

No. 798,610.

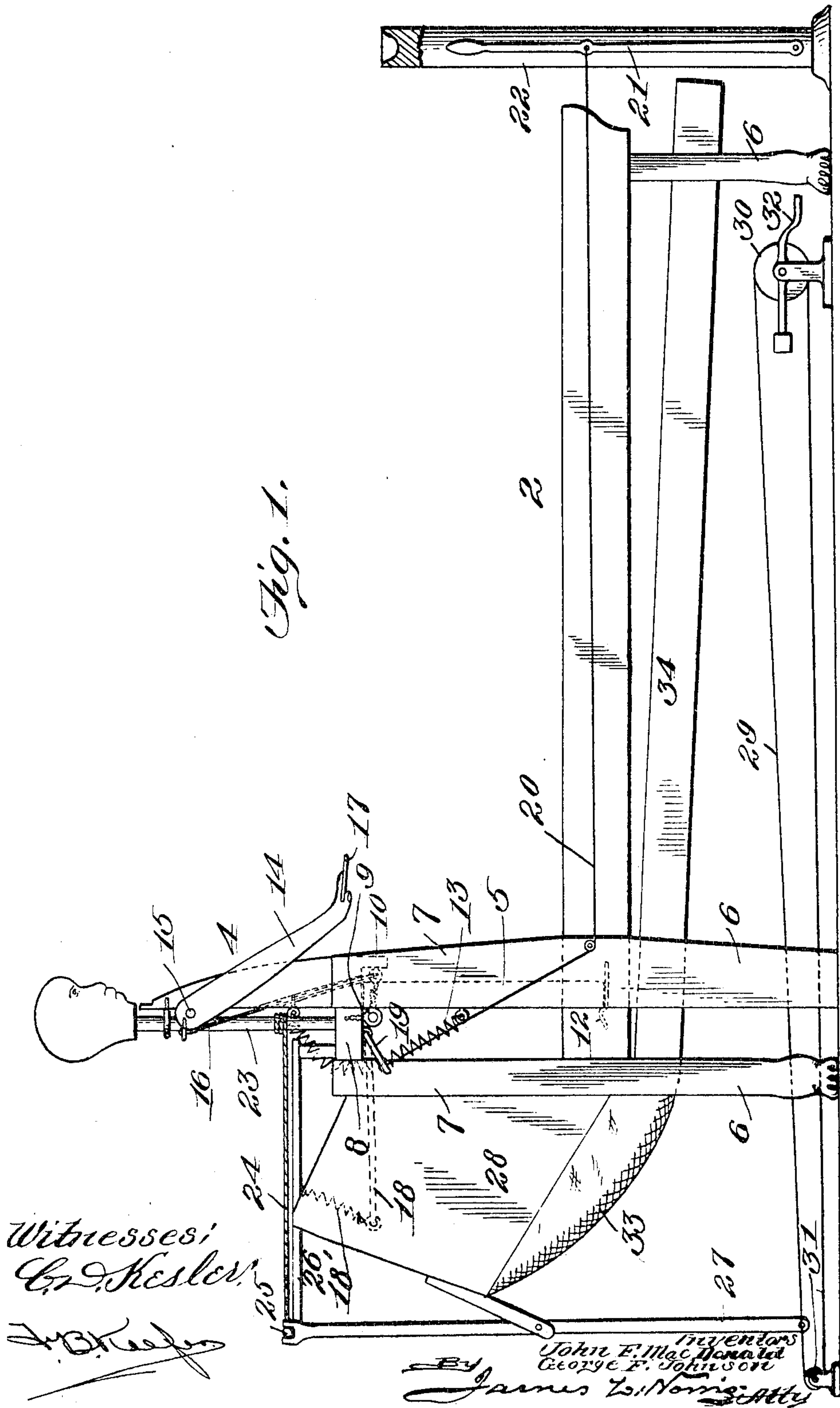
PATENTED SEPT. 5, 1905.

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GAME APPARATUS.

APPLICATION FILED MAY 28, 1904.

