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W. H. BUTTERWORTH

1,968,371

TELLTALE DEVICE

Filed Feb. 23, 1934

Fig. 1.

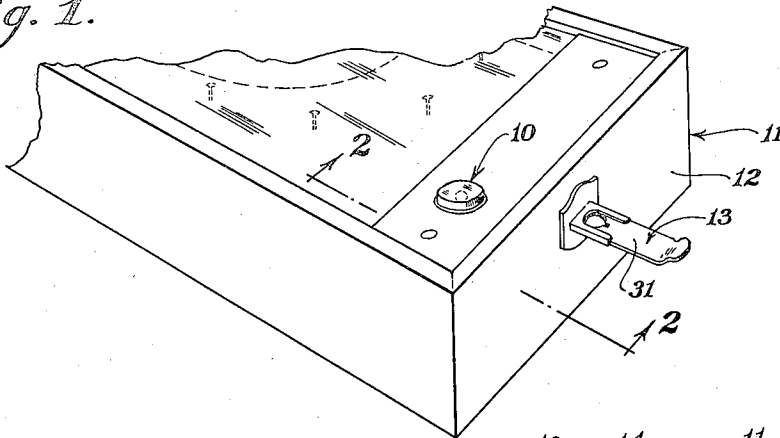


Fig. 2.

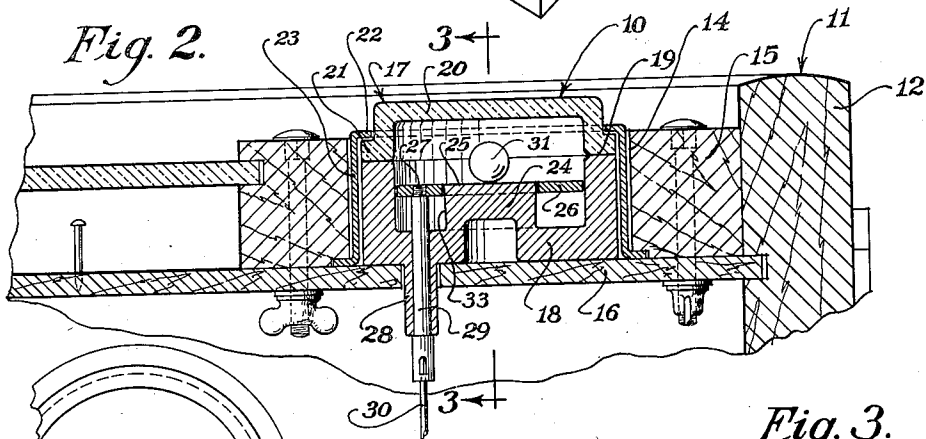


Fig. 4.

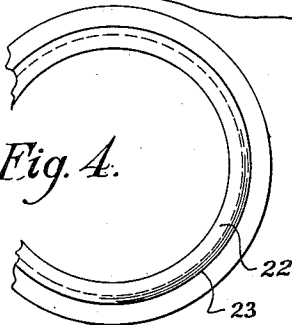


Fig. 7.

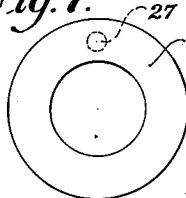


Fig. 5.

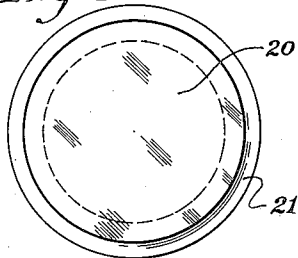


Fig. 6.

