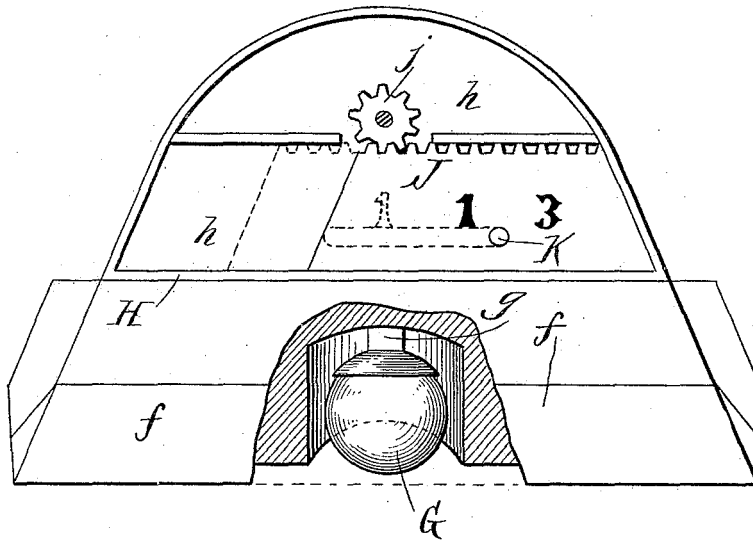
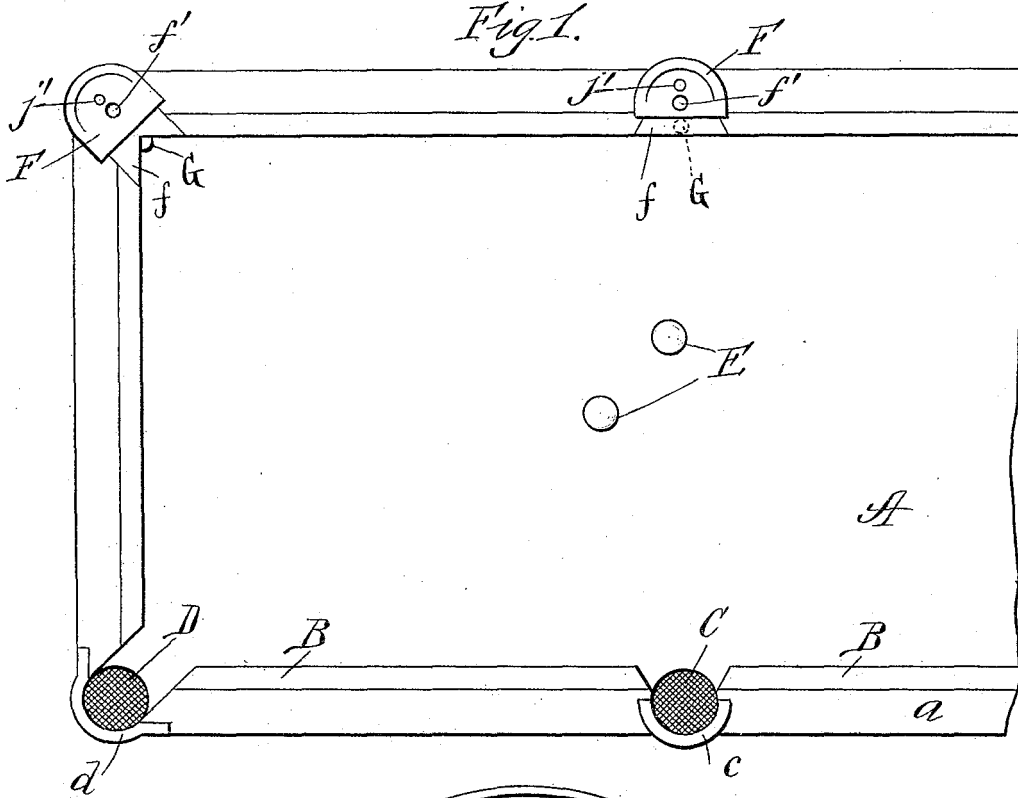


C. W. GOETZE & A. KNOPP.
BILLIARD OR POOL REGISTER.

No. 523,468.

Patented July 24, 1894.



Witnesses:
 W. C. Coyle
 Jno. A. Christianson.

