

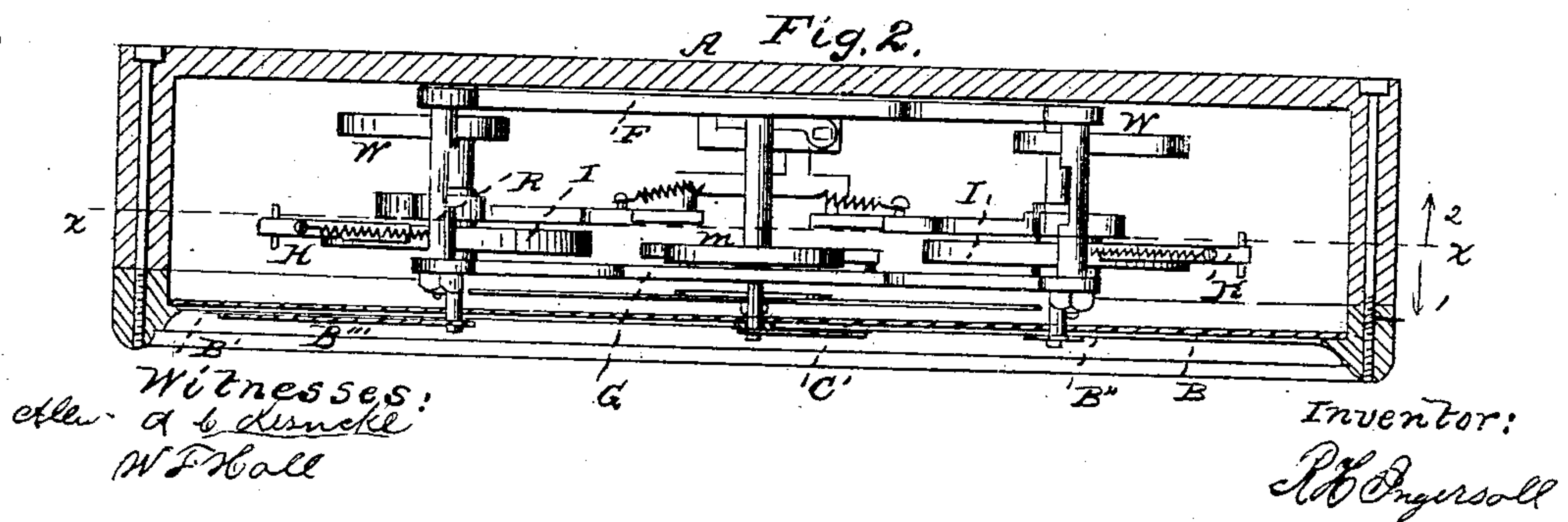
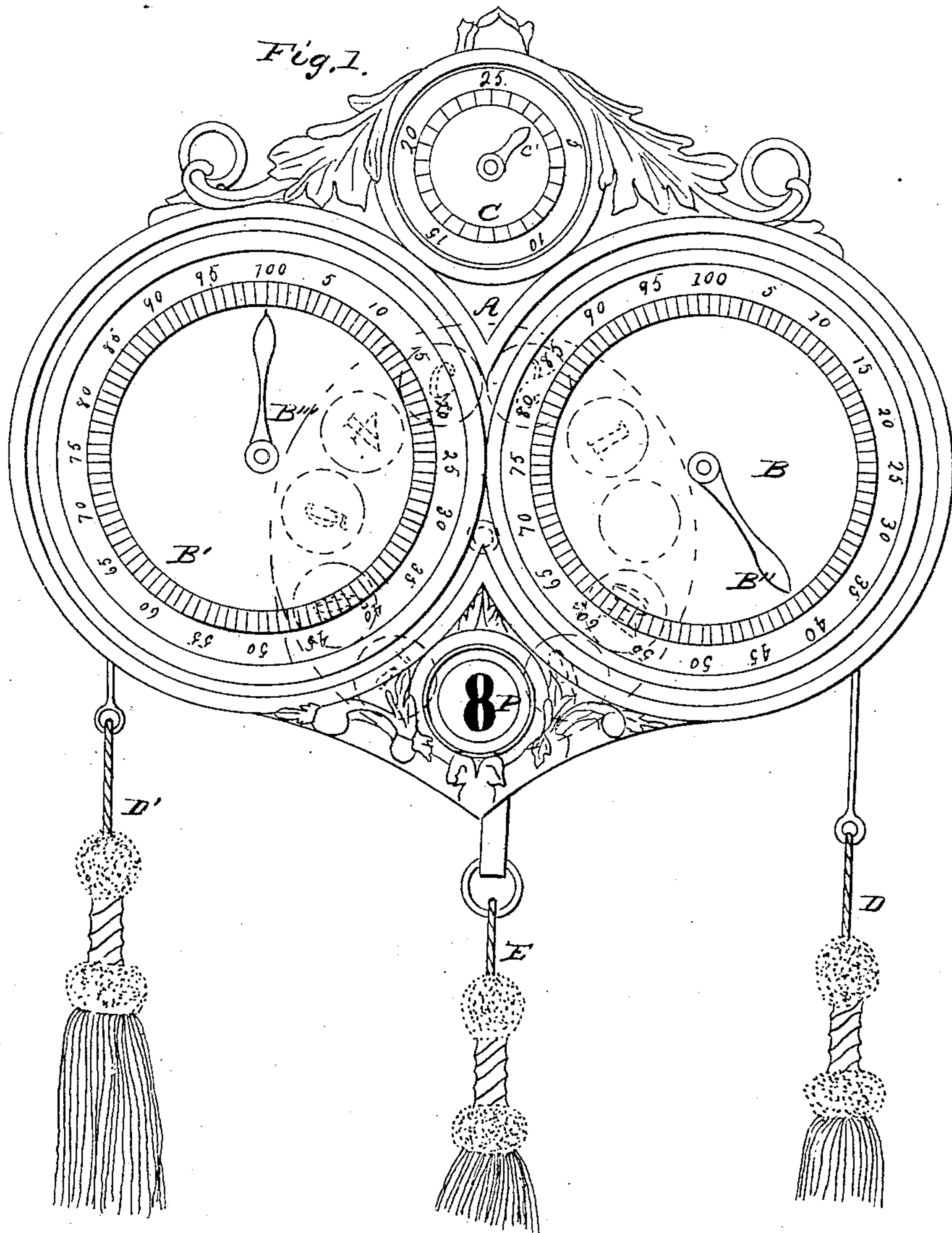
R. H. INGERSOLL.

