Sept. 16, 1969 C. E. SMITH 3,467,386

GAME BOARD WITH MOVABLE BARRIER MEANS

Filed Sept. 13, 1966 3 Sheets-Sheet 1

FIG. 1

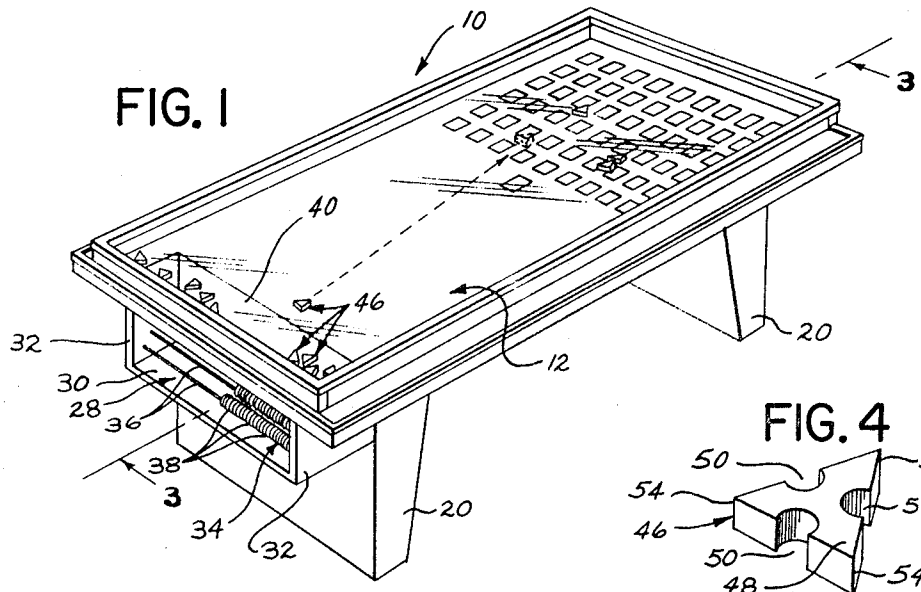


FIG. 4

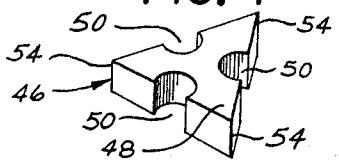


FIG. 2

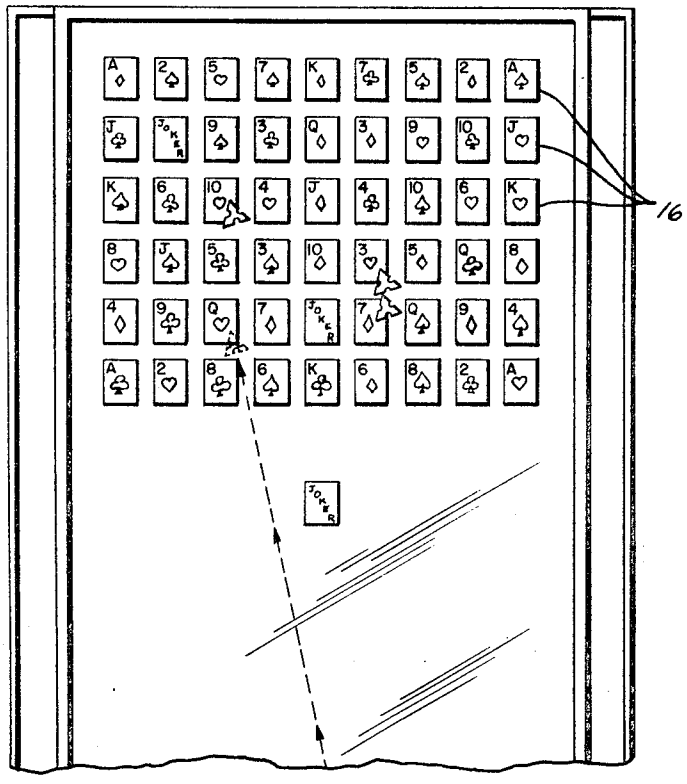
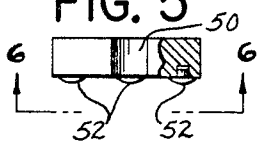