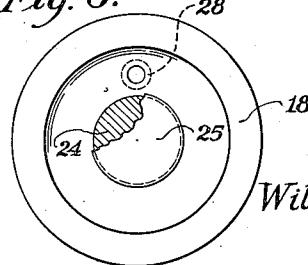
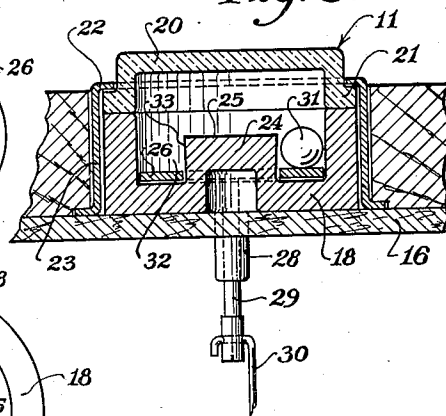


Fig. 3.



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UNITED STATES PATENT OFFICE

1,968,371

TELLTALE DEVICE

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Application February 23, 1934, Serial No. 712,568

9 Claims. (Cl. 116—114)

This invention relates to telltale devices.

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

Another object of the invention is to provide an improved anti-tilting or telltale device for detecting and preventing the fraudulent operation of coin-controlled apparatuses.

A further object of the invention is to provide an improved telltale or anti-tilting device for use in conjunction with a coin-controlled amusement game apparatus whereby the proprietor or lessee of the same may detect and prevent fraudulent operation of the game apparatus should the operator thereof attempt to fraudulently operate the apparatus by tilting the same out of its normal, level or horizontal position and otherwise manipulating it.

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 perspective view of a conventional coin-controlled amusement game apparatus showing a preferred form of the invention associated therewith;

Fig. 2 is an enlarged vertical sectional view of the aforementioned preferred form of the new device, on line 2—2 in Fig. 1;

Fig. 3 is a transverse vertical sectional view on line 3—3 in Fig. 2;

Fig. 4 is a plan view of a part of the casing embodied in the aforementioned preferred form of the invention;

Fig. 5 is a plan view of a transparent closure member forming a part of the casing embodied in the preferred form of the invention shown;

Fig. 6 is a top plan view of the ball seat and base of the casing embodied in the preferred form of the invention; and

Fig. 7 is a plan view of the ball elevator or ball-elevating ring.

A preferred form of the invention is illustrated in the drawing, is therein generally indicated at 10, and is shown associated with a conventional coin-controlled apparatus in the form of an amusement game apparatus, generally indicated at 11.

The coin-controlled apparatus 11 comprises a cabinet 12 in an end wall of which is arranged a conventional coin chute 13 which is intended

to control the operation of any desired type of operating mechanism that may be arranged in the cabinet 12 (but not shown) and for the proper and authorized operation of which parts the cabinet 12 should be kept level on its supporting base, (not shown); it being understood that in coin-controlled apparatuses operators thereof will frequently attempt to operate the same fraudulently by tilting the apparatus out of its normal level position and otherwise manipulating it. To discourage this practice and to enable the proprietor or lessee of the apparatus to detect when the same has been tilted and fraudulently operated the new telltale or anti-tilting device 10 is provided.

The preferred form of the new telltale or anti-tilting device 10 is shown associated with the cabinet 12 in a conventional manner and for the purpose of illustrating the invention the same is shown mounted in a recess 14 formed in a wall 15 of the cabinet 12 and supported by an end portion of a member 16 which provides the ball-playing surface of the game apparatus; it being understood that this arrangement of the new device does not limit the invention to the particular arrangement or mounting shown since the same may be arranged and mounted in many different ways and in different types of cabinets for coin-controlled apparatuses.

The new anti-tilting or telltale device 10 comprises a casing, generally indicated at 17. This casing 17 includes a bottom section or body portion 18 which is mounted upon and is supported by the cabinet member 16. The bottom section 18 of the casing 17 has an open top 19, over which is arranged a transparent annular top or closure member 20. This closure member 20 has an annular external flange 21 and is held in position upon the bottom casing section 18 by an annular flange 22 which is formed at the top of a retaining cup-shaped member 23. This member 23 forms a part of the casing 17 and encircles the bottom section 18 thereof externally of the same.

