

June 11, 1940.

R. L. WILLIS

2,204,199

GAME APPARATUS

Filed June 22, 1938

3 Sheets-Sheet 1

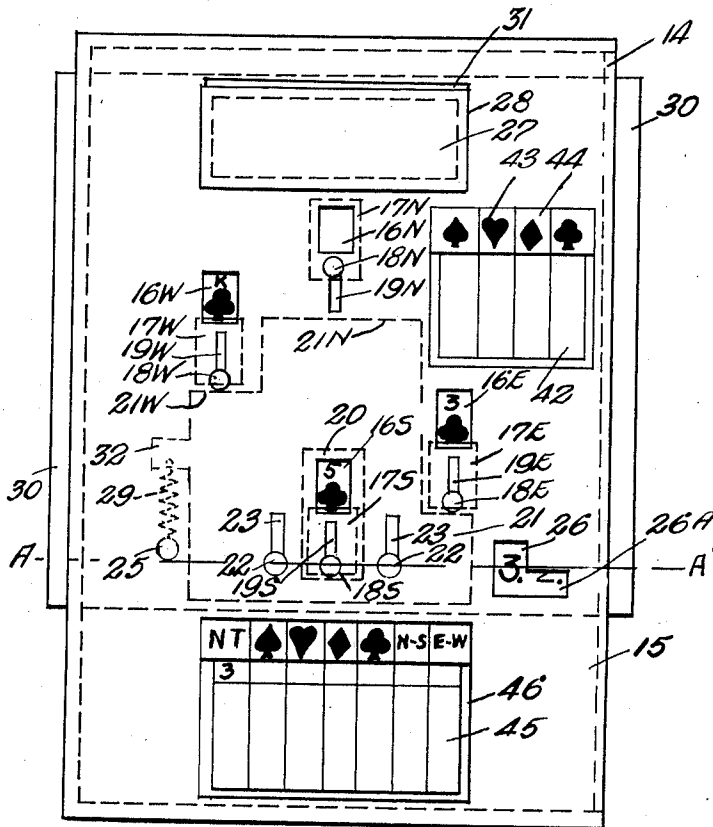


Fig. 1.

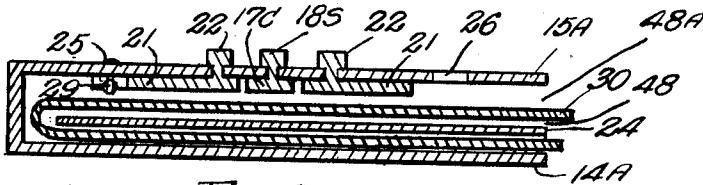


Fig. 2.

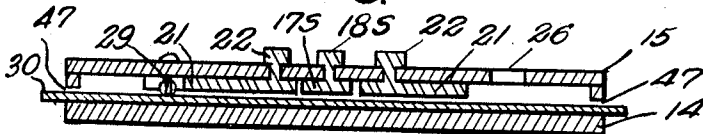


Fig. 3.

