Dec. 9, 1924. 1,518,845

H. J. FOLEY ET AL

CHANCE DEVICE

Filed May 7, 1923 2 Sheets-Sheet 1

Fig. 1.

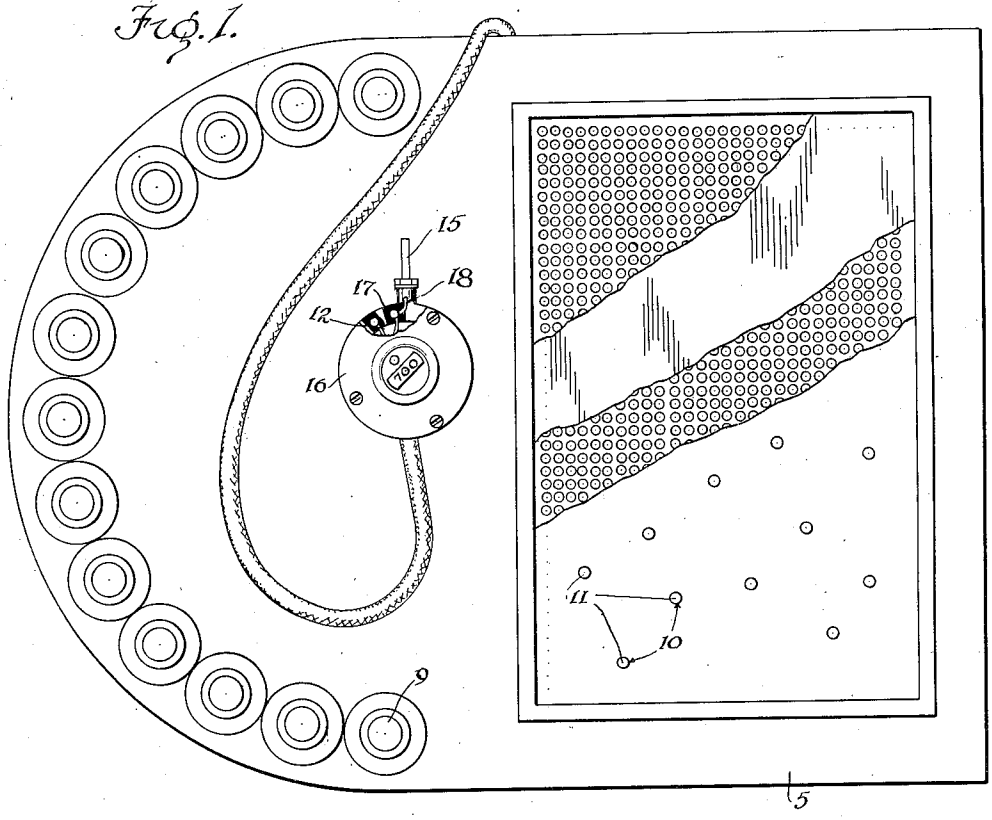
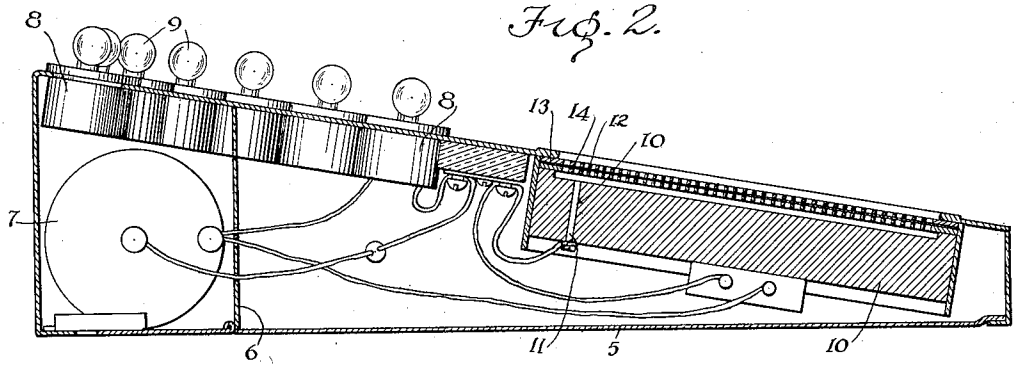


Fig. 2.



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Fig. 3.

