

G. J. WAINWRIGHT.
POOL REGISTER.

No. 524,123.

Patented Aug. 7, 1894.

Fig. 1.

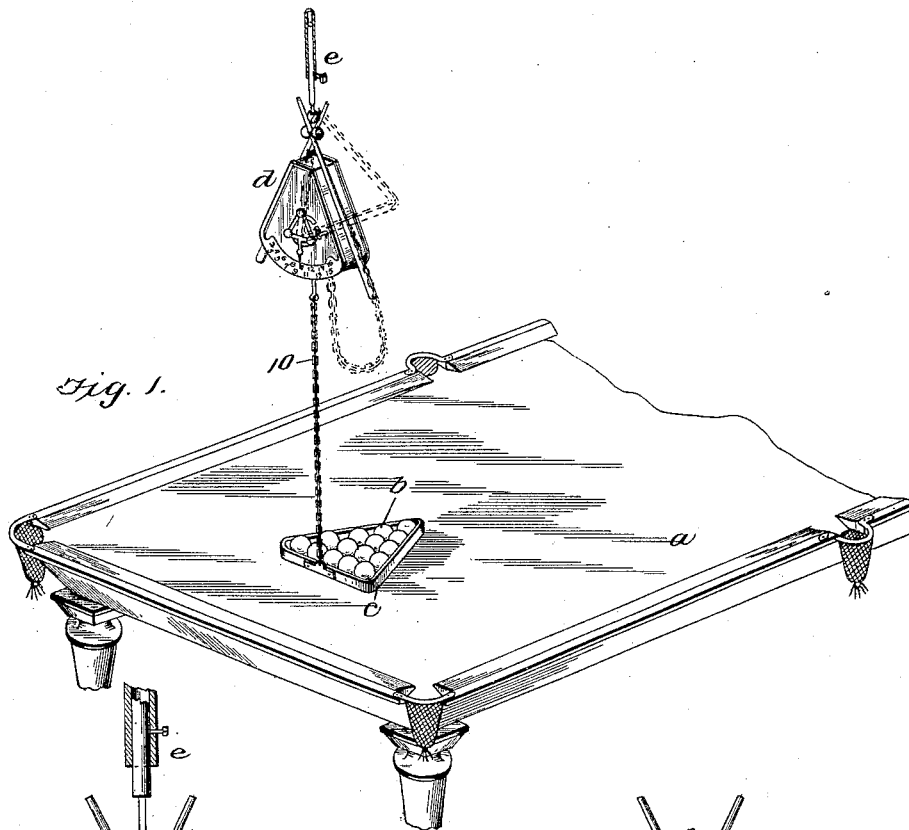
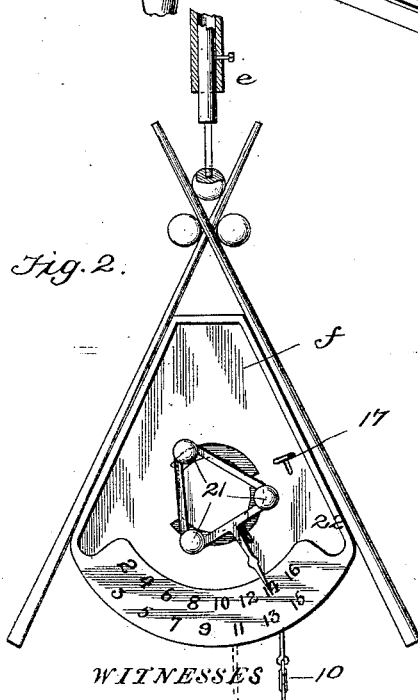


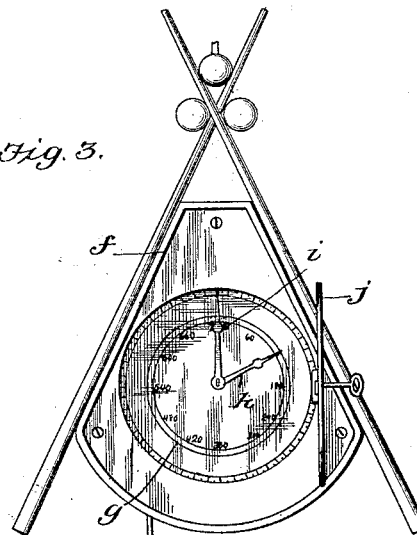
Fig. 2.



