July 26, 1927.

1,636,893

A. BIBERFELD

ABILITY GAME

Filed Jan. 2, 1926

2 Sheets-Sheet 1

Fig. 1

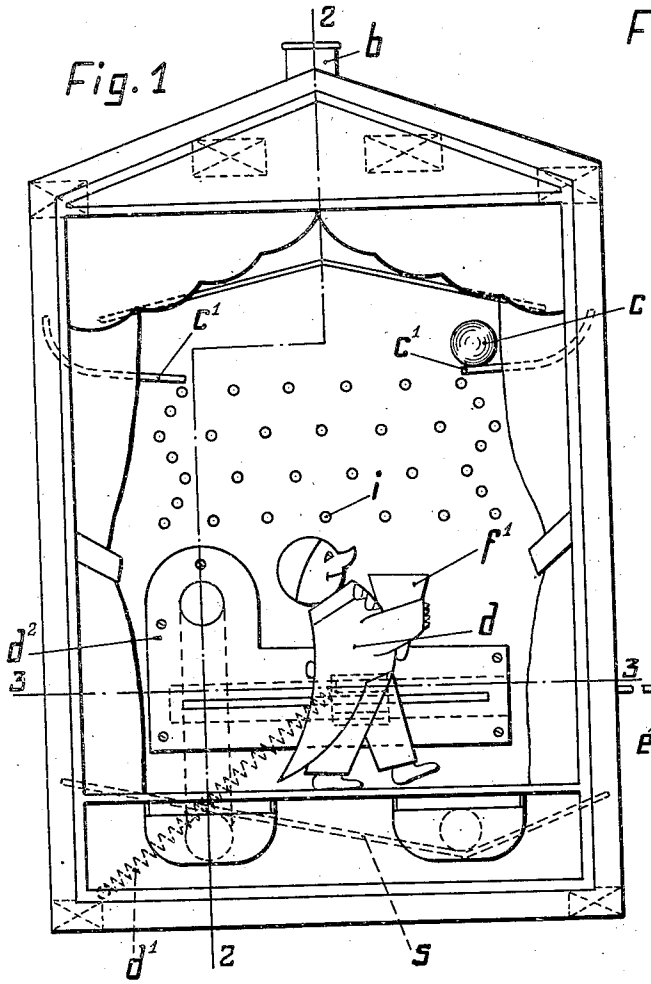


Fig. 2

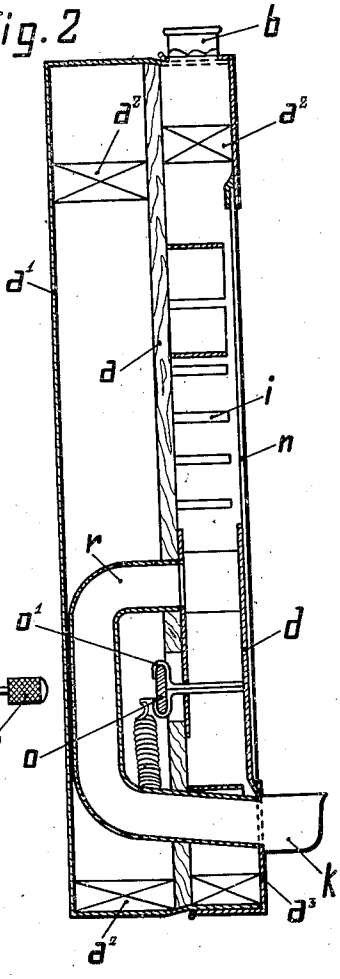
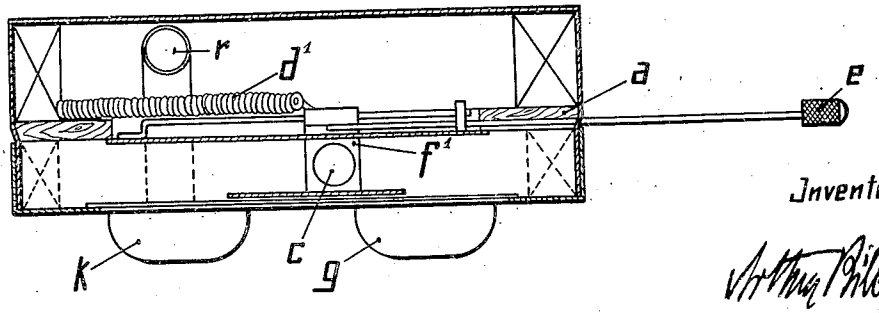


