

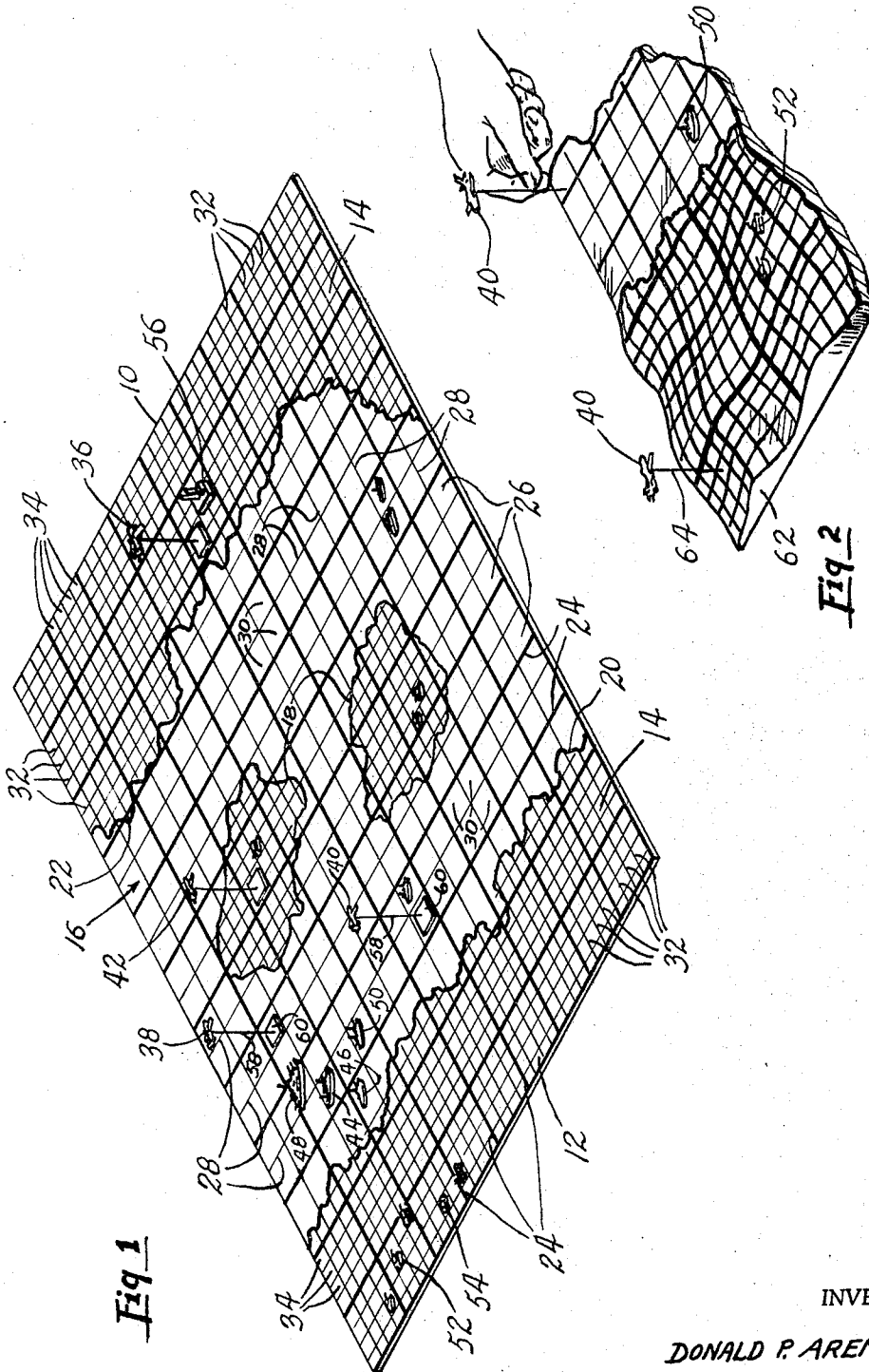
Sept. 26, 1967

D. P. AREND

3,343,841

GAME BOARD HAVING SUPERIMPOSED GRIDS OF DIFFERENT SIZES

Filed May 19, 1964



INVENTOR

DONALD P. AREND

BY *Beaman Beaman*

ATTORNEYS

1

3,343,841

GAME BOARD HAVING SUPERIMPOSED GRIDS
OF DIFFERENT SIZESDonald P. Arend, 3877 Kirkwood St.,
Jackson, Mich. 49203Filed May 19, 1964, Ser. No. 368,502
3 Claims. (Cl. 273-131)

