

Nov. 12, 1940.

C. H. ROBERTSON

2,221,267

CHESSBOARD BOX

Filed Oct. 18, 1938

4 Sheets-Sheet 1

Fig. 1.

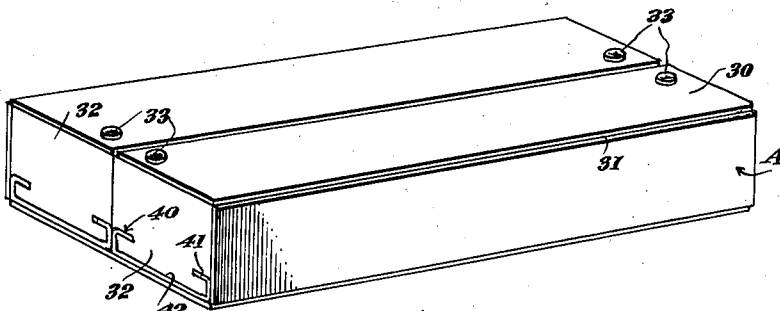


Fig. 2.

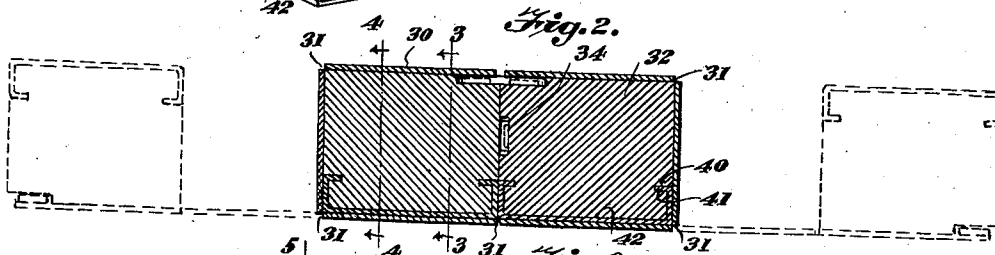


Fig. 3.

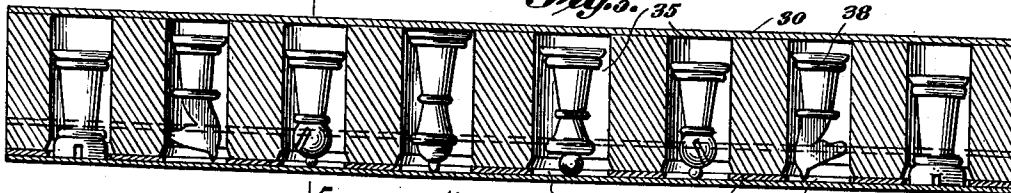


Fig. 4.

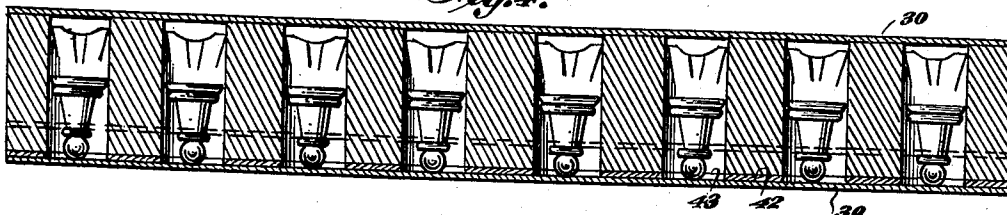


Fig. 5.a

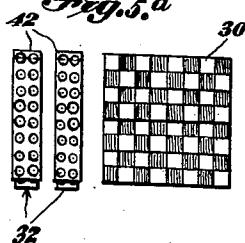
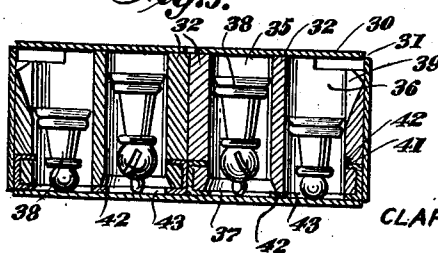


Fig. 5.



Inventor
CLARENCE H. ROBERTSON

By *Livingston R. M. Cothran*
Attorney

Nov. 12, 1940.

