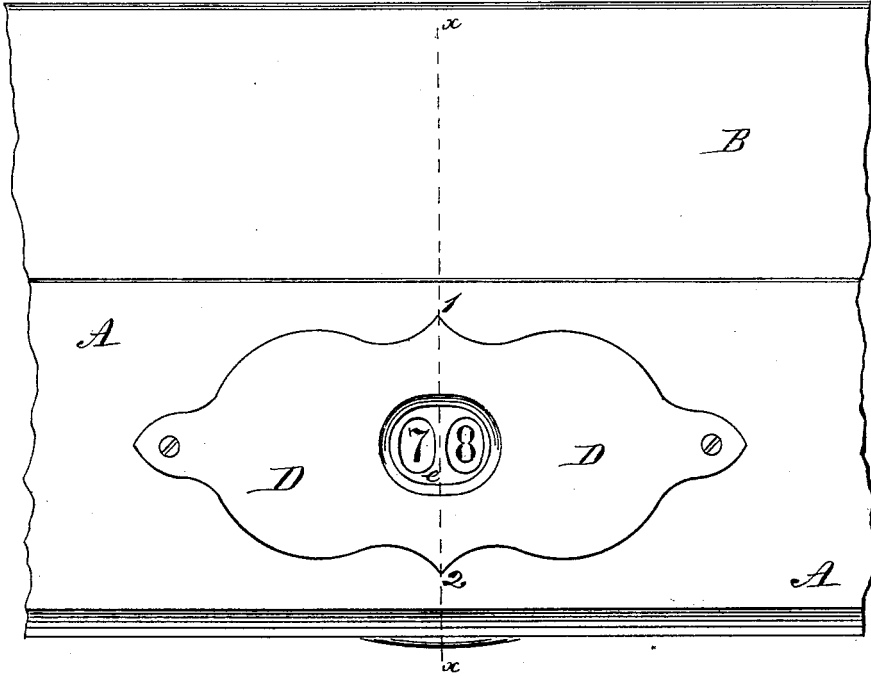


H. W. COLLENDER.  
Game-Counter for Billiard-Tables

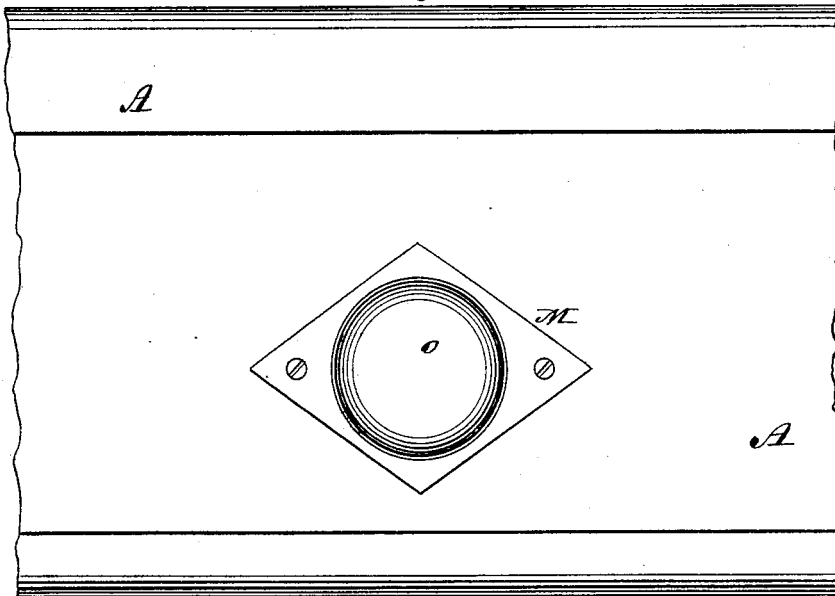
No. 203,422.

Patented May 7, 1878.