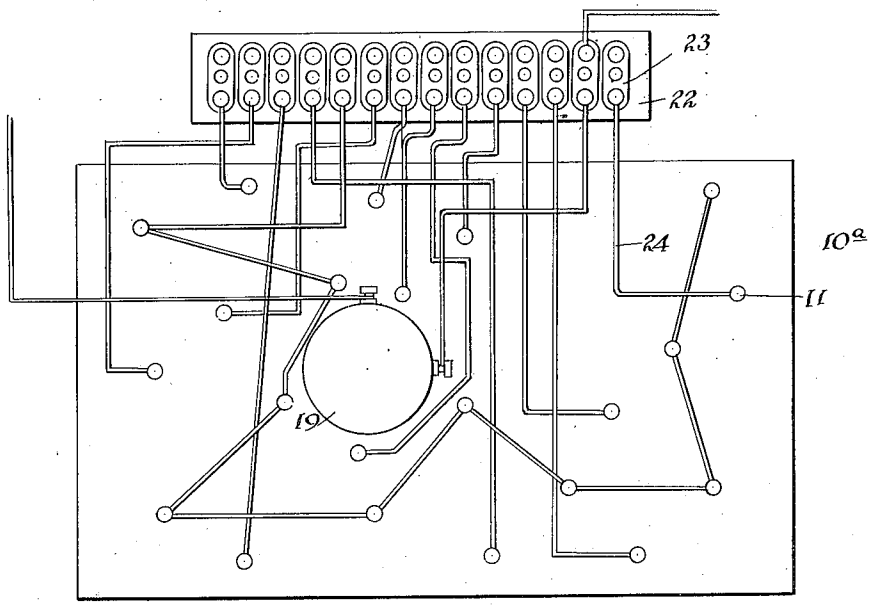
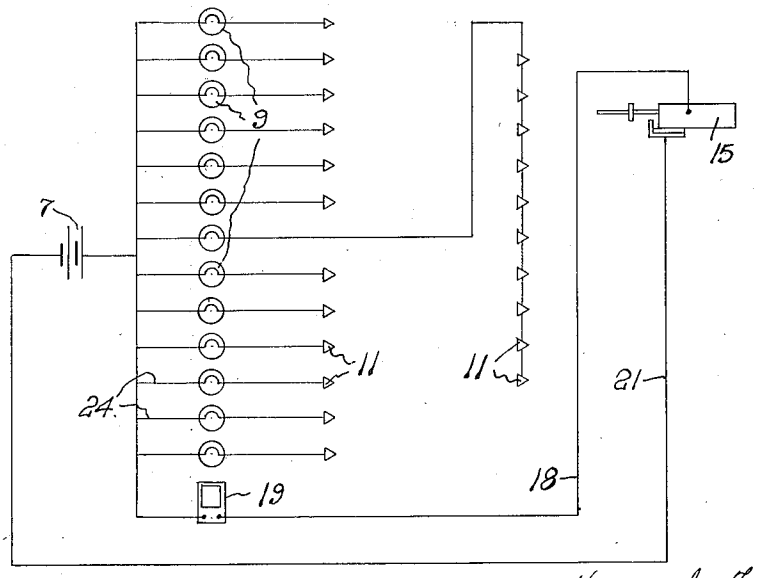


Fig. 4.



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Patented Dec. 9, 1924. 1,518,845

UNITED STATES PATENT OFFICE.

HENRY J. FOLEY, THOMAS DILLOWAY, AND RYLAND D. BATCHELDER, OF BURLINGTON, VERMONT.

CHANCE DEVICE.

Application filed May 7, 1923. Serial No. 637,294.

To all whom it may concern:

Be it known that we, HENRY J. FOLEY, THOMAS DILLOWAY, and RYLAND D. BATCHELDER, citizens of the United States of America, and residents of Burlington, in the county of Chittenden and State of Vermont, have invented certain new and useful Improvements in Chance Devices, of which the following is a specification.

This invention relates to chance devices under the general class of games and toys, and has for an object the provision of novel means for producing a signal when an electric contact is made by a punching device which is inserted in a socket with which a contact is associated. It is the purpose of the inventors, however, to produce a board having a plurality of indicated sockets with novel means for guarding the sockets in order that the contacts will not be visible, it being necessary to rupture a shield guarding the socket prior to the insertion of the contact pin by which the circuit is formed, should a contact be encountered in the socket being pegged or punched.

It is a further object of this invention to produce a chance device having a board preferably wired with contacts and conductors leading to signals such as lamps, or the signals may be audible, according to the wishes of the producer or user; and it is furthermore an object of this invention to provide novel means whereby the operation of the peg or plug will result in the production of a signal which is preferably audible prior to the rupture of the socket guard, in order that the owner of the chance device may know that the plug is being inserted.