3 SHEETS—SHEET 1.



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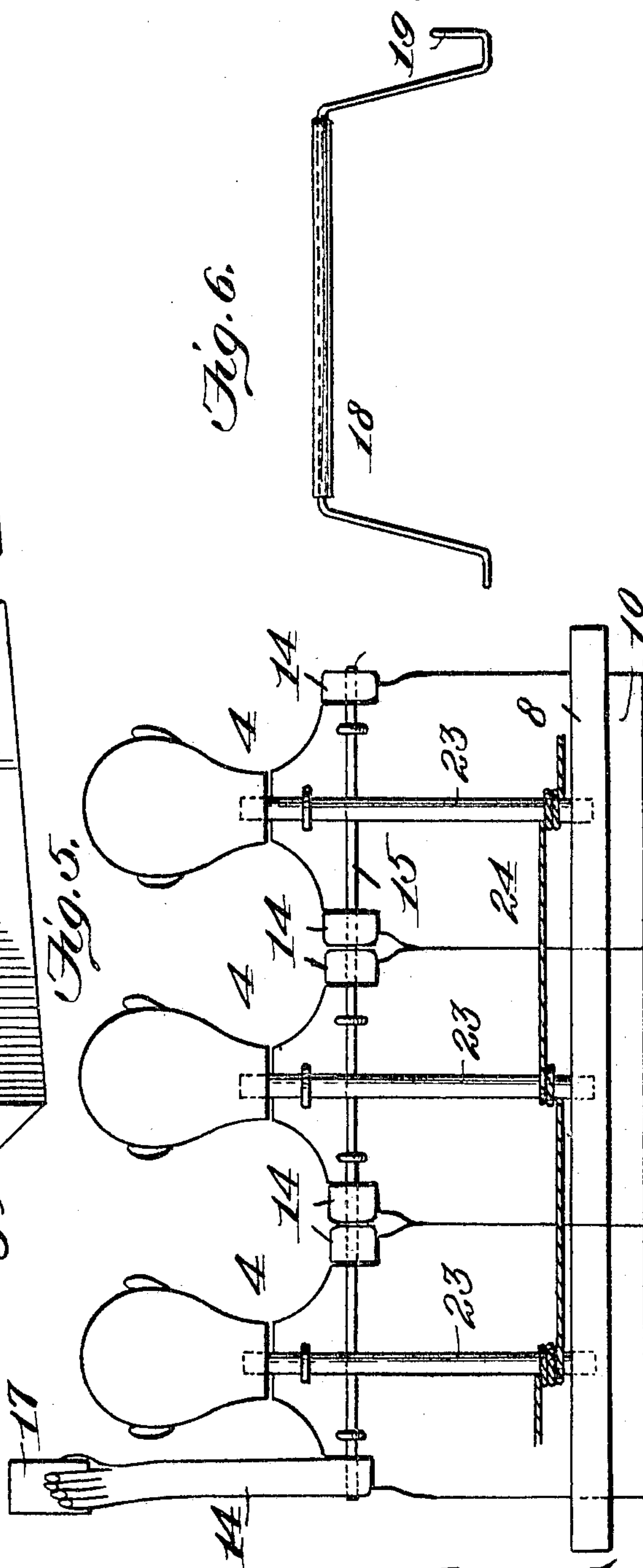
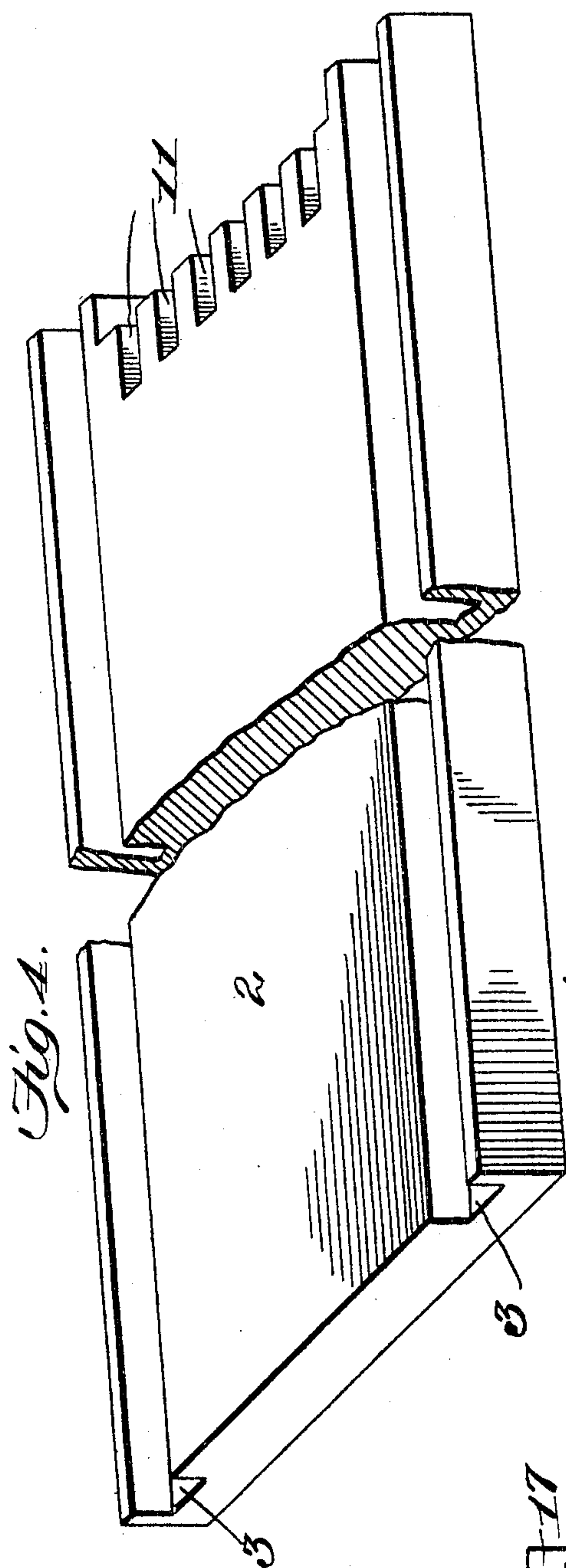
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3 SHEETS—SHEET 3.



