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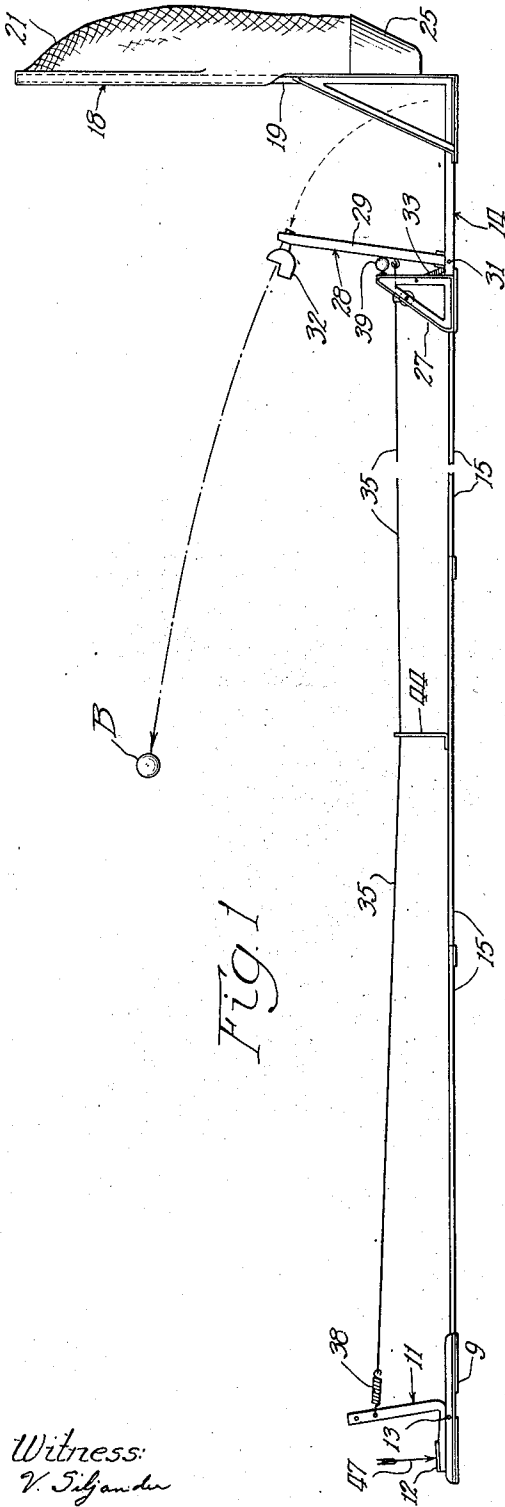
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2,082,818

