Feb. 20, 1934. J. A. CURTISS 1,948,026

GOLF GREEN AND METHOD OF MAKING THE SAME

Filed Oct. 25, 1930 2 Sheets-Sheet 1

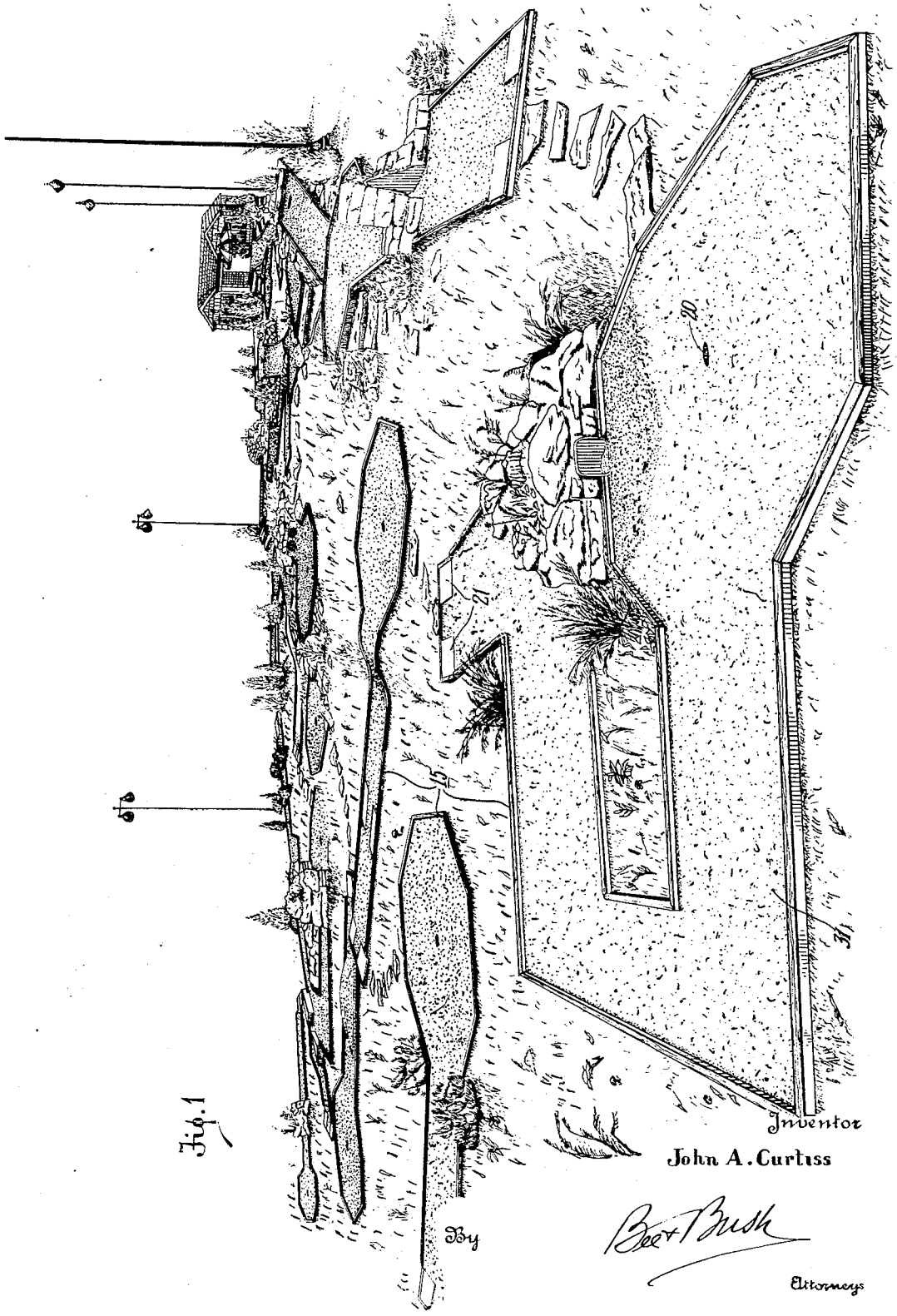