Fig. 3



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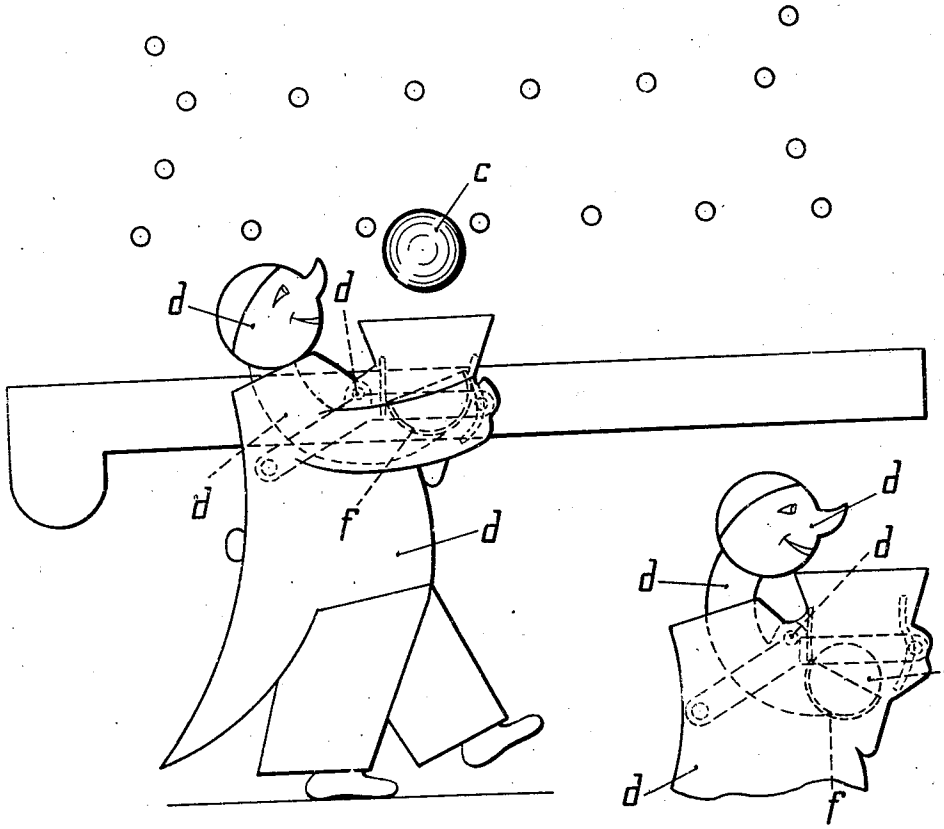


Fig. 4

Fig. 5

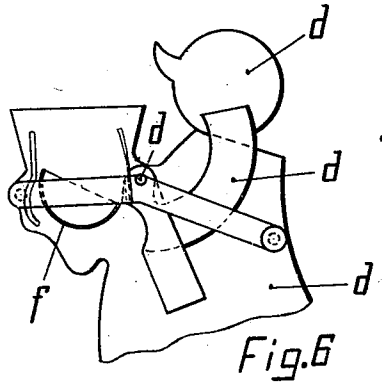


Fig. 6

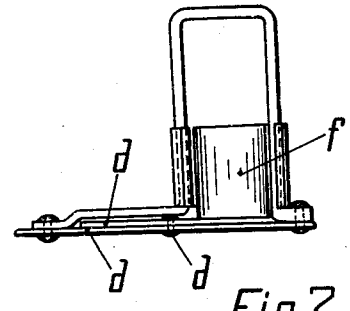


Fig. 7

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UNITED STATES PATENT OFFICE.

