

Aug. 28, 1956

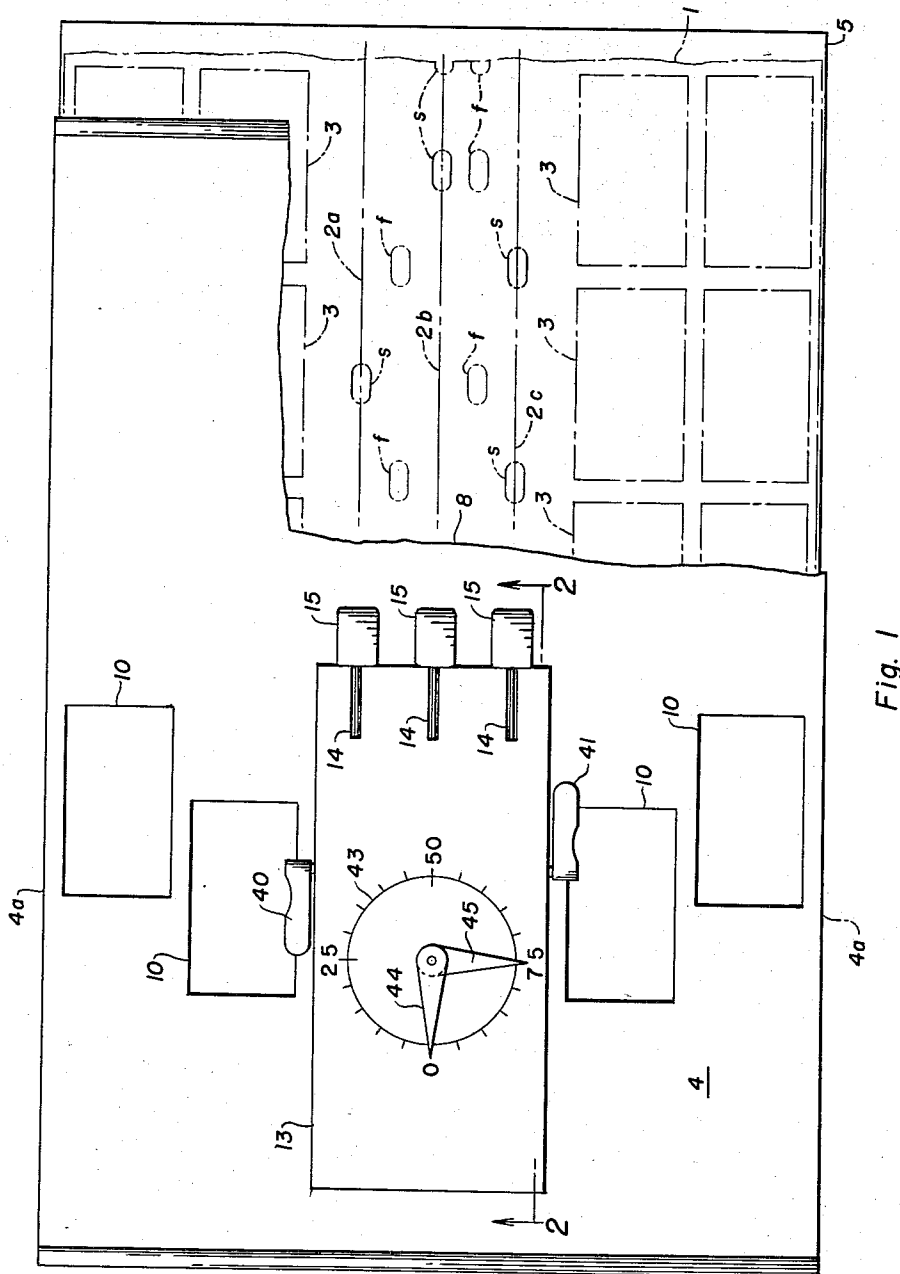
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2,760,274