FIG. 5



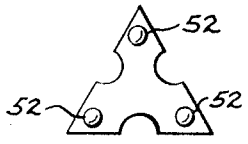


FIG. 6

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FIG. 3

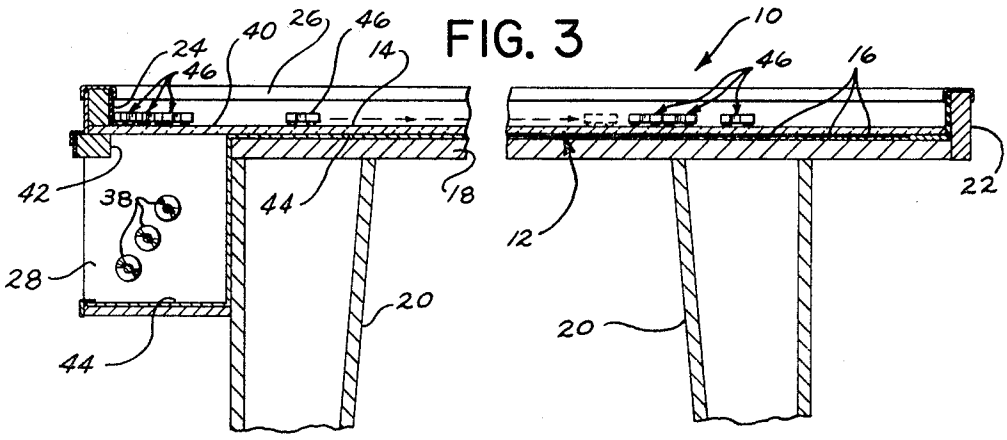
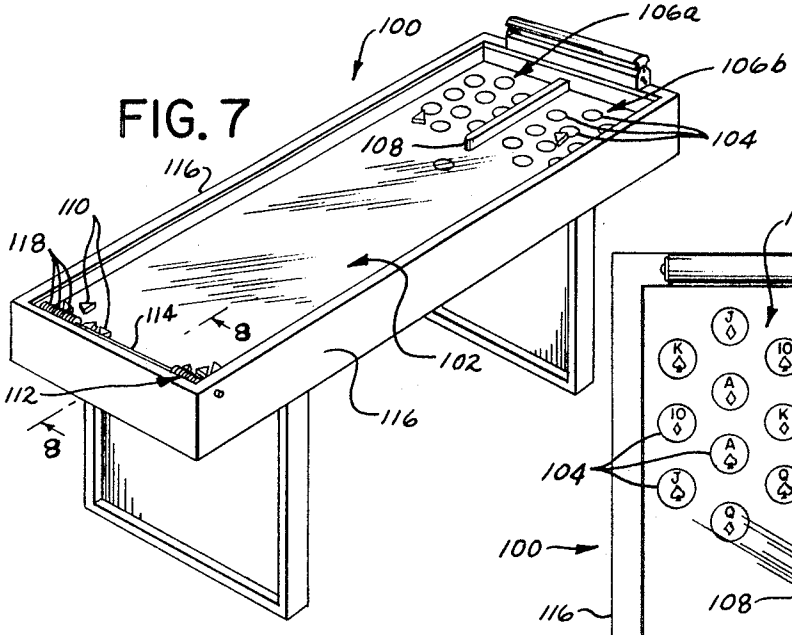


FIG. 7



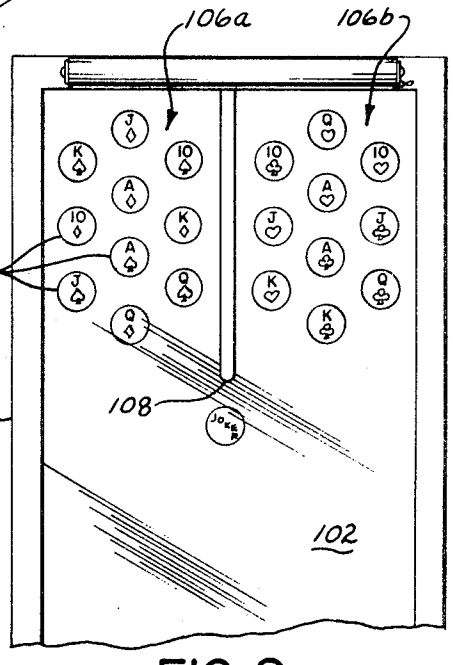


FIG. 9

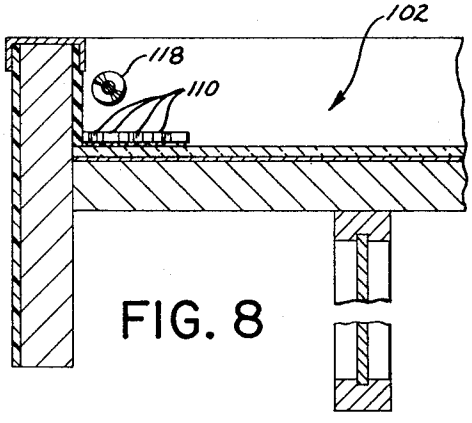


FIG. 8

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GAME BOARD WITH MOVABLE BARRIER MEANS