*Fig. 1.*



*Fig. 2.*



*Witnesses:*

*E. Wolff*  
*Jacob Felbel*

*Inventor:*

*H. W. Collender*  
*per atty.*  
*J. N. McEntire*

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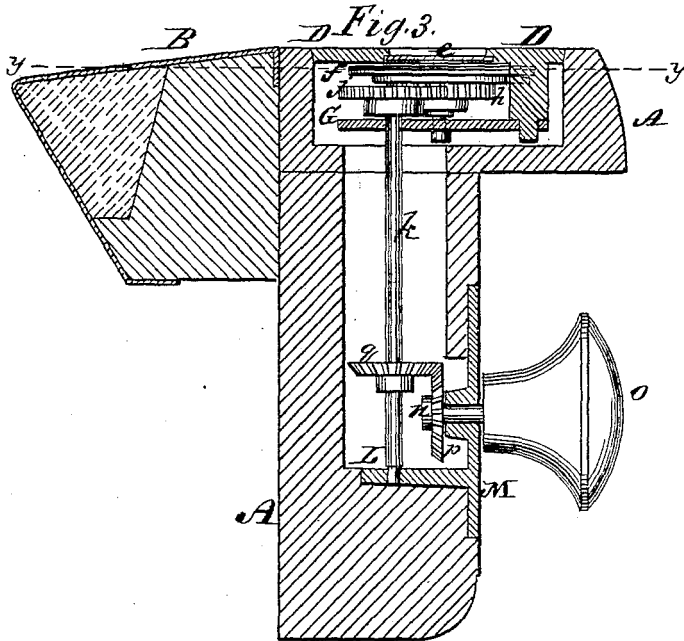
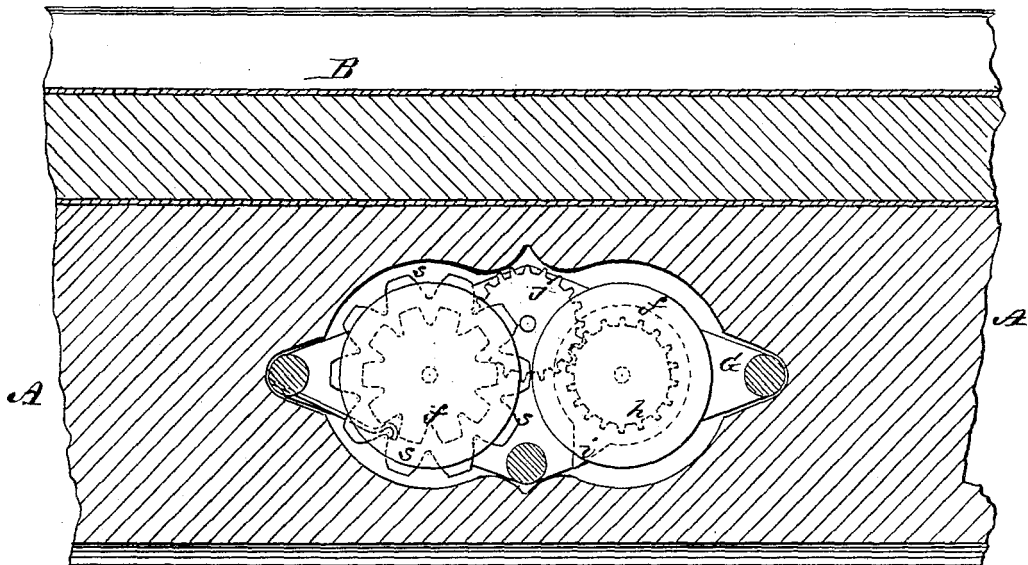


Fig. 4.



Witnesses:  
*E. Wolff*  
*Jacob Felber*

Inventor:  
*H. W. Colender*  
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# UNITED STATES PATENT OFFICE.

HUGH W. COLLENDER, OF NEW YORK, N. Y.

## IMPROVEMENT IN GAME-COUNTERS FOR BILLIARD-TABLES.

Specification forming part of Letters Patent No. **203,422**, dated May 7, 1878; application filed February 28, 1878.

*To all whom it may concern:*

Be it known that I, HUGH W. COLLENDER, of New York city, in the county of New York and State of New York, have invented an Improved Game-Counter for Billiard-Tables; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification.

Previous to my invention various devices or contrivances have been employed for marking or registering the count at billiards, some of which have been applied directly to the table on which the game is played. In all that kind of game-registers, however, which are adapted to be applied to or combined with the table, made previous to my invention, the construction has been such that some sort of handle, knob, or other protuberance for the manipulation of the mechanism by the hand of the player projected upward from the top plate of the fixture and above the top surface or level of the cushion-rail of the table.

Any protuberance, or any device for projecting upward from the top surface of the cushion-rail, is very objectionable, because in the use of the table the player has not only to frequently rest the bridge-hand on top of the cushion-rail, but has often to rest the body thereon in reaching far over, and some players elect to sit partially on the cushion-rail in certain positions, and any protuberance whatever on top of the cushion-rail is therefore always in the way of, and sometimes hurtful to, the player.

My invention has for its main object to provide for use in the rail of the table a register mechanism or game-counter which, while it can be as conveniently operated by the player as any of those heretofore made, presents no projecting obstacles to the players at the top surface of the cushion-rail.

The register mechanisms heretofore made have also been objectionable because of their inability to operate to mark a discount game, the complexity of their mechanisms, and their construction in such a manner as to necessitate the cutting away and weakening of the cushion-rail too much.

My invention is further designed to overcome

all these objections; and consists in a registering mechanism adapted to be inserted in the top of the cushion-rail, and having the knob, handle, or other projecting device by which it is manipulated located somewhere below the top of the cushion-rail, substantially as hereinafter more fully set forth; and my invention further consists in a mechanism for registering the count made, as hereinafter described, so that it can be operated to count either way for the purposes of registering a discount game; and my invention further consists in having the top plate of a register adapted to be inserted in the cushion-rail, so formed as to serve also the purpose of a pointer or sight for indicating the table-angle, all as will be hereinafter more fully explained.

