No. 653,727. Patented July 17, 1900.

J. ZENTNER.

COMBINED POOL AND BILLIARD TABLE.

(Application filed July 24, 1899.)

(No Model.)

Fig. 1.

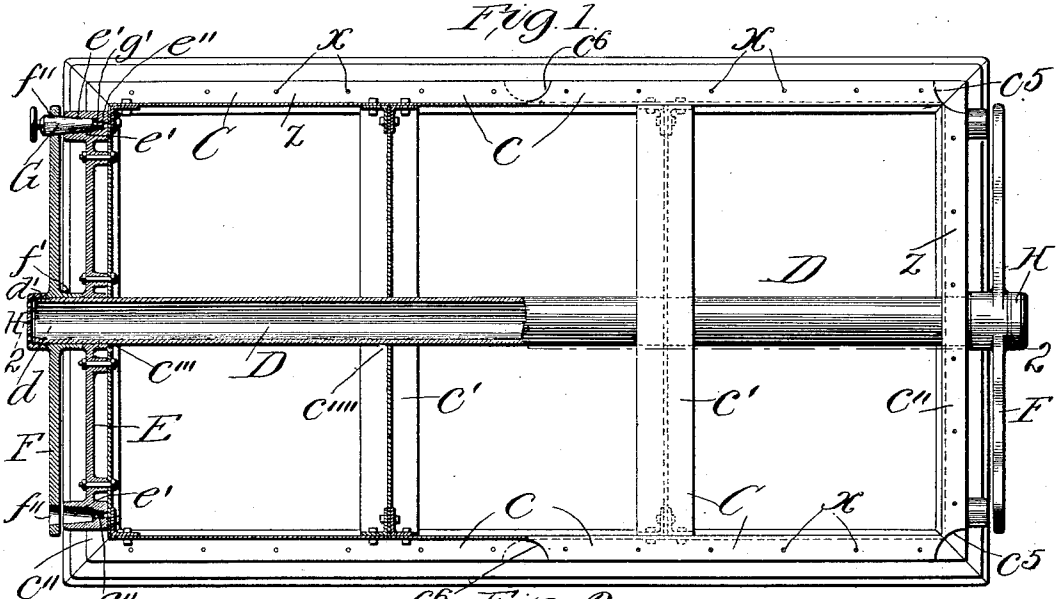


Fig. 2.

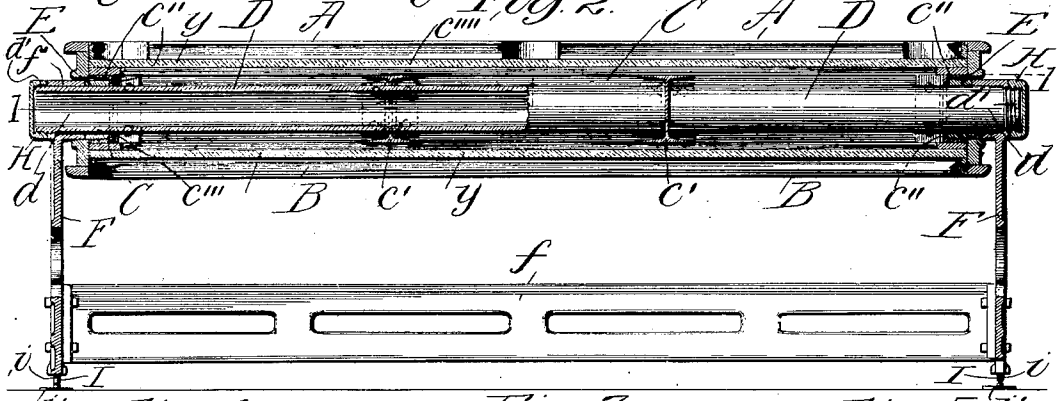


Fig. 4.



Fig. 3.