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FIG. 10

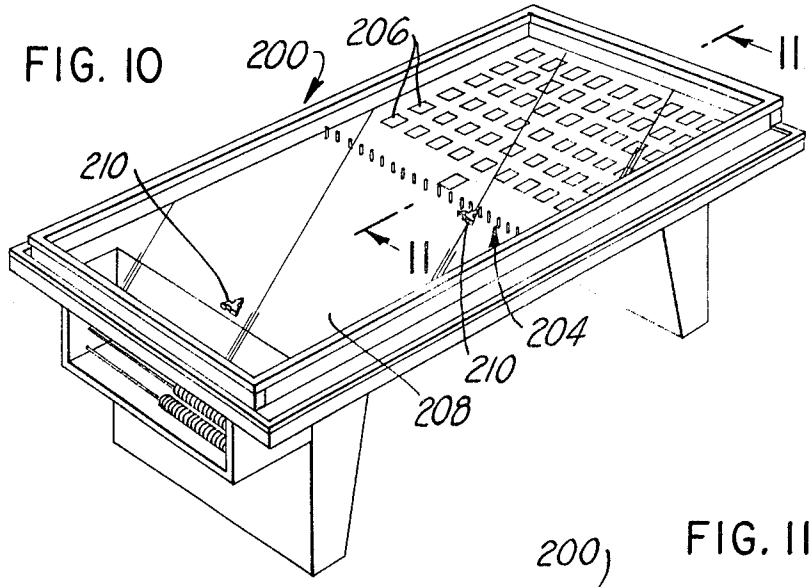


FIG. 11

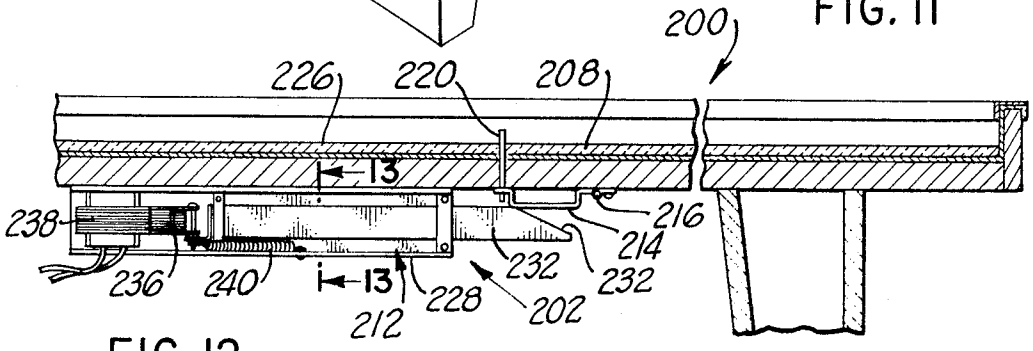
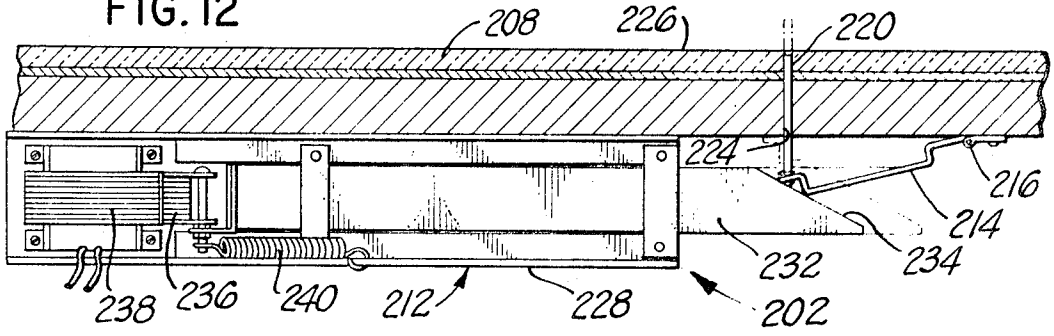


FIG. 12



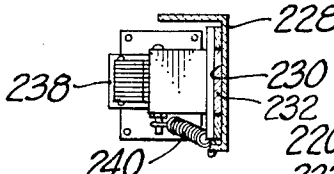
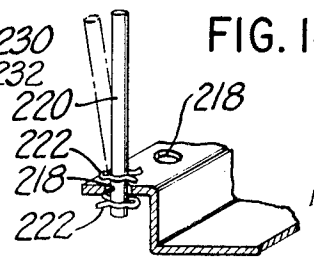