C. H. ROBERTSON

2,221,267

CHESSEBOARD BOX

Filed Oct. 18, 1938

4 Sheets-Sheet 2

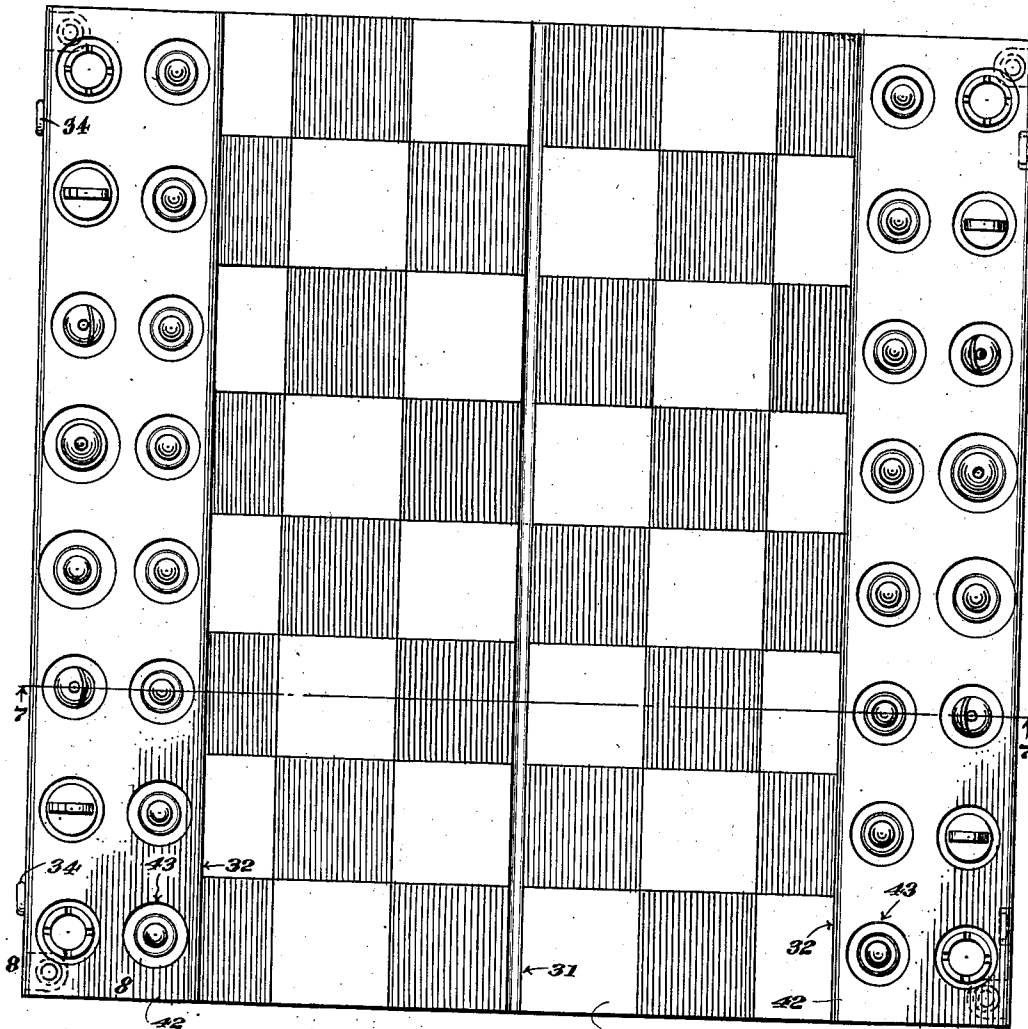


Fig. 6. 30

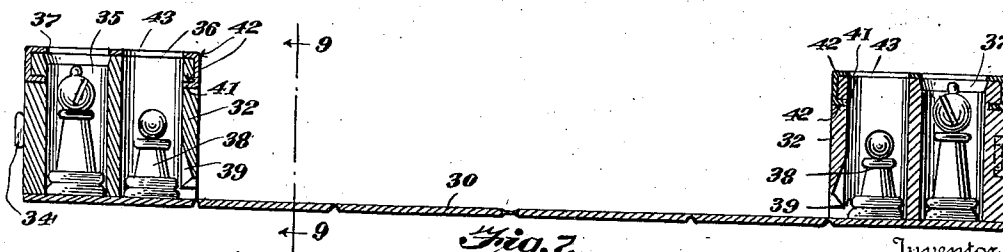


Fig. 7.

Inventor

CLARENCE H. ROBERTSON

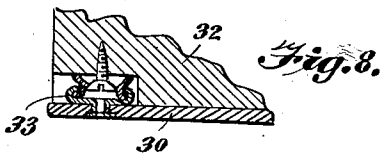


Fig. 8.

By

Wm. A. McEthan

Attorney

Nov. 12, 1940.

C. H. ROBERTSON

2,221,267

CHESSEBOARD BOX

Filed Oct. 18, 1938

4 Sheets-Sheet 3

Fig. 9.