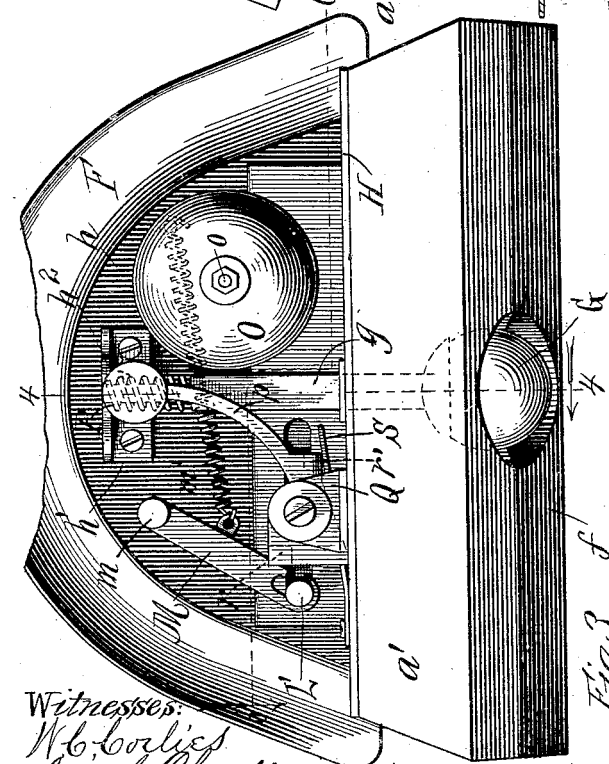
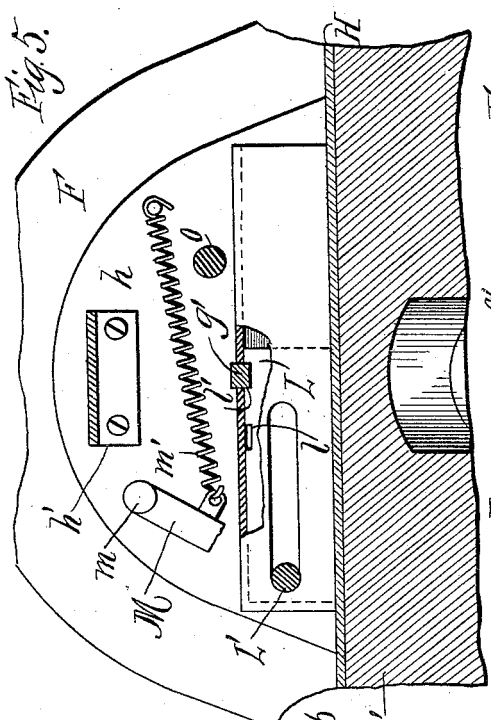
Fig. 2.

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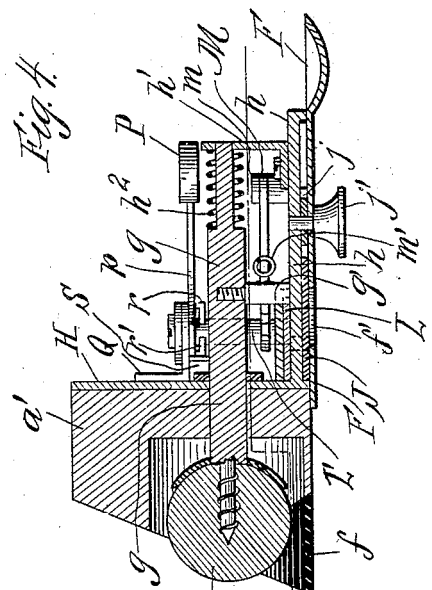
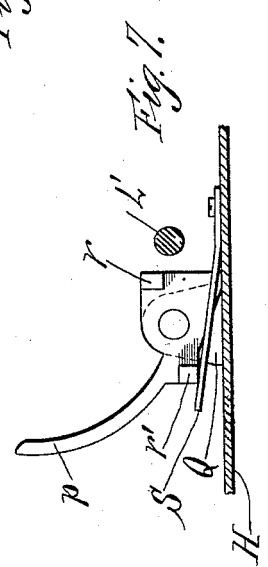
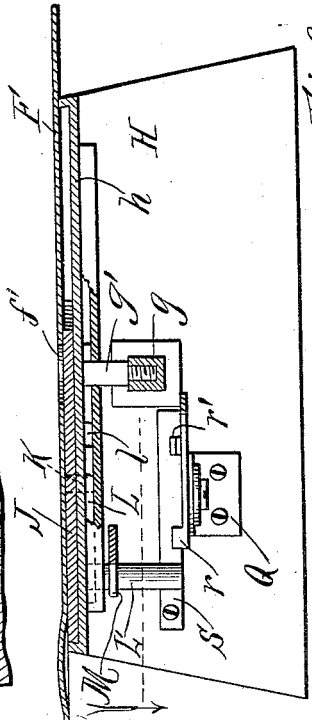
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UNITED STATES PATENT OFFICE.

