

H. E. SCHMIDT & M. W. ARENS.  
 GAME REGISTERING CABINET.  
 APPLICATION FILED APR. 25, 1913.

Patented Jan. 27, 1914.

4 SHEETS—SHEET 1.

1,085,494.

Fig. 1.

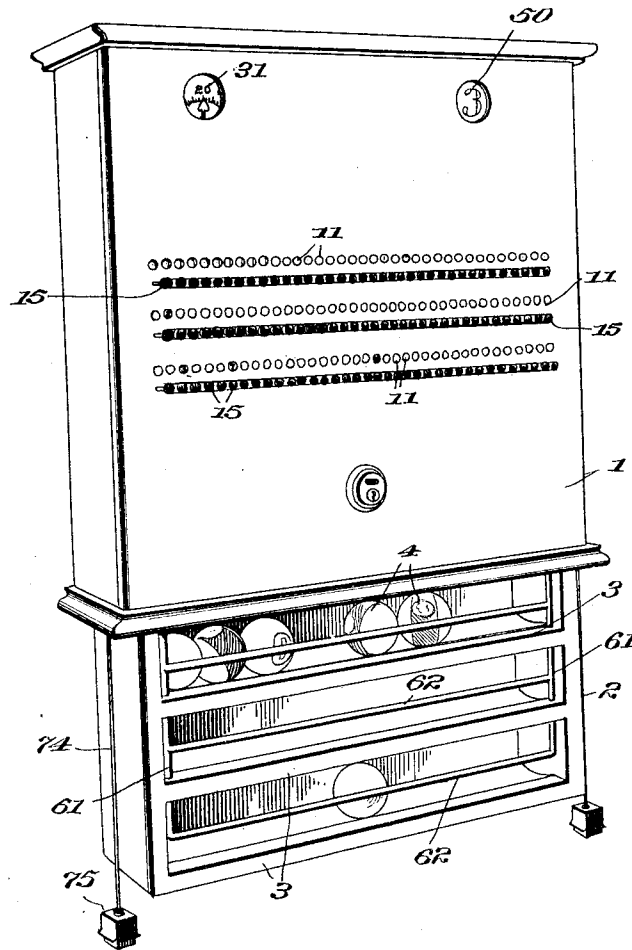
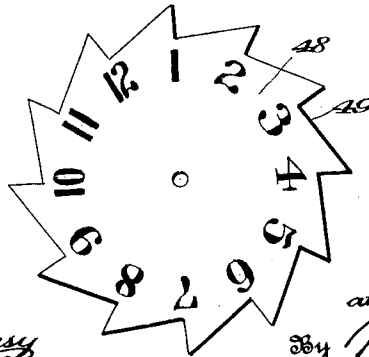


Fig. 11.



