(No Model.)

G. C. BATEMAN.

GAME COUNTER FOR BILLIARD TABLES.

No. 451,993. Patented May 12, 1891.

Fig. 1.

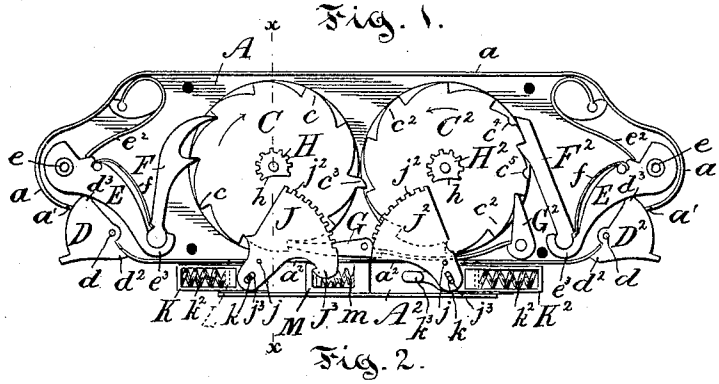


Fig. 2.

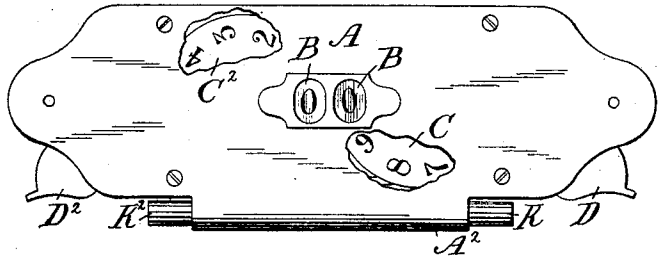


Fig. 3.

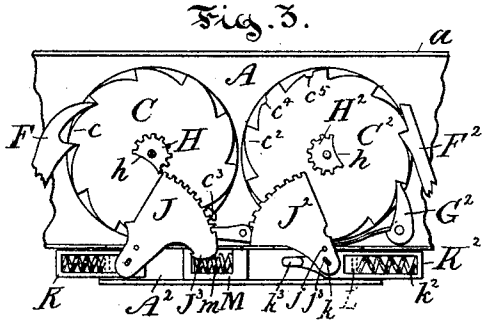


Fig. 4.

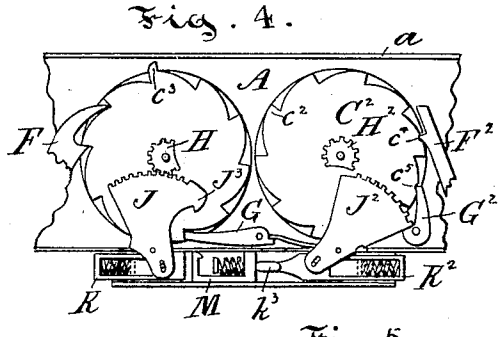


Fig. 6.

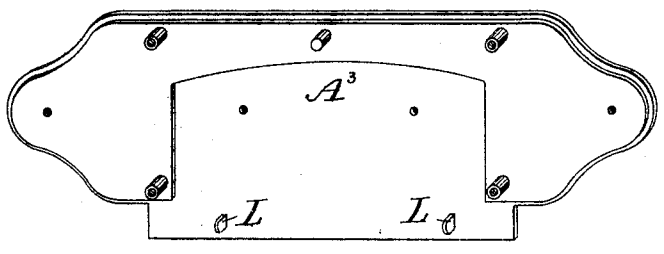
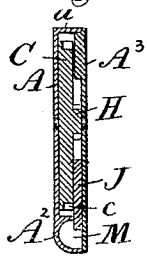


Fig. 5.



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UNITED STATES PATENT OFFICE.

GEORGE CHARLES BATEMAN, OF HALIFAX, CANADA, ASSIGNOR OF ONE-HALF TO RICHARD SHEPEARD, OF SAME PLACE.

