

(No Model.)

W. D. LITTLE.

ADJUSTER AND LEVELER FOR BILLIARD TABLES.

No. 507,915.

Patented Oct. 31, 1893.

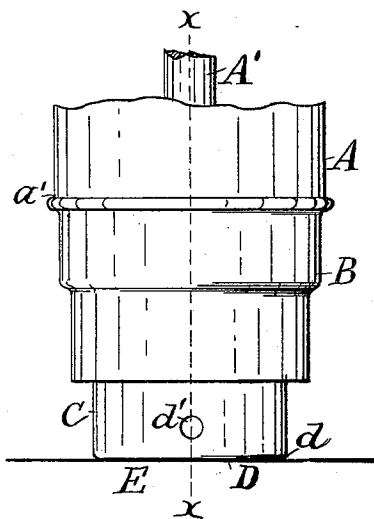


Fig. 1.

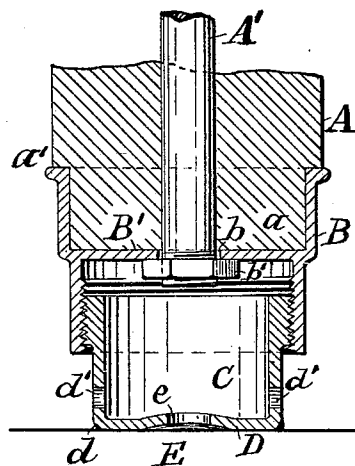


Fig. 2.

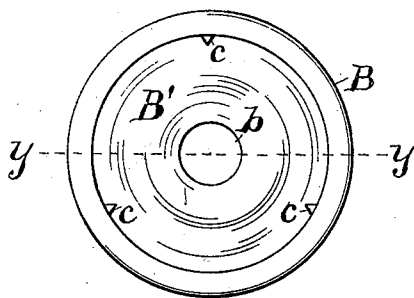


Fig. 3.

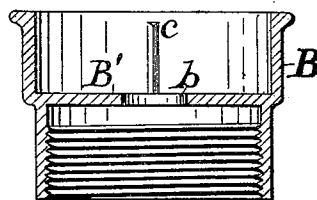


Fig. 4.

WITNESSES:

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UNITED STATES PATENT OFFICE.

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ADJUSTER AND LEVELER FOR BILLIARD-TABLES.

SPECIFICATION forming part of Letters Patent No. 507,915, dated October 31, 1893.

Application filed June 13, 1893. Serial No. 477,427. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM D. LITTLE, a citizen of the United States, and a resident of Syracuse, in the county of Onondaga, in the State of New York, have invented new and useful Improvements in Adjusters and Levelers for Billiard-Tables, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

My invention relates to adjusting and leveling devices for billiard and pool tables and the object is to provide my device set forth in United States Letters Patent No. 474,750, dated May 10, 1892, with an improved bearing surface for the leg and improved means for securing it to the leg. In the patent referred to, the leg of the table, which is usually very heavy, rested upon two narrow annular ledges or shoulders, one being the top edge of a sleeve, and the other on the interior just above the thread, and the sleeve was secured to the leg by short screws extending through the said sleeve into the leg or tenon formed thereon. This device provided a very small and insufficient bearing surface for the leg which was liable to loosen or settle farther into the sleeve, which required special attention and adjustment of the lifting screw. These objections are overcome by my present invention which consists in providing the sleeve with a disk integral with the sleeve and located on the interior of said sleeve between its top edge and its threaded portion. This disk may provide a bearing surface for the entire lower end of the leg, but the leg is preferably enlarged and provided with a tenon so that a shoulder will be formed to rest upon the top edge of the sleeve also.

My invention consists also in securing the said sleeve to the leg by passing the rod or bolt usually extended vertically through the center of the leg, through an aperture in the disk, and screwing a nut on the end of said rod or bolt against the lower side of the disk. One or more vertical ribs are formed on the inner sides of the socket formed by the sleeve and disk to insure against the turning of the socket on the leg when the lifting screw is adjusted.

