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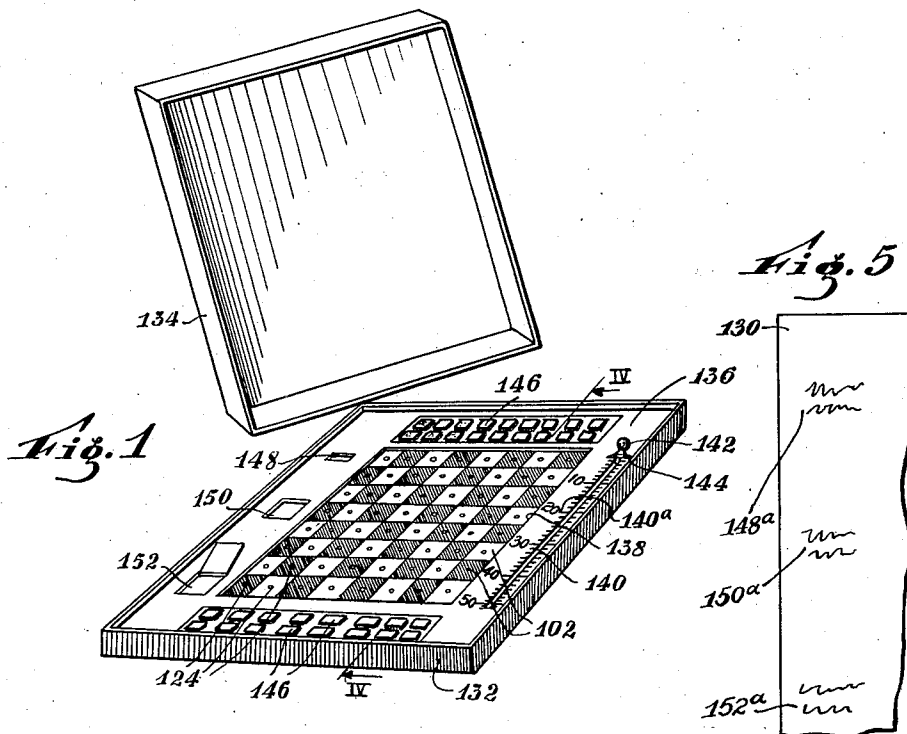
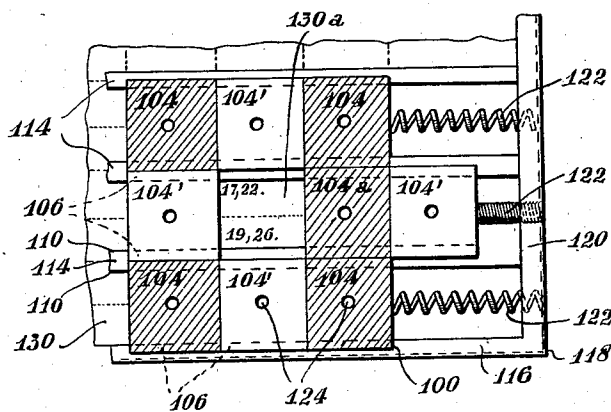
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2,298,456

MECHANICAL CHESSBOARD

Filed Sept. 30, 1940

2 Sheets-Sheet 1



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2 Sheets-Sheet 2

Fig. 3

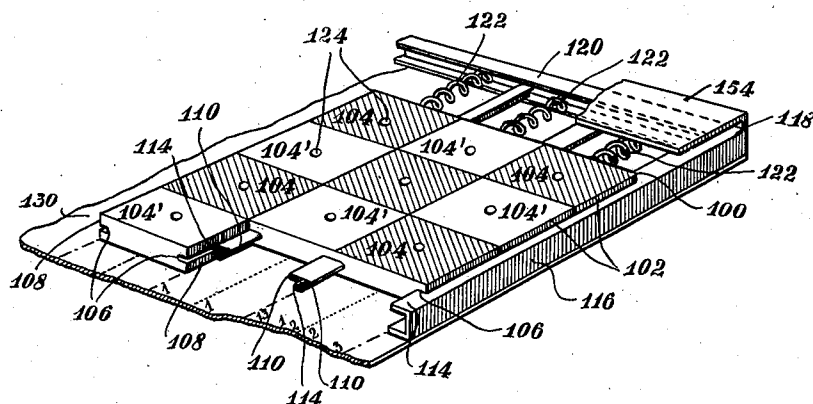
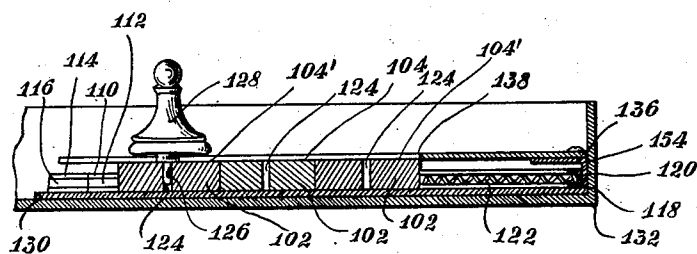


Fig. 4

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MECHANICAL CHESSBOARD

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8 Claims. (Cl. 35—8)

The present invention relates to the game of chess and has for its object to provide a new and improved chessboard which is designed to enable a single player to play games or parts of games or to solve chess problems while having available a key prepared by experts, which is normally concealed by the board and of which one or more moves can be disclosed at a time.