WITNESSES

Joseph B. Stack.
Hubert A. Rick

Fig. 3.



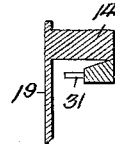
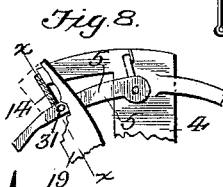
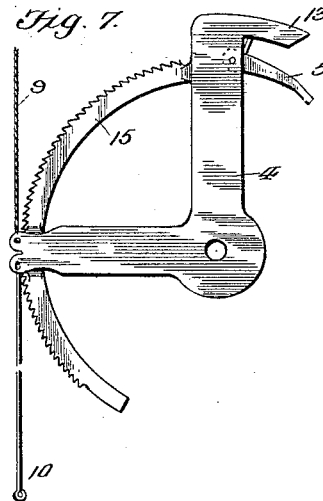
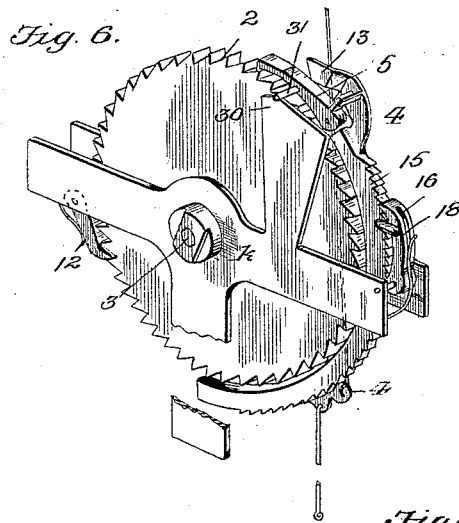
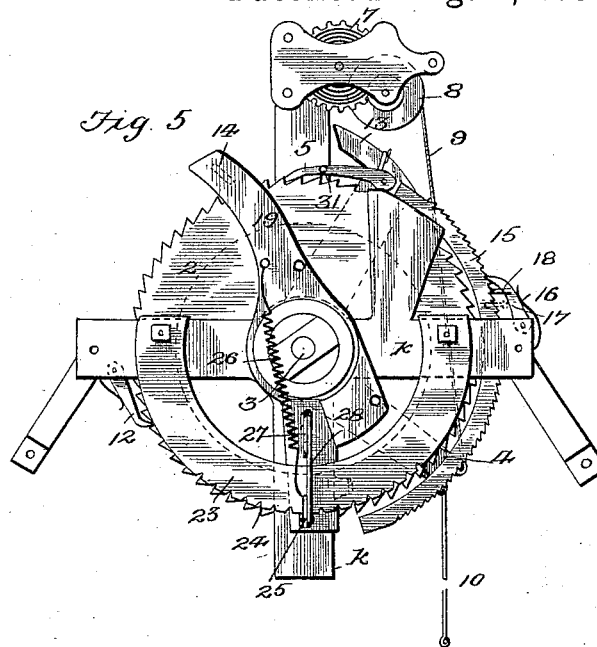
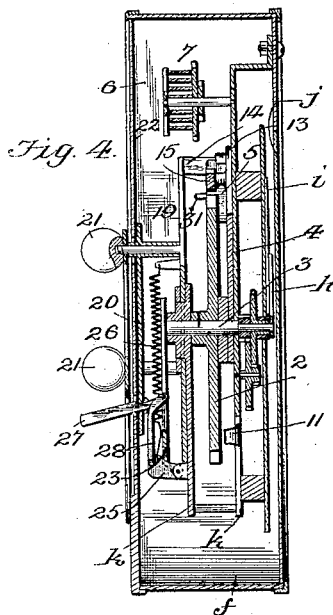
INVENTOR