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3 Sheets-Sheet 2

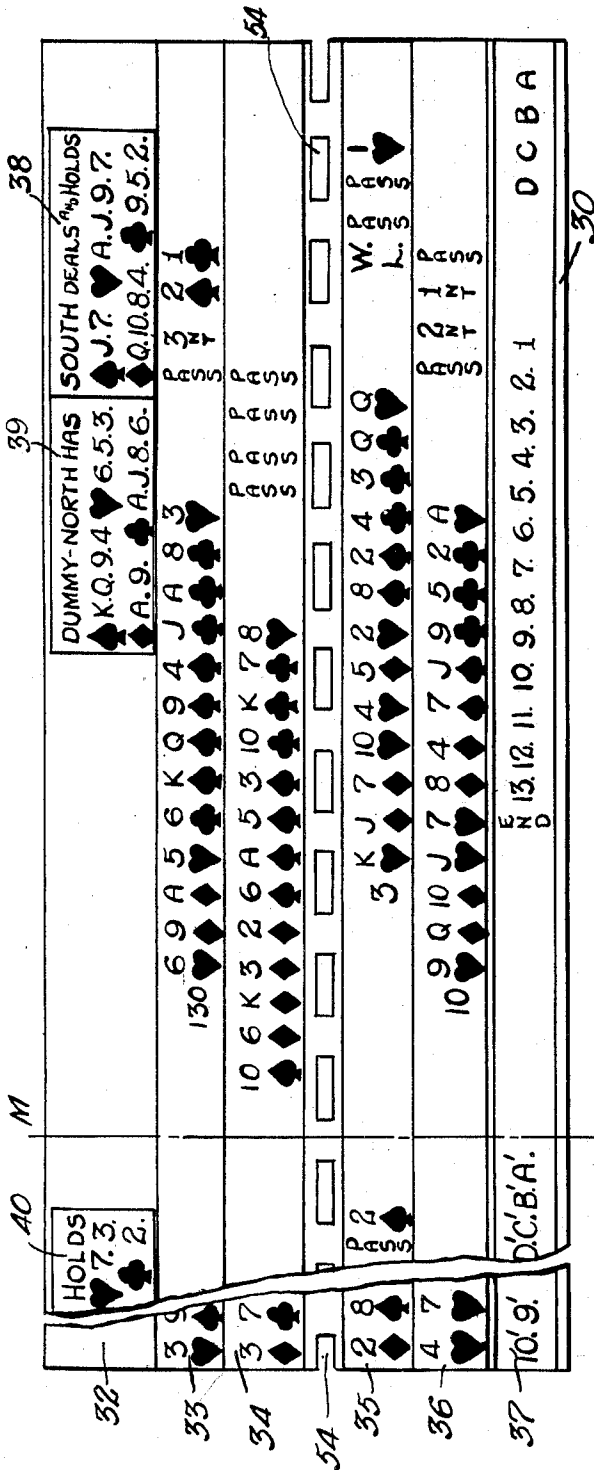


Fig. 4.

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3 Sheets-Sheet 3

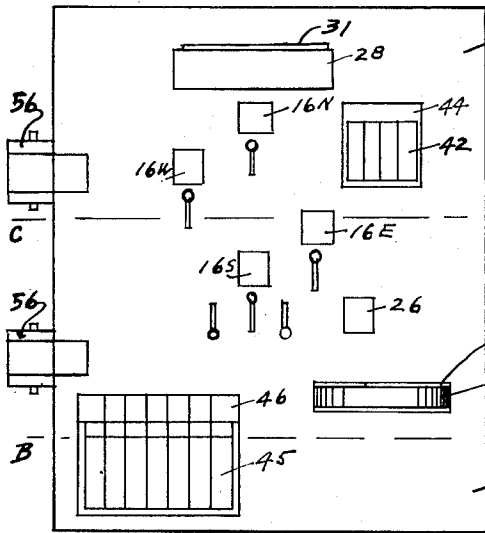


Fig. 5.

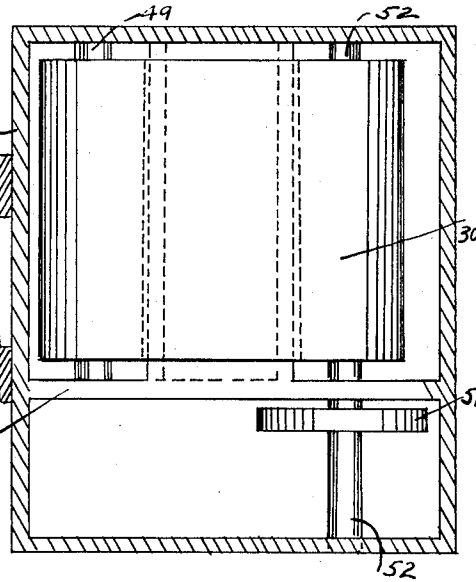


Fig. 8.

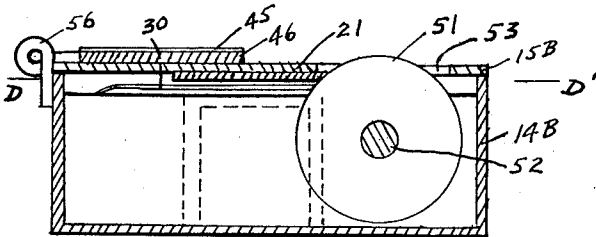


Fig. 6.