ARTHUR BIBERFELD, OF BERLIN, GERMANY.

ABILITY GAME.

Application filed January 2, 1926, Serial No. 79,021, and in Germany March 24, 1925.

This invention relates to an ability game of the type of the well known apparatus in which a figure is moved to and fro underneath a dropping ball which is stopped in its course by pins. The apparatus of this type are rather complicated as they require devices for releasing at the catching of the balls the delivery of a ticket and as the ball remained always inside the casing and has to be automatically raised to the top end of the casing with the aid of a complicated mechanism.

The apparatus according to the present invention is much simplified as regards construction and it forms an apparatus exclusively adapted for an ability game. The balls to be caught are inserted by hand through an opening at the top end of the apparatus and retarded and deflected in their movement by deflecting or guide pins. The figure which is moved to and fro underneath the dropping balls may either be of the usual shape of a bajazzo, e. g. consist of a rigid body, or comprise a movable element which is displaced when catching a ball so that it is indicated visibly from the outside that the ball has been caught. A dropping ball, whether caught or not, drops out of the casing of the apparatus after having passed through between the pins and it is then deposited in such a manner that it can be easily removed.

The apparatus is preferably arranged in such a manner, that the ball which has been caught drops into a winning-box arranged on the outer side of the casing.

According to the invention this is realized by arranging a tube, into which the caught ball drops from the catching device of the figure, if this figure is in a certain position, said tube terminating in the winning box, whilst a ball which has not been caught drops onto an incline on the bottom of the casing, said incline terminating in a hole through which the ball drops out of the casing into the loss-box.

An embodiment of the invention is shown, by way of example, in the accompanying drawings, in which

Fig. 1 is a front elevation of the apparatus.

Fig. 2 is a section on line 2—2 of Fig. 1.

Fig. 3 is a section on line 3—3 of Fig. 1.

Figs. 4–7 show a form of construction of a figure imitating a bajazzo and designed to catch the ball.

Fig. 4 shows the figure prior to the catching of the ball.

Fig. 5 shows this figure after the catching of the ball, the head of the figure having adopted a different position.

Fig. 6 is a rear view of the figure.

Fig. 7 is a plan view of the same.

The essential elements of the apparatus are mounted on a board a which, underneath the hole b in the top end of the casing through which the balls c are to be inserted, is fitted with a guide plate c' and has guiding or deflecting pins i. The board with the elements is inserted into a box-shaped casing a' in which spacing blocks a^2 hold the board a at a certain distance from the rear wall of the casing a'. In the board a the upper open end of a tube r is fixed the inner diameter of which tube corresponds with the diameter of the balls c. The other end of said tube r is fixed in the lower part of the board a and terminates in a winning box k arranged at the outer side of the casing. The figure d which is adapted to be moved to and fro, carries behind its head a catching device f', and it is pulled by the action of a spring b' to the left side of the casing a' in Fig. 1. The means for guiding the figure consist of a metal plate d^2, embedded in the board a and having a hole which registers with the open upper end of tube r. To the metal plate d^2 a guide rod o is connected, which serves to move the figure d to and fro with the aid of guide flaps o'. By means of a handle e projecting from the apparatus the figure d can be moved to and fro underneath the pins i.

If by the moving figure a ball c^2 is caught and if the catching device with the ball is brought in front of the mouth of tube r, the ball drops through the tube and rolls into the winning box k from which it can be removed by hand. A ball which is not caught drops upon an incline s in the bottom portion of the casing a' the deepest point of said incline standing opposite a loss box g, so that the ball drops into this box which is also arranged at the outer side of the casing a', and the ball can be removed by hand from this box g.

