(No Model.)

2 Sheets—Sheet 1.

S. R. MATHEWSON.

Billiard Table.

No. 229,625. Patented July 6, 1880.

Fig. 1.

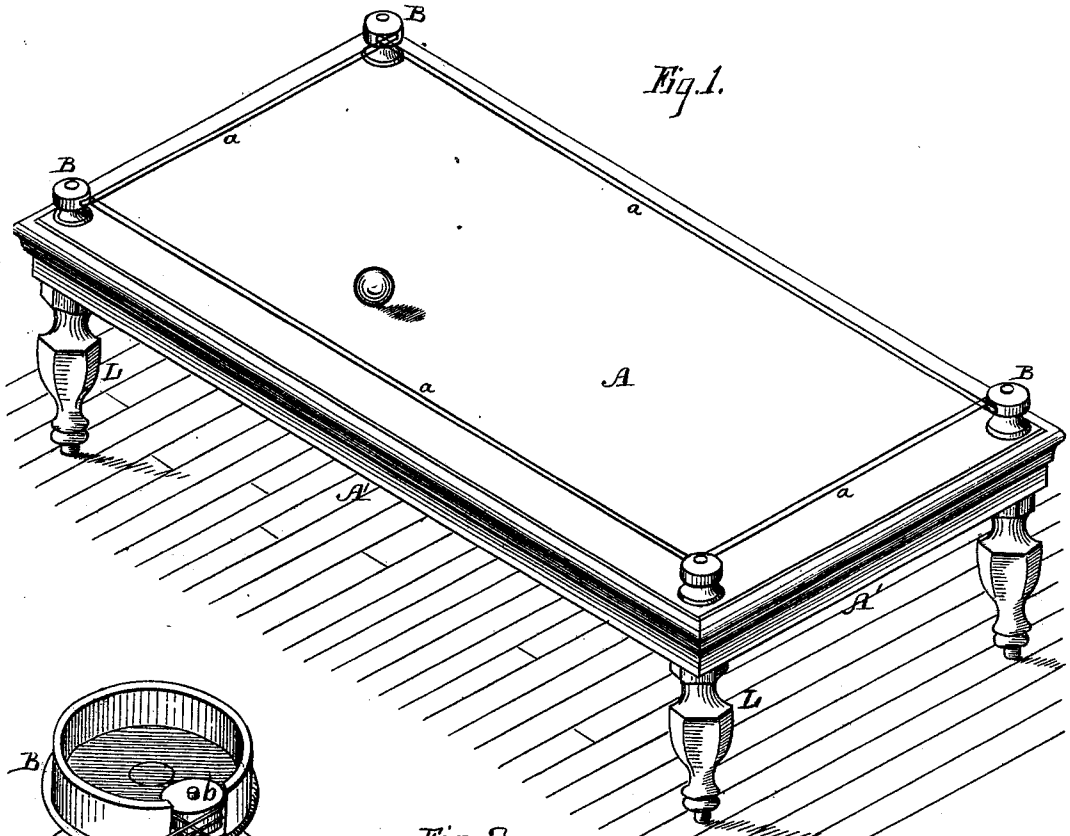
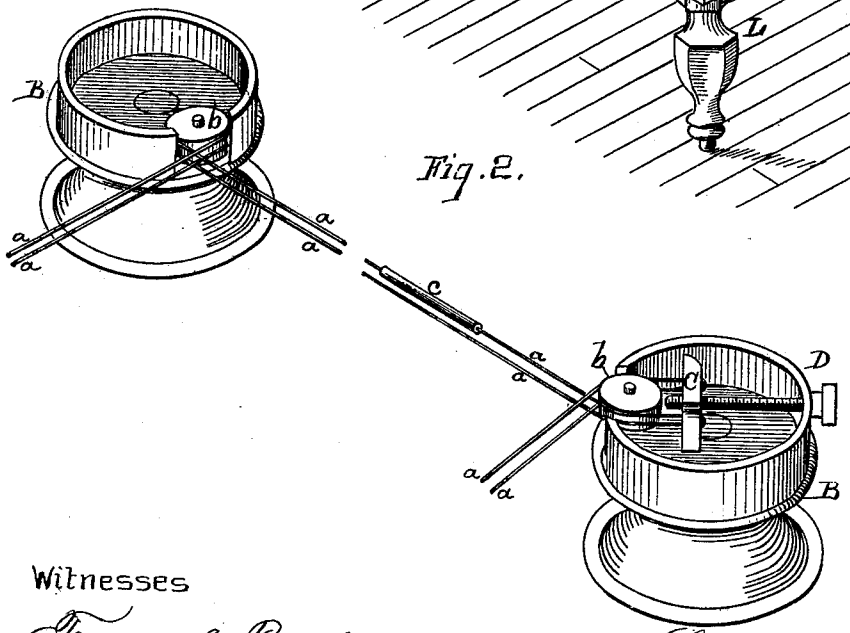