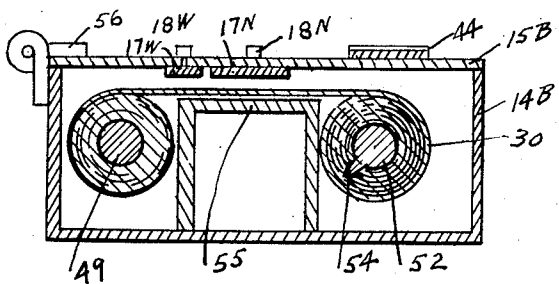


Fig. 7.

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2,204,199

GAME APPARATUS

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Application June 22, 1938, Serial No. 215,086

5 Claims. (Cl. 35—8)

My invention is an improved form of devices now available which are designed to permit a person to play in solo fashion various card games such as contract bridge, whist, etc. It has the advantage of being more compact, cheaper to manufacture, requiring fewer parts, and of presenting to the user of the device the information desired in a form easier to understand and is also easier to operate.

It also eliminates a fault common to devices now on the market of revealing to the user of such devices of information concerning the sequence of play prior to the time the user wants such information. It also provides a device which can be made up in more beautiful and artistic forms than are permissible with present forms of such devices.

My device could be made up in sizes small enough to carry in a coat pocket or in a lady's purse, so that it could be used by persons traveling on trains or elsewhere where devices of the now available type are so large and bulky as to limit their use. My device also permits the inscription on the card member of a plurality of different games thus eliminating the delays encountered in loading and re-loading the cases used in the devices now available.

My invention involves a new and novel arrangement of the card-value indicia on the card member. The arrangement which I use, although varying in small degree from arrangements heretofore used is a novel arrangement and by virtue of this arrangement it permits of a great simplification of the aperture feature of such devices. In devices now on the market it is necessary to have a minimum of 52 apertures through the case in order to reveal the play of the 52 cards in the game. In my device this number of apertures is reduced from 52 to only four apertures. In devices now available, each of these 52 apertures must be equipped with a separate aperture closure member, thus requiring a minimum of 52 of such members. In my device the number of such aperture closure members can be reduced to a maximum of 4.

My device has the further advantage of being adaptable for use in the play of such games as pinochle, five-hundred and other such games. It is also adaptable to the play of the new game of contract bridge requiring the use of sixty-five cards instead of fifty-two cards.

I attain these and other desirable features by the mechanism illustrated in the accompanying drawings, in which

Figure 1 is a plan view of one embodiment of the device.

Figure 2 is a vertical sectional view on line A—A' of Figure 1.

Figure 3 is a vertical sectional view on line A—A' of a different embodiment of the device, showing a modified type of a case member.

Figure 4 is a plan view of the top surface of a game-card which forms part of the device.

Figure 5 is a plan view of another embodiment of the device.

Figure 6 is a vertical sectional view on line B—B' of Figure 5.

Figure 7 is a vertical sectional view on line C—C' of Figure 5.

Figure 8 is a plan view taken on line D—D' of Figure 6.

Similar numerals refer to similar parts throughout the several views. Inasmuch as some of the indicia require the use of numerals 1 to 13 inclusive, the lowest numeral used to indicate a part is 14. In explaining the device it will be necessary to use terms commonly used in the card game known as contract bridge. In this game it is customary for two players to play as partners against another pair of players. The game is usually played about a rectangular table, and the players seated to the north, east, south, and west of the table are commonly referred to as "North," "East," "South," and "West" respectively. This custom will be followed in this description, with the modification that in the use of the apparatus only one player will be needed, the "South" player, and the other three players are imaginary players. "North" and "South" are partners, and "East" and "West" are partners. In the description of the play of the card values it is intended to illustrate the use of the device for playing a game of contract bridge and the play is designed to conform to customs and rules governing the play of that game.

Referring to Figure 1, the principal structural member is the case 14. This consists of a top 15 and bottom, end and side members in the general form of a flat box. It can be made of wood, sheet-metal, hardened rubber, Bakelite, fibre-board or other similar material. An aperture 16W is cut or stamped through the top 15. Attached to the lower side of top 15 is a shutter member 17W. This may be a small flat strip of sheet metal, cardboard, wood or other material. There is rigidly attached to member 17W a button-member 18W, which extends upwardly through the slot 19W which is cut through top 15. Member 18W can be manually moved length-

wise in the slot 19W in such manner as to position the shutter 17W so as to block-off aperture 16W, or to leave member 16W in an open position. The top of member 18W is enlarged slightly so that it does not fall down through slot 19W.