Witnesses

Gerald Hennessy  
 D. W. Gould

Inventors

H. E. Schmidt  
 and M. W. Arens,

By Victor J. Evans

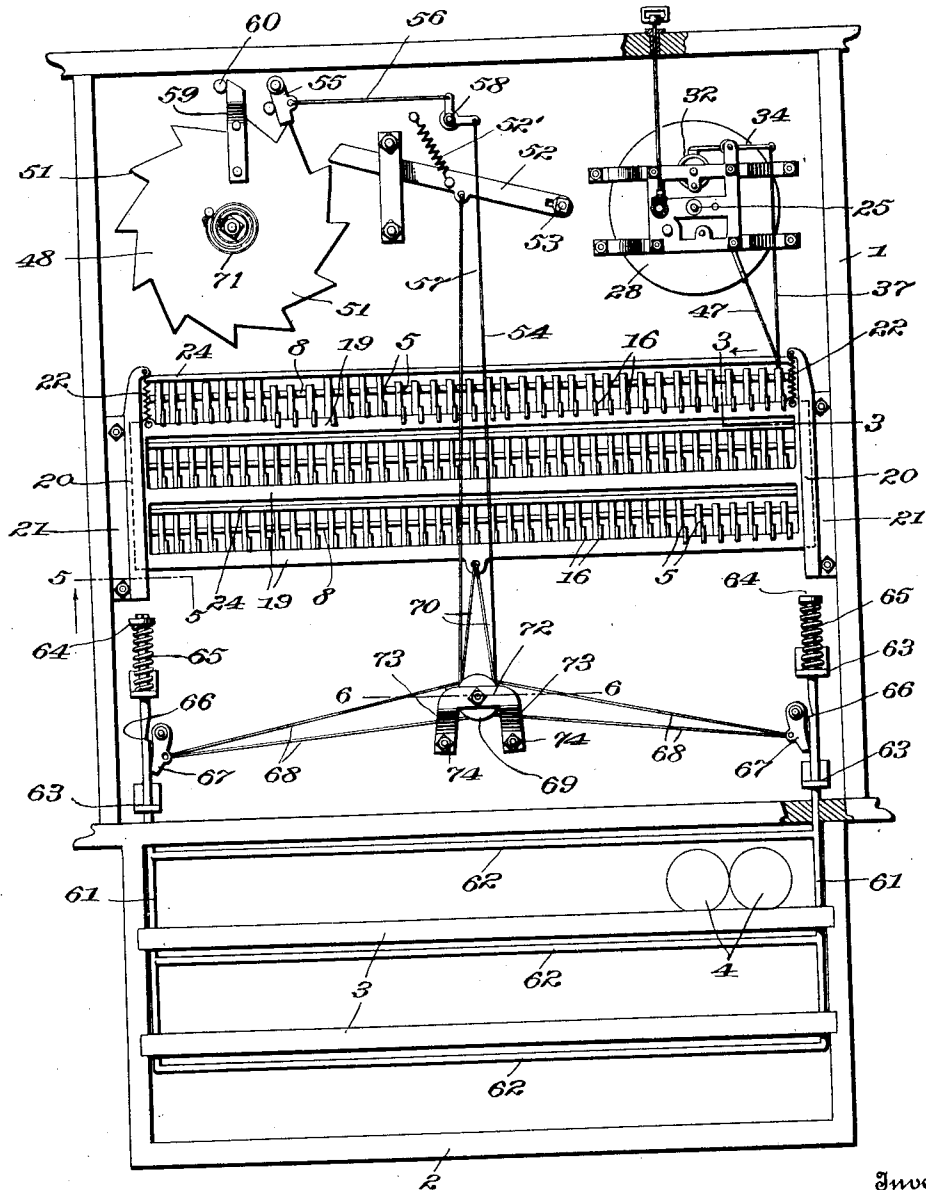
Attorney

H. E. SCHMIDT & M. W. ARENS.  
 GAME REGISTERING CABINET.  
 APPLICATION FILED APR. 25, 1913.

Patented Jan. 27, 1914.  
 4 SHEETS—SHEET 2.

1,085,494.

Fig. 2.



Inventors

H. E. Schmidt, and

M. W. Arens

By Victor J. Evans

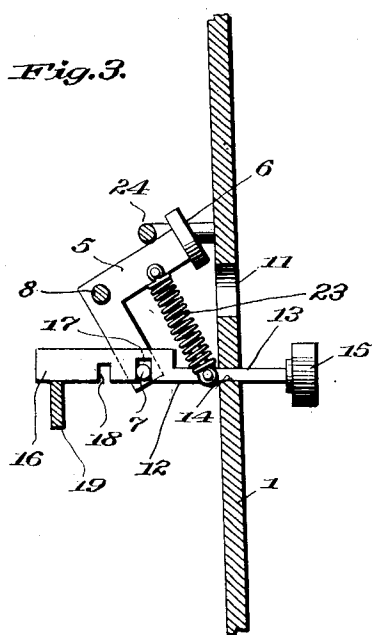
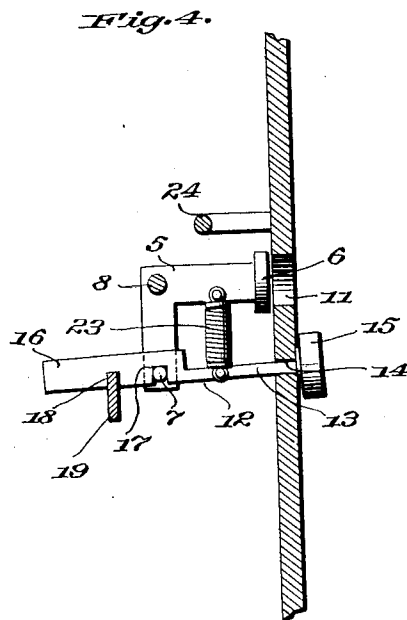
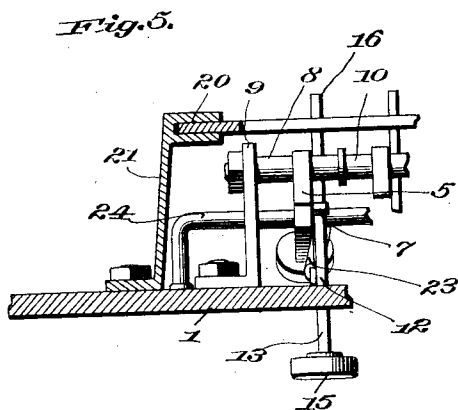
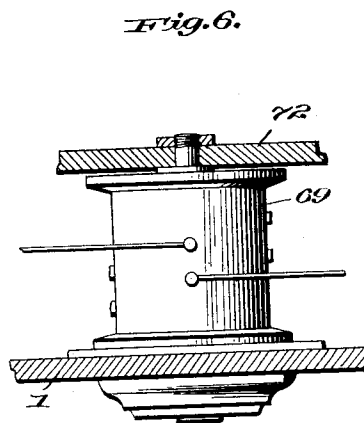
Attorney