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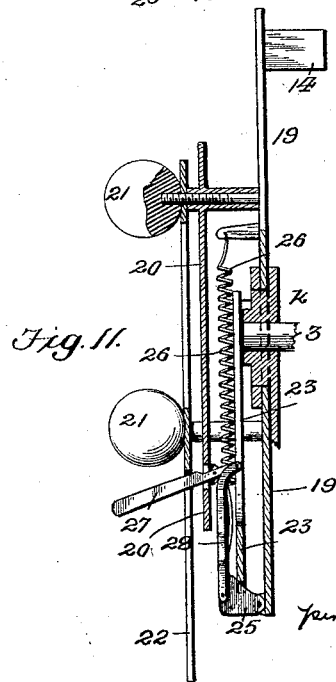
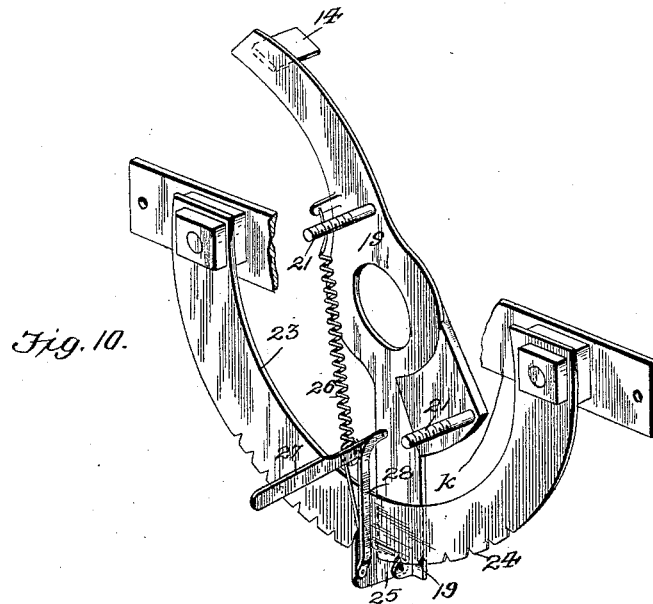
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UNITED STATES PATENT OFFICE.

GEORGE J. WAINWRIGHT, OF NEW YORK, N. Y., ASSIGNOR OF ONE-HALF TO
WALTER J. WAINWRIGHT, OF SAME PLACE.

POOL-REGISTER.

SPECIFICATION forming part of Letters Patent No. 524,123, dated August 7, 1894.

Application filed January 31, 1894. Serial No. 498,602. (No model.)

To all whom it may concern:

Be it known that I, GEORGE J. WAINWRIGHT, of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Pool-Registers; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form part of this specification.

This invention relates to certain improvements in registers.

In conducting pool rooms it is the usual custom to charge so much per cue for each pool game and at the beginning of each game it is necessary to set up the balls in a triangle which is then removed so that the game can proceed. Any number of persons can engage in a game from two persons say to sixteen.

It is the object of my invention to provide an improved registering mechanism which will accurately register the number of cues used for each game so that at the end of the day or whenever desired the proprietor can at a glance see how many cues have been employed and can at once determine the amount of cash due him.

A further object of the invention is to provide a reliable check against defrauding pool attendants and players operated by a triangle at the beginning of every game to register the number of cues employed in a game.

A further object of the invention is to provide an improved register which the attendant can set at the beginning of each game to the number of cues employed in a game and which is positively and necessarily operated to register the number of cues by the movement of the triangle necessarily employed in a game.

A further object of the invention consists in certain improvements in details of construction and operation of triangle operated cue registers whereby a most reliable and accurate instrument is provided.

The invention consists in certain novel features of construction and in combination of

parts more fully and particularly described hereinafter.