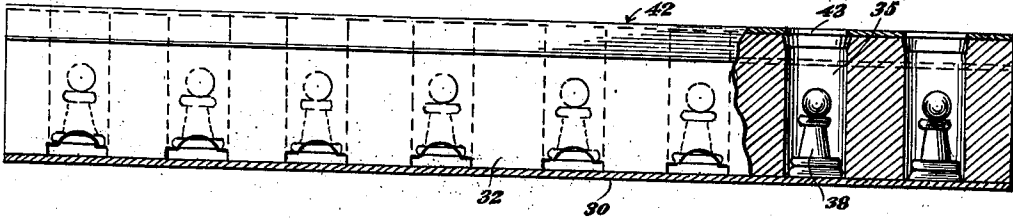


Fig. 10.

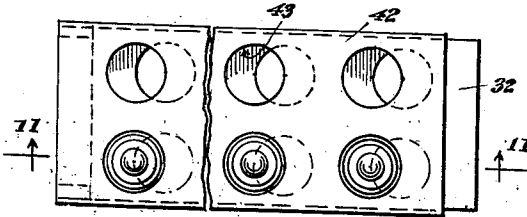


Fig. 11.

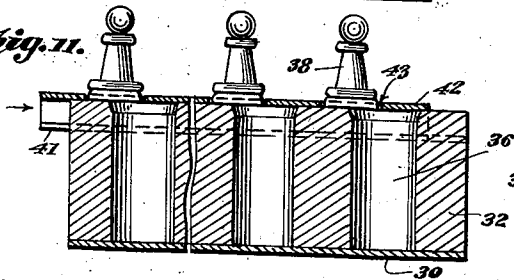


Fig. 12.

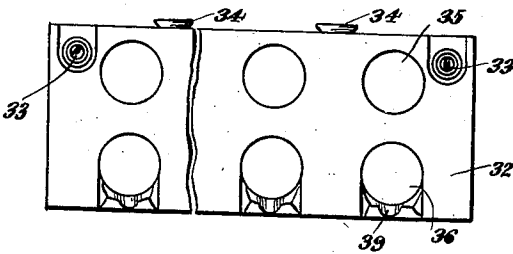


Fig. 13.

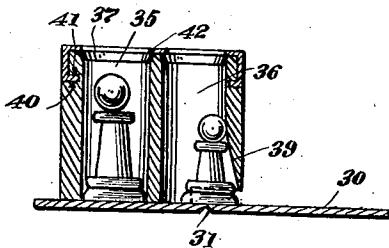


Fig. 14.

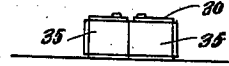


Fig. 15.

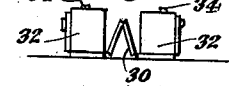


Fig. 16.



Fig. 17.

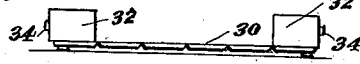


Fig. 18.

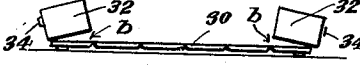


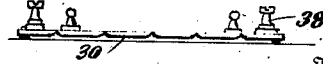
Fig. 19.



Fig. 20.



Fig. 21.



Inventor
CLARENCE H. ROBERTSON

By *William T. McEathern*
Attorney

Nov. 12, 1940.

