(No Model.)

# C. W. ALLEN.

## BILLIARD TABLE.

No. 259,454. Patented June 13, 1882.

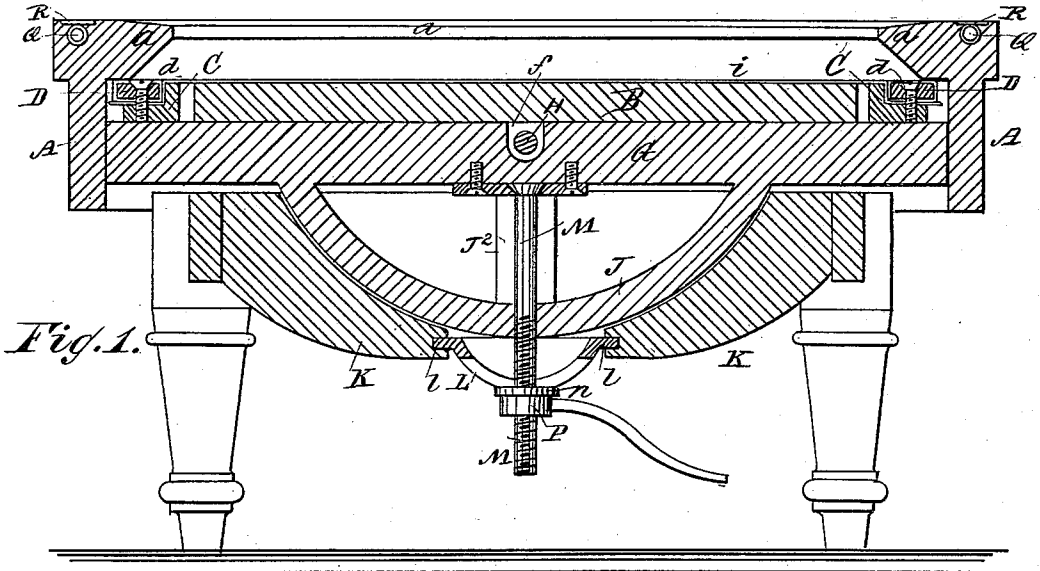


Fig. 1.

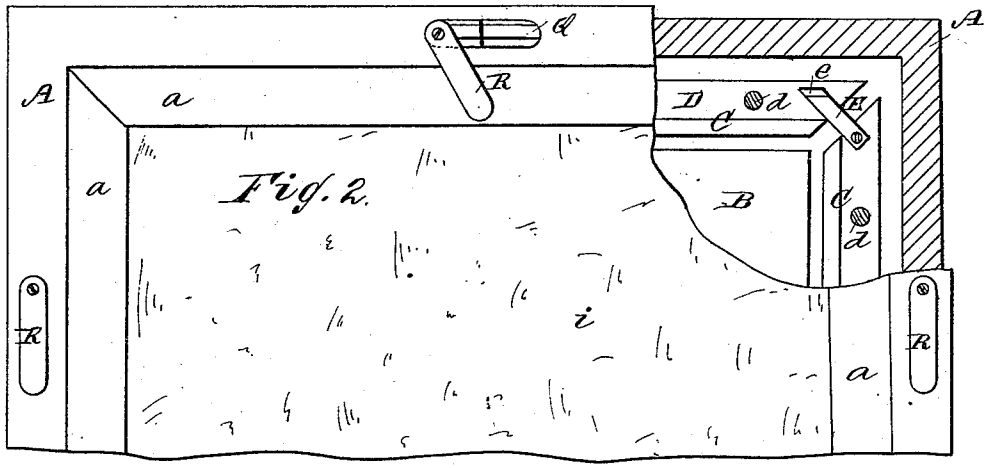


Fig. 2.

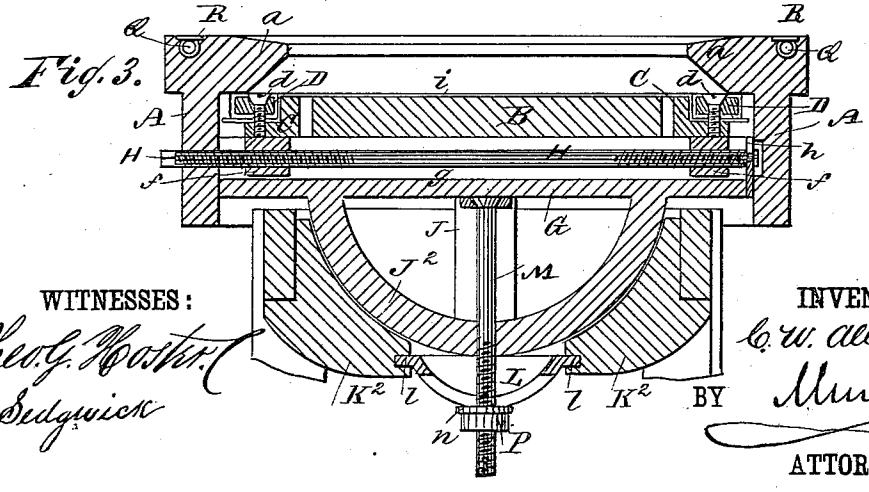


Fig. 3.

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# UNITED STATES PATENT OFFICE.

CHARLES W. ALLEN, OF PINE RIDGE AGENCY, DAKOTA TERRITORY.

## BILLIARD-TABLE.

SPECIFICATION forming part of Letters Patent No. 259,454, dated June 13, 1882.

Application filed April 10, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES WESLEY ALLEN, of Pine Ridge Agency, in the county of Shannon and Territory of Dakota, have invented a new and useful Improvement in Billiard-Tables, of which the following is a full, clear, and exact description.