The invention pertains to a game, and particularly relates to a game adapted to be played on a board. The game, in accord with the invention, is a game of war employing game board pieces whereby the pieces are moved about the board to indicate the strategy being employed by the players.

Many war games have been devised wherein the game is played upon a board and the rules of the game are so determined that conditions generally relating to actual conditions of combat are simulated. However, heretofore, because of the complexities of the strategy, tactics and logistics of modern warfare, it has not been possible to provide a war game which actually approached the skill, objectives and problems of actual combat. It is a basic object of the invention to provide a war game, and a game board therefor, wherein a more realistic war game than has heretofore been produced is provided wherein the principles, strategy and tactics of modern warfare may be substantially reproduced and employed in the game. The objectives of each game may be varied by agreement among the players and yet the relationships between the various armed forces and weapons are interrelated in a manner similar to the relationships between various types of armed forces and weapons as during actual combat. During the period of play the challenge and complexity of each game and the outcome of the game are primarily dependent on the skill of the players. However, elements of chance are incorporated in the game whereby the elements of chance which exist in actual warfare may be duplicated to some extent.

The game board pieces which are to be played upon the board are classified into four categories, namely, air forces, naval forces, army forces and civilian forces. The various forces employed during the game are represented by miniature replicas of aircraft, naval craft, land vehicles, factories, and the like. To provide logistical problems equivalent to those which actually exist, the game board has defined thereon a plurality of grids which divide the game board playing surface into a plurality of squares. A first system of grids is used to define air force movements. A second system of grids is used to divide the areas of the game board which represent water into distances which are appropriate to the distance of naval craft movement. A third system of grids is used to define the movement of land forces, and this third system of grids only exists upon those areas of the board which represent land.

In order to present a realistic relationship between the various forces employed during the game, it is necessary that the air, naval, and army forces be maneuverable in a manner similar to reality and the weapons and vehicles of the forces must be properly related to each other with respect to range, fire power and function. As the first, second and third grids defined upon the game board are of different size, the moves permitted by the aircraft, naval craft, and land forces are so proportioned that the movement of the respective board pieces is related in relative distance upon the board to that movement which could actually be accomplished in a given time. In like manner, the grid work defined upon the game board indicates the distance of fire power of the various game board piece weapons, as well as the range or distance that the aircraft or naval craft may be capable of traveling from a base of operation.

2

Another object of the invention is to provide a war game, and a playing board therefor, wherein the objects and actions of actual combat may be realistically reproduced and the outcome of the game is dependent upon the skill of the players.

Another object of the invention is to provide a war game, and a game board therefor, where air, naval, army and civilian forces are employed during the playing of the game, and the relationship of these forces is such as to realistically correspond to actual conditions during combat.

Yet another object of the game is to provide a war game, and a playing board therefor, wherein the objectives of the game may be varied and wherein the game may be played with a portion of the board pieces thereof or with all of the board pieces and components provided.

These and other objects of the invention will be apparent from the following description and accompanying drawings wherein:

FIG. 1 is a perspective view of a game board, in accord with the invention, illustrating a number of board pieces located thereon and distributed in a manner typical during playing of a game, and

FIG. 2 is a detail, enlarged, perspective view of another embodiment of the game board, in accord with the invention, wherein the playing surface is in relief to provide a three-dimensional effect.

