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Breslow et al.

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[54] **GAME APPARATUS**

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[73] Assignee: **Marvin Glass & Associates**, Chicago, Ill.

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[52] **U.S. Cl.** ..... **273/1 E**

[51] **Int. Cl.** **A63f 9/00**

[58] **Field of Search** ..... 273/1 R, 1 E; 35/9 B

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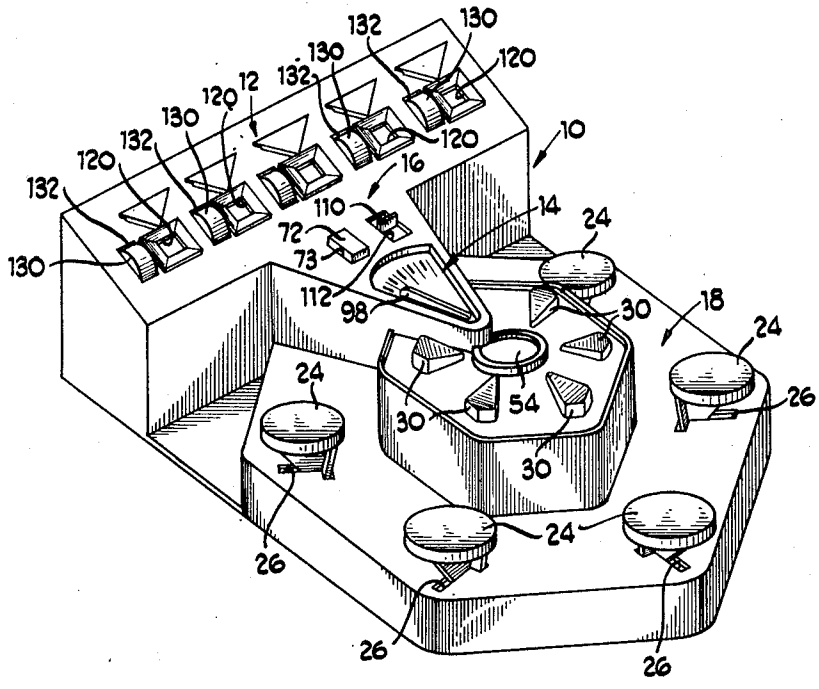
Primary Examiner—Paul E. Shapiro

Attorney, Agent, or Firm—Coffee & Sweeney

[57] **ABSTRACT**

A self-contained game apparatus for use particularly with question and answer type games. A plurality of levers are mounted on a base structure, one lever for each player of the game, for striking by the players of the game immediately when they believe they have the correct answer to a question posed by another player of the game. The first lever to be struck closes contacts to a light positioned in association with that lever to indicate which lever was struck first. An audible signal device, such as a buzzer, is mounted on the base structure for actuation by the questioning player to indicate whether or not the answer given by the respective player who first struck his lever is correct or not. A timer is mounted on the base structure for actuating the buzzer after a given "answering period" of time. A blocking member is provided for the questioning player to stop the timer at any time during the given time period should the answer given by the answering player be correct, for instance. A score board also is provided on the base structure, with individual score indicating devices for each player of the game.