BALL CATCHING AND PITCHING MACHINE

Filed May 16, 1935

3 Sheets-Sheet 1



Witness:
V. Silander

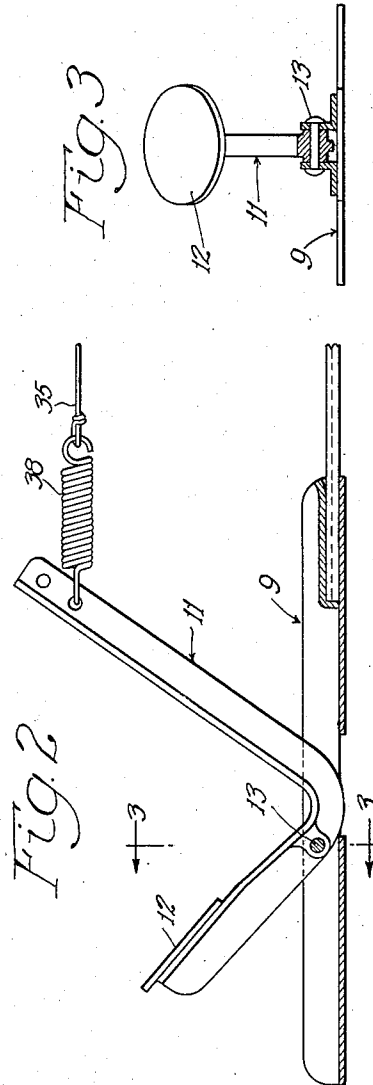


Fig. 3

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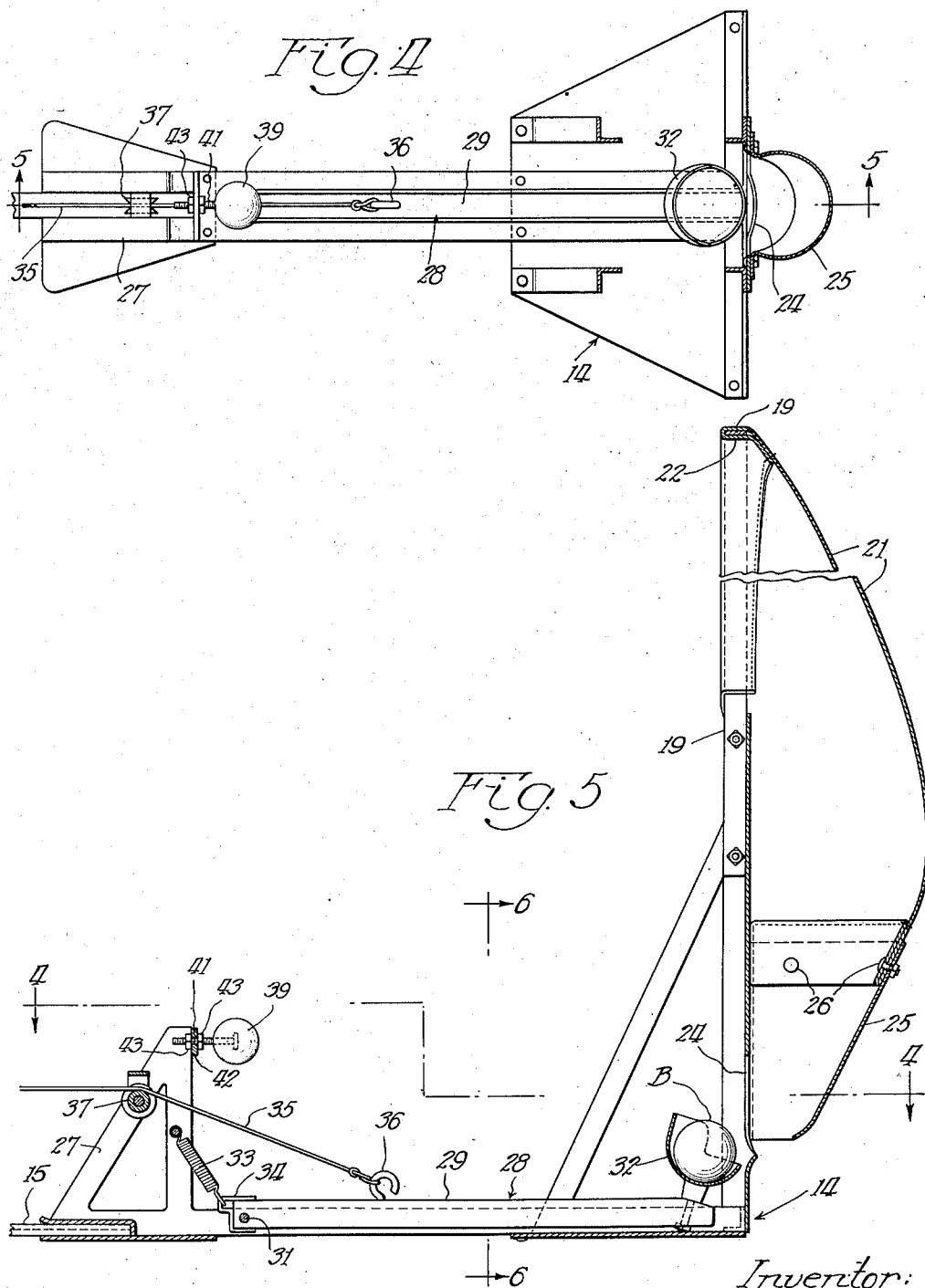
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3 Sheets-Sheet 2