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# UNITED STATES PATENT OFFICE.

JOHN F. MACDONALD AND GEORGE F. JOHNSON, OF NORFOLK, VIRGINIA.

## GAME APPARATUS.

No. 798,610.

Specification of Letters Patent.

Patented Sept. 5, 1905.

Application filed May 28, 1904. Serial No. 210,258.

*To all whom it may concern:*

Be it known that we, JOHN F. MACDONALD and GEORGE F. JOHNSON, citizens of the United States, residing at Norfolk, in the county of Norfolk and State of Virginia, have invented new and useful Improvements in Game Apparatus, of which the following is a specification.

This invention relates to game apparatus, the object of the invention being to provide an apparatus of this character which requires considerable skill, while at the same time it affords a corresponding degree of amusement and physical exercise.

In the drawings accompanying and forming a part of this specification we illustrate clearly one desirable and advantageous embodiment of our invention which we will fully set forth in the following description. At this point, however, we wish to state that we do not limit ourselves to the exact disclosure made thereby, for certain variations as to a number of features may be made within the scope of our claims succeeding said description, nor do we restrict ourselves to the association in a single apparatus of all the said features.

Referring to said drawings, Figure 1 is a side elevation of a game apparatus including our invention with a part in section. Fig. 2 is a sectional side elevation of the rear end of the machine, the elevation in Fig. 2 being opposite to that shown in Fig. 1. Fig. 3 is a top plan view illustrating more particularly a portion of a means for securing the rotation of the heads. Fig. 4 is an enlarged perspective detail of a portion of the alley or table. Fig. 5 is a rear elevation of the upper portions of the figures, and Fig. 6 is an elevation of a bail.

The game apparatus is represented as including in its organization a table or, as it is sometimes known, "alley," as 2, provided along its sides with gutters, as 3. Along the upper side of the table or alley balls or equivalent articles are propelled by the players, it being the aim of the players, as will hereinafter appear, to strike with the balls swinging members, for a purpose that will hereinafter be set forth, which swinging members in the present instance constitute legs of one or more figures situated at the end of the alley or table 2, said figures in the present case being made of man-like appearance or being, as we term them, "boys." There are three of these boys or figures 4. One, however, may be employed; but preferably a number

is provided, as in this way the sport of the game will be materially enhanced. These boys are arranged in a row at the rear end of the table, and the swinging members or legs thereof are each denoted by 5.