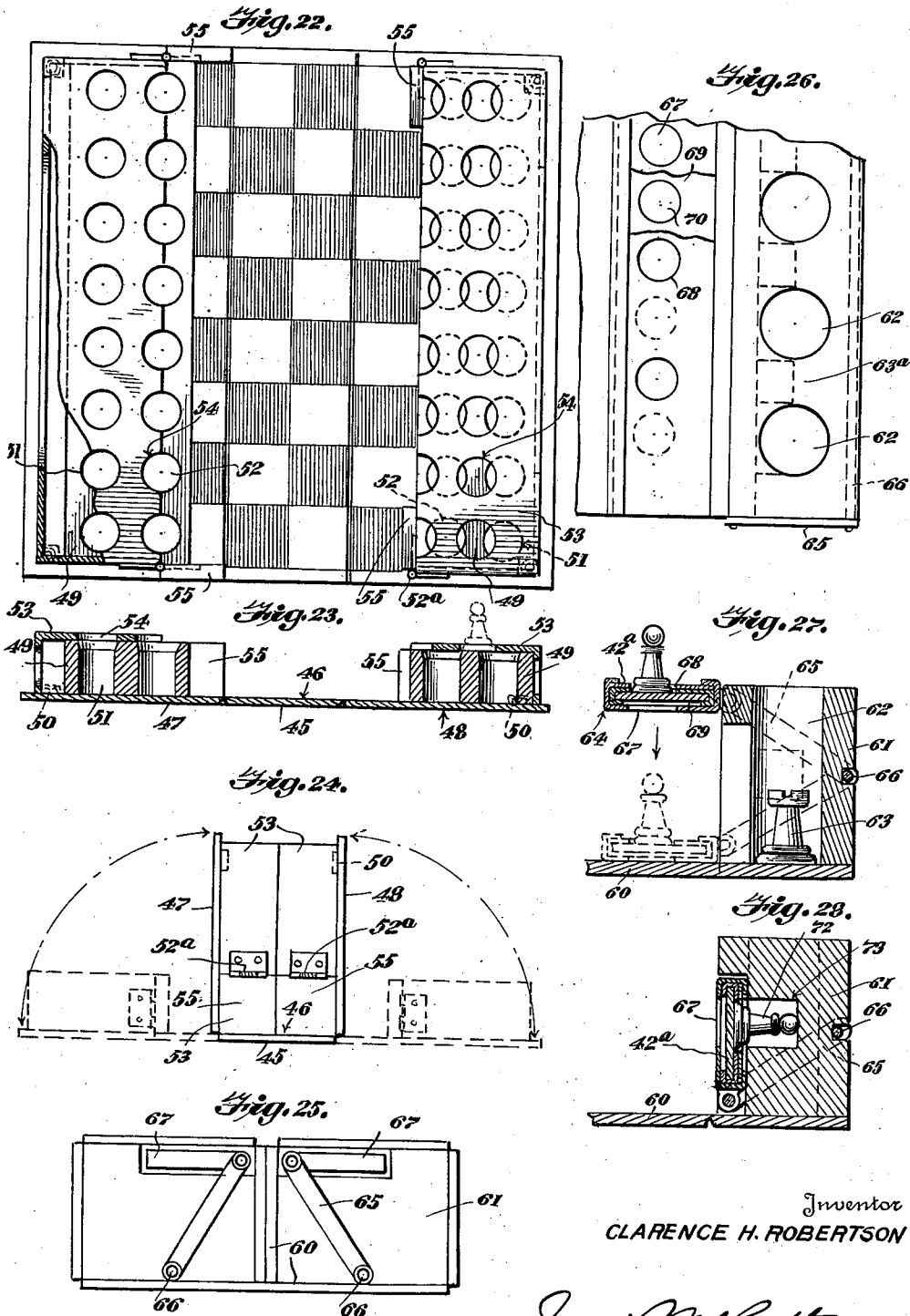
C. H. ROBERTSON

2,221,267

CHESSEBOARD BOX

Filed Oct. 18, 1938

4 Sheets-Sheet 4



Inventor
CLARENCE H. ROBERTSON

By *Irving R. McCutcheon*
Attorney

UNITED STATES PATENT OFFICE

2,221,267

CHESSBOARD BOX

Clarence H. Robertson, West Lafayette, Ind.

Application October 18, 1938, Serial No. 235,644

14 Claims. (Cl. 273—136)

This invention relates to chessboard boxes, and has for one of its objects the production of a simple and efficient means for facilitating the handling of chessmen in a manner to provide convenience, order, efficiency, durability, intelligence, cleverness and pleasure to the players while playing the game of chess.

A further object of this invention is the production of a simple and efficient rack for receiving chessmen which are removed from the playing board while playing chess, which rack is so constructed as to locate all of the playing pieces of each side in the same relative positions as when placed on the board at the beginning of the game.

Another object of this invention is the production of a simple and efficient means for attaching the racks to the playing board and folding the board around the racks in a manner whereby the racks, board and chessmen are fastened together into a neat and substantial box.

Other objects and advantages of the present invention will appear throughout the following specification and claims.

In the drawings:

Figure 1 is a perspective view of the chessboard box in a closed position;

Figure 2 is a transverse sectional view of the box in a closed position, the sections of the box being shown in an extended position in dotted lines;

Figure 3 is a longitudinal sectional view of one of the boxes taken on line 3—3 of Figure 2;

Figure 4 is a longitudinal sectional view taken on line 4—4 of Figure 2;

Figure 5 is a transverse sectional view through the two sections of the box taken on line 5—5 of Figure 3;

Figure 5a is a miniature plan view of the board and racks;

Figure 6 is a top plan view of the game board showing the box sections or racks in position upon the edges of the board;

Figure 7 is a transverse sectional view taken on line 7—7 of Figure 6;

Figure 8 is an enlarged sectional view taken on line 8—8 of Figure 6;

Figure 9 is a vertical sectional view through the game board taken on line 9—9 of Figure 7, a portion of the rack or box section being also shown in section;

Figure 10 is a fragmentary top plan view of one of the racks or box sections;

Figure 11 is a longitudinal sectional view taken on line 11—11 of Figure 10, with the men posi-

tioned thereon prior to falling into the man-receiving sockets of the rack;

Figure 12 is a fragmentary bottom plan view of one of the racks or box sections;

Figure 13 is a fragmentary transverse sectional view through a portion of the board and rack partly fitting over the playing pieces;