Fig. 2.



Witnesses

Frank A. Brooks

Geo. H. Strong.

Inventor

Sebra R. Mathewson

By Dewey & Co.

Attys.

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

(No Model.) 2 Sheets—Sheet 2.

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Fig. 3.

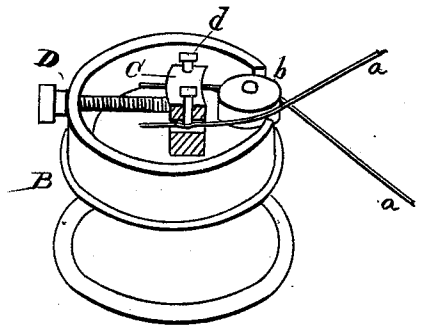
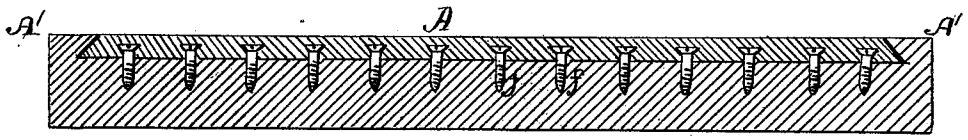


Fig. 4.



Witnesses

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Attys

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UNITED STATES PATENT OFFICE.

SEBRA R. MATHEWSON, OF RIO VISTA, CALIFORNIA.

BILLIARD-TABLE.

SPECIFICATION forming part of Letters Patent No. 229,625, dated July 6, 1880.

Application filed March 8, 1880. (No model.)

To all whom it may concern:

Be it known that I, SEBRA R. MATHEWSON, of Rio Vista, county of Solano, and State of California, have invented an Improved Billiard-Table; and I hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to certain improvements in billiard-tables; and my improvements consist in forming the cushion or sides of the table of one or more pieces of straight wire passing around studs at the corners, in combination with an adjusting device so arranged that the slack may be taken up in order that the wire may be kept at such a tension as to provide an elastic medium for the balls to rebound from.

It also relates to a peculiar method of forming the studs which control the wire.

It also consists in a peculiar construction of bed-surface in combination with a billiard-table.

Figure 1 is a perspective view of my improved billiard-table. Fig. 2 is a view of the studs, showing the manner of tightening the wires. Fig. 3 is a modification of the same. Fig. 4 is a section of the body of the table.

Let A represent the bed or table, and A′ the inclosing edges or rims of said bed. The table has the usual supporting-legs L, supplied with a leveling or adjusting device, as hereinafter described.

At each corner of the table is placed a stud, B, carrying at one edge a roller or sheave, *b*, around which the wires *a* pass. These wires *a* form the cushion or edge upon which the balls rebound, and take the place of the expensive rubber cushions which are commonly placed upon billiard-tables.

In order that a proper amount of tension shall be kept upon the wires to insure the necessary elasticity, it is necessary to provide a ready means of tightening them when they become slack from stretching. This I accomplish by forming a stretching device on one of the studs B. A block, C, having an adjusting-screw, D, which may be turned by means of a wrench, is placed in one of the studs, and the ends of the wires are secured to this block, as shown. Each wire is carried from this block C past the outside of the sheave *b* to the outside of the corresponding sheave in the next stud, passing around this sheave, as shown, so that each wire crosses itself at the corner. The rectangular corners formed by the wires are therefore inside and clear of the studs, so that the balls will never strike the studs. When reaching the corners they will rebound, as well as at the center. Each wire passes from the adjusting-block C around the sheaves *b* in each stud, and has its opposite end secured to the same block, as shown, completing the circuit of the table. Still, if desirable, adjusting-blocks may be put in the studs at opposite corners of the table and shorter wires used.

