E. T. BURROWES.

BILLIARD OR POOL TABLE.

APPLICATION FILED MAR. 19, 1914.

1,125,460. Patented Jan. 19, 1915.

3 SHEETS—SHEET 1.

Fig. 1.

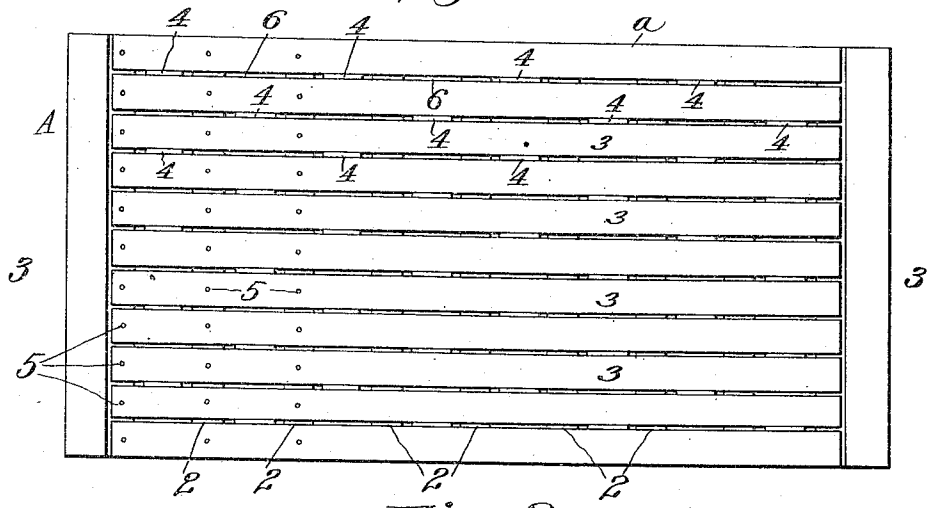


Fig. 2.

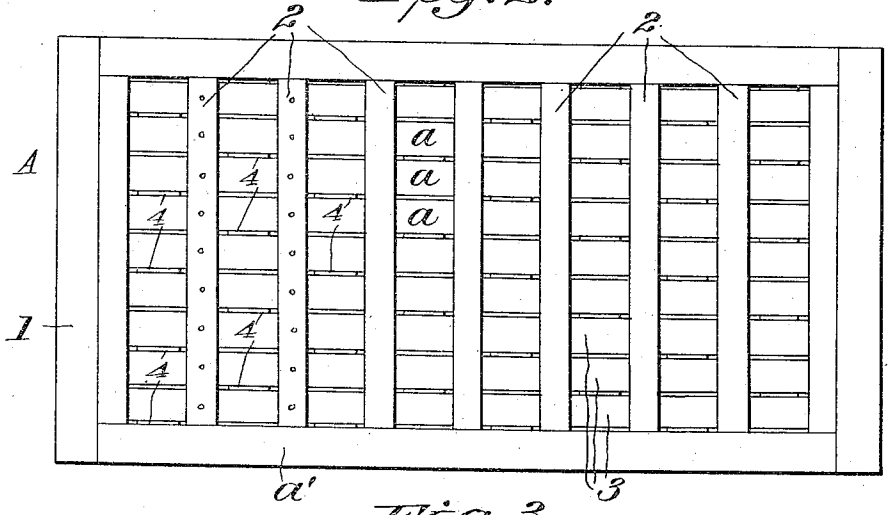
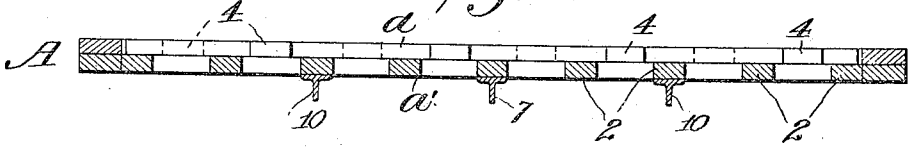


Fig. 3.



Witnesses

C. H. Walker.

C. Van Sant

Inventor

E. T. Burrowes

By Watson & Boyden

Attorneys

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

E. T. BURROWES.

BILLIARD OR POOL TABLE.