Accordingly the board of the present invention is composed of individual squares, adapted to be displaced crosswise of the board between guide-members so as to disclose the instructions relating to the particular square displaced, means being provided for operatively coupling the chessmen to the square on which they are placed.

In the drawings:

Fig. 1 is a perspective view of a preferred embodiment of the present invention.

Fig. 2 is a fragmentary plan of the board showing certain squares displaced.

Fig. 3 is a fragmentary perspective view of the board showing the chart of instructions,

Fig. 4 is a section along the line IV—IV of Fig. 1, and

Fig. 5 is a plan view showing a fragment of an indicia-bearing sheet.

Referring to the drawings, the board proper or field of play 100 consists of sixty-four individual blocks 102, of some suitable material, such as wood, synthetic resin, ivory or bone, one surface 104, 104' of which forms the "squares" of the field of play and is suitably coloured to differentiate the "black" from the "white" squares. Each block 102 has a groove 106 formed on each of two parallel sides 108 and the blocks are adapted to be aligned in parallel and contiguous rows with the grooves aligned along the sides of the rows and slidably engaged with laterally projecting wings 110 of a plurality of spaced guide members 114 or with lips 112 projecting from side members 116 of a frame 118. The guide-members 114 which may conveniently be of T-section are disposed transversely of said frame 118 that is to say, parallel to the side members 116. The lips 112 are substantially coextensive with said side members and project inwardly of said frame which has a pair of end members 120 between which and each row of blocks 102 compression springs 122 are provided to hold the blocks normally together in a yieldable manner lengthwise of the guide members 114. It will be understood that the guide members 114 are spaced from each other and from the side members 116, in a direction parallel to the end members 120, in such a man-

ner that the rows of blocks are substantially in sliding contact along their edges.

Each of the blocks 102 has a perforation 124 in its upper surface 104, 104', adapted to receive a pin 126 projecting from the base of a chessman such as the pawn 128 shown in Fig. 4.

The construction above described is mechanically complete and the "board" so formed is adapted to be used with an indicia-bearing sheet 130 intended to be laid beneath the "board" and bearing indications designed to show whether a move made or contemplated is correct or agrees with the record of a given game, as will be further explained below.

Conveniently the "board" as hereinbefore described is placed in a box 132 (Fig. 1) having a lid which is separable as shown at 134, but may be hinged, and a mask 136 is located above the frame 118. The mask 136 has a central opening 138, the size of the field of play and a move indicating device running parallel to one of the end-members 120 of frame 118. The move indicating device may consist of a slot 140, having a scale and numerical indicia 142^a adjacent thereto, and a cursor 142 having pointers 144 and adapted to be moved along the slot 140. The mask may also be provided with side pocket 146 for the reception of the chessmen.

The springs 122 are preferably fitted at only one end of the frame 118, and an abutment bar (not shown) is provided at the other end to serve as a stop for the blocks 102, the mask may also have along the side opposite the move indicator, a plurality of windows 148, 150 and 152 corresponding to informative indicia 148^a, 150^a, 152^a marked on the indicia bearing sheet 130. Thus, through window 148 may be read the names of the original players of the game which is to be rehearsed or from which a mating problem has been taken. Window 150 may disclose the first moves made in the game and window 152 may show the diagram for the placing of the chessmen in a problem. A cover for the latter window is provided so that it may be closed if desired.

The mask may be placed loosely over the frame 118 or it may be secured thereto or, preferably to a spacing member 154 (Fig. 3) firmly attached to the frame 118.

In using my mechanical chessboard, the player takes out the "board" from the box 132 and places in the latter an indicia bearing sheet 130 on which he again places the "board." He then sets out the chessmen either for a full game or for a problem or part of a game as shown either through window 152 or on a separate sheet. The

player's task then is either to play out the game with the opening moves or "gambit" seen through window 150, or to work out the moves of the problem. When he has decided on a move, he may shift the square of arrival to the right or left, against the action of the corresponding spring 122, either by inserting a pointed instrument in the perforation 124 or by separating the chessman concerned from the square of departure and inserting its pin into the perforation of the square of arrival. Shifting of the square of arrival, for example the square 104a in Fig. 2, discloses the corresponding portion 130a of the indicia bearing sheet 130. If this portion contains an indication that the move should then have been made, the chessman is either moved to that square or left thereon and released, whereupon the square 104a will move back to its normal position under the action of spring 122. If the disclosed portion 130a of the indicia bearing sheet 130 does not show that the move should then have been made, the player must revise his calculations and is thus made to reason out why one move was made in preference to another. Conversely a single player or a pair of players may use my "board" to record the moves made during a new game, in which event a plain sheet would be placed below the "board."

