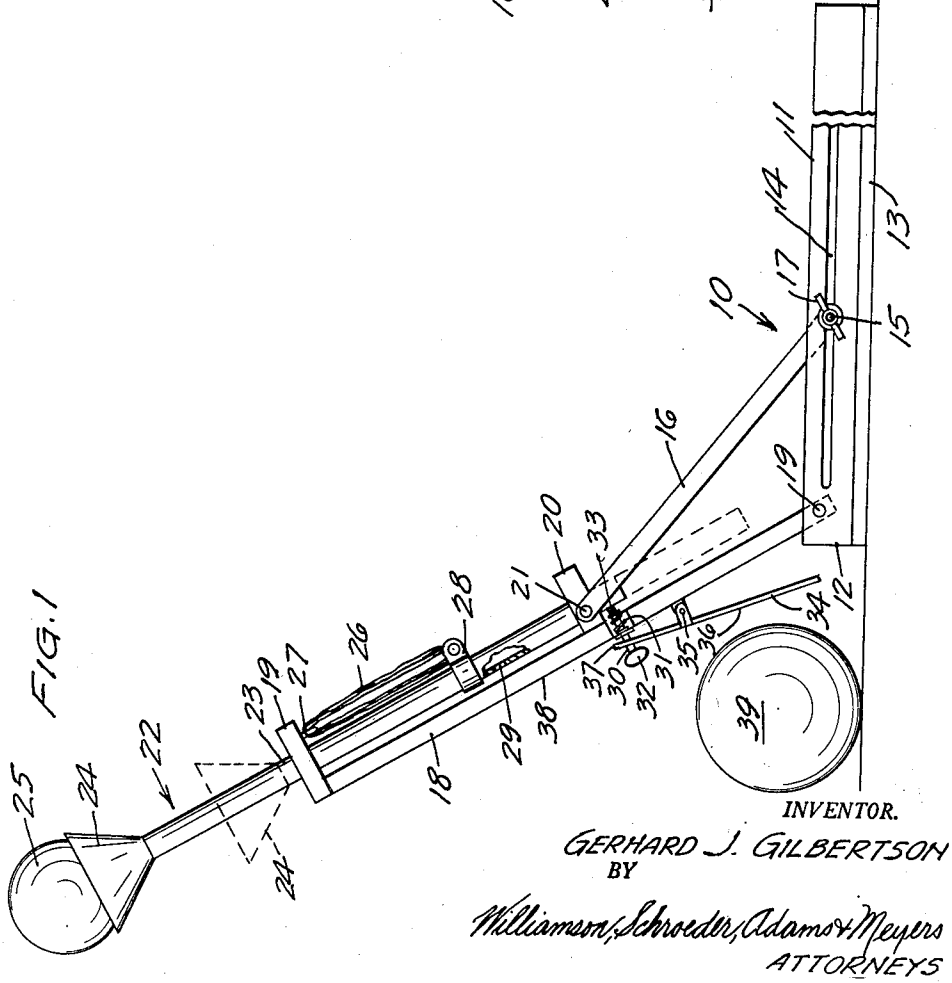


FIG. 1

INVENTOR.
GERHARD J. GILBERTSON
BY
Williamson, Schroeder, Adams & Meyers
ATTORNEYS

United States Patent Office 2,818,260
Patented Dec. 31, 1957

2,818,260

CATAPULT TOY

Gerhard J. Gilbertson, Montevideo, Minn.

Application August 15, 1956, Serial No. 604,178

1 Claim. (Cl. 273—127)

This invention relates to a catapult toy and more particularly to a triggered device for catapulting a ball.

It is an important object of the invention to provide a toy which will develop a child's skill in both throwing and catching balls.

Another object of the invention is to provide a catapult toy which is inexpensive and sturdy in construction and which adapts itself to folding and collapsing into a compact unit when not in use.

These and other objects and advantages of my invention will more fully appear from the following description made in connection with the accompanying drawings wherein like reference characters refer to similar parts throughout the several views and in which:

Fig. 1 is a side elevation of my catapult device, portions thereof being cut away and other portions shown in dotted line retracted position;

Fig. 2 is a front elevation of the toy showing the cradling projector in upward position after having ejected a ball; and

Fig. 3 is a rear view of the device, portions thereof being shown in vertical section.

With continued reference to the drawing my catapult toy has a supporting structure indicated generally at **10**. The supporting structure in turn has a base **11** which may be box-like in character and provided with side walls **12** and a bottom **13** as shown. Each of the longitudinal opposed side walls **12** may be provided with a longitudinal slot **14** for receiving bolt **15** to which is secured a brace **16** securable at a preselected position along slot **14** by means of wing nut **17**. Another portion of the supporting structure **10** is a guide member **18** pivotally secured at **19** adjacent its lower end cross the opposed elongated sides **12** as shown in Fig. 1. The guide **18** has laterally extending brackets **19** and **20** at the upper and lower portions respectively and brace **16** is pivotally secured at **21** to the lower bracket **20** as shown. The guide **18** can be swung downwardly upon loosening of each of the wing nuts **17** so that the braces **16** will collapse inside the box **11** and the guide **18** will then become compactly folded within the box when the toy is not in use.

