No. 880,696. PATENTED MAR. 3, 1908.

A. F. SCHUPINSKY, JR.

PARLOR BOWLING ALLEY.

APPLICATION FILED NOV. 6, 1905.

2 SHEETS—SHEET 1.

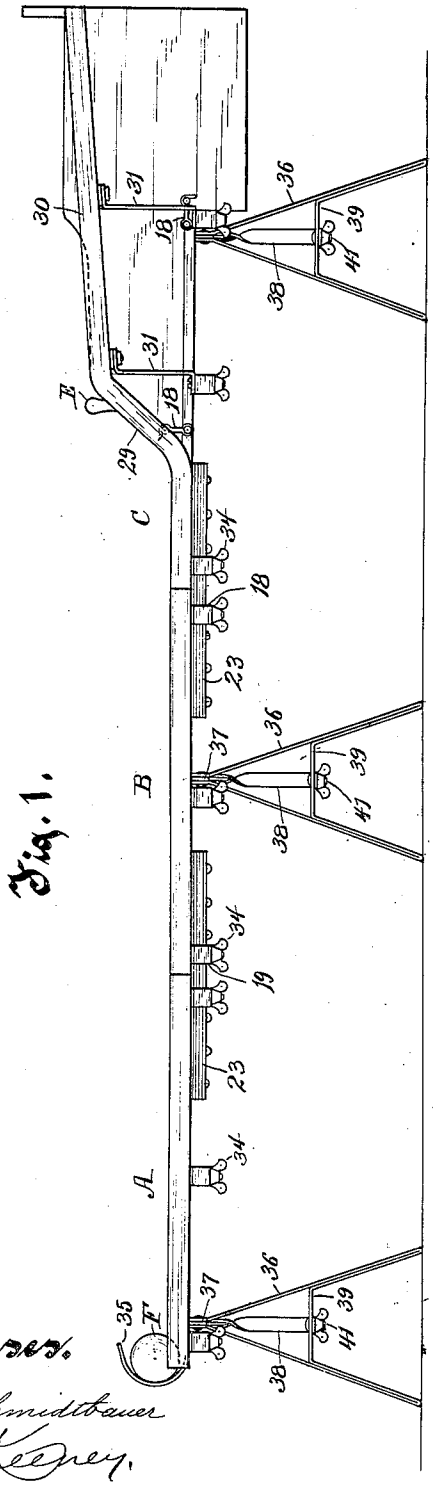


Fig. 1.

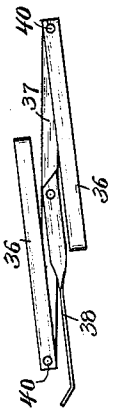


Fig. 7.

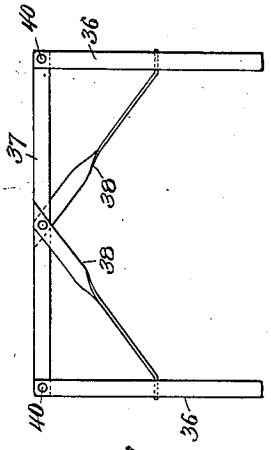


Fig. 6.

Witnesses.

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2 SHEETS—SHEET 2.