CARL W. GOETZE AND AUGUST KNOPP, OF CHICAGO, ILLINOIS.

BILLIARD OR POOL REGISTER.

SPECIFICATION forming part of Letters Patent No. 523,468, dated July 24, 1894.

Application filed March 30, 1894. Serial No. 505,683. (No model.)

To all whom it may concern:

Be it known that we, CARL W. GOETZE and AUGUST KNOPP, citizens of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Billiard or Pool Tables; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

Our invention relates to billiard and pool tables and its object is to provide a mechanical counter which may be placed permanently in the pocket recess in the rail of a common pool table so that the points of the game will be recorded without removing the balls from the table, and the table will be adapted as well for the game of billiards.

The invention consists in the use of a block adapted to fit within the pocket recess of the rail and having a rubber faced plunger which when struck by a ball causes a bell to sound and shifts a recording plate, the head of the plunger being set within a recess in the cushion so that it will not change the angle of the ball.

In the drawings we show, in Figure 1, a plan view of a pool table, our attachment being applied to some of the pockets; Fig. 2, a plan view of the attachment with its upper plate removed; Fig. 3, a bottom plan of the attachment showing the operating mechanism; Fig. 4, a sectional view on the line 4—4 of Fig. 3. Fig. 5, is a bottom plan of the attachment with some of the parts removed. Fig. 6, is a sectional view on the line 6—6 of Fig. 3. Fig. 7, is a detail section on the line 7—7 of Fig. 6.

The bed of the table is shown at A; its cushion at B, and its rail at, *a*. A side pocket is represented at, C, and a corner pocket at, D, the guard or rails for the pockets being indicated at, *c*, *d*. Billiard balls are shown at, E.

The attachment forming the subject of the invention is covered by a metal plate, F, conforming to the general contour of and adapted

to rest upon the rail, *c*, or *d*,— the attachment being necessarily in two forms for use in connection with side and corner pockets.

The pocket recess in the cushion, B, is filled by a short piece of cushion, *f*, adapted to form a continuation of the cushion, B, and a block, *a'*, for supplying a back for the cushion. The piece of cushion, *f*, is centrally recessed to accommodate a rubber ball, G, whose face is a short distance back of the extreme edge of the cushion piece, and which forms the head of a plunger, *g*, extending through the block, *a'*, and carried by a metal plate, H, attached to the block, *a'*, and by a hanger, *h'*, depending from a lateral extension, *h*, of the plate, H. The inner end of the plunger, *g*, carries a spiral spring, *h²*, which bears against the hanger, *h'*, and reacts upon a shoulder of the plunger holding the ball, G, in its position as described.

The plate, *h*, is immediately below the plate, F, and spaced apart from it sufficiently to accommodate a rack plate, J, which reciprocates upon the plate, *h*, transversely to the plunger, *g*, and immediately back of the plate, H. A pinion, *j*, co-operates with the rack plate, J, and is carried by the stem of a button, *j'*, located above the plate, F.

A slide plate, L, is carried in suitable ways along the under side of the plate, *h*, directly below and parallel with the plate, J, these two plates being united by a stud, K, for the accommodation of which a slot is formed in the plate, *h*. The plate, L, has two recesses in its rearward edge, indicated at, *l*, *l'*, and a dog, *g'*, carried by the plunger, *g*, is adapted to engage these recesses when the ball G, is in its advanced position.

A post, L', projects downwardly from the plate, L, and a swinging arm, M, pivoted to the plate, *h*, at, *m*, bears against the post and is held thereto by a spring, *m'*, attached to the arm and to the plate, *h*.

The rotation of the button, *j'*, carries the plates, J, L from their normal position, against the resistance of the spring, *m'*. The dog, *g'*, falls into the recess, *l*, as it passes but recedes therefrom as the plate continues to advance and falls into the recess, *l'*, the configuration of the dog being such that it forms no obsta-

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ele to the movement of the plate, L, against the spring, *m'*, but locks it from returning with the spring.

A quick blow, as the percussion of a billiard ball, upon the ball, G, releases the dog from the recess, *l'*, and the plate, L, is carried by the spring, *m'*, but stopped by the engagement of the dog with the recess, *l*. A second blow upon the ball, G, releases the plate, L, again and it is carried back to its normal position.

