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Jakel

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[54] **FASTENING STRIP FOR SYNTHETIC TURF**

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[51] **Int. Cl.** **A47g 27/04**

[58] **Field of Search** 94/7; 16/7, 8, 11, 16/16

[56] **References Cited**

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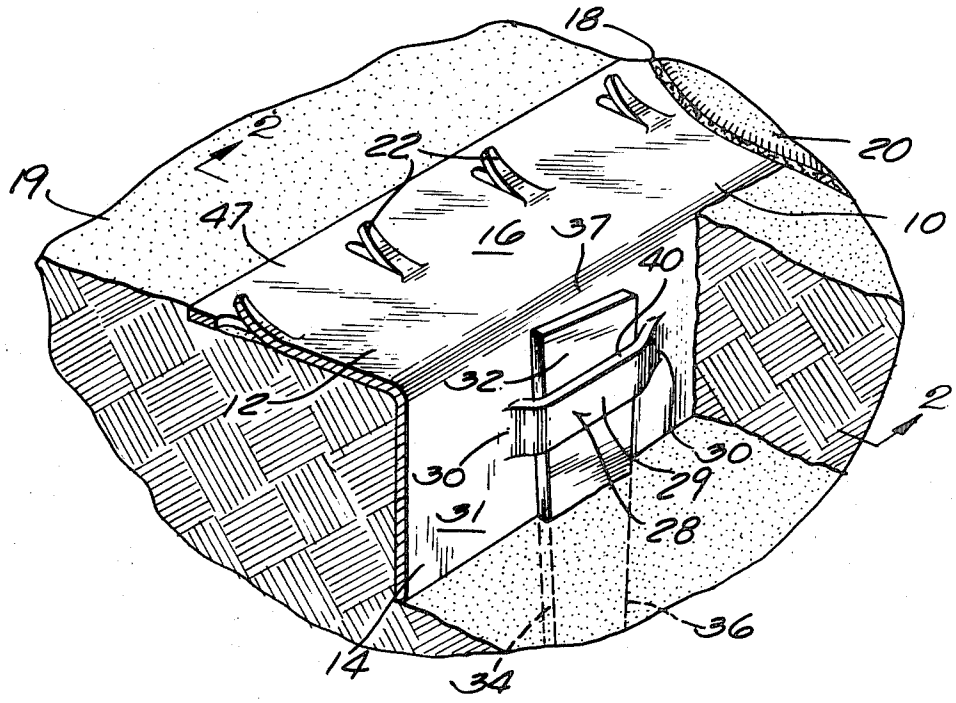
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[57] **ABSTRACT**

A fastening strip for anchoring the margins of synthetic turf for lawns, golf courses or game playing fields to a dirt base includes horizontal and vertical flanges with the horizontal flange resting on the surface of the dirt base and having upstanding angularly projecting teeth to hook the backing of the synthetic turf and providing a flat bonding surface for gluing the turf backing to the strip. The vertical flange extends into a narrow slot in the ground and is provided with stamped loops for receiving thin flat stakes with tapered edges which wedge in the loops and firmly anchor the strip to the dirt base.