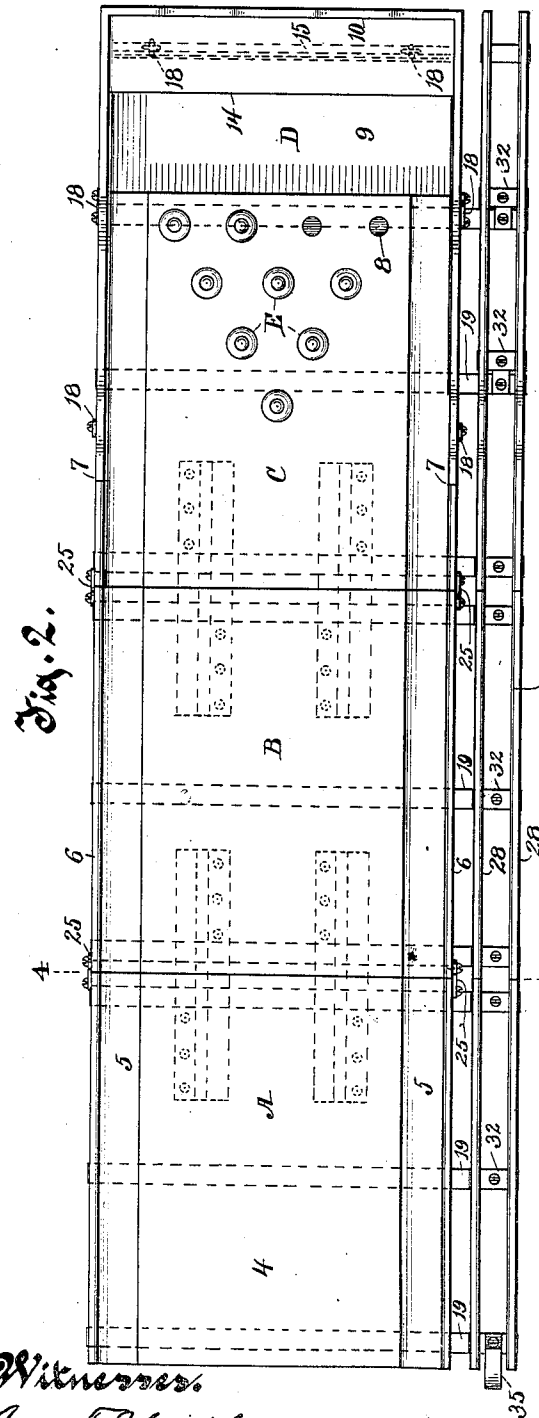


Fig. 2.

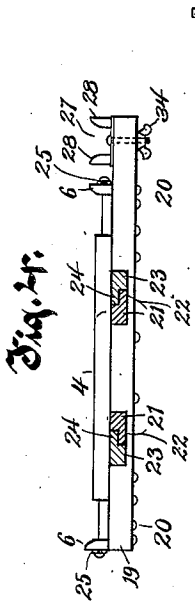


Fig. 4.

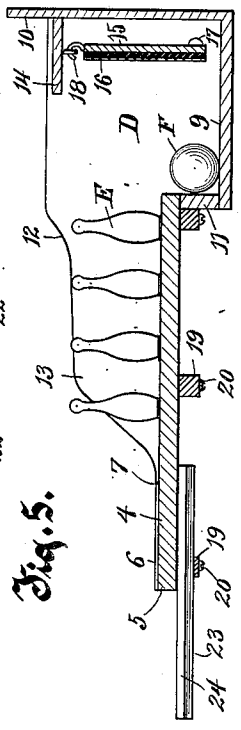


Fig. 5.

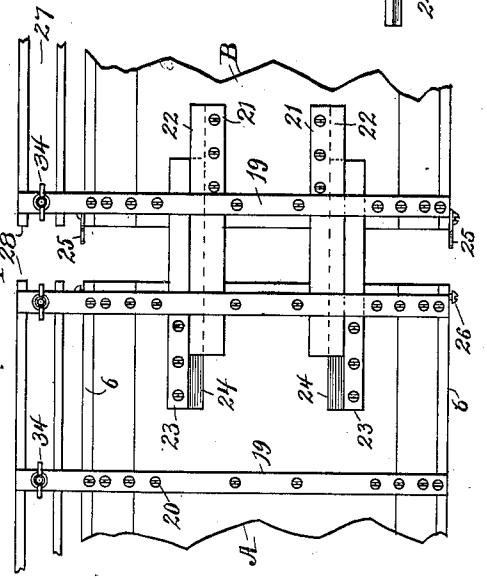


Fig. 3.

Witnesses.

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UNITED STATES PATENT OFFICE.

AUGUST F. SCHUPINSKY, JR., OF MILWAUKEE, WISCONSIN.

PARLOR BOWLING-ALLEY.

No. 880,696. Specification of Letters Patent. Patented March 3, 1908.

Application filed November 6, 1905. Serial No. 286,014.