14 Claims, 7 Drawing Figures



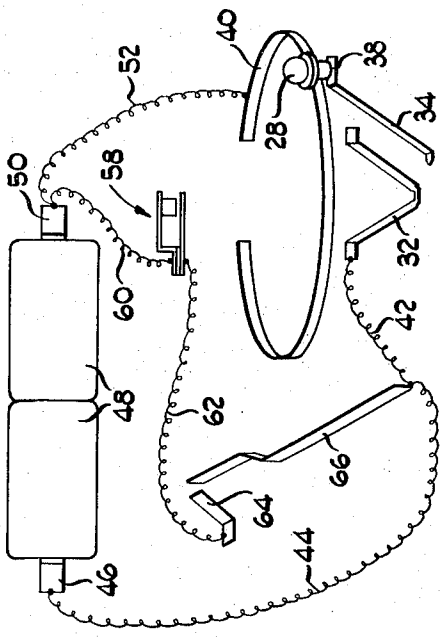


Fig 7

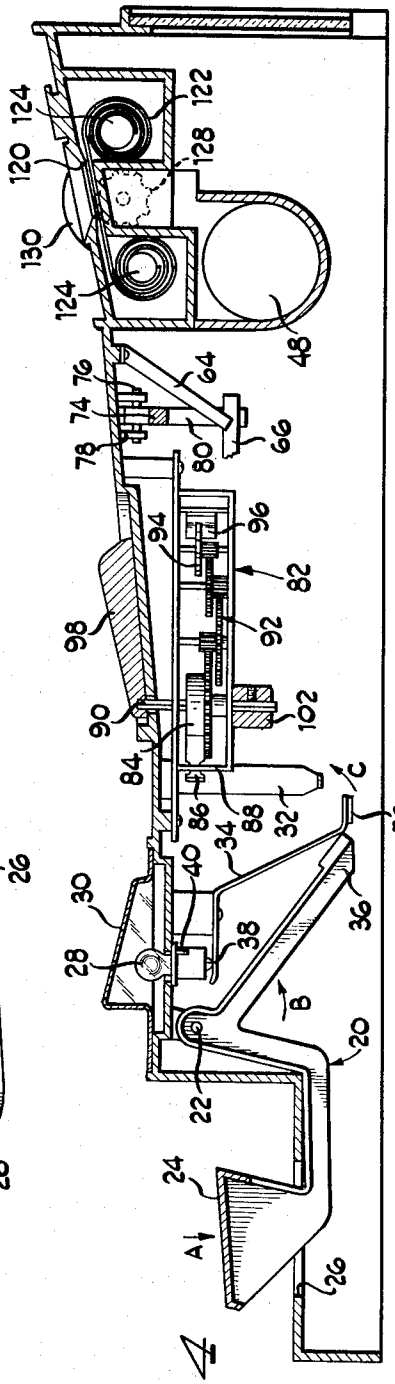


Fig 4

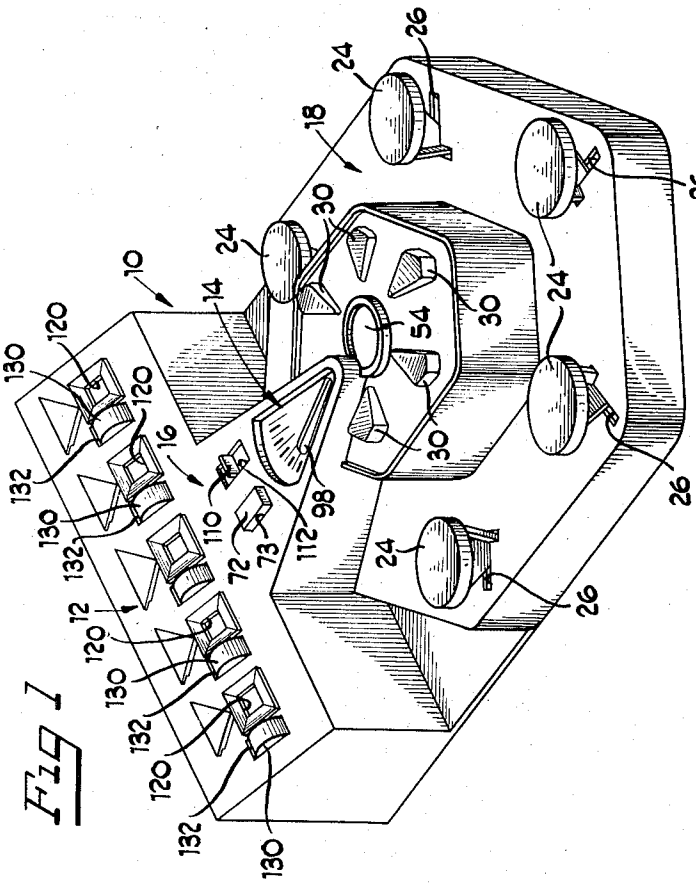


Fig 1

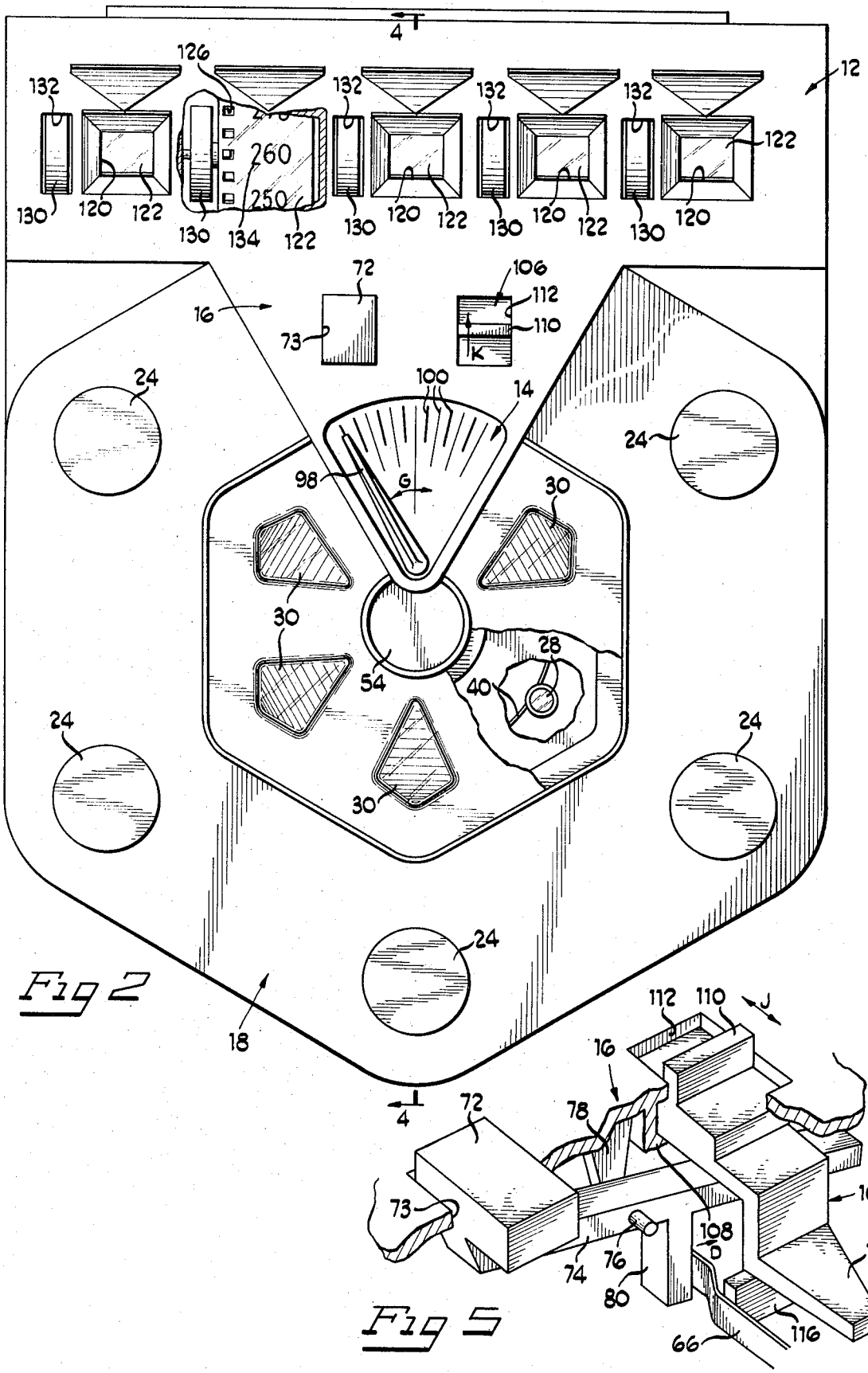

4
12
126
132
260
250
130
120
122
134
16
72
73
106
112
110
K
24
100
14
98
G
30
54
28
40
18

Fig 2

4
112
110
J
16
72
78
73
106
108
D
74
76
80
114
66
116

Fig 5

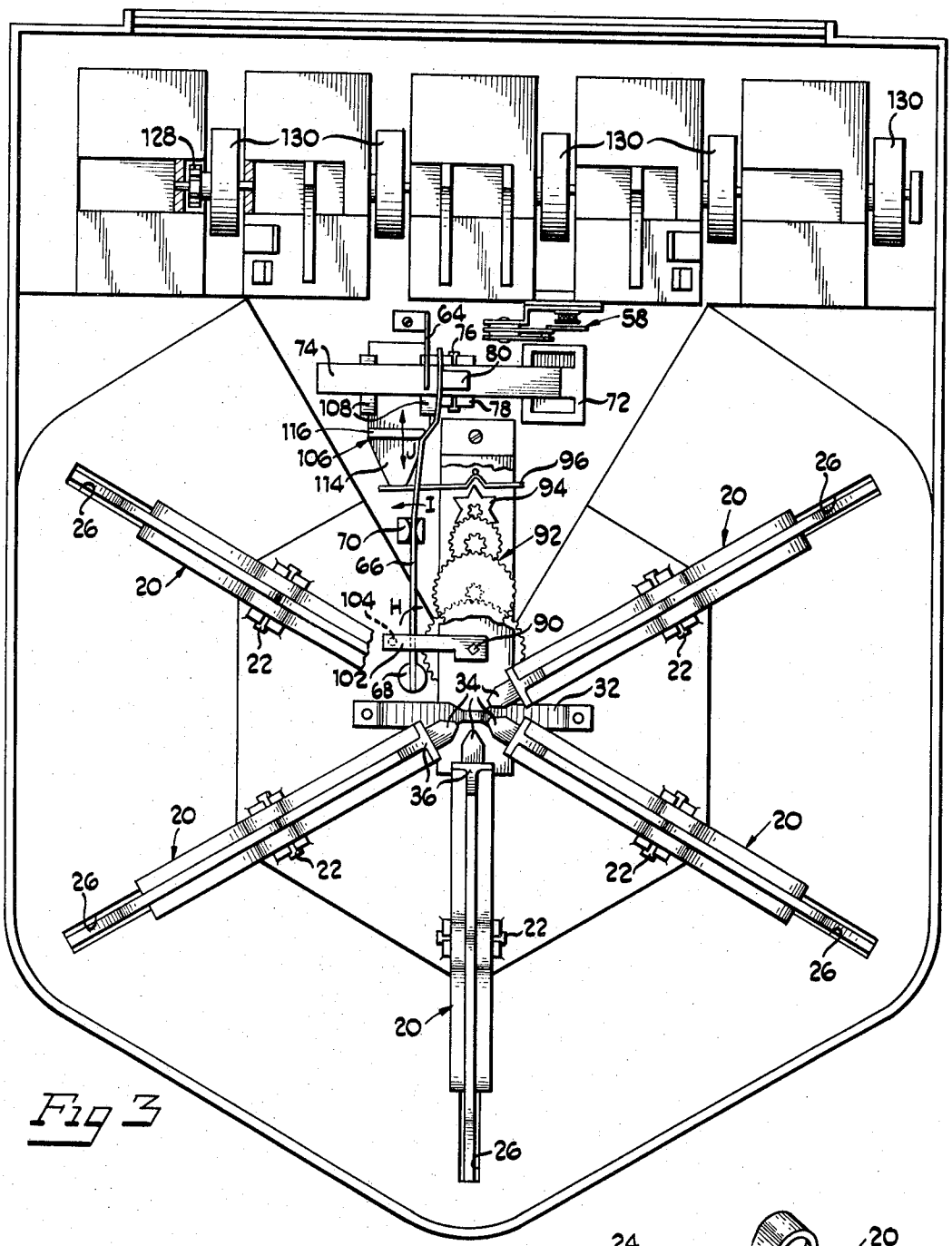

128
130
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130
58
64
76
74
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72
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108
116
106
114
96
94
I
70
92
66
104
H
90
102
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Fig 3

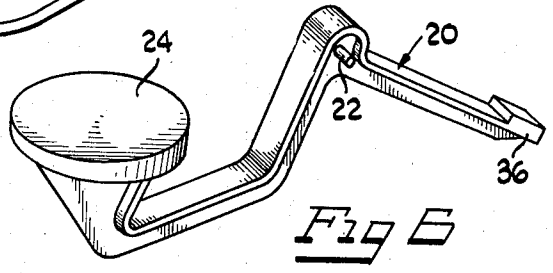

24
20
22
36

Fig 6

GAME APPARATUS

BACKGROUND AND SUMMARY OF THE INVENTION

This invention relates to a game apparatus and particularly a game apparatus for use with question and answer type games.

There are games available, for instance in conjunction with card games, which require constant alertness on the part of the players and which include means for positively indicating the degree of alertness of the various players. The present invention comprises a self-contained game apparatus for use particularly in a question and answer type game, whereby not only is ingenuity and intelligence required in answering the questions posed, but constant alertness and quickness is required by the answering players when they believe that they have the correct answer in order to be the first player given an opportunity to state his answer to the question posed.