4 Claims, 4 Drawing Figures



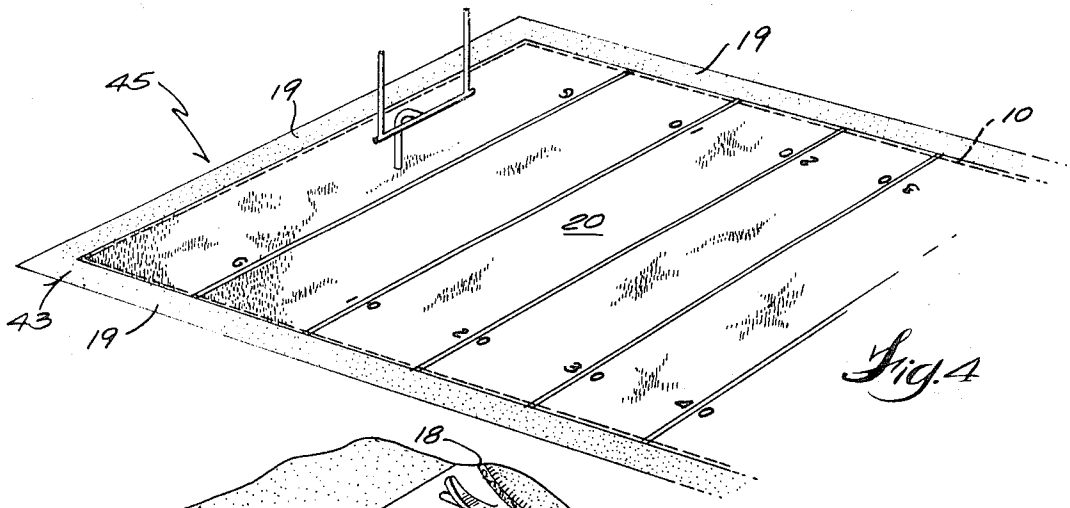


Fig. 4

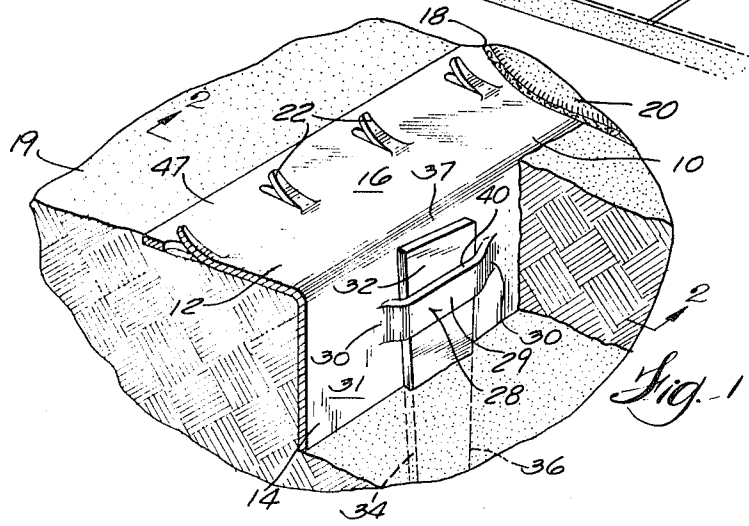


Fig. 1

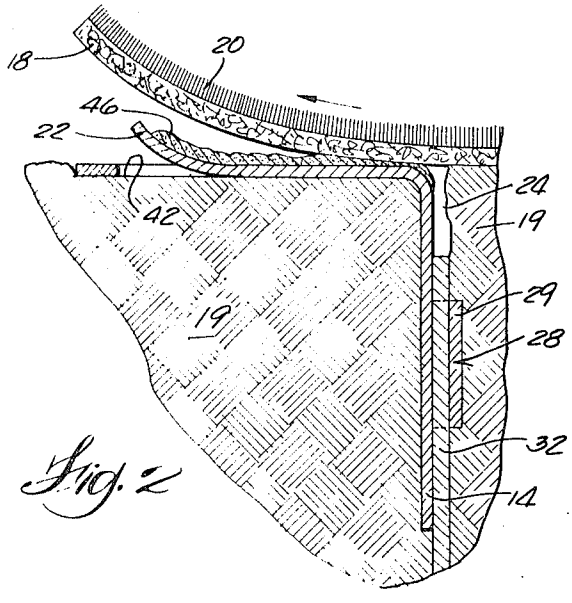
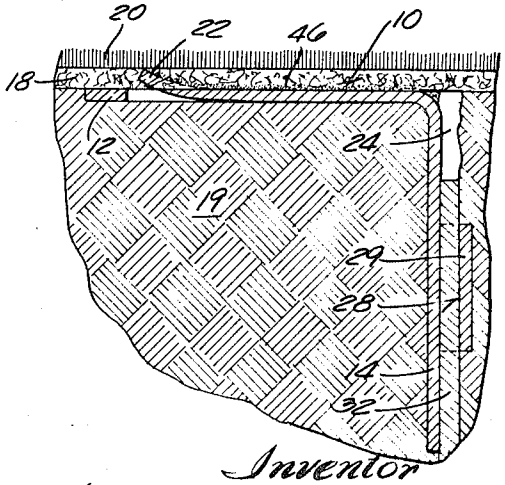


Fig. 2

Fig. 3



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FASTENING STRIP FOR SYNTHETIC TURF

BACKGROUND OF THE INVENTION

Various arrangements for anchoring synthetic grass of artificial turf to a dirt base are disclosed in U.S. Pat. Nos. 3,418,897; 3,407,714 and 3,433,137. The present invention provides a fastening strip and stake for securing the margin of the synthetic turf to a dirt base which is inexpensive to manufacture and install.

SUMMARY OF INVENTION

The invention provides a fastening strip for securing the perimeter or margin of artificial or synthetic turf to the dirt base of the playing field. The fastening strip can be manufactured in convenient lengths, such as 8 to 14 feet, and includes a horizontal flange which rests on the surface of the dirt base and a vertical flange which extends into a narrow slot formed in the dirt base with a lawn edger. The horizontal flange includes angularly projecting teeth which pierce the web or backing of the synthetic turf. The horizontal flange also serves as a bonding surface for adhesively uniting or bonding the backing of the turf to the strip. Spaced loops on the vertical flange receive flat stakes with tapered edges which wedge in the slots and firmly secure the fastening strips to the dirt base.

