Aug. 14, 1962 W. E. PELOW 3,049,182

TURF REPAIR TOOL

Filed March 2, 1961

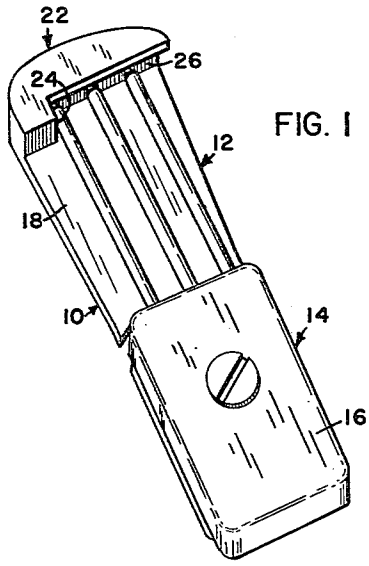


FIG. 1

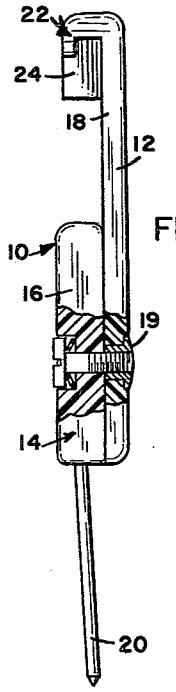


FIG. 3

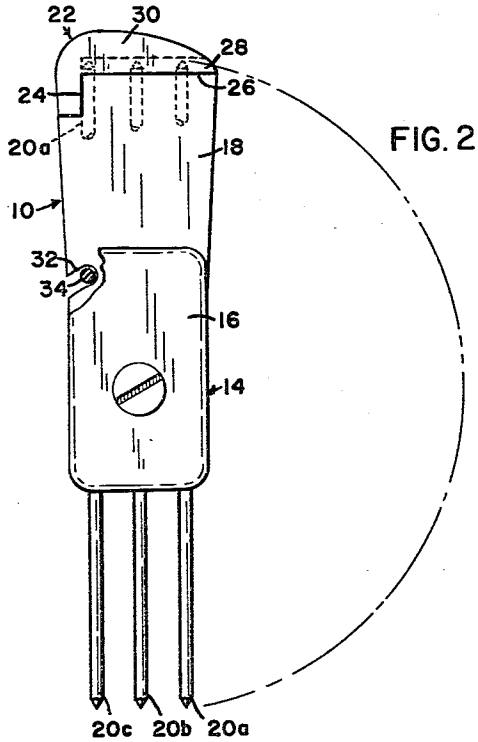


FIG. 2

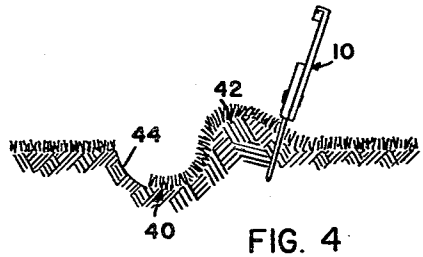


FIG. 4

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TURF REPAIR TOOL

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This invention relates broadly to a tool for working certain forms of earth such as turf. More particularly, this invention relates to a hand tool for repairing relatively expensive turf of the kind used on the putting surface of a golf course. Still more particularly, this invention pertains to a hand operated tool for repairing turf on the putting surface of a golf course which sustains damage due primarily to the action of a golf ball landing on the putting surface.

It is well known to those familiar with the game of golf that a common problem encountered by those charged with maintenance of a golf course is the restoration of the putting surface after damage due to the termination of the flight of a golf ball on the putting surface. Usually, the ball has imparted thereto a reverse spin so that the natural indentation on the surface is aggravated, resulting in torn turf.

This invention contemplates a relatively inexpensive tool that may be easily carried by a player for repairing the torn turf at the time it is damaged.

Accordingly, the chief object of this invention is the provision of a tool for repairing damage to turf caused by a projectile such as a golf ball terminating its flight on the surface of the turf.

Another object of this invention is the provision of a tool of the kind under consideration wherein manual manipulation of the tool is all that is necessary to repair the damaged turf.

A further object of this invention is the provision of a tool of the type described including a handle and blade arrangement having relative pivotal movement for ease in the use thereof.

A still further object of this invention is the provision of a hand tool of the kind under consideration fabricated of relatively lightweight material and compact in construction so that a golfer may easily carry it in his pocket. Such a tool may then be used by the golfer to repair turf immediately after the damage thereto. Thus, the "green" or putting surface is promptly restored to its original condition.

These and other objects of the invention will be apparent upon a consideration of the ensuing specification and drawings in which:

FIG. 1 is a perspective view of a preferred embodiment of a hand tool illustrating the invention.

FIG. 2 is a plan view, with portions broken away, of the tool showing the respective parts in their operating position.