With reference to FIG. 1, a game board 10 is shown which illustrates a typical land and water arrangement on which the game may be played. The board 10 is of a planar configuration, having an upper playing surface 12. If desired, the board may be provided with a centrally disposed fold, or hinge line, whereby the board may be folded to conserve space. Upon the playing surface 12, the topography or battle zone of the playing area is defined by a printing process, or the like. The areas of the playing surface which represent land are indicated at 14, and the areas of the board which represent water are indicated at 16. Islands 18 are located centrally between the primary land areas to add interest to the game and increase the possible strategical opportunities for maneuver. The primary land area shore lines are defined at 20 and 22. In practice, it is desirable to color the land areas 14 green or brown and the water area 16 blue, so as to provide suitable contrast therebetween and provide realism. Bridges, rivers, roads and other landmarks are also defined on the land areas 14.

Three systems of grid work are indicated on the playing surface 12. The first grid work system is represented by the lines 24 which define the large squares 26 which are, henceforth, designated as air squares. The grid lines 24 are evenly spaced in both perpendicularly disposed directions whereby the air squares are of equal size throughout the playing surface. The second grid work is represented by perpendicularly disposed lines 28 which define naval squares 30. The grid work defined by lines 28 is symmetrically related to the grid work lines 24 whereby the lines 24 become a part of the naval square grid work and such that each of the air squares will be divided into four naval squares, as will be apparent from FIG. 1.

The land areas 14 defined upon the game board surface 12 are covered by grid lines 32 which define a plurality of land squares 34. Preferably, the grid lines 32 are so related to the grid lines 24 and 28 that each of the air squares will be divided into sixteen land squares, and the lines 24 and 28 help define many of the land squares. It will, therefore, be appreciated that the entire surface of the playing board 10 is divided into equal size air squares 26. The water areas 16 of the playing surface are divided into naval squares 30 which are one-fourth the size of the air squares, and the land areas 14 of the playing surface 12 are subdivided into land squares 34 which are

one-sixteenth the area of the air squares. As apparent in the drawing, lines 24 are of a perceptibly different characteristic than lines 28 and 32.

The game board pieces which may be typically employed in the practice of the invention may include in the air force, for instance, bombers 36, fighter bombers 38, interceptors 40, carrier based naval fighter bombers 42, transports and helicopters. Several of each aircraft type will usually be provided each player. The naval force game board pieces may include, for instance, battleships 44, cruisers 46, aircraft carriers 48, destroyers 50, transports and submarines. The army forces will include, for instance, tanks 52, tank destroyers 54, mobile and stationary antiaircraft units, shore batteries and engineering units. The civilian forces may include aircraft factories 56, shipyards and tank-producing factories.

Each of the above-mentioned game board pieces is represented by miniature replicas of these items, as will be apparent from FIG. 1. Preferably, the aircraft are placed upon pedestals 58 projecting from bases 60 in order that they will be supported above the playing surface to add reality to their relation to the naval, land and civilian installations and forces. As apparent in the drawing, the naval craft and land vehicles are of a size approximating the size of the grid unit in which they are placed and to which they correspond.

In the playing of a war game, in accord with the invention, the players, usually two in number, or divided into two different teams, will be provided with game board pieces such as those described above, depending on the particular type of game to be played. If it is previously decided by the players to conduct only an air battle, the naval, land and civilian forces will not be employed. However, if a full scale battle is to be conducted, each of the players will be provided with a full complement of the game board pieces previously mentioned.

The following description of a typical game refers to procedure which would be employed in conducting a full-scale war game wherein all four categories of forces are employed.

In playing the game in accord with the invention, the players take alternate turns. Each turn will consist of four moves, designated the air force move, the naval force move, the army force move and the civilian force move. The four moves allotted to each player during each turn may be taken in any order. However, each move must be completed before the next move is started. Moves are made in accordance with the description set forth below. The game is ended when one player achieves a predetermined objective, or a specific time limit is reached, or the opponent surrenders.