The small pulleys are grooved for the wires, and are placed on spindles, so they will turn and lessen the friction when the wires are moved in tightening.

I have shown double wires to form the cushion—the number which I prefer to use; but a single wire or more than two may be used. One wire may be set slightly in advance of the other, so that the ball will strike one first, which will prevent the ball from jumping, and the full elasticity of both wires will be utilized.

The wires are covered with a tube of india-rubber, as represented at *c*, so as to prevent noise when the balls strike the wire, and also save the ivory from injury from the wires. The rubber fits close on the wire in the form of a tube, or the wire may be coated with it, as preferred.

I have shown the wires as drawn through holes in the adjusting-block C and twisted behind it. In Fig. 3, however, I have shown another means of securing the wire to this block C. Set-screws *d* pass down vertically through the block, and the wires pass through horizontal holes under the set-screws. As the set-screws are screwed down they press the wire down and clamp it tightly, so it will not slip.

I prefer to form the bed of my billiard-table out of a peculiar compound, so as to form a smooth surface for the balls to roll on. The main portion of the table is made of wood, the rims A′ being an inch or two higher than the center or portion on which the bed is formed. In this center I put in a lot of screws, *f*, the

heads of which do not reach up to the top of the rims. I then form a plastic compound of six parts of cement, four parts of glue, one part of plaster, and one part of powdered marble. This I spread into the center of the table until it forms a smooth bed, level with the rims, entirely covering the screws *f*, the heads of which do not reach the surface, as shown in Fig. 4. As soon as this compound sets and becomes hard a smooth level surface is presented, and is held in place by the heads of the screws *f*, as shown. This surface, after being formed, can be polished down. It is then covered with the usual cloth, and a smooth, even surface is obtained. This makes the table much lighter than where a heavy stone bed is used, as well as much less expensive.

In this improved billiard-table the wires answer every purpose of a cushion, and, being kept tight, never become "dead." The cue may be pushed under the wire to make a draw shot near the cushion, which cannot be done with the usual form of cushion in some positions. The ordinary cues and balls are used in connection with the game on this as on any ordinary billiard-table.

The top of the studs B may be made to screw off and on, so that the pulleys or sheaves *b* may be replaced in case a pin breaks, and they may be made ornamental in appearance.

I am aware that billiard-table beds have heretofore been made of plastic compounds; and I am also aware that such plastic compounds have been cast in metal plates having flaring perforations to hold the compound securely to the plate to form beds for billiard-tables.

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

1. In a billiard-table, the cushions or rebounding-surfaces consisting of one or more independent horizontal wires, *a*, extending across the sides and ends, in combination with a tension-adjusting device, by which their tension is regulated, substantially as and for the purpose herein described.

2. In combination with the independent horizontal wires *a*, forming the cushions or rebounding-edges for a billiard-table and adapted to have their tension increased at will, the rubber tubing or covering *c*, whereby injury to the balls from contact with the wire is prevented, substantially as herein described.

3. In combination with the independent horizontal wires *a*, forming the cushions for a billiard-table, passing around the sheaves *b* in the corner-studs B, the block C, with its adjusting-screw D, whereby the tension of the wires is regulated and their elasticity maintained, substantially as herein described.

4. In combination with the billiard-table A A′, having cushions formed of the elastic independent wires *a*, the corner-studs B, provided with the grooved sheaves *b*, whereby the wires are crossed at the corners and contact of the balls with the studs prevented, substantially as herein described.

5. In combination with a billiard-table, the bed A, formed of a plastic compound, and held in place by the bedded screws *f*, substantially as and for the purpose herein described.

In witness whereof I have hereunto set my hand.

SEBRA R. MATHEWSON.

Witnesses:
GEO. H. STRONG,
S. H. NOURSE.