My invention relates to means for attaching the cloth to the bed of a billiard-table and for leveling the table previous to use.

The invention consists, first, in the combination, with the bed and frame of the table, of adjustable cleats, to which the cloth is connected, and devices for operating said cleats, whereby provision is made for stretching the cloth perfectly smooth and taut and for removing it when desired; and, further, in a novel construction, arrangement, and combination, with said bed and frame, of arc-shaped frames and a spherical segment and a screw and nut connected therewith, whereby provision is made for placing and securely holding the table in a perfectly-level position.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a longitudinal vertical sectional view of a billiard-table embodying my improvements. Fig. 2 is a top view, partly in section. Fig. 3 is a transverse vertical section.

The frame A is of the usual or any suitable construction, and provided with cushions *a* in the usual manner. The bed B is made shorter and narrower than the beds heretofore in use, and at its ends and sides are cleats C, of a height equal to the thickness of said bed. These cleats are preferably of metal, and their ends are mitered, so that when placed together they form a rectangular frame. The bed and cleats rest on a base, G, hereinafter more particularly described. In the upper surface of each cleat is a rabbet, in which fits a cloth-covered bar, D. The bars D at the ends of the bed have attached at each end thereof one end of a diagonal brace, E, countersunk even with the surface of said bar, and the bars at the sides of the bed have at each end thereof a diagonal groove, *e*, which receives the free end of the contiguous brace E. The frame A rests on these bars D. The two side cleats C are provided with downwardly-extending lugs *f*, one having a right-hand thread and the other a left-hand thread. In these threaded lugs works a rod, H, one end having a right-hand and the other a left-hand thread. The inner end of the rod has its bearing in a plate, *h*, attached to the base G, and is prevented from moving longitudinally by means of a shoulder on one side of the plate and a collar, pin, or nut on the other side. The rod and lugs work in a groove, *g*, in the base G. The outer end of the rod is squared to enable it to be turned by a wrench.

The operation of this part of my invention is as follows: The cleats C are laid closely against the ends and sides of the bed B, and the cloth *i* is spread over the bed and over the cleats to the outer edges thereof, and is stretched as smooth as possible by hand. The bars D are then placed in position, so as to press the cloth closely into the rabbets in the cleats, in which position they are securely held by screws *d*. Then by turning the screw-rod H the side cleats C are forced outward by the action of the threads of the rod in the lugs *f*, and the end cleats are also forced outward at the same time by the action of the bars E in the grooves *e;* and by this means the cloth is stretched perfectly smooth and taut.

To the under side of the base G are attached two semicircular bars, J $J^2$, one of which is parallel with the sides of the table and the other parallel with the ends. These bars rest in correspondingly-shaped seats in arms K $K^2$, extending from the side and end rails of the legs toward the center. In the ends of these arms are grooves, in which fits a flange, *l*, extending outward from the edge of a spherical segment or bowl-shaped skeleton frame, L, the bottom of which is open to allow sufficient play to a screw-threaded rod, M, the upper end of which is secured to the under side of the base G. On the threaded portion of the rod M, below the bottom of the bowl or frame L, is a washer, *n*, and a nut, P, provided with a handle for turning it.

The operation of this part of my invention is as follows: The nut P being loosened, the frame A is oscillated either longitudinally or transversely, or both, until it is found to be per-

fectly level, in which position it is firmly secured by tightening the nut P, so as to clamp the washer *n* against the frame or bowl L, and thus prevent the parts from moving in any direction. As the frame A rests upon the bars D, and said bars and the cleats C and bed B rest upon the base G, it follows that when the frame A is level the bed B must be level.

The side and end rails of the frame A are provided with spirit-levels Q, which are sunk below the surface and provided with swinging covers R to protect them from injury.

The advantages of my invention are: The cloth can be stretched perfectly taut and smooth in a uniform manner, and it can be removed and replaced at pleasure without injury, and if the legs of the table should rest on uneven ground the table can be easily and quickly made perfectly-level independently of the legs.

Having thus described my invention, I claim as new and desire to secure by LettersPatent—

1. In a billiard-table, the combination, with the bed B and cloth *i*, of the cleats C, provided with rabbets, and arranged as herein shown and described.

2. The combination, with the bed B, cloth *i*, and cleats C, of the cloth-covered bars D and screws *d*, substantially as and for the purpose herein described.

3. The combination, with the cleats C, provided with the screw-threaded lugs *f*, and the base G, provided with the groove *g*, of the rod H, provided with a right-hand and a left-hand thread, substantially as and for the purpose herein described.

4. The end cloth-holding cleats adapted for lateral movement, and provided with diagonally-placed brace-bars adapted to act in grooves of the side cloth-holding cleats, whereby both side and end cleats may be simultaneously spread to stretch the cloth over the bed, substantially as shown and described.

5. The end cleats C, provided with screw-threaded lugs *f* and diagonally-placed brace-bars E, and side cleats C, having seats *e* to receive the bars E, and the right and left screw H, combined for operation substantially as shown and described.

6. The combination, with the frame A and bed B, and the devices connected therewith, of the base G, provided with the semicircular bars J $J^2$, substantially as herein described.

7. The combination, with the semicircular bars J $J^2$, of the arc-shaped arms K $K^2$, substantially as herein described.

8. The combination, with the arms K $K^2$, having grooves in their ends, of the spherical segment or bowl-shaped skeleton frame L, provided with the flange *l*, as herein shown and described.

9. The combination, with the base G, bars J $J^2$, arms K $K^2$, and skeleton frame or bowl L, of the rod M, washer *n*, and nut P, substantially as and for the purpose herein described.

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Witnesses:
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