

(No Model.)

2 Sheets—Sheet 1.

R. N. MONTGOMERY.  
BILLIARD SCORER AND REGISTER.

No. 488,480.

Patented Dec. 20, 1892.

Fig. 1

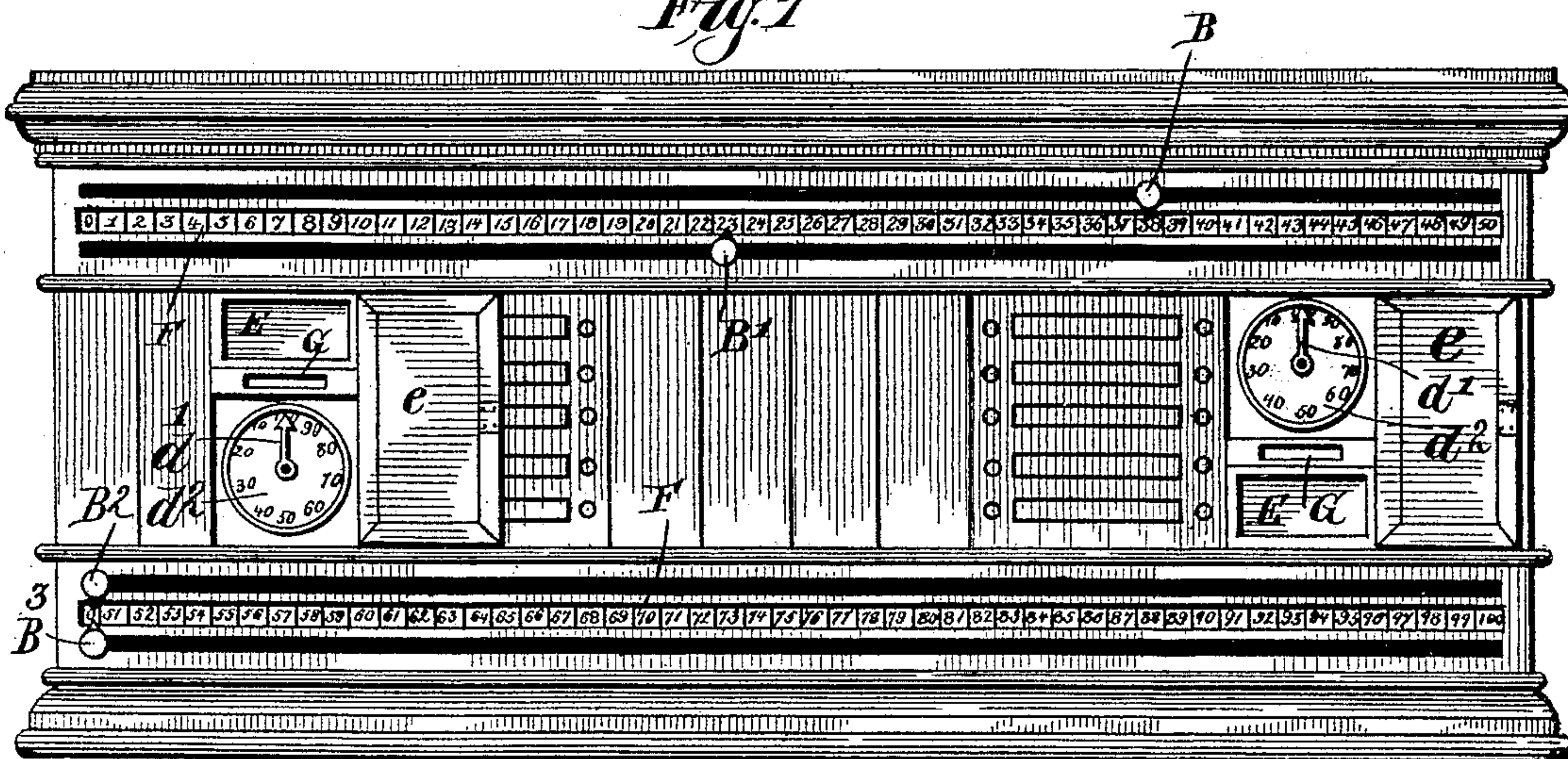


Fig. 2.