Within the brackets **19** and **20** of guide **18** is slidably received a ball-cradling projector indicated generally at **22**. The rod or stem **23** of the projector **22** is elongated and uniform in cross sections for easy extensible and retractable sliding with respect to guide **18** as shown in Fig. 1. At the upper end of the rod **23** is a ball-holder **24** which may be funnel shaped to retain a ball **25** as shown. The projector **22** together with ball **25** is not only biased to upward extended position and this may be accomplished by such means as tension spring **26** which is secured at its upper end to a fastener **27** on the bracket **19** and at its lower end to a clip **28** rigidly secured to the rod **23** intermediate its ends and at a position between the guide brackets **19** and **20**. Rod **23** is provided with a catch opening **29** which is adapted to lie just below the side

bracket **20** when the ball-cradling projector is retracted to the dotted line position shown in Fig. 1.

Latching means such as the pin **30** is received laterally in the guide **18** and is biased toward the rod **23** by means of the spring **31** as shown. The pin **30** has an abutment **32** extending at the outer end thereof and the inner end **33** is adapted to be received within the opening **29** to latch the biased ball-cradling projector **22** in its dotted line position when so retracted.

A striking plate **34** is pivotally secured at **35** to the guide **18** and at a position intermediate the striking face **36** and the lever arm **37** as shown. The lever arm **37** loosely surrounds the pin **30** and lies between the abutment head **32** and the forward surface **38** of the guide **18**. The forwardly facing surface **36** of pressure plate **34** is adapted to be struck by a ball **39** and for that purpose may be pivoted to the guide **18** in such a manner as to lie close to the plane of the bottom **13** of base **11**.

During the use and operation of my catapult toy the guide **18** is moved upwardly from its collapsed position, swinging it about the pivot **19** until the desired upward and forward angulation is achieved. Wing nuts **17** at each side of the base are then tightened so that the braces **16** rigidly hold the guide in the preselected angulation. A ball **25** is then placed in the upward holder or funnel **24** and the rod **23** is retracted to the dotted line position of Fig. 1. This position will bring the opening **29** in alignment with the latch pin **30** and the inwardly extending end **33** will project thereinto and hold the entire ball-cradling projector in the dotted line position with the biasing means **26** tensioned and ready for projection.

The user then throws or rolls a ball **39** toward the forwardly facing surface **36** of striking plate **34** and, if he aims accurately, the plate will move arcuately about the pivot **35** and retract the extending end **33** of pin **30** from its latch opening **20**. The ball-cradling projector will then snap upwardly under the influence of the biasing means **26** and the ball **25** will be thrown upwardly and forwardly toward the user. If the user is in the proper position he can then catch the ball **25**. The device may be used with each participant attempting to see how many times he can strike the plate **34** with a ball **39** to catapult a ball **25** toward him and can similarly tabulate the number of times that he catches a ball **25**. The device can be so set that the closer a participant stands while throwing a ball **39** toward the striking plate, the more difficult it will be for him to run back to catch the ball **25**. A participant must therefore exercise the power degree of judgment in each case as well as developing skill at throwing a ball and in catching a projected ball in flight. Other adaptations of the catapult toy will suggest themselves to those using the device.

It may thus be seen that I have devised a novel and interesting game of skill utilizing catapult means for throwing one ball to a user in response to actuation by an accurately thrown ball, the device testing both the throwing and catching skill of one using the device.

It will, of course, be understood that various changes may be made in the form, details, arrangement and proportions of the parts without departing from the scope of my invention which consists of the matter shown and described herein and set forth in the appended claim.

What is claimed is:

A ball throwing device comprising a box-like base, a guide member pivotally secured adjacent one end of the base and adapted to lie closely thereover and to be swung to an upwardly and forwardly facing position, an adjustable brace pivotally secured to the guide member and interconnecting with said base for holding the guide member at a predetermined forwardly inclined angle, a ball-cradling projector slidably received longitudinally within

said guide member and normally biased upwardly therefrom, said projector terminating upwardly in a ball-holder, a spring pressed latch pin on said guide member engageable with said projector for retaining it in lower position with respect to the guide member, and striking plate pivotally secured to the guide member in depending relation and having a forwardly facing surface, said striking plate bearing upon said latch pin and closely overlying the projected plane of the base in position to be struck by a rolling ball to actuate the ball-cradling projector, said guide member, projector and brace all being foldable over

against the box-like base in compact form when not being used.

References Cited in the file of this patent

UNITED STATES PATENTS

283,661	Reed	Aug. 21, 1883
2,607,333	O'Dell	Aug. 19, 1952
2,663,291	Hall	Dec. 22, 1953
2,675,642	Coleman et al.	Apr. 20, 1954
2,722,211	Eisele	Nov. 1, 1955