Figures 14 to 21 are views illustrating the progressive steps and positions of the racks or box sections, which are followed in moving the racks from a closed position or locked position to an open or removed position with respect to the playing board;

Figure 22 is a top plan view of a modified form of my invention;

Figure 23 is a transverse sectional view through the structure shown in Figure 22;

Figure 24 is an end elevational view of the structure shown in Figure 22, in a closed position;

Figure 25 is an end elevational view of a further modified form of my invention;

Figure 26 is a fragmentary plan view of one of the racks or box sections shown in Figure 25;

Figure 27 is a transverse sectional view of one of the racks of the form shown in Figure 25, with the folding portion in an extended position;

Figure 28 is a transverse sectional view similar to Figure 27, with the folding portion in a closed position.

Be referring to the drawings it will be seen that A designates the chessboard box in general, which comprises a playing board 30 which is hinged longitudinally, as at 31, to provide foldable sections which encase the box sections or racks 32, which box sections or racks provide framing devices. These box sections 32 or racks are detachably secured to the corners of the playing board 30 by means of spring snap fasteners 33 of the conventional type, as shown in Figure 1, and the box sections or racks 32 are detachably held in nested relation by means of spring snap fasteners 34 similar to the fasteners 33, thereby holding the chessboard box in firm assembled position. A plurality of these snap fasteners 34 may be provided upon the adjoining faces of the box sections or racks 32. These spring snap fasteners 33 and 34 may be of the conventional type, such as is illustrated in detail in Figure 8. Each rack or box section 32 is provided with a plurality of rows of chessmen-receiving apertures 35 and 36 which extend vertically through the box in the manner as shown in Figures 3, 4 and 5. The apertures 35 at one end are preferably beveled, as at 37, to facilitate the dropping of the chessmen 38 in position, as will be hereinafter described, and the

opposite ends of the apertures 36 are notched, as at 39, to facilitate the moving of playing pieces to place them in proper positions upon the board. Attention is particularly directed to Figures 14 to 21 of the drawings, and especially to Figures 19 and 20. The notches 39 will permit the blocks to be shifted laterally to separate the pawns from the pieces about one-half inch over their previous positions had prior to this movement and this is the manner in which the pieces or men finally find their position each over the center of its respective square. This structure will allow the parts to be reduced in size so that the chessboard may reach around the blocks when folded.

Each rack or box section 32 is provided with track channels 40 upon its longitudinal side edges in which track channels 40 are slidably mounted the inturned flanges 41 of the plates 42. These plates 42 are slidable longitudinally of the racks or box sections 32. The racks or box sections 32 are preferably made of balsa wood to provide a light structure, and the plates 42 are preferably formed of light sheet metal. The plates 42 are provided with apertures 43 which are adapted to register with the respective apertures 35 and 36 formed in the racks 32 to permit the chessmen to drop through the apertures 43 in the plates into the apertures 35 and 36.

When the game is not in use, the chessboard box is arranged in its assembled position, as shown in Figure 1, 2 and 5, thereby providing a very compact and assembled box within which the chessmen are contained and are ready for instant use. When it is desired to use the game, the box is placed in the position shown in Figure 14, this being an end view of the box. The box is picked up by using both hands with the thumbs on top and the fingers underneath the box and in such a fashion that the box is pointing away from the body of the operator. By rotating the hands outwardly so that the thumbs separate or move away from each other, the box will be brought to the position shown in Figure 15, and it is important that the two center sections of the chessboard or playing board stand up in the form of an inverted V, as shown at the center of Figure 15. The purpose of this position is to keep the chessmen from falling out of the apertures 35 and 36 which constitute receptacles for the chessmen.

By continuing to rotate the sections of the box outwardly, the position illustrated in Figure 16 will be reached. If the box sections 32 are now separated still further, the board will be stretched out flat to the position shown in Figure 17. The box sections 32 are then unsnapped from the board by pressing the finger down against the center of the chessboard and near the edges of the box sections at the points b-b, after which a slightly further rotation of the box sections outwardly away from each other will result in their being released from the snap fasteners. The box sections are then permitted to fall back on the board with their contents of chessmen located in the apertures 35 and 36 and the box sections are then slid an inch or so toward the center of the board to the position shown in Figure 19. The box sections or racks are then slid back toward the edges of the chessboard until the movement is stopped by contacting the snaps 33 mounted in recesses in the bottom of the racks. This movement is indicated in Figure 20, and results in each man being centered on its proper square on the playing board, the playing board being of the conventional chessboard type. The formation of the bottom of the apertures 35 and 36 as previously

described, will facilitate the lifting of the racks vertically from the board, thus leaving all of the men on the board in their proper respective positions. The racks or box sections may be lifted in the direction as indicated by the arrow in Figure 21, and as also further indicated in Figure 13.

