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QUESTION AND ANSWER GAME WITH INDICATING LAMP

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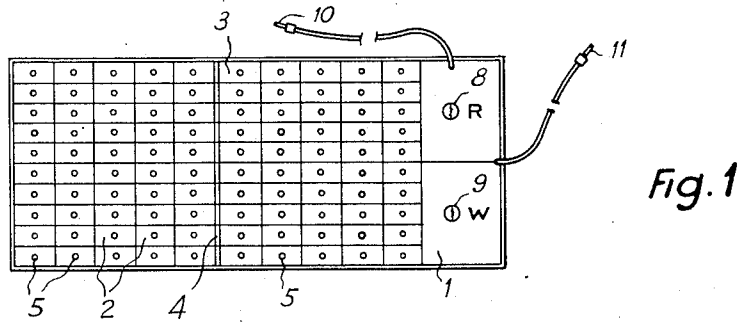


Fig. 1

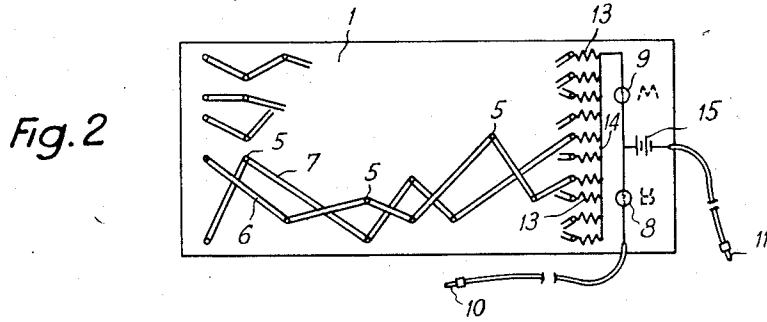


Fig. 2

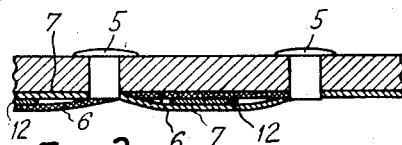


Fig. 3

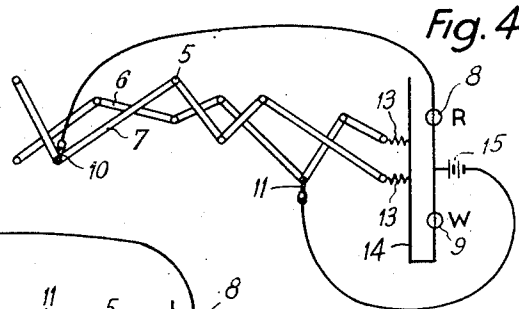


Fig. 4

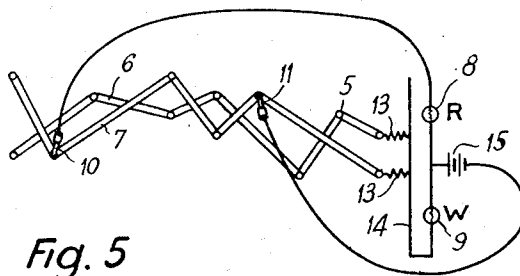


Fig. 5

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QUESTION AND ANSWER GAME WITH INDICATING LAMP

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5 Claims. (Cl. 35—9)

This invention relates to a question and answer game provided with a luminous electric arrangement showing whether the answer given to the question put is right or not.

One of the objects of the invention is to produce a more attractive game than those hitherto known due to the special features of the electric arrangement.

It is another object of the present invention to provide a game which comprises a plate provided with contact studs, some of which correspond to questions and the others to answers, the said contact studs being selectively connected to one another by electric conductors, one end of each conductor being prolonged by a resistance and the said resistances being connected together by a conductor wire comprising successively, and in series, a so-called "wrong answer" lamp, a shunt towards a source of current and a so-called "answer" contact plug, a so-called "right answer" lamp, and a so-called "question" contact plug.

With these and other objects in view which will become apparent in the following detailed description, the present invention will be clearly understood in connection with the accompanying drawings in which:

Figure 1 is a plan of a game according to the invention.

Fig. 2 is a diagrammatic view, seen from below, of the plate of the game and of some of the conductors and circuits located under the said plate.

Fig. 3 is a vertical section of a part of the plate comprising two contact studs and the crossing of certain conductors.

Fig. 4 is a diagrammatic view of two circuits of the game, the contact plugs being so positioned that the answer given to the question is wrong.

Fig. 5 is a diagrammatic view of two circuits of the game, the contact plugs being so positioned that the reply given to the question is right.

The question and answer game shown on the drawings comprises a plate 1 provided with divisions 2 corresponding to questions put, and divisions 3 corresponding to answers.

The divisions 2 are separated from the divisions 3 by lines 4.

In each division is a stud 5, being a conductor of electricity.

The studs 5 in the divisions 2 correspond to certain studs 5 in the divisions 3.

According to circumstances, a stud in a division 2 corresponds to a single stud in a division 3, or else the studs in several divisions 2 correspond to a stud in a division 3 or conversely, or again several studs in divisions 2 correspond to several studs in divisions 3.

It is the latter case that is shown in Figs. 2, 4 and 5. It will be observed that several studs 5 in divisions 2 are connected by an electric conductor 6 which likewise passes through several studs in divisions 3.

A conductor 7 similarly connects several studs in divisions 2 with several studs in divisions 3.

In Fig. 2 only the beginning and the end of several conductors have been shown so as to simplify the showing.

In Figs. 4 and 5 only the conductors 6 and 7 have been shown.

The plate 1 comprises in addition two lamps, a lamp 8 indicating that the answer is right, and a lamp 9 indicating that the answer is wrong.