Referring to the accompanying drawings: Figure 1, shows in perspective a portion of the pool table with the improved register suspended above the same and a triangle in operative position inclosing the balls, dotted lines showing the triangle in its elevated position suspended on the register. Fig. 2, is a side elevation of the register, showing the suspending means thereof in section and the register set to record a game wherein fourteen cues are employed. Fig. 3, is an elevation of the opposite side of the register showing the door covering the dial face open, the hands of the register indicating that one hundred and twenty cues have been employed since the register was set to zero. Fig. 4, is a vertical sectional view taken through the register. Fig. 5, is a detail elevation of the register operating mechanism, the position of its outer setting plate indicated by dotted lines. Fig. 6, is a detail perspective view of the main ratchet operating wheel and the means for operating the same and a portion of the frame of the registering mechanism. Fig. 7, is a detail elevation of the oscillating frame carrying the main operating pawl for rotating the main ratchet wheel, showing the connection from said frame to which the triangle is attached and also the connection to the spring mechanism actuating the frame. Figs. 8 and 9, are, respectively, detail views in elevation and section of the means to wedge the main operating pawl against the main ratchet wheel at the end of the feeding stroke. Figs. 10 and 11 are detail views.

In the drawings the reference letter *a*, indicates the pool table.

b, indicates the balls.

c, indicates the triangle.

d, is the register in Fig. 1, suspended by any suitable means above the table.

The support or suspending means for the register are preferably formed telescopic as shown at *e*, Figs. 1 and 2, so that the register can be secured at various heights to accommodate different tables.

f, is the register case suitably and strongly constructed and supported from the suspending

90

95

100

ing means. One side of the case is provided with the dial face *g*, over which the hands *h* and *i*, travel. The door *j*, is employed to close the dial face. This door is preferably provided with a lock so that the proprietor can keep the door locked so that the attendants will not know how many cues are charged to them and so that it will not be easy for them to tamper with the device or defraud their employers. The dial face is here shown with one set of figures running from 0 to 60 and traversed by the hand *i*, and another set of figures running from 60 to 720 so that every time the hand *i*, revolves once the hand *h*, will move sixty points ahead.

k, indicates the frame of the operating registering mechanism suitably secured within the case *f*.

3, is a center arbor or main shaft of the registering mechanism passing through the sides of the frame *k*, and carrying the indicator hands and the cannon pinion, any suitable system of gearing being provided to operate the indicator hands in the manner before described.

2, is the main operating ratchet wheel rigid on the shaft 3, and preferably located between the sides of the frame *k*.

4, is the oscillating frame fulcrumed loosely on the shaft 3, carrying the main pawl 5, yieldingly held in engagement with the teeth of the ratchet wheel 2 so as to feed said wheel around in the direction to always move the indicator hands forward around their respective dials.

6, is any suitable spring mechanism connected with said oscillating feed frame 4, to draw said frame around in the direction to feed the ratchet wheel 2, forward. This spring mechanism preferably consists of a coiled spring 7, and a windlass 8, geared thereto and having flexible connections 9 secured thereon and attached to the lower arm of the feeder frame. The spring 7, exerts constant tension to coil the connection 9, on the spool 8, and thereby throw the oscillating frame around its full stroke.

I do not wish to limit myself to any peculiar feed mechanism but show and describe this form to illustrate a convenient means for feeding the frame and wheel when the triangle is lifted.

10, is a suitable flexible connection secured to the oscillating frame 4, preferably, to said lower arm, and extending downwardly through an opening in the bottom of the case *f*, and attached to the triangle as clearly shown in Fig. 1. The connection 10, is of such length that when the triangle is placed on the surface of the pool table the oscillating feeder frame will be pulled down and around to its limit of movement in that direction until it engages the stop 11. In this connection it should be noted that the power of the spring feeding device 6, is not sufficient to lift the triangle, but is only sufficient to move the feeder frame and lift connection 10, when the

triangle is lifted by the attendants and hung on the projections of the register frame.