QUESTION AND ANSWER GAME

Filed June 17, 1953

4 Sheets-Sheet 1



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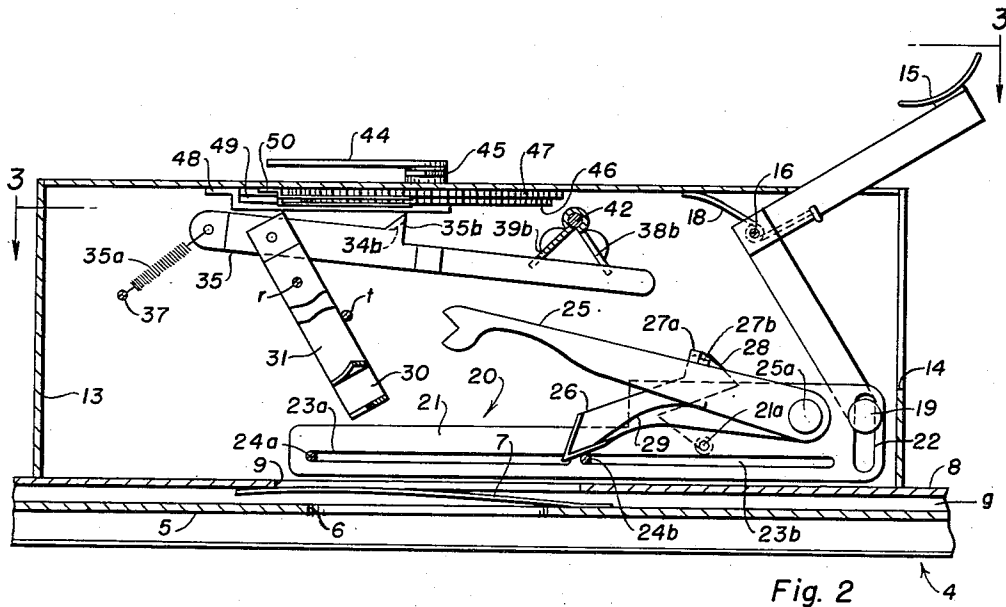
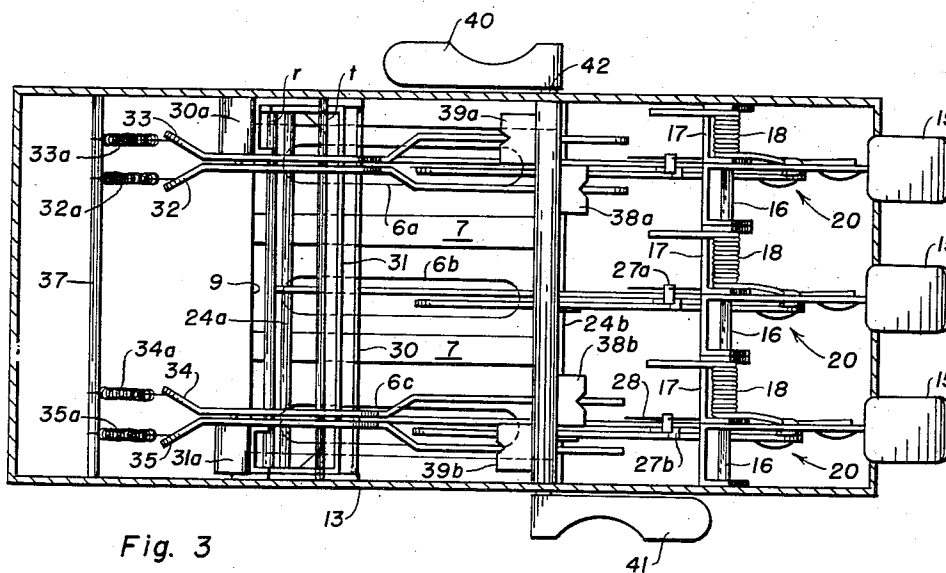
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QUESTION AND ANSWER GAME

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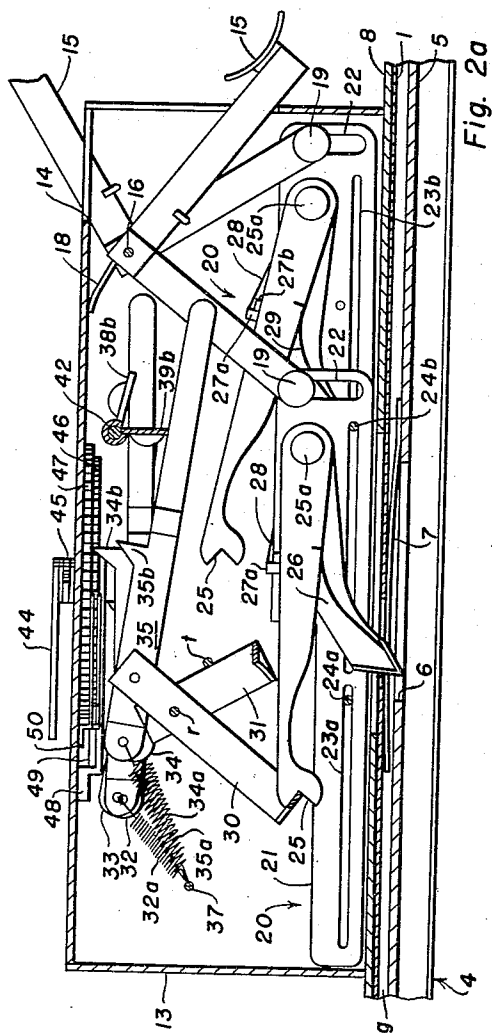