Witnesses  
 Gerald Kennedy  
 D. W. Gould

H. E. SCHMIDT & M. W. ARENS.  
 GAME REGISTERING CABINET.  
 APPLICATION FILED APR. 25, 1913.

1,085,494.

Patented Jan. 27, 1914.  
 4 SHEETS—SHEET 3.



Witnesses  
*Gerald Hennessy.*  
*D. W. Gould*

Inventors  
*H. E. Schmidt, and*  
*M. W. Arens,*  
 By *Victor J. Evans*  
 Attorney

H. E. SCHMIDT & M. W. ARENS.  
 GAME REGISTERING CABINET.  
 APPLICATION FILED APR. 25, 1913.

Patented Jan. 27, 1914.

4 SHEETS—SHEET 4.

1,085,494.

Fig. 7.

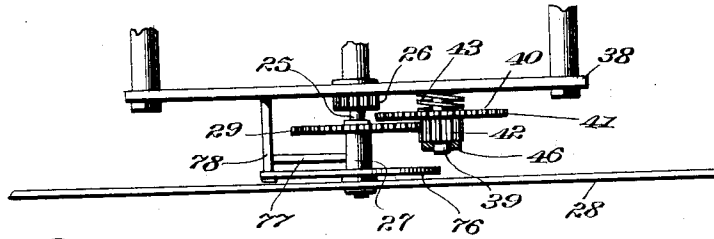


Fig. 8.

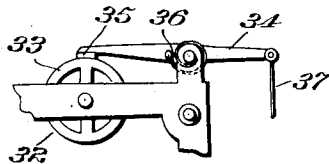


Fig. 9.

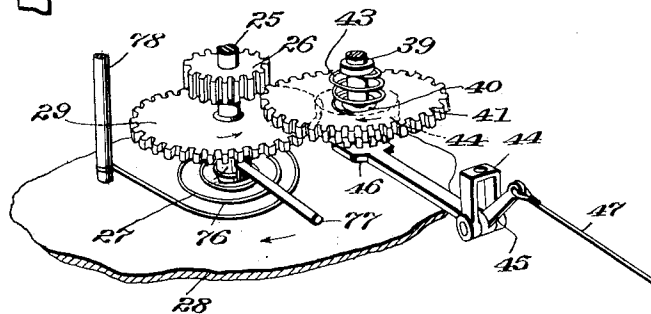
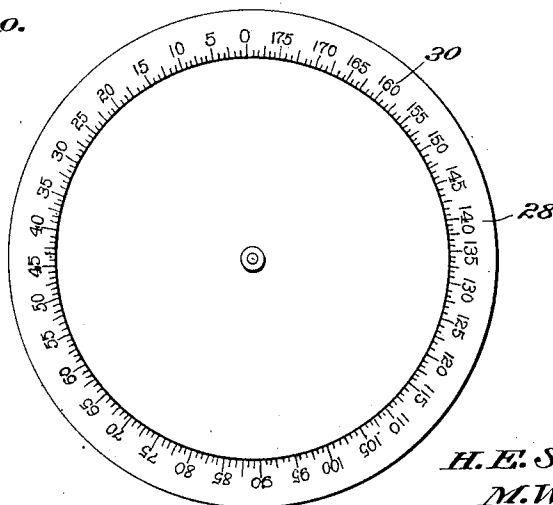


Fig. 10.