During each move of a player, the permissible distance of movement and direction of the game pieces are determined by the type of the game board piece being moved. For instance, during each turn each bomber 36 may be permitted to move three air squares in any direction, including the diagonal direction. Fighter bombers 38 and naval fighter bombers 42 may also move three air squares in any direction during each turn. Interceptors 40 may move four air squares, transports may move two air squares, and helicopters may move two air squares during each turn. Thus, it will be appreciated that the distance the particular air force game pieces may move during each turn is dependent upon the type of aircraft and the speeds which this particular type of aircraft is normally capable of attaining, relative to other types of aircraft.

The player may move his battleships 44, cruisers 46, aircraft carriers 48 and destroyers 50 two naval squares in any direction during each turn. Naval transports and submarines may only be moved one naval square, in that the speed capabilities of these is not as great as those of the faster type of watercraft. The tanks 52, tank destroyers 54, mobile aircraft units, and engineering units are per-

mitted to move one land square when off a road and two land squares when on a road during each turn.

The stationary antiaircraft units and shore batteries are immovable, as are the civilian forces which include shipyards and aircraft and tank factories.

The firing range of the various weapons employed during the playing of the game is determined by the playing surface grid work. For instance, a bomber 36 is within range of any air, army, or civilian target within the air square it is occupying. The same applies to fighter bombers 38 and interceptors 40, except that these aircraft cannot destroy factories. Carrier based fighter bombers 42 have the same firing range as fighter bombers 38 and interceptors 40 and cannot destroy factories. Helicopters and air transports have no fire power ranges, in that these aircraft are normally unarmed.

A battleship 44 has a firing range equal to two naval square distances from the naval square it occupies. A battleship is in range from any air target which occupies the air square in which the battleship is located. A cruiser 46 is considered to have a firing range equal to one naval square distance from the naval square occupied by the cruiser game board piece. A cruiser 46 is in range of any air target in the air square in which the cruiser is located, and would also be within range of any army target which is within one naval square of the cruiser. The firing range of destroyers 50 is the same as a cruiser, except that a destroyer is not considered capable of destroying a battleship. Aircraft carriers 48 are not considered to have their own firing power but must rely upon their aircraft 42 for protection and fire power. A submarine is considered to have a firing range against any naval target within one naval square of the submarine, and submarines cannot destroy air or army targets. Naval transports have no fighting power.

In the army forces, the tanks 52 are considered to be within range of any army target within one land square of that occupied by the game board piece. Tank destroyers 54 have a range of two land squares. Antiaircraft units 56 have a range against aircraft within any air square occupied by the antiaircraft unit. Engineering units have no fire power but are only used to rebuild bridges. Shore batteries would have a fire power within two naval squares or four land squares of itself.

The game board pieces are moved about the game board in accordance with the above-described rules, the distances being defined by the grid work defined upon the game board. Upon enemy forces occupying common squares or coming within firing range, combat between individual game board pieces occurs. The outcome of the encounter between enemy game board pieces is determined by chance. For instance, a conventional playing card deck may be used to determine the outcome of combat between opposing game board pieces. Upon enemy aircraft, for instance, arriving within the same air square, the player taking the turn may turn over the top card of a playing card pack. If the card should be a nine or higher, it may be previously decided that the aircraft belonging to the player taking the turn has scored a hit and destroys the enemy aircraft whereupon the "destroyed" aircraft is removed from the board. If the card is lower than a nine, it may be considered a miss and, thus, the enemy's game board piece will not be removed from the game board. Of course, the element of chance to determine the outcome of combat between individual game board pieces may be provided by a throw of dice, spinners, or other devices of a similar nature. Under the rules of the game, the turn of the card, or other chance-indicating means, also permits the other game piece being encountered to retaliate, if the game piece is capable of doing so and, thus, after being attacked, the other player may turn a card and if the proper card is turned up the attacking game piece may be destroyed, as under actual combat conditions.