FIG. 13

FIG. 14



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3,467,386

GAME BOARD WITH MOVABLE BARRIER MEANS

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Continuation-in-part of application Ser. No. 408,170. Nov. 2, 1964. This application Sept. 13, 1966, Ser. No. 586,906

Int. Cl. A63f 3/00

U.S. Cl. 273—126 3 Claims

ABSTRACT OF THE DISCLOSURE

A game board with a vertically retractable barrier that acts to block a slidable playing piece. The barrier consists of a series of pins pivotally attached to a bar which bar is under the game board playing surface. The pins extend through holes in the playing surface and may be extended to block or be retracted to a position flush with the playing surface. The bar supporting the barrier pins is hingedly connected to the underside of the playing surface and is actuated by a camming latch bar that moves longitudinally of the table when a coin operated mechanism is activated.

This application is a continuation-in-part of my copending application Ser. No. 408,170, filed Nov. 2, 1964, and entitled Game apparatus now abandoned.

The present invention relates generally to games; more particularly, the invention relates to improvements in game apparatus for games of the type wherein playing pieces or markers are propelled along a playing surface in an attempt to locate the markers in scoring relation to a plurality of scoring zones spaced about the surface.

Game apparatus of the class to which this invention relates are well known in the art and are used for playing a variety of games. Poker, for example, is played with game apparatus of this type. In this case, the scoring zones are defined by playing cards bonded to the playing base or card facsimiles imprinted on the base. The game is played by assigning each player a given number of playing pieces, or markers, which the player propels along the base in an attempt to locate each marker in scoring relation to one or more of the playing cards. The player whose markers register the best poker hand wins. As indicated above, poker is only one of the many different games which may be played with game apparatus of this general type.

Briefly described, the invention provides game apparatus wherein each marker is shaped to define, or otherwise includes, one or more indicators, the effective size of each of which is substantially smaller than the overall size of the marker. The scoring zones on the playing base of the apparatus are spaced in such a way that each indicator of each marker may be disposed in scoring relation to only one scoring zone at one time. Accordingly, the maximum number of scoring zones relative to which a marker may be disposed in scoring relation at one time may be controlled. For example, if a marker has but a single indicator, each marker may be disposed in scoring relation to only a single scoring zone. If the marker is equipped with two spaced indicators, the marker may be disposed in scoring relation to either one or two, but no more, scoring zones at one time. In the illustrative embodiment of the invention, each marker has three indicators, whereby each marker may be disposed in scoring relation to a maximum of three scoring zones at one time. A unique feature of the invention resides in the fact that each marker is so configured in relation to the spaces between adjacent scoring zones that the marker may assume either a scoring position in any space, wherein the marker is disposed in

scoring relation to one or more of the adjacent scoring zones, or a non-scoring position, wherein the marker is not disposed in scoring relation with any of the adjacent scoring zones. Thus, each marker of the illustrated embodiment of the invention may assume a non-scoring position or a scoring position in relation to one, two or three adjacent scoring zones. In this regard, the present game apparatus differs significantly from the existing game apparatus of the same class of which I am aware. In some of the existing game apparatus of this class, for example, the scoring zones are contiguous so that no spaces exist between the adjacent zones. In this case, the markers or playing pieces are incapable of assuming a non-scoring position. In other existing game apparatus, the adjacent scoring zones are spaced in such a way that each marker or playing piece may assume either a non-scoring position or a scoring position in relation to one scoring zone, only. In other words, in these latter game apparatus, while each marker or playing piece may assume either a scoring position or a non-scoring position, the marker may be disposed in scoring relation to only one scoring zone, and no more, at any given time. This unique shape of the marker also permits a playing base of given size to contain a maximum number of scoring zones and, in addition, permits the markers themselves to be of convenient size and to have sufficient mass for effectively sliding them along the playing base.

A further aspect of the invention resides in an improved table construction which embodies the playing base of the present apparatus. This table is equipped with scoring keeping means disposed below the base and accessible from one end of the table. The base has a transparent area overlying the score keeping means to permit the latter means to be viewed from above the base, thereby facilitating keeping of a player's score, without diminishing the overall playing area of the base. A particularly unique feature of the present game table resides in a coin operated or controlled barrier mechanism which is effective to permit unauthorized use of or play on the table until the appropriate coin is inserted into the mechanism. This barrier mechanism, therefore, adapts the present game table for commercial use in taverns and other public gathering places.

It is therefore the general object of the present invention to provide improved game apparatus of the character described.

