(Model.)

2 Sheets—Sheet 1.

# W. M. BATES.

## RACK FOR POOL BALLS.

No. 265,214. Patented Sept. 26, 1882.

Fig. 2.

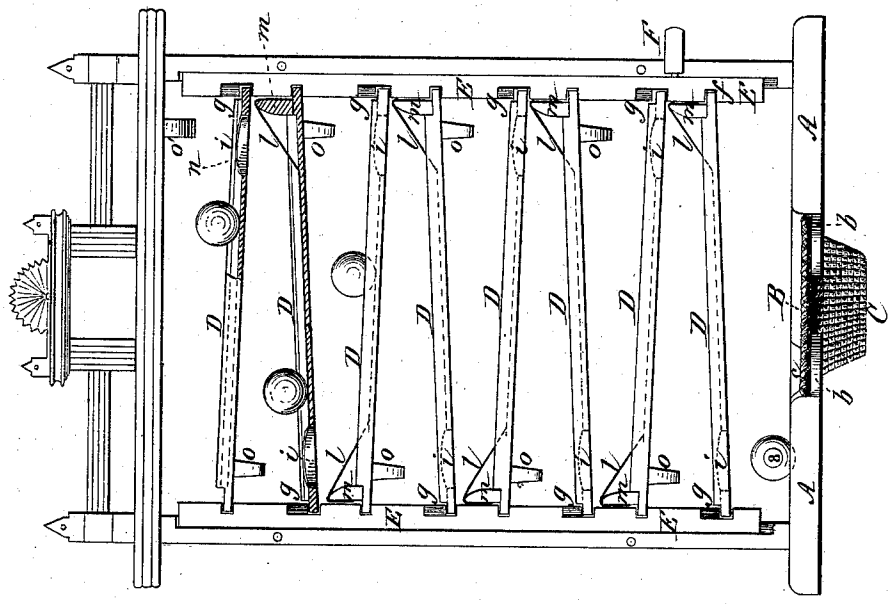
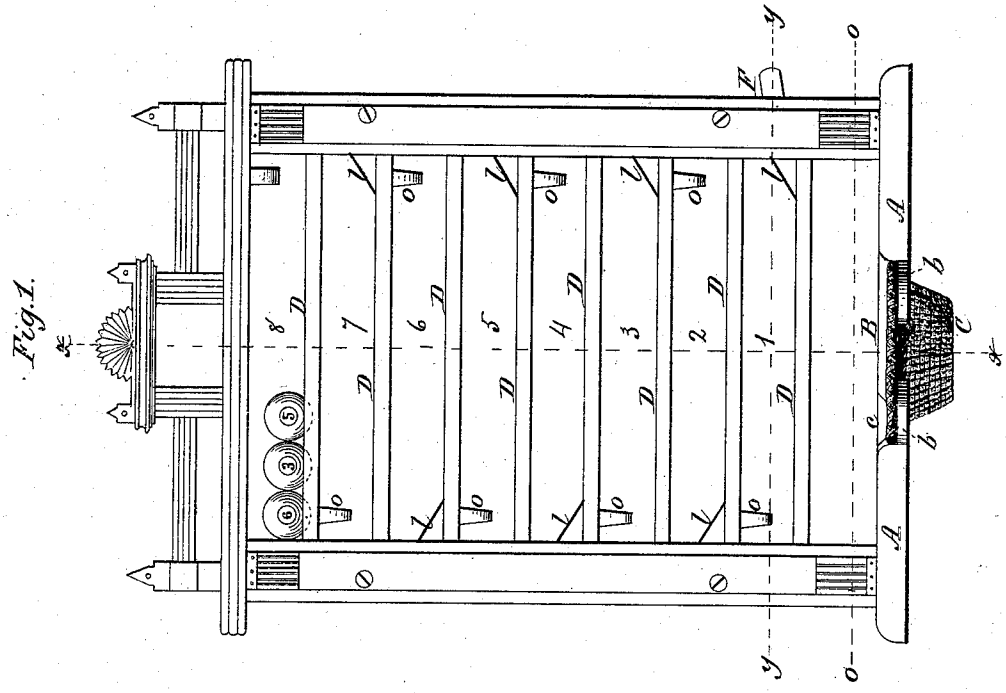


Fig. 1.



