

Oct. 28, 1941.

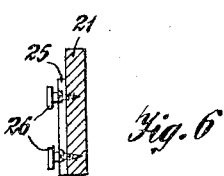
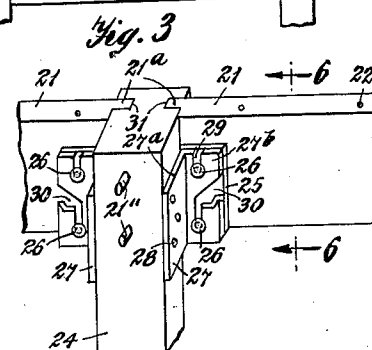
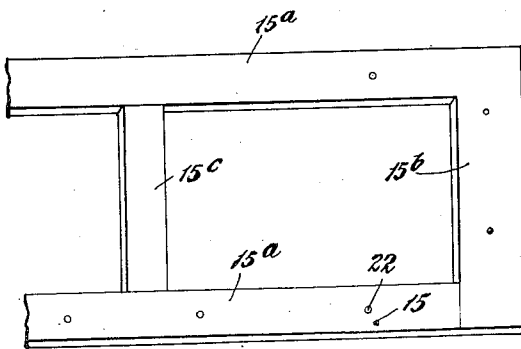
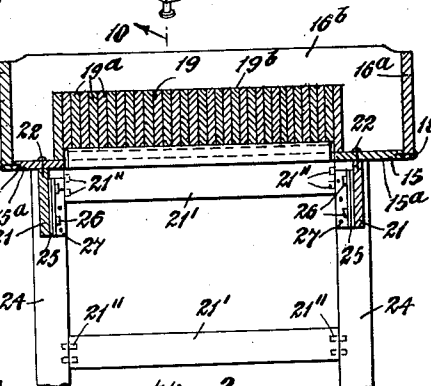
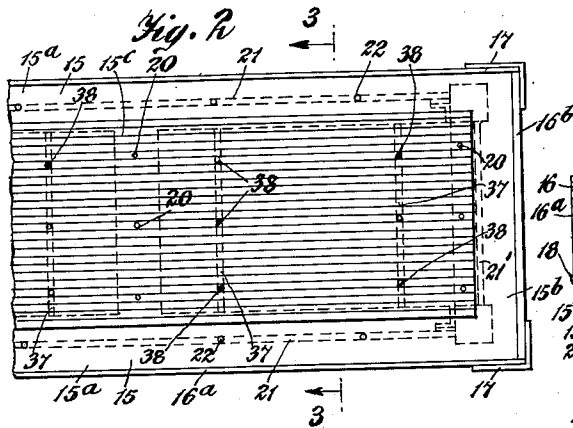
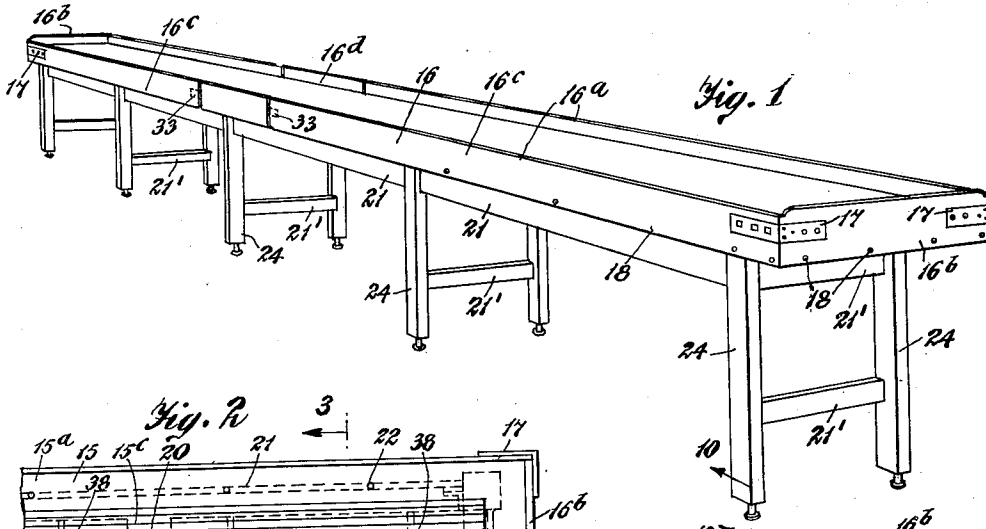
P. KOTLER