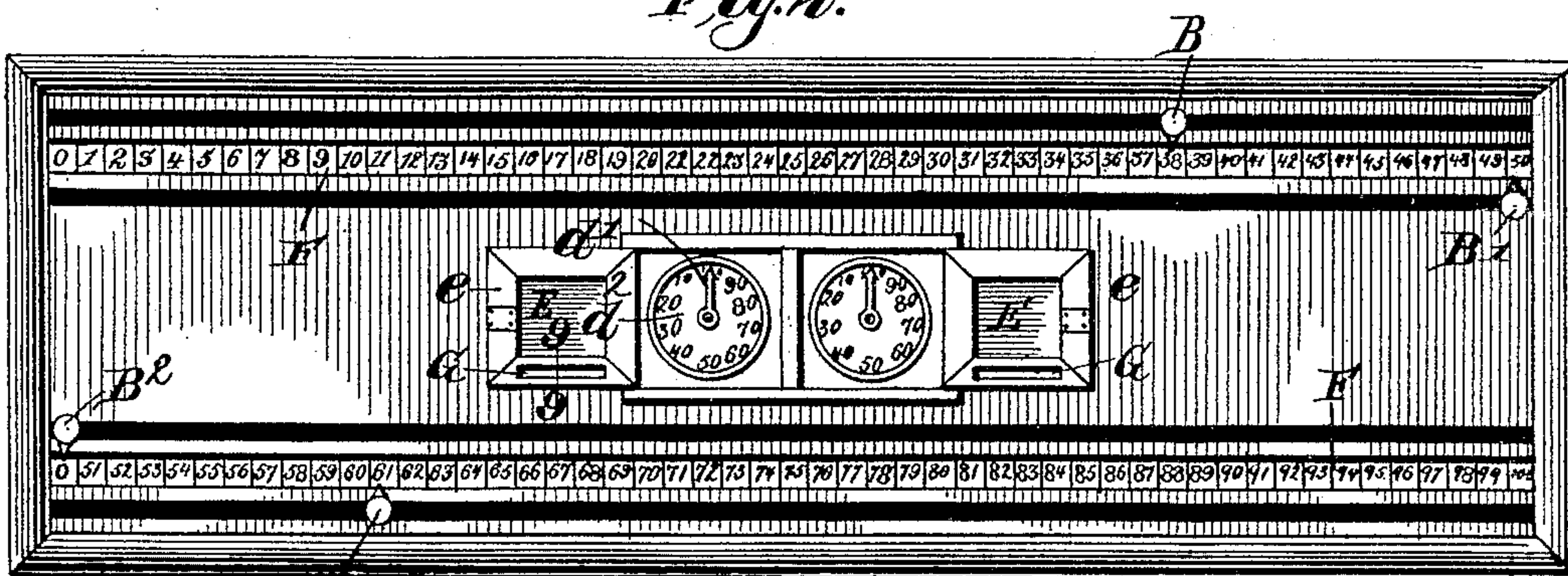


Fig. 3.