Further objects, advantages and features of the invention will become apparent from the following disclosure.

DRAWINGS

FIG. 1 is a fragmentary perspective view of a synthetic turf fastening strip in accordance with the invention.

FIG. 2 is an enlarged sectional view along line 2—2 of FIG. 1 showing the application of the synthetic turf to the edging strip.

FIG. 3 is a sectional view similar to FIG. 2 showing the synthetic turf anchored to the fastening strip.

FIG. 4 is a fragmentary perspective view of a playing field showing the location of the fastening strips.

DESCRIPTION OF PREFERRED EMBODIMENT

Although the disclosure hereof is detailed and exact to enable those skilled in the art to practice the invention, the physical embodiments herein disclosed merely exemplify the invention which may be embodied in other specific structure. The scope of the invention is defined in the claims appended hereto.

In the drawings, FIG. 1 discloses a fastening strip **10** formed from angle iron and having a horizontal or first flange **12** and a vertical or second flange **14** at right angles with the flange **12.** The flange **12** has a broad, flat horizontal surface **16** which serves as a bonding surface for adhesively uniting the backing **18** of the synthetic turf **20** to the strip **10** as subsequently described. In use the flange **12** rests horizontally on the upper surface of the dirt base **19.** To secure the fastening strip to the backing **18** while the adhesive is setting, the flange **12** has a plurality of spaced upwardly projecting teeth **22** which can be stamped from the flange **12.**

In the disclosed construction the vertical flange **14** has the same width as the flange **12** and extends into a thin slot **24** in the dirt base **19.** The slot **24** can be formed in the dirt base **19** with a conventional lawn or garden edger (not shown).

Means are provided for securing the strips **10** to the dirt base **19.** In the disclosed construction the means comprises spaced stake loops **28** stamped or otherwise formed in the flange **14.** The loops **28** include a flat loop run or portion **29** parallel with flange **14** and connecting or linking portions **30** joining the flat portion **29** to the flange **14.** The strip **10** is secured to the dirt base by stakes **32** which, in the disclosed construction, have a single tapered edge **34.** Alternatively, the edge **36** can also be tapered. The edges **34** and **36** wedge between the linking portions **30** when the stakes **32** are driven. The flat portions **29** are spaced from the surface **31** of flange **14** a distance slightly greater than the thickness of the stakes to provide clearance to receive the stakes **32** and provide a snug fit. The loops **28** are located intermediate the height of flange **14** and the taper of the stakes is such that the top **37** of the stakes is located beneath the flange **12** and the surface of the dirt base to avoid interference with the turf **20.**

In installation of synthetic turf **20** using the fastening strips **10** of the invention, the slot **24** is formed in the ground with the edger and the strips **10** inserted with the horizontal flange **12** resting on the horizontal surface **42** of the dirt base **19,** with the teeth **22** projecting outwardly towards the margins **43** of the playing field **45.** The stakes **32** are then driven into the dirt base **19** to firmly anchor the strips. An adhesive **46** is applied on the upper surface **16** of flange **12** and the synthetic turf anchored to the teeth **22** as the turf is stretched over the strips **10** with a carpet stretcher. The teeth firmly retain the turf **20** while the adhesive is setting.

The strips **10** can also be curved for arcuate playing field margins. Spaced partial slots **47** (FIG. 1) can be provided in flange **12** between the teeth **22** to facilitate bending of the strips.

What is claimed is:

1. A fastening strip for anchoring the margin of synthetic turf to a dirt base comprising a strip having first and second interconnected flanges, said first flange adapted to rest in a generally horizontal position on a dirt base, provide a bonding surface for adhesively bonding the turf to said strip, and said first flange having upturned teeth extending outwardly toward the edges of the synthetic turf for piercing the backing of said synthetic turf and said second flange being at right angles with said first flange and being adapted to be received in a generally vertical slot in the dirt base, spaced stake apertures on said said second flange, said stake apertures being defined by loops stamped from said second flange and stakes extending through said loops, and said loops having a loop run extending generally parallel to said second flange and spaced from said second flange by a distance sufficient to receive said stake and provide a snug fit with said stake and linking portions connecting said loop run to said second flange and engagable with the edges of said stakes.

2. A device in accordance with claim **1** wherein said loops are located intermediate the width of said second flange.

3. A device in accordance with claim **1** wherein said stakes are formed from flat strip stock and have a tapered edge the full length of said stakes and a maximum width such that the upper ends of said stakes are located below said first flange when said stakes are wedged in said loops.

4. A device in accordance with claim **1** including spaced slots in said first flange between said teeth.

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