Witnesses

Gerald Kenney  
 D. W. Gould

Inventors

H. E. Schmidt and  
 M. W. Arens,

By Victor J. Evans

Attorney

# UNITED STATES PATENT OFFICE.

HERMAN E. SCHMIDT AND MATTHEW W. ARENS, OF SELBY, SOUTH DAKOTA.

GAME-REGISTERING CABINET.

1,085,494.

Specification of Letters Patent.

Patented Jan. 27, 1914.

Application filed April 25, 1913. Serial No. 763,608.

*To all whom it may concern:*

Be it known that we, HERMAN E. SCHMIDT and MATTHEW W. ARENS, citizens of the United States, residing at Selby, in the county of Walworth and State of South Dakota, have invented new and useful Improvements in Game-Registering Cabinets, of which the following is a specification.

The invention relates to a game registering cabinet, designed primarily for use in pool and billiard parlors and adapted to provide a lock for the balls in the racks, a register for the number of games played, a register for the time utilized in the particular game or games, and a score register, all of the essential registering elements being governed, directly or indirectly by a single master-control element designed for actuation through the use of a suitable key, whereby the entire operation of the registering elements is prevented except upon due authorized use of the key.

The main object of the present invention is the provision of a cabinet of this type in which the balls for use in the game are normally secured in their racks, and released for playing purposes only by use of the proper key, such key serving at the same time, if desired to register the number of the particular game, the time registering element being set in operation with a manual movement of a key, which key is locked against return movement except following a further actuation of the master-control element.

The invention in the preferred form of details will be described in the following specification, reference being had particular to the accompanying drawings, in which:—

Figure 1 is a perspective view of the improved cabinet. Fig. 2 is a vertical sectional view of the same. Fig. 3 is an enlarged section on line 3—3 of Fig. 2, the score registering element being shown in normal or inoperative position. Fig. 4 is a view similar to Fig. 3 with the score registering element in operative position. Fig. 5 is a section on line 5—5 of Fig. 2. Fig. 6 is a section on line 6—6 of Fig. 2. Figs. 7, 8 and 9 are detail views of the controlling means for the time register. Fig. 10 is a

face view of the time registering dial. Fig. 11 is a face view of the game registering dial.

In the preferred form of the invention, as shown in the drawings, the improved cabinet comprises an upper inclosed section 1, and a lower open section 2, the latter depending from the former and being preferably in the form of racks 3 to receive and support the balls 4 with which the games are played.

Arranged within the section 1 of the cabinet is the scoring register, including a series of rows, each made up of a series of successively numbered tablets designed to be operated by push buttons, and when operated to expose the particular number on the tablet to indicate the score. Each tablet is identical in construction and operation with every other tablet, and a detail description of one will suffice for all. Each of said mechanisms include a right angle lever 5 provided at one end with a disk or tablet 6, bearing a number and at the opposite end with a laterally projecting pin 7. The levers 5 of each row are pivotally mounted upon a rod 8 supported in brackets 9, secured to the inner surface of the front wall of the section 1, spacing sleeves 10 being arranged intermediate the respective levers, so that the numbered disk 6 of each operates in rear of an opening 11 formed in such front wall. An operating bar 12 is provided for each angle lever 5, said bar including a rod like member 13, which projects through an opening 14 in the wall of the section 1, and is provided beyond the wall with a push button 15. The operating bar also includes a locking section 16 formed with a recess 17 to receive the pin 7 of the lever 5 and with a locking notch 18 to cooperate with the edge of a locking bar 19. The locking bar 19 comprises a flat strip slidably mounted in guide sections 20 of brackets 21 secured to the inner surface of the front wall of the casing. The brackets are so connected to the casing that the locking bar, which it will be understood, cooperates with the scoring members of one row, is movable at right angles to the path of movement of the operating bar 12 of each

counter. Springs 22 connected to the brackets 21 and to the locking bar serve to maintain the latter in operative position, and to return the bar to such position when  
 5 operated to release the actuated counters, as will hereinafter appear. A coil spring 23 is terminally connected to the angle lever 5 in advance of the pivot and to the rod 13 of the operating bar, and a stop member in  
 10 the form of a rod 24 is secured to the casing in position to overlie the angle levers of one row, and form a limit for the upward movement of the disk carried section of said lever.