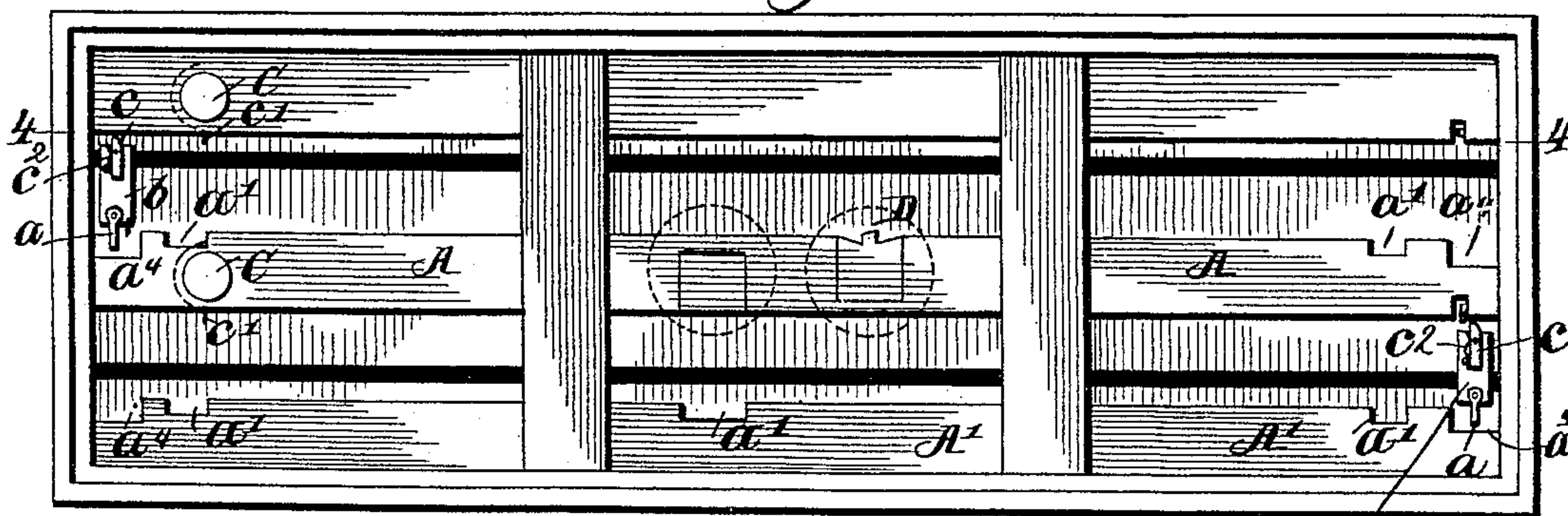


Fig. 4.



Witnesses:

H. S. Dieterich  
B. W. Sommer.

Inventor:

Roderick N. Montgomery.

By *[Signature]*

Atty:



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Fig. 5.