In the drawings accompanying this specification and forming a part thereof, Figure 1 is

a side elevation of my improved device applied to the leg of a table. Fig. 2 is a central vertical section of the same taken upon line x, x , of Fig. 1. Fig. 3 is a top plan view of the sleeve or socket for the table leg with the latter removed, and Fig. 4 is a section on line y, y , of Fig. 3.

Referring specifically to the drawings, A— is the lower portion of the leg of a table, said leg terminating at its bottom part in a reduced portion or tenon, a , preferably cylindrical in form, and, a' , is an annular seat or shoulder formed by the contraction of the lower end of the leg into the tenon.

B, is the stationary sleeve or shell threaded internally below the disk B', its upper portion with the disk B', forming the socket for the table leg or tenon thereon to rest in.

A'— is the rod or bolt extending vertically through the center of the table leg and having its lower end threaded and extending through an aperture, b , in the center of the disk B', and provided with a threaded nut, b' , bearing with its top side against the lower side of said disk.

c, c, c , are the vertical ribs on the inner side of the socket to prevent the turning of the same when the lifting screw, C, is rotated. Said lifting screw or bolt is of cylindrical form and preferably tubular having an open top and closed bottom, D. The horizontal bottom, D, is rounded at its circumferential edge, as at d , and is smooth so that it can be turned easily when adjusted while resting upon the floor, E, and so that the table may be shifted without lifting it from the floor and without injuring the floor or the covering thereon.

The bottom, D, is provided with an aperture, e , in its center to facilitate in forming or casting the screw, C, and is therefore slightly raised or concaved for the same purposes that its edge is rounded. Exteriorly the lifting screw, C, is provided with a cylindrical enlargement on its upper or threaded portion so that its exterior lower portion will not bind or come in contact with the thread on the interior of the sleeve, B, when the latter is lowered.

d', d' , are orifices formed in diametrically opposite sides of the vertical wall of the screw, C, near its lower end, adapted to receive the end of a bar or other instrument for turning

the screw. The lifting screw, C, being inserted within the stationary sleeve, B, engages therewith by means of its thread engaging and meshing with the surrounding threaded surface of the sleeve, B, the screw when rotated serving to raise or lower the sleeve, B, and the leg seated therein according to the direction of rotation of said screw.

Each of the legs of a table is provided with my leveling device.

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

1. The combination in an adjuster and leveler for tables, with a sleeve to receive the end of the table leg and a lifting screw threaded to engage a thread on the sleeve, of a rod in the leg and suitable means for securing the sleeve to the rod, substantially as described and shown.

2. The combination in an adjuster and leveler for tables, of a sleeve adapted to receive the lower end of a table leg, a threaded rod within said leg and projecting below the lower end thereof, a disk within, integral with and below the top edge of the sleeve for the table leg to rest upon, a screw thread upon the interior of the sleeve below the disk, a lifting screw having its upper exterior portion threaded to engage the threaded portion of the

sleeve, said screw having a broad base to rest and turn upon the floor, an aperture in said disk to receive the rod in the table leg, and a nut on said rod bearing against the lower side of the disk, as and for the purpose described.

3. The combination in an adjuster and leveler for tables, of a sleeve adapted to receive the lower end of a table leg, a threaded rod within said leg and projecting below the lower end thereof, a disk within, integral with and below the top edge of the sleeve for the table leg to rest upon, a screw-thread upon the interior of the sleeve below the disk, a lifting screw having its upper exterior portion threaded to engage the threaded portion of the sleeve, said screw having a circular base to rest and turn upon the floor, an aperture in said disk to receive the rod in the table leg, a nut on said rod bearing against the lower side of the disk, and one or more vertical ribs on the inner wall of the sleeve above the disk, substantially as described and shown.

In testimony whereof I have hereunto signed my name.

WILLIAM D. LITTLE. [L. S.]

Witnesses:

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