

(No Model.)

J. STICH.
REGISTER FOR BILLIARD TABLES.

No. 556,071.

Patented Mar. 10, 1896.

Fig. 1.

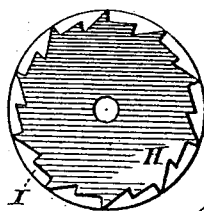
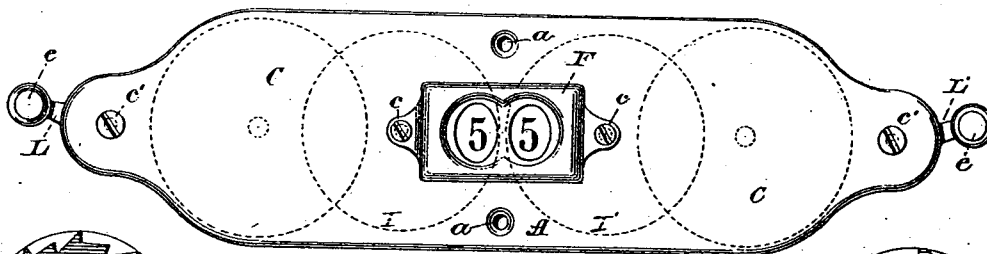


Fig. 5.

Fig. 2.

Fig. 6.

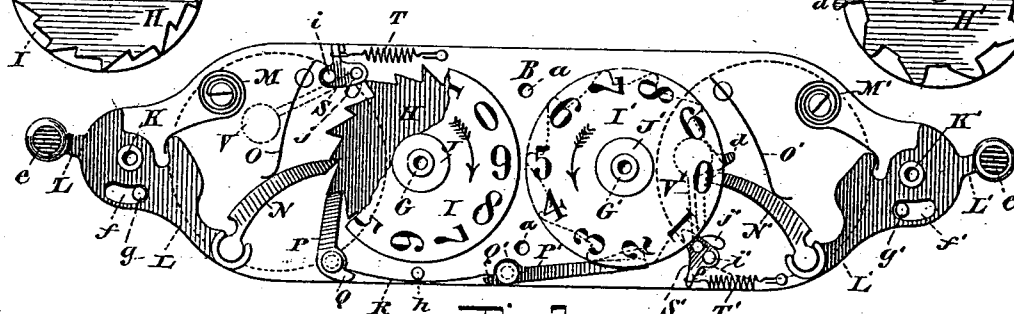
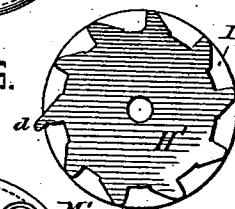


Fig. 3.

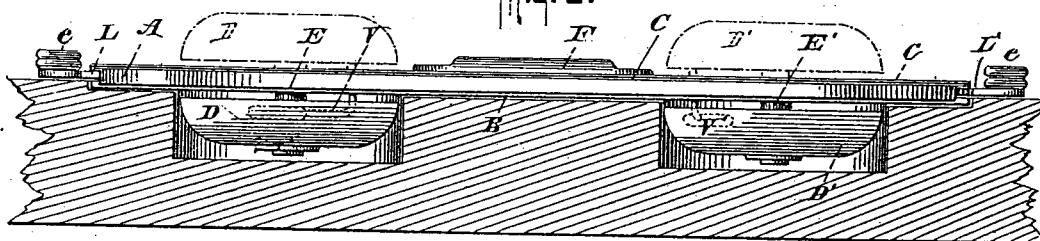
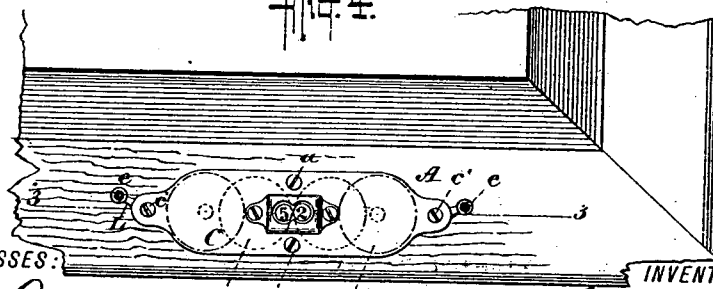


Fig. 4.



WITNESSES:

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UNITED STATES PATENT OFFICE.

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REGISTER FOR BILLIARD-TABLES.

SPECIFICATION forming part of Letters Patent No. 556,071, dated March 10, 1896.

Application filed October 7, 1895. Serial No. 564,899. (No model.)

To all whom it may concern:

Be it known that I, JOHN STICH, a citizen of the United States, residing at the city of New York, in the county and State of New York, have invented certain new and useful Improvements in Registers for Billiard-Tables, of which the following is a full, clear, and exact description.

