Jan. 5, 1960 G. H. DARRELL ET AL 2,919,491

LEVEL INDICATING PUTTER

Filed Dec. 3, 1957

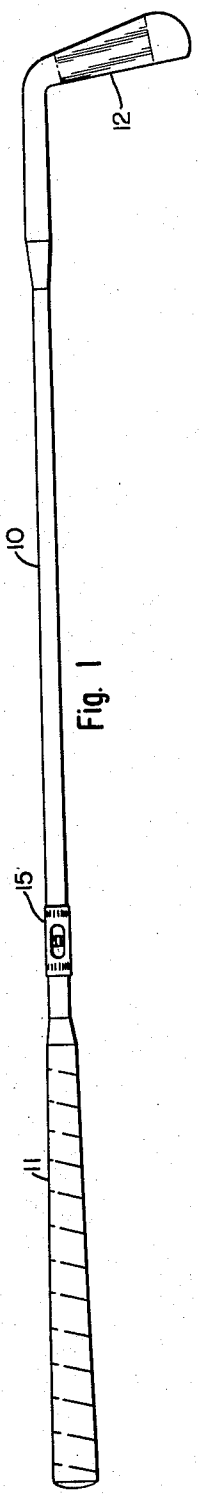


Fig. 1

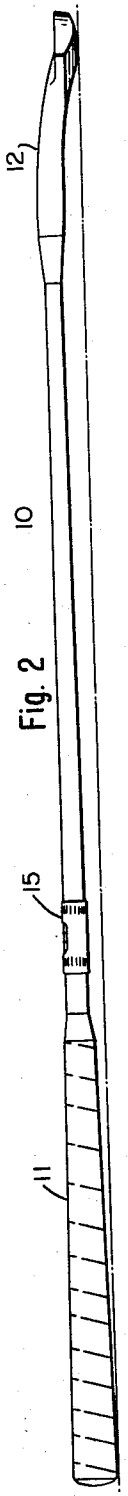


Fig. 2

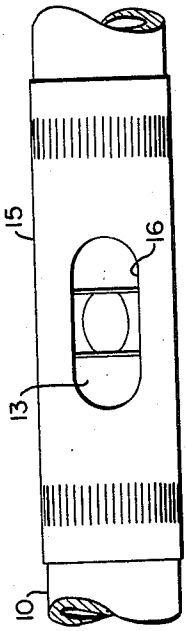


Fig. 5

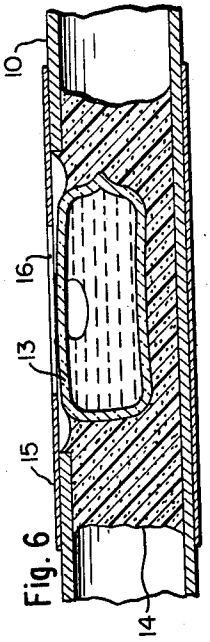


Fig. 6

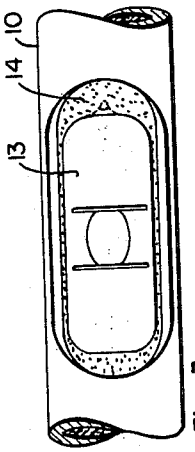


Fig. 3

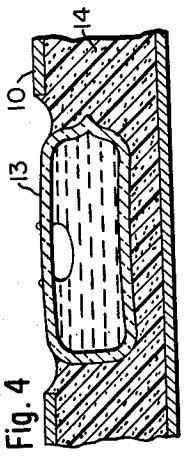


Fig. 4

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LEVEL INDICATING PUTTER

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1 Claim. (Cl. 33—207)

This invention comprises a new and improved putter constructed and arranged to aid the golfer in determining with considerable accuracy the pitch of the putting green.

In the game of golf it is customary for a player who has reached the green to lay his putter on the ground to aid his eye in determining the contour of the ground between the ball and the cup in order that he may properly gauge the force of the stroke required to propel the ball to the cup without danger of overrunning it.