It is a further object of this invention to produce a chance device of the character indicated in which the board may be removable so that a machine may be used with successive boards of different combinations, a condition which will preclude users from being familiar with the location of the contacts of the system.

It is a further object of this invention to produce a chance device having a board of the character indicated so concealed as to be inaccessible from the rear, except by those who have proper authority or keys for unlocking the same; and it is furthermore an object to provide a compartment accessible independently of that part of the device having the board in order that the battery may be renewed without disturbing the other parts of the apparatus.

With the foregoing and other objects in view, the invention consists in the details of construction, and in the arrangement and combination of parts to be hereinafter more fully set forth and claimed.

In describing the invention in detail, reference will be had to the accompanying drawings forming part of this application wherein like characters denote corresponding parts in the several views, and in which—

Figure 1 illustrates a plan view of a device embodying the invention;

Figure 2 illustrates a sectional view thereof;

Figure 3 illustrates a rear view of the board, showing the connections for the conductors thereof; and

Figure 4 illustrates a diagrammatic view of the wiring.

In these drawings, 5 denotes a suitable casing, the rear or under side of which may have a suitable door, and provision may be made for preventing access to the interior of the casing by unauthorized persons. As the door, however, may be of a conventional type, and as the locking mechanism does not form a part of the present invention, no attempt has been made to show these details. The casing has a partition 6 forming a compartment for a battery 7, as it is the purpose of the inventors that this compartment shall be accessible to anyone who may want to renew the battery.

Within the casing there are a plurality of lamp sockets 8 accessible from the exterior in order that lamps 9 may be applied thereto, and, if desired, the lamps may be of different colors to indicate the value of the prizes which are to be given to those who are fortunate enough to plug a socket having a contact or terminal. Preferably, also, provision might be made for housing the lamps in order that they may not be tampered with by unauthorized persons, for, of course, if the lamps were slightly unseated, they would not be illuminated, even though the operator plugged a socket having a contact. Suitable protection should, of course, be provided for safeguarding the device against fraud.

The board 10^a has a plurality of sockets 10, and some of these sockets are provided with electrical contacts or conductors 11

which are suitably wired, as will presently appear, to the lamps so that when a socket is plugged that contains a contact or conductor, the appropriate lamp will be illuminated.

In order to safeguard the apparatus against its being tampered with, the socket board is provided with two, preferably metal, plates 12 and 13 with an interposed paper shield 14, although instead of paper, any other material may be employed which will guard against the insertion of a plug without offering resistance to its insertion, as will presently appear. Some apertures in the plates aline with the contacts on the board so that when a plug is inserted through the apertures of the plate and has punctured the shield, the plug may engage a contact if one is in that socket.

In order that a signal may be given prior to the insertion of a plug or pin that will prove effective in completing a circuit, the plug 15 is associated with a switch and preferably a counter 16 that will advance one number each time the device is operated. To that end, a conventional counter is used such as is employed for tallying attendance at public functions, and the same is provided with switch mechanism that will establish a current each time the indicator is operated.

In the present embodiment of the invention, the plug or pin 15 is applied to the actuator 17 of the counter and this actuator, in practice, is pushed inwardly in order to operate the numbering mechanism, and as stated, this is of well known construction and the device need not be described in detail. When the actuator 17 is pushed inwardly to operate the numbering mechanism, the said actuator is forced into engagement with a wire or terminal 18 that establishes a circuit through an audible signal 19 within the casing, and the indicator is also in circuit with the source of electricity, so that each time the pin or plug is pressed into a socket, the resistance of the guard is sufficient to impart motion to the indicating actuator prior to the fracturing of the guard, and hence when the indicator actuator is moved inwardly, a circuit is established through the signal and an alarm is given so that the owner of the device knows that it is being operated. The conductor 18 is grounded on an insulated plate 20, whereas the conductor 21 is grounded on the metal frame, and when the indicator actuator moves into engagement with the conductor 18, a circuit is established through the frame of the indicator actuator.

It will be seen from an inspection of the drawing and from the foregoing description that when the plug is forced against the shield or paper that is between the plates, resistance will be met, and that prior to the fracture of the paper or guard, the circuit through the indicator will be established and then if the plug or pin 15 strikes a contact within the plug, a circuit will be established through one of the lamps and it will be illuminated while the signal is being sounded.