Fig. 1

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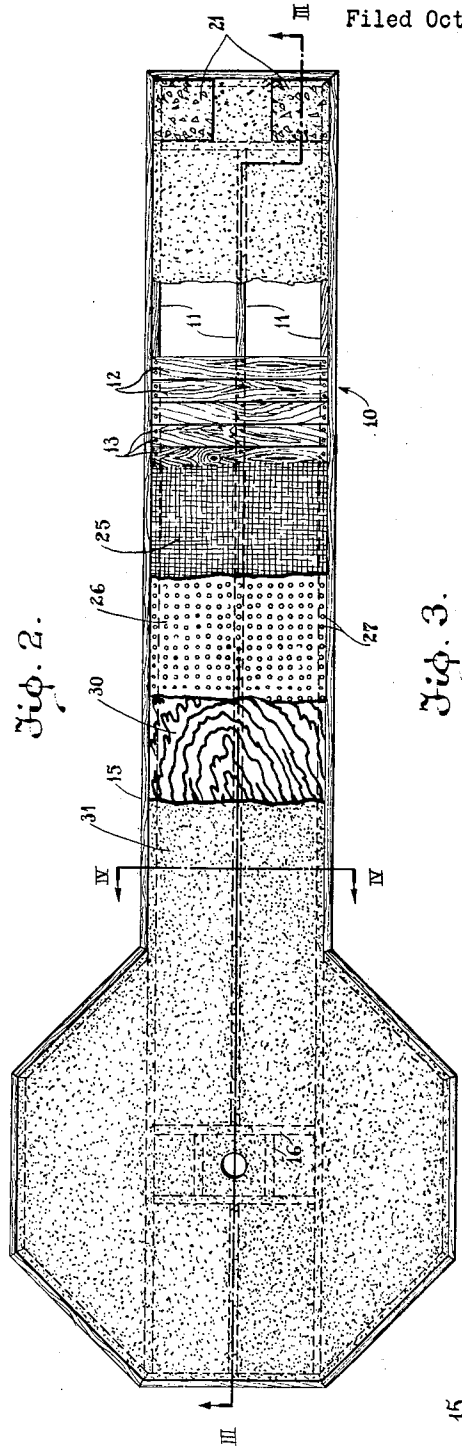


Fig. 2.

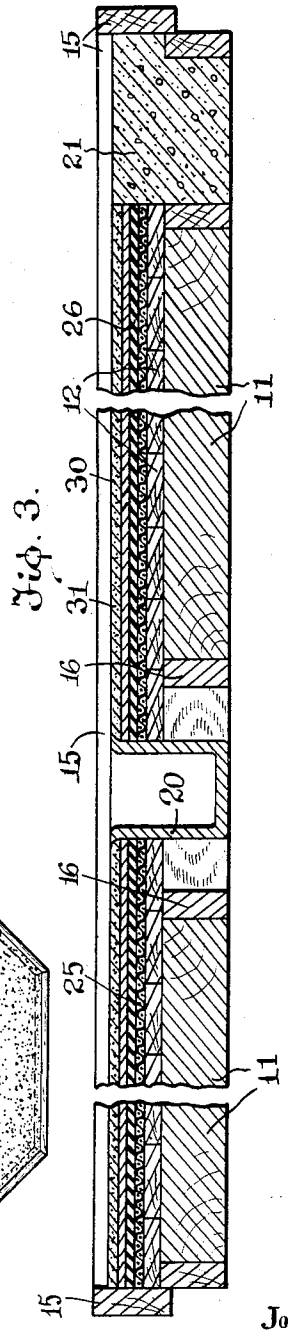


Fig. 3.