2 Sheets—Sheet 1.

Billiard Register.

No. 52,417.

Patented Feb. 6, 1866.

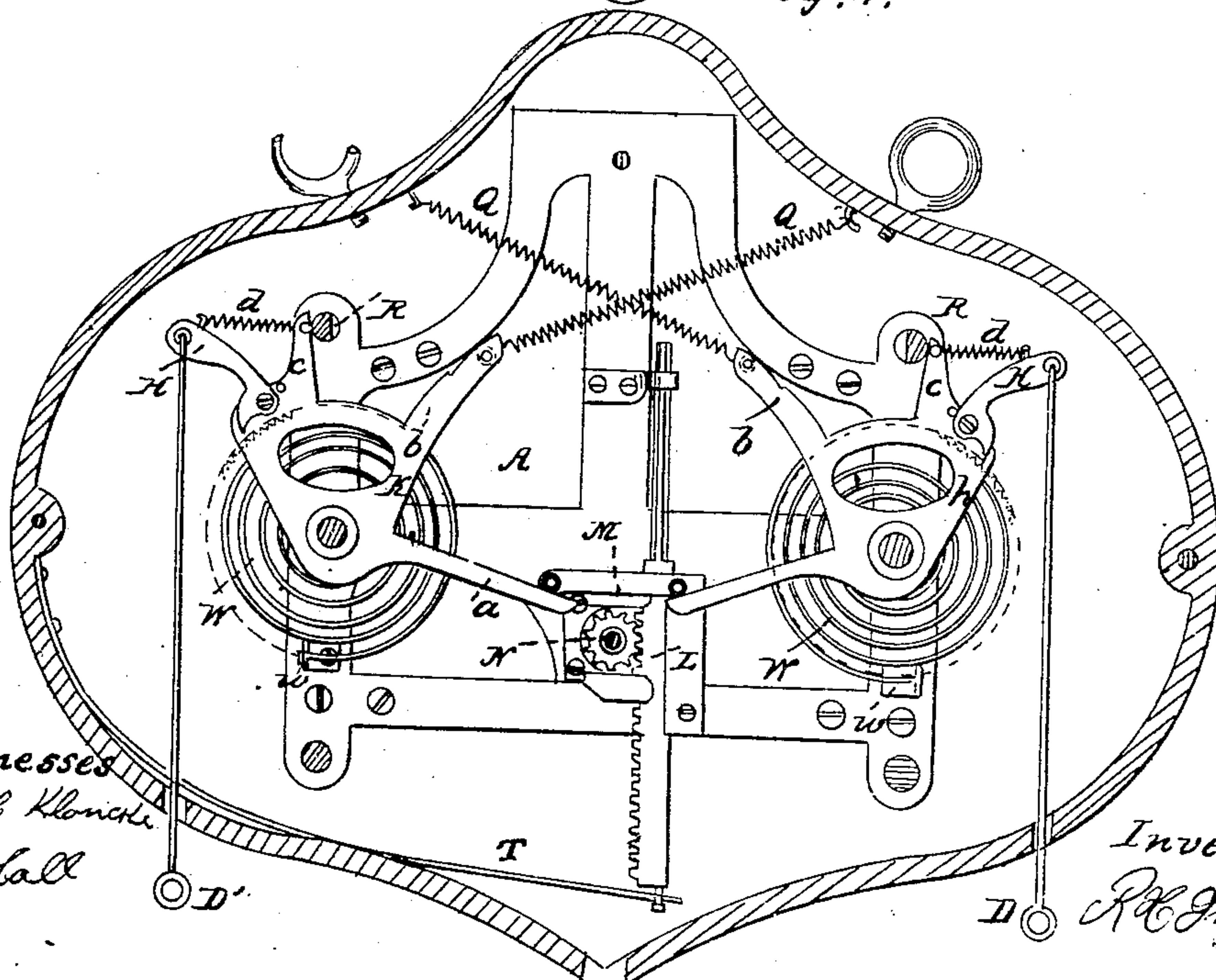
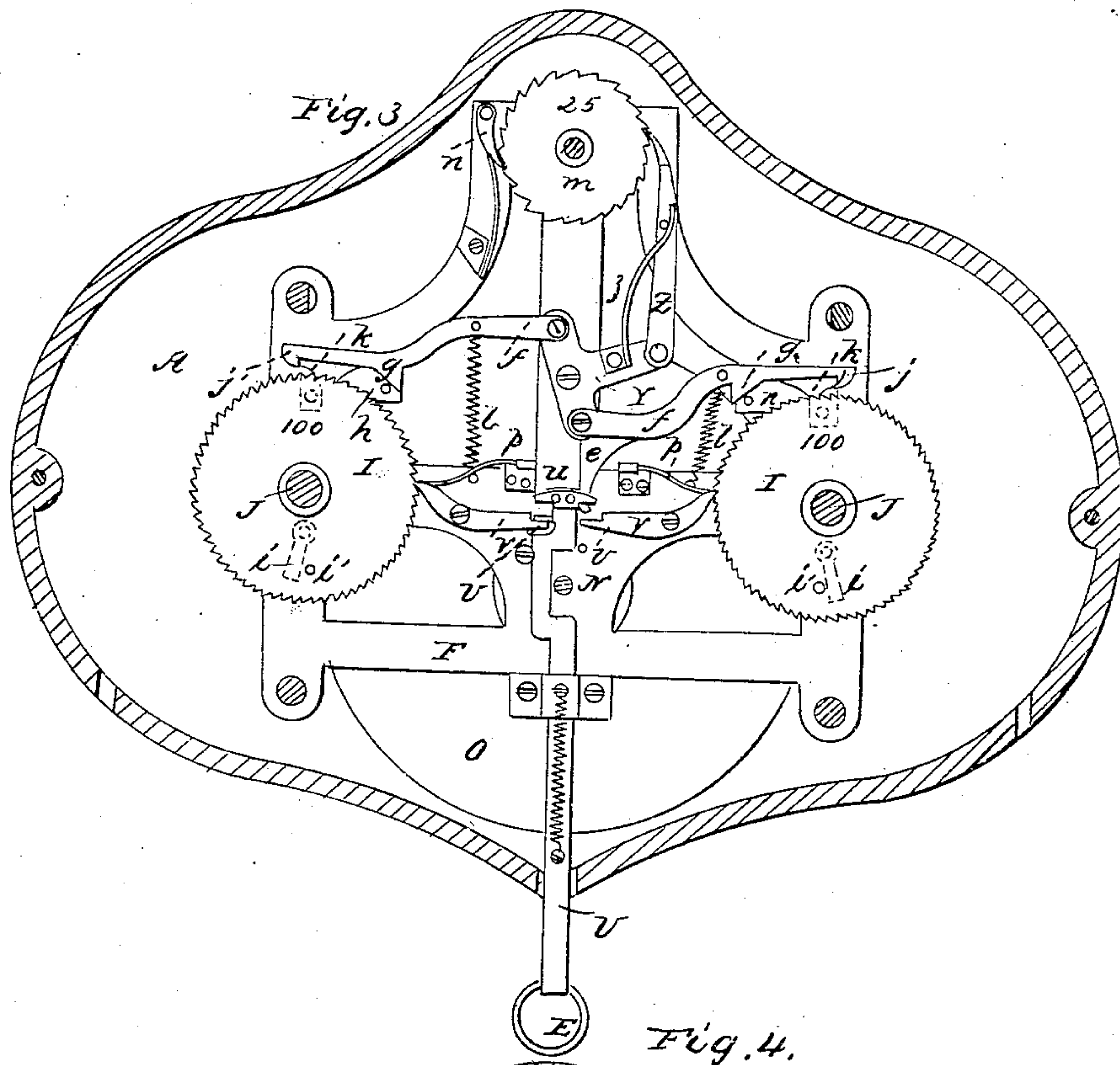