APPLICATION FILED MAR. 19, 1914.

1,125,460.

Patented Jan. 19, 1915.

3 SHEETS—SHEET 2.

Fig. 4.

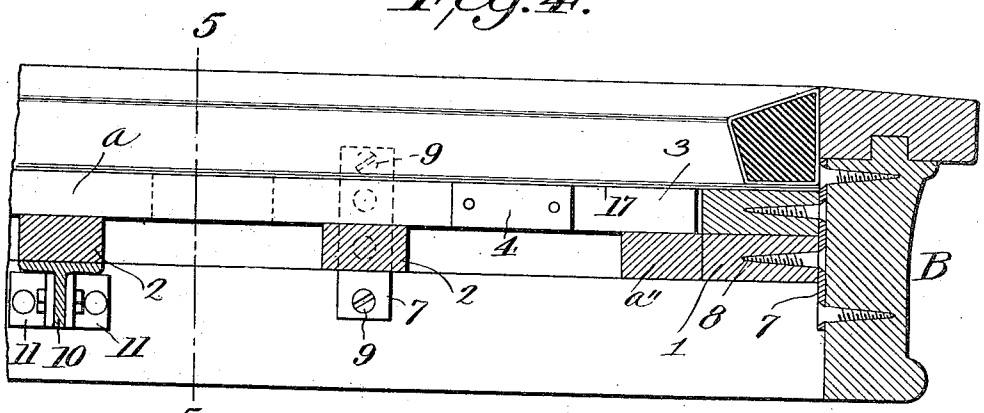


Fig. 5.

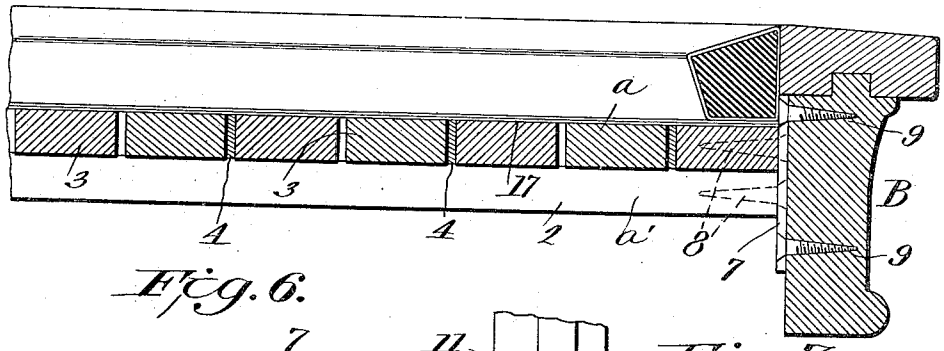


Fig. 6.

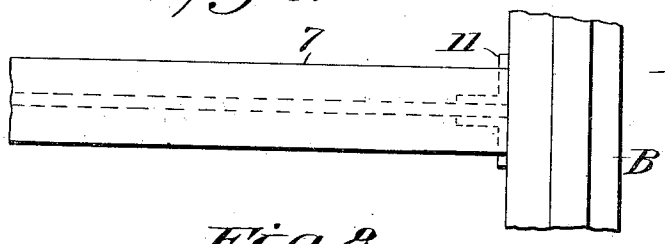


Fig. 8.

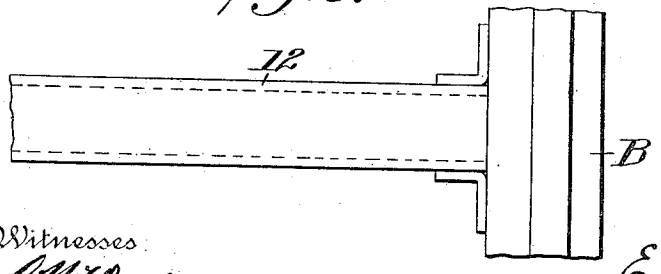


Fig. 7.

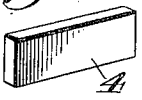
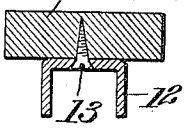


Fig. 9.