When the triangle is raised from the table the spring mechanism 6, immediately draws the oscillating feeder frame up around and rotates the ratchet wheel 2, until the projection 13, of said oscillating frame engages the variable stop 14. When the triangle is lowered the pawl 5, runs back over the ratchet teeth of said wheel without rotating the wheel.

12, is the pawl carried by the frame *k*, and engaging the ratchet wheel to prevent retrograde movement thereof.

15, is a segment carried by the oscillating frame 4, and having ratchet teeth at its outer edge inclined in the direction in which said frame travels when moving down with the triangle.

16, is the spring actuated pawl yieldingly held in engagement with the ratchet teeth of said segment 15, so as to prevent the triangle being lowered to the table except when the attendant inserts a key 16, in the opening 17 of the case *f* and then turns the same so that its tongue strikes the projection 18, on the pawl 16, and moves the same from engagement with the segment 15. A check is thus provided against the players tampering with the device or starting in the game when the attendant is absent or without his knowledge.

Suitable mechanism is provided to regulate the throw of the oscillating feeder frame so as to feed the ratchet wheel different distances according to the number of persons engaged in the game. This mechanism for varying the throw of the oscillating frame preferably consists of a swinging frame 19, loosely mounted on or about the rear end of the shaft 3, preferably outside of the frame *k*, and having its upper arm provided with the lateral stop or projection 14 arranged to engage the projection 13 of the oscillating feeder frame. This frame 19, is rigidly secured to the plate 20, which has one or more knobs or handles 21, at the exterior of the rear face of the register case. These handles project through segmental slots formed in the rear of said case and are provided with a pointer 22 arranged to travel over a series of figures shown in Fig. 2 and located on the outer face of the register case. These figures are shown running from 2 to 16.

Suitable locking mechanism is provided to secure the parts so that the pointer is located over any one of said figures. This locking mechanism preferably consists of the segment 23, rigid with the frame *k*, and provided with a series of notches 24, corresponding to the numbers over which the pointer 22 travels. Thus in the present instance there are sixteen notches corresponding to the sixteen figures. An arm 19, projects beneath the segment 23 and has the latch or catch 25 pivoted to its outer end and extending up at the edge of said segment 24 and arranged to enter any one of the notches 24 and lock the frame 19,

the stop 14, and the pointer 22 at a certain fixed position. This catch 25 is yieldingly held toward the notched edge of segment 23 by the spring 26 and is operated by the lever 27, fulcrumed in the plate 20 and extending to the exterior of the register case beside or near the handle 21, and a link 28 from the lower end of said lever to the upper edge of the catch 25, so that by pressing the lever 27 in one direction the catch 25 will be drawn out of engagement with the notched edge of the segment 23, and the variable stop mechanism can be moved to a point desired by the handles 21. If four persons desire to play the game of pool, the attendant first by means of lever 27, releases the catch 25, and then by means of the handles 21, turns the frame 19, until the pointer 22, is located over the figure 4, at the exterior of the case, the lever 27, is then released and the catch 25 then enters the fourth notch in the segment 23. This holds the stop 14, at such a point in the path of the oscillating feeder frame that when the said frame has been released from its locking mechanism (composed of pawl 16) the triangle can be placed on the table and the balls properly arranged and the said triangle is then moved up and the feeder frame will move the main shaft wheel around such a distance as to move the finger *i*, forward four points. In the present instance the parts are so proportioned that the ratchet wheel 2, is also moved around four teeth.

In order to prevent the ratchet wheel 2, moving by reason of the inertia after the stops 13, and 14, have engaged, the upper surface of the pawl 5, is formed inclined and arranged to pass under and into engagement with the stop 14. This causes the stop 14, to force the pawl 5, positively into locking engagement with the ratchet wheel so as to prevent further forward movement thereof. The frame *k*, is provided with the inclined edge 30, with which a projection 31 from the pawl 5, is attached to engage at the outward limit of the stroke of the feeder frame. This raises the pawl from engagement with the ratchet wheel.