A related object of the invention is to provide game apparatus of the character described wherein the game table is equipped with a coin operated barrier mechanism which is effective to prevent unauthorized use of or play on the table until the appropriate coin is inserted into the mechanism.

Other objects, features and advantages of the present invention will become apparent to those versed in the art from a consideration of the following description, the appended claims and the accompanying drawings, wherein:

FIGURE 1 is a perspective view of the present improved game apparatus;

FIGURE 2 is an enlarged, fragmentary top plan view of the apparatus;

FIGURE 3 is an enlarged vertical sectional view taken at line 3—3 in FIGURE 1;

FIGURE 4 is a perspective view of a unique playing piece or marker according to the invention;

FIGURE 5 is a side elevation view, partially broken away, of the marker of FIGURE 4;

FIGURE 6 is a bottom view of the marker of FIGURES 4 and 5, taken at line 6—6 in FIGURE 5;

FIGURE 7 is a perspective view of a modified game apparatus according to the invention;

FIGURE 8 is an enlarged, fragmentary vertical sectional view taken at line 8—8 in FIGURE 7;

FIGURE 9 is an enlarged fragmentary plan view of the game apparatus in FIGURE 7;

FIGURE 10 is a perspective view of a modified game apparatus according to the invention embodying a game table which is equipped with a coin operated barrier mechanism for preventing unauthorized use of or play on the table until the appropriate coin is inserted into the mechanism;

FIGURE 11 is an enlarged section taken on line 11—11 in FIGURE 10 illustrating the barrier mechanism of a game table in its normal extended or operative position;

FIGURE 12 is a further enlarged section similar to FIGURE 11 illustrating the barrier mechanism in the retracted or inoperative position which it assumes in response to insertion of the appropriate coin in the mechanism;

FIGURE 13 is a section taken on line 13—13 in FIGURE 11; and

FIGURE 14 is an enlarged fragmentary perspective view of a portion of the barrier mechanism illustrating, in particular, the pivoting action of certain barrier pins embodied in the mechanism.

Referring first to FIGURES 1 through 6, there is illustrated game apparatus **10** in the form of a game table. This table includes a playing base **12** of generally rectangular outline. As shown best in FIGURE 3, the base **12** comprises a rectangular transparent sheet **14**, which may be plastic or glass. Cemented or otherwise bonded to the under surface of this sheet are a multiplicity of playing cards **16**. Cards **16** are located at one end of the base **12** and are spaced about the base in the rectangular pattern shown in FIGURES 1 and 2. As will be explained later, each playing card **16** defines a scoring zone on the base.

Base **12** is supported by a horizontal platform **18** of the table **10**. Fixed to the under surface of this platform are legs **20** for positioning the base **12** at a convenient height above the floor. Upstanding side rails **22** are fixed to the side edges of the table platform **18** and rise above the base **12** to define a border thereabout. According to preferred practice of the invention, a resilient cushion **24** is bonded or otherwise secured to the inner surfaces of the rails **22**. The purpose of this cushion will appear presently. A channel shaped cap **26** may be fitted over the upper edges of the rails **22** and cushions **24**, as shown in FIGURE 3, to provide the table **10** with a finished appearance.

At one end of the table **10** is a score keeping enclosure **28**. This enclosure has a bottom wall **30** secured to the adjacent table legs **20** and vertical side walls **32** secured to the ends of the bottom wall **30**, the outer surfaces of the adjacent legs **20**, and the table platform **18**. The score keeping enclosure **28** opens endwise of the table **10**. Within the enclosure are score keeping means **34**. Various score keeping means may be employed on the table. The illustrated score keeping means comprises a plurality of horizontal supporting rods **36** which are fixed at their ends to the enclosure side walls **32** and mount thereon a plurality of counters **38**. The location of the score keeping means **34** below the playing base **12** is convenient from the standpoint of compactness. In other words, the score keeping means are located out of the way and yet in a position which they are readily accessible for keeping the players scores. However, the score keeping means **34**, being disposed beneath the table **12**, as it is, is not readily visible from above the table or from the end of the table.

For this reason, the base **12** is provided with a transparent area or window **40** overlying the score keeping enclosure **28** through which the score keeping means **34** are readily visible from above the base. The transparent area **40** is simply provided by cutting an opening **42** in the table platform **18** in registry with and preferably of the same size as the enclosure **28**. The transparent sheet **14** extends over the platform opening **42** to provide the transparent viewing area **40**. The sheet **14**, extending over the platform opening **42**, as it does, provides a continuous playing surface which extends from one end of the table **10** to its other end and over the platform opening **42**. As a result, the entire upper surface area of the table is available for play.

