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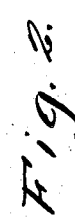
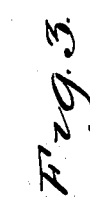
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2,203,458

BOWLING ALLEY

Filed Dec. 26, 1939

2 Sheets-Sheet 1



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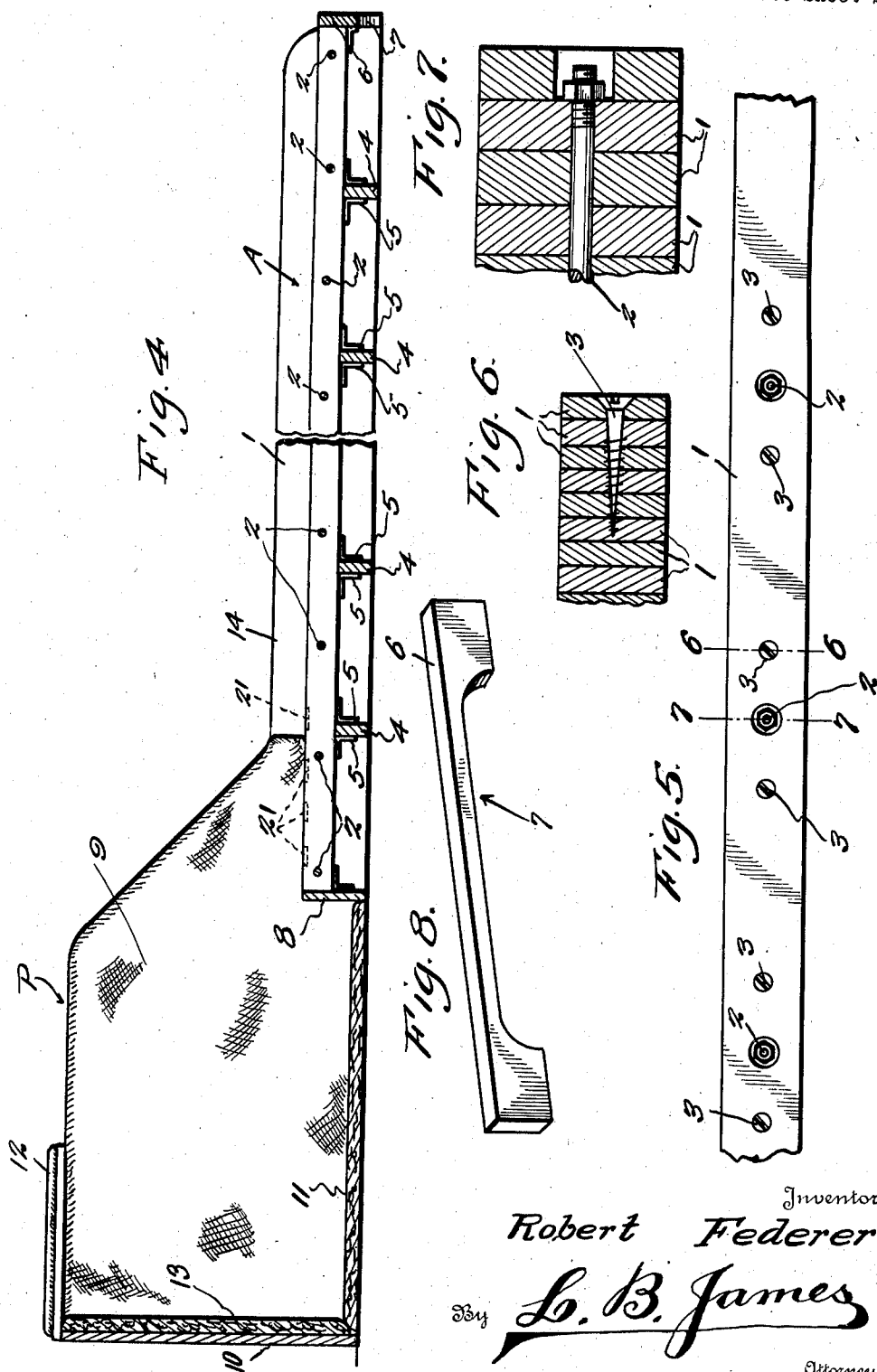
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2 Sheets-Sheet 2



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UNITED STATES PATENT OFFICE

2,203,458

BOWLING ALLEY

Robert Federer, Sheboygan, Wis.