Fig. 2a

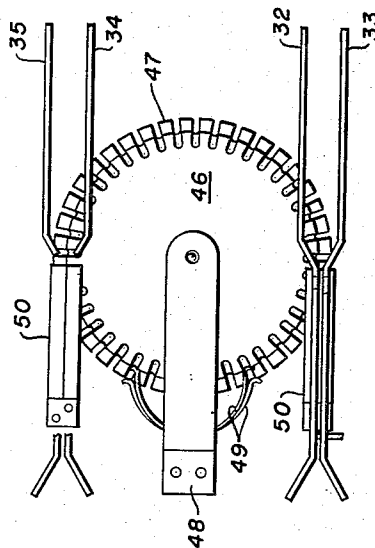


Fig. 4

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4 Sheets-Sheet 4

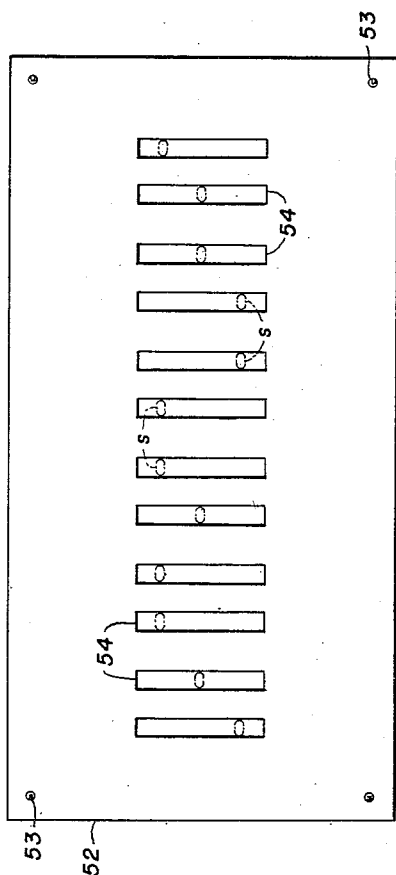


Fig. 5

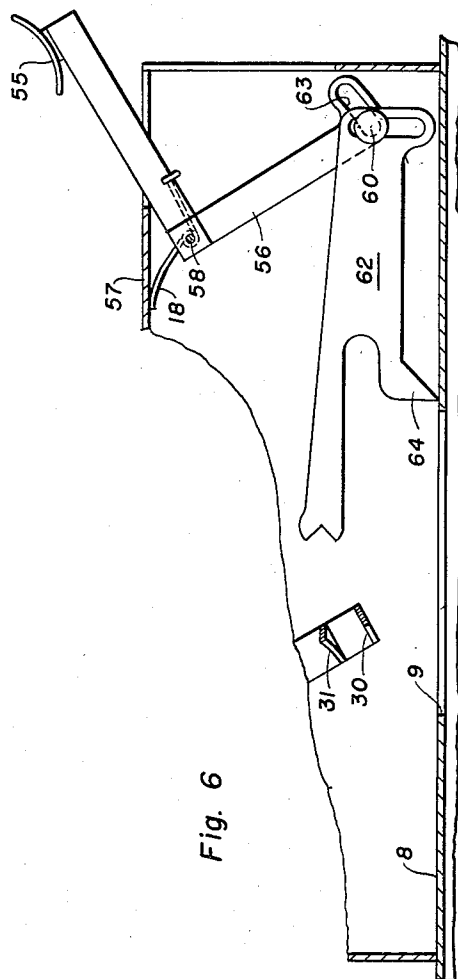


Fig. 6

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1

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QUESTION AND ANSWER GAME

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Application June 17, 1953, Serial No. 362,186

10 Claims. (Cl. 35—9)

This invention relates to a question and answer game. It may be played by one, or by two players, and the embodiment of the invention disclosed herein is intended primarily as a contest between two players.

An object of the invention is to provide an improved question and answer game.

Another object of the invention is to provide game apparatus which is positive and dependable in operation.

