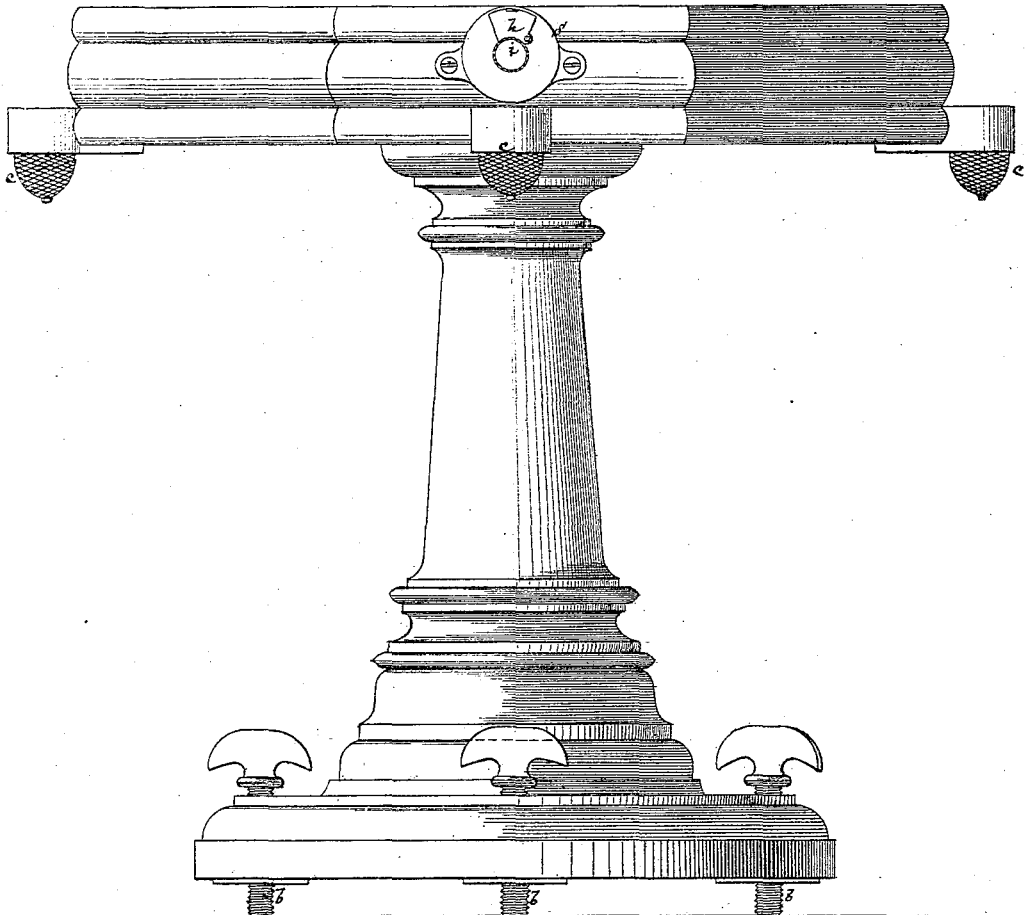


E. A. BARRETT.  
Improvement in Ball Games.

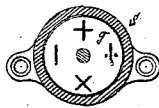
No. 123,442.

Patented Feb. 6, 1872.

*Fig. 1.*



*Fig. 4.*



*Witnesses:*

*Fred Haima*  
*R. H. Kabeau*

*E. A. Barrett*

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Fig. 2.