To enable those skilled in the art to make and use my invention, I will proceed to more fully describe its construction and operation, referring by letters to the accompanying drawings, in which—

Figure 1 is a top view of part of a billiard-table having applied to it my improved register mechanism. Fig. 2 is a side elevation of the same. Fig. 3 is a vertical section at the lines *x x*, Figs. 1 and 2; and Fig. 4 is a horizontal detail section at the line *y y*, Fig. 3.

In the several figures the same parts will be found designated by the same letter of reference.

A is the cushion-rail, and B the cushion, of an ordinary billiard-table.

The main portion of the mechanism of the game register or counter is attached to a plate, D, beneath which all of said mechanism is located, and said plate is let into the top of the cushion-rail B, so as to come flush with its upper surface, as illustrated.

This plate D is so shaped or patterned, as seen, that its points at 1 2 serve the purposes of the usual diamonds or angle-sights of the cushion-rail, one of which has to be dispensed with always where any register device is inserted at the middle of the cushion-rail, and said plate is cut out at its middle portion, as shown, to permit observation (through the usual glass *e*) of the figures of the dial-plates arranged below. These dial-plates *f f* are, as usual, each numbered on top with the ten

digital figures, only two of which (one on each plate) can be seen at the same time through the glass of the register.

The studs or arbors which carry the dial-plates *f f* are mounted at their upper ends in the top plate and at their lower ends in the bottom plate *G*, and that one of the said arbors that carries the dial-plate of units (the one on the right) carries also a spur-gear, *h*, and a single tooth-sector, *i*. The said gear *h* engages with a spur-pinion, *j*, by which it is driven, and the said sector *i* engages at proper intervals (all as will be presently explained) with a toothed wheel, *s*, on the arbor of the dial-plate for tens, (the one on the left,) so as to move said toothed wheel, and thereby move the dial for tens one-tenth of a revolution at each complete revolution of the other dial-plate.

*k* is a shaft extending vertically downward from the spur-pinion *j*, and stepped at its lower end in a projection or stand, *L*, of the knob-plate *M*. This plate is let into the vertical side of the cushion-rail, as shown, and is made with a central hole and hub, in which is arranged, so as to turn freely in either direction, the spindle *n* of the knob *O*.

On the inner end of the spindle *n* is secured a bevel-pinion, *p*, that engages with and drives the bevel-gear *q* of the shaft *k*.

Both the top plate *D* and the side or knob plate *M* may be secured in place by screws, as shown, or otherwise.

To operate the register, the knob *O* is turned in either direction, whereby, through the medium of the bevel-pinion *p*, bevel-gear *q*, shaft *k*, and spur-pinions *j*, engaging with the spur-gear *h*, the arbor of the dial-plate to the right is turned round to bring any desired figure under the glass of the plate *D*; and, in thus turning, this dial-plate and toothed sector *i*, secured to the arbor of said dial-plate, will once, during each complete revolution of the latter, come into engagement with one of the teeth of the wheel *s*, and move the latter one-tenth of a revolution, thus bringing some one of the figures of the other dial-plate (the one to the left) under the glass, where it can be seen.

It will be understood that as all the rotating parts are free to turn or rotate in either direction, and yet always retain their given relative positions and engagements, the register may be manipulated at pleasure to count either forward or backward; and this capacity

of the machine, not possessed by prior register mechanisms, renders my improved register capable of use for counting a discount game—*i. e.*, that kind of game in which one player sets back his opponent's score each time he adds to his own.

It will also be seen that, as the dial-plates and their connected wheels are operated by a shaft extending downward and provided with a bevel-gear engaging with the pinion of a horizontal shaft protruding at the side of the cushion-rail, no projecting handle, knob, or other device has to be employed on top of the cushion-rail, where any such projection is objectionable.

By making the top plate *D*, as shown and described, of some form or shape in which will be presented points at 1 2, or at one of these places, the said plate is made to perform, in addition to its usual functions, the office of an angle-sight to the cushion-rail, and by making the register mechanism as shown the whole fixture is so shallow as not to necessitate any material weakening of the cushion-rail where the latter is cut out to let in the register or counter.

The top plate *D*, I utilize also for the purpose of a "name-plate," and by thus using it for this purpose also I am enabled to dispense with the usual name-plate on a table supplied with a counter mechanism, and place one of the counters at the foot and the other at the head of the table.

The details of construction may of course be varied without departing from my invention.

What I claim as new, and desire to secure by Letters Patent, is—

1. A register mechanism for counting the game, adapted to be let into the top of the cushion-rail, and provided with means for manipulating its dials by a handle, knob, or other device projecting from the side of the table or cushion-rail, substantially as set forth.

2. A billiard-table register adapted for insertion in the top of the cushion-rail, and having its top plate so shaped as to serve also the purposes of one of the usual angle-sights of the table, as set forth.

In witness whereof I have hereunto set my hand and seal this 9th day of November, 1877.

H. W. COLLENDER. [L. s.]

In presence of—

MULFORD W. HAYWARD,  
F. W. HOWARD.