

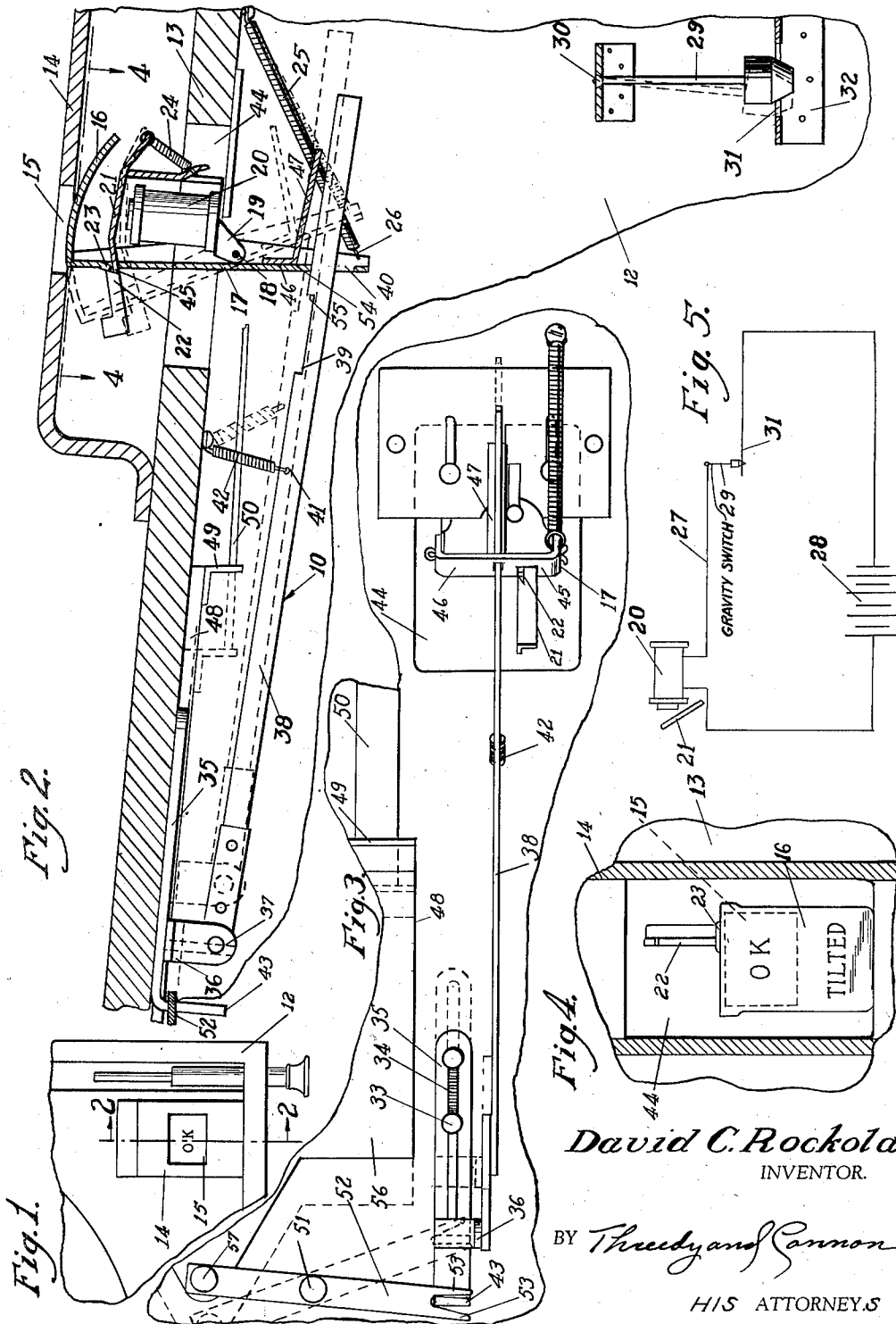
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TELLTALE DEVICE

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TELL-TALE DEVICE

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This invention relates to a tell-tale device.

It is an object of this invention to provide an improved tell-tale device which is relatively simple and inexpensive in construction and efficient in use.