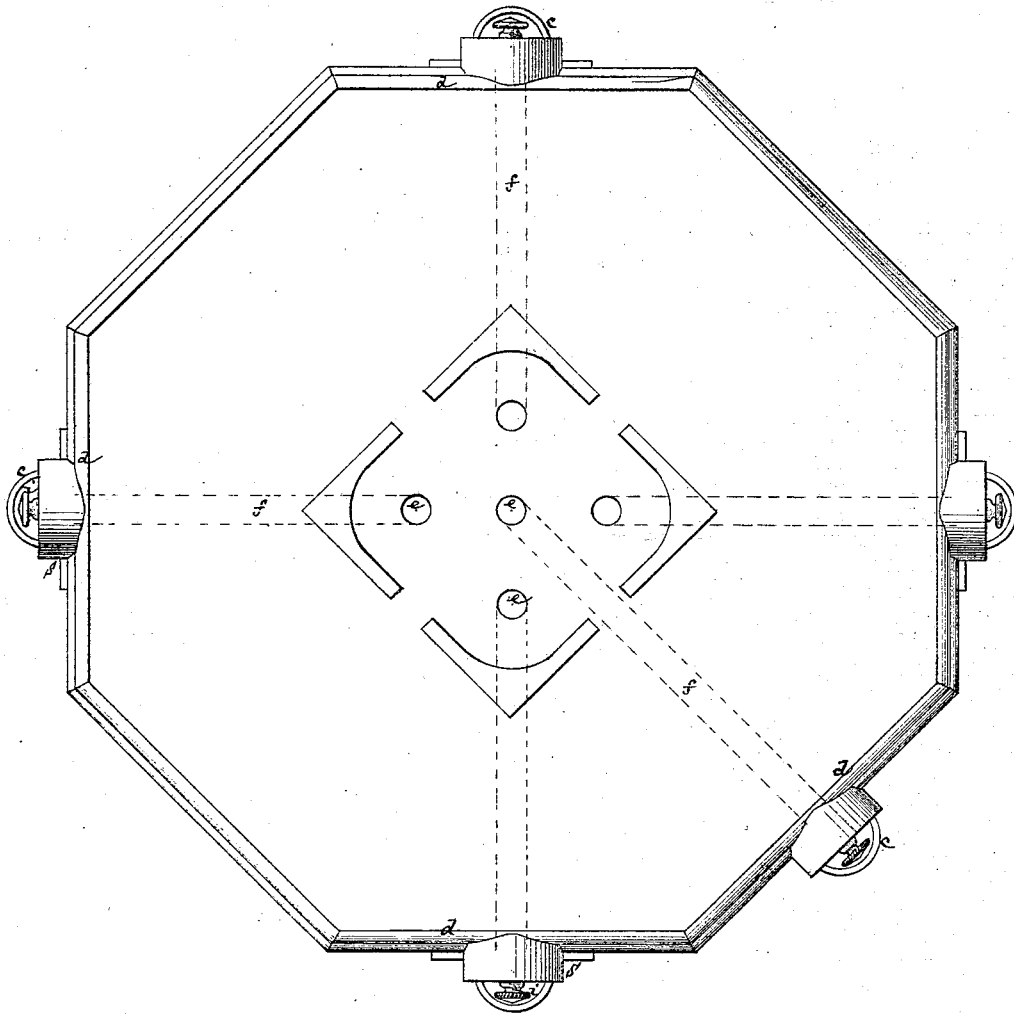
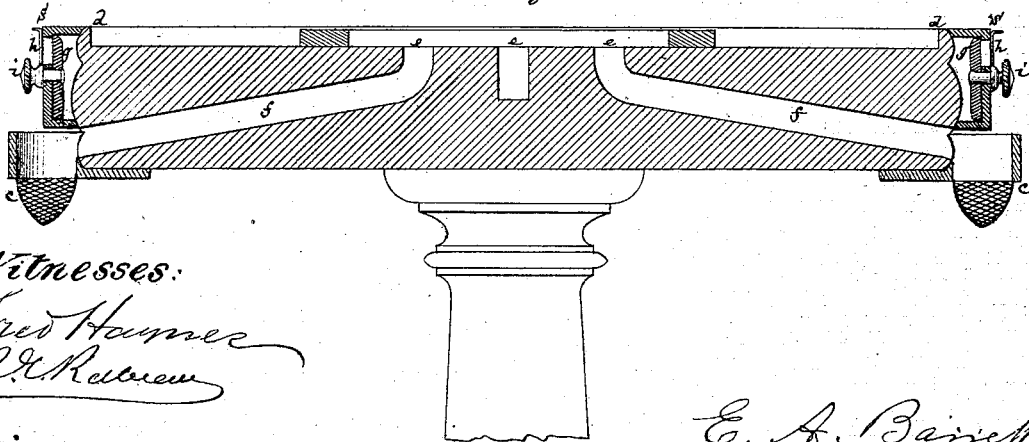