2,260,716

SHUFFLEBOARD TABLE AND PLAYING TOP, AND OTHER TABLES

Filed June 27, 1939

2 Sheets-Sheet 1



INVENTOR.

PAUL KOTLER

BY

Edward J. Kotler

ATTORNEY.

Oct. 28, 1941.

P. KOTLER

2,260,716

SHUFFLEBOARD TABLE AND PLAYING TOP, AND OTHER TABLES

Filed June 27, 1939

2 Sheets-Sheet 2

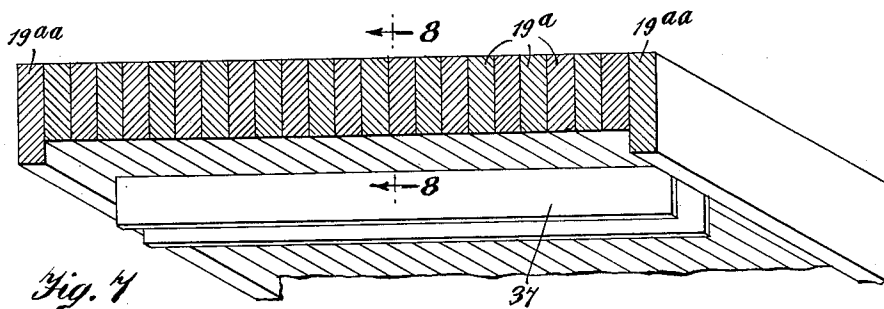


Fig. 7

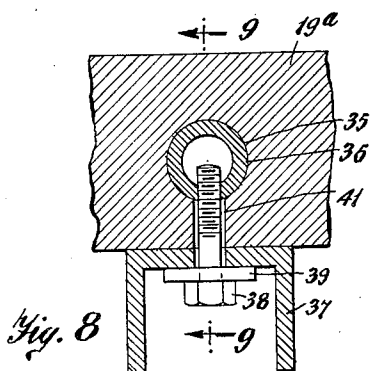


Fig. 8

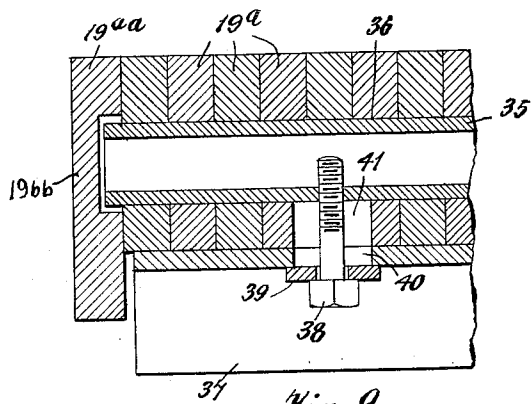


Fig. 9

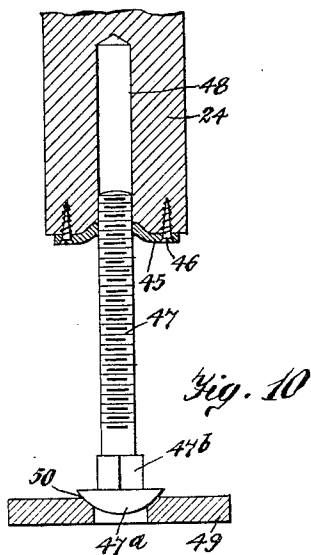


Fig. 10

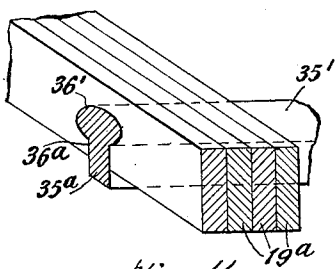


Fig. 11

INVENTOR.