Another object of the invention is to provide apparatus of the above identified kind by which a score for one player, or for two players, is automatically cumulated and recorded.

Another object of the invention is to provide game apparatus of the above identified kind which is adapted for coaction with an unlimited selection of cards presenting questions and a selection of answers from which the player makes a selection by operation of the apparatus which automatically indicates whether or not the selection is the correct one, and adds, or subtracts from the player's cumulated score.

Other objects of the invention will be in part obvious or in part pointed out hereinafter.

The invention accordingly consists in the features of construction, combinations of elements, arrangements of parts, and in the several steps and relation and order of each of said steps to one or more of the others thereof, all as will be pointed out in the following description, and the scope of the application of which will be indicated in the following claims.

The invention will best be understood if the following description is read in connection with the drawings, in which

Figure 1 is a plan view of the invention;

Figure 2 is a sectional view in elevation taken on line 2—2 of Figure 1;

Figure 2A is a sectional view in elevation similar to Figure 2 and having the player selector and one answer lever operated;

Figure 3 is a sectional view in plan taken on line 3—3 of Figure 2;

Figure 4 is a bottom plan view of the pointer gears and the operating levers therefor;

Figure 5 is a plan view of a card backing member; and

Figure 6 is a side elevation partly in cross section of a modification of the answer lever assembly means.

The game disclosed herein comprises apparatus including scoring means for recording correct and incorrect selection of an answer from a plurality of answers presented along with a question, and the cumulative result of the efforts of a player, or the efforts of a plurality of players. A plurality of "answer levers" are provided equal in number to the total of the one correct and one or more incorrect answers submitted for selection by a player in connection with each of a series of questions submitted to a player.

In the embodiments of the game illustrated herein,

2

the questions, together with the answers submitted for choice in connection with each question, are set forth on a card and disclosed one by one to a player as the card is intermittently advanced. Sample questions and choice of answers may, for example, be as follows:

Who played the most ball games?

1. Lou Gehrig?

2. Ty Cobb?

3. Babe Ruth?

What is the diameter of a golf hole?

1. $5\frac{1}{2}$ "?

2. 3"?

3. $4\frac{1}{4}$ "?

The player indicates his choice of the answers submitted with each question by depressing the answer lever corresponding to a particular answer. If he thinks No. 1 answer is correct, he depresses No. 1 "answer lever"; if he thinks No. 2 answer is correct, he depresses No. 2 "answer lever," etc.

Cards on which the questions and choice of answers are presented have a plurality of irregularly spaced apertures, which may be holes or slots extending in a number of series, equal in number to the number of answers submitted for choice and, therefore, equal also to the number of "answer levers." There is one slot in the card for each question and it occurs in the series of slots which register with the particular answer lever corresponding to the correct answer for that question. Each slot is engageable by means controlled by the "answer lever" related to the series of slots of which it is one, and, when it is engaged (indicating the "answer lever" corresponding to the correct answer has been actuated) the card is moved forward to present another question, and counter or scoring means are actuated as will be explained. When an "answer lever" corresponding to an incorrect answer is actuated, the card is not moved forward as there is no corresponding slot in the series of slots engageable by said answer lever, but the counter or scoring means is actuated to penalize the player. The same question remains presented and the player, or his opponent if a plurality of persons are playing the game, proceeds to make a further answer selection.

The game comprises one or more cards 1, each having three parallel series of slots 2a, 2b and 2c, extending longitudinally in the center portion of a card, and apparatus in which the cards are inserted and advanced and which coacts with the card as will be explained. Preferably along each lateral margin of each card are two rows of spaced areas or boxes 3, in each of which is a question and three numbered answers to the question, only one answer being the correct answer and the other two being incorrect. In the embodiment of the invention as illustrated herein, the number of boxes along each lateral margin of the card, their arrangement in two rows and the questions and answers in correspondingly positioned boxes is the same, but it will be understood that different sets of questions may be presented along each margin or that questions might be presented in other ways, as, for example, by reading from a separate list in a stated sequence, the card being slotted in accordance with said sequence.