It is evident that various changes might be made in the forms, arrangements and constructions of parts described without departing from the spirit and scope of my invention, hence I do not wish to limit myself to the exact constructions herein set forth, but consider myself entitled to all such changes as fall within the spirit and scope of my invention.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. In a register, the combination of the case, registering mechanism proper therein, a spring controlled mechanism for the register arranged to be connected and controlled by the ball assembling triangle, a variable stop mechanism to control the throw of said operating mechanism, a handle for operating the same from the exterior of the case pro-

vided with a pointer, a scale for said pointer, substantially as set forth, a lock to hold the stop mechanism at the desired point, substantially as described.

2. In a register, the combination of a case, a frame in the case, registering mechanism proper, a ratchet feed wheel for operating the same, a spring controlled oscillating frame provided with a pawl to feed said wheel, said frame adapted to be connected with and controlled by the ball assembling triangle; a swinging frame provided with a stop for said feed frame arranged to lock the pawl against said wheel at the limit of the stroke of the feed frame in one direction, and having an operating handle at the exterior of the case substantially as described.

3. In a register, the combination of a register case, the registering mechanism proper, a ratchet feed wheel for operating the same, an oscillating feed frame provided with a pawl to rotate said wheel, said frame to be connected with and controlled by the ball assembling triangle, said frame provided with a series of ratchet teeth, and a pawl arranged to lock said frame against movement in a direction to place the triangle in operative position on the table, said pawl to be released by a key.

4. In a register, the combination of the case having a dial face provided with a door, a frame in the case, registering mechanism proper, the center arbor, a ratchet feed wheel rigid with the arbor, a spring controlled oscillating frame having a pawl to feed said ratchet wheel, one arm of said frame adapted to be secured, by flexible connections, to the ball assembling triangle, a swinging frame operative from the exterior of the case, and loose on said arbor having a stop to limit the swing of said oscillating frame in feeding direction, a lock, to hold said swinging frame in the desired position, operative from the exterior of the case.

5. In a register, the registering mechanism, operating mechanism therefor, a swinging frame provided with stops to limit the throw of the feeding or operating mechanism in feeding direction, a handle to turn or swing said frame extending to the exterior of the register case, a scale, a pointer moving with said frame and over said scale so that the stops can be set at any point desired to produce the desired registration, a swinging catch arranged to engage the frame in the register case and lock the swinging frame at the desired point, and a swinging lever extending to the exterior of the case and connected with said catch to operate the same, substantially as described.

6. A register case provided with suspending means, to suspend the register above a table, a registering mechanism therein, a swinging feed frame for the registering mechanism, a spring device connected to said frame to swing the frame in feeding direction, a ball assembling device connected to said frame by a

flexible connection shorter than the distance from the frame, in its normal position to the table, so that the frame is moved against the spring, to position to feed, by placing the assembling device on the table, and a variable stop operated from the exterior of the case to limit the return or feeding movement of said frame under the impulse of the spring when the assembling device is raised, substantially as described.

7. A pool register comprising a case, a registering mechanism, a movable feed frame arranged to feed the same on its return stroke and adapted to be connected to a ball assembling device to be moved thereby to feeding position, a spring device connected to said frame to move the same in its feeding or return stroke, and a movable stop in the path of said frame, and arranged to limit the return feeding stroke of said frame and provided with holding and operating means extending to the exterior of the case, substantially as described.

8. A case, a registering mechanism therein, a swinging feed frame for said registering mechanism arranged to feed the same on the

up or return stroke, a spring device to return said frame on its feeding stroke, a connection from said frame depending through the case to a ball assembling device and arranged to swing the frame against the spring to feeding position, and a single movable variable stop operative from the exterior of the case to form a variable limit for the return or upward stroke of the frame, substantially as described.

9. In a register, registering mechanism, a movable feeding frame therefor, and a swinging frame having a stop extending into the path of the feed frame to limit the feeding stroke thereof, means to lock said swinging frame, and a handle for turning said swinging frame and moving the stop, substantially as described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

GEO. J. WAINWRIGHT.

Witnesses:

ROBERT T. BROWN,
I. B. WALLACH.