Witnesses

C. M. Walker.

L. Van Saint

Inventor

E. T. Burrowes

By Watson & Boyden

Attorneys

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

E. T. BURROWES.

BILLIARD OR POOL TABLE.

APPLICATION FILED MAR. 19, 1914

1,125,460.

Patented Jan. 19, 1915.

3 SHEETS—SHEET 3.

Fig. 10.

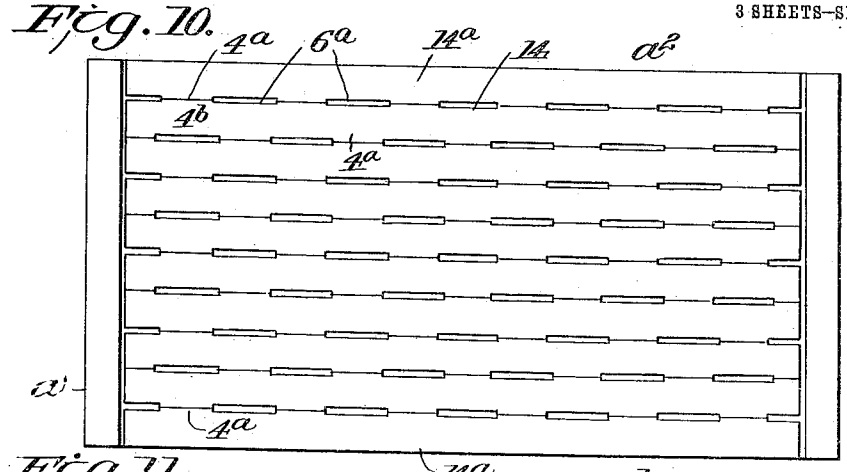


Fig. 11.

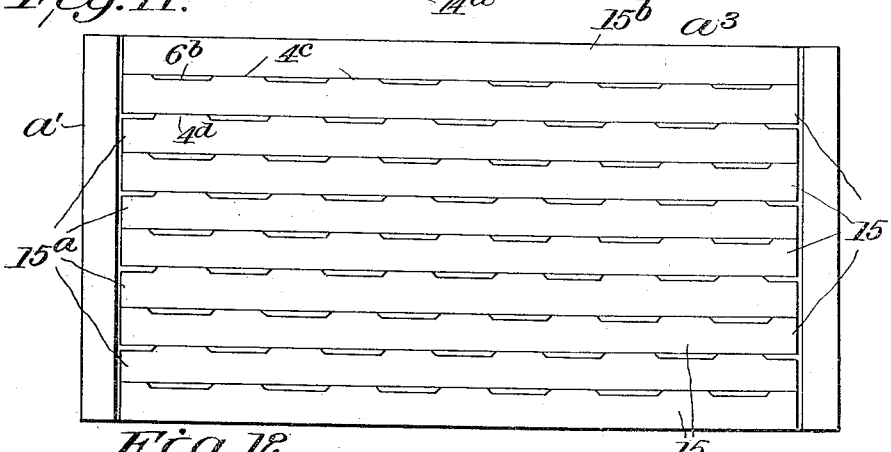
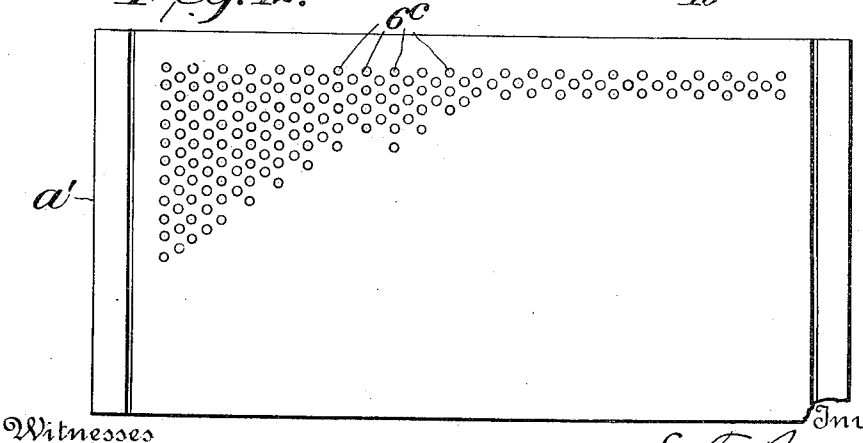


Fig. 12.