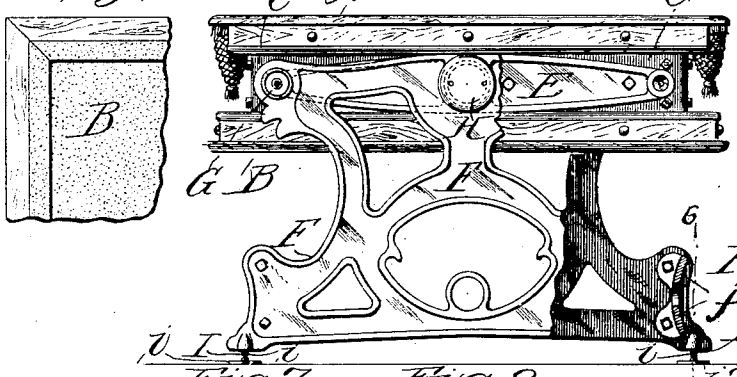


Fig. 5.

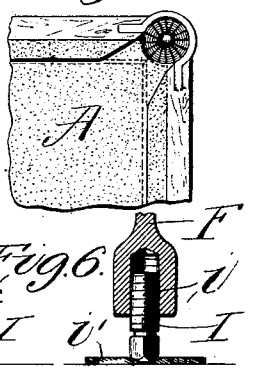


Fig. 6.

Fig. 7.

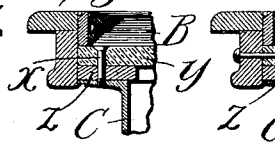
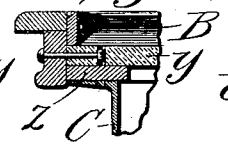


Fig. 8.



Attest.

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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOSEPH ZENTNER, OF ST. LOUIS, MISSOURI, ASSIGNOR OF ONE-HALF TO OLIVER J. FUNSCH, OF SAME PLACE.

COMBINED POOL AND BILLIARD TABLE.

SPECIFICATION forming part of Letters Patent No. 653,727, dated July 17, 1900.

Application filed July 24, 1899. Serial No. 724,928. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH ZENTNER, a citizen of the United States, residing at the city of St. Louis, State of Missouri, have invented a certain new and useful Improvement in a Combined Pool and Billiard Table, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a horizontal sectional view of my improved reversible combined pool and billiard table. Fig. 2 is a vertical longitudinal sectional view of the same, taken in the indicating-line 2 2, Fig. 1. Fig. 3 is an end elevational view of the same, a portion of the supporting-stand being broken away to more clearly illustrate the invention. Fig. 4 is a plan view of one corner of the billiard-table. Fig. 5 is a plan view of one corner of the pool-table. Fig. 6 is an enlarged detail vertical sectional view of the leveling means, the same being taken on the line 6 6 of Fig. 3; and Figs. 7 and 8 are detail sectional views illustrating, respectively, the manner in which the pool and billiard tables are secured to the commercially-rolled iron or steel bond and the manner in which the slate beds of said pool and billiard tables are secured to the framework.

Similar characters designate similar parts throughout the several views.

This invention relates to a new and useful improvement in a reversible combined pool and billiard table wherein a pool-table and billiard-table are arranged parallel to each other and back to back, said tables being secured together with a substantial bond, and the table as an entirety provided with suitable trunnions and supporting-frame or legs, whereby when the pool-table is in proper position for use and it is desired to play a game of billiards all that is necessary is to reverse the table, and vice versa.

The essential features of this invention reside, first, in the novel means employed for preventing the sagging of both the pool and billiard tables, said means also acting as a bond for securing said tables together; second, in the novel means employed for providing trunnions for the combined pool and billiard table, said means also performing the additional function of bracing and stiffening the structure; third, in the novel means employed for locking the table as an entirety in either of its correct positions, and, finally, the invention consists in the novel arrangement, construction, and combination of the several parts, all as will hereinafter be explained, and finally pointed out in the claims.

I am aware that combined pool and billiard tables have been constructed by having a pool-table on one side and a billiard-table on the other side of a rotatable body supported or suspended upon standards. Therefore I do not claim this feature broadly. The great difficulty met with heretofore in constructing a table of the character described has been in the sagging of the table. The slate which forms the bed of these tables is quite heavy, and in a combination-table of this character this weight is doubled. In addition to this is the balance of the table—such as woodwork, cushions, &c.—which adds to this weight, and to prevent a table of this weight when only supported at two ends from sagging has been much sought after. Another reason why tables of this character often begin to sag is that a player in making a shot will often sit on the table, as is well known. I have built a full-size table in exact accordance with the accompanying drawings and declare that no perceptible sag exists.

