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C. D. SWINHOE

2,067,356

COURT FOR GAMES

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Fig. 1.

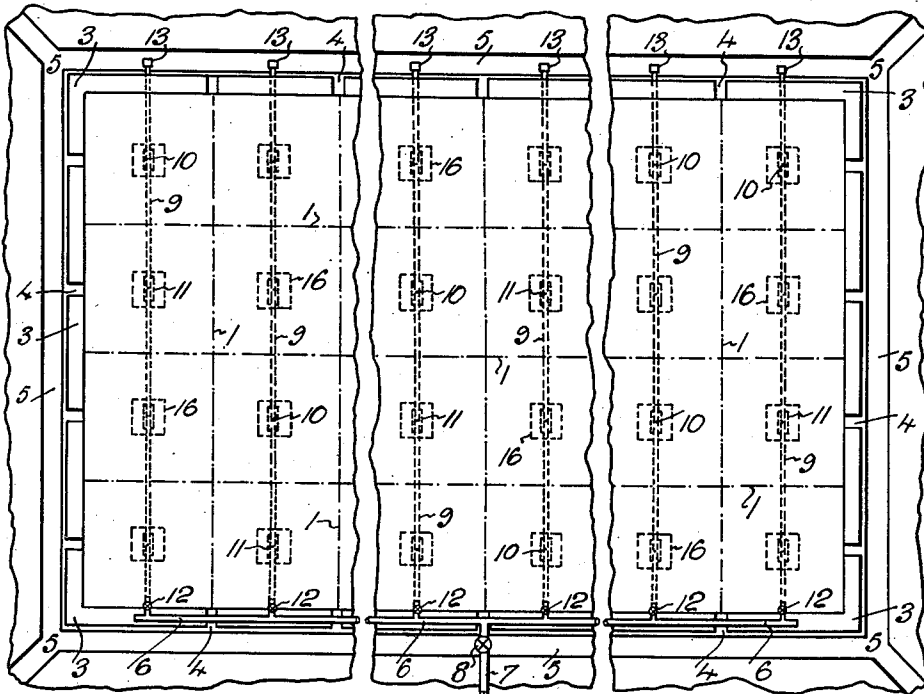


Fig. 2.

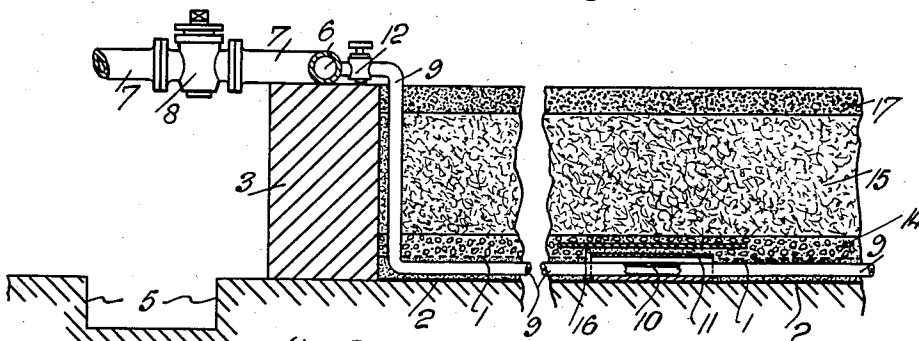
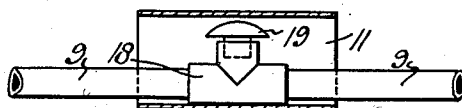


Fig. 3.



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COURT FOR GAMES

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2 Claims. (Cl. 61—13)

This invention relates to the construction and watering and drainage of courts for lawn tennis and like games, and is primarily applicable for hard lawn tennis courts such as are made with sand, ashes, rubble, brick dust or the like, which require to be watered and rolled, but it is also applicable for grass courts or for any other open-air area intended for games or sports.

In the specification of my own prior British Patent No. 286,179 I have described a court for lawn tennis or other games comprising a shallow tray composed of water-retaining material containing a porous filling and a top dressing, a pipe or pipes for supplying water to the said courts being provided below the surface of the court, which is surrounded by a drain, drainage pipes being provided to retain water within the tray at any desired level. In this construction of court, water was supplied below the surface at the side of the court by one or more pipes. With such a construction I have found that the water supplied to the pipes took a long time to travel across the court so as to water the whole court evenly, whilst, more often than not, there resulted excessive saturation at the sides.

The object of my present invention is to overcome these disadvantages.

According to the present invention the foundation surface of the court is divided into a plurality of trays or compartments, preferably square, the boundary of the court being surrounded by bricks, each row of trays or compartments being traversed by a transverse branch pipe disposed below the top surface of the court and communicating with a main water supply pipe, each branch pipe having a hole or holes in each tray or compartment to allow water to be supplied thereto, preferably at the centre thereof.

Preferably a tap is provided to control the main water supply, whilst each branch pipe may be provided with its own tap so that any part of the court which shows signs of dryness can be watered independently.

Preferably also gaps are left at intervals between the bricks surrounding the boundary of the court for drainage purposes, through which gaps any excess water may flow away to a drain or drains outside the boundary of the court.