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Fig. 6

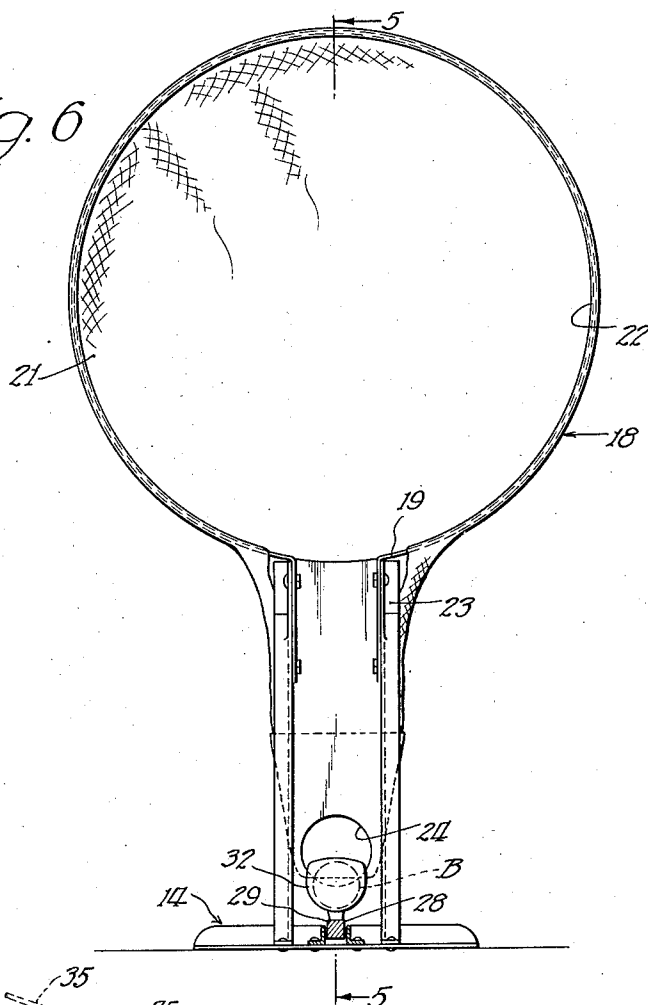


Fig. 7

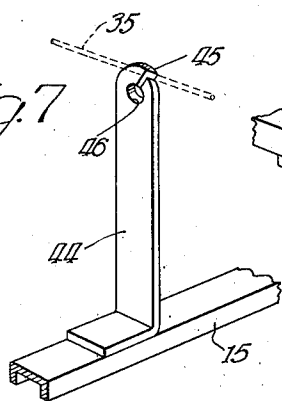
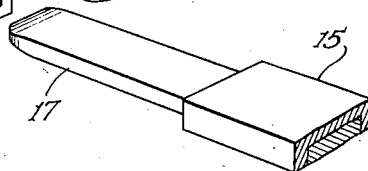


Fig. 8



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UNITED STATES PATENT OFFICE

2,082,818

BALL CATCHING AND PITCHING MACHINE

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Application May 16, 1935, Serial No. 21,759

5 Claims. (Cl. 273—26)

This invention relates to games and particularly to a game apparatus for receiving a thrown ball, and wherein manually operated mechanism associated therewith is provided for returning the ball to the operator or thrower.

One object of the present invention is to provide a device whereby a sole player may catch and throw a ball repeatedly without changing his position with relation to the device.

Another object of the invention is to provide a device whereby one may improve his control over the throwing of a ball, and whereby his catching ability may be improved.

Another object of the invention is to provide a device whereby the speed and direction of the ball when being thrown by the device is under the control of the player or operator.

A further object of the invention is to provide a device which may be adjusted to various lengths and where the various operating mechanisms at the respective ends of the device may be maintained in proper operative position with respect to each other.

A still further object of the invention is to improve devices of the character described in sundry details hereinafter referred to and particularly pointed out in the appended claims.

One embodiment of the present invention is shown for illustrative purposes in the accompanying drawings, in which:

Fig. 1 is a side elevational view of a game device embodying features of the present invention;

Fig. 2 is an enlarged sectional elevational view of a support at one end of the device and having an operating foot lever pivotally mounted thereon;

Fig. 3 is a sectional elevational view taken substantially as indicated by the line 3—3 of Fig. 2;

Fig. 4 is a plan sectional view adjacent the opposite end of the device and taken substantially as indicated by the line 4—4 of Fig. 5;

Fig. 5 is a sectional elevational view taken as indicated by the line 5—5 of Figs. 4 and 6;

Fig. 6 is a sectional elevational view taken as indicated by the line 6—6 of Fig. 5;

Fig. 7 is an enlarged perspective view of a supporting bracket for a portion of the operating mechanism, and

Fig. 8 is an enlarged perspective view of adjacent ends of separable interengaging spacers employed in the device.