Witnesses

C. N. Walker

C. Van Sant

Inventor

E. T. Burrowes

By Wilson & Boyden

Attorneys

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

UNITED STATES PATENT OFFICE.

EDWARD T. BURROWES, OF PORTLAND, MAINE.

BILLIARD OR POOL TABLE.

1,125,460. Specification of Letters Patent. Patented Jan. 19, 1915.

Application filed March 19, 1914. Serial No. 825,854.

To all whom it may concern:

Be it known that I, EDWARD T. BURROWES, a citizen of the United States, residing at Portland, in the county of Cumberland and State of Maine, have invented certain new and useful Improvements in Billiard or Pool Tables, of which the following is a specification.

This invention relates to improvements in game boards, and particularly to beds for light, portable billiard and pool tables. In my prior Patents, Nos. 674,729 and 739,284, I have shown billiard table beds composed of narrow strips of wood, dove-tailed and glued together to form continuous playing surfaces. In the manufacture of billiard and pool tables with such beds, the bed, instead of fitting snugly against the side and end rails of the table, is spaced from the rails as illustrated in Patent No. 739.284, and also in Patent No. 1,005,151, granted to F. M. Burrowes. Beds thus constructed and arranged, and supported upon transverse girders, dove-tailed into the bed, to prevent warping, as illustrated in the latter patent, have proved, in the main, very satisfactory. Notwithstanding great care taken in selecting the material and gluing and seasoning the beds, I have found that individual beds in the course of time develop slight elevations or bulges at points along the margins of the wooden slats, which bulges render the playing surfaces uneven, and these local distortions of the surfaces I attribute to moisture entering the slats at the time the latter are glued together, resulting in local expansion and the consequent slight bulging of the surfaces at more or less frequent intervals along the edges of the slats.

Another disadvantage of the beds referred to, made of wooden strips or slats glued together throughout their lengths, is that the material for the beds must be gotten out, glued and seasoned for several months before the beds are suitable for sale or service without danger of warping. In order to keep an ample supply of the seasoned beds on hand, a considerable amount of capital is necessarily tied up, and if the seasoned stock is sold off, it is impossible to make up new stock, fit for the market, without waiting several months for the beds to be made up and thoroughly seasoned.

One purpose of my present invention is to provide a billiard or pool table bed which will be free from the objection first mentioned above, namely the local expansion and bulging of the material at points on the surface of the bed; another purpose of the invention is to provide a bed which may be played upon and marketed without waiting a long period of time for the bed to season after being assembled, and a still further purpose of the invention is to provide a bed which may be fitted closely within the side rails of the tables, instead of being spaced a distance therefrom, without expanding as a whole to such an extent as to exert harmful pressure against said rails. These objects are accomplished by providing throughout the top or playing surface of the bed, numerous small opening so disposed or arranged that the material may expand into these openings. By this arrangement local expansion of the material is taken care of locally, with the result that the bed is not expanded to any considerable extent as a whole by the accumulation of a multiplicity of local expansions, nor is the playing surface caused to bulge in spots as hereinbefore referred to.

The manner of carrying out my invention will be clear from the following description and accompanying drawing, in which,

Figure 1 is a top plan view of a billiard table bed embodying my improvements in one form; Fig. 2 is a bottom plan view of the same; Fig. 3 is a longitudinal section through the bed, taken on the line 3—3 of Fig. 1; Fig. 4 is a longitudinal section, on an enlarged scale, through a billiard table fitted with the bed shown in Figs. 1 to 3; Fig. 5 is a section on the line 5—5 of Fig. 4; Fig. 6 is a top plan view of one of the girder supports, showing the same attached to a side of the table; Fig. 7 is a perspective view of one of the spacers or separators used in the table top shown in Figs. 1 to 5, inclusive; Fig. 8 is a top plan view of a modified form of girder support; Fig. 9 is a cross section through the girder support illustrated in Fig. 8, and also through one of the transverse slats of the table, showing the girder secured to the slat; Fig. 10 is a top plan view of the table bed in which the slats of the top are provided with integral spacers or separators arranged so as to leave staggered openings between the slats; Fig. 11 is a similar view showing a modification in which integral spacers are provided upon one edge of each slat; and Fig. 12 is a similar view of a table made of a continuous

piece of material, in which staggered perforations are made to allow for internal expansion.