In order to arrange the apparatus so that it can be easily put together and taken to pieces the box-shaped casing a' designed to accommodate the board a is covered by a box-shaped lid a^3 which forms the front wall of the casing and has a mica window

n. Between the board a and the inner surface of the front plate a^3 spacing blocks a^2 are arranged. The lid a^3 is securely fixed on the box-shaped casing a' so that they form together a well closed box. In order to take the apparatus to pieces it is merely necessary to remove the lid a^3 whereby the board a and the elements on the same are made accessible.

The figure shown by way of example in Figs. 4 to 7 imitates a bajazzo. The figure d has a head d^4 oscillatably mounted on a pivot pin d^5. The neck d^3 of the head d^4 carries a gutter-shaped catching device f', into which the ball drops if the figure has been correctly moved by the person who plays the game. The ball dropping into the catching device f' makes the head d^4 swing around the pivot bolt d^5 so that it adopts the position shown in Fig. 5. The neck d^3 of the head will then project from the body of the figure and the player can see that the ball has been caught.

As soon as the ball drops out of the catching device f', the figure having been moved in front of the mouth of tube r, the head d^4 returns into the normal position shown in Fig. 1.

The catching of a ball might be indicated in any other manner, for instance by means of a bow movable on a stationary gutter, or by optical or acoustic signals.

I claim:—

1. An ability game, comprising in combination with a casing having in its top end an inlet for balls, a vertical board in said casing having near its lower end an outlet hole for the miss balls and an outlet hole for the hit balls, an inclined guide on said board near the upper end underneath said inlet for the balls, deflecting pins on said board, a figure on the bottom of said casing underneath said pins, a catching device held by said figure, and means operated from the outer side of said casing and designed to move said figure to and fro to catch a dropping ball and to deliver the same to the outlet hole for the hit balls so that it rolls out of the casing.

2. An ability game, comprising in combination with a casing having in its top end an inlet for balls, a vertical board in said casing having near its lower end an outlet hole for the miss balls and an outlet hole for the hit balls, an inclined guide on said board near the upper end underneath said inlet for the balls, deflecting pins on said board, a figure on the bottom of said casing underneath said pins, a catching device held by said figure, and means operated from the outer side of said casing and designed to move said figure to and fro to catch a dropping ball and to deliver the same to the outlet hole for the hit balls so that it rolls out of the casing, and an open box in front of each outlet hole designed to receive the one the balls caught by the moving figure and the other the balls which have not been caught so that said balls can be easily removed from the outer side of the casing.

3. An ability game, comprising in combination with a casing having in its top end an inlet for balls, a vertical board in said casing having near its lower end an outlet hole for the miss balls and an outlet hole for the hit balls, an inclined guide on said board near the upper end underneath said inlet for the balls, deflecting pins on said board, a bent tube fixed with its open upper end in said board at a certain distance above the bottom of the casing and terminating at its lower end in the outlet hole for the hit balls, a figure on the bottom of said casing underneath said pins, a catching device held by said figure, and means operated from the outer side of said casing and designed to move said figure to and fro to catch a dropping ball and to deliver the same to said tube, and an open box in front of each outlet hole designed to receive the one the balls caught by the moving figure and the other the balls which have not been caught so that said balls can be easily removed from the outer side of the casing.

4. An ability game, comprising in combination with a casing having in its top end an inlet for balls, a vertical board in said casing having near its lower end an outlet hole for the miss balls and an outlet hole for the hit balls, an inclined guide on said board near the upper end underneath said inlet for the balls, deflecting pins on said board, a bent tube fixed with its open upper end in said board at a certain distance above the bottom of the casing and terminating at its lower end in the outlet hole for the hit balls, a figure on the bottom of said casing underneath said pins, a catching device held by said figure, and means operated from the outer side of said casing and designed to move said figure to and fro to catch a dropping ball and to deliver the same to said tube, an incline on the bottom of said casing leading to the outlet hole for the miss balls, and an open box in front of each outlet hole designed to receive the one the balls caught by the moving figure and the other the balls which have not been caught so that said balls can be easily removed from the outer side of the casing.