My invention relates to improvements in registering apparatus, and has for its object to provide a simple and efficient apparatus whereby tally may be kept of the billiard-games, and which apparatus is capable of being attached to the tables in such a manner that the same may be easily accessible to the player without interfering with his work or marring the appearance of the table.

The invention consists in the novel combination, connection and arrangement of parts hereinafter more fully described, and particularly pointed out in the claims.

In the accompanying drawings, forming part of this specification, wherein like letters of reference indicate like parts, Figure 1 is a top or plan view of my register. Fig. 2 is a similar view with the cover or top removed to expose the interior operating mechanism. Fig. 3 is a section taken on the line 3 3 of Fig. 4, showing the register in side view secured to the top of the table, the latter being recessed to accommodate the bells. Fig. 4 is a top view of a corner portion of a billiard-table with my register in position thereon, and Figs. 5 and 6 are detail inverted plan views of the registering-disks and the ratchet-wheel attached thereto and showing the forms of teeth on the peripheries of said ratchet-wheels.

In said drawings, A designates the registering-casing provided with screw-holes, and comprising a base B and a cover C adapted to be secured to said base by means of screws *c c'*.

D D' are a pair of bells which are secured to posts E E' secured to and projecting downwardly from the under side of the base.

F is a frame provided with an aperture and adapted to inclose a body of transparent material upon the cover C over an aperture therein which registers with the one in the frame F, and made sufficiently large to render visible a single numeral of each registering-disk at one time.

On the upper side of the base B, near the

center thereof, are arranged two upwardly-projecting studs or pivots G G', upon which are mounted two independently-rotatable ratchet-wheels H H', the ratchet-wheel H being provided with an additional set of small teeth intermediate the large ones, and to the upper sides of said ratchet-wheels are attached respectively the registering-disks I I', each bearing upon its face the numerals from 0 to 9, both inclusive, and arranged to read in opposite directions to each other, said disks and their respective ratchet-wheels being held in position upon their pivots by means of washers J J' and screws *c c'*, which extend through the cover C and into said pivots G G', said screws serving at the same time to hold the frame F and the interposed transparent body in position upon said cover.

The ratchet-wheel H' is further provided between the numerals 0 and 9 with a large tooth or projecting catch *d*, which is adapted to engage with the teeth of the ratchet-wheel H and move said ratchet-wheel sufficiently to move one numeral of the registering-disk I into position beneath the aperture in the cover C in the course of each complete revolution of the ratchet-wheel H' and registering-disk I' attached thereto, this, however, being only intended to occur where the two registering-disks are to be operated by means of the actuating-lever L' only.

Near the opposite ends of the base B are two studs or pivots K K' similar to the pivots G G', which serve as fulcrums for the actuating-levers L L', the outer ends of which project beyond the opposite ends of the register-casing and are provided with buttons *e* adapted to be colored to designate the black and white billiard-balls. The portions of the actuating-levers within the casing are provided with slots *f f'* adapted to accommodate the stops *g g'* secured to the base, whereby the movement of the actuating-levers will be limited, and coil-springs M M', the inner ends of which are secured to the base B, while their outer ends are held in contact with the inner ends of the actuating-levers L L' and serve to return said levers to their initial positions after the same have been operated.

The extreme inner ends of the levers L L' are socketed to receive each one end of the pawls N N', the free ends of which engage

with the teeth of the ratchet-wheels H H', and O O' are springs having each one end secured to the base and the other end in contact with the free ends of the pawls N N' to hold the same spring-pressed against the teeth of their respective ratchet-wheels.

P P' are a pair of locking-pawls having their lower ends pivotally secured to the base and provided with toes Q Q', respectively, and R is a spring having its opposite ends held in contact with the toes Q Q' aforesaid and sprung into position over a stud h on the base B. By means of this spring the free ends of said locking-pawls will be held in engagement with the teeth of the ratchet-wheels, and thereby prevent a rotation of said ratchet-wheels in the direction opposite to that imparted to them by the actuating-levers L L'.

S S' are the hammer-actuating levers, which are fulcrumed upon pivots i i' secured to the base and provided with helical springs T T', having each one end secured to the levers S S' and the other secured to the base, and hammers V V' secured to the under sides of said levers extending through slots j j' in the base above the bells D D'.

It will be observed that as all the operating parts within the casing are flat and as the casing is itself very shallow between the cover and base the parts will all be maintained in their proper place when the cover is secured in position, and, further, that where it is desired to secure the register to the side of the table or to the wall without unnecessarily mutilating the same it becomes a simple matter to place the bells on the cover and provide the same with slots to receive the hammers, which in this case are simply reversed, as shown by dotted lines in Fig. 3.