Another object of the present invention is to provide an improved tell-tale device for a game apparatus and by means of which an attempted fraudulent operation or tilting movement of the game apparatus with which the device is associated may be readily noted, and which attempted fraudulent operation will actuate the tell-tale device in such a manner as to release whatever balls may be retained upon the playing surface of the game apparatus with which the tell-tale device is associated.

Other objects will appear hereinafter.

The invention consists in the novel combination and arrangement of parts to be hereinafter described and claimed.

The invention will be best understood by reference to the accompanying drawing showing the preferred form of construction, and in which:

Fig. 1 is a fragmentary top plan view of a game apparatus of the so-called pin and marble game type embodying a preferred form of the present invention;

Fig. 2 is a vertical sectional view on line 2—2 in Fig. 1 showing a preferred form of the present invention;

Fig. 3 is a bottom plan view of the device shown in Fig. 2;

Fig. 4 is a fragmentary top plan view, on line 4—4 in Fig. 2, showing an indicator or tell-tale embodied in the invention; and

Fig. 5 is a schematic wiring diagram of an electrical circuit embodied in the present invention.

A preferred form of the present invention as shown in the drawing, is therein generally indicated at 10, and is shown associated with an amusement game apparatus of the so-called pin and marble game type.

The game apparatus 11 comprises a cabinet 12 which includes an inclined playing board 13 and mounted upon this inclined playing board 13, adjacent the lower end thereof, is a housing 14 in which is provided a sight opening 15.

Arranged within the housing 14, below the sight opening 15, is an indicator or tell-tale 16, upon which are provided suitable indicia (Fig. 4) to indicate when the cabinet 12 is in its normal and proper operating position and when the same has been tilted from its normal and proper operating position.

The flag or indicator 16 is carried by a U-shaped supporting member 17 which is pivotally mounted between its ends, as at 18, upon a supporting bracket 19 which is arranged below the inclined playing board 13; and likewise arranged in the cabinet 12, in an opening 44 which is provided therefor in the inclined playing board 13, is an electromagnet 20. This electromagnet 20 has an armature 21 and this armature 21 is slidably projected through an opening 45 which is provided in the right portion 46 of the member 17. The armature 21 has a latch portion 22 which is latchinglly engageable with a latch element 23 which is formed in the member 17, above the opening 45 therein, the latch element 22 being urged into latching engagement with the latch element 23 by means of a spring 24 which is attached to the armature 21 adjacent one end thereof (Fig. 2), this spring 24 normally urging the armature 21 (from dotted to full line position, Fig. 2). The latch element 23, which is formed in the member 17, is urged out of latching engagement with the latch element 22, which is formed in the member 21, by means of a spring 25 which is attached, as at 26, to the lower end portion of the member 17 as shown in Fig. 2, this spring 25 normally urging the member 17 in an anticlockwise direction out of its latched and normal indicating position (from full to dotted line position, Fig. 2).

The electromagnet 20 is arranged in an electrical circuit 27 which is shown diagrammatically in Fig. 5, and this circuit 27 also includes a source of energy 28, which may be a battery of dry cells, or the like, arranged in the cabinet 12. The circuit 27 also includes a gravity actuated member in the form of a pendulum 29 which is swingingly mounted in the cabinet 12 below the inclined playing board 13, as at 30, (Fig. 2), and the lower end portion of this pendulum 29 is disposed within a conductive ring or annular contact 31 which is also mounted in the cabinet 12 below the inclined playing board 13, as at 32 (Fig. 2).

Slidably mounted upon the inclined playing board 13, on the underside of the same, by means of a pin and slot connection 33—34, is a bar 35, and this bar 35 has a depending arm 36 which is pivotally connected, as at 37, to a slide bar 38. Provided in this slide bar 38 is a latch element in the form of a notched portion 39 and the slide bar 38 is slidably projected through an opening 40 which is formed in the right portion 46 of the U-shaped member 17.

Attached to the slide bar 38, as at 41, is a

spring 42 and this spring 42 normally urges the slide bar 38 (in a counterclockwise direction, as seen in Fig. 2).

Attached to the bight portion 46 of the U-shaped member 17 is an arm 47 (Fig. 2).

Slidably mounted in the cabinet 12, below the inclined playing board 13, is the usual ball-retaining member 48 (Figs. 2 and 3) and this member 48 has a depending arm 49 (Fig. 2).