Referring particularly to Figs. 1, 2, and 3, the illustrative embodiment of the present inven-

tion is shown as comprising a support 9 adjacent one of its ends and having a lever 11 provided with a foot engaging portion 12 pivotally mounted thereon as indicated at 13, the support 9 being adapted to be placed on the ground or floor as may be found convenient.

Adjacent the opposite end of the device is a base indicated as a whole by the numeral 14, Figs. 4 and 5, adapted also to be positioned on the floor or ground, the base 14 and the support 9 being spaced from each other preferably by a plurality of spacers 15, one end of the spacers being provided with a socket 16 adapted to snugly receive a pin or splicing portion 17 formed on an adjacent spacer in a manner to maintain the respective spacers in alignment and spacing the base 14 and support 9 in relatively fixed position with respect to each other.

Mounted on the base 14 is a ball catcher indicated, as a whole, by the numeral 18 and comprising a hoop-like frame 19 having a bag-like structure 21 formed preferably of a tough strong fabric mounted thereon in a manner to provide an opening 22 of substantial diametrical proportion well adapted for receiving a ball thrown into the catcher.

Below the opening 22, the ball catcher is provided with a reduced portion 23 for guiding the ball from the bag-like structure to a discharge opening 24, the lower end or guide portion of the catcher being shown, in the present instance, as comprising a sheet metal hopper-like member 25 tapering inwardly toward the discharge opening 24, and to the upper edge portion of the hopper 25 is secured the lower edge portion of the fabric of the catcher by means of bolts 26.

Mounted also on the base 14 is an upright frame member 27 on which is pivotally mounted a ball thrower indicated, as a whole, by the numeral 28 and comprising an arm 29 pivotally mounted adjacent one of its ends on a pivot pin 31 carried by the frame member 27, and provided adjacent its opposite end portion with a cup-like ball receiving member 32 adapted normally to occupy a position adjacent the discharge opening 24 of the ball catcher in a manner to receive a ball B therefrom as clearly illustrated in Figs. 5 and 6 of the drawings, and for yieldingly maintaining the cup-like member 32 in ball receiving position, a tension spring 33 is operatively connected to the frame member 27 and to a loop or bracket 34 secured to the arm 29 as clearly shown in Fig. 5.

For actuating the ball thrower 28 to move it

from the position shown in Fig. 5 to the position shown in Fig. 1 for projecting the ball toward the operator, a flexible connector shown, in the present instance, as a small wire or cable 35 is connected to the arm 29 intermediate its ends by means of a hook 36, the wire 35 being trained over a sheave or pulley 37 rotatably mounted on the frame member 27 and having its opposite end connected preferably by means of a stiff strong spring 38 to the foot lever 11, and for cushioning the shock of the arm 29 when the ball thrower is brought to throwing position as shown in Fig. 1, a stop 39 formed, preferably, of rubber or the like, is mounted on the frame member 27 in the path of movement of the arm when brought to ball throwing position by operation of the foot lever 11.

For varying the position of the arm 29 at the moment of projection of the ball from the cup-like member 32, the stop 39 is adjustably mounted on the frame member 27 by means of a shank portion 41 screw-threaded into the bracket 42 and locked in adjusted position with respect thereto by means of jamb nuts 43 screw threaded onto the shank portion 41 thereby providing for relative adjustment between the vertical planes of the pivot pin 31 and stop member 39.

As illustrated in Figs. 1 and 7, a supporting bracket 44 may be mounted on one of the spacers 15 between the base 14 and support 3, the bracket being provided with a diagonal slot 45 through which the wire 35 may be conveniently positioned in an aperture 46 formed in the bracket, thereby providing a guide for the wire and preventing whipping intermediate its end portions.

Assuming that the ball thrower 28 with a ball in the cup-like member 32 is in the position shown in Fig. 5 and the lever 11 is in the position shown in Fig. 2, the operation of the device is substantially as follows:

By pressing quickly on the foot-engaging portion 12 in the direction of the arrow 47 in Fig. 1, the wire or cable 35 is drawn suddenly taut and the arm 29 of the ball thrower is brought up forcibly against the stop 39 as shown in Fig. 1, and by reason of the momentum developed, the ball B is projected toward the operator to be caught by him. Upon releasing the foot from the lever 11 the spring 33 serves to return the arm 29 and cup-like member 32 to ball receiving position adjacent the opening 24 of the ball catcher 18. The operator may then throw the ball into the catcher 18 from which it is discharged into the cup-like member 32, after which the operation may be repeated.