When the racks 32 are lifted as above described, they are then placed on the table preferably at the left-hand edge of the board and parallel thereto as illustrated in Figure 5a. One rack may be colored black, and the other white, for containing the respectively colored chessmen. The racks are so placed that the white rack is next to the board and the black rack is spaced further away from it. Also the racks are placed so that the holes for the pawns are next to each other, as indicated in Figure 5a. The slide plates 42 are then displaced so that the apertures 43 will be offset with respect to the apertures 35 and 36, and preferably located between the apertures formed in the racks, the apertures 43 providing a rest for receiving the pawns and supporting the pawns in proper position to allow the players to tell at a glance the relative strengths of the two sides on the chessboard. It is obvious that by again sliding the plates 42 to bring the apertures 43 into registration with the apertures 35 and 36, the chessmen or pawns may drop into the apertures 35 and 36. Each rack is provided with a series of apertures 35 and a parallel series of apertures 36, as above described.

As the chessmen are taken from the board in the course of the game, they are placed each in its respective hole in the cover or slide plate 42 and rest upon the solid part of the rack between the apertures formed within the rack. When the game is finished, any men remaining are transferred to the rack. The racks and their contents are then placed on the chessboard and snapped thereto. The plates 42 are then moved to the position to bring the apertures 43 into registration with the apertures 35 and 36 causing the men to drop into the receptacles or apertures 35 and 36 and rest upon the playing board. When the chessmen have fallen through the apertures 35 and 36 they will rest near the center of the squares on the chessboard and in the proper relative positions where the playing pieces or men belong for the beginning of the game. The racks may be given a slight forward and backward movement with the result that each piece is centered in its proper square. These racks may then be lifted as previously described for the purpose of playing another game. In playing the game, the racks are placed as shown in Figure 5a, so that the pawn receptacle holes are facing each other and the plates 42 are moved in a position so that the chessmen may be supported on the top of the racks as previously stated. When the players are ready to discontinue the playing, the racks are placed on their proper edges of the chessboard and snapped fast in position through the medium of the fasteners 33 and a slight movement of the plates 42 will cause the chessmen supported upon the rack to drop into their respective apertures 35 and 36. The chessboard is then rolled up around the racks or box sections following the reverse steps illustrated in Figures 21 to 14, this being possible due to the hinge formations 31 of the chessboard being so placed that they fit just at the corners of the racks or box sections 32. When the two uncovered faces of the box sections or racks come against each other a slight pressure from the outside causes the snaps 34 to fasten together into

a neat and substantial box. When the game is in progress, a piece is taken from the board and is placed upon the rack in such a position that at the end of the game all of the pieces of each side are in the same relative positions as when placed on the board at the beginning of the game. By this procedure, each white piece is placed opposite to the corresponding black piece, thus enabling the player at a glance to compare the relative strength of the men left on the field which is essential in determining the strategy to pursue.

From the foregoing description, it will be seen that an important feature of the present invention is the compactness of the structure which has been provided whereby the racks 32 are folded up within the chess game board 30 of the conventional type, the game board being hinged, as at 31, so as to allow the game board to be wrapped around the racks 32 and to be fastened thereby by means of the snap fasteners 33. The racks 32 are provided upon their adjacent faces with a series of the fasteners 34 which will firmly hold the racks 32 in assembled relation when the adjoining faces are brought to abutting relation such as is shown in Figure 2, in this way avoiding the necessity of providing an additional case or providing a tying band or other securing means independent of the board and racks.

Furthermore, it should be noted that the beveled ends of the apertures 35 will facilitate the dropping of the chessmen 38 therethrough when the apertures 43 of the plates 42 are brought into registration with the apertures 35. Furthermore, the formation of the apertures 35, as at 39, will facilitate the lateral shifting of the racks to properly place the chessmen in their positions.

By referring to Figure 11, it will be noted that the chessmen may be placed upon the top of the racks when the apertures 43 are brought out of registration with the apertures 35 and 36 when the plates 42 are moved to such a position. By moving the plates 42 in the direction of the arrows as shown in Figure 11, it will be noted that the apertures 43 will be brought into registration with the apertures 35 and 36.

As shown in Figure 6, certain of the apertures 35 may be marked for the king and queen, and if it is desired, certain other markings may be provided and certain other detail changes may be substituted without departing from the spirit of the invention, so long as such changes fall within the scope of the appended claims.