The board 10^a may be provided with any number of contacts 11 and preferably, some of the contacts are connected in series with one lamp in order to increase the chances for illuminating that lamp, but, of course, the prize or merchandise given for that illumination would be less than where but one contact is in circuit with a lamp. In view of the showing in the drawing, it will be understood that the number of contacts will be arranged in series to suit the particular requirements, and the inventors do not wish to be limited with respect to this feature.

An insulated block or base 22 has a plurality of terminal plates 23 with which the conductors from the contacts are connected. The conductor plates are wired to the lamps so that when a circuit is established by plugging one of the contacts, the appropriate lamp will be illuminated. Conductors such as 24 are provided leading from the contact to a plate, and when a plug or pin strikes one of the contacts, a circuit will be established, as shown by the diagrammatic view in Fig. 4.

In practice, assuming that the user of the device applies the plug or pin to an aperture of the plate and presses until a circuit is formed through the member carrying the plug or contact to the buzzer or signal 19, an alarm will be given that the device is being used. Further pressure on the plug will result in severing the film of paper, permitting the plug to pass into the socket where, if it strikes a contact, a circuit will be established through one of the lamps so that the buzzer or audible signal will be sounding and the lamp will be illuminated simultaneously.

As stated, the diagram of the wiring will be clearly read by one skilled in the art, and therefore, it is believed unnecessary to trace the circuit or circuits to enable one skilled in the art to practice the invention.

We claim:

1. In a chance device, a board having a plurality of contacts, plates covering the board having apertures in alinement with each other, a frangible guard interposed between the plates, the said apertures in the plates being in alinement with the contacts on the board, signals in circuit with the contacts, and a plug in circuit with a source of electricity and the signals, a switch in circuit with the source of electricity, and a switch element carried by the plug adapted to engage the switch for establishing a cir-

cuit when the plug receives pressure necessary for plugging.

2. In a chance device, a board having conductors of electricity connected thereto, apertured plates covering the conductors of electricity, the apertures of the plates alining with each other and with the conductors, a frangible shield interposed between the plates, a plug, switch elements having terminals, one of the switch elements taking motion from the plug and closed by pressure when the frangible shield is punctured by the plug, conductors leading from the switch terminals, a source of electricity, and signals electrically connected by the said conductors.

3. In a chance device, a board having electric contacts, a frangible element covering the contacts, a plug adapted to puncture the frangible element, a switch element actuated by the plug, a switch element with which the first mentioned switch element coacts, said switch elements being brought into contact for establishing a circuit by pressure necessary to fracture the frangible element, and a signal, including a source of electricity in circuit with the said switch elements.

4. In a chance device, electric contacts suitably supported, a frangible cover therefor, a plug adapted to puncture the frangible cover and engage the contacts, a switch normally open and operative to close under pressure necessary for forcing the plug through the frangible cover, a switch element actuated by the plug for closing the circuit, a signal, a source of electricity, and suitable conductors for establishing a circuit through the switch, signal and source of electricity.

5. In a chance device, electric contacts suitably supported, a frangible cover therefor, a plug adapted to puncture the frangible cover and engage the contacts, a normally open switch means operative with the plug to close the switch under pressure necessary for forcing the plug through the frangible cover, a signal, a source of electricity, suitable conductors for establishing a circuit through the switch, signal and source of electricity, and other signals, one of which is electrically connected to the aforesaid circuit and energized therewith.

6. In a chance device, a casing, a board therein having electric contacts, a source of electricity, lamps wired to the said contacts and to the source of electricity, an audible signal, apertured plates, the apertures of which are in alinement, covering the said board, the said contacts being in alinement with certain of the said apertures, a frangible shield interposed between the plates, a plug adapted to puncture the shield and engage a contact, a switch having elements normally out of contact, means associating one of the elements with the plug whereby the elements are closed by pressure applied for forcing the plug through the frangible shield, a conductor from the source of electricity to one of the terminals of the switch, and a conductor from the switch to the audible signal.

7. In a chance device, a casing, a board therein having electric contacts, a source of electricity, lamps wired to the said contacts and to the source of electricity, an audible signal, a frangible shield covering said board, a plug adapted to puncture the shield and engage a contact, switch elements normally out of contact, one of said elements being moved by the plug and closed by pressure applied for forcing the plug through the frangible shield, a conductor from the source of electricity to one of the terminals of the switch, and a conductor from the switch to the audible signal.

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