To all whom it may concern:

Be it known that I, AUGUST F. SCHUPINSKY, Jr., residing in Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented new and useful Improvements in Parlor Bowling-Alleys, of which the following is a description, reference being had to the accompanying drawings, which are a part of this specification.

My invention relates to an improved parlor bowling alley, which may be constructed chiefly of wood or of metal as preferred, and which is made in sections adapted to be separated when not in use either for packing the alley for transportation, or for storing it away in a small space.

The invention consists of the bowling alley, its parts and combinations of parts and related devices, as herein described and claimed, or the equivalents thereof.

In the drawings, Figure 1 is an elevation of the improved bowling alley; Fig. 2 is a plan of the alley; Fig. 3 is a view on the under side of fragments of two abutting sections of the alley, partially separated from each other, showing the means and method of uniting them and securing them together; Fig. 4 is a cross section of the alley on line 4—4 of Fig. 2; Fig. 5 is a longitudinal section centrally of the rear or third section of the alley; Fig. 6 is an elevation of a folding horse adapted to be employed with, and to form a part of the bowling alley apparatus, in the manner shown in Fig. 1; and Fig. 7 is a view of the horse of Fig. 6, in its collapsed and folded form.

The bowling alley is made in a plurality of sections, the sections in their assembled order being here designated A, B, C, and the pin box and pit D.

The alley proper may consist of a plurality of sections, here shown as 3, and designated respectively as A, B and C. These sections consist of the central raised longitudinal bed 4 with lower floors 5 at each side, and a slightly elevated guard rail 6 secured to and extending along the entire sides of all the sections preceding the rear one, and on this section the guard rail extends from the front thereof along its side but is not raised above the floor at the rear beyond the point 7.

On the bed of the rear section C, there are pin spots 8, which in an alley of this character may consist of thin leather disks secured in desired positions on the surface of the bed.

The pin box and pit section, consists of a floor 9, a rear end upright wall 10, a low front wall 11, and side members 12, all secured to each other permanently, the side members 12 having forwardly projecting portions 13 which when this box member is placed in connection with and is secured detachably to the rear section C of the alley, extend along on and above the edges of the alley in the line of the guards 6, 6 of the alley sections. A partial top floor or ledge 14 secured to the rear end 10 and to the side members 12, extends over a portion of the box, and a baffle 15 which may consist of a plate with a cushion of rubber 16 on its front surface, advisably faced with felt or analogous material is suspended from the partial top 14, at a little distance in front of the end wall 10, and at a distance rearwardly from the front edge of the top by any convenient means such as hooks and eyes, so as to be adapted to swing thereon. The baffle 15 is provided on its rear surface at the lower edge thereof with rubber knobs 17 adapted to serve as cushions, to contact against the rear end wall 10 and stop the swing of the baffle rearwardly. This pin box and pit section is secured detachably to the rear alley section C conveniently by means of hooks 18 pivoted on one of the members and taking on to screws or pins fixed in the other member. The location and arrangement of these hooks is such as to secure the pin box and pit section, against escaping therefrom in an endwise direction or upwardly; or otherwise. The pit of this section is adapted to receive the balls F therein when rolled down the alley, and also the pins E when they fall from the alley. The baffle 15 is adapted to receive and stop the movement of the balls rearwardly and the top will prevent balls or pins from flying out upwardly toward the front.

The bed 4, the floors 5 and the rails 6 of each of the alley sections are secured in place and in position relative to each other in the section, by a plurality of cross ties 19, three being preferably employed with each section of the alley, as shown in the drawings. These cross ties are secured to the bed, the floors and the guard rails conveniently by means of screws 20 passing through the cross ties and turning into the thereto secured members. The several sections A, B, C, of the alley are provided with interlocking connecting members, consisting preferably in each instance