To enhance the appearance of the table **10**, the inner side wall and bottom wall surfaces of the score keeping enclosure **28** are preferably lined with a felt material **44** or other suitable lining material. According to the preferred practice of the invention, this lining material is also interposed between the transparent sheet **14** of the base **12** and the platform **18** of the table **10**, to cushion the sheet.

Used in conjunction with the table **10** are playing pieces, or markers **46**. One of these markers is illustrated in enlarged detail in FIGURES 4 through 6. As shown in these latter figures, each market **46** comprises a generally flat, triangular body **48**. The markers may comprise any suitable material, and may preferably be fabricated of steel. For appearance's sake, the sides of the markers may be recessed as indicated at **50**. As explained hereinafter, the markers **46** must slide freely along the playing surface of the base **12**, which is the upper surface of the transparent sheet **14**. To this end, each marker **46** may be equipped with plastic feet or bearings **52** for engaging the playing surface. These bearings may comprise pins of Teflon, nylon, or other appropriate material, which are simply press-fitted into the underside of each marker, as shown in FIGURE 5. According to the preferred practice of the invention, each marker is equipped with three bearings arranged in a triangular pattern of FIGURE 6 so that each marker will rest flat on the playing surface.

According to the present invention, at least one and preferably all three, of the apex points of each marker **46** define an indicator or pointer **54** which cooperate with the scoring areas **16** in the manner described below. In the event that less than all of the apex points of each marker are to be used as indicators or pointers, the marker points which are to be so used may be designated by colors, or in some other fashion. Conceivably, in some games which may be played with the present apparatus, the points of each marker may be differently colored and assigned different may be differently colored and assigned different point values to be used in calculating the total score which is registered by each marker during the progress of a game. It is apparent of course that the marker indicators **54** may comprise other than physical points on the marker. For example, each indicator **54** might comprise a simple line or other mark impressed into or otherwise formed in each marker.

According to the present invention, the scoring zones **16** are spaced in such a way that each of the marker indicators **54** can be disposed in scoring relation to only one scoring zone at one time. Thus, if each marker is equipped with only one indicator **54**, the marker can be disposed in scoring engagement with but a single scoring zone. If each marker is equipped with two indicators, each marker can be disposed in scoring relation to one or two, but no more, scoring zones at one time. In the event each marker is equipped with three indicators, as in the case of the marker shown in FIGURE 4, each marker may be disposed in scoring relation to a maximum of three scoring zones at one time. It is apparent, therefore, that the maximum number of scoring zones relative to which each marker may be disposed in scoring relation at one time may be controlled or varied by changing the number of indicators on the marker. In some games, such as the illustrated poker game, it is desirable to provide each marker with three indicators, as shown, so that each marker may be disposed in scoring relation to up to three scoring zones, or playing cards **16**, at one time.

When playing a game with the illustrated game apparatus **10**, each player is assigned a given number of markers **46**. During each turn of a player, he propels one or more of his markers along the playing surface of the base **12** toward the scoring zones or playing cards **16**.

The player's score is then computed by noting which if any of the indicators or pointers **54** of the corresponding markers are disposed in scoring relation to the scoring zone **16**. In the case of the illustrated poker game, the player whose markers registered the best poker hand during each round would be designated the winner of that particular round and would be assigned a number of points commensurate with his particular winning hand.

It will be observed that each marker indicator or pointer **54** is substantially smaller in size than the overall size of the marker. This is advantageous since it permits a playing base **12** of given size to contain a maximum number of scoring zones **16** and, as well, the use of markers of convenient size and appropriate weight. In other words, if each marker were simply made round, in the usual way, the only way in which it would be possible to limit or control the maximum number of scoring positions relative to which the marker could be disposed in scoring relation at one time would be to make the spaces between adjacent scoring zones larger than the markers. This, in turn, would require the spaces to be made excessively large or the markers to be made excessively small. Large spaces between adjacent scoring zones, of course, would increase the overall size of the game apparatus, which excessively small markers would render the latter difficult to handle. According to the present invention, these difficulties are simply solved by providing each marker with the indicators **54** which are substantially smaller than the markers themselves and by using the game apparatus in such a way that the scoring relation of each marker to a scoring zone **16** is determined by the relative position of the zone and one of the indicators on the marker rather than by the relative position of the zone and the marker as a whole. This obviously permits the spaces between adjacent scoring zones to be minimized, thereby permitting a reduction in the overall size of the game apparatus for a given number of scoring zones, and, at the same time, permits the use of markers of any convenient overall size and weight. It is apparent that the number of indicators with which each marker is equipped may vary from game to game depending upon the maximum number of scoring zones relative to which each marker is to be disposed in scoring relation at one time for the particular game.