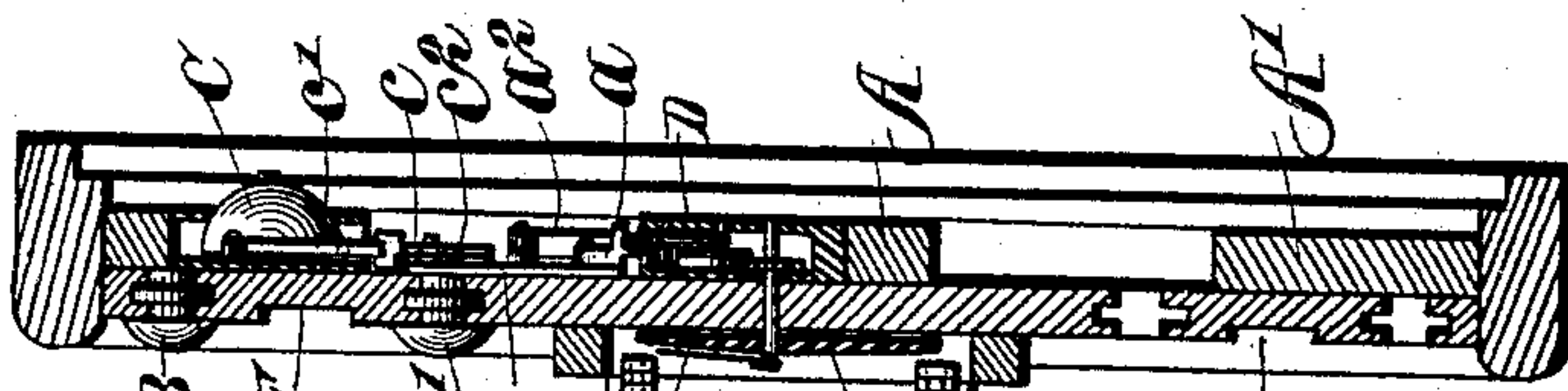
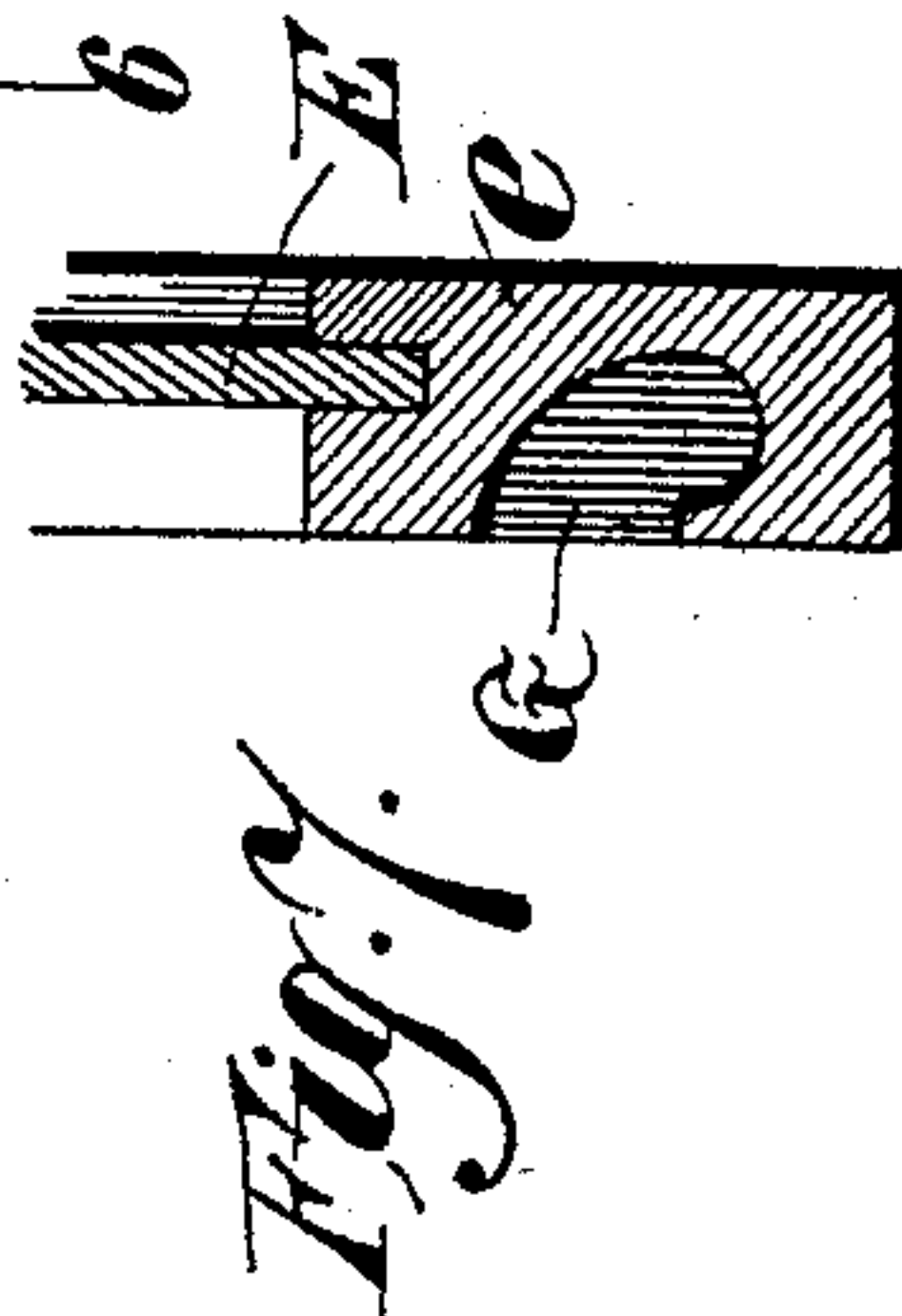