Witnesses:
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Attys

N. PETERS. Photo-Lithographer. Washington, D. C.

(Model.) 2 Sheets—Sheet 2.

# W. M. BATES.

## RACK FOR POOL BALLS.

No. 265,214. Patented Sept. 26, 1882.

Fig. 3.

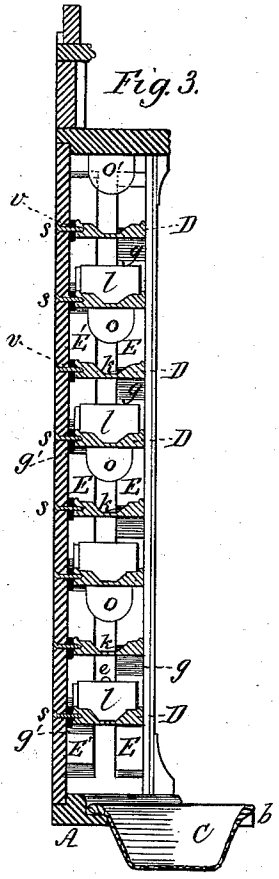



Fig. 4.

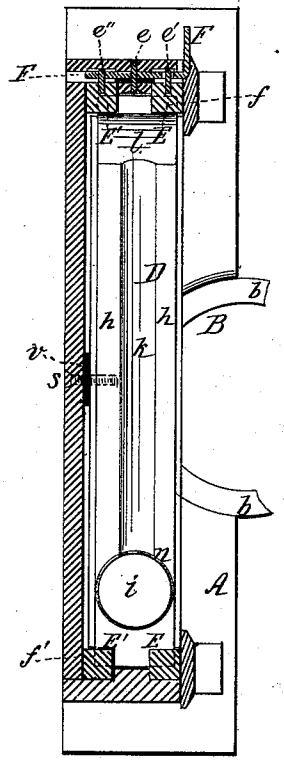



Fig. 5.

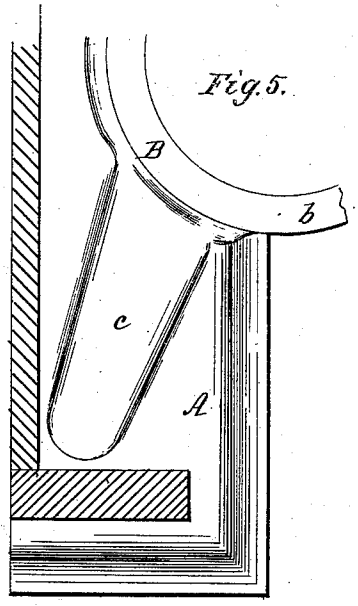



Fig. 6.

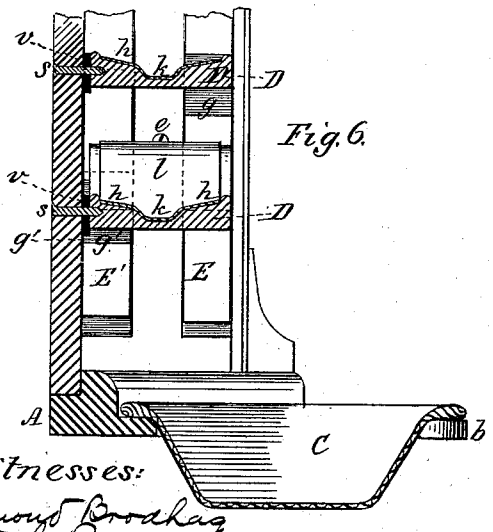
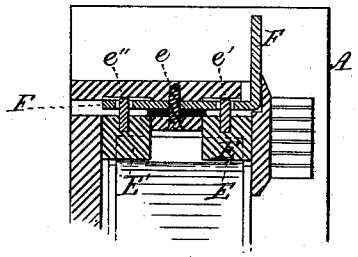



Fig. 7.