15 In the operation of the scoring or counting register, it will be understood that a particular push button, or that push button corresponding to the number of points made in the particular play, is pressed inwardly,  
 20 the operating bar is moved inwardly, rocking the angle lever 5 on its pivot until the numbered disk 6 is exposed through the opening 11, thus indicating the number of points. In this movement the locking notch  
 25 18 in the operating bar engages over the edge of the locking bar 19, and the coil spring 23 is compressed, thus holding the numbered disk exposed, as shown in Fig. 4 of the drawings.

30 The time registering structure, utilized when the game to be played is to be paid for in accordance with the time required for such game, includes a clock work mechanism arranged within the upper section or casing  
 35 1 of the cabinet, preferably near the top thereof. This mechanism, aside from the specific details noted may be of any type desired, the ordinary spring type being shown. For the purposes of the present invention, one of the main arbors 25 of the  
 40 clock train is provided with a pinion 26, and beyond the pinion is extended to loosely receive a sleeve 27 on which at one end there is secured an indicating dial 28 and on the  
 45 opposite end a gear 29. The indicating dial, shown more particularly in Fig. 10 is provided with an edge series of numerals 30 adapted to be successively exposed through  
 50 an opening 31 in the front wall of the casing. Preferably the numerals are arranged in multiples of 5, though it is to be understood that any style or character of time registering may be used on the dial, the present  
 55 instance of course, indicating by the numerals exposed the cash amount due for the time utilized in the game up to that point.

For the purposes of the present invention, means must be provided whereby the clock train may be started and stopped only by the  
 60 authorized person, in order that the full period utilized in the game may be registered. To this end we arrange in an appropriate part of the clock train what we term a controlling wheel 32 having a periphery 33

of friction material. A lever 34 is pivotally  
 65 mounted adjacent such wheel, having one end thereof provided with a friction tab 35 to overlie the periphery of the wheel 32, a spring 36 cooperating with said lever to normally hold the operative end thereof in such  
 70 frictional engagement with the wheel as to hold the clock train against operation. The opposite end of the lever is connected by a flexible connector 37 with the angle lever 5  
 75 of a device similar in all respects to one of the counting mechanisms heretofore described, except that this time registering controlled button is without the numbered  
 80 disk, being preferably arranged in line with and as one of the upper row of scoring registering elements. To control the connection  
 85 of the dial with the mechanism of the clock train, we mount on a frame bar as 38 of such frame, a stub shaft 39, and arrange upon said stub shaft a sleeve section 40 carrying a gear  
 90 41, adapted when in operative position to mesh with the pinion 26 of the clock train, said sleeve also carrying a pinion 42 which is at all times in mesh with the gear 29 having  
 95 fixed relation with the dial. A spring 43 is arranged to encircle the stub shaft between the sleeve 40 and the frame bar 38, said spring operating to normally hold the  
 100 gear 41 out of mesh with the pinion 26. A bracket 44 is secured to the rear wall of the casing 1 and supports an angle lever 45 having one forked at 46 to engage the stub shaft 39, and the opposite end provided with a  
 105 flexible connector 47 having one end connected to the angle lever 5 of the time registering control button to which the connector 37 is attached.

From this construction it will be obvious that in the actuation of the time registering control button the levers 34 and 45 will be  
 110 operated to release the brake and simultaneously connect the dial with the clock train, and that such button will be locked against opposite movement until released by actuation of the master-control element, as will  
 115 later appear. It is of course to be understood that the gearing arranged between the clock train and the dial is such as to cause said dial to be properly operated by the clock  
 120 train, that is to expose its proper cash indicating amount in accordance with the time occupied. We contemplate in this connection the use of any indicating data on the dial, it being understood that the movement  
 125 of the dial will be governed in accordance with such data, that is to say will accurately register the cash amount, the time employed, or any other desired data.

