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BOWLING EQUIPMENT

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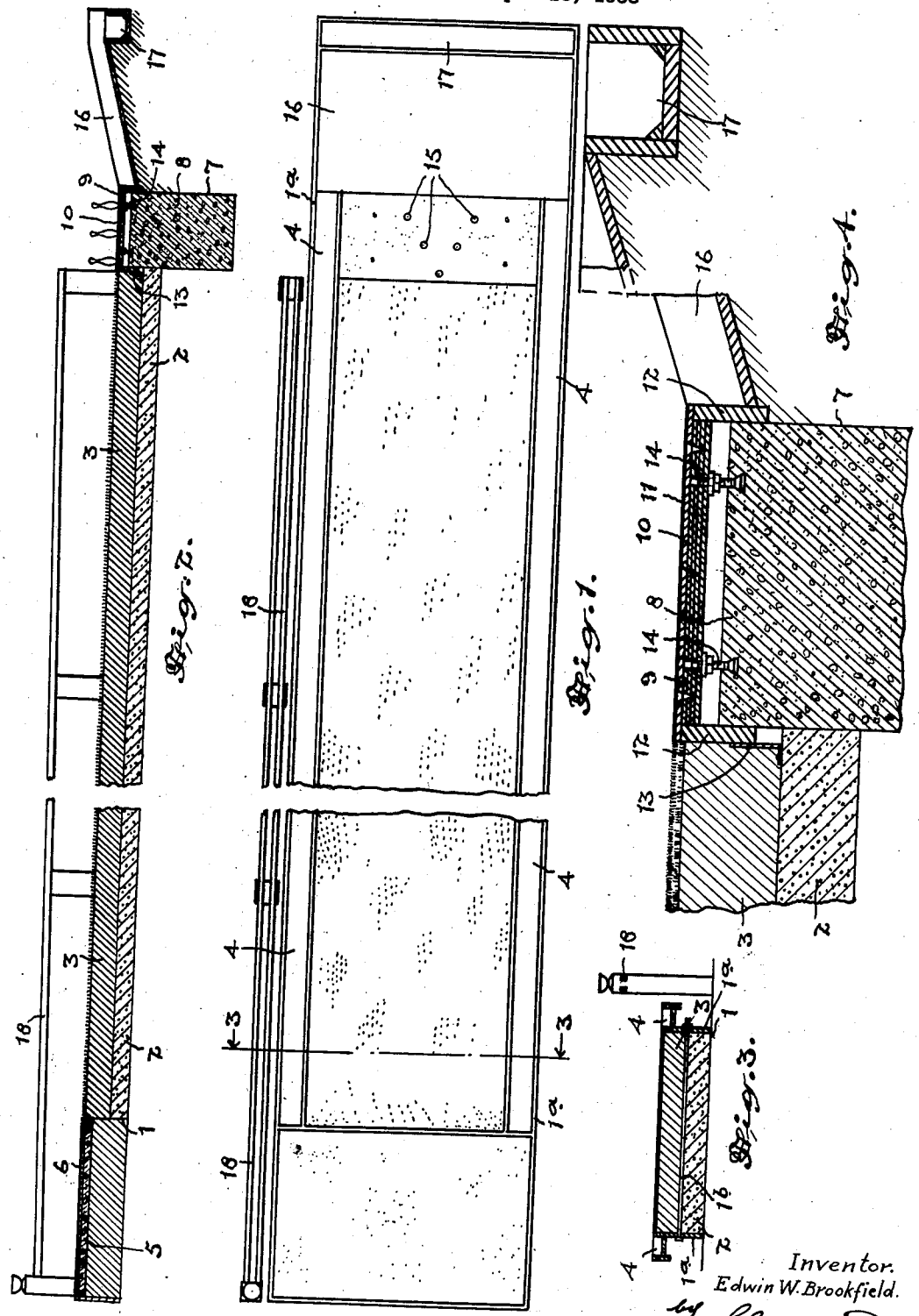


Fig. 2.

Fig. 1.

Fig. 4.

Fig. 3.

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BOWLING EQUIPMENT

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4 Claims. (Cl. 273—51)

This invention relates to an equipment designed to combine the interest of those who are interested in lawn bowling and those who are interested in alley bowling and the object of the invention is to provide an equipment which will combine certain features of both types of bowling.

The principal features of the invention consist in the novel construction of a bowling alley in which a grass-covered "green," enclosed between parallelly arranged side boundaries, has arranged at one end a delivery mat from which the bowls are delivered, and at the other end of said "green" there is provided an adjustable plate upon which pins are mounted, a pit being arranged beyond the pin plate in the form of an inclined surface to receive the "bowls" and pins, gutters being provided on either side of the "green" and at the end of the pit.

In the accompanying drawing, Figure 1 is a plan view of my improved bowling equipment.

Figure 2 is a longitudinal broken section of the equipment illustrated in Figure 1.

Figure 3 is a cross section taken on the line 3—3 of Figure 1.

Figure 4 is an enlarged longitudinal sectional detail through one end of the "green" and through the pin-carrying structure and end pit.

In the game of alley bowling pins are set up at one end of a polished hardwood alley bounded on either side by gutters, and spherical balls are rolled over this hardwood surface to strike the pins. This game is played indoors and is usually restricted to being played in the winter months.