The move indicator is intended to assist in keeping count of the moves already made and also to simplify the system of indicia marked on the sheet 130. By the use of the move indicator these indicia are reduced to simple numbers denoting the move, placed under the squares of arrival. The numbers are placed in two sets corresponding to "white" and "black." Thus, for example, the uncovered portion 130a in Fig. 2 shows above the numbers 17, 22 and below the numbers 19, 26. This means that at the end of the 17th and 22nd moves of "white" a white chessman occupies that corresponding square 104a and at the end of the 19th and 26th moves of "black" a black chessman occupies that square. Particularly in problems there will generally be only one chessman able to move into that square or alternatively the position may make it unavoidable or obvious to move a given chessman. Of course, other systems of indication can also be employed.

I claim:

1. A mechanical chessboard comprising a table, a plurality of blocks covering a portion of said table and corresponding to squares of a chessboard, said blocks being individually displaceable to expose the portion of table therebeneath, and an exchangeable chart representing a particular game insertable between said table and blocks having indicia thereon indicating whether or not a displaced block is the proper arrival square for a particular move of a chessman.

2. A mechanical chessboard comprising a table, a plurality of blocks covering a portion of said table and corresponding to squares of a chessboard, said blocks being individually displaceable to expose the portion of table therebeneath, and an exchangeable chart representing a particular game insertable between said table and blocks having indicia thereon indicating whether or not a displaced block is the proper arrival square for a particular chessman in a move of a certain number in the game.

3. A mechanical chessboard comprising a table, a plurality of blocks covering a portion of said table and corresponding to squares of a chessboard, said blocks being individually dis-

placeable to expose the portion of table therebeneath, and an exchangeable chart representing a particular game insertable between said table and blocks having indicia thereon indicating whether or not the displaced block is the proper arrival square for a particular chessman in one or the other of two sets in a move of a certain number in the game.

4. A mechanical chessboard comprising a frame, blocks mounted on said frame corresponding to the squares of a chessboard and individually displaceable, and an exchangeable chart representing a particular chess game placed beneath said frame in registration with said blocks, said chart having indicia thereon indicating whether or not a displaced block is the proper arrival square for a particular chessman in a particular move of the game.

5. A mechanical chessboard comprising a box, a frame removably placed in said box, blocks corresponding to the squares of a chessboard supported on said frame, guideways for said blocks on said frame permitting displacement of individual blocks to expose the bottom of the box therebeneath, and an exchangeable chart representing a particular chess game insertable in said box beneath said blocks and having indicia thereon indicating whether or not a displaced block is the proper arrival square for a particular chessman in a particular move of the game represented.

6. A mechanical chessboard comprising a rectangular frame, blocks corresponding to the squares of a chessboard arranged within said frame, guideways on said frame for said blocks permitting displacement of each individual block, resilient means for returning the displaced block to its normal position, chessmen adapted for engagement with each of the blocks, and an exchangeable chart placed beneath said frame having indicia in registration with the blocks when in normal position and indicating when a block is displaced whether or not it is the proper arrival square for a particular chessman in a particular move of the game represented.

7. A mechanical chessboard comprising a rectangular frame, blocks corresponding to the squares of a chessboard arranged within said frame, guideways on said frame for said blocks permitting displacement of each individual block, resilient means for returning the displaced block to its normal position, chessmen adapted for engagement with each of the blocks, an exchangeable chart placed beneath said frame having indicia in registration with the blocks when in normal position and indicating when a block is displaced whether or not it is the proper arrival square for a particular chessman in a particular move of the game represented, the marginal portion of said frame having windows therein, and said chart being provided with information in registration with said windows concerning the particular game represented.

8. A chessboard for self-teaching and practicing of the game of chess, of the type adapted to be used with chessmen having means for detachably coupling the men to the board, and to be superimposed on an indicia bearing chart, said chessboard comprising a rectangular frame having a pair of opposed end members and a pair of opposed side members, a plurality of individual blocks of equal size and square in plan, having an upper face suitably colored to differentiate "black" from "white" squares, said blocks being arranged in contiguous rows parallel to said

side members to define a field of play and being adapted to be moved slidably parallel to said side members, guide means operatively associated with said rows to prevent displacement thereof parallel to said end members, said indicia bearing 5 chart having chessmen determining indicia arranged to underlie the block bearing the piece to be moved, and complementary move determining indicia underlying the block to which said piece should be moved, and compression springs 10 located between one end member and the prox-

imate end of each row of blocks, and normally maintaining the blocks yieldably compacted into a field of play, whereby any one block may be displaced towards said one end member to disclose a section of chart corresponding to said block only and bearing chessmen determining indicia, and a second block must be subsequently displaced towards said one end member to discover the complementary move determining indicia.

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