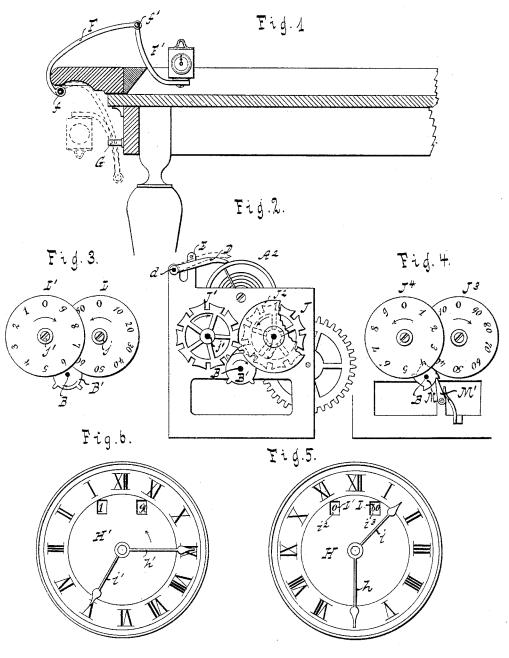
R. C. WITTMANN.

TIME REGISTER FOR BILLIARDS.

No. 346,880.

Patented Aug. 3, 1886.



WITNESSES: Atalus du Faur Ja. Milliam Willer INVENTOR
Rudolf C. Wittmann
BY
Van Santword x Hauff

his ATTORNEYS

UNITED STATES PATENT OFFICE.

RUDOLF C. WITTMANN, OF EAST NEW YORK, N. Y.

TIME-REGISTER FOR BILLIARDS.

SPECIFICATION forming part of Letters Patent No. 346,880, dated August 3, 1885.

Application filed October 22, 1885. Serial No. 180,640. (No model.)

To all whom it may concern:

Be it known that I, RUDOLF C. WITT-MANN, a citizen of the United States, residing at East New York, in the county of Kings and 5 State of New York, have invented new and useful Improvements in Time-Registers for Billiards, &c., of which the following is a specification.

My invention relates to improvements in time-registers for billiard-tables, or for other similar purposes; and it consists, essentially, in the combination, with a billiard-table, of a clock connected with said billiard-table, which when in a normal position is stopped, but when changed from said position is started, all of which is fully pointed out in the following specification and claims, and illustrated in the accompanying drawings, in which—

Figure 1 is a sectional view of a billiardtable provided with my improved time-register. Fig. 2 is a front view of the operating parts of the clock. Fig. 3 is a face view of the registering-dials in the front of the clock. Fig. 4 is a similar view of the back registering-dials. Figs. 5 and 6 are respectively views of the front and back clock dials.

Similar letters indicate corresponding parts. In the drawings, the letter A, Fig. 2, designates the balance-wheel of a clock of any 30 ordinary construction, and B is the arbor of the minute-hand. In order that the motion of the clock may be stopped when the clock stands upright, as shown in full lines, Fig. 1, a detent-arm is loosely pivoted at d to the 35 frame of the operating parts, Fig. 2, in such a position that its free end will bear against the balance-wheel A of the clock, and thereby stop the motion thereof. When the position of the clock is reversed end for end, as shown 40 by dotted lines in Fig. 1, the detent D falls away from balance-wheel and the clock will start. A stop, E, Fig. 2, is placed in position to arrest the downward motion of the detent D. To apply the clock to a billiard-table to in-

dicate the time in which the same is in use, I employ an arm, F, which is pivoted to the table at f, and an arm, F', which is pivoted at f' to the arm F and supports the clock. The arms, when properly turned about their pivots, carry the clock into the position shown by the dotted lines in Fig. 1, and the levers can be seen at a time, so that the number at i² the dollars due. Similar sets of pinions, arbors, and dials, J³ J¹, are placed at

be held in that position by a catch, G, or by other suitable means, so that the device is entirely out of the way. When the clock is in the position shown by full lines in Fig. 1, the 55 motion of the same is arrested by detent-arm D, and the clock is also in a position to interfere with the game. If, however, the clock is turned into the position shown by dotted lines in Fig. 1, which is done when the game is pro- 60 ceeded with, the clock immediately starts to keep time, and continues so until it is returned to the first position, which is done at the end of the game, thereby registering the time of duration of the game. The clock can be sup- 65 ported in such a position that the game can not be proceeded with until the clock is removed, as it may be situated directly in front of the cushion, and thus act as an interference.

In order that the clock may indicate the 70 time and charges of each game, and also the total time and charge during the day, I use the following mechanism. The clock is provided with two dials, H H', one at the front and one at the back, the time being indicated on each 75 by the minute-hand h h' and an hour-hand, i i', as usual, the front dial indicating the time of each game, while the back dial indicates the total time for the whole day.

J, Fig. 2, is a pinion secured to an arbor, j, 80 which is in a proper position to be engaged by a pinion, B', on the minute-arbor B, and J' is a second pinion on an arbor, j, which is engaged by a pinion, J^2 , secured to and rotating with the pinion J. The pinion B' is provided 85 with four teeth, pinions J J' with ten each, and pinion J² one tooth, so that pinion J will be moved by one tooth for each quarter of an hour, and pinion J' one tooth for each hour. To the arbors j, or to the pinion J, is secured a 90 registering-dial, L, which has thereon a series of figures from 0 to 100, counting by tens, the said figures corresponding to the price in cents for the successive quarter-hours, and upon the arbor j' or pinion J' is a dial having 95 thereon the numerals from 0 to 10, which indicate the price in dollars. In the front clockdial are apertures i2 i3, through which one number can be seen at a time, so that the number appearing at i3 will indicate the cents and the 100 the back of the clock, the numbering on the dials of course being reversed in order, and since it is convenient always to set the hands h and i of the front dial, H, back to 12 at 5 the end of each game, and thereby to cause the registering dials to indicate zero, it is found necessary to secure a detent-wheel, M, to the arbor B, which is engaged by a spring-pressed detent-arm, M, or by similar means, to prevent 10 the hands h' i' and registering dials J³ J⁴ of clock-dial H' from rotating in this direction. These hands h' i' and dials J³ J⁴ will therefore always indicate in succession the time of the games, and thus indicate the total time and 15 charges for the day.

The clock can be provided with a striking movement or alarm to indicate quarters, half-

hours, and hours.

What I claim as new, and desire to secure by

20 Letters Patent, is-

1. As a time-register for billiard-tables or the like, a clock constructed to stop when in a position serving as an obstacle, and adapted to start when removed from that position, sub-25 stantially as shown and described.

2. In a time-register for billiard-tables or

the like, a clock constructed to stop when in a position over the table, and constructed to start when swung clear of the table, substantially as shown and described.

3. In a time register for billiard tables or the like, a clock having dials for indicating the time and charges for each game, and dials for indicating total charges and time, the clock being stopped when extending over the table, 35 and started when swung clear of the same.

4. In a time-register for billiard-tables and the like, the combination, with a clock supported by a pivoted arm, of a gravitating detent adapted to engage the balance-wheel when 40 the clock is in position to obstruct the game, and to release the same when the clock is swung clear of the table, substantially as described.

In testimony whereof I have hereunto set 45 my hand and seal in the presence of two subscribing witnesses.

RUDOLF C. WITTMANN. [L. S.]

Witnesses:

W. HAUFF, E. F. KASTENHUBER.