In Figures 22 to 24 inclusive, I have shown a modified form of the invention wherein a playing board 45 is illustrated consisting of a central section 46 and two side sections hinged thereto and numbered 47 and 48 respectively. A hollow box-like form 53 is detachably secured to each end of the playing board 45 by means of suitable snap fasteners 50 similar to the snap fasteners previously described and indicated by the numeral 33. Inside form 53 is a rack or framing device 49 that can be made to slide therein in the direction of the arrows shown. This rack 49 is provided with apertures 51 and 52 shown by dotted circles for receiving the chessmen for spacing them on the board or for storage when the game is finished. The form 53 is also provided with apertures on its upper face as shown by the solid lines 54. By sliding the rack 49 towards the center of the board, the chessmen may be caused to drop into the aper-

tures 51 and 52 in a manner similar to that previously described. Hinged gates 55 are secured at each end of the form 53 to provide fillers for closing the ends of the spaces between the sides of the forms 53 and the section of the board 46, as shown in Figure 24. Gates 55 are opened by sliding the rack 49 towards the center of the board and are closed by spring hinges 52a.

In Figures 25 to 28 inclusive, I have shown a further modified form of the invention which is so constructed as to economize as to space, and in this form I have illustrated a playing board 60 and a special type of rack 61 having apertures 62 formed therein for receiving the pawns 63, the apertures 62 being spaced sufficiently to provide a bridge 63a between the apertures 62 to support the pawns when desired. A tray 64 is hingedly supported upon the pivoted links 65, which links are connected by a transverse journal rod 66 to the tray 64. These links 65 are in turn connected to the sides of the racks 61, as shown in Figures 25 to 28, inclusive. This tray 64 is provided with a plurality of apertures 67 at the bottom thereof registering with the apertures 68 at the top and between which is slidably mounted a sliding plate 69 having suitable apertures 70 adapted to be brought into registration with the apertures 68 and 67 to allow the pawns to drop therethrough and be positioned in the proper places upon the board 60 in a manner similar to that previously described. The tray 64 may be supported in the position shown in Figure 27, and when the pawns are to be placed upon the board, the tray 64 may be placed in the position shown in dotted lines in Figure 27. For the purpose of compact assembly, the tray 64 may be swung into the channel 71 upon the inner face of the rack 61 in a position as shown in Figure 28, the pawn or chessmen 72 fitting in the socket 73. The chessboard 60 may then be folded around the racks 61 in the manner shown in Figure 25. A cover plate 42a similar to the plate 42 is provided in the structure shown in Figures 27 and 28. The shaft 66 is essential for the reason that the links at the opposite ends of the blocks are kept parallel to each other, thus holding the pawn tray in a proper position through the medium of the links 65. The joint between the links 65 and the tray 67 is of a friction and stop type to facilitate the holding of the tray in three selected positions. When the joint is opened to its widest angle it is stopped in the position for the tray in its elevated position. When it is pushed down against the chessboard the board itself will furnish the stop to determine its position. When the pawns are pushed into closed position in the storage rack 61 the rack itself will furnish the stop. In all positions the friction in the two joints will support the weight involved.

From the foregoing description, it will be seen that a very entertaining and convenient game apparatus has been provided, whereby the game apparatus is compactly assembled for convenient use and whereby the playing pieces may be kept in proper order.

Having described the invention, what is claimed is:

1. A game apparatus of the class described comprising a playing piece supporting rack, said rack having a plurality of playing piece-receiving apertures formed therein, a sliding element slidably mounted upon said rack and adapted to support playing pieces above the rack, said sliding

element having means formed therein for permitting the playing pieces to drop into said playing piece-receiving apertures upon the rack as said means is brought into registration with the apertures by the sliding movement of the sliding element.

2. A game apparatus of the class described comprising a playing piece-supporting rack, said rack having a plurality of playing piece-receiving apertures formed therein, a sliding element slidably mounted upon said rack and adapted to support playing pieces above the rack, said sliding element having means formed therein for permitting the playing pieces to drop into said playing piece-receiving apertures upon the rack as said means is brought into registration with the apertures by the sliding movement of the sliding element, said sliding element comprising a sliding plate having inturned marginal flanges, and said rack having channels for receiving said flanges.

3. A game apparatus of the class described comprising a playing piece-supporting rack, said rack having a plurality of playing piece-receiving apertures formed therein, a sliding element slidably mounted upon said rack and adapted to support playing pieces above the rack, said sliding element having means formed therein for permitting the playing pieces to drop into said playing piece-receiving apertures upon the rack as said means is brought into registration with the apertures by the sliding movement of the sliding element, said sliding element comprising a sliding plate having inturned marginal flanges, said rack having channels for receiving said flanges, and said playing piece-receiving apertures having beveled ends to facilitate the dropping of the playing pieces into the apertures.