The apparatus coacting with the cards 1 comprises, a base 4 on which the device rests, a guideway comprising the horizontally extending floor 5, supported by walls 4a extending up from base 4, and shown having three apertures 6a, 6b and 6c therein, disposed laterally of the surface and spaced apart to provide spaces respectively below said three series of slots in cards 1; positioned in the guideway and having a pair of leaf springs 7 disposed between said apertures to hold a card 1 against the horizontally extending upper floor 8 supported above floor 5 by said frame side walls 4a, leaving a low, wide space

between said floors 5 and 8 forming a guideway *g* into which said cards 1 are inserted and through which they are advanced as will be described. In the top 8 of said guideway is a cut-out 9 which extends under all three "answer lever" assemblies, which will be described. Cut-out 9 provides space into which arms 26 comprising said assemblies may respectively fall when in register with a slot in a card 1 positioned in the guideway, and gives access to all of said apertures 6*a*, 6*b* and 6*c* in floor 5 which provide space for the lower ends of said arms respectively when they have respectively dropped into and partly through slots in said card as will be explained.

Resting on the guideway *g* and extending over the cut-out 9 in its top 8 is the operating mechanism case 13, and disposed similarly on opposite sides of said case are two pairs of cut-outs or windows 10, each cut-out being substantially equal in size to a "question and answer containing box" 3 on said cards. The inner row of boxes 3 along one margin of a card registers with the inner window of the pair of windows which are above that margin of a card, and the outer row of boxes 3 along that margin of the card registers with the outer window of said pair. The inner window along each margin is shown staggered one-half a window length ahead of the outer window, and the cards are advanced a one-half window length at a time in order that more sets of questions and answers may be provided on each card.

In the upper and rear walls of case 13 are three slots 14 through which respectively extend three identical operating or "answer" levers 15 by means of which a player's selection of answers to a question is made. Levers 15 are pivoted on the shaft 16, which is biased by springs 18 to move said levers toward their upper positions. Levers 15 are spaced from one another on shaft 16 by spring cases 17. Levers 15 are in the form of bell cranks and are respectively attached to identical sliding assemblies 20. Each sliding assembly 20 comprises a carrier 21 having adjacent its rear end a vertical slot 22 in which is slidably engaged the pin 19 by which lever 15 is joined to said carrier. Each carrier 21 also has two horizontally aligned slots 23*a* and 23*b* and travels on a pair of portage rods 24*a* and 24*b* which pass through said slots 23*a* and 23*b* respectively and are fixed to the sides of the case 13. An arm 25 for operating scoring means, pivoted to each carrier 21 by the pivot 25*a* located just forward of the vertical slot 22, and the card moving arm 26 is also pivotally supported on pivot 25*a*.

In rest position (Figure 2) the lower edge of arm 26 rests on rod 24*b* and a spring 28, joined between 21*a* on carrier 21 and a flange stop 27*a* on arm 26, tends to force arm 26 downwardly. A second spring 29 affixed at one end to the lower edge of arm 25 engages the arm 26 with its free end and tends to spread the two arms 25 and 26 and to force the upper edge of the arm 25 against the flange stop 27*b* on arm 26. As the sliding assembly 20 travels forward, the spring 28 draws the arm 26 downwardly, carrying the arm 25 with it until the flange 27*a* bears against the carrier 21, thereby limiting the angular movement.

If a card 1 is in guideway *g* and the lever 15 corresponding to the correct answer is depressed, the forward ends of arm 26 of the lever assembly will pass through a slot *s* provided in the series of slots in card 1 with which said lever registers, and will assume the position shown in Figure 2*A* (its lower end extending through cut-out 9, a slot *s* in card 1, and into the aperture 6*a*, 6*b* or 6*c* in floor 4 with which it registers), the arm 25 then pivoting downwardly with arm 26 and moving forwardly along its lower path and engaging and actuating the swinging yoke 30.

If a lever 15 corresponding to an incorrect answer is operated, there will be no registering slot *s* in the card 1 and, instead of dropping down, the arm 26 will ride on card 1 and the arm 25 will then move forwardly along

its upper path and engage and actuate the swinging yoke 31.