The players of the game take alternate turns, each

turn consisting of the moves of the various forces of each player, as described above. Prior to beginning the game, the players decide on the objective of the game with regard to the area or object which is to be attacked, or whether the game is merely to consist of an encounter between opposing forces, without regard to specific location of the encounter. Of course, due to the freedom of choice of the players, the exact location of encounter of enemy forces cannot be predetermined, in that the maneuvers of each player control the outcome and the character of each game. As the weapons of one player are destroyed by those of another, the weapons can be rebuilt if the player has civilian factories available which are capable of producing the particular weapon needed. Specific rules may be set forth with regard to the manufacture of weapons, and it may be assumed, for instance, that during each turn of the player one or two airplanes may be considered to be manufactured, if a player has an operable aircraft factory at his disposal.

The mode of play set forth above describes the basic principles of the game to be played upon the game board. For purposes of illustration, a minimum number of board pieces are shown. It will be understood that usually quite a few board pieces will be in play by each player at any given time. Of course, a specific set of rules to describe particular circumstances are employed. However, in accord with the concept of the invention, these particular rules are not considered necessary to an understanding thereof. The playing of the game with the players taking alternate turns continues until one of the players achieves a predetermined objective, a specific time limit is reached, or the opponent surrenders. Due to the infinite number of possibilities of play, the game has wide appeal for adults, as well as young people, and the complexities of the game wherein all of the game board pieces are employed are such as to intrigue the most sophisticated of players. While the land and water areas described on the illustrated game board are for purposes of illustration, it is anticipated that game boards illustrating actual famous combat areas may be reproduced whereby famous battles may be duplicated or refought. The refighting of famous battles with the game of the invention is of great interest, in that it is possible to foresee how the battle may have been decided differently if the strategy employed had been different than that actually used.

By employing the three grid work systems, and by allocating a number of squares which may be moved during each turn by a particular game board piece, the relative distances game pieces move in a given unit of time is proportional to the mobility of actual combat weapons and apparatus. Thus, the employment of the air, naval and land forces in the playing of the game is similar to that which actually occurs.

FIG. 2 discloses a variation of game board wherein the board 62 is formed of a material which may be readily manufactured in relief, or a three-dimensional manner,

whereby the playing surface of the land areas will not be planar, as in the embodiment of FIG. 1, but will represent the mountains, hills, and valleys of terrain. With the game board of FIG. 2, it is desired that the game board be constructed of a material which permits the aircraft standard 64, attached to the aircraft, to be "stuck" into the game board material, in that it is not practical to use the bases 60, as used with the aircraft supporting means of the embodiment of FIG. 1.

It is understood that various modifications to the disclosed embodiments may be apparent to those skilled in the art without departing from the spirit and scope thereof, and it is intended that the invention be limited only by the scope of the following claims.

I claim:

1. A board game of a type wherein board pieces are used comprising a board member, a playing surface defined on said board member, land and sea geographical features defined on said playing surface, a first grid work subdividing said sea geographical features in a first manner, a second grid work subdividing said land geographical features in a second manner, the playing surface area defined by an area unit of said first grid being larger than the playing surface area defined by an area unit of said second grid, board pieces simulating water craft of a size approximating the size of the individual units of said first grid, board pieces simulating land vehicles of a size approximating the size of the individual units of said second grid, the dimensional relationship between area units of said first and second grid works being related to the distance of movement of water craft and land vehicles, respectively, in a given time interval.

2. In a board game as in claim 1, a third grid work subdividing said entire playing surface in a third manner and superimposed over said first and second grid works, board pieces simulating aircraft, the playing surface area defined by a unit of said third grid work being larger than a unit of said first grid work and being related to the distance of movement of aircraft in said given time interval.

3. In a board game as in claim 2, the individual lines forming said third grid work having perceptibly different characteristics than the lines forming said first and second grid works.

References Cited

UNITED STATES PATENTS

463,602	11/1891	Hamilton	273—131
628,773	7/1899	Davis	273—131
1,579,327	4/1926	Knowles	273—131 X
2,414,165	1/1947	Paschal	273—131 X

FOREIGN PATENTS

4,871	1904	Great Britain.
-------	------	----------------

DELBERT B. LOWE, *Primary Examiner.*