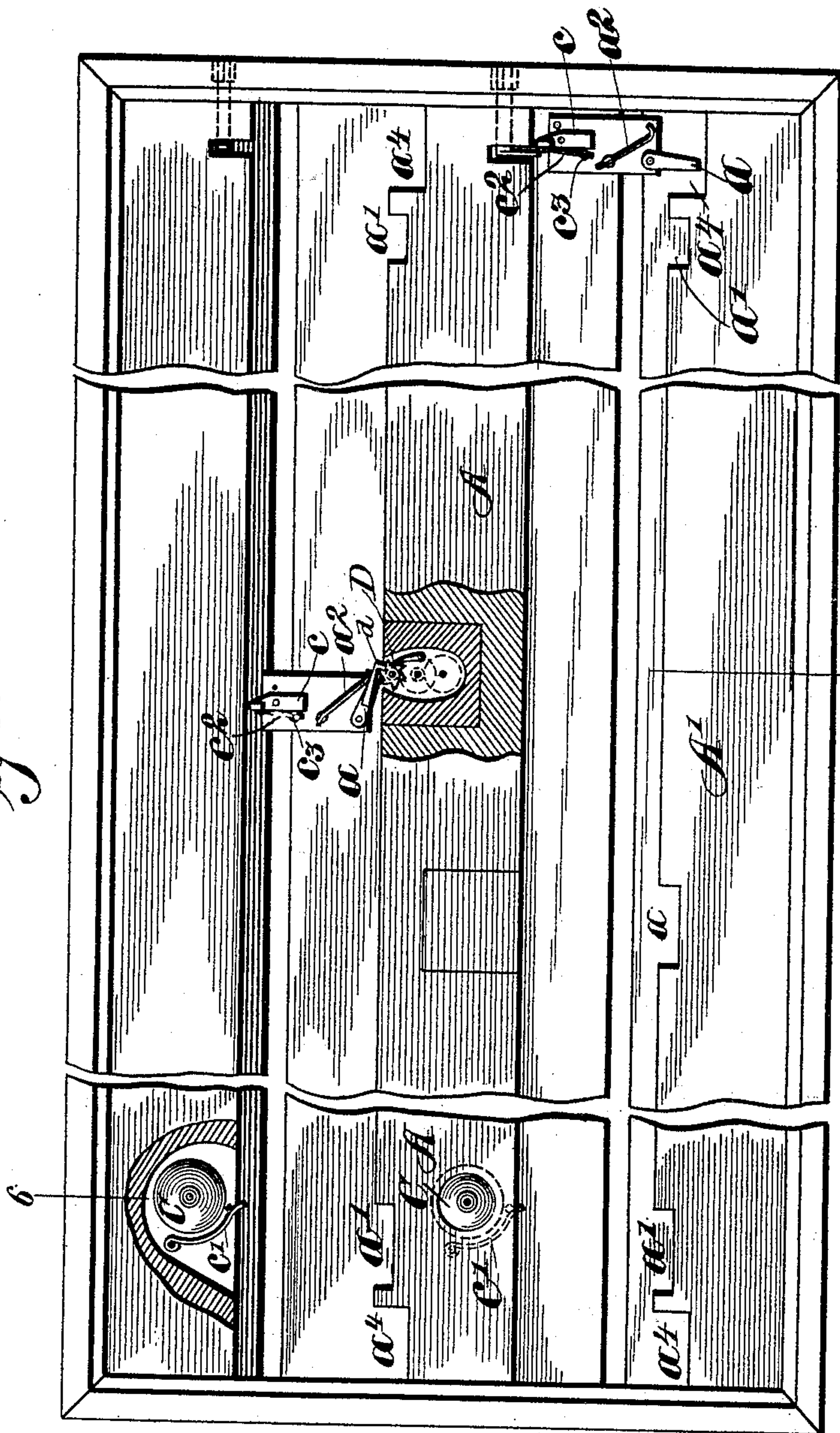