In the use of the device, aperture 16W is designed to represent the position of player "West." A similar aperture 16N is cut through top 15, and at this point there is a similar shutter 17N, but-ton-member 18N and slot 19N. This group of members represents player "North." Another group of members, aperture 16E, shutter 17E, button-member 18E and slot 19E serve for player "East," and a fourth group of members, aperture 16S, shutter 17S, slot 19S and button member 18S serve for player "South." There is also cut through top 15 another aperture 26. This can be widened as desired by extending it as shown at 26a. This aperture does not require any shutter member.

I have shown all of the shutter members attached to the under side of top 15. If desired they could be attached to the top of top 15. They could be of any desired shape as long as they are designed to obturate or expose indicia which may be positioned at the apertures. Similarly the shape of apertures 16N, 16E, 16S and 16W could be circular or any other desired shape.

A shutter-closure member 21 is positioned against the under side of top 15. This is preferably a flat sheet of metal which is of such shape that its edges will co-operate with the shutters. In using the apparatus the player will slide shutter members downwardly to open the apertures 16N, 16E, 16S and 16. He will later want to close these shutters. Member 21 is so shaped that its edges 21W, 21N, 21E and 21S adjoin the lower edges of the shutters, so that when the operator slides member 21 upwardly these edges will engage the shutters and move them to a closed position. Member 21 is movably attached to top 15 by means of the button-members 22, which are designed to move slidably in the slots 23 which are cut through top 15. It will be seen that in this way the operator can close all four shutters simultaneously with one operation instead of four separate operations. I have shown member 21 extended to form the arm 32 to which is attached a coil spring member 29. The other end of member 29 is attached to top 15 by means of the pin member 25. The coil spring 29 is normally in tension and holds member 21 in a position toward the lower end of the case, that is, with its edges out of engagement with the shutter members when the shutters are in a closed position.

Member 27 is a larger sized aperture through top 15. It has a cover member 28 which is attached to top 15 by the hinge 31. Cover 28 can be raised or lowered to expose aperture 27 as desired.

Referring to Figure 4, I show a card member 30. This can be made of paper, cardboard, cloth or other material on which indicia can be inscribed, printed or painted. It is designed to insert card 30 into case 14 in such manner that it will be positioned underneath top 15 so that the indicia on card 30 can be viewed through the apertures in top 15. In Figure 2 I show this card inserted into case 14 by passing it through the slots 47 which are located on the sides of case 14. In Figure 3, I have shown card 30 inserted in case 14A by passing it through slot 48 on the right hand edge of case 15A, making a

double-turn around baffle plate 24 and passing out of case 15A through slot 48A.

My device differs from other devices in that my device calls for card 30 to be a manually movable card whereas in present devices the card corresponding to card 30 is kept stationary during the play of the game. These other devices therefore require a multiplicity of apertures in the top of the case, whereas I employ a smaller number and provide means for moving the various indicia to this smaller number of apertures. The use of a movable card member instead of a stationary card member is a novel feature of my device. It will be readily apparent that this is not merely an advantage in manufacturing cost but that by reducing the number of apertures at which the user must look it greatly reduces the confusion in the play of the game.

On card 30 I show a group of indicia in row 32. This consists of the announcement 38 which states the card-holdings of player "South." In row 32 I also show another announcement 39 which gives the card-holdings of player "North" who is the "Dummy."

On card 30 is also a row of indicia 33. These indicia represent, reading from right to left, the sequence of bids and play of the card-holdings of player "North." Similarly on card 30 there appear rows 34, 35, and 36 which represent respectively the sequences of bids and plays of the card-holdings of players "West," "East," and "South." It will be noted that the distance from the right hand edge of card 30 to the first indicium in rows 33, 34, 35, and 36 varies. This is a novel arrangement of such indicia on a game card.

I also show another row of indicia in row 37. As will be explained later, these indicia are used for the proper positioning of card 30 in the play of the game.