The modified game apparatus illustrated in FIGURES 7 through 9 includes a table **100** which is similar to that described earlier and includes a base **102** having means, such as playing cards, defining a plurality of scoring zones **104** spaced about the base. In contrast to the eariler game apparatus, however, the base **102** of the table **100** is divided into two playing areas or fields **106***a* and **106***b* by an upstanding, longitudinally extending divider **108** rising above the upper playing surface of the base **102** and extending lengthwise of the latter along its longitudinal center line. Each of these playing fields has a number of the scoring zones **104** spaced thereabout, in the manner best illustrated in FIGURE 9. The modified apparatus also includes playing pieces or markers **100** which are identical to the markers illustrated in FIGURES 4 through 6.

The table **100** is somewhat differently constructed than the table **10** described earlier. The differences between the two tables, however, are unimportant except that in the case of the table **100**, the score keeping means **112** are located above the playing base **102**, at one end of the table. In this case, the score keeping means comprise a rod **114** which extends between and is secured at its ends to the upstanding side rails **116** of the table and mounts counters **118**.

The modified game apparatus of FIGURES 7 through 9 is used in much the same way as the game apparatus of FIGURES 1 through 6. In the case of the apparatus of FIGURES 7 through 9, however, each player is assigned one of the two playing fields **106***a* or **106***b* and each player's score is determined by the positions of his markers relative to the scoring zones **104** in his respective playing field.

The modified game apparatus of FIGURES 10 through 14 embodies a game table **200** which is identical to the game table **10** illustrated in FIGURE 1 except that the game table **200** embodies a coin operated barrier mechanism **202** for effectively preventing unauthorized use of or play on the table until the appropriate coin is inserted into the mechanism. Accordingly, only the barrier mechanism **202** will be described.

Generally speaking, the barrier mechanism **202** includes a barrier or gate **204** which extends crosswise of the game table **200**, intermediate the left hand end of the table in FIGURE 10, at which the players stand, and the right hand end of the table containing the scoring zones **206**. This barrier is vertically movable between its upper extended position of FIGURES 10 and 11, wherein the barrier protrudes above the upper playing surface of the playing base **208** of the game table, and its lower retracted position of FIGURE 12, wherein the barrier is located substantially flush with or slightly below the playing surface. In its extended position, therefore, the barrier **204** prevents or obstructs movement of the markers or playing pieces **210** of the game apparatus from the left hand end of the game table to the scoring zones **206**. In its retracted position, the barrier clears the playing surface to permit unobstructed movement of the playing pieces to the scoring zones. Associated with the barrier **204** is a coin operated mechanism **212**. This mechanism is effective to normally retain the barrier in its extended position and thereby prevent unauthorized use of or play on the game table **200**. Insertion of the appropriate coin into a coin slot (not shown) on the game table activates the mechanism **212** to effect retraction of the barrier **204** and thereby condition the game table **200** for play.

Referring now in greater detail to the barrier mechanism **202**, the barrier **204** comprises an elongate, generally channel shaped supporting member **214** which extends cross-wise of the game table **200**, below the playing base **208** of the table. Supporting member **214** is pivotally attached along one longitudinal edge, by a hinge **216**, to the under side of the table base for swinging on an axis extending crosswise of the table. Extending through the supporting member **214**, adjacent its opposite longitudinal edge, are a number of holes **218** arranged in a row parallel to the pivot axis of the member. Each hole **218** loosely receives the lower end of an upright pin **220**. Each pin **220** is restrained against axial movement relative to the supporting member **214** by means of spring clips **222** which are secured to the pin above and below the member, as shown best in FIGURE 14. As indicated by the broken lines in FIGURE 14, each pin **220** is loosely connected to the supporting member **214** in such a way that the pin can pivot or rock through a small angle relative to the member. Pins **220** fit slidably within openings **224** which extend through the playing base **208** of the game table **200**, normal to the upper playing surface **226** of the base. At this point, it is evident that the pins **220** are vertically movable, relative to the table base **208**, between their upper extended positions of FIGURES 10 and 11 and their lower retracted positions of FIGURE 12 by swinging of the supporting member **214** about its pivot axis.