Obviously, the present invention is not limited to the precise construction and arrangement shown and described, as the same may be variously modified. Moreover, all the features of the invention need not be used conjointly as the same may be used to advantage in variously different combinations and sub-combinations.

What I claim as new and desire to secure by Letters Patent is:

1. In a device of the class described, the combination of a ball catcher adjacent one end of the device and comprising a bag-like receptacle of ample proportions having a relatively large opening adjacent one of its ends adapted to receive a thrown ball and having a reduced portion terminating in a relatively smaller discharge opening adjacent its opposite lower end, a ball thrower pivotally mounted adjacent said catcher and having a cup-like receiving member capable of being positioned adjacent said discharge open-

ing to receive a ball therefrom, and a foot lever pivotally mounted adjacent the opposite end of the device and flexibly connected to said ball thrower for actuating the thrower to project a ball therefrom with a velocity dependent upon the force exerted on said lever.

2. In a device of the class described, the combination of a base adjacent one end of the device, a ball catcher mounted thereon and adapted to receive a thrown ball, said ball catcher having a discharge opening of reduced dimensions adjacent the lower side thereof, a ball thrower pivotally mounted on said base and having a cup-like member positioned adjacent said discharge opening to receive a ball therefrom, a rigid frame member on said base, a stop on said frame member, a support adjacent the opposite end of the device, interconnected means for spacing said support from said base, a foot lever pivotally mounted on said support, and means connected to said ball thrower and foot lever for drawing the ball thrower towards said stop when said lever is actuated and for projecting the ball from the thrower with a velocity dependent upon the force exerted upon said foot lever.

3. In a device of the class described, the combination of a base adjacent one end of the device, a ball catcher mounted thereon and adapted to receive a thrown ball, said ball catcher having a discharge opening adjacent the lower end thereof, a ball thrower pivotally mounted on said base and having a cup-like member positioned adjacent said discharge opening to receive a ball therefrom, a rigid frame member on said base, a stop adjustably mounted on said frame member, a support adjacent the opposite end of the device, separable means for spacing and maintaining said support and base in relatively fixed position with respect to each other, a foot lever pivotally mounted on said support, and flexible means including a resilient member connected to said ball thrower and foot lever for drawing the ball thrower toward said stop when said lever is actuated.

4. In a device of the class described, the combination of a base adjacent one end of the device, a bag-like ball catcher mounted thereon and adapted to receive a thrown ball, said ball catcher having a discharge opening adjacent the lower end thereof, a ball thrower pivotally mounted on said base and having a cup-like member positioned adjacent said discharge opening to receive a ball therefrom, resilient means operatively relating said cup-like member in ball receiving position with respect to said discharge opening, an upright frame member on said base, an adjustable resilient stop and a sheave mounted on said frame member, a support adjacent the opposite end of the device, separable interengaging spacers operatively related to said support and said base for maintaining the base and support in relatively fixed positions with respect to each other, a foot lever pivotally mounted on said support, and flexible means trained over said sheave and connected to said ball thrower and said foot lever, said means including a resilient member for drawing the ball thrower towards said stop when said lever is actuated.

5. In a device of the class described, the combination of a base adjacent one end of the device, a bag-like ball catcher mounted thereon and adapted to receive a ball, said ball catcher having a discharge opening adjacent the lower end thereof, a ball thrower pivotally mounted on said

5 base and having a cup-like member positioned adjacent said discharge opening to receive a ball therefrom, resilient means operatively related to said ball thrower for yieldingly retaining said cup-like member in ball receiving position with respect to said discharge opening, a rigid frame member on said base and an adjustable resilient stop mounted on said frame member, a support adjacent the opposite end of the device, cooper-

able interengaging spacers operatively related to said support and said base for maintaining the base and support in relatively fixed position with respect to each other, a foot lever pivotally mounted on said support, and flexible means connected to said ball thrower and said foot lever for drawing the ball thrower toward said stop when said lever is actuated. 5

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