R. H. INGERSOLL.

Billiard Register.

No. 52,417.

Patented Feb. 6, 1866.



Witnesses
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UNITED STATES PATENT OFFICE.

R. H. INGERSOLL, OF WASHINGTON, DISTRICT OF COLUMBIA.

BILLIARD-REGISTER.

Specification forming part of Letters Patent No. 52,417, dated February 6, 1866.

To all whom it may concern:

Be it known that I, R. H. INGERSOLL, of Washington, in the District of Columbia, have invented a new and useful Improved Billiard-Register; and I do hereby declare the following to be a full, clear, and exact description of the nature, construction, and operation of the same, sufficient to enable one skilled in the art to which it appertains to construct and use the same, reference being had to the accompanying drawings, which are made part of this specification, and in which—

Figure 1 is a face view or elevation of the machine. Fig. 2 is a transverse horizontal section of the case, showing the works by a top view. Figs. 3 and 4 are vertical sections on the line *x x*, Fig. 2. The works in Fig. 3 are viewed in the direction shown by arrow 1, and in Fig. 4 are viewed in the direction indicated by arrow 2.

The object of the machine is to keep the count or tally of the billiard-players and to score the games played.

The invention consists of two sets of works and recording-dials distinct as to the means of the count of the players to which they respectively belong, but connected as to the means by which the dial-fingers are restored to the zero-point at the conclusion of the game and the games scored, and also having an independent connection to the rotating dial, by the exposure of whose figures at the opening the count to be registered is manifested to the eye.

The machinery is inclosed in a casing, A, which is to be suspended or otherwise supported in the position shown in Fig. 1. There are upon its face three dials, of which B B' are those on which the count of the two players is registered by the indicators B'' B''', and C the dial by which the number of games played is scored by the finger C'.

I will here remark that the dials B B' are divided numerically for games of one hundred points, and the dial C for scoring twenty-five games; but these numbers are not imperative, but I adopt them as appropriate in the description ensuing.

On the lower portion of the face of the register is an opening, P, through which may be observed the figures of a dial which rotates inside, and whose purpose will be more particularly explained hereinafter.

Below the register hang tasseled cords D D' E, whose purpose is, the two former to score the points of the respective players, and the latter to restore the fingers B'' B''' to zero on their dials at the conclusion of the game.

The operation of the devices will be more clearly understood from an inspection of Figs. 3 and 4 and the following description, and it may be stated in general terms that Fig. 4 shows more particularly the devices for registering the points of the players, while Fig. 3 is more especially confined to the devices for liberating the fingers of the dial-plates B B' and bringing them back to zero at the conclusion of a game, ready for a new tally, and to the device for scoring up the game just played.

The works just cited are attached, either immediately or secondarily, to the frame-plates F G, the various shafts being journaled therein, while the levers, pawls, &c., are pivoted thereto.

I shall proceed, first, to describe the operation of registering, and the description of one side will suffice, as the two are counterparts of each other.

We will suppose that one of the players has made eight points and no more, and the finger B'' of his dial previously standing at 32, the cord is pulled, and, being attached to the claw H, moves the latter on its pivot and causes it to engage a notch of the wheel I, which is attached to the shaft J, on which the finger B'' is arbored. The pulling on the cord D being continued, the plate K is rotated upon the axis J, causing the prong *a* to lift the rack L, which rotates the pinion M and the shaft N, to which is attached the figured dial O, whose figures pass in review before the orifice P in the face of the register.