Fig. 6.

Witnesses:  
H. S. Dietrich  
B. W. Summers.

Inventor:  
Roderick N. Montgomery.  
By Henry (H.)  
Atty.



# UNITED STATES PATENT OFFICE.

RODERICK NICHOLSON MONTGOMERY, OF MELBOURNE, VICTORIA.

## BILLIARD SCORER AND REGISTER.

SPECIFICATION forming part of Letters Patent No. 488,480, dated December 20, 1892.

Application filed January 9, 1892. Serial No. 417,593. (No model.)

*To all whom it may concern:*

Be it known that I, RODERICK NICHOLSON MONTGOMERY, gentleman, a subject of the Queen of Great Britain, residing at Salisbury Buildings, Bourke Street, Melbourne, in the British Colony of Victoria, have invented an Improved Billiard Scoring-Board, of which the following is a specification.

This improved billiard scoring board has been devised for the purpose of providing a check upon the markers as well as upon the players, so as to enable the proprietors of billiard tables to ascertain at a glance how many games have been played and the amount of cash taken. I accomplish this object by so constructing the scoring board as to prevent the pointer being moved back to the starting point either by the players or the marker until a game has been registered. For this purpose I provide the back or base plate upon which said pointer is secured with a pawl arranged to engage with the teeth in a fixed rack, so that although said pawl offers no impediment to the forward travel of said pointer, it will effectually prevent it being moved backward to the starting point, after it has engaged in the first tooth of said rack until the whole number constituting the game has been registered and the said pointer has travelled to the point where the said pawl is automatically reversed. The ends of the rack are made with deep recesses, into which the pawl drops and is thereby reversed, enabling the pointer to be moved back again to the starting place.

My improved billiard scoring board also comprises one or more gongs, which is or are arranged in such a position as to be operated by the travel of the pointer. The striker or hammer of said gong being operated by a pawl or projection attached to said pointer. The numbers over which the recording pointers are arranged to slide instead of being flush with the surface of the board, are painted or otherwise formed upon the surface of a shallow groove or recess, the effect being that the pointers in traveling over the numbers do not come into contact with, and therefore do not scratch or otherwise disfigure them. I provide a slate either upon the back of each of the doors used for covering the index dial or

numbers for indicating the total number of games registered, or else in some place that will be covered by said doors when they are closed. By this means the proprietor of the table is enabled to note the number indicated by the dial and then to lock the doors so that it is impossible for unauthorized persons to tamper with the record on the slate. All that is necessary to enable the proprietor to see what amount is due to him is to note the state of the indicator and to subtract the number previously noted from the number registered, which will of course give him the number of games registered since last noting the record.

Referring to the accompanying drawings,—Figure 1 is a front elevation of a combination billiard scoring board constructed according to my invention. Fig. 2 is a front elevation of another arrangement of billiard scoring board constructed according to my invention. Fig. 3 is an elevation of the back of the apparatus shown in Fig. 2. Fig. 4 is a horizontal section on line 4—4, Fig. 3. Fig. 5 is a similar view to Fig. 3, but drawn to a larger scale in order to better illustrate the construction of my improved billiard scoring board. Fig. 6 is a vertical transverse section on line 6—6, Fig. 5. Fig. 7 is a vertical transverse section on line 9—9, Fig. 2.

The same letters of reference indicate the same parts in all the figures.