The yokes 30 and 31 are pivoted on a rod *r* extending across said case 13 and are limited in one direction of travel, i. e. rearwardly or counterclockwise, by a rod *t* extending across said case. The yokes are U-shaped and one end arm of each yoke engages pivot rod *r* and the other end arm has a laterally projecting portion providing a pivot connection to a pair of arms for actuating means for keeping individual cumulative scores for a plurality of players. The yokes are oppositely disposed so that portion 30*a* of yoke 30 to which arms 32 and 33 are pivotally connected is at the opposite end of rod *r* from portion 31*a* of yoke 31 to which arms 34 and 35 are connected. (Each yoke has a hooked portion, 30*a* and 31*a* respectively, at one end and to said hooked portions are pivotally joined the pairs of arms 32, 33 and 34, 35 respectively.) The forward ends of said arms are yieldingly urged by springs 32*a*, 33*a*, 34*a* and 35*a* respectively to rotate upwardly to engage the counter gears by which each player's score is automatically recorded as will be explained. The springs 32*a*—35*a* not only tend to hold the yokes 30 and 31 against the stop *t*, but also serve to hold the arms 32, 33, 34 and 35 respectively against cam plates 38*a*, 39*a*, 38*b* and 39*b*, mounted on a rotatable shaft 42 extending through the side walls of case 13. The cam plates 39*a* and 39*b* are disposed at the same angle and are adjacent opposite ends of said shaft. The cam plates 38*a* and 38*b* are disposed on shaft 40 inwardly with respect to said cam plates 39*a* and 39*b* respectively, and are disposed at the same angle relative to each other and at a rotary angle of 180° relative to the cam plates 39*a* and 39*b* when shaft 42 is at rest.

At opposite ends of shaft 42, outside of case 13, are the player's selector levers 40 and 41 which serve respectively to release the pair of arms 32 and 34, or the pair of arms 33 and 35, to actuate, either clockwise or counterclockwise, gear 46 or gear 47, to move pointer 44 or pointer 45 over a calibrated surface on top of case 13 to automatically keep score as will be described.

The gears 46 and 47 are held to the bottom surface of the top of the case 13 by an arm 48 which also supports retaining springs 49 whose free ends engage the teeth of said gears respectively to prevent the gears from rotating freely. The plates 50 supported from the top of case 13 partially shield gears 46 and 47 to prevent premature or accidental operation of the counter mechanism. A hub 46*a* on gear 46 extends through case 13 and has affixed thereon pointer arm or indicator 44. Rotatably mounted on hub 46*a* is a collar 47*a* which also extends through the wall of case 13 and interconnects gear 47 and pointer 45. The said pointers rotate over a calibrated surface on top of case 13 comprising the dial 43.

In operation, a player first depresses and continues to hold down either lever 40 or 41. If, for example, lever 40 is depressed, cam plates 39*a* and 39*b* engage arms 33 and 35 and hold them down in inoperative position. If lever 41 is depressed, cam plates 38*a* and 38*b* engage the arms 32 and 34 and hold them down in inoperative position. The front ends of the pair of arms which remain in operative position rest on the plates 50 respectively. When a player makes his selection of an answer by depressing a lever 15, the attached slider assembly 20 is actuated and the arm 25 therefore engages either yoke 30 or yoke 31 depending upon whether the selection is correct or incorrect.

Assume it is the turn of the player identified by lever 40. Should he depress the lever 15 indicating the correct choice of answers to a question, arm 25 associated with that lever 15 will assume its lower position, because its associated arm 26 will have dropped into a slot *s* in the card 1 which is in the apparatus, and the forward end of arm 25 will engage yoke 30 which carries arms 32 and 33, which, when advanced in operative position, rotate said gears 46 and 47 respectively, by which pointers 44

5

and 45 are respectively rotated, clockwise to record a positive score. Both of said arms 32 and 33 will accordingly be advanced, but since arm 33 is being held down by cam plate 39a and is, therefore, inoperative, only arm 32 and tooth 32b thereon will engage gear 46, thereby moving the pointer 44 clockwise to indicate a positive score for the player using player-selector lever 40.

If, however, the player identified with lever 40, gear 46 and pointer 44 makes the wrong choice of answers by depressing a lever 15 corresponding to a wrong answer, the gear 46 and the pointer 44, are turned counterclockwise by arm 34, the tooth 34b on which engages said gear. The arm 25 associated with the selected lever 15 will assume its upper position because its associated arm 26 will not have registered with a slot in card 1 and consequently will not have dropped down. Accordingly, arm 25 will engage yoke 31 which carries arms 34 and 35 which serve respectively to operate gears 46 and 47 counterclockwise to record a negative score. Both of said arms 34 and 35 will accordingly be advanced, but since arm 35 is being held down by cam plate 39b and is, therefore, inoperative, only arm 34 is operative and will engage gear 46, thereby moving it in counterclockwise direction.