BY

PAUL KOTLER
Edward Kotler

ATTORNEY.

UNITED STATES PATENT OFFICE

2,260,716

SHUFFLEBOARD TABLE AND PLAYING TOP,
AND OTHER TABLES

Paul Kotler, Irvington, N. J.

Application June 27, 1939, Serial No. 281,339

4 Claims. (Cl. 273—126)

This invention relates to new and useful improvements in a shuffleboard table and playing top, and in butcher bench tops and other and all tables, in general.

The invention has for an object the construction of a shuffleboard table which is characterized by a horizontal frame supporting a vertical frame along its edges and a playing top, upon its center, and provided with a plurality of vertical boards secured on the bottom face of the frame and having their adjacent ends slightly spaced from each other, and legs for supporting said frame having their upper ends engaged within said spaces and associated with means for releasably securing the legs in position upon said vertical boards. With this arrangement it is possible to remove the legs when desired. This is of practical advantage when it is desired to ship, assemble, or store the shuffleboard table.

Another object of this invention resides in a novel and efficient construction of means for removably securing the legs in relation to the vertical boards of the shuffleboard table.

Another object of this invention resides in a novel arrangement for preventing the playing top or other top of the table from warping. It is proposed to form the playing top and other top from a plurality of vertical boards in face contact with each other and secured together as a unit, and having their top edges finished to form a true flat surface. A table top of this kind is very likely to warp. This invention contemplates a novel, simple and efficient construction to prevent such warping.

Another object of this invention resides in a novel construction associated with the bottom of each leg by which an adjustment is possible to relatively extend or retract the operative length of the leg. The advantage of this construction resides in the fact that it is possible to have each leg rest upon the ground for assisting in supporting the table, even though the floor upon which the table is mounted, is not truly level. The invention particularly proposes a novel construction of the adjustment means as hereinafter more fully described.

Still further the invention proposes the construction of a shuffleboard table and playing top embodying all of the advantages previously pointed out and additional advantages as will hereinafter be pointed out, and which may be manufactured and sold at a reasonable cost.

For further comprehension of the invention, and of the objects and advantages thereof, reference will be had to the following description

and accompanying drawings, and to the appended claims in which the various novel features of the invention are more particularly set forth.

In the accompanying drawings forming a material part of this disclosure—

Fig. 1 is a perspective view of a shuffleboard table and playing top constructed according to this invention.

Fig. 2 is a fragmentary plan view of a portion of the table, shown in Fig. 1.

Fig. 3 is a transverse sectional view taken on the line 3—3 of Fig. 2.

Fig. 4 is a perspective view of a portion of the horizontal frame used in the table.

Fig. 5 is a perspective view of the upper portion of one of the legs of an adjacent pair of vertical boards of the shuffleboard table.

Fig. 6 is a fragmentary vertical sectional view taken on the line 6—6 of Fig. 5.

Fig. 7 is a transverse vertical sectional perspective view of the playing top of the table viewed from the bottom.

Fig. 8 is a fragmentary longitudinal vertical sectional view taken on the line 8—8 of Fig. 7.

Fig. 9 is a fragmentary vertical transverse sectional view taken on the line 9—9 of Fig. 8.

Fig. 10 is a fragmentary vertical sectional view taken on the line 10—10 of Fig. 1.

Fig. 11 is a fragmentary transverse vertical sectional view of a playing top constructed according to a further embodiment of this invention.

The shuffleboard table and playing top according to this invention includes a horizontal frame 15, having side arms 15a and end arms 15b, and throughout its length at spaced positions having transverse joining arms 15c connected between the side arms 15a. A vertical frame 16 is mounted along the edges of the horizontal frame 15. The vertical frame 16 has side arms 16a and end arms 16b. These end arms are secured together at the corners by screws and brackets 17. The frame 16 engages about the edges of the frame 15 and it is secured thereto by a plurality of fastening elements 18 through these parts. A playing top 19 is mounted upon the frame 15. This playing top 19 is of slightly larger size than the central opening of the frame 15, see Fig. 3, so that the playing top is supported along all its edges. Several fastening elements 20 are engaged through the frame 15 and into the playing top 19 for fixedly holding these parts together as a unit.