Fig. 3.



Witnesses:

Fred Hamner  
R. C. Ketchum

E. A. Barrett

# UNITED STATES PATENT OFFICE.

EDWARD A. BARRETT, OF NEW YORK, N. Y.

## IMPROVEMENT IN BALL-GAMES.

Specification forming part of Letters Patent No. 123,442, dated February 6, 1872.

*To all whom it may concern:*

Be it known that I, EDWARD A. BARRETT, of the United States Navy, at present residing in the city, county, and State of New York, have invented a new and useful Improvement in Ball-Games, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing forming part of this specification, and in which—

Figure 1 is a side elevation of what I term a mathematical and pool table having my invention applied to it. Fig. 2 is a plan of the same; Fig. 3, a vertical section thereof in part; and Fig. 4, an interior of an indicating device or dial used in connection with said table and applicable to billiard-tables generally.

Similar letters of reference indicate corresponding parts throughout the several figures.

My invention consists, first, in a novel construction of playing-table having pockets for the balls, as in billiard-tables, in which the pockets are masked by cushions; also, in which the play into the pockets is through holes in the table arranged to connect with the pockets by concealed conduits or tubular leaders. Furthermore, the invention includes an indicating device or dial having quantities or marks upon it, which are used to control or change the play of the game, whether "mathematical" or "pool," and which is applicable to billiard-tables generally. An account-board is also used to facilitate the calculations of the play, which by my invention calls into operation the exercise of skill, yet in a pool-game places the expert and the novice upon an equal footing as regards success, and is, in this respect, a blind game, developing both the physical and mental powers of the players and having an improving or arithmetical tendency, as well as being a source of amusement both to the players and bystanders or lookers-on.

Referring to the accompanying drawing, the "mathematical" or "pool" table thus represented is preferably constructed either of a round or octagonal shape, to economize space, and may be leveled by any suitable arrangement of screws *b* applied to its legs. Its pockets *c*, which are four or five, more or less, in number, are disposed in any desired positions around it, with an adequate space between them for the run or play of the balls, and are

masked by cushions *d*. In the center of the table are holes *e*, corresponding in number with the pockets. These holes, which serve as inlets to the pockets, are connected with the latter by concealed conduits or tubular leaders *f*, said conduits being of any suitable construction. Over or in vicinity of each pocket is an indicating device or dial, *S*, used to control and change the play of the game. This device, which is applicable to billiard-tables generally, is composed of a movable dial, *g*, arranged within a fractional cylinder or fixed box, having a sight-hole in it covered by a lid, *h*, which may, if desired, be under lock. Said movable dial is preferably a rotating one, and may be turned by a knob, *i*, to expose, on opening the lid *h*, certain varied marks or characters on its face. These marks or characters, which indicate and change or control the play, may either be signs or letters having a particular signification; thus, as shown in the drawing, they may be + (plus,) - (minus,) × (multiplication,) and ÷ (division) signs of the fundamental rules of arithmetic; or they may be letters having a conventional signification, as, for instance, A (for all,) T (for take,) N (for none,) D (for double up,) P (for put.) The dials are moved or adjusted at will, according to the change required in the play, and so that any particular quantity or mark may be read off on opening the lid *h*; but during the game, if a pool one, the dials are kept masked or concealed by the lids, so that the players may be kept ignorant of the adjustment.