When a second player takes his turn, he rotates or depresses the player selector lever 41 to actuate the apparatus, including the means for scoring his play. This movement of lever 41 renders operative the arms 33 and 35 controlling the scoring mechanism identified with that player selector lever. Actuation of lever 41 rotates cross rod 42 in a direction to cause cam plates 38a and 38b to depress arms 32 and 34 and render them inoperative and cause cam plates 39a and 39b to release arms 33 and 35, allowing their free front ends to rise against the plates 50 respectively. When the second player now chooses and depresses an answer lever 15, the arm 25 associated with it engages either the yoke 30 or the yoke 31, depending upon whether or not the selection is correct, thereby causing tooth 33b on arm 33 or tooth 35b on arm 35 to engage gear 47 to rotate it either clockwise or counterclockwise, as has been explained above in connection with gear 46, thereby rotating the pointer arm 35 connected to gear 47 and causing it to indicate or record either a positive or negative score. The position of the two pointers 44 and 45 indicates at all times the net scores accumulated by the players respectively. By the means illustrated herein each pointer is moved backwards to record an incorrect answer.

The direction of movement of a player's pointer 44, 45 thus indicates with each play whether or not a correct answer has been selected. Another indication is provided by the card 1 which is moved forward each time a question is correctly answered, thus bringing into full view through a window 10 the next question and choice of answers. It will be noted that the lower end of each arm 26 is shaped to engage the leading edge of a slot into which it falls when the answer selected by depression of the lever 15 with which it is associated, is correct. Since the arm 26 moves into the slot at the beginning of the forwardly sliding movement of member 21 and its associated arms 25 and 26, the said engagement between the lower end of arm 26 and the leading edge of the slot propels the card 1 forwardly a distance equal to the extent of the sliding movement of member 21. Arm 26 is withdrawn from the slot when the answer lever 15, by which it is controlled, is released and returned to starting position by the spring means which has been described.

In Figure 5 a card backing and strengthening member 52 is shown. It has ears 53 adjacent its leading edge against which the leading edge of a card may be positioned and the assembly of card and member 52 may then be inserted in guideway g. The slots 54 in member 52 are spaced apart the distance between successive slots in card 1 (in any of the three series of slots) which as

6

illustrated herein is one-half the length of a window 10 and their leading edges register with the leading edges of the card slots respectively. The arms 26 of the answer key assemblies 15 pass freely those slots 54 into the card slots with which they respectively register, the edges of the slots and particularly the leading edges serving to protect the slots from tearing or becoming worn from contact with arms 26.

In Figure 6 a modification of the answer lever assembly means for advancing the card upon selection of the correct answer lever, and desirably but not necessarily also actuating scoring means, is shown. In this embodiment an answer lever 55 comprising a bell crank portion 56 is shown pivoted within housing 57 on pivot rod 58. The lower end of the bell crank portion 56 is connected by pivot 60 to an arm 62 which has on its lower surface the tooth 64 which, when it is moved forward by lever 55 being depressed, slides on the surface of a card 1 and does not act to move the card forward unless it encounters an aperture s. In that event the tooth 64 drops into the aperture during the first part of the forward motion of slider 62 and consequently engages the card and moves it forward a distance corresponding to the remainder of the forward movement of slider 62. The tooth 64, the trailing edge of which is sloping, is disengaged from the aperture and again rides up on top of the card when the card is again moved forward by the correct selection of some other answer lever assembly. When tooth 64 on arm 62 registers with and drops into a slot s arm 62 takes its lower position and can be utilized also to actuate swinging yoke 30 of the score indicating means described above. When tooth 64 does not encounter a slot s (indicating selection of an incorrect answer lever) arm 62 is maintained in its upper position and can be utilized to actuate swinging yoke 31 of the score indicating means described above.

To prevent a player "feeding" with an answer key or lever to try to tell whether the tooth 64 of a slider 62 has fallen into a slot s in the card by the resistance to movement of the answer lever caused by engagement of tooth 64 with the edge of the slot (which would indicate a correct selection) I provide a lost-motion slot 63 at the lower end of bell crank 56. Upon an answer lever 55 being depressed the bell crank portion 56 swings, without advancing arm 62, while slot 63 moves past pivot 60. Only when the upper end of slot 63 engages pivot 60 is the arm 62 advanced and by that time a player is committed to his selection.

It will be understood that it is within the contemplation of this invention that instead of moving the card through a horizontal plane relative to the answer selecting means and the scoring means relative movement between the card and said means may be obtained in a variety of ways, as for example by supporting the card on a rotatable member and causing coaction of said card and means to rotate said member, and the word "guideway" is used herein in a broad sense including a curved path as well as a horizontal path.