4. A game apparatus of the class described comprising a playing piece-supporting rack, said rack having a plurality of playing piece-receiving apertures formed therein, a sliding element slidably mounted upon said rack and adapted to support playing pieces above the rack, said sliding element having means formed therein for permitting the playing pieces to drop into said playing piece-receiving apertures upon the rack as said means is brought into registration with the apertures by the sliding movement of the sliding element, said sliding element comprising a sliding plate having inturned marginal flanges, said rack having channels for receiving said flanges, said playing piece-receiving apertures having beveled ends to facilitate the dropping of the playing pieces into the apertures, and some of said apertures having notches formed in the sides thereof to facilitate the proper positioning of the playing pieces upon the board.

5. In combination with a game board having playing piece location designations formed thereon, framing racks, said framing racks having playing piece receptacles formed thereon conforming to the location of the playing piece location designations, supporting means for playing pieces carried by the racks, and means for moving the playing pieces into registration with said receptacles for causing the playing pieces to drop in proper positions upon their proper locations on the game board.

6. In combination with a game board having playing piece location designations formed thereon, framing racks, said framing racks having playing piece receptacles formed thereon conforming to the location of the playing piece location designations, supporting means for the playing pieces carried by the racks and adapted to

drop the playing pieces in proper positions upon their proper locations on the game boards, and said supporting means being slidably mounted for supporting the playing pieces above the rack when in one position and causing the playing pieces to drop through the rack when in an adjusted position.

7. In combination with a game board having playing piece location designations formed thereon, playing piece-supporting forms adapted to be placed upon the board for locating playing pieces in proper position, a transversely slidable rack carried by each form and adapted to receive playing pieces from the form, and said rack having apertures into which said playing pieces are adapted to drop from said apertures of said forms.

8. In combination with a game board having playing piece location designations formed thereon, playing piece-supporting forms adapted to be placed upon the board for locating playing pieces in proper positions, a transversely slidable rack carried by each form and adapted to receive playing pieces from the form, and said rack having apertures into which said playing pieces are adapted to drop when said racks are slidably moved outwardly of said forms, said game board being foldable about said forms, and hinged gates carried by the ends of the forms and adapted to constitute fillers between the racks and a portion of said game board when said game board is folded and movable to an extended position when said racks are moved outwardly of the forms.

9. A framing device for use in combination with a game of the character described comprising a body having playing piece-receiving apertures formed therein, a transversely slidable rack carried by the body and having apertures for receiving playing pieces to support playing pieces above the body when the apertures in the body are out of registration with the apertures in the rack and being adapted to drop the playing pieces through the apertures in the body and into the apertures of the rack when all of the apertures are brought into registration.

10. A framing rack of the class described comprising a body having playing piece-receiving apertures, a tray adjustably supported upon the rack, playing pieces adapted to be supported by said tray, means carried by the tray for dropping the playing pieces through the tray upon a support, a slidable supporting plate carried by the tray, and said tray having apertures through which the playing pieces are adapted to drop.

11. A framing rack of the class described comprising a body having playing piece-receiving apertures, a tray adjustably supported upon the rack, playing pieces adapted to be supported by said tray, means carried by the tray for dropping the playing pieces through the tray upon a support, links hingedly secured to the rack and engaging the tray for supporting said tray in substantial parallel relation with the upper edge of the rack and swinging the tray to a position substantially parallel with the lower edge of the rack, and said rack having a channel for receiving the tray and playing pieces carried thereby when said tray is swung at right angles to the transverse axis of the rack.

12. A rack of the class described comprising a body having playing piece-receiving means, a tray adjustably mounted with respect to the rack, supporting links pivoted to the rack and tray, said tray being pivotally secured to the links

for swinging movement from a horizontal to a vertical position, and said rack having receiving means for receiving the tray and playing pieces carried thereby when the tray is swung to a vertical position to partially encase the tray within the rack.

13. A game apparatus comprising a foldable game board having a playing field formed thereon, framing racks carried by the game board and adapted to be encased within the game board when the board is folded, said racks having game piece-receiving apertures formed therein extending through the racks from the outer to the inner faces thereof and adapted to register with selected portions of the playing field, the game piece-receiving apertures fitting over selected portions of the playing field in a manner whereby playing pieces may be placed in the apertures in the outer faces of the racks and the playing pieces will drop through the aperture and assume

a proper relative position with respect to the selected positions of the playing field, the racks being removable from the playing field and detachable from the playing pieces to cause the playing pieces to remain in properly placed positions upon the playing field when the racks are removed.

14. A framing rack of the class described comprising a body having playing piece-receiving apertures, a tray adjustably supported upon and attached to the body, said tray having playing piece-receiving apertures adapted to register with the apertures in the body, means carried by the tray for supporting playing-pieces within the apertures in the tray, and said means being movable to permit playing pieces to drop through the apertures in the tray and body to a selected position upon a support.

CLARENCE H. ROBERTSON. 20