A plurality of vertical boards 21 are secured on the bottom of the frame 15 by fastening ele-

ments 22, and these vertical boards have adjacent edges 21a, see Fig. 5, slightly spaced from each other. A plurality of legs 24 is provided for supporting the table. These legs have their upper ends engaging within the spaces between the ends 21a of the vertical boards 21. A novel means is provided for releasably securing together the legs and the vertical boards 21 so that these parts may be disconnected when desired.

The holding means mentioned in the previous paragraph includes a plate 25 fixedly mounted on an inner face of each end of each vertical board 21. These plates 25 have headed holding elements 26. An angle plate 27 is permanently secured upon each side face of each leg 24. These angle plates 27 have one of their arms 27a secured to the leg 24 by fastening elements 28. These angle members have their arms 27b extended at right angles to the arms 27a and adapted to engage in intimate face contact against the plates 25. Each arm 27b is formed with a slot 29 extended in from the top edge and another slot 30 extended in through the side edge. These slots 30 and 29 are so arranged that the headed holding elements 26 may be engaged into these slots and reach a position at the bottom ends of the slots for securely holding the parts together.

Each end 21a of each vertical board 21 is also formed with a reduced portion engaging into a receiving groove 31 formed in the leg 24, see Fig. 5. The arrangement is such that the horizontal frame 15, to which the vertical boards 21 are secured by the fastening elements 22, is normally supported by the legs 24. Each leg may be removed by forcing it downwards relative to the frame 15 so that the headed holding elements 26 move relatively upwards along the slots 29 and 30 and reach positions in which the leg 24 may be completely removed.

Preferably the frame 16 should be made of several sections so that it also may be taken apart. In Fig. 1 the frame 16 is shown to be constructed of end sections 16c and a central section 16d. These sections are normally joined together with dowel pins 33. This arrangement permits the frame 16 to be taken apart to facilitate shipment thereof.

The legs 24 are joined together in transverse pairs by transverse boards 21' across their top ends and across lower portions thereof. Dowel pins 21'' are used to secure the boards 21' and the legs 24 together as units. Each pair of connected legs 24 may be removed as a unit from the vertical boards 21.

The playing top 19 or butcher bench top is constructed according to a novel feature of this invention, an arrangement to prevent warping thereof. More specifically the playing top 19 is formed from a plurality of vertical boards 19a which are arranged in face contact with each other and which are secured together as a unit. The top face 19b of these boards are finished so as to have a flat and true straight surface. A plurality of rigid units are keyed through these boards 19a at spaced positions along the length of the playing top for holding the top against warping.

Each rigid unit referred to in the previous paragraph includes a rod 35 preferably of metallic material engaging through and a tight fit in an opening 36 extended transversely through the playing top. A means is provided for covering the ends of the rod 35. One such means is shown in Fig. 9 and comprises an arrangement whereby

the playing top has an edge board 19aa at each side with a closed area 19bb covering each end of the rod 35. The edge boards 19aa are of a slightly higher dimension than the other boards 19a, as illustrated in Figs. 3 and 9. These edge boards 19a are adapted to rest upon the edge portion of the central opening of the frame 15.

In one form of this invention a novel mechanism is associated with rod 35 assisting the rod and holding the playing top from warping. This means includes a channel bar 37, for each rod, extended transversely across the bottom face of the playing top at an area immediately below the rod 35. Fastening elements 38 are arranged at several positions along the length of the channel bar 37 and are connected with the rod 35 in a particular way. Each fastening element 38 is in the form of a headed screw 38 and a washer 39 is engaged beneath each head of each fastening element 38 and extend over slots 40 formed in the base of the channel bar 37. These slots 40 are aligned with slots 41 formed in the boards 19a. Each slot 41 extends to one side of the rod 35. Each fastening element 38 passes through the slots 40 and 41 and threadably engages the bar rod 35. In this form of the invention the rod 30 is of hollow tubular form.