Referring to Figs. 1 to 7, inclusive, of the drawing, A indicates a billiard table bed as a whole, and B the frame of the table. The bed comprises a top a and a supporting base a'. The base a' consists of a rectangular frame 1 adapted to fit within the frame of the table, and cross bars or slats 2 spaced suitable distances apart, secured to the side bars of the frame and having their upper surfaces flush with said side bars. The top a rests upon the cross pieces and side bars of the base, as shown in the drawing, and it comprises a plurality of narrow parallel slats 3, evenly spaced apart by separators or spacers 4, one of which is shown in Fig. 7. Several separators are shown, evenly spaced apart from one another, between each pair of slats, and the separators between successive slats are alternately arranged, or staggered, throughout the top. The separators may be made of wood, fiber, or other suitable material, and attached to one edge of each slat before the slats are assembled by suitable means, such as tacks. The slats, with their attached spacers or separators after assembling, are clamped together and then secured to the cross-pieces of the base by suitable means, such as nails 5. When the top is complete, the elongated slits or spaces 6 between adjacent slats, and which it will be seen are staggered throughout the top, provide room for lateral expansion of the individual slats into said spaces. Hence the top, as a whole, will be substantially free from lateral expansion and contraction, and will retain substantially its original width regardless of atmospheric changes. The bed, therefore, can be made the full width of the space between the sides of the billiard table, instead of making it narrower, as has heretofore been found necessary where the top has been made in the usual way of imperforate wooden strips or slats glued or otherwise closely fitted together.

The spacers or separators may be made of wood, fiber, or other material, and when made of material that is easily cut, they may be of the same depth as the thickness of the slats. When the top is secured to the base, the top is planed off to make a smooth upper surface, and the separators will be planed down with the slats. If the separators are made of hard material that would dull the planing cutters, they will have preferably less depth than the thickness of the slats, and will be sunk below the tops of the slats a sufficient distance to allow the top to be planed off without being engaged by the planing knives.

To the sides and ends of the bed are secured plates 7, by means of screws 8, these plates projecting above and below the bed and being connected to the table frame by screws 9. The bed is further supported by metal girders 10 which, as shown in Figs. 3, 4, and 6, are T-shaped in cross section and extend beneath alternate slats 2 of the base. These girders are secured to the sides of the table frame B by suitable means, such as angle irons 11. The girders should be light in weight but rigid, and they may have any suitable form for this purpose, as for instance, the T-form previously referred to, or the channel form shown in Figs. 8 and 9. In the latter figures, 12 indicates the channel bar, and in Fig. 9, 2^a indicates a cross slat of the table base. Preferably the channel bars are secured to the cross slats by wood screws 13, as illustrated in Fig. 9.

Instead of making the separators or spacers separately from the slats and attaching them to the slats, as previously described, they may be made integrally with the slats, as illustrated in Figs. 10 and 11.

In Fig. 10, the base a' may be the same as the base in the previously described figures. The top a^2 is composed of parallel wooden slats 14, extending longitudinally of the base. The outer slats 14^a are formed with integral projections 4^a on their inner edges and each intermediate slat is provided with similar projections, 4^a and 4^b, on its opposite edges. The lateral projections on the slats are of substantially uniform length and evenly spaced apart lengthwise of the bed, and on the intermediate slats the projections 4^a and 4^b on each slat are arranged alternately at opposite edges of the slat throughout its length. When the slats are assembled, as shown in Fig. 10, the projections 4^a on one slat will abut against the projections 4^b on the adjacent slat. The abutting projections, it will be seen, form spacers or separators in staggered relation throughout the top. Between the projections or separators on adjacent slats are formed the narrow slots or spaces 6^a into which the material of the slats may expand. These spaces, it will be noted, are also staggered throughout the bed. Preferably, the separators are shorter than the spaces so that the latter overlap in adjacent rows, but the separators and spaces may be of equal length, if desired.