More particularly, the game apparatus is self-contained on a base structure and has manually manipulatable members for each player of the game for actuating means which determines which of the players first moved his manipulatable member when he believes he has the correct answer to the question. This player would be permitted to give his chosen answer first. Indicating means is mounted on the base structure for selective actuation by the questioning player to indicate whether the answer given is correct or not. A timer is mounted on the base structure for actuating the aforesaid indicating means at the end of a given time period of the timer. Means also is provided to selectively stop the timer at any time during the given time period, for instance should the answer given to the question posed be the correct answer. Scoring means also is provided on the base structure for all players of the game.

In the exemplary embodiment of the invention, a plurality of levers are pivotally mounted on the base structure and radiate outwardly from a generally centrally disposed position. A fixed electrical contact is disposed at the central position and the levers urge movable contacts in separate paths toward the fixed contact, with the paths becoming coextensive at the point of engagement with the fixed contact. Each movable contact has a conductive side facing the fixed contact and a non-conductive side facing away from the fixed contact whereby only the first of the movable contacts which engages the fixed contact will establish an electrical connection, with the movable contacts being insulated from each other. The contacts are in circuit with a plurality of lightbulbs, one for each of the manipulatable levers, to indicate which player of the game first moved his lever to close the contact and light his respective bulb. That player then would be permitted to be the player to first give his answer to the question posed.

An electrical buzzer is mounted on the base structure for selective actuation by the questioning player to indicate that the answer given is incorrect, for instance. In addition, a timer is electrically connected to the buzzer for actuating the buzzer after a given period of time after which the opportunity to answer the posed question has lapsed. Another actuatable member for the questioning player is also mounted on the base structure for stopping the timer at any time during the given period, for instance should the answer given be correct.

A score board is mounted on the base structure and includes a plurality of windows equal in number to the levers which are operated by the players of the game. A tape, which is wrapped around a pair of spaced reels, is disposed behind each window for visualization of scoring indicia on the tape. The tape is perforated and moved manually by a sprocket wheel having a portion thereof exposed on top of the base structure for manual manipulation.

Other objects, features and advantages of the invention will be apparent from the following detailed description taken in connection with the accompanying drawings.

DESCRIPTION OF THE DRAWINGS

FIG. **1** is a perspective view of a game apparatus in accordance with the concepts of the present invention;

FIG. **2** is a top plan view, on an enlarged scale and partially broken away, of the game apparatus of FIG. **1**;

FIG. **3** is a bottom plan view of the game apparatus;

FIG. **4** is a vertical, generally central section taken generally along the line **4—4** of FIG. **2**;

FIG. **5** is a perspective view of the manipulatable buttons and related components for actuating the contacts to the buzzer and for stopping the timer;

FIG. **6** is a perspective view, on an enlarged scale, of one of the strikable lever members of the game apparatus; and

FIG. **7** is a somewhat schematic showing of the wiring and circuit components of the game apparatus.

DETAILED DESCRIPTION OF THE INVENTION

Referring to the drawings in greater detail, and first to FIG. **1**, the game apparatus of the present invention includes a base structure or housing, generally designated **10**, which defines the various playing areas on the top thereof and with most of the operative components mounted on the underside thereof. The top of the base structure **10** defines a score board area, generally designated **12**; a timer area, generally designated **14**; a playing area, generally designated **16**, for a questioning player of the game; and another playing area, generally designated **18**, for the answering players of the game.

Turning first to the answering area **18** and the components disposed thereat, a plurality of actuatable answer devices in the form of lever members, generally designated **20** (one of which is shown in perspective in FIG. **6**), are pivotally mounted on the underside of the base structure **10** by pins **22**, with a knob portion **24** of each of the lever members protruding through the base structure or housing through slot means **26**, as best seen in FIGS. **1** and **4**. The lever members **20** are provided for the purposes of permitting the striking of the knob portions **24** thereof, generally in the direction of arrow A (FIG. **4**), to pivot the lever members about pins **22** generally in the direction of arrow B (FIG. **4**). The first player to strike a lever will be given the first opportunity to give an answer to a previously posed question in order to increase or decrease his respective score.

In order to determine and indicate which player first struck the knob portion **24** of his respective lever **20**, indicating means in the form of lightbulbs **28** are mounted on the base structure **10** beneath transparent or translucent covers **30** which are positioned adjacent the levers. The levers are operatively associated with

the lightbulbs so as to energize the same in response to pivoting the levers.