In accordance with the present invention it is proposed to incorporate into the shaft of the putter a level indicator such as a spirit level and so enable the player to determine the slightest inclination in the contour of the green. A player using the improved putter will therefore enjoy a real advantage over his opponent when the putting green is reached.

Going more into detail, the putter of our invention has a shaft terminating at one end in an enlarged handle grip and at the other in an offset head, together with a level incorporated in the shaft between the grip and the offset head in a location to indicate a level position of the putter when supported by its head and handle grip upon a level putting green surface. To affect the desired results a critical and exact relationship of the head, the grip and the level is essential. It will be apparent that the mere location of a level in the axis of the shaft will not result in a putter serviceable for the desired purposes and that we have invented a new combination of these components such that they cooperate in a novel manner to make possible the desired results.

These and other features of the invention will be best understood and appreciated from the following description of a preferred embodiment thereof, selected for purposes of illustration and shown in the accompanying drawings in which:

Figs. 1 and 2 are views in plan and elevation of the putter,

Figs. 3 and 4 are views in plan and longitudinal section showing the mounting of the level bulb, and

Figs. 5 and 6 are fragmentary views in plan and longitudinal section with the addition of the protecting frame.

As herein shown the putter includes a tubular shaft **10** of steel upon one end of which is secured an enlarged handle grip **11** formed by winding a strip of leather or rawhide upon the shaft over felt or other compressible filler. At its other end the shaft is secured to an offset head **12** of steel or other metal. The putter thus far described is of conventional design and it is appreciated that in practice a very considerable variation in the shape of the head is experienced.

As herein shown an elongated opening is formed in the shaft **10** in a location adjacent to the handle grip **11** opening into the hollow interior of the shaft. In the opening thus made available is mounted the elongated bulb **13** of a spirit level of any commercial or well known

type. The bulb is partially filled with fluid having a low freezing point and leaving the usual air bubble. Transverse center lines on the surface of the bulb are also provided.

As herein shown the bulb is mounted and fixed within the shaft **10** by being set in a bed of cement **14**, and this may be of any suitable composition as plaster of Paris or synthetic resin. The setting of the bulb **13** is determined with careful precision so that the bubble will indicate a level position of the putter as a whole when resting upon a level surface indicated by the dot-and-dash line in Fig. 2 and which of course will correspond to the level surface of the green.

The level is protected and a finished appearance imparted to the putter by telescopically mounting on the shaft **10** a tubular frame or sleeve **15**. This may be of thin sheet metal having an elongated side opening **16** which will expose the operative portion of the bulb **13** while concealing its mounting and the aperture formed in the wall of the shaft. The sleeve **15** is shaped to fit snugly upon the shaft **10** and may of course be slipped into position thereon any time before the attachment of the grip **11** or head **12**. The sleeve is friction-tight upon the shaft so that it may be slipped into position to cover or expose the level as the user desires. It also has the effect of reinforcing the shaft **10** in the vicinity of the aperture formed therein for the level.

In use the player has only to place his putter on the green adjacent to his ball and directed toward the cup. Any slope in the surface of the green is then immediately indicated by an off-center position of the bubble in the level, and the amount of slope may be checked by raising the lower end of the putter until the bubble moves to its central position. It will be noted moreover that the effective position of the head **12** is at right angles to the sight opening of the level so that the head **12** retains the putter on the surface of the green with the level upwardly exposed and in the most favorable position for inspection.

Having thus disclosed our invention and described in detail an illustrative embodiment thereof, we claim as new and desire to secure by Letters Patent:

A level indicating device for determining the pitch of a putting green surface including in its structure an elongated shaft having an offset head at one end projecting laterally at substantially right angles, a handle at the other end of larger diameter than the shaft, and an elongated level bulb extending longitudinally of and fixed within said shaft and exposed to view in a position in the shaft at right angles to the said head, the head and handle being of such dimensions as to support the bulb in level position when the head and handle rest upon a level underlying surface.

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