FIG. 3 is a side view of the tool with a portion broken away to illustrate the connection between the handle and blade members.

FIG. 4 is a schematic view of a damaged section of turf and the action of the tool as repair begins.

Referring to the drawings for an illustration of a preferred embodiment of the invention, the tool **10** includes a handle assembly **12** and a blade assembly **14**. The blade support portion **16**, formed of either plastic material or a light metal, is pivotally connected to one end of the handle **18** as at **19** with conventional fastening elements, including a spring washer, for the purpose of requiring a small amount of force to be applied to the blade to accomplish the pivotal movement to be later described.

Extending from the end of the blade support portion **16** remote from its connection to the handle are a plurality of tines or prongs **20***a*, **20***b* and **20***c* arranged in parallel relation. The tines may be cast in the blade or assembled in preformed openings with conventional assembly techniques.

Located at the end of the handle **18** remote from its connection with member **16** is abutment member **22** having surface **24** serving as a stop in a manner to be later described. The abutment member also includes surface **26** disposed normal to surface **24** and is proportioned to provide a section **28**, note FIGURE 2, of surface **30** to conceal the pointed ends of the tines when the blade is positioned in the manner shown in FIGURE 1.

The handle **18** is provided with a notch **32** extending inwardly from an edge thereof for receiving pin **34** projecting from the blade support to positively assure axial positioning of the parts when the blade assumes the position illustrated in FIGURE 2.

Considering the operation of the tool, the normal position of the parts is shown in FIGURE 1. In the position illustrated, the blade has been rotated relative to the handle until tine **20***a* engages surface **24**. Section **28** of the abutment member **22** overlies and conceals the ends of tines **20***a*, **20***b* and **20***c* having turf penetration points formed thereon. The tool may then be inserted into a pocket of the golfer without fear of damage to the clothing or fingers.

Once the turf has been damaged by a ball having been lofted thereon with reverse spin in the manner described heretofore, the golfer rotates the blade relative to the handle until the parts assume the position illustrated in FIGURE 2. Engagement of the pin **34** within notch **32** assures axial alignment of the parts sufficient to restore the displaced turf.

Referring to FIGURE 4, it will be seen that a cavity **40** is formed in the surface of the "green" causing a turf displacement **42** to project upwardly above the plane of the "green." The mound of compressed turf **42** has a surface of grass. The cavity has a grass surface except in the area **44** where earth is exposed as the grass is torn. To repair the damage illustrated in FIGURE 4, the golfer inserts the tines rearwardly of the mound of turf **42** and applies a relatively small amount of force sufficient to relieve the compressed turf and force it gently to its original form until the exposed earth portion of the cavity is covered and the depression elevated. The tines are then extracted and any resulting unevenness removed with a finger or the flat surface of handle assembly **12**. Because the tines are substantially parallel, there is absent a tendency for dirt to adhere to the surface thereof upon extraction of the tool.

In addition to being arranged in parallel alignment, the tines **20***a*, **20***b* and **20***c* are preferably either circular or oval in shape and spaced apart a distance greater than the thickness of the tine to further obviate any tendency for turf to adhere thereto. Preferably the tines comprise over half of the length of the blade so that relatively lightweight material can be used in the construction of the tool to transmit the force necessary to accomplish the turf restoration.

While one embodiment of the invention has been described, it will be apparent that other constructions and arrangements will suggest themselves to those skilled in the art without departure from the inventive concept as set forth in the appended claims.

I claim:

1. A hand manipulated turf working tool comprising handle means including a substantially planar member, a blade abutment element positioned at one end thereof, said blade abutment element having a first surface; and a blade assembly including a blade support portion pivotally connected to the end of the said planar member, remote from the end accommodating the abutment ele-

ment, a plurality of spaced turf-penetrating tines connected at one end to and projecting longitudinally of said blade support portion, said turf-penetrating tines each having a curvilinear cross-section, said turf-penetrating tines being arranged coplanar and arranged relative to one another so that the space between adjacent tines exceeds the width of the tine, said first surface having a height above the planar member at least as great as that of the blade support portion, said blade assembly from said pivotal connection to the free ends of said tines being of such length that the blade assembly has a first operating position wherein said blade assembly forms an axial extension of said handle means and a second storage position wherein said blade assembly overlies the planar member with one of said turf-penetrating tines engaging said first surface and the ends of said tines disposed below the upper vertical limit of said first surface.

2. A hand manipulated turf working tool as in claim 1 wherein said blade abutment element includes a portion arranged in space relation to said planar member to shroud the ends of said tines.

3. A hand manipulated turf working tool as in claim 1 wherein said planar member is provided with a recess in one edge thereof and said blade support includes a protuberance depending from the under surface thereof, said protuberance being constructed and arranged to engage the recess when the blade assembly is in its operating position.

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