More particularly, as best seen in FIGS. 4 and 7, a common fixed V-shaped electrical conductive contact member 32 is mounted beneath the base structure generally centrally of the lever members, with the lever members extending generally radially thereof. Between each of the lever members 20 and the fixed contact 32, as best seen in FIG. 4, is a movable leaf spring contact 34 which is engageable on the underside thereof by the inner end 36 of the lever. The end 36 of the lever moves the end of the contact 34 into engagement with the fixed contact 32 generally in the direction of arrow C (FIG. 4) when the knob portion 24 of the lever is struck by a player of the game in the direction of arrow A. The movable contact 34 is electrically connected to the lightbulb 28 at point 38 and, as best seen in FIG. 7, the lightbulb is electrically conductively connected to a common ring conductor 40 for all of the lightbulbs.

As seen in FIG. 7, the fixed contact 32 is connected through lines 42 and 44 to one end 46 of a conductive bracket which holds a pair of batteries 48. The opposite end 50 of the conductive battery bracket is electrically connected to the conductive ring 40 through line 52. Thus, it can be seen that when one of the leaf spring contacts 34 engages the V-shaped fixed contact 32 at the apex thereof, a circuit is completed through the batteries to the respective lightbulb 28 for the particular lever 20, thus indicating which lever was first struck by a player of the game. It can be seen that the respective lever portions 24 and the covers 30 for the lightbulbs 28 are in generally radial alignment from a central position as at 54 (FIG. 1).

In order to prevent current from passing through one of the movable contacts 34 to other movable contacts which might be sandwiched therebeneath and in engagement therewith, a non-conductive insulating piece 56 (FIG. 4) is disposed on the underside of each of the movable contacts so that the movable contacts themselves are insulated from each other.

Indicating means is provided on the base structure for selective actuation by a questioning player of the game to indicate whether the answer given by the first player to strike the portion 24 of his lever member 20 is correct or not. Such indicating means could be either visual or audible and, in the exemplary embodiment shown, comprises a known form of magnetic buzzer means, generally designated 58 (FIGS. 3 and 7). The buzzer means 58 is electrically connected to the batteries 48 through line 60 (FIG. 7) and is electrically connected through line 62 to a fixed contact member 64. The fixed contact member is shown in FIGS. 3 and 4 protruding downwardly from the underside of the housing 10. A flexible leaf spring contact 66 is anchored at 68 (FIG. 3) to the underside of of the housing and extends through a slotted fulcrum member 70 into juxtaposition alongside of the fixed contact 64. The leaf spring contact 66 is electrically connected to the batteries 48 through the line 44.

In order to actuate the buzzer to indicate a wrong answer, for instance, a push button 72 is exposed through an aperture 73 in the top of the housing 10 at the playing area 16 for the questioning player. As best seen in FIGS. 3 and 5, the push button is part of an arm member 74 which is pivoted by pin 76 to bracket 78 on the underside of the housing. A tongue portion 80 protrudes downwardly from the arm 74 in position for lateral movement in the direction of arrow D (FIG. 5) to engage the free end of the movable contact 66 to move the same into engagement with the fixed contact 64 to establish a circuit through the buzzer 58. The leaf spring contact 66 will urge the button back to its upper position when the button is released.

A timer motor, generally designated 82, of known construction has a wound power spring 84 (FIG. 4) with one end 86 anchored to a frame piece 88 and the other end secured to a rotatable shaft 90. The power spring 84 is operatively connected through a gear train, generally designated 92, to a star wheel 94 which engages a governor leaf 96 in known fashion, whereby the star wheel and governor leaf limit and stabilize the output of the power spring 84. A hand manipulatable lever member 98 (FIGS. 2 and 4) is fixed to the shaft 90 of the power spring 84 and is exposed on top of the housing 10 for pivotal movement with the shaft 90 in the direction of doubleheaded arrow G (FIG. 2). The free swinging end of the hand manipulatable lever 98 moves across indicia means shown in the form of lines 100 (FIG. 2) which may be utilized for purposes of time increment indication and/or for scoring purposes. The hand manipulatable lever 98 may be pivoted by the questioning player of the game in one direction to cock or wind up the power spring 84, and the lever thus will be driven in the opposite direction in response to the release of energy from the power spring as limited by the star wheel 94 and governor leaf 96.