It will thus be seen that there has been provided by this invention an apparatus in which the various objects hereinabove set forth together with many thoroughly practical advantages are successfully achieved. As various possible embodiments might be made of the mechanical features of the above invention and as the art herein described might be varied in various parts, all without departing from the scope of the invention, it is to be understood that all matter hereinbefore set forth or shown in the accompanying drawings is to be interpreted as illustrative and not in a limiting sense.

What I claim is:

1. In combination, guide means, a card slidably engaging said guide means, said card being divided into zones each containing a question accompanied by a plurality of suggested answers of which one is correct, a

key assembly corresponding to each answer, a counter dial, a plurality of means movable over said dial and moved in one direction by actuation of the correct answer key assembly for indicating selection of the correct answer, and moved in the opposite direction by actuation of any other key assembly for indicating selection of a wrong answer, and means for rendering inoperative one of each of said pluralities of means.

2. A question and answer game including a plurality of key assemblies for indicating selection of one of several answers presented with a question to a player, a guideway positioned in operative relation to said key assemblies, a card movable through said guideway, a scoring indicator movable in opposite directions to indicate a positive or a negative score, means controlled by actuation of the correct key assembly to move said counter in one direction, and means controlled by actuation of an incorrect key assembly to move said scoring indicator in the opposite direction.

3. In combination, guide means, a card slidably engaging said guide means, said card being divided into zones, each zone having means corresponding to a correct answer to a question corresponding to said zone, key means corresponding respectively to each of a plurality of answers to a question, and means controlled by actuation of the correct answer key means for engaging and advancing said card one step, scoring means, and other means controlled by actuation of a correct or an incorrect answer key means respectively for actuating said scoring means either positively or negatively.

4. In combination, guide means, a card slidably engaging said guide means, said card being divided into zones, each zone having means corresponding to a correct answer to a question corresponding to said zone, key means corresponding respectively to each of a plurality of answers to a question, and means controlled by actuation of the correct answer key means for engaging and advancing said card one step, including a plurality of counter means, and a plurality of means for actuating said counter means respectively, each means comprising said plurality of actuating means being responsive to each actuation of a key means, and means for rendering ineffective one of said plurality of means.

5. A question and answer game including, a plurality of key assemblies for indicating selection of one of several answers presented with a question to a player, a guideway positioned in operative relation to said key assemblies, a card movable through said guideway and having a plurality of series of apertures equal in number to the number of said key assemblies, there being one aperture for each correct answer and said apertures being in a sequence corresponding to the sequence of questions propounded to a player and respectively in a series related to the key assembly indicating selection of the correct answer corresponding to said aperture, said assembly comprising means coacting with said aperture to engage the card and move it forward one step upon selection of the correct answer assembly, scoring means for each of a plurality of players, two sets of means each

separately responsive to the selection of a correct answer key assembly to actuate said scoring means respectively, means for disconnecting one set of responsive means from the scoring means for one player, and means for connecting the other set of responsive means to the scoring means for another player.

6. In combination, guide means, a card slidably engaging said guide means, said card being divided into zones corresponding to a number of questions, each zone having means corresponding to a correct answer to a question corresponding to said zone, key means corresponding to each answer, means movable in one direction to indicate selection of a correct answer and movable in another direction to indicate selection of an incorrect answer, means controlled by actuation of the correct answer key means for moving said indicator means in one direction, and means controlled by the actuation of an incorrect answer key means for moving said indicating means in said other direction.

7. The device claimed in claim 6 in which a plurality of indicating means are provided each operable for movement in one direction by actuation of a correct answer key means and operable for movement in the opposite direction by actuation of an incorrect answer key means, and means for selectively rendering inactive one of said indicating means.

8. A question and answer game, in combination, a plurality of key assemblies operable to indicate correct selection of one of several answers presented with a question to a player, a guideway positioned in operative relation to said key assemblies, a card movable through said guideway and having apertures corresponding to said answers, the aperture corresponding to the correct answer adapted to receive an element of a key assembly, a scoring indicator movable in opposite directions to indicate a positive or negative score, means controlled by actuation of a key assembly upon selection of the correct answer to move said indicator in one direction, and means operatively associated with said indicator and coacting with said card to move said indicator in the opposite direction upon selection of an incorrect answer.

9. Apparatus in accordance with claim 8, wherein said element comprises an arm pivotally mounted on said key assembly so as to be movable by gravity into said correct aperture.

10. Apparatus in accordance with claim 8, wherein said card has a plurality of zones of apertures, the apertures in each zone being so arranged that only one of them will receive said element upon selection of the correct answer.

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