In the drawings, A represents a pool-table, and B a billiard-table, said tables being arranged back to back and parallel to each other and are secured to a bond C, said bond being constructed of commercially-rolled iron or steel, preferably the latter, and also, preferably, of channel-beam form, suitably stiffened and braced with I-beams. This bond C consists of a preferably rectangular frame of channel-beam form, whose longer parallel sides c are braced by and bolted to transverse I-beams c'. The shorter parallel members c'' of this rectangular structure are provided with a single central perforation c''', and the I-beams c', which are parallel with said shorter members, are likewise provided with single central perforations c'''', and

through these alining openings c''' and c'''' is passed a preferably steel tube D, said tube being caused to fit tightly in said perforations and of sufficient length to extend somewhat beyond each of the shorter parallel members c''. These extensions, which I have marked d, act in the capacity of trunnions when properly fitted into suitable supporting means, hereinafter explained. From the above it will be seen that a substantial, rigid, and strong frame or bond is produced, as the channel-beams, which have little or no deflection, are additionally strengthened and braced by the I-beams, and in addition to all of this the steel tube employed further assists in producing a rigid structure. This frame or bond C is, as before stated, rectangular, and as the ends of the flanges at the corners come directly in line with the corner-pockets of the pool-table I cut away on that side of the channel-beam nearest said pool-table a portion of the flanges, as at c^5, thus permitting the passage of the pocket down past said flange. I also cut out a small portion of the flange of the channel to permit of the passage of the side pocket, as at c^6. (See Figs. 1 and 5.) The billiard-table being formed without pockets renders the cut-out portions a^5 and a^6 unnecessary in the flange of the channel nearest said table.

E represents a casting designed to be bolted or otherwise secured to the outer face of the shorter parallel members of the frame C, said casting serving the double function of, first, furnishing a long bearing for the tube D, which passes therethrough, and, second, in providing means in the form of sockets or conically-bored openings e', which form one portion of a lock, (see Figs. 1 and 3,) the construction and purpose of which will be explained in the following:

F represents two standards or supports which are preferably of cast metal and are designed to support my improved combined pool and billiard table as an entirety, said standards being suitably braced and distanced from each other by strips or bars f. The upper ends of these supports are provided with a perforated boss f', which perforated boss receives and supports the trunnions d.

G represents a conical plug designed to be passed through suitable conical openings f'', formed in the standards F, said openings being preferably arranged one on each side of the trunnion d and in horizontal alinement therewith and preferably at equal distances therefrom. These conical openings when the table is in a horizontal position are designed to register with the corresponding conical openings e', formed in the casting E. Said conical plug G after passing through the opening f'' is forced into the opening e' until the screw-threaded portion g' touches the screw-threaded opening e'', formed in the casting E, said screw-threaded opening being in axial alinement and communicating with the conical opening e'. This conical plug G is now rotated in the proper direction, which rotation causes the male screw-thread on the plug to engage the female thread in the casting E and firmly clamp and lock the table to its supporting-standard.

H represents nuts or cap-pieces designed to engage the screw-threaded ends d' of the trunnions d, said nuts being located outside of the standards F and when screwed home bear thereagainst. These nuts perform the double function of, first, preventing longitudinal movement of the table relative to the standards, and, second, in clamping the supports or standards and the table together. These trunnions d are designed to rotate freely in their bearing in the standards when the nuts H are unscrewed, and when said nuts are unscrewed and the locking means released the table is free to be turned by the operator or player to the other side, as is obvious.

Arranged under or in the bearing-points of the standards or legs are adjusting-screws I, which consist of a screw-threaded shank i, which engages a female screw-threaded bore formed in the standard, said screws I being also provided at preferably their lower ends with heads or other well-known means for the application of a wrench or other tool for adjusting them, which adjustment in one direction or the other causes that portion of the table to rise or fall and by which means the table may be leveled, as will be readily understood.

i' represents bearing disks or plates upon which the lower ends of the adjusting-screws rest for obvious reasons.