Engageable with this depending arm 49 of the ball-retaining member 48 is the inner end portion of the coin slide 50.

Pivotally mounted between its ends, as at 51 (Fig. 3), upon the inclined playing board 13, on the bottom side of the same, is a member 52, and this member 52 has a bifurcated end portion which provides a pair of spaced arms 53, and the slide bar 35 has a depending end portion 43 which projects between the arms 53 of the member 52. This member 52 is pivotally connected at one end, as at 57, to an arm 56 of the slidable ball-retaining member 48 (Fig. 1).

Operation

In the use of the present tell-tale device the indicator 16 is normally disposed (as in full lines, Fig. 2) when the cabinet 12 is disposed in its normal or proper operation position.

However, if the cabinet 12 is tilted from its normal or proper operating position, for any reason, such as in an attempt to operate fraudulently the game apparatus with which the present tell-tale device is associated, the pendulum 29 will engage the contact ring 31 and thereby close the circuit 27 to the electromagnet 20, whereupon the electromagnet 20, being thus energized, will attract its armature 21 and thereby pivot the same, against the action of the spring 24 (in a counterclockwise direction, or from full to dotted line position, as seen in Fig. 2).

This movement of the armature 21 (from full to dotted line position, Fig. 2), moves the latch element 22 thereof out of latching engagement with the latch portion 23 of the member 17, whereupon the indicator 16 will be pivoted, by the spring 25, (in a counterclockwise direction, or from full to dotted line position, Fig. 2), thereby causing the tell-tale or indicator 16 to indicate through the sight opening 15 that the cabinet 12 has been moved from its normal or proper operating position.

When the indicator 16 is thus moved into effective position (as in dotted lines, Fig. 2), that is, into position to indicate that the cabinet 12 has been mode from its normal or proper operating position, the parts will remain in this position until the cabinet 12 is returned to its normal or proper operating position and the coin slide 50 is operated (from right to left, Fig. 2), whereupon the inner end portion of the coin slide 50 will engage the depending arm 49 of the slidable ball-retaining member 48 and thereby move the latter (from right to left, Figs. 2 and 3), it being noted that when the cabinet 12 is returned to its normal or proper operating position the gravity-actuated member or pendulum 29 will move out of contact with the conductive ring 31, thereby opening the circuit 27 and deenergizing the electromagnet 20.

When the slidable ball-retaining member 48 is moved into ball-releasing position (from right to left, Figs. 2 and 3), by the action of the coin slide 50, as above set forth, the portion 56 of the slidable ball-retaining member 48 will pivot the member 52, at 51, (from dotted to full line posi-

tion, Fig. 3). This movement of the pivotal member 52 (from dotted to full line position, Fig. 3), causes one of the arms 53 of the same to engage the depending arm 43 of the slide bar 35 and thereby shift the latter and the slide bar 38 (from left to right, Figs. 2 and 3). When the slide bar 38 is thus moved (from left to right, Fig. 2), the notched portion 39 thereof is urged, by the spring 42, into position to receive the portion 54 of the member 17 (Fig. 2), this portion 54 of the member 17 forming the upper wall of the opening 40.

Accordingly, when the coin slide 50 and the slidable ball-retaining member 48—56 are released and returned to their initial positions (right to left, Figs. 2 and 3), by resetting means (not shown), the slide bar 38 is moved (right to left, from dotted to full line position, Fig. 2) and during this operation the notch portion 55 of the slide bar 38 which forms one end wall of the notch 39 engages the portion 54 of the member 17 and thereby pivots the latter (clockwise, from dotted to full line position, Fig. 2). During this operation the latch element 22 of the member 21 is urged, by the spring 24, into latching engagement with the latch element 23 of the member 17 and the tell-tale device or flag 16 is thus reset into its normal or initial position (as in full lines, Fig. 2), and at the same time the extending arm 47 cams the reset arm 38 downwardly against the tension of the spring 42 so as to disengage the notch portion 55 from the portion 54 of the member 17, thus freeing the latter for movement independently of arm 38 until the flag is tripped again.