The game register, that is the device for registering the number of games played includes a dial 48 rotatably mounted in the  
 130 upper portion of the casing 1 and bearing a series of concentric numerals 49 successively

exposed through an opening 50 in the front wall of the casing. A toothed disk 51 is secured to the dial, the teeth being arranged in the path of movement of the lever 52 pivotally supported at 53 in the casing, and operated from the master-control element to a flexible connection 54. A release dog 55 is mounted on the casing wall in position to engage the tooth in rear of that tooth engaged by the lever 52, said release dog normally preventing retrograde movement of the dial, said dog being connected with the master-control element through flexible connections 56, 57 and an angle lever 58 pivotally supported on the casing wall. A stop to limit the movement of the dial to one revolution, is provided, by securing an arm 59 to the toothed disk and having one end offset to avoid interference with the dog and lever and adapted to engage a pin 60 projecting from the casing wall.

The invention also contemplates a means for locking the balls 4 in the racks 3, said means including a frame comprising up- rights 61 connected by cross bars 62, there being one such cross bar for each ball rack. The uprights extend through the bottom of the casing and within the latter are mounted in guides 63 between one of which and the headed end 64 of each upright is arranged a coil spring 65. Each upright within the casing is notched at 66, and a spring pressed dog 67 is arranged to cooperate with the notch. This arrangement of parts is such that when the dog is in engagement with the notch 66 of the upright, the cross bars 62 are about centrally of the ball receiving space of each ball rack, hence preventing the withdrawal of the balls from the racks, the springs 65 operating, upon disconnection of the dogs from the notches to move the frame upwardly, elevating said cross bars, and providing a sufficient space for the withdrawal of the balls. The dogs, of which there is one for each upright are each connected by two flexible connectors 68 with the master-control element, for a purpose which will later appear.

The master-control element comprises a barrel 69 rotatably supported between the walls of the casing 1, near the lower end of said casing. The rotation of this barrel is designed to be controlled by a lock, so that the barrel can be rotated only through the introduction of the proper key. The details making up this control are unimportant in the present invention, as many types of such devices are well known, and we therefore desire to limit ourselves only to the extent of providing a barrel adapted for rotation, and held against such rotation except by the use of a proper key. The barrel is adapted for rotation in either direction, and the various flexible connectors hereinbefore

referred to are connected to this barrel. 65 The locking bars 19 of each row of the scoring devices are preferably fixedly connected together, that is made in one frame structure, as clearly shown in Fig. 2 and this structure is connected to the barrel by flexi- 70 ble connectors 70 which are terminally connected to the barrel at diametrically opposite points, so that the locking bars will be operated no matter in which direction the barrel is turned. The flexible connectors 68, 75 leading from each dog 67 are also connected at diametrically opposite points from the barrel, so that the dogs are operated in the movement of the barrel in either direction the connector 54 extending from the operat- 80 ing lever for the game dial is connected to the barrel at one point, while the connector 57, leading from the release dog is connected to the barrel diametrically opposite the attachment of the connector 54 thereto, so 85 that in the rotation of the barrel in one direction the lever 52 will be operated, and in the barrel rotation in the opposite direction, the release dog will be operated. A spring 71 is secured on the game registering disk 90 and adapted to be tensioned in the registering movement of such disk, so that upon release of the disk by proper actuation of the dog 55, the disk will return to normal position. The barrel is preferably provided at 95 one end with a diametrically extending plate 72 adapted to bear upon springs 73, fixedly supported from the casing at their opposite ends, as at 74, provision being thus made for the return of the barrel to normal posi- 100 tion following its operation.

If desired, cords 74 may be mounted in the casing and supported in any desired manner, as over a pulley, and weighted, or wound about a spring drum or the like, the ends of 105 the cords beyond the casing being provided with cups 75 for the reception of the usual blocks of cue chalks.

In operation assuming the game to be played is to be paid for in accordance with 110 the time occupied, an authorized person by the use of a proper key unlocks the barrel and rotates the same in a direction which would otherwise operate the release dog 55 of the game disk. This movement of the 115 barrel withdraws the dog 67 from the uprights 61 of the ball rack frame and permits the springs to force said rack into a position to release the balls. The balls are now accessible for use on the table, and at the same 120 time as the balls are put in play the authorized operator actuates the time registering control button, hereinbefore referred to. The operation of this button locks it in set or operated position and at the same time 125 releases the brake 35 on the clock train and causes a gearing coupling of the clock train and time indicating dial. When the game

has been finished the amount to be paid is indicated at the opening 31, and after the balls have been restored to the rack the operator by again turning the barrel actuates the connectors 70, one or the other, withdraws the locking bar 19 from the time registering control button, as well as from those buttons which have been used for scoring purposes, permitting the buttons to return to normal positions under the influence of the springs 23, as will be obvious. This movement of the time controlled button re-applies the brake to the clock train and disconnects the dial therefrom. A spring 76 returns the dial to normal position, such position being controlled by a stop 77 carried by the dial coöperating with a pin 78 projecting from the frame of the clock train.