Formed in the bottom section 18 within the casing 11 is an annular ball seat 24 which has a slight concavity on its upper and ball-supporting surface 25. Slidably mounted for vertical movement in the casing 11 is a ball elevator in the form of a ring member 26 which is arranged in a groove 32 that is formed in the bottom section 18 of the casing 17. Attached to the ball elevator or ball-elevating ring 26, as at 27, and slidably projected downwardly through a guideway 28 formed in the bottom casing section 18 is an operating member or rod 29 which has connec-

tion at its lower end (Figs. 2 and 3) to an operating element 30 which, in turn, is intended to be associated with the coin controlled operating mechanism in the cabinet 12.

5 Arranged in the casing 17 is a tell-tale ball 31 and when the apparatus 11, including the cabinet 12, is arranged in its proper, level position, the telltale ball 31 is arranged upon the slightly concave face 25 of its seat 24 to indicate this fact, and the ball elevator ring 28 is arranged (as in Fig. 2) with its upper face substantially flush with, or in the same horizontal plane with, the upper surface 25 of the ball seat 24. However, the association of the ball elevator or ball-elevating ring 26 and its operating parts 29—30 with the coin-controlled operating mechanism in the cabinet 12 is such that when a proper coin is inserted into the coin aperture of the coin slide 31 and the latter is pushed inwardly, the operating elements 30 and 29 pull the ball elevator 26 downwardly in the groove 32, from the position of Fig. 2 into the position of Fig. 3, in which latter position the upper surface of the ball elevator 26 is disposed below the upper surface 25 of the ball seat 24, so that if an attempt is made to fraudulently operate the coin-controlled apparatus in the cabinet 12 by tilting and otherwise manipulating the cabinet 12, the telltale ball 31 will gravitate off its ball seat 24—25 into the annular groove 32 wherein it will rest upon the lowered ball elevator 26. In this position the telltale ball 31 indicates to the proprietor or lessee of the coin-controlled apparatus with which the same is associated that the operator of the apparatus is attempting to or has attempted to, operate the same fraudulently. In this way the new device effectively serves to discourage and prevent fraudulent operation of the coin-controlled apparatus with which it is associated.

40 As the coin slide 31 returns to its initial and ball-receiving position and the operation of the mechanism in the cabinet 12 is completed, the operating means 30 and 29, for the ball elevator 26, are raised and the ball elevator 26 is thus lifted from its lowered position of Fig. 3 to its raised position of Fig. 2, and carries with it the tell-tale ball 31.

50 The annular ball seat member 24 is slightly smaller in diameter at its base than at its top (Figs. 2 and 3) so that its peripheral side wall 33 is slightly inclined from the vertical.

During the ball-elevating operation the telltale ball 31 bears against the slightly inclined or tapered peripheral side wall 33 of the ball seat 24 and is deflected laterally thereby away from the ball seat and toward the radially outer edge of the ball elevator 26; the telltale ball 31 finally coming to rest upon the upper surface 25 of the ball seat 24 only when the ball elevator 26 has reached the limit of its upward movement and has come to rest with its upper surface flush with the upper surface 25 of the ball seat 24. This feature makes it difficult and practically impossible for the operator of the coin-controlled apparatus with which the telltale device is associated to fraudulently reseal the telltale ball 31 upon its seat 24 by manipulating the ball elevator 26 if he dislodges the ball 31 from its seat by tilting and otherwise attempting to fraudulently operate the apparatus with which the new device is associated, so that the proprietor or lessee of the apparatus is thus assured by the absence of the telltale ball 31 from its proper place upon the ball seat 24—25 that the operator of the apparatus has attempted to operate the same fraudulently and

is not entitled to any of the advantages or amusement to be derived therefrom.

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 telltale device, comprising, a casing having a substantially horizontal ball seat therein; a ball elevator encircling said ball seat and movable vertically relative thereto within said casing; means for operating said ball elevator; and a telltale ball in said casing disposed upon said ball seat in the normal, horizontal position of the latter but gravitating therefrom onto said ball elevator when the said ball seat is tilted from its normal, horizontal position.