The table or alley 2, which is generally horizontally disposed, may be of any desirable length, its structure, as will be apparent, being similar to that of the well-known bowling-alley. To uphold the table at a suitable distance from the floor or other foundation, it is provided with props, as 6, the rear props of the table being continued upward to provide uprights 7. A cross-bar, as 8, which may be in the form of a plank or beam, is suitably united at its opposite ends to the several uprights 7.

The bodies of the figures 4 are suitably united, as by screws or similar means, to the cross-bar 8, and they are so shaped as to cause the figures or boys to have a stout appearance, and thereby present a grotesque or comical look. It will be remembered that the legs 5 for the respective bodies are arranged for swinging movement, they normally occupying a vertical position, as will be hereinafter set forth. The several legs have a common pivot or center, which is shown as a transverse shaft 9, supported by suitable bearings upon the under side of the cross-bar 8 and extending through eyes in the upper rear sides of the legs, which eyes may be at the outer ends of screw-shanks screwed into the several legs. The legs, as will hereinafter appear, are connected with the arms of the respective bodies. The joint between the legs and bodies is at a point that would correspond in the human body to the thigh, and to cover the joint or joints the bodies of the figures are provided with downwardly-extending portions, as 10. Normally the legs 5 stand vertically, at which time the foot or lower portions thereof fit in slots or recesses, as 11, formed in the rear edge of the table or alley 2. To maintain the legs in their normal positions, we provide spring-latches, as 12, there being one latch for each leg, as it is understood that the latter are independently operable. The shanks of the spring-latches are suitably connected with the under side of the table, while the free portions of said latches are so shaped as to engage the foot portions of the legs, normally to hold them in their upright positions. The striking of a leg by a rolling ball or similar object traveling along the upper side of the table 2 will swing such leg



away from its holding-latch 12, and when this occurs we provide a spring or analogous means in connection with said leg to instantly shift the same to a horizontal position, or approximately so. During the motion of said leg it through a suitable connection operates an arm. Similar connections are provided between each leg and corresponding arm. Should two legs be operated, it follows that two arms will be also operated, and the same applies if a greater number of legs are operated.

To the bodies of the figures above the cross-bar 8 we connect the upper ends of springs, as 13, of the pull kind, there being one spring for each leg. The lower ends of these springs are connected in some suitable manner with the respective legs. It therefore follows that when a leg 5 is struck by a ball with force sufficient to release the leg from its holding-latch 12 the cooperating spring 13 will become immediately effective for moving the leg from a vertical to a substantially horizontal position. During this motion the corresponding arm is operated.

The arms for the figures are each denoted by 14, they like the legs having a common pivot or center which is represented as a transverse shaft 15, located above and approximately in vertical line with the pivot or shaft 9. The arms are freely and independently movable on the said pivot or shaft, the latter being suitably carried upon the rear side of the several bodies of the figures and being horizontal.

We will now set forth a connection between one arm and a corresponding leg, the same description applying to the similar parts.

The lower end of a cord or equivalent connection, as 16, is united in some suitable manner with a leg 5 at the upper forward side thereof, while the upper end of said cord or equivalent connection is likewise joined with a cooperating arm 14 to the rear of its center of motion. The cord extends through a suitable bore or passage in the body of the figure. It therefore follows that when a leg is released by the impact of a ball or analogous object propelled thereagainst by a player said leg will be swung upward and backward to substantially a horizontal position through the agency of its operating-spring 13 in order to pull the cord 16 downward, and thereby elevate the cooperating arm 14, which is normally pendent, or substantially so, to a position to bring the hand thereof above the horizontal. Should two or more legs be operated, their cooperating arms through the intervening connections will be likewise elevated. In the palm of each hand is a card or equivalent device, as 17, bearing on what might be considered normally its rear face a numeral or other character. As the numeral is normally to the rear, it cannot be seen from the front. When, however, a leg is operated to elevate

a cooperating arm, the hand of said arm is raised above the horizontal in order to expose the numeral on the card carried by the hand from the front. Scores can be taken from these numerals in playing the game, and the greater the skill of the player the higher will be his score.