5. An ability game, comprising in combination with a casing having in its top end an inlet for balls, a vertical board in said casing having near its lower end an outlet hole for the miss balls and an outlet hole for the hit balls, an inclined guide on said board near the upper end underneath said inlet for the balls, deflecting pins on said board, a bent tube fixed with its open upper end in said board at a certain distance above

the bottom of the casing and terminating at its lower end in the outlet hole for the hit balls, a figure on the bottom of said casing underneath said pins, a catching device held by said figure, and means operated from the outer side of said casing and designed to move said figure to and fro to catch a dropping ball and to deliver the same to said tube, said means consisting of a metal plate having a hole registering with the upper mouth of said tube flaps holding said figure and a handle projecting from said casing, an incline on the bottom of said casing leading to the outlet hole for the miss balls, and an open box in front of each outlet hole designed to receive the one the balls caught by the moving figure and the other the balls which have not been caught so that said balls can be easily removed from the outer side of the casing.

6. An ability game, comprising in combination with a casing having in its top end an inlet for balls, a vertical board in said casing having near its lower end an outlet hole for the miss balls and an outlet hole for the hit balls, spacing blocks between said board and said casing, an inclined guide on said board near the upper end underneath said inlet for the balls, deflecting pins on said board, a figure on the bottom of said casing underneath said pins, a catching device held by said figure, and means operated from the outer side of said casing and designed to move said figure to and fro to catch a dropping ball and to deliver the same to the outlet hole for the hit balls so that it rolls out of the casing.

7. An ability game, comprising in combination with a casing having in its top end an inlet for balls, a vertical board in said casing having near its lower end an outlet hole for the miss balls and an outlet hole for the hit balls, spacing blocks between said board and said casing, an inclined guide on said board near the upper end underneath said inlet for the balls, deflecting pins on said board, a figure on the bottom of said casing underneath said pins, a catching device held by said figure, a spring holding said figure in the normal position, and means operated from the outer side of said casing and designed to move said figure to and fro in opposition to the pull of said spring to catch a dropping ball and to deliver the same to the outlet hole for the hit balls so that it rolls out of the casing.

8. An ability game, comprising in combination with a vertical casing composed of a box shaped rear part and of a box shaped lid forming the front part having in its top end an inlet for balls, a vertical board in said casing having near its lower end an outlet hole for the miss balls and an outlet hole for the hit balls, and inclined guide on said board near the upper end underneath said inlet for the balls, deflecting pins on said board, a figure on the bottom of said casing underneath said pins, a catching device held by said figure, and means operated from the outer side of said casing and designed to move said figure to and fro to catch a dropping ball and to deliver the same to the outlet hole for the hit balls so that it rolls out of the casing.

9. An ability game comprising in combination with a casing having in its top end an inlet for balls, a vertical board in said casing having near its lower end an outlet hole for the miss balls and an outlet hole for the hit balls, an inclined guide on said board near the upper end underneath said inlet for the balls, deflecting pins on said board, a figure on the bottom of said casing underneath said pins, a catching device held by said figure, movable elements of said figure designed to oscillate if a ball is caught by said catching device, and means operated from the outer side of said casing and designed to move said figure to and fro to catch a dropping ball and to deliver the same to the outlet hole for the hit balls so that it rolls out of the casing.

10. An ability game comprising in combination with a casing having in its top end an inlet for balls, a vertical board in said casing having near its lower end an outlet hole for the miss balls and an outlet hole for the hit balls, an inclined guide on said board near the upper end underneath said inlet for the balls, deflecting pins on said board, a figure on the bottom of said casing underneath said pins, a catching device held by said figure, a movable head of said figure designed to oscillate if a ball is caught by said catching device, so that it is raised with regard to the catching device to return into its normal position if the ball has dropped out of said catching device, and means operated from the outer side of said casing and designed to move said figure to and fro to catch a dropping ball and to deliver the same to the outlet hole for the hit balls so that it rolls out of the casing.

In testimony whereof I affix my signature.

ARTHUR BIBERFELD.