Lawn bowling differs considerably from alley bowling in that the game is played upon a lawn or "green" with "bowls" which are "biased," that is to say, they are not spherical but are flattened on one side and consequently loaded off centre so that they will roll with an inward or outward curve according to their manner of delivery toward the object ball or "kitty."

The present invention has been devised to create a combination of these two games.

It is well known that the cost of building and maintaining bowling greens is quite expensive. The entire area, which is usually square so that "rinks" can be played in either direction thereon, requires the entire surface to be perfectly level and it will be understood that this requires continuous care in surfacing and rolling.

The present invention proposes the construction and maintenance of "greens" confined to individual units for each rink or alley and in constructing the rinks excavations are made in the ground surface for a depth of approximately eighteen inches in the form of a long, narrow trench 1 which will be approximately seven feet wide and fifty feet long, though these dimensions may be varied as may be desired. Instead of a trench side walls 1a may be used.

In the bottom of this trench there is placed a bed of loose material 2 such as gravel for a depth of about eight inches and over this is laid, for a depth of about ten inches, a suitable grass-supporting base 3 made preferably of a mixture of good loam, sharp sand and rotted manure in about equal proportions. A top covering of grass is produced, either by seeding or sodding, but preferably sodding to provide a well developed root base.

On either side of this long, narrow "green" is arranged a pair of shallow gutters 4 to receive bowling balls which may over-run the sides of the "green". These gutters extend the full length of the "green". At one end of this "green" there is built a foundation slab 5 of concrete upon which is placed a suitable mat such as rubber or fibre 6, upon which a bowler stands in delivering his bowls.

At the opposite end of the "green" there is formed a comparatively deep excavation 7 in which is placed a body of concrete 8, the top surface of which is lower than the top of the built-up "green" 3.

A platform 9, preferably formed of a thick laminated wood sheet preferably surfaced on top with a steel plate 10 covered with a suitable rubber surfacing mat 11, is mounted above the rectangular foundation 7 and is provided along its longitudinal sides with apron strips 12, which may be of wood or any other suitable material. These apron strips extend downwardly from the platform 9 a considerable distance below the top of the concrete foundation and a guard strip 13 is arranged to extend transversely of the "green" to engage the outward side of the strip 12 adjacent to the "green," thus providing a recess in which the strip 12 may operate vertically while preventing entry of the grass-supporting base between the platform 9 and foundation 7.

The platform 9 is preferably supported a short distance above the top of the foundation by suitable jack screws 14 which may be manipulated from the end so as to raise or lower the platform to adjust it to the height of the sod of the green 3 so that the bowls which are rolled over the sod, will roll smoothly onto the top surface of the platform.

The surface mat of the platform 9 is provided with suitable pin spots 15 which may be five or

more or less in number. When pins are used upon these spots they are spaced so that by the striking of the head pin with the bowl in a proper manner, the head pin may be caused to knock over certain of the pins while the bowl takes the others and a "strike" results, or the bowling may be effected to accomplish other purposes.

Back of the concrete foundation is preferably arranged a pit 16 which is here shown in the form of an upwardly sloping board, terminating in the gutter 17 at the top side.

In playing the game on this device it is preferred to use "biased" bowls. The long narrow "green" structure enables the maintenance of the surface in a level condition without regard to other and similar "greens" that may be arranged alongside of same and the provision of a concrete slab supporting a mat surface at the playing end, together with a heavy concrete mass with its adjustable platform at the opposite end, obviates the difficulties met with in the maintenance of the grass surface at the two points of play.

It will be readily understood that the niceties of the game of "bowls" on a grass "green" may thus be combined with the features of alley bowling.

The shape and arrangement of the pit to receive the "bowls" and the pins may be altered to suit requirements, and a suitable bowl-returning trackway 18 to return the bowls to the delivery end may be arranged.

As intimated, the "greens" may be built up above the ground surface by using longitudinal side retaining walls spaced and supported by cross ties 1b. By raising the "green" structure above the ground surface the problem of drainage of the "greens" is taken care of in a very simple manner and the structure is very easy to install.

What I claim as my invention is:

1. A bowling equipment comprising a long, narrow "green" of natural grass having a supporting base of shiftable material, a rigid foundation at green end of said "green", an adjustable platform mounted on said foundation to support pins at the said end of the "green", and means for preventing entry of said "green"-supporting base below said platform in its various adjusted positions.

2. A bowling equipment comprising a channel having a drainage foundation, such as gravel, a bed of grass arranged over said gravel including a soft supporting base, gutters enclosing the longitudinal edges of said grass-covered portion, said channel including retaining walls extending above the foundation and confining said soft grass-supporting base against spreading into said gutters, a delivery platform arranged at one end of said grass-covered portion, a firm foundation at the opposite end of said grass-covered portion, a platform mounted on said foundation and capable of vertical movement in relation thereto, means for raising and lowering the said platform, and means for preventing spreading of the soft grass-supporting base under said platform.

3. A bowling equipment comprising a long, narrow "green" having a supporting base of a material subject to spreading, a bowl-delivering platform arranged at one end of said "green" a rectangular foundation arranged at the other end of said "green", a platform arranged above said foundation and having members depending from the sides thereof forming guards, and adjusting means mounted on said foundation and engaging and supporting said platform in an adjusted position relative to the green, one of said guard members forming a barrier between the platform and foundation to prevent spreading of the "green"-supporting base between the platform and foundation.

4. Equipment as claimed in claim 2 in which tie rods extend between said retaining walls below said grass strip for bracing the walls against spreading.

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