of two longitudinally disposed cleats 21, 21, located at a little distance apart and secured at one end respectively to the under surface of one of the sections, and projecting therefrom endwise under the surface of the adjacent section. These cleats are each provided with a lip 22 along its longitudinal edge, at the outer surface thereof, leaving a space under the lip between it and the surface of the bed of the section. These lips on the two cleats project laterally in opposite directions on the respective cleats. On the abutting section there are complementary cleats 23, 23 secured to the under surface of the bed of the section and projecting endwise therefrom and having lips 24 that, in connecting the sections together, slide under the lips 22, 22 of the cleats 21, being complementary thereto. By these means when the two sections of the alley are brought together, they are secured against displacement laterally or vertically. The cross ties 19 are cut away sufficiently adjacent to the surface of the bed to which they are attached, to permit these cleats to pass them. When the sections are brought together, they are secured against displacement endwise, by hooks 25 pivoted on the edge of one of the sections and taking on to pins or screws 26 on the adjacent section.

Alongside the sections of the bowling alley and extending the entire length thereof at a little distance therefrom, there is a ball runway 27 consisting of two runway rails 28, 28, supported on the projecting ends of the cross ties 19. These runway rails in sections are placed directly on and are secured to those sections of the alley in front of the last section C, and on all the sections the rails are located parallel with each other and at a little distance apart, the inner upper edges of the rails being rounded on the inside inwardly, as shown best in Fig. 4, the construction being such as to adapt the rails to receive and carry the balls thereon from the rear or pit end of the alley to the front end, where they are required to be for use. On the rear or last alley section C, the runway rails are placed on and secured directly to the front cross tie, and at a point about opposite the front ends of the projecting portions 13 of the side members 12, when the pit section is connected to the alley section, the rails are bent and carried upwardly at a sharp angle forming a steep incline 29, and thence rearwardly they extend to opposite the rear end of the assembled alley on a moderate incline 30. The thus raised portion of the runway is supported on the rear cross ties of the section C, by standards 31 footed on the cross ties. The rails 28 are secured to each other and in proper relative positions by cross straps 32 placed against the under edges of the rails and permanently fastened to them. These cross straps 32 are arranged to and do fit and rest upon the projecting ends of the cross ties, where the rails are supported directly on the cross ties, and they rest on and are secured to the standards 31, where the raised portion of the rails are supported by those standards. The cross straps 32 where they rest directly on the cross ties, and the standards 31 where they rest on the cross ties, are detachably secured to those cross ties by screw bolts 33 provided with thumb nuts 34 turning on their ends. At the front end of the alley, the runway is provided with a stop 35, which may consist of a short flat strip of metal secured to the terminal cross strap 32 by passing the attaching screw bolts 33 of that strap through the stop and by the turning down of the thumb-nut on the screw to secure the runway to the cross tie, at the same time securing the stop in place. The metal strip is curved and extended upwardly so as to form a kind of pocket to receive a ball therein. That portion of the runway from the steep incline 29, to the front end of the alley, that is to the stop 35, descends slightly, the descent being obtained by the cut away and gradual lowering of the top of the rails in that direction, with reference to the horizontal plane of the bed of the alley. The construction of the runway is such that balls placed on the runway at the pit D, start slowly down the incline 30 and then move more rapidly down the steep incline 29 being thereby given a momentum that carries them rapidly along the slight incline of the runway to the terminus thereof at the stop 35, where their movement is arrested by the stop, and where they remain in position, because of the stop and the slight incline of the runway upwardly away from the stop.

The complete bowling alley thus described is adapted to be placed on any support that is convenient and suitable therefor, but as the alley is intended and adapted to be taken apart into sections for being stored away, and as it is desirable to have at hand at all times some convenient portable and readily applied means for supporting the assembled alley, I provide portable collapsible horses or trestles therefor. These trestles consist of two sets of legs 36, a cross bar 37 and two braces 38 suitably formed and connected together therefor. Each set of legs consists of a metal strap having a medial transverse member 39, from the ends of which transverse member the strap is bent downwardly and inclining outwardly reversely to the foot of the legs, and from the foot of the legs the strap extends upwardly converging to the upper ends of the strap at the top of the leg, where the two ends of the strap are connected to the cross bar 37 by a bolt or rivet, forming a pivot 40 by which each set of legs is pivoted respectively to an end of the cross bar 37. The braces 38 are pivoted one at one side and the other at the other side to the

cross bar 37 medially, and extend therefrom downwardly and laterally to the transverse members 39, to which they are secured detachably by means of screws 41 provided with thumb nuts. It will be understood that this construction of the trestles adapts them to be folded up in the manner shown in Fig. 7, by merely removing the screws 41 and thereby loosening the braces 38 at their lower ends.