A plug 10 is intended to be positioned on certain studs

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5 in the divisions 2, whereas a plug 11 is on the other hand intended to be positioned on certain studs 5 in the divisions 3.

If the reply of the division 3 is right, i. e. if it corresponds to a division 2 placed on the same conductor, lamp 8 lights, and if not lamp 9 lights.

As will be seen in the drawing, the conductors 6 and 7 cross under the plate 1, and the conductors are insulated from one another at the crossing points by insulating material 12.

A resistance 13 is provided at the end of a conductor 6 or 7, and all the resistances 13, preferably of the same value, are connected by a conductor wire 14. The conductor wire 14 then comprises in series circuit a lamp 9, a lamp 8 and the plug 10. A source of current 15, which may be a source of direct or alternating current, has one of its poles branched between the lamps 8 and 9, the other pole being connected to the plug 11.

The game described above operates in the following manner.

A question is put by positioning the plug 10 on the stud 5 in a division 2 and the answer is given by positioning the plug 11 on the stud of a division 3.

If the answer is wrong (Figure 4), the plug 11 is not on the same conductor 7 as the stud on which is the plug 10. The arrangement shows two closed circuits having, as can be ascertained, a common section.

The first circuit comprises the source 15 connected to the plug 11, the conductor 6 and its resistance 13, the conductor 14, the resistance 13 of the conductor 7, said conductor 7, the plug 10, and the so-called "right answer" lamp 8.

The second circuit comprises the source 15 connected to the plug 11, the conductor 6 and its resistance 13, the conductor 14 and the so-called "wrong answer" lamp 9.

It will be seen that the first circuit in which is inserted the so-called "right answer" lamp 8 is more resistant than the second circuit in which is inserted the so-called "wrong answer" lamp 9, since the first of these two circuits comprises two resistances 13, whereas the second comprises only one. The intensity of the current in the second circuit will therefore be stronger than the intensity in the first circuit.

The value of the resistances 13 is suitably chosen so that, whereas the intensity of the current passing through the less resistant circuit is sufficient to make the filament of the lamp inserted thereon incandescent, the intensity of the current passing through the more resistant circuit is insufficient to make the filament of the lamp inserted on that circuit incandescent.

Therefore, under the circumstances, lamp 9 will light, indicating that the answer is wrong, whereas the so-called "right answer" lamp 8 will not light.

If the reply is right (Figure 5), the plug 11 is in electric connection with the conductor 7 which comprises the stud on which is placed the plug 10.

In this case again, there are two closed circuits, likewise having a common section.

The first circuit comprises the source 15 connected to the plug 11, the part of the conductor 7 comprised between the plugs 11 and 10, the latter plug 10 and the so-called "right answer" lamp 8.

The second circuit comprises the source 15 connected to the plug 11, the conductor 7 and its resistance 13, the conductor 14 and the so-called "wrong answer" lamp 9.

It will be seen that this time the second circuit is more resistant than the first, since it comprises a resistance 13, whereas the first does not comprise any.

As before, the value of the resistances 13 being suitably chosen, the intensity of the current passing through the circuit of less resistance is sufficient to make incandescent the filament of the lamp inserted thereon, whereas the intensity of the current passing through the circuit of greater resistance will be insufficient to make incandescent the filament of the lamp inserted on that circuit.

Under the circumstances, lamp 8 will light, indicating that the answer is right, whereas the so-called "wrong answer" lamp 9 will not light.

It should be observed that if no question has been

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put and if the plug 11 is positioned on the stud in a division 3, the circuit is closed in respect of lamp 9 which lights indicating that a mistake has been made.

As indicated above, it is required that the value of the resistances 13 must be suitably chosen, in order to assure that the intensity of the current passing through the circuit of less resistance is sufficient to make incandescent the filament of the lamp inserted thereon, whereas the intensity of the current passing through the circuit of greater resistance will be insufficient to make incandescent the filament of the lamp inserted on that circuit. It is well known to men skilled in the art that the inner resistance of the electric source and also that of the lamps must also be taken into consideration, and in order to bring about proper results, it is necessary to provide a predetermined relationship between the resistances 13, on the one hand, and the inner resistances of the electric source of the lamps, on the other hand.

The game that has now been described is especially attractive due to the fact that it comprises two lamps one of which lights if the answer is right, and the other if the answer is wrong.

It will be obvious that the invention is not limited by the details of the practical example described above.

The shape of the plate 1, for example, or the position of the lamps 8 and 9 on the said plate could be altered without departing from the scope of the invention as defined in the claims.

While I have described one embodiment of the present invention, it is to be understood that this embodiment is given by example only and not in a limiting sense, the scope of the present invention being determined by the objects and the claims.

I claim:

1. A question and answer game with indicating lamps

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comprising a plate, a plurality of question contact studs and a plurality of answer contact studs disposed on the said plate, electrical conductors connecting each of the said question contact studs with its appropriate answer stud, each of the said electrical conductors including a resistance, the resistances of all said electrical conductors being connected in parallel to a wire, the latter continuing in a series circuit comprising a wrong answer lamp, a right answer lamp and a question plug, and a power source, one terminal of the said power source being connected to the said series circuit intermediate the said wrong answer lamp and the said right answer lamp, and the other terminal of the said power source being connected to an answer plug.

2. The game, as set forth in claim 1, in which each of the said question contact studs is connected to a single one of the said answer contact studs.

3. The game, as set forth in claim 1, in which a plurality of the said question contact studs are connected to a single one of the said answer contact studs.

4. The game, as set forth in claim 1, in which a single one of the said question contact studs is connected with a plurality of the said answer contact studs.

5. The game, as set forth in claim 1, in which a plurality of the said question contact studs are connected with a plurality of the said answer contact studs.

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