A—A' represent the upper and lower racks corresponding with the two rows of numbers illustrated in Figs. 1 and 2, while B—B'—B<sup>2</sup>—B<sup>3</sup> (Figs. 1 and 2) represent the pointers which are arranged to slide over the recording numbers to enable the progress of the game to be marked, as will be well understood, said numbers being preferably arranged in two rows, the first being from 1 to 50 and the second or lower row from 51 to 100. B'—B<sup>3</sup> of the two pairs of pointers being distinguished by a white spot or otherwise from the other two pointers as in the ordinary manner. The lower pointer B' of the upper pair is provided with a base plate *b* having an upwardly projecting pawl *c* which is arranged to contact with the striker or hammer *c'* of a gong *C* mounted upon the framing of the scoring board, as illustrated in Figs. 3 and 5, so that as said pointer B' reaches near the end of its travel, said pawl



or projection  $c$  will contact with and operate said hammer  $c'$  so as to cause the gong C to sound, and thus notify to the spectators that one game has been registered. The projection or pawl  $c$  is kept in its projected position by a small spring  $c^2$  and stud  $c^3$ , as illustrated in Figs. 3 and 5, and of course will only operate said striker or hammer so as to cause it to sound the gong when traveling toward the finishing end of the register, as will be well understood. A depending pawl or catch  $a$  is suspended on a pivot from the lower end of the base plate  $b$  and is arranged to engage with the teeth or recesses  $a'$  in the rack A so that when once the said depending pawl or catch has passed into engagement with the first recess it will be impossible to replace the pointer B' at the starting point till the direction of the pawl or catch has been reversed by dropping into the large recess  $a^4$ . To insure the hook  $d$  in said pivoted catch or pawl moving the tooth D in the ratchet, I provide a small spring  $a^2$ , as illustrated in Figs. 3 and 5.

D represents one of the teeth of a ratchet wheel with which a hook  $d$  formed on the said pawl  $a$  engages as the pointer B' travels along the register, said ratchet wheel being connected through the medium of suitable gearing with one of the index fingers  $d'$ , Figs. 1 and 2, which is arranged to indicate upon a dial  $d^2$  the number of games played. The base plate of the pointer B<sup>2</sup> of the lower row is also provided with a pawl or projection  $c$ , spring  $c^2$ , stud  $c^3$  and a depending pawl or catch  $a$ , which latter is arranged to engage with the teeth or recesses  $a'$  in the rack A', but is not provided with a hook  $d$  because it is not required to operate the tooth of a ratchet wheel as in the former case, said tooth in this instance being operated by the pawl or projection  $c$  which also serves to actuate the lower gong.

E, Figs. 1 and 2, represents the piece of slate which is secured either to the back of the door  $e$  or else is let into some part of the framing of the apparatus so as to be covered by the door  $e$  when the latter is closed. This slate serves to enable the proprietor of the billiard table to note the number of games that have been registered and therefore the amount of money due to him when next he inspects the register.

F—F, Figs. 1, 2, and 6, represent the shallow grooved or recesses in which the recording numbers are printed, painted or otherwise formed, the object of employing said grooves for this purpose being to prevent the pointers B—B'—B<sup>2</sup>—B<sup>3</sup> rubbing said numbers off the board or damaging same.

G, Figs. 1, 2 and 9, represents a small groove adapted to receive a small piece of pencil, said groove being formed either in the framing of the register which is covered over by the door  $e$ , as shown in Fig. 1, or else in the lower part of the framing of the door  $e$  beneath the slate E, as in Figs. 2 and 9.

Instead of an index finger  $d'$ , a dial or bar-

rel may be arranged so that its numbers show through a slot or openings in the scoring board in a manner that will be well understood.

From the foregoing description it will be obvious that when either of the pointers B' or B<sup>2</sup> has once been shifted forward to allow the depending pawl or catch  $a$  to engage in the first tooth of the first recess in the rack A or A', it will be impossible for the marker or players to replace it at its starting point until the whole of the game has been scored. It is moreover impossible to sound the gong without first passing the tooth D and registering a game on the index dial for each time the gong is sounded and spectators will know the gong should be sounded for each fifty in billiards. Just as the striker or hammer  $c'$  is made to sound the gong C, the depending pawl or catch  $a$  engages in the tooth of the recess  $a'$ , and it is necessary to reverse this pawl in the large recesses  $a^4$  and  $a^3$  before the gong can be sounded again and thus register a game on the index dial for each ring of the gong in a manner that will be well understood.