It will also be understood from the description of the alley herein before contained, that when not in use, the several sections A, B, C, D of the alley can be readily separated one from the other, by releasing the hooks 18 and 25, and drawing the sections apart one from the other, and that the sectional ball runways can be detached from the alley sections, by taking off the thumb nuts 34 and removing the bolts 33. By this means the several parts of the alley can be so disassembled, as to adapt them to be handled easily and to be stored away in a very compact form in a small space.

What I claim as my invention is:

1. In a parlor bowling alley, a detachable transverse section of such alley, comprising a longitudinal bed centrally, adjacent longitudinal side floors whose surfaces are below the plane of the bed, longitudinal guard rails along and projecting above the outer edges of the side floors, a longitudinal rail ball-runway a little distance at one side from and parallel with the adjacent one of said guard rails, and cross ties on which the bed and floors and guard rails and the runway all in the same plane are severally supported and secured.

2. In a parlor bowling alley, a plurality of detachable sections, each section including a central longitudinal bed, adjacent longitudinal side floors whose surfaces are lower than the top surface of the bed, longitudinal bordering upwardly projecting guard rails, a longitudinal rail ball-runway a little distance at one side from and parallel with the guard rail but generally in the same horizontal plane with the bed and the side floors, and a detachable rear end box and pit section including a high rear end wall, a low front wall, a bottom, and side walls projecting forwardly above and in front of the front pit wall to over the adjacent bed section above and in alinement with the guard rails of that adjacent bed section.

3. In a parlor bowling alley, the combination with a plurality of detachable sections forming a central longitudinal bed, and parallel adjacent lower side floors having outer raised guards, of a detachable box and pit section having a bottom, a high rear end wall and high side walls, a partial box top projecting forward from the rear wall above the pit, and a swinging baffle depending from the partial top at a distance rearwardly from its front edge and adapted to impinge in inclined position rearwardly against the rear box end.

4. In a parlor bowling alley, a plurality of detachable bed sections abutting transversely in a right line, longitudinally extending cleats in complementary pairs secured on the under side alternately to abutting alley bed sections and projecting endwise therefrom, the cleats being longitudinally shouldered or rabbeted whereby they interlock when the sections are brought together endwise and prevent both lateral and vertical displacement of the abutting sections, and means for connecting together the sections detachably preventing separation in endwise direction when so connected together.

5. In a parlor bowling alley, detachable alley bed sections, a plurality of cross ties secured on the under side to and projecting laterally from each section, a pair of ball runway rails adjacent to and parallel with the beds of the bed sections and supported on the projecting ends of said cross ties substantially in the horizontal plane of the bed sections and means for securing the rails to the ties detachably.

6. In a parlor bowling alley, detachable alley-bed sections, cross ties secured to and projecting laterally from each section, a pair of ball runway rails, cross straps secured to the rails holding them in relative position, the straps being arranged to rest on the cross ties, and means for securing the cross straps to the cross ties detachably.

7. In a parlor bowling alley consisting of a plurality of detachable sections, a rear end alley-bed section, cross ties secured to and projecting laterally from said section, a pair of ball runway rails supported and secured at their front ends on the cross ties, and standards secured to and supporting elevated portions of the rails and footed and secured on other cross ties of said alley bed section.

8. In a parlor bowling alley, an alley-bed and pit, a ball-returning runway consisting of a pair of rails descending from the pit to the front end of the alley, cross straps connecting and securing the rails to each other, a cross tie, a curved metal ball stop, and means for securing the stop the cross strap and the cross tie together detachably.

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

AUGUST F. SCHUPINSKY, JR

Witnesses:
ANNA F. SCHMIDTBAUER,
C. T. BENEDICT.