The means illustrated for resetting the legs 5 will now be described. Said means includes a bail or yoke, as 18, normally substantially horizontally disposed and maintained in such position by a coiled spring, as 18', connected thereto. The transverse portion of said bail is covered with rubber or equivalent material, while the branches or arms thereof have journal or pivot portions supported by suitable bearings on the under side of the cross-bar 8. One of said journal portions is provided with a crank, as 19, to which the rear end of a cord or equivalent connection, as 20, is connected, the cord extending downward from the bail or yoke 18 and over suitable guide-pulleys mounted on the alley or table 2 or at any other convenient place. The forward end of this cord is shown as united with a resetting-lever, as 21, at a point between the ends of said lever. The latter is fulcrumed at its lower end to a standard 22, suitably associated with the table, and is provided at its upper end with a handle by which it can be readily manipulated in order to bring about a resetting or return of the legs to their initial positions. In the top of the standard is a concavity or depression to constitute a cup for a sponge to be used by the players. By pulling the lever forward the cord will be correspondingly drawn to carry the transverse rubber-covered portion of the bail 18 noiselessly against a shifted leg or legs to return the latter to their normal position to be engaged by their latch or latches 12. On releasing the lever the spring 18' becomes immediately effective to return the resetting device or bail 18 to its original position. We provide the active portion of the bail 18 with sound-deadening material. Such material may, if desired, be applied at any other place or places.

The bodies for the figures are provided with collars to hide the joint as much as possible between the heads and bodies. The heads are carried at the upper ends of rotative posts, as 23, socketed at their lower ends in the cross-bar 8 and extending through eyes suitably united to the bodies of the figures above the bar 8. The upper ends of the posts in practice are square and fit correspondingly-shaped seats in the heads. The rotation of the heads is secured independently of the motion of the arms and legs of the figures, it being brought about in the present instance by the operator or attendant in charge of the table. The primary actuating factor for the heads is preferably under the control of the foot of the operator or attendant, and it and its immediately-associated devices are hidden



from view as far as possible by the table in order to leave the public or the players ignorant of the manner in which the heads are moved. In fact, the operation of the heads is secured by an almost imperceptible motion of the leg of the operator or attendant, so that the players will experience considerable difficulty in solving the manner in which the heads are made to turn.

A band, as 24, is passed around the rotative posts or vertical shafts 23, and the opposite ends thereof are connected to the horizontally-disposed lever 25 at opposite sides of its fulcrum, said lever being pivoted to the rear end of a bracket or bearing, as 26, mounted in any desirable way. The band or cord 24 when operated by the lever 25, it will be apparent, simultaneously turns the three posts or shafts 23. The relation between the band and posts or shafts may be such that the said shafts may be turned in opposite or the same directions or in any other desirable way. For example, the relation may be such that when the cord is turned two of the heads will be caused to face each other, while the third head will be caused to turn away from the other two, or any other desirable arrangement may be adopted to suit the individual user.

The bracket or bearing 26, to which reference has been made, is suitably united in some convenient way to the upper end of the standard or upright 26<sup>a</sup>, rising from and fixedly connected in any desirable way with the beam or plank 8. Said bracket or bearing 26 is supported between its ends by a cross-bar 26<sup>b</sup> or other convenient support extending between and connected in some convenient way to the side guards 28, hereinafter described.

The horizontally-disposed lever 25 is operated by a vertically-disposed lever, as 27, pivotally supported by an arm, as 27<sup>a</sup>, fastened to one of two side guards, as 28, connected in some suitable manner with the opposite sides of the table or alley 2 at the rear thereof. This lever 27 is notched at its upper end to receive one end of the horizontal lever 25, whereby when the lever 27 is operated the companion lever will be correspondingly operated to secure the simultaneous turning of the several heads. The lower end of the lever 27 is illustrated as connected to the ends of a band, as 29, of any desirable material, passing around the pulleys 30 and 31. The forward or larger pulley 30 is located under the table or alley 2, where it is out of sight. The forward and rear pulleys may be supported by any suitable bearing upon the floor or other foundation upon which the legs of the table rest.