Eight being the number which is to be scored, the pull upon the rope ceases when the figured dial O shows that figure at the orifice P, and the rope then being released, the spring Q, which is connected to the frame A and the prong *b* of the plate K, draws back the said plate until the prong *c* touches the pin R, which forms a part of the frame in which the works are arranged. The claw H is then withdrawn from contact with the wheel I by means of the spring S, and the rack L descends under the influence of the spring T, rotating the figured dial O in the contrary direction to its forward

motion until the zero is presented to the opening P. The rack L moves in guides or ways in any suitable manner and need not be particularly described, and, being constantly under the pressure of the spring T, is always in contact with the prong *a* of the plate K, and the range of motion of the latter is limited by the contact of the prongs *b c*, respectively, with the pin R, as has been mentioned.

The other player having made his play, the number of points gained is registered in a similar manner upon his dial, and the results of the successive plays are there recorded until one reaches one hundred, which makes the game, and the stop *i* on the wheel I, coming in contact with the pin *i'*, prevents its further revolution. When the points to be scored amount to more than ten the number is registered by successive pulls upon the cord—as, for instance, giving the full swing K for ten, followed by a stroke of five to make up a complement of fifteen.

This is believed to be descriptive of this portion of the invention, and brings us up to the point where the game is finished by one of the parties reaching the limit one hundred.

It is now desired to commence a new game and score up the one just played, the latter being either for the satisfaction of the players or for an indication to the proprietors, who generally charge so much a game for the use of the table.

For the purpose of bringing back the index-fingers B'' B''' to the zero the cord E is pulled, which draws down the slide U, whose cross-head *u* strikes upon the ends *v* of the pawls V V, withdrawing them from the teeth of the wheels I I, which, by the influence of their coil-springs W W, which are attached to the shafts J J and to the lugs *w w*, return at once, carrying the indicator-fingers B'' B''' back to the zero-point of the dials B B', the stop *i* again striking the pin *i'* on the other side, this stop being the limiter of the motion of the wheel I, whose motions are so regulated that at the end of its stroke it is at the zero-point and 100 respectively. The pawls V V are kept to their work by springs *d d* above them.

The cross-head *u* of the slide U being depressed allows the prong *e* of the lever Y to fly to the left, as seen in Fig. 3, and the lever Y to rotate a little on its axis *y*, bringing down the pawl Z into the notch below the arc it occupied, the pawl *u*, the wheel *m* being kept

to its work by the spring *z*. As the lever Y is thus rotated the two arms *f f* move toward each other longitudinally, causing the inclines *g* to slip down on the pins *h*, bringing the notches *j* into such a position as to engage the flat sides of the lugs *k*, which project from the wheels I, this downward motion of the arms being assisted by the springs *l*.

Upon commencing a fresh game, the first pull upon either of the ropes D D', the lug *k* of the wheel I engages the notch *j* of the arm *f*, dragging the arm along, it gradually rising by means of the impingement of the incline *g* on the pin *h* until the arm is raised out of contact with the lug *k*, and the lever Y being rotated on its axis forces up the pawl Z, rotating the wheel *m*, which carries the index-finger C' of the dial C, the pawl *n*, by aid of the spring *o*, maintaining whatever is gained by the pawl Z. The described rotation of the lever Y brings the prong *e* so far to one side that the slide U flies up alongside of it, being raised by the spring *p*. It is hence seen that pulling the cords D D' records the points of the game, and pulling the cord E runs back the index-fingers to zero, the first subsequent movement of the cord D or D' scoring the game first played.

Having described my invention, what I claim therein as new, and desire to secure by Letters Patent, is—

1. The combination of the claw H, wheel I, and pronged plate K, as and for the purpose described.

2. The combination of the pronged plate K, rack L, pinion M, and figured dial O, operating as described.

3. The combination of the spring-slide U, pawls V V, wheels I I, and springs W W, substantially as described and represented.

4. The lever Y, in its combination with the arms *f f*, wheels I I, and pawl Z.

5. The described combination of the wheels I I, lug *k*, notch *j*, incline *g*, and pin *h*.

6. The slide U, spring *p*, prong *e*, lever Y, and arms *f f*, operating substantially as described and represented.

The above specification of my improved billiard-register signed this 19th day of September, 1865.

R. H. INGERSOLL.

Witnesses:

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