The operation of the apparatus is as follows: If we assume that the register is at zero and a player has just made eight "points," which he wishes to register, he will then grasp the projecting end of the lever L' at the right-hand side of the apparatus and pull or depress the same eight consecutive times. With each of said depressions the inner end of the lever will be raised, as likewise the pawl N', and the ratchet-wheel H' moved until the end of the pawl engages with the next tooth, whereupon the said ratchet-wheel will be held to that position by the locking-pawl P'. In the course of each of the said operations the registering-disk will be moved by one number and the tooth of the ratchet-wheel caused to strike against the end of the hammer-actuating lever S', lift the same, and as it falls into the next tooth of the ratchet-wheel cause the hammer to strike the bell D'. This operation will be repeated with each successive depression of the actuating-lever L'. Should the player next inning make only three points and desire to register the same, he will again depress the lever L' three times. However, with the second depression of the said lever the tooth d of the ratchet-wheel will strike against one of the teeth of the

ratchet-wheel H and move the same and the registering-disk attached thereto and change the numeral 0 appearing at the aperture to the numeral 1 and change that on the disk I' from 9 to 0, and thus form the figure 10, and with the following depression of the lever the numeral 0 on the disk I' will be changed to 1, and thus form the figure 11, the total score to be registered. Should the player, on the other hand, have made a high score at his first play—for example, thirty-three—he would not be obliged to depress the lever L' thirty-three consecutive times. In that case, assuming the apparatus to be at zero, he would simply depress the lever L three times, thereby causing the numeral 3 of the disk I to appear at the aperture and repeat the same operation with the lever L', thereby causing the numeral 3 of the disk I' to appear at the aperture beside the one first mentioned, and thus form, by six depressions of the actuating-levers, the player's total score of thirty-three points.

In practice I propose to equip each billiard table with at least two of my improved registering apparatus, and these may be attached either directly to the table, as shown, or to some object in close proximity thereto. Of these apparatuses one shall be used by each player or combination of players to record their respective scores.

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

1. In a register for the purposes set forth, the combination with a suitable casing comprising a base, and a cover provided with apertures for said base, a pair of independently-rotatable registering-disks arranged to operate side by side and be rotated toward each other, ratchet-wheels secured to the under sides of said registering-disks and mounted upon pivots secured to the base; one of said ratchet-wheels being provided with an additional set of small teeth intermediate its large ones, pawls pivotally secured to the base having their free ends held spring-pressed against the teeth of the ratchet-wheels aforesaid, a pair of actuating-levers pivotally supported upon the base having their outer ends projecting beyond the ends of the casing, and their inner ends pivotally connected with the pawls aforesaid and provided with slots adapted to receive stops secured to the base to limit the movement of said levers, and a pair of spiral springs having their inner ends secured to the base and their outer ends in contact with the actuating-levers to return the same to, and maintain them in their normal positions, a pair of bells secured to the under side of the base upon posts depending therefrom, a pair of hammer-actuating levers pivotally supported upon the base provided with helical springs having their ends secured to said levers and the base, hammers attached to said levers extending through slots in the base above the bells, said levers being arranged in path of the teeth of

the ratchet-wheels and adapted to be operated thereby to strike their respective bells, and a pair of locking-pawls pivotally secured to the base having a spring disposed between the ends of said pawls to hold their free ends in engagement with the teeth of the ratchet-wheels, substantially as specified.

2. In a register for the purpose set forth, the combination with the casing A comprising the base B and cover C having a suitable aperture in the top thereof to expose a portion of each registering-disk, independently-rotatable registering-disks I, I' mounted upon pivots G, G' secured to the base B, ratchet-wheels H, H' secured to said disks I, I', the ratchet-wheel H being provided with an additional set of small teeth intermediate the large ones thereof, pawls N, N' pivotally secured to the base B and provided with springs O, O', actuating-levers L, L' pivotally supported upon the base B having buttons *e* at their outer projecting ends, and their inner ends connected with the pawls N, N', and

provided with slots *f, f'* adapted to receive the stops *g, g'* secured to the base B, spiral springs M, M' having their free ends held in contact with the levers L, L', bells D, D' secured upon posts E, E' to the under side of the base B, hammer-actuating levers S, S' pivotally secured to the base B provided with helical springs T, T', secured to said base, and said levers, hammers V, V' extending through slots *j, j'* in the base above the bells D, D', and a pair of locking-pawls pivotally secured to the base B provided with toes Q, Q', and a spring R disposed between the ends of said locking-pawls upon the toes Q, Q', substantially as shown and described.

Signed at the city of New York, in the county and State of New York, this 3d day of October, 1895.

JOHN STICH.

Witnesses:

JACOB SAUNK,
MOSES A. FREEDMAN.