It will be observed that both the levers 25 and 27 are supported outside of the pocket or hood 33, to which reference is hereinafter made, and naturally outside of the range of the balls directed into said pocket or hood

by the players, whereby during the game neither of the levers nor any of their cooperating parts can be injured.

To the shaft of the pulley 30 a foot-lever 32 is suitably fixed, whereby when the forward or treadle end of said foot-lever is depressed or elevated the heads of the several figures, through the intermediate connections, will be caused to turn in unison.

The balls when they leave the rear end of the alley or table fall into the pocket 33, from which a trough or runway, as 34, at either side of the alley leads, said trough or runway being inclined toward the front of the alley and serving to return the balls to the players at the forward end of the table. In practice the pocket is so formed as to direct the balls into the trough or runway 34.

We claim—

1. In a game apparatus, a table, a plurality of swinging members associated with the table, means for positively holding the swinging members in a normal position and adapted to release said members when they are struck with sufficient force, means distinct from said swinging members for positively shifting the same when they are released, and manually-operable means for returning said swinging members to their normal positions.

2. In a game apparatus, a table, a plurality of swinging members associated with the table, a latch for engaging the lower end of each swinging member to hold the same in a normal position and adapted to release said member when it is struck with sufficient force, and means distinct from said swinging members for positively shifting the same, when released.

3. In a game apparatus, a man-like figure having swinging legs, latching means for engaging the lower ends of the legs to hold the same normally in a substantially vertical position and adapted to release said legs when they are struck with suitable force, and means distinct from the legs for positively moving the same away from their normal positions when released.

4. In a game apparatus, a row of man-like figures having swinging legs and arms, respectively, operatively connected, spring-latches for engaging the lower ends of the legs to hold the same normally in a substantially vertical position and arranged to release the legs when they are struck with sufficient force, and means connected with the legs for moving them away from their normal positions when released.

5. In a game apparatus, a man-like figure having swinging legs and arms, means for normally engaging the lower ends of the legs to positively hold the same in a predetermined position and adapted to release the legs when they are struck with sufficient force, means for positively moving the legs away from their normal positions, and operative



connections between the respective legs and arms.

6. In a game apparatus, an alley, a row of man-like figures at one end of the alley, each having independently-operative swinging legs and swinging arms, a latch carried by said alley for holding each leg normally in a predetermined position and adapted to release the same when the leg is struck with suitable force, and connections between the respective legs and arms for moving the latter when corresponding legs are operated.

7. In a game apparatus, an alley, a row of man-like figures at and rising from one end of the alley, each having swinging legs and swinging arms, a latch carried by the alley for holding each leg normally in a predetermined position and adapted to release said leg when the same is struck with suitable force, connections between the legs and arms for moving the latter when corresponding legs are operated, springs connected with the legs for positively shifting the same when they are released, and manually-operable means for returning the legs to their initial positions.

8. In a game apparatus, a man-like figure having swinging legs and arms operatively connected, the hands of the arms being provided with character-bearing cards, means engaging the lower ends of the legs for normally holding the same in a predetermined position and adapted to release said legs when they are struck with suitable force, and means for positively moving the legs away from their normal positions, when they are released.

9. In a game apparatus, an alley having recesses at one end, a man-like figure situated at

the recessed end of the alley, provided with swinging legs and arms operatively connected, the foot portions of the legs being located normally in the recesses, spring-latches for normally engaging the said foot portions to hold the legs and serving, when the legs are struck with sufficient force to release the same, and means for positively moving the legs away from their normal positions, when released by said spring-latches.

10. In a game apparatus, a man-like figure having a swinging leg and arm operatively connected, the arm carrying a character-bearing card, means engaging the lower end of the leg for normally holding the same and adapted, when said leg is struck with sufficient force, to release the same, and means for positively moving the leg away from its normal position when it is released, the leg, through its connection with said arm, serving to shift the latter.

11. In a game apparatus, a table, a plurality of swinging members associated with the table, means for positively holding the swinging members in a normal position and adapted to release said members when they are struck with sufficient force, and means distinct from the swinging members for positively shifting the same when they are released.

In testimony whereof we have hereunto set our hands in presence of two subscribing witnesses.

JOHN F. MacDONALD.  
GEORGE F. JOHNSON.

Witnesses:

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