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N. PETERS. Photo-Lithographer. Washington, D. C.

# UNITED STATES PATENT OFFICE.

WILLIAM M. BATES, OF POUGHKEEPSIE, NEW YORK, ASSIGNOR OF ONE-HALF TO SIMON POTTER, OF SAME PLACE.

## RACK FOR POOL-BALLS.

SPECIFICATION forming part of Letters Patent No. 265,214, dated September 26, 1882.

Application filed April 26, 1882. (Model.)

*To all whom it may concern:*

Be it known that I, WILLIAM MORGAN BATES, a citizen of the United States, residing at Poughkeepsie, Dutchess county, State of New York, have invented new and useful Improvements in Racks for Pool-Balls, of which the following is a specification.

My invention relates to the racks of shelves used for receiving the balls in playing the game of pool, and from whence the balls are carried in a tray back to the table.

The object of my said invention is to improve the construction of tilting shelves for such racks, so as to render the movement of the balls in their passage from shelf to shelf to the receptacle noiseless, to start the balls on their descent, to support the tilting shelves for retaining the balls, and for tilting them to deliver said balls to the receptacle.

The novel means for carrying out such improvements are hereinafter described with reference to the accompanying drawings, in which—

Figure 1 represents a front view of the rack, the shelves being in a horizontal position to retain the balls; Fig. 2, a similar view, showing the shelves as tilted, the architrave-jambs being removed to show the construction of shelf-operating means; Fig. 3, a vertical cross-section taken at the line *x x* of Fig. 1; Fig. 4, a horizontal section taken on the line *y y* of Fig. 1; Fig. 5, a sectional view enlarged, taken on the line *o o* of Fig. 1; Fig. 6, a partial vertical central section enlarged, and Fig. 7 a partial horizontal section enlarged.

The case for the shelves is made in the usual manner, open at the front, and is fastened to the wall of the room or to an upright frame or horse. The sill A of this case is provided with an open seat, B, having a drop-ring shoulder, *b*, to receive and hold a basket, C, in such manner that the basket-rim shall be flush with or below the sill-surface for the purpose of receiving the rolling balls as they drop from the bottom shelf and pass to said basket in a gutter or way, *c*, as will be presently described.

The shelves D are pivoted by screws *s* to the case at their back edges centrally of their length; but the object being to hold the balls until the game is ended, and then to deliver those of all the shelves out at one end of the bottom shelf, it is necessary that said shelves should be adapted to remain stationary until the delivering time, and then to be tilted alternately in opposite directions. I effect this by means of lifting-bars E E′, arranged two in each jamb of the case, to be movable in guides therein, the one up, the other down. This movement of the bars on both sides is made from the right-hand side by the upward pushing of a lever, F, pivoted to the jamb at a point, *e*, between the bars E E′, and to each bar at *e′ e″*, just above the bottom shelf. This bottom shelf, D, is held at its outer right-hand edge in a notch, *f*, in the bar E, and in like manner at its inner left-hand edge in a notch, *f′*, in the bar E′, while its two remaining corner edges have freedom to move up and down in gains *g g′* in said bars E E′, the gain *g* of the left-hand bar E being in line with the notch *f* in the right-hand bar E and the notch *f′* in the left-hand bar E′ in like relation to the gain *g′* in the right-hand bar E′. For the next shelf the case thus stated is reversed, and so on alternately for the series.

The shelves have each longitudinal gutters *h*, to prevent the balls from rolling off and to facilitate their travel when the shelves are tilted. These gutters are beveled from each edge to a central groove, *k*, or direction-channel, and covered with oil-cloth or other suitable material to deaden the sound. The oil-cloth covering is raised up at an incline, *l*, upon a block, *m*, at that end of each shelf which is below the hole *i* of the shelf above it. Each shelf has one of these holes *i* to discharge the balls, the holes of the top shelf being on the right-hand end and the hole in the next shelf on the left hand, and so on alternately for all the shelves. These holes are lined with cloth, as at *n*, to deaden the sound made by the passing balls.