Since the channel bar 37 is tightly pressed against and across the bottom edges of the boards 19a by the fastening elements 38 tightly connected with the rod 35, the channel bar 37 and the rod 35 will function to rigidly hold the wooden boards 19a against possible warping. This arrangement makes it certain that the playing top will maintain a flat and true condition.

In Figure 11 a modified form of the rigid unit is illustrated for holding the playing top against warping. According to this form of the invention the boards 19a of the playing top are held, against warping by a rod 35' which is extended through and is a tight fit in an opening 36' formed transversely across the playing top. This rod 35', at the bottom side, is provided with a rectangular projection 35a which extends through a complementary groove 36a formed in the playing top. This rectangular projection 35a functions to stiffen the rod 35' against possible bending in the plane of the projection 35a. The combination rod 35' and the projection 35a serve to hold the playing top against warping.

The bottom end of each leg 24 is provided with a novel means by which the leg may be raised or lowered as to properly seat it upon the floor, to properly support the shuffleboard table. More specifically each leg has a plate 45 attached to its bottom by several fastening elements 46. A screw 47 threadably engages through each plate 45 and extends into a closely bored opening 48 formed in the bottom end of each leg. The bottom end 47a of the screw 49 is oval shaped or round headed. Immediately adjacent this head 47a there is a square gripping portion 47b or other shaped gripping portion.

A plate 49 is provided to rest on the floor. This plate has a recess 50 adapted to receive the rounded head 47a, and the curvature of the recess and the head are such that the head may be set into the recess and the recess act as a bearing for the head. The arrangement is such that the screw 47 may be turned in one direction or the other by engaging a turning tool on the gripping portion 47b. When the screw 47 is turned in one direction it will move upwards relative to the leg 24, and when turned in the other direction, down-

wards. In this way the adjustment desired may be accomplished.

While I have illustrated and described the preferred embodiments of my invention, it is to be understood that I do not limit myself to the precise constructions herein disclosed and the right is reserved to all changes and modifications coming within the scope of the invention as defined in the appended claims.

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

1. In a shuffleboard table and playing top, a plurality of vertical boards in face contact with each other and secured together as a unit and having a finished top to form a playing top, and a plurality of rigid keys through said boards at spaced positions along the length of said playing top for holding said top against warping, each unit including a rod engaged through and a tight fit in an opening extending transversely through said playing top, a channel bar for each rod and extended transversely across the bottom face of said playing top, and fastening elements connecting said channel bar with said rod.

2. In a shuffleboard table and playing top, a plurality of vertical boards in face contact with each other and secured together as a unit and having a finished top to form a playing top, and a plurality of rigid keys through said boards at spaced positions along the length of said playing top for holding said top against warping, each unit including a rod engaged through and a tight

fit in an opening extending transversely through said playing top, a bar for each rod and extended transversely across the bottom face of said playing top, and fastening elements connecting said bar with said rod, said playing top having slots extended upwards from its bottom face and connecting with said opening, and said fastening elements passing through said slots.

3. In a shuffleboard table and playing top, a plurality of vertical boards in face contact with each other and secured together as a unit and having a finished top to form a playing top, and a plurality of rigid keys through said boards at spaced positions along the length of said playing top for holding said top against warping, each unit including a rod engaged through and a tight fit in an opening extending transversely through said playing top, and a reinforcement bar for each rod extending along the longitudinal length and bottom of each rod, and connected with each rod.

4. In a table having a plurality of vertical boards in face contact with each other and secured together with a plurality of units and having a finished top, a key for each unit extended through said boards at spaced positions along the length of said boards and including a rod engaged through and a tight fit in an opening extending transversely through said boards, a channel bar for each rod and extended transversely across the bottom of said boards, and fastening elements connecting said channel bar with said rod.

PAUL KOTLER.