Preferably also sleeves are provided over the branch pipes to cover each hole therein to protect it from being choked with dirt, the sleeves being of short lengths of a larger diameter pipe, preferably coated with a protective solution to

guard against corrosion; the ends of the branch pipes may, if desired, be closed by caps preferably detachable to allow the branch pipes to be flushed out.

Each tray or compartment is covered with a bitumastic solution to render it water-proof, preferably after treatment with a weed-killer, over which a layer of shingle, small broken stones or other suitable material is laid, this layer further protecting the pipes from the corrosive effect of ashes provided above the layer of shingle or the like, and at the same time facilitating the spreading of the water over the water-proof surface before it rises through the ash bed to the surface of the court. The "bitumastic solution" referred to is a solution mainly composed of bitumen. The bitumastic solution is laid while still in the form of a liquid and it sets fairly quickly, so that in the finished court, the bitumastic solution material has a permanent surface rather like rubber and being somewhat pliable.

Preferably over each sleeve of the branch pipes there is provided a cover plate of suitable material, such as metal, roofing felt or the like, which cover plate acts as a diffuser for the water emerging through the holes of the branch pipes. Above the bed of ashes the top dressing composed, for example, of brick dust, fine granite, or other suitable material, is laid and rolled in.

The invention is illustrated by way of example in the accompanying drawing, in which:

Figure 1 is a diagrammatic plan view of the court, and

Figure 2 is a transverse conventional section.

Figure 3 is a detail view of a modification.

Referring now to the drawing, the layout of the court is effected in the following manner:

The ground surface is levelled and lightly rammed and divided into square trays or compartments by means of ridges of pressed earth about one inch high, the said ridges being shown at 1. The whole area is then treated with weed-killer, and a bitumastic solution 2 to render it water-proof. Around the boundary of the court bricks 3 are laid in cement, gaps 4 being left at intervals so as to allow any water to drain through and to be carried away into drains 5 outside the boundary of the court. The main water supply pipe 6 is laid along one side of the court and connected by a pipe 7 with the water supply which may be controlled by a tap or valve 8. Leading off the said pipe 6, and at right angles thereto, branch pipes 9 extend right

across the court on the water-proof surface 2. Each pipe 9 traverses a row of trays or compartments and at suitable intervals along the pipe, holes 10 are provided, one or more holes being
 5 arranged in each tray or compartment, preferably at the centre thereof. Over the branch pipes 9 are passed a plurality of sleeves 11 so as to cover each hole 10 and protect it from getting choked
 10 up with dirt. All the piping under the court is coated with a protective solution to guard against corrosion. Taps or valves 12 are provided on each branch pipe 9 so that any part of the court can be watered independently of the rest. The
 15 ends of the branch pipes are closed by caps 13 which can be removed to enable the pipes to be flushed if necessary. Over the whole area of the court is then laid a layer of shingle, small broken stones or other suitable material 14,
 20 about 1 inch deep, which layer 14 further protects the pipes from the corrosive effect of a bed of ashes 15. In the layer of shingle or the like 14 there are laid a plurality of cover plates 16, a
 25 cover plate being provided over each hole 10 in the branch pipes so as to assist in distributing the water emerging therefrom and to guard against the water rising to the surface thereby
 30 disturbing the surface dressing. The bed of ashes or other suitable porous moisture-retaining material 15 is consolidated and subsequently the top dressing 17 composed of brick dust, fine granite or other suitable material is laid and rolled in. When applying this invention to a grass court, the top dressing 17 is replaced by turf.

Instead of providing the branch pipes 9 with
 35 holes 10 for distributing the water, the modification shown in Figure 3 may be employed. In this arrangement the pipes 9 are formed of several sections connected together at suitable inter-

vals, e. g. at the centre of each tray or compartment, by hollow members 18 of inverted T-section, the orifices in the upwardly extending portions of which members have positioned therein
 5 plugs 19, the plug being provided with a pan head similar to a rivet, the plug being of such dimensions as to allow of a space around it equivalent in area to the hole 10 in Figure 1. 11 is the sleeve as in the previous construction, the
 10 dimensions of the sleeves being such as just to clear the tops of the plugs 19 to allow them to move up and down but not to be blown out by the pressure of the water.

What I claim is:—

1. A court for games such as lawn tennis comprising a foundation, divisions on said foundation forming a plurality of rows of trays, bricks
 15 surrounding the boundary of the court, a layer of bitumastic solution material over the foundation of each tray, a transverse branch water pipe
 20 traversing each row of trays, a main water supply pipe adjacent a side of the court and in communication with said branch pipes, each of which
 25 is provided with at least one outlet in each tray above the layer of bitumastic material, a layer of aggregate superimposed over said layer of
 30 bitumastic material, a layer of ashes superimposed upon said layer of aggregate, and a top dressing superimposed upon said layer of ashes.

2. A court as claimed in claim 1 in which there
 35 is provided a valve for controlling the main water supply, a valve in each branch pipe for controlling the flow in the branch pipes independently of each other, a drain surrounding the court, and passages between the boundary bricks
 35 connecting and affording flow-off communication between the court and the drain.

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