The coin operated mechanism **212** comprises a frame **228** secured to the underside of the table base **208**, approximately midway between the ends of the hinged, barrier pin supporting member **214**. Frame **228** defines a narrow guideway **230** which is disposed in a vertical plane extending lengthwise of the game table **200** and normal to the pin supporting member **214**. Slidable in this guideway, lengthwise of the game table, is a latch bar **232**. Latch bar **232** has a beveled end **234** adjacent and engageable with the pin supporting member **214**. The opposite end of the latch bar **232** is connected to the

plunger **236** of an electrical solenoid **238**. Acting between the frame **228** and the solenoid plunger **236** is a spring **240** which yieldably retains the plunger and the latch bar **232** in their extended positions of FIGURE 11. In these extended positions, the latch bar engages under the pivoted supporting member **214** of the barrier **204** to retain the barrier pins **220** in their extended positions of FIGURE 10. Left hand retraction of the solenoid plunger **236**, as the mechanism **212** is viewed in the drawings, in response to energizing the solenoid **238** retracts the latch bar **232** to its solid line position of FIGURE 12. In this retracted position of the latch bar, the latter clears the member **214** sufficiently to enable this member to swing downwardly to its position of FIGURE 12, wherein the barrier pins **220** occupy their retracted positions.

Solenoid **238** is normally deenergized. In this deenergized condition of the solenoid, the solenoid spring **240** retains the barrier **204** in its elevated position of FIGURE 10, thus to prevent unauthorized use of the game table. The solenoid is energized, from an electrical power source (not shown), in response to the insertion of the appropriate coin into the coin slots of the game table. Energizing of the solenoid retracts the latch bar **232**, thus to permit the barrier **204** to descend to its retracted position under the force of gravity and thereby condition the game table **200** for play. It is obvious, of course, that during extension and retraction of the barrier **204**, the barrier pins **220** and the pin supporting member **214** undergo relative angular movement. This relative angular movement of the pins and member is accommodated by the pivotal connections, described earlier and illustrated in FIGURE 14, between the pins and the member. It will be obvious at this point that while the barrier mechanism **202** of the game table **200** has been described as being coin controlled, this mechanism may be controlled in some other way, as by a remote, manual switch.

Those versed in the art will appreciate that the present invention achieves the objects and realizes the advantages hereinbefore mentioned.

Although specific embodiments of the present invention have been illustrated and described herein, it will be understood that the same are merely exemplary of presently preferred embodiments capable of attaining the objects and advantages hereinbefore mentioned, and that the invention is not limited thereto; variations will be readily apparent to those versed in the art, and the invention is entitled to the broadest interpretation within the terms of the appended claims.

I claim:

1. A game apparatus comprising a base having a playing surface, means on said base defining a plurality of scoring zones spaced about one end region of the base, a playing piece slidable on said playing surface and adapted to be propelled along said surface from the opposite end of said base toward said scoring zones, a supporting bar below and extending crosswise of said base between said end region and the opposite end of said base, hinge means along one longitudinal edge of said bar pivotally joining said bar to the under side of said base for hinging of said bar about a pivot axis extending along said one bar edge, a number of barrier pins pivotally secured to the opposite longitudinal edge of said bar and projecting upwardly from said bar through holes in said base, and operating means on said base engaging said bar for operating said bar between an upper extending position, wherein said pins project above said playing surface to obstruct movement of said playing piece along said playing surface from said opposite end of said base to said scoring zones, and a lower retracted position, wherein said pins are substantially flush with said playing surface to permit said movement of said playing piece.

2. A game apparatus comprising a base having a playing surface, means on said base defining a plurality of scoring zones spaced about one end region of the base, a playing piece slidable on said playing surface and adapted to be propelled along said surface from the opposite end of said base toward said scoring zones, a supporting bar below and extending crosswise of said base between said end region and the opposite end of said base, hinge means along one longitudinal edge of said bar pivotally joining said bar to the under side of said base for hinging of said bar about a pivot axis extending along said one bar edge, a number of barrier pins secured to the opposite longitudinal edge of said bar and projecting upwardly from said bar through holes in said base, and operating means on said base engaging said bar for operating said bar between an upper extending position, wherein said pins project above said playing surface to obstruct movement of said playing piece along said playing surface from said opposite end of said base to said scoring zones, and a lower retracted position, wherein said pins are substantially flush with said playing surface to permit said movement of said playing piece, said operating means comprising a latch bar mounted on the under side of said base for movement endwise of said base between an extended position, wherein one end of said latch bar engages under said supporting bar to retain said latter bar in its extended position, and a retracted position, wherein said latch bar releases said supporting bar for downward hinging of said supporting bar to its retracted position, spring means for urging said supporting bar to its retracted position, and actuating means for driving said latch bar betwen its extended and retracted positions.

3. Game apparatus according to claim **2** wherein said one end of said latch bar is tapered to cam said supporting bar upwardly to its extended position upon movement of said latch bar to its extended position.

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