The "mathematical" games are played as follows: The balls are numbered from 0 to 9, more or less, and the dials are adjusted over the pockets to any particular mark or sign. A choice of balls having been made, by cutting or otherwise, the lowest draw taking the lowest number of ball, and so on in succession, the balls are placed on their respective spots, No. 1, who can play on any ball, taking the lead, and each succeeding higher number following in regular order. Supposing the dials to have been adjusted to the addition sign, +, then the players add the number of the balls carromed, pocketed, and the player's on a "plus" column of the account on the board. When the several sums thus recorded reach or surpass an amount previously agreed upon, the game will have result-

ed in favor of the party or parties who first reached or exceeded it. On adjusting the dials to the subtraction sign,  $-$ , then, the amount of the game having been previously fixed, the sums of the balls carromed, pocketed, and the player's are deducted from the amount agreed upon for the game and the remainder recorded on the minus column of the board. When, by successive subtractions, the amount of the game will have been canceled, the party or parties first reaching that end will have won. Supposing the dials to have been adjusted to the multiplication sign,  $\times$ , and any desired amount fixed upon for the game, then the players take the numbers of the balls carromed and pocketed as the factors, and, multiplying them, enter their product under a multiplication ( $\times$ ) column. The party who first reaches the amount of the game is the winner. For division, adjust the dials to the division sign,  $\div$ , and take the number of balls carromed upon and pocketed as a divisor and the sum specified as the game as dividend; then divide, and place the quotient under the division sign,  $\div$ , in the account-table, after which take that quotient as the next dividend, and so on till, by successive divisions, the amount agreed upon as game will have been canceled by one or more of the players.

A combination or compound game may likewise be played by adjusting the dials to indicate different mathematical signs over the several pockets, in which case the pockets alone should count, to prevent confusion. When the balls are pocketed in a plus ( $+$ ) pocket, add their number under the plus ( $+$ ) column of the account. If the ball is pocketed in a minus ( $-$ ) pocket, subtract the sum of the balls from the amount agreed upon for game, and record accordingly. If the ball is pocketed under the multiplication sign,  $\times$ , take the ball played into and upon as factors and enter their product in the  $\times$  column of the account. Supposing the balls to be pocketed in a division-marked ( $\div$ ) pocket, then their sums should be taken as a divisor and the amount of the game as a div-

idend, and the quotient be placed under the division ( $\div$ ) column of the table. When the sums of  $+$  and  $\times$  will have attained or surpassed the amount of the game, the latter will have concluded in favor of the party or parties representing these signs; but if the amount of the game is previously canceled by the party or parties representing the signs  $-$  and  $\div$ , then they will be the winners.

For a "pool"-game, the dial should be lettered, as hereinbefore described, and said dials be adjusted by disinterested parties and kept masked. The pool is then put up, and the players draw, the lowest taking the lead. Accordingly as the balls are pocketed under the dials set to indicate A, T, N, D, and P, the player takes all the pool; will take out his own ball; will leave the pool intact; all the players will double their deposit; or the players only put up a new deposit. This, however, is only one illustration, as the marks or signs may be changed and the game be made capable of great versatility, such game in all cases being a blind one, and placing the novice and the expert on the same basis.

What is here claimed, and desired to be secured by Letters Patent, is—

1. The pockets *c* of the table masked by cushions, substantially as specified.
2. The combination of the inlets *e* in the table, the pockets *c*, and concealed or covered conduits *f*, when the whole are arranged relatively to each other in a table, substantially as herein specified.
3. The combination, with a table for ball-games having pockets, of the indicating device or dial *S*, constructed and marked with mathematical signs, as described, for controlling and changing the play of the game, substantially as specified.

E. A. BARRETT,  
Comdr. U. S. N.

Witnesses:

FRED HAYNES,  
R. E. RABEAU.