GAME-COUNTER FOR BILLIARD-TABLES.

SPECIFICATION forming part of Letters Patent No. 451,993, dated May 12, 1891.

Application filed December 29, 1890. Serial No. 376,009. (No model.)

To all whom it may concern:

Be it known that I, GEORGE CHARLES BATEMAN, of the city and county of Halifax, in the Province of Nova Scotia, Canada, have invented certain new and useful Improvements in Billiard-Markers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to devices for indicating the number of points made by a player in a game of billiards or the like.

The object of this invention is to improve the construction of this class of devices, and obviate the necessity of moving the dials round one unit at a time when the game is finished, if the game should be for less points than one hundred, and return both dials to zero, together with sundry details hereinafter set forth, and specifically pointed out in the claims.

In the drawings, Figure 1 is a view of this device from the back, the cover being removed. Fig. 2 is a front view of the same, parts of the case being broken out to show the interior. Fig. 3 is a view of a portion of Fig. 1, showing the dials in a different position. Fig. 4 is a similar view showing part of the mechanism for returning the dials to zero in operation. Fig. 5 is a section on line x x, Fig. 1, and Fig. 6 is a view of the cover.

The casing A is provided with a rim a sufficiently deep to allow the mechanism room to operate freely. Apertures a' a' and a^2 a^2 are formed in the rim. Below this casing and attached thereto is a semi-cylindrical casing A^2, open at each end. The cover or back A^3 conforms to the outline of the casing A A^2, and is adapted to be secured thereon by screws, rivets, or the like. The casing is provided with two glazed apertures B B, placed side by side in the center of the casing, and through which the numerals on the dials to be hereinafter described may be seen.

Two dials C C^2 are journaled in the casing and cover, each having upon its front surface a series of digits from 0 to 9, those on the dial C representing units and those of C^2 the tens as they pass the apertures B B when revolved. On the peripheries of each of these dials are formed ten teeth c and c^2, respectively. These teeth extend from the back of the dials to near the face. A projection c^3 on one of the teeth c of the unit-dial C is so formed that every revolution of the said dial on this projection c^3 engages one of the teeth c^2 and moves it the space of one-tenth of the circumference—that is, registers one digit higher. With this exception the dials revolve independently of each other. Two indentations c^4 and c^5 are formed on two adjoining teeth of the dial C^2, the object of which will be hereinafter described.

D D^2 are two levers projecting through the apertures a', formed at either side of the casing and adapted to be operated from the outside. These levers are fulcrumed on pins d. Shoulders d^2 are formed, which abut against a portion of the rim a and hold the levers in position, and shoulders d^3 are provided, which abut against and operate the levers E E, fulcrumed on the internally-threaded bosses e and are held down by the springs e^2. The lower ends of these levers are provided with segmental jaws e^3, in which are held the lower parts of the spring-actuated dogs F F^2, the spring f for actuating these jaws being secured to the levers E. Two spring-actuated pawls G G^2 hold the dials in position when any movement has been given thereto by the dogs F F^2.

The operation of the device, as far as described, is as follows: When a score has been made, the lever D is pushed up as many times as the points scored, operating the lever E, and the dog F turning the unit-dial C as many points as desired in the direction of the arrow. When 9 has been registered by the unit-dial, the projection c^3 comes in contact with a tooth of the dial C^2 and causes it to revolve, so as to register 1 and the unit-dial C to register 0, thus making 10. If more than ten points have been scored in one brake, the lever D^2 is operated, causing the dial C^2 to revolve.