In Fig. 11, the top a^3 is composed of slats 15 and 15^a each having one straight edge and a series of integral separators or projections on its opposite edge, the separators on the several slats being of substantially uniform length and evenly spaced apart, and the separators on the slats 15 being alternately arranged with respect to the separators on the slats 15^a. The slat 15^b at one side of the top has straight edges, as no separators are required on this slat. It will be seen that by this arrangement the separators are staggered throughout the bed, as are likewise the spaces or narrow slits 6^b.

In the forms shown in Figs. 10 and 11, the slats of the top will be clamped tightly together and nailed to the transverse slats of the base, as in Fig. 1, only a few nails being required for each slat. As thus constructed, the wood may expand laterally into the spaces between the slats and thus the expansion will be taken up locally instead of cumulatively, so that there will be little or no expansion of the bed as a whole, and furthermore, the local bulging of the surface at the edges of the slats which occurs with the slats having straight, continuous glued edges, as heretofore mentioned, will be prevented.

Tables having beds constructed as described may be used after assembling and planing without waiting a long period of time for the beds to season, as is necessary where the strips are glued throughout their length, as before mentioned. The slits or spaces between the slats are quite narrow, not over $\frac{1}{8}$ of an inch in width, and these do not interfere with the smoothness of the playing surface, as a layer of suitable material 17, such as sheet fiber or cloth, is laid or stretched across the top and interposed between the surface of the top and the usual billiard cloth covering.

In Fig. 12 is shown a top made of a continuous piece of material, in which are arranged small perforations 6^c which are staggered throughout the top, and into the spaces formed by these perforations the material may crowd when it expands during atmospheric changes, and thus the expansion will be taken up locally. The top in Fig. 12 may be made of various materials, such as fiber or metal.

What I claim is:

1. A billiard table top comprising a layer of material for directly supporting the billiard balls, said layer having therein a plurality of openings of relatively small width or diameter disposed throughout its playing area and spaced apart lengthwise and crosswise of the top.

2. A billiard table top having therein a plurality of staggered openings of relatively small width or diameter disposed throughout its playing area.

3. A billiard table top having a plurality of narrow longitudinally extending slots disposed in staggered relation in its playing area.

4. A billiard table top having a plurality of narrow longitudinally extending and overlapping slots disposed in staggered relation in its playing area.

5. A billiard table top comprising a plurality of parallel slats and separators at intervals between the adjacent slats.

6. A billiard table top comprising a plurality of parallel slats and separators in staggered relation between the several slats.

7. A billiard table top comprising a plurality of parallel slats, said slats having integral separators disposed at intervals along their edges.

8. A billiard table top comprising a plurality of parallel slats having integral separators at intervals along their edges, said separators being disposed in staggered relation in the playing area of the top.

9. A billiard table top comprising a plurality of parallel slats having separators at intervals along their edges, the separators on adjacent slats abutting against one another.

10. A billiard table top comprising a plurality of parallel slats having separators at intervals along their edges, the separators on adjacent slats abutting against one another, and the separators on each slat being arranged alternately on its opposite edges.

11. A billiard table bed comprising a rectangular frame having transverse supporting slats, and a top comprising parallel slats extending longitudinally of the bed and suitably secured thereto, said latter slats having separators at intervals along their edges.

12. A billiard table bed comprising a rectangular frame, having transverse supporting slats spaced apart from one another, and a top comprising parallel slats extending longitudinally of the bed and suitably secured to the transverse slats, the top slats having separators at intervals along their edges.

In testimony whereof I have affixed my signature, in presence of two witnesses.

EDWARD T. BURROWES.

Witnesses:
HOLLY D. LUTHER,
GENEVIEVE D. O'NEILL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."