Receipts from other games, such as pool, can be registered on my apparatus if the marker is instructed to register a game on the receipt of every sixpence or other definite sum, such for instance as the amount received for a single game of billiards.

By means of the slate E, adapted to be closed in or covered by the door  $e$ , the proprietor, can keep conveniently a private record of the number of games registered, and thus be enabled to readily calculate the amount due to him from players or marker.

The teeth or recesses  $a'$  nearest the registering dial and the slot on either side of the ratchet tooth D (Figs. 3 and 5) in the apparatus are so arranged that the pawl or projection  $c$  of B<sup>2</sup> or depending pawl or catch  $a$  of B' can only be made to register one game on the dial during the time the pointer B' or B<sup>2</sup> has been away from the starting point, as can be readily understood. When the pointer B' or B<sup>2</sup> has been to the finishing end of the board, and has been moved backward toward the starting point to a point where the depending pawl or catch  $a$  enters the nearest recess  $a'$  to the finishing end, it is impossible to replace it again at the finishing end till it has traveled the whole distance to the starting point to allow said depending pawl to be reversed.

During the progress of the game, the pointer B' or B<sup>2</sup> may be put back eight or nine points in some cases, till the point of the depending pawl or catch  $a$  comes against the end of one of the recesses in the rack A or A', as will be readily understood by referring to Figs. 3 and 5. The number of teeth or recesses in the rack A or A' may be more or less than shown; where desired more can be readily made or closed by inserting a small filling piece, as shown at  $a^5$  in Fig. 5, to suit the requirements of proprietors.

Where the pointers of the board are used



for registering points in other games, the first recess or tooth *a* is closed in this manner, as shown in said Fig. 5.

Having now particularly described and as-  
 5 certain the nature of my said invention and in what manner the same is to be performed I declare that what I claim is:—

1. In a billiard scoring board, the combina-  
 10 tion of a rack provided with notches or recesses and a ratchet wheel connected with the rack intermediate of its ends, with a pointer, having motion along the rack, provided with a gravitating pawl adapted to trail over the recessed face of the rack and over the ratchet  
 15 wheel, said pawl engaging a recess and locking the pointer against motion when the movement of said pointer is reversed before it reaches the end of the rack, for the purpose set forth.

2. In a billiard scoring board, the combina-  
 20 tion of a rack provided with notches or recesses, and a bell hammer near one end of said rack, with a pointer having motion along the rack provided with a pawl adapted to engage  
 25 the bell hammer when the pointer moves in one direction, and with a gravitating pawl adapted to trail over the recessed portion of said rack engage one of the recesses and lock the pointer against motion whenever its di-  
 30 rection of motion is changed before it reaches the end of the rack for the purpose set forth.

3. In a billiard scoring board, the combina-  
 tion of a rack provided with notches or re-  
 cesses, a ratchet wheel mounted in the rack  
 intermediate of its ends, and a bell hammer 35  
 near one end thereof, with a pointer having motion along the rack provided with two pawls one of which engages the bell hammer, the other trailing over the notched or recessed face of the rack and engaging the ratchet  
 40 wheel when the pointer is moved in one direction said notches or recesses arranged to lock the pointer against movement in a reverse direction and means at each end of the rack for changing the position of the locking  
 45 pawl to permit the reversal of the motion of the pointer, for the purpose set forth.

4. In a billiard scoring board, the combina-  
 tion with a registering mechanism, a register-  
 ing dial and hand on the front face of the  
 scoring board, and a movable pointer for op- 50  
 erating said registering mechanism, of a cover for said dial and hand provided with a slate and chalk receptacle on its inner face and a  
 lock for locking said cover to the board, for 55  
 the purpose set forth.

RODERICK NICHOLSON MONTGOMERY.

Witnesses:

WALTER SMYTHE BAYSTON,  
 EDWIN WILSON.