From the foregoing statement it will be seen that if the game played was for thirty-one points it would be necessary to operate the lever D nine times and the lever D^2 six times, in order to make the dials register zero

for the commencement of a fresh game. In order to obviate this, the following mechanism is introduced:

On the axles of each of the dials C C^2 are formed toothed disks H H^2, a portion of each being cut away at *h*. Two levers J J^2 are fulcrumed on pins *j*, formed in the apertures a^2 of the rim *a*. These levers are provided with segmental racks j^2, adapted to engage the toothed disks H H^2. The lower parts of these levers J J^2 project through the rim *a* into the semi-cylindrical casing A^2, and are provided with slots j^3. These slots are engaged by pins *k* on the slides K K^2. These slides project from either side of the casing A^2, and are provided with spiral springs k^2, which abut against lugs L, formed on the cover A^3.

The segmental portion of the lever J is produced and formed into a hook J^3. This hook is adapted to be engaged by a sliding catch M, operated by a spring *m*. This catch M is disengaged from the hook J^3 by a projection k^3, formed on the slide K^2.

The operation of this latter part of the device is as follows: In Fig. 3 the dials are shown in the position in which they are when 31 is registered. When it is desired to bring them to the positions shown in Figs. 1 and 2—that is, registering 0 0—both slides K K^2 are pressed. The slide K^2 operates first, K being held by the spring-catch M, and by means of the lever J^2, engaging the toothed disk H^2, the dial C^2 is brought to the position shown in Fig. 4, at which point the teeth of the segmental rack of the lever J^2 are out of engagement with the disk H^2 and the lever is free to return to its original position, passing the portion *h* of the disk H^2, the dog F^2 and pawl G^2 engaging the indentations c^4 and c^5, holding the dial in that position. In pressing in the slide K^2 the projection k^3 has moved the sliding catch M and disengaged it from the hook J^3 of the lever J, allowing the slide K to be pressed in and the segmental rack to engage the teeth of the disk H, (shown in operation in Fig. 4,) which revolves the dial C until the projection c^3 engages one of the teeth of the dial C^2 and brings both of the dials to register zero, as shown in Figs. 1 and 2. The lever J and slide K are then free to return to their original positions.

I am aware that billiard-markers have been heretofore in use having two revolving dials, one adapted to register the units and the other the tens, and such I do not broadly claim.

I claim as my invention—

1. The combination, in a billiard-marker, with a casing and cover in which are journaled two revolving dials, one registering units and one tens, having teeth on their peripheries operated by spring-actuated dogs held by spring-actuated levers, of the levers D D^2, projecting through the rim of the said casing, fulcrumed on pins *d*, and having shoulders d^3, adapted to abut against and operate the said spring-actuated levers, and shoulders d^2, substantially as set forth.

2. The combination, in a billiard-marker, with the casing A, rim *a*, having apertures a' a' and a^2 a^2, cover A^3, glazed apertures B B, toothed dials C C^2, each having a series of digits on their front surfaces, and means for revolving the said dials, of the projection c^3 on one of the teeth of the dial C, the indentations c^4 c^5 on two adjoining teeth of the dial C^2, adapted to be engaged and held by the dog F^2 and pawl G^2, the semi-cylindrical casing A^3, the toothed disks H H^2, each having a portion *h* cut away, formed on the axles of the said dials C C^2, levers J J^2, having segmental racks adapted to engage the said disks H H^2, the spring-slides K K^2, engaging and operating the said levers, the hook J^3 on the lever J, adapted to be engaged by the spring-catch M, the spring-catch M sliding in the semi-cylindrical casing A^3, and the said slides K K^2 projecting through the open ends of the said casing A^3, substantially as and for the purpose set forth.

3. The combination, in a billiard-marker, with the revolving dials journaled in a suitable casing, one having digits representing units and the other having digits representing the tens on their front surfaces, and means for revolving the said dials one unit at a time, of toothed disks formed on the axles of the said dials operated by segmental racks on levers suitably operated, the said levers and disks being adapted to revolve the said dials from registering any number to register zero, substantially as set forth.

Signed at Halifax this 3d day of December, 1890.

GEORGE CHARLES BATEMAN.

In presence of—

JOHN P. FEGAN,

WILLIAM Q. GENGE.