All indicia necessary for the play of one complete game of contract bridge are shown on card 30 positioned to the right of line marked M—M'. If desired card 30 could be cut off at line M—M'. However, if so desired, card 30 can be a card of any desired length and there can be inscribed on an extension of card 30 beyond M—M' the complete set of indicia for a second game, and for as many additional games as may be desired. I have shown at 40 a fragment of an announcement for a second game, and in rows 34, 35, and 37 a few of the indicia for this second game. Lack of space on the drawings precludes showing all the indicia of the second game or subsequent games, as indicated by the cut-away lines.

In the use of the apparatus, the operator closes all the shutters and slides card 30 into case 14, sliding same from left to right until the indicium A in row 37 appears at aperture 26. He then opens door 28, and finds that he can read announcement 38 through aperture 27. Using a pencil, he copies on a pad of paper 45 the card holdings indicated by announcement 38. Paper 45 is held in a pad holder 46, which has markings as shown in Figure 1. The user, in this case would tabulate in the row headed with the "spade" marking, all the spades shown in announcement 38, namely the "jack" and the "seven". Similarly he would tabulate in the row headed with a "heart" marking, the "hearts" indicated in announcement 38, namely, the "ace," "jack," "nine" and "seven." He would do likewise with the "diamonds" and the "clubs." He then studies his "hand," makes a mental bid, and then opens shutter 17S, permitting him to

check his mental bid. Thus in sequence he opens shutters 17W, 17N and 17E. He then moves card 30 to the right, after having first closed the four shutters and having closed door 28. Card 30 is moved to the right until the indicium B is centered in aperture 26. The user then opens in sequence shutters 17S, 17W, 17N, and 17E. The shutters are again closed, card 30 is moved to the right until indicium C is centered at aperture 26, and the process repeated until no indicia appear at apertures 16W, 16N, 16E, and 16S. The user then moves card 30 to the right until indicium 1 is centered at aperture 26. Inasmuch as "South" secured the contract, the user opens shutter 17W and this reveals that player "West" has played as his first "card" the "8-of-hearts." The user then opens door 28 and is able to read announcement 39 through aperture 27. Using a pencil, he copies on pad-of-paper 42 the card-holdings indicated, listing the "spades," "hearts," "diamonds" and "clubs" in the columns provided for him. 42 is held in pad-holder 44, on which are inscribed the markings 43 as shown in Figure 1. Member 44 is not rigidly attached to top 15. It can be moved to various positions on top 15 depending on which "player" is supposed to be the "Dummy".

Pad-holder 46 is preferably rigidly attached to top 15 but does not have to be so attached.

The user then makes a mental selection from the card holdings shown on paper 42. He then opens shutter 17N, and checks his selection. He then makes a pencil scratch mark through the "3-of-hearts," inasmuch as this is the indicium which appeared at aperture 16N. This scratch mark indicates to the user that this particular "card" has been played once and is not to be replayed in this game. He then opens shutter 17E, revealing the "queen of hearts." He then makes a mental selection from his own "card holdings" and checks it by opening shutter 17S. This reveals the "ace of spades," and the user draws a pencil scratch mark through that "card" in his listing on paper 45.

He makes a pencil mark in the column headed "N-S," indicating that the "North-and-South" partnership has won one trick. He then closes the door 27, and closes the four shutters, and moves card 30 to the right until the numeral 2 is centered at aperture 26. He then opens in sequence shutters 17S, 17W, 17N, and 17E. Each time a card is "played" he scratches it off the lists on papers 42 and 45, and each time a trick is won, he makes a mark in column headed "N-S" or "E-W" depending on which partnership wins. It will be seen that the user is thus keeping a running record of which "cards" have been played, and how many tricks each partnership has taken.

The user proceeds in the manner indicated until all thirteen tricks have been played. He then closes the shutters, and tabulates his score. In order to furnish the player with a check on his tabulations, I have shown at the end of the rows the correct number of tricks taken by each partnership, in this case, 10 tricks by "North-and-South" and 3 tricks by "East-and-West." These marks appear in rows 36 and 35 respectively. I have also shown the correct "point" score, in this case, 130 in row 33. These markings can be viewed by the user by positioning the marking "end" at aperture 26 and opening the correct shutters.