The pool and billiard tables may be secured or fastened to the commercially-rolled metal bond C in any approved or convenient manner. One means, and probably the best, is illustrated in Fig. 7 of the drawings, wherein it will be observed that I have provided screws x, having formed thereon countersunk heads, which screws pass through suitable holes formed in the slate bed y, their countersunk heads being flush with the upper or our faces of said slate. These screws x engage screw-threaded holes formed in the flanges of the channel-beams, as at z.

z indicates wooden cleats or strips arranged on both sides of the metallic frame and its cross-braces, serving practically as facing-strips to act as cushions or buffers for the slate bed, whereby any shock or jar communicated to the slate bed will be cushioned by these facing-strips, and the bed will not be broken, as would be likely were it supported directly against the hard metal of the frame. These facing-strips interposed between the beds and the metallic frame also serve as securing-strips for the attachment of the cloth, which can be stretched over the bed and tacked in its stretched position, as usual.

In practice I find that one of the plugs G is sufficient for locking the entire table; but I wish it understood that any number of these plugs from one to four may be employed, as I have provided means for the accommoda-

tion of four. Likewise I may only employ one of the nuts H, in which event the table can be manipulated from one end and obviate the necessity of the operator or player having to unclamp and unlock both ends of the table.

I am aware that minor changes in the arrangement, construction, and combination of several parts of my device can be made and substituted for those herein shown and described without in the least departing from the nature and principle of my invention.

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

1. The combination with suitable standards, of a metallic frame, a tube secured in said frame, the ends of said tube finding bearings in said standards, a nut on at least one end of said tube for coöperating with the standards to lock the frame in its adjusted positions, a pool-table secured to one side of the frame, and a billiard-table secured to the other side of said frame; substantially as described.

2. The combination with standards, of a rectangular frame formed of commercially-rolled metal of channel or I beam cross-section, a tube secured in said frame, the ends of which project beyond the frame and serve as trunnions for coöperating with the standards, castings secured to two of the parallel members of said rectangular frame, means arranged on at least one projecting end of the tube for preventing the rotation of said frame by clamping the same to a standard, and conical openings formed in said castings designed to register with conical openings formed in said standards, and a conical plug for coöperating with said registering openings for holding the table or tables and their carried parts in a horizontal position; substantially as described.

3. In a locking means for a device of the character described, the same consisting of a suitable standard or support, of a rotatory element mounted therein, said standard or support being provided with a conical bore, and said rotatory element being provided with a conical bore, which last-mentioned conical bore, when said rotatory element is in a given position, is in axial alinement with the conical bore of said standard or support, said rotatory element being also formed with a screw-threaded hole, which screw-threaded hole is in axial alinement with the conical bore formed in said element, a conical plug for coöperating with the conical bore formed in the standard or support, and the conical bore of the rotary element, and a screw-threaded portion formed on one end of said conical plug for engaging the screw-threaded hole in said rotatory element; substantially as and for the purpose specified.

4. In a combined pool and billiard table, the combination of supporting-standards, a reversible metallic frame journaled on said standards, and constructed with U side and end beams, transverse I-beam braces secured to the side U-beams, a tubular shaft passing through the end and brace beams and constituting the journals for the frame, a casting E secured to one end U-beam between its parallel flanges, and a conical locking-plug adapted to enter alined conical openings in one standard and said casting, substantially as described.

5. In a game apparatus, the combination with suitable standards, of a frame journaled therein, said frame composed of commercially-rolled beams joined by suitable connection-plates and also including commercially-rolled strengthening-beams intermediate the end beams and secured to the side beams by suitable connection-plates, a continuous tubular shaft which passes through alining openings in the end and strengthening-beams, the ends of said shaft being received in said standards and forming a pivotal support for said frame, a billiard-table secured to one side of said frame, a pool-table secured to the other side of said frame, cushioning-strips interposed between the beds of said tables and the frame, and means for locking said frame in either of its two positions; substantially as described.

In testimony whereof I hereunto affix my signature, in the presence of two witnesses, this 21st day of July, 1899.

JOSEPH ZENTNER.

Witnesses:
WM. H. SCOTT,
F. R. CORNWALL.