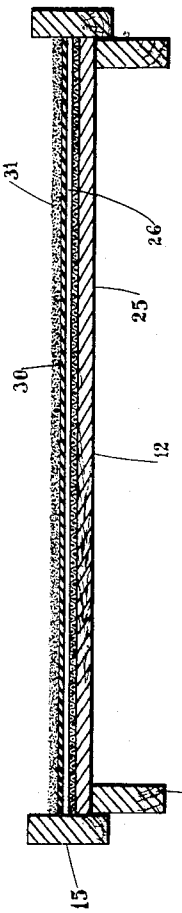


Fig. 4.

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UNITED STATES PATENT OFFICE

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GOLF GREEN AND METHOD OF MAKING THE SAME

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5 Claims. (Cl. 94—7)

This invention relates generally to improvements in golf courses and methods of constructing them, and it has particular relation to a novel construction for a golf course of the so-called "miniature" type.

One object of the invention is to provide a golf course with a surface, or putting greens, that will not be affected materially by changes in the weather.

Another object of the invention is to provide an artificial surface or putting green that has substantially the same characteristics as a grass putting green of a regulation golf course, and greater durability.

A further object of the invention is to provide a relatively economical and efficient playing surface that may be repaired and replaced with little or no delay, and with greater ease and relatively lower maintenance cost than other known types of surfaces.

Another object of the invention is to provide a unitary putting green for a golf course that can be conveniently moved from one location to another, or substituted with other units of an existing course to provide an entirely new arrangement.

According to the invention, the golf course comprises a substantial base, made of wood, concrete or other composition materials of similar supporting characteristics, having ball-retaining flanges around its edges, and a hole disposed at one end for receiving a ball. The playing surface of the course, or the surface between the ball-retaining flanges, is covered with a layer of fibrous material, preferably a waterproof or semi-waterproof felt.

A sheet of vulcanized rubber, such as a floor matting, is next applied upon the playing surface and over the layer of fibrous material. The sheet of vulcanized rubber is securely fastened to the base through the fibrous material by means of nails or other suitable fastening devices.

After the sheet of vulcanized rubber is securely fastened to the base, a coating of adhesive material, preferably a viscous substance such as a heavy rubber cement, is applied to the outer surface of the rubber matting.

Before the coating of adhesive material has dried, a heavy layer of comminuted vulcanized rubber, colored green to simulate grass, is sprinkled over the entire surface thereof. After the comminuted rubber is applied over the entire surface of the putting green, it is immediately compressed or rolled with a heavy roller into a compact or homogeneous mass. It is impossible for all of the individual particles of the comminuted rubber to come into contact with the adhesive material. Consequently, a considerable amount of the material will not be secured permanently to the rubber matting. After the adhesive material is thoroughly dried, the unsecured particles of comminuted rubber may be removed by sweeping the surface of the putting green with a broom, or by other suitable devices.

An artificial putting green of this construction is advantageous because it is extremely durable, it does not require the constant care that is required for the proper upkeep of other kinds of greens, and its repair or entire replacement can be quickly effected at a minimum expense.

For a better understanding of the invention, reference may now be had to the accompanying drawings, forming a part of this specification, in which:

Figure 1 is a perspective view of a complete golf course, containing eighteen putting greens constructed in accordance with the invention;

Figure 2 is a fragmentary plan view, on a larger scale, of one of the putting greens shown in Figure 1, with portions omitted to illustrate, in detail, the construction thereof;

Figure 3 is a fragmentary cross-sectional view taken substantially along the line III—III of Figure 2; and

Figure 4 is a fragmentary cross-sectional view, on a larger scale, taken substantially along the line IV—IV of Figure 2.

Referring to Figure 2 of the drawings, a foundation or base 10 is constructed of wood, and consists of a number of longitudinal supporting members 11, upon which transverse members 12 are secured by means of nails 13. The transverse members 12 have a plurality of narrow longitudinal grooves 14 along their bottom surfaces to prevent any tendency of the members to warp.