If the card is of the type on which several games are inscribed, the user then moves card

30 to the right until the index mark A' appears at 26 and proceeds as before.

In an improved form of the device shown in Figure 2, I show the case 14A closed along one of its sides, and with the slotted opening 48 in the other side. A baffle member 24 extends from the upper end of the case to the lower end of the case, and positioned between the top 15A and the bottom of the case. In this type the card is inserted under this baffle member and then passes over its top, as illustrated in Figure 3. Otherwise the construction of the case 14A is similar to that of case 14 in Figure 1. The card comes out of case through slot 48A.

In Figures 5 to 8 inclusive I have shown an improved form of the device which incorporates improved methods of positioning the card member 30. In this type the case 14B is in the form of an open-topped box. The top 15B is attached to the case 14B by means of the hinges 48. In this type the card member 30 is wound around the roller member 49, which serves as a pay-out spool. One end of the roller member 49 is journaled in the upper wall of the case 14B and the other end is journaled in the diaphragm wall 50. The roller member 49 is free to rotate.

The free end of the card 30 is passed over the horizontal table member 55 which is positioned inside of the case 14B and beneath the top 15B. The free end is attached by some suitable means to the roller member 52 which serves as a receiving spool. One end of roller member 52 is journaled in the upper wall of the case 14B and the other end is journaled in the diaphragm wall 50. I have shown the roller member 52 as being extended through the wall 50 and being further journaled in the lower wall of case 14B. This construction could be varied by leaving out the diaphragm wall 50 and journaling the lower ends of roller members 49 and 52 in the lower wall of case 14B. The method of attaching the card member 30 to the roller member 52 may vary. The card 30 may be simply wrapped around the roller member 52 several times and depend on friction for its connection or a spur- or spoke-member such as shown by the numeral 56 may protrude from the roller member 52 and engage the slots 54 in the card member 30.

A wheel member 51 is rigidly attached to the roller member 52 in such manner that rotation of the wheel 51 will cause rotation of the roller member 52. The size of the wheel 51 is such that a portion of it extends up through the slot 53 which is cut through the top 15B. The edge of the wheel 51 is preferably milled or otherwise roughened. When the user of the device wishes to advance the card 30 under the apertures in the top 15B he rotates the wheel 51 which causes the card 30 to wind up on the roller member 52.

If desired, the wheel 51 could be positioned outside of the case by mounting it rigidly on a part of the roller member 52 which could pass through a hole in the case 14B to outside of the case.

Referring to Figure 4, particular attention is directed to the order of arrangement on card 30 of the rows 33, 34, 35, and 36. Identifying these rows by the "players" which they represent, it will be seen that the order of arrangement, reading from top to bottom is "North," "West," "East," and then "South." Inasmuch as "North" and "South" are partners, and "East" and "West" are partners it will be seen that the order of arrangement is such that the two adjacent interior rows represent two players who are partners and that the two exterior rows represent

players who are their opponents. This arrangement is important. Without varying the controlling principle of said arrangement, the order could be varied to read "North," "East," "West" and then "South," or could read "West," "North," "South," and then "East," or could vary to read "West," "South," "North," and then "East." The important thing is that the two adjacent interior rows should represent players who are partners, and the two exterior rows should represent players who are partners and the opponents of the first pair of partners.

In the reading of maps the public has been educated to consider the upper, the right-hand, the lower, and the left-hand edges of the map to represent respectively the direction north, east, south, and west.

There have appeared in books and elsewhere tables of the card indicia somewhat similar to the tabulation shown on 39. But it has been customary to arrange the rows in what might be called a "round-the-compass" order, such as having the first row represent the card holdings of player "North," and the second, third and fourth rows represent the cardholdings respectively of players "East," "South," and "West."

It will be readily seen that a card with the indicia arranged in rows in this "round-the-compass" order could not be used in a device of this sort. If it were used it would present the card holdings of players "North," "East," "South," and "West" at the apertures which in accordance with the system of map-reading would represent respectively the positions north, east, south and further south, or in some other distorted arrangement. Any arrangement of the apertures to co-operate with such a "round-the compass" order on the card would violate the desirable arrangement that the apertures be in a quasi-rectangular arrangement. This would result in considerable confusion in the play of the game. The arrangement in the form I show permits the use of many fewer apertures and produces a result not obtainable with the usual order of arrangement.