Application December 26, 1939, Serial No. 311,043

1 Claim. (Cl. 273—51)

This invention relates to a bowling alley, the general object of the invention being to provide an alley of stout construction and one that will have great wearing qualities and yet can be manufactured to sell at low cost.

The invention also consists in certain other features of construction, combination and arrangement of the several parts, to be hereinafter fully described, illustrated in the accompanying drawings and specifically pointed out in the appended claim.

In describing the invention in detail reference will be had to the accompanying drawings wherein like characters denote like or corresponding parts throughout the several views, and in which:

Fig. 1 is a plan view of the alley.

Fig. 2 is a side view thereof.

Fig. 3 is a section on line 3—3 of Fig. 1.

Fig. 4 is a section on line 4—4 of Fig. 1.

Fig. 5 is a partial side view of the bottom of the alley.

Fig. 6 is a section on line 6—6 of Fig. 5.

Fig. 7 is a section on line 7—7 of Fig. 5.

Fig. 8 is a view of the front end member of the alley.

Fig. 9 is a transverse sectional view through the return gutter and showing one of the check members.

As shown in these drawings, the floor A of the alley is formed of a plurality of longitudinally extending wooden strips 1 placed on edge and fastened together by the bolts 2 and the screws 3. The floor A is connected with the supporting beams 4, which extend transversely of the alley, by the brackets 5. A front end piece 6 is fastened to the front end of the floor and has a slot 7 in its under part for forming a space for receiving the feet of the players as they throw the balls down the alley. A strip 8 is fastened to the rear end of the floor and forms the front wall of the pit P, which also includes the side walls 9, the rear wall 10, the floor 11, and the top 12 which extends over the rear part of the pit. The vertical walls of the pit are cushioned as shown at 13. The front ends of the side walls slope downwardly and forwardly and join the side walls 14 of the floor part of the alley. The beams 4 extend beyond the sides of the floor A and the side walls 14 are connected to the ends of these beams and gutters 15 are placed between these side walls and the side edges of the floor A. Each gutter is formed of a bottom strip 16, attached to the beams 4 by brackets 17, the upwardly diverging boards 18, which have their adjacent faces slightly grooved and these grooved faces form the side walls of the gutter, the bottom being formed by a narrow strip 19 attached

to the strip 16. Filler strips 20 are placed between the members 18 and the floor A and the adjacent side wall 14. As shown in Figures 3, 5, 6 and 7, the bolts have their heads and nuts located in holes in the outer strips 1 of the floor A and the screws 3 pass through the outer strips 1 into some of the other strips, as shown more particularly in Fig. 6. The rear end of the floor has the marks 21 thereon to show where the pins are to be placed by the boy in the pit. The return gutter or chute is shown at B and is composed of the downwardly and forwardly sloping rear part and the practically level front part, as shown in Fig. 2. The chute is connected to the adjacent side walls 9 and 14 by the brackets 23 and said chute is composed of the spaced angle members 24 fastened to said brackets and the filler members 25 which form with parts of the members 24 ball engaging parts of the chute. A cushioned rear end part 26 is provided for the chute, in which the boy places the balls and a front cushioned part 27 receives the balls at the front end of the chute. Arches 28 are spaced apart along the level part of the chute and are connected to parts of the chute and to parts of the side wall 14 and flexible members 29 are suspended from the tops of the arches to slacken the balls as they move to the front end of the chute.

It is thought from the foregoing description that the advantages and novel features of the invention will be readily apparent.

It is understood that changes may be made in the construction, combination and arrangement of the several parts, provided such changes fall within the scope of the appended claim.

Having thus described my invention what I claim and desire to protect by Letters Patent is:

A portable bowling alley comprising a floor composed of a plurality of longitudinally extending strips placed on edge and connected together, a gutter at each side of the floor, side walls at the outer sides of the gutters, cross beams passing under the floor and gutters and connected with the side walls, said side walls and cross beams having their bottom edges in the same plane, a pit at the rear end of the floor, a return chute connected to the outer face of a side wall of the pit and a side wall of the floor, said pit having side walls forming continuations of the first mentioned side walls and extending to a greater height than the latter, said pit having a rear wall of equal height with the pit side walls, and triangular members at the rear corners of the pit and connecting the side and end walls to form braces for the walls and seats for an attendant.

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