The foundation 10, which may be of any desired contour, is provided around its edges with ball-retaining flanges 15, so disposed as to extend slightly above the playing surface to prevent a ball from rolling therefrom. Adjacent one end of the foundation 10, a ball-receiving cup 20 is positioned upon supports 16. Wear-resisting platforms 21, disposed at the opposite end of the foundation 10 from the ball-receiving cup 20, are preferably constructed of concrete to support players and to prevent damage to the playing surface at these locations.

In the construction of the putting green between the ball-retaining flanges 15, the upper

surface of the transverse supporting members 12 of the foundation 10 is covered with a layer of fibrous material 25, preferably a waterproof or semi-waterproof felt. A layer of sheet rubber 26, which preferably consists of vulcanized rubber matting, is positioned upon the fibrous material 25. The layer of sheet rubber 26 is secured to the foundation 10 by means of nails 27 disposed at spaced intervals over the entire surface and extending through the fibrous material 25 into the transverse supporting members 12, thereby securing both layers of material securely to the foundation 10.

A relatively thick coating of an adhesive 30, preferably a viscous substance such as a heavy rubber cement, is applied over the entire surface of the putting green with the exception of the ball-receiving cup 20 and the platforms 21. Before the coating of adhesive material 30 has dried, a layer of comminuted vulcanized rubber 31, which has been previously treated, during its course of manufacture with a green coloring agent to simulate grass, is sprinkled thereover and compressed with a heavy roller into a compact or homogeneous mass. The putting green is then allowed to set until the adhesive material has dried.

Since it is impossible for all of the particles of the comminuted rubber material 31 to come into contact with the adhesive material 30, a considerable portion will not be secured to the layer of sheet rubber 26. Consequently, if the putting green is swept with a broom all of the unattached particles of the comminuted rubber material may be removed, leaving a finished playing surface having substantially all of the surface characteristics of an ideal grass putting green.

In order to repair the course, or even refinish its entire playing surface, it is only necessary to apply a coating of adhesive, sprinkle a new layer of comminuted rubber material over the adhesive, compress the mass, allow to dry, and remove the excess material, all of which should be effected in the manner outlined above.

Another desirable feature of a golf course of this construction is that each of the putting greens is a unitary piece, which may be removed from one location to another, or the various units of an existing course may be transferred to provide a new arrangement, without in any way damaging the putting greens.

Although I have illustrated only one form which the invention may assume and have described that form in detail, it will be apparent to those skilled in the art that the invention is not so limited, but that various modifications may be made therein without departing from the spirit thereof or from the scope of the appended claims.

What I claim is:

1. A putting green for a golf course comprising a base, a layer of fibrous material adjacent the base, a layer of rubber covering said layer of fibrous material, and a surface of comminuted vulcanized rubber secured to the layer of rubber by means of an adhesive substance.

2. A putting green for a golf course comprising a base, a layer of fibrous material adjacent said base, a sheet of vulcanized rubber covering the fibrous material, means for securing the layers to the base, and a surface of comminuted vulcanized rubber secured to the layers by means of an adhesive substance, the whole being compressed into a homogeneous mass and having a coloring agent applied to simulate grass.

3. A putting green for a golf course comprising a unitary base, ball-retaining flanges secured to the edges of said base, means positioned at one end for receiving a ball, a layer of waterproof material covering the base, a sheet of vulcanized rubber covering said waterproof material, and a surface of comminuted vulcanized rubber secured to the sheet rubber by means of an adhesive substance, the whole being compressed into a homogeneous mass and having a coloring agent applied to simulate grass.

4. In combination in a carpet, a solid base, a layer of fibrous resilient cushioning material on said base, a layer of sheet rubber covering said layer of cushioning material, means extending through the sheet rubber and cushioning material and securing the same to the base, a layer of rubber cement over the layer of sheet rubber, and a surface of comminuted vulcanized rubber secured to said rubber cement.

5. In combination in a carpet, a solid base, a layer of fibrous cushioning material on said base, a layer of sheet material covering said layer of cushioning material, means extending through the sheet material and cushioning material and securing the same to the base, a layer of adhesive over the layer of sheet material and a surface of comminuted material secured to said adhesive.

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