If additional apertures through the top are required they could be added. For instance, it might be desired to have an aperture through the top 15 which could co-operate with scoring-indicia inscribed on the card 30 in the same manner as is shown by aperture 39 and scoring-indicia 68 in Figures 1 and 9 of the device illustrated in U. S. Patent Number 1,988,587. This arrangement could take the place of the scoring by making pencil marks on the paper 45. The card 30 could show various combinations of card holdings for various players. Any of the commonly used devices for advancing a sheet of paper a predetermined space could be added to the device for advancing card 30 as much as desired.

I have described a simple form of my invention. Many variations of details and elaborations of this simple form can be made and still fall within the scope of the invention.

If a card member of the multi-game type is used, it might be desirable to use a flexible card. This card could be wound on a pay-out spool which could be attached to the case; the card could be passed belt-fashion under the top member of the case and then wound on a receiving spool which is also attached to the case. The construction would resemble that used in holding a roll of photographic film in an ordinary camera-box, and the card-sheet could be advanced in the same manner that the film is advanced for

progressive exposure of parts of the film by rotating the receiving spool to cause the card to wind up on this spool.

It will be noted that the card member and the top member of the form of the device which I have described are relatively movable with respect to each other. In the type which I have illustrated the top remains stationary and the card member moves. The construction could be varied by having the card member remain stationary and having the top member movable. This could be accomplished by having the top of the case movably attached to the case and having the card held stationary by the lower part of the case.

Having thus described my invention, I claim:

1. In a game device of the type described a manually movable card member on which are inscribed indicia representing the card-value holdings and the sequence of play thereof of four players, the indicia on said card being arranged in four substantially parallel rows of which the two exterior rows represent respectively the card-value holdings of two players who are partners in the game and the two interior parallel rows represent the card-value holdings respectively of two other players who are partners opposing the aforementioned partners.

2. In a game device of the type described a card member on which are inscribed indicia representing the card-value holdings and the sequence of play thereof of four players, the indicia on said card being arranged in four substantially parallel rows of which the two exterior rows represent respectively the card-value holdings of two players who are partners in the game and the two interior rows represent the card-value holding respectively of the two other players who are partners opposing the aforementioned partners, and on which card member there is inscribed in another row which is substantially parallel to the said four rows a series of positioning-indicia, the spacing distances between the individual positioning-indicia in said row corresponding to the spacing distances between the individual card-value indicia in any one of the said four rows.

3. A single-player game apparatus for simulating a four-player game comprising in combination a card member on which are inscribed four parallel rows of indicia, said rows being identified respectively as row number one, row number two, row number three, and row number four, and said rows representing respectively the card-value holdings and the sequence of play thereof of the four players, a case member whose top is positioned above said card member and serves as a mask therefor, said top and said card being relatively movable to each other, an aperture through said top member which co-operates with said row number one, an aperture through said top member which co-operates with said row number two, an aperture through said top member which co-operates with said row number three, an aperture through said top member which co-operates with said row number four, the size of each of said apertures being approximately that of a single indicium on said card member, manually movable shutter members mounted on said case member whereby the view of said indicia through said apertures can be concealed or exposed, together with manual means of changing the relative positions of said card member and said top member.

4. A playing-sheet member adaptable for use

in a card-game apparatus of the type described which has inscribed thereon four groups of actual card-value indicia, each of said groups of indicia representing respectively one of the four
5 players of a pre-determined game, the arrangement of the indicia which comprise each group being in the order of the sequence of play of the card values in the pre-determined game by the player which said group represents, and which
10 also has inscribed thereon elsewhere a plurality of groups of said card-value indicia, each of said latter groups representing respectively the card values held by one of the players, the arrangement of the indicia which comprise said latter

groups being different than the order of sequence of play of the card-values in the pre-determined game.

5. In game educational apparatus, a chart having four parallel rows of card indicia thereon corresponding respectively to four hands of a
5 card game, each row indicating the preferred order of bidding and playing the cards of a given hand; and a relatively movable mask for said chart having window means therein to ex-
10 pose said indicia as said mask and said chart are moved relatively to each other longitudinally of said rows of indicia.

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