Means is provided to actuate the buzzer 58 in response to the timer running out of a given period of time. More particularly, an actuating lever 102 (FIG. 3) is secured to the lower end of the spring shaft 90 for rotation therewith. When the spring is cocked by winding the same by the hand manipulatable lever 98, the actuating lever 102 will be positioned as shown in FIG. 3. As the spring unwinds to release the energy stored therein, the actuating lever 102 will pivot in the direction of arrow H (FIG. 3) whereupon an upwardly protruding boss 104 on the top thereof will come into engagement with the leaf spring 66 intermediate its anchoring point 68 and the fulcrum member 70. Force from the spring on the leaf spring in the direction of arrow H will cause the free end of the leaf spring to move in the direction of arrow I (FIG. 3) into engagement with the fixed contact 64 to energize the buzzer 58.

Means is provided for selectively stopping the timer 82 at any given time during the aforesaid time period. This would be desirable, for instance, should the answering player give a correct answer to the question posed. The score of the game could be based on the time which is needed for a player to answer the posed question, as indicated by the time indicia 100 adjacent the hand manipulatable lever 98. The stopping means comprises a slide member, generally designated 106 (FIGS. 3 and 5) which is slidably mounted on the underside of the housing by means of elongated angle brackets 108, for sliding movement in the direction of doubleheaded arrows J (FIGS. 3 and 5). The slide member 106 has a button portion 110 exposed on the top of the housing through an aperture 112 for hand manipulation by the questioning player of the game. The slide member 106 has an abutment portion 114 on the underside of the housing which is movable into engagement with the governor lever 96 of the timer 82 as shown by the relative position shown in FIG. 3. In this

manner, the timer can be stopped at any given time. In addition, an abutment rib **116** also is disposed on the underside of the slide member **106** for engagement with the leaf spring **66**, as best seen in FIG. **3**, to hold the leaf spring out of engagement with the fixed contact **64** to prevent energization of the buzzer **58**. However, the leaf spring should be sufficiently flexible to permit engagement with the fixed contact when the button **72** is depressed to overcome the abutment locking of the rib **116** on the slide member **106**.

The score board **12** and the scoring means therefor provide independent scoring indicia for each individual player of the game.

More particularly, a plurality of windows **120** are formed in the housing **10** along the score board area **12**, at least one window for each answering player of the game. As best seen in FIG. **4**, an elongated strip **122** of tape, or the like, is wrapped about a pair of reels **124** so that the tape may pass beneath the respective window **120** for observation therethrough by the players of the game. As best seen in FIG. **2**, the tape is perforated, as at **126**, for engagement with a sprocket wheel **128** (FIG. **4**) which is mounted for conjoint rotation with a hand manipulatable wheel **130** for each sprocket wheel and its respective tape. Each hand manipulatable wheel **130** protrudes partially through an aperture **132** in the score board area **12** for manipluation by the players of the game. Each strip of scoring tape **122** has scoring indicia thereon, such as the numerical indicia **134** shown in FIG. **2**.

In using the game apparatus of the present invention, a player of the game, such as the questioning player, first will grasp the hand manipulatable lever **98** on top of the timer **82** and rotate the same to wind and cock the power spring **84**. The slide member **106** should be in the position shown in FIG. **3** so as to prevent the timer spring from immediately unwinding and starting the timer. The questioning player then asks his question and immediately pushes the slide member in the direction of arrow K (FIG. **2**) to move the abutment portion **114** out of engagement with the governor leaf **96** of the timer whereupon the timer begins to run. When an answering player believes he has the correct answer to the question, he will strike the knob portion **24** of his lever member **20** in an attempt to be the first to energize his respective indicating lightbulb **28**. The first answering player doing so is entitled to state his answer to the posed question. If the answer is incorrect, the questioning player will push down on the button **72** causing the boss **80** operatively connected thereto to move the leaf spring contact **66** into engagement with the fixed contact **64** to actuate the buzzer **58** which audibly indicates a wrong answer. If the answer is correct, the questioning player will push the slide member opposite the direction of arrow K (FIG. **2**) to cause the abutment portion **114** thereof to engage the governor leaf **96** to stop the timer **82**. The player giving the correct answer then is given an appropriate score which may be indicated by moving his strip of scoring tape **122** by hand manipulation of the respective rotatable wheel **130**. The timer increment indicia **100** may be utilized in the scoring scheme. Likewise, an answering player who gives a wrong answer may be penalized by subtracting from his individual score. This is but one scheme of play for utilizing the game apparatus of the present invention and other schemes or rules obviously are contemplated by the present invention.