If the registration of the game by number is to be kept, the barrel is unlocked and turned in the direction to draw upon the connector 57, which through operation of the lever 52, imparts a step movement to the game dial, the barrel being thus operated after each game, and in its operation of course re-setting all scoring buttons. When the number of games are completed the dial is actuated in the opposite direction, withdrawing the release dog 55 and permitting the springs 71 to restore the dial to normal position, that is in the position controlled by the stops 59 and 60. The arm 52 is slotted to permit limited longitudinal movement, against the tension of the spring 52', whereby the arm may ride by the teeth on its upward movement, the extreme upper position of the arm being just beyond the path of movement of the teeth. After re-setting the parts, and restoring the balls to the racks, the locking frame is moved downwardly until the spring pressed dogs 67 engage the notches 66, when the balls are locked against withdrawal.

From the above description, it will be seen, that we have provided a game registering cabinet designed particularly for use with the games of pool, billiards, and the like, in which the balls are locked against withdrawal from the cabinet except upon authorized release, and means are provided whereby the number of games, or the time employed in playing a game, or both, are accurately registered, with the registering means wholly beyond control of the players or other unauthorized person, and further means are provided, within control of the players, for scoring; with the provision of a master-control element for controlling directly or indirectly all of said means.

What is claimed, is:—

1. A game registering cabinet, and a scoring means arranged therein said means including a manually operable member, a number carrying member connected there-

with, and a locking bar to automatically engage the manually operable member when the latter is in actuated position, and a key controlled element connected with said locking bar.

2. A game registering cabinet, and a scoring means arranged therein, said means including a pivotally mounted number carrying lever, a manually operable member connected with said lever and formed with a locking recess, and a locking bar to automatically engage said recess when said member has been operated.

3. A game registering cabinet, and a scoring means arranged therein, said means including a pivotally mounted number carrying lever, a manually operable member connected with said lever and formed with a locking recess, and a spring compressed in the operative actuation of said member.

4. A game registering cabinet, and a scoring means arranged therein, said means including a pivotally mounted number carrying lever, a manually operable member connected with said lever and formed with a locking recess, a spring tensioned in the operative actuation of said member, and a locking bar to engage the member-recess in the actuation of the member.

5. A game registering cabinet, and a scoring means arranged therein, said means including a pivotally mounted number carrying lever, a manually operable member connected with said lever and formed with a locking recess, a spring tensioned in the operative actuation of said member, a locking bar to engage said recess in the actuation of the member, and a master-controlled member to operate the locking bar to release said member.

6. A game registering cabinet including a time registering device, comprising a clock frame, clock mechanism therein, a time indicating dial, means for operatively connecting said dial to the clock mechanism, a manually operable push button for controlling said means, means for locking the push button in operative position, and a master-control member for releasing the locking means.

7. A game registering cabinet including a time registering device, comprising a clock mechanism, a brake therefor, a time indicating dial, means for operatively connecting said dial to the clock mechanism, a manually operable push button for controlling the brake and said connecting means, means for locking the push button in operative position, and a master-controlled member for operating the locking means to release the button.

8. A game registering cabinet including a game number registering dial, a lever for imparting a step by step movement to the dial, a spring for operating the dial in op-

position to the lever, a release dog for holding the dial against operation of the spring, and a master-controlled element mounted for rotation in either direction and oppositely connected to the lever and to the release dog.

9. A game registering cabinet including a time registering device, a game number registering device, a series of scoring devices, a ball locking frame, a push button for opera-

tively affecting the time registering device, 10 and a key operated master-control element.

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

HERMAN E. SCHMIDT.

MATTHEW W. ARENS.

Witnesses:

D. W. GOULD,

BENNETT S. JONES.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."