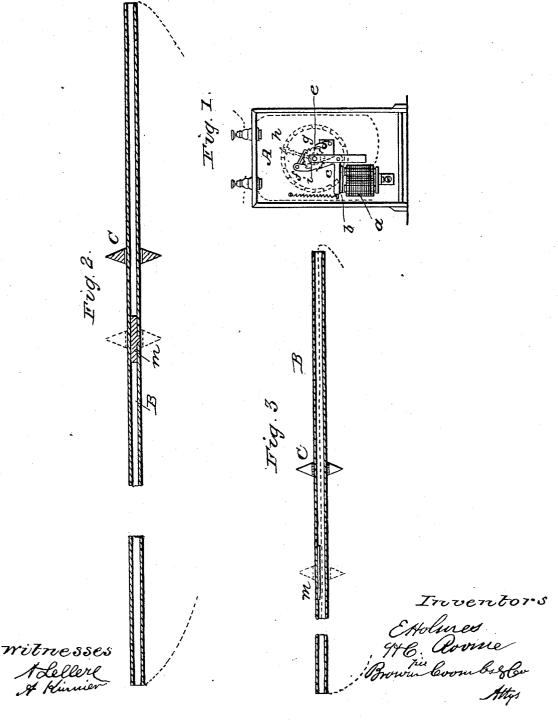
HOLMES & ROOME. Billiard Register.

No. 87,674.

Patented March 9, 1869.



United States Patent Office.

E. HOLMES AND H. C. ROOME, OF NEW YORK, N. Y.

IMPROVEMENT IN BILLIARD-GAME REGISTERS.

Specification forming part of Letters Patent No. 87,674, dated March 9, 1869.

To all whom it may concern:

Be it known that we, E. Holmes and H. C. ROOME, both of the city, county, and State of New York, have invented a new and useful Billiard-Game Register; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification.

The object of this invention is to provide for the accurate registration of the number of

games played upon a billiard-table.

The invention consists in an electro-magnetic register located at any desirable distance from the billiard-table, and operated by a galvanic battery the circuit of which is opened and closed by the movement of a button or its equivalent along the string on which the progress of games is marked.

Figure 1 represents a rear-elevation view of our billiard-game register with back casing removed, illustrating the interior works thereof. Figs. 2 and 3 represent longitudinal sections of the string or wire upon which the buttons or counters are carried, illustrating two of the many different ways of opening and closing the electric circuit thereon.

Similar letters of reference indicate corre-

sponding parts in the several figures.

Referring to the accompanying drawings, A is the register, composed of a magnet a, armature b, lever c, reciprocating pawl d, and ratchet e. The lever c is provided with an upward extension or arm, f, but may be constructed of other desirable formations for carrying the pawl d, which is connected by a pivot to the said extension f, and is provided with a drawing-tooth or hooked projection, g, which, upon motion of the lever c, engages with the teeth of the ratchet e, secured upon an indexoperating arbor, i, and which communicates motion to the index h, which revolves around a suitable dial. (Illustrated upon the opposite side of the register, as indicated by dotted lines at Fig. 1.)

p is a pawl with its point engaging with the teeth of the ratchet e to prevent backward rotation of the same, and to prevent it from being moved forward more than one tooth at a

time by the pawl d.

B, Fig. 2, is the string or button-wire of a marking apparatus, such as is commonly used for marking the game of billiards. This may be composed of small metal tubing or hollow wire, or it may be composed of the ordinary solid wire commonly used for the purpose by having inserted at some suitable locality therein a section of tubing or hollow wire of sufficient length for carrying out the invention. The extremities of this string B are connected with the poles of a battery; but for the purpose of interrupting the current from the battery, and forming what is known as a "circuitbreaker," the string is separated transversely at a suitable point in its length, and a short section, m, of gutta-percha or other suitable non-conducting material is inserted. Upon this string or button-wire B, and suitably located among the numerous buttons or counters commonly employed, is a button or counter, C, composed of a metallic or other suitable conducting material; or it may be composed of the same material as the other buttons or counters, but having a metallic or conductinglining, so that when it is made to slide over the circuit-breaker m it overlaps the same and establishes a metallic connection between the separated ends of the metal tube or wire and closes the circuit, thereby causing the charging of the magnet a, which registers the game by its attraction of the armature b, and consequent action of the pawl d upon the ratchetwheel e, which moves the index h upon the dial.

A different manner of effecting the insulated joint is illustrated at Fig. 3. B is the tube or section of tube; C, metallic-lined button or counter, and m the non-conducting material

or insulated joint.

Instead of separating the tube B, as in Fig. 2, a longitudinal section of suitable length is removed, and one of the wires of the battery is secured to the inner surface of said section, and, being properly insulated, is inserted through the opening in the tube caused by the removal of the said section, and is caused to pass through the cavity of the tube and out at one of its extremities, finally connecting with the battery. The said removed section is then adjusted to the place within the tube from whence it was removed, but insulated from the main

tube by the layer m of gutta-percha, or other suitable insulating substance. In this way more strength of the tube is preserved, while a more certain registration is effected by a more prolonged connection being kept up during the greater sliding distance of the button upon the longitudinal section of the tube.

We do not confine ourselves to any particular construction of the circuit-breaker in the string, as it is obvious that this may be considerably varied without changing the char-

acter of the invention; but

What we claim as our invention, and desire to secure by Letters Patent, is—

A register for games of billiards, consisting

of an index capable of being actuated by an electro-magnet, with whose poles the string of the marking apparatus is connected, a circuit-breaker in the said string, and a button or its equivalent, which, by its passage along the string and over the circuit-breaker, completes the circuit through the string and magnet, the whole operating substantially as herein specified.

E. HOLMES. H. C. ROOME.

Witnesses:

S. M. OSTRANDER, G. W. BUCHANAN.