The foregoing detailed description has been given for clearness of understanding only and no unnecessary limitations should be understood therefrom as some modifications will be obvious to those skilled in the art.

We claim:

1. For use with question and answer type games or the like, a self-contained game apparatus comprising, in combination: a base structure, means defining a plurality of actuatable answer devices mounted on said base structure at least one for each player of the game, and means for determining which one of said actuatable answer devices was actuated first by a respective player during a play of the game, said last named means including a common actuating member selectively actuatable by all of said answer devices but only one answer device at a time for actuating purposes.

2. The combination of claim **1** wherein said common actuating member comprises first, common electrical contact means in circuit with individual electrical indicating means associated with each of said actuatable answer devices, said answer devices including second electrical contact means for engaging said first contact means, and means for permitting only one of said second contact means to establish electrical contact with said first contact means at any one time.

3. The combination of claim **2** wherein said common contact means is a fixed contact and said second contact means are movable in separate paths toward said fixed contact with the paths becoming coextensive at the point of engagement with said fixed contact, each movable contact having a conductive side facing said fixed contact and a non-conductive side facing away from said fixed contact whereby only the first of said movable contacts engaging said fixed contact will establish an electrical connection, with the movable contacts being insulated from each other.

4. The combination of claim **3** wherein said fixed contact is disposed generally centrally of said movable contacts which are spaced radially therefrom and disposed angularly thereabout.

5. The combination of claim **4** including individual indicating light means associated with each of said movable contacts and in circuit with both the respective movable contacts and said fixed contact.

6. The combination of claim **1** including a timer mounted on said base structure and means for automatically indicating the end of a given time period of the timer.

7. The combination of claim **6** including means for selectively stopping said timer at any time during said time period.

8. The combination of claim **1** wherein said means for determining the first of said answer devices to be actuated is electrically operated and includes individual light means associated with each of said answer devices for energization only when the respective answer device is the first to be actuated.

9. For use with question and answer type games or the like, a self-contained game apparatus comprising, in combination: a base structure, means defining a plurality of individually actuatable answer devices mounted on said base structure at least one for each player of the game, means for determining which one of said actuatable answer devices was actuated first by a respective player during a play of the game including a common actuating member selectively engageable by all of said answer devices but only one answer device

at a time for actuating purposes, indicating means mounted on said base structure for selective actuation by a questioning player of the game to indicate, for instance, whether the answer of said player first actuating his respective actuatable answer device is correct or not, a timer mounted on said base structure, with means for automatically indicating the end of a given time period of the timer, said selectively actuatable indicating means and said means for automatically indicating the end of said time period being a common means for rendering an audible signal, and means for selectively stopping said timer at any time during said time period.

10. The combination of claim **9** wherein said common actuating member comprises first, common electrical contact means in circuit with individual electrical indicating means associated with each of said actuatable answer devices, said answer devices including second electrical contact means for engaging said first contact means, and means for permitting only one of said second contact means to establish electrical contact with said first contact means at any one time.

11. The combination of claim **10** wherein said common contact means is a fixed contact and said second contact means are movable in separate paths toward said fixed contact with the paths becoming coextensive at the point of engagement with said fixed contact, each movable contact having a conductive side facing said fixed contact and a non-conductive side facing away from said fixed contact whereby only the first of said movable contacts engaging said fixed contact will establish an electrical connection, with the movable contacts being insulated from each other.

12. The combination of claim **11** wherein said fixed contact is disposed generally centrally of said movable contacts which are spaced radially therefrom and disposed angularly thereabout.

13. The combination of claim **9** wherein said signal rendering means is electrically operable and including contact means selectively closable by a player of the game and automatically closable by said timer.

14. For use in toys, games or the like, a base structure, means defining a plurality of individually actuatable devices at least one for each player of the game, and means for determining which one of said actuatable devices was actuated first by a respective player during a play of the game, said last named means including an electrical circuit having actuatable indicating means and contact means to close the circuit to the indicating means, said contact means including a fixed contact and a plurality of movable contacts one operatively associated with each of said actuatable devices, said movable contacts being movable in separate paths toward said fixed contact with the paths becoming coextensive at the point of engagement with said fixed contact, each movable contact having a conductive side facing said fixed contact and a nonconductive side facing away from said fixed contact whereby only the first of said movable contacts engaging said fixed contact will establish an electrical connection, with the movable contacts being insulated from each other.

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