2. A telltale device, comprising, a casing having a substantially horizontal ball seat therein adapted to have a telltale ball seated thereon when the said device and its said seat are disposed in their normal, level and horizontal position; and a ball elevator encircling said ball seat and movable relative thereto within said casing; said telltale ball gravitating from its normal position upon its said ball seat onto said ball elevator when said device and its said ball seat are tilted from their normal horizontal or level position.

3. A telltale device, comprising, a casing having a substantially horizontal ball seat therein; an annular ball elevator encircling said ball seat and movable vertically relative thereto within said casing; means for operating said ball elevator; and a telltale ball in said casing disposed upon said ball seat in the normal, horizontal position of the latter but gravitating therefrom onto said ball elevator when the said ball seat is tilted from its normal horizontal position.

4. A telltale device, comprising, a casing having substantially horizontal telltale ball seat therein adapted to have a telltale ball seated thereon when the said device and its said seat are disposed in their normal, level and horizontal position; and an annular ball elevator encircling said ball seat and movable relative thereto within said casing; said telltale ball gravitating from its normal position upon its said ball seat onto said ball elevator when said device and its said ball seat are tilted from their normal horizontal or level position.

5. A telltale device, comprising, a casing; an upright member in said casing having a substantially horizontal upper surface providing a ball seat; an annular ball elevator encircling said member and movable vertically relative thereto within said casing; means for raising and lowering said ball elevator; and a telltale ball in said casing disposed upon said ball seat in the normal, level or horizontal position of the latter but gravitating therefrom onto said ball elevator when the said ball seat is tilted from its proper level or horizontal position.

6. A telltale device, comprising, a casing; a member in said casing having a substantially horizontal upper surface providing a ball seat and there being formed within said casing an annular groove encircling said ball seat below the latter; an annular ball elevator arranged in said

groove and movable vertically therein relative to said ball seat; a telltale ball in said casing disposed upon said ball seat in the normal horizontal or level position of the latter but gravitating therefrom into said groove and onto said ball elevator when the said ball seat is tilted from its normal horizontal or level position; and means for raising and lowering said ball elevator in said groove.

10 7. A telltale device, comprising, a casing; an upright member in said casing having a substantially horizontal upper surface providing a ball seat; an annular ball elevator encircling said annular member and movable vertically relative
15 thereto within said casing; means for raising and lowering said ball elevator; and a telltale ball in said casing disposed upon said ball seat in the normal, level or horizontal position of the latter but gravitating therefrom onto said ball elevator
20 when the said ball seat is tilted from its proper level or horizontal position; said ball seat member having its peripheral side wall slightly inclined from the vertical so as to deflect the said telltale ball radially outwardly therefrom as the
25 said telltale ball is elevated toward its said seat by said ball elevator.

30 8. A telltale device, comprising, a casing; a member in said casing having a substantially horizontal upper surface providing a ball seat and there being formed within said casing an annular

groove encircling said ball seat below the latter; an annular ball elevator arranged in said groove and movable vertically therein relative to said ball seat; a telltale ball in said casing disposed upon said ball seat in the normal, horizontal or level position of the latter but gravitating therefrom into said groove and onto said ball elevator when the said casing is tilted from its normal horizontal or level position; and means for raising and lowering said ball elevator in said groove; said ball seat member having its peripheral side wall slightly inclined from the vertical so as to deflect the said telltale ball radially outwardly therefrom as the said telltale ball is elevated toward its said seat by said ball elevator.

9. A telltale device, comprising, a casing; a member in said casing having a substantially horizontal upper surface providing a ball seat; a telltale ball in said casing disposed upon said ball seat in the normal, level or horizontal position of the latter but gravitating therefrom when the said ball seat is tilted from its normal, level or horizontal position; means for receiving said telltale ball when the same is gravitated from its said seat including a ball elevator movable in said casing for returning the said telltale ball to its said seat after the same has gravitated therefrom; and means for operating said ball elevator.

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