The upper surface of the plate, J, carries a series of indicating characters, in the drawings the numerals, 1 and 3, are shown. The plate, F, is apertured to show these numbers when the plate, J, is in certain positions. Normally the figure 3 appears before the aperture, *f'*. When the plate, J, is moved back so that the dog, *g*, engages the recess, *l*, the figure, 1, shows at the aperture. Further movement of the plate, J, again hides this figure and it reappears at the first blow upon the ball, G; the second blow restoring the figure, 3, to the aperture, *f'*. The indicating characters and the recesses, *l*, *l'*, must, of course, be located with reference to each other.

An audible signal of the contact of the billiard ball, E, with the plunger head, G, is provided and consists of a bell, or gong, O, carried by a post, *o*, set in the plate, *h*, and sounded by the following described mechanism. A hammer, P, co-operates with the bell, O, and is carried by a stem, *p*, pivotally attached to a hanger, Q, secured to the plate, H. The hub of the stem, *p*, has two lugs, *r*, *r'*, both so located as to be struck by the post, *L'*, as it travels with the plate, L. The quick contact of the post, *L'*, with either of these lugs throws the hammer, D, against the gong, Q. A retracting spring, S, tends to hold the hammer, P, back from the gong.

The recess in the cushion, F, should be as small as possible consistent with the proper accommodation of the ball G, so that it will offer no serious obstacle to the use of the table for the game of billiards. The numerals shown upon the several attachments in use upon a table may differ, and serve for the purpose of scoring the points made by the player. Before each player commences an inning he turns back the plate, J, so that each contact with one of the balls, G, will actuate the mechanism it controls. It is obvious that the number of the recesses in the plate, L, may be varied, the numerals on the plate being correspondingly varied.

It is desirable that the ball, G, be of different color from the cushion so that the player may see it plainly.

It is obvious that the attachment described may be built into the rail of a billiard table not provided with pocket recesses without departing from the scope of our invention, the essence of which is that a plunger is housed within the cushion in such manner as to be struck by a ball rolling on the table, and

mechanism is provided to act in conjunction with the plunger for announcing the impulses it receives from such contact. The indicating characters may be used without the audible signal or the latter may be used without the former. Neither do we limit ourselves to the precise manner of connecting the plunger with the indicating mechanism.

We claim as our invention—

1. The combination with a billiard or pool table having pocket recesses in its rail, of blocks for closing such recesses said blocks each having a plunger set in its face, and mechanism connected with the plunger for recording its impulses, substantially as described and for the purpose specified.

2. The combination with a billiard, or pool, table of a plunger projecting through the cushion, and mechanism for recording the impulses of the plunger, substantially as described and for the purpose specified.

3. The combination with a billiard, or pool, table, of a plunger set in the cushion of the table and extending within the rail, a sliding plate having indicating characters an apertured plate for covering the sliding plate and exposing its characters to view, and mechanical connection between the sliding plate and the plunger whereby the former is caused to move by the impulses of the latter, substantially as described and for the purpose specified.

4. The combination with a block adapted to close the pocket aperture of a pool table and having its face cushioned and centrally recessed, of a plunger adapted to reciprocate within the block and having a cushioned head located within the block recess, a retracting spring for forcing the plunger forward, a dog carried by the plunger, an indicating plate, J, adapted to reciprocate transversely to the plunger and having recesses for the engagement of the dog, a covering plate having an aperture for revealing the indicating characters, a rack and pinion for moving the plate, J, a retracting spring for restoring said plate to its normal position when released by the dog, and a gong, or bell, adapted to be sounded by the action of the plunger, substantially as described and for the purpose specified.

5. The combination with a billiard or pool table, of a plate, F, having an aperture, *f'*, a spring actuated plate, J, adapted to slide below the plate, F, and having a series of indicating characters so arranged as to register with the aperture, *f'*, and having a series of recesses or notches corresponding in number and relative position with the indicating characters, a spring returned plunger projecting through the cushion of the table and adapted to engage the recesses or notches in the plate, J, and to be disengaged therefrom by pressure on its outer end, substantially as described and for the purpose specified.

6. The combination with a billiard or pool table of a plunger projecting into the rail and

having its head inclosed in a recess in the cushion, a spring for restoring the plunger to its normal position after being forced in by pressure on its head, and a gong adapted to be sounded by an in-thrust of the plunger, substantially as described and for the purpose specified.

In testimony whereof we affix our signatures in presence of two witnesses.

CARL W. GOETZE.
AUGUST KNOPP.

Witnesses:

LOUIS K. GILLSON,
M. H. L. WING.