On the under right-hand top of the case, above the hole *i* of the shelf below it, is a depending stop-block, *o′*, serving, (in connection with the blocks *o*, similarly placed upon the other shelves,) when the balls are held in them, to prevent their rolling through the holes. The shelves being in horizontal position to hold the balls, the lever F being down, it is only necessary to raise the lever, when the herein-before-described movement of the lifter-bars

takes place. The shelves are tilted alternately in opposite directions, thus opening a passage for the downrolling balls, since the stops are thus brought out of their before-described relation to the holes. The balls of the bottom shelf—those of the others following—now drop upon the sill A in the gutter-way *c* and roll into the basket or receptacle, from whence they are taken to the table.

The shelves are separated from the back of the case sufficiently to prevent grating upon the back of the case by washers *v*, of fabric or suitable material, between pivot and edge of shelf.

One slide of each set serves by its notched connection with the shelves to move them simultaneously at each end, and also as to the means of holding them when set either in an inclined or in a horizontal position.

I claim—

1. In a rack for pool-balls, the combination, with a series of shelves pivoted centrally to the case, of means, substantially as described, for securing them to retain the balls and tilting them alternately in opposite directions to deliver the balls.

2. In a rack for pool-balls, the combination, with a series of shelves pivoted centrally to the back of the case, of the lifter-bars E E′, provided with gains *g g′*, the jamb of the case, and a lever, F, all substantially as and for the purpose described.

3. In a rack for pool-balls, a series of shelves, each provided with a hole, *i*, at one end and a depending stop-block, *o*, at the other, in combination with means for tilting them, substantially as described.

4. In a rack for pool-balls, a series of shelves, each provided with a hole, *i*, at one end and a depending stop-block, *o*, at the other, and inclines *l*, as described, in combination with means for tilting them.

5. In a rack for pool-balls wherein a series of centrally-pivoted shelves are caused to be tilted alternately to deliver the balls, the holding and tilting means, consisting of the lifter-bars E E′ on both sides of the case, provided with notches *f f′* and gains *g g′*, in combination with the jambs of the case, having guides and lever F pivoted to one of said jambs and to the bars E E′ (in said jamb) at *e′ e″*, all substantially as and for the purpose described.

6. In a rack for pool-balls having a series of pivoted shelves and means for tilting them alternately in opposite directions, the said shelves each beveled from the edges to a middle groove, *k*, and covered with oil-cloth to form a noiseless gutter and holding-way, *k*, substantially as set forth.

7. In a rack for pool-balls having tilting shelves capable of delivering the balls to a receptacle, the combination therewith of the sill A, provided with a gutter, *c*, and shouldered seat B *b*, substantially as and for the purpose described.

8. In a rack for pool-balls, the combination, with the case and the centrally-pivoted shelves, of the fabric-separating washers *v* and means for tilting the shelves, substantially as described, for the purpose specified.

9. In a rack for pool-balls, the combination, with a series of shelves, each provided with a hole, *i*, at one end and a depending stop-block at the other end, and fabric inclines arranged on the shelves beneath the said openings, of means, substantially as described, for freeing the stops from the balls.

10. In a rack for pool-balls, the shelves thereof, having a cushion-lined hole at one end and a cushion-incline at the other, in combination with the depending stops and means for operating said shelves to hold and to deliver the balls, as set forth.

11. The receiving and delivering sill or lower shelf of a pool-rack, having a gutter, *c*, and a curved seat part, *b*, in combination with a noiseless receptacle supported upon said seats with its edge below the plane of said gutter, substantially as described, for the purpose specified.

12. The herein-described rack for pool-balls, consisting of the series of centrally-pivoted shelves, each having a depending stop, a delivering-hole, and a receiving-incline, the operating-bars E E′, connecting the opposite ends of the shelves, the lever F, the guttered sill having the curved seat, the basket-receptacle, and pivot-cushions of the shelves, all constructed and arranged for operation substantially as described.

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

WILLIAM MORGAN BATES.

Witnesses:

CYRUS SWAN,

WILLIAM L. DE LACEY.