While I have illustrated and described the preferred form of construction for carrying my invention into effect, this is capable of variation and modification, without departing from the spirit of the invention. I, therefore, do not wish to be limited to the precise details of construction set forth, but desire to avail myself of such variations and modifications as come within the scope of the appended claims.

Having thus described my invention, what I claim as new and desire to protect by Letters Patent is:

1. A tell-tale mechanism for a game apparatus of the type having a cabinet including a member providing a ball-playing surface; said mechanism comprising a tell-tale member or indicator movably mounted in said cabinet and including a portion visible from above the said playing surface; means urging the said indicator into a position to indicate that the said cabinet has been tilted from its normal or proper operating position; means latching the said indicator in its normal position against the action of said urging means; and electro-magnetic latch-releasing means including a gravity switch mounted in the said cabinet and operable to actuate said releasing means when said cabinet is tilted for releasing said latching means from latching engagement with said indicator so as to enable the latter to move, under the action of said urging means, into a position to indicate that the said cabinet has been moved from its normal or proper operating position.

2. A tell-tale mechanism for a game apparatus of the type having a cabinet including a member providing a playing surface; said mechanism comprising a tell-tale member or indicator movably mounted in the said cabinet and including a portion visible from above the said playing surface; means urging the said indicator into a

position to indicate that the said cabinet has been tilted from its normal or proper operating position; means releasably latching the said indicator in its normal position, against the action of said urging means; a gravity-operated switch mounted in the said cabinet and adapted to close a circuit when the cabinet is tilted; and an electro-magnetic device actuated by circuit-closing operation of said gravity-operated switch to release said latching means from latching engagement with said indicator so as to enable the latter to move, under the action of said urging means, into position to indicate that the said cabinet has been moved from its normal or proper operating position, together with means including a reciprocable arm adapted for operation by means operatively associated with said game apparatus for resetting said indicator into latched engagement with said latching means.

3. A tell-tale apparatus for use with game devices including a resetting instrumentality, said apparatus including a pivoted indicator movable into and out of indicating position, yieldable means normally urging said indicator into indicating position, a fulcrumed arm normally and releasably latching said indicator out of indicating position, electrical means for pivoting said arm out of latching engagement with said indicator, means for moving said indicator out of indicating position and including a reciprocable arm disposed for movement into operative engagement with said indicator when moved in one direction and operable to pivot said indicator back into latched condition and out of indicating position and thereafter disengage the indicator so that the same may move independently of said reciprocable arm when the latter is moved in the opposite direction, and means operable by said resetting instrumentality for reciprocating said reciprocable arm, together with means including a switch operable by tilting from a determined position for energizing said electrical means.

4. Tell-tale mechanism comprising a pivotally mounted indicator, yieldable means urging said indicator into a first indicating position, means including a magnetically attractable member for

latching said indicator into a second and normal indicating position against the urgency of said yieldable means, an electro-magnetic member operable to move said magnetically attractable member out of latching engagement with the indicator to permit the same to move out of said latched normal position into said first indicating position, tilt-operated switch means for energizing said electro-magnetic member, and resetting mechanism for said indicator including an arm mounted for reciprocatory movement relative to said indicator and having a notched portion transiently engageable with said pivoted indicator to move the latter from said second and normal indicating position back to the first indicating position when said arm is reciprocated.

5. Tell-tale mechanism including an indicator mounted for movement into a plurality of indicating positions, yieldable means urging said indicator into a first indicating position, means including a magnetically attractable member engageable with said indicator to latch the same in a second and normal indicating position against the urgency of said yieldable member, an electro-magnetic element for moving said attractable member out of latching engagement with the indicator, a gravity-operated switch in circuit with said magnetic element and means for resetting said indicator from said first indicating position back to the second and normal indicating position, said means including a reciprocable member, an elongated resetting arm pivoted at one of its extremities to said reciprocable member and having adjacent its opposite extremity a notched portion positioned for engagement with said indicator when said resetting arm and reciprocable member are moved in one direction whereby said indicator may be moved from said first indicating position back to said second and normal indicating position when said resetting arm and reciprocable member are moved in an opposite direction, and means on said indicator operable to pivot said resetting arm and disengage the notched portion thereof from the indicator when the latter is moved back to normal position as aforesaid.

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