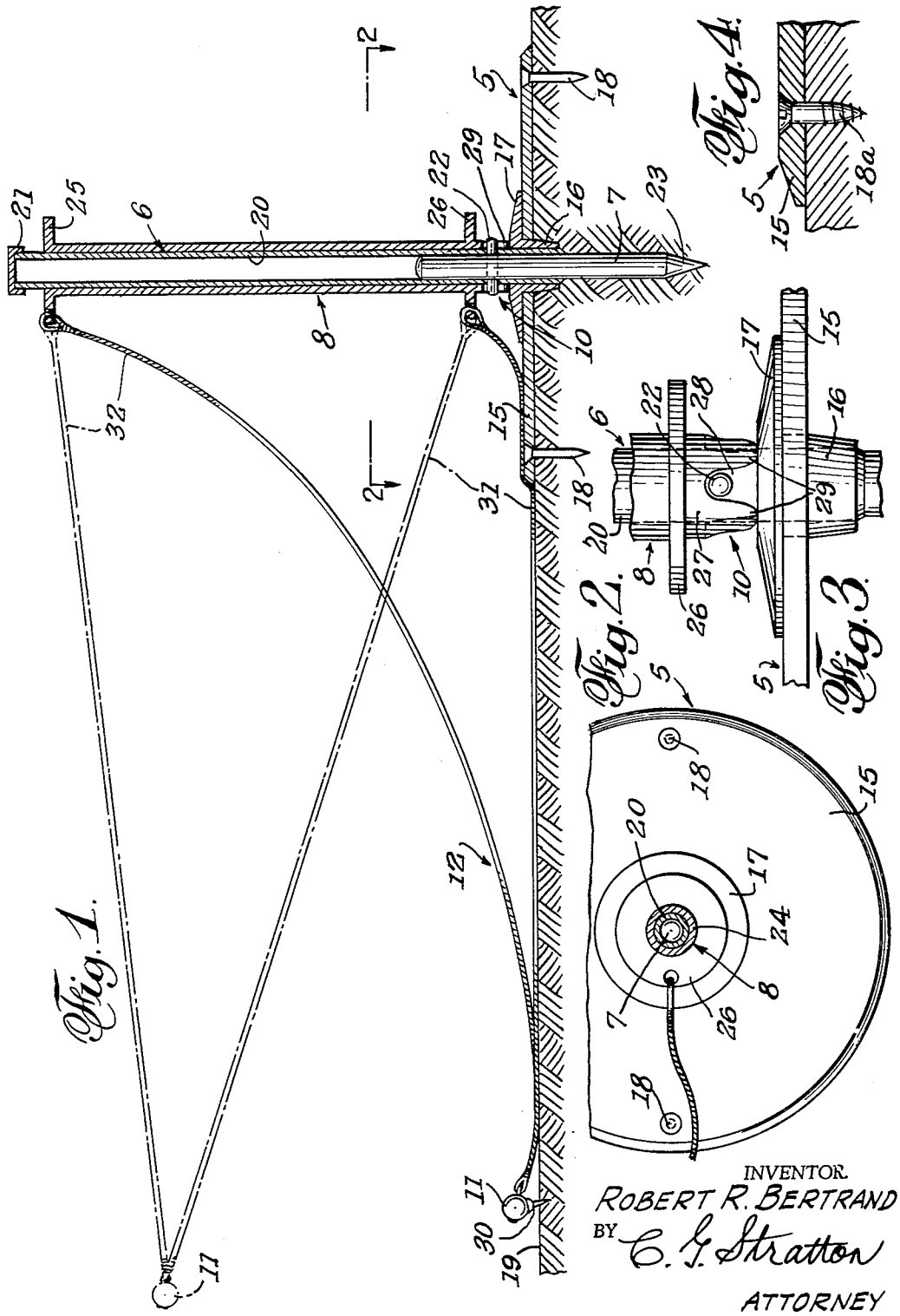
Aug. 4, 1964 R. R. BERTRAND 3,143,351

TETHERED GOLF BALL ON A SELF-LOCKING ROTATABLE SPOOL

Filed April 30, 1962



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United States Patent Office 3,143,351 Patented Aug. 4, 1964

3,143,351

TETHERED GOLF BALL ON A SELF-LOCKING ROTATABLE SPOOL

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Filed Apr. 30, 1962, Ser. No. 191,242
3 Claims. (Cl. 273—200)

This invention relates to a device for use in practicing golf swings, and has for an object to provide means for ascertaining the proficiency of a stroke by observing the position of a captive golf ball after the same has been struck.

Another object of the invention is to provide a device of the character referred to that embodies novel means for facilitating return of the ball to teed position.

A further object of the invention is to provide a practice device that, after enabling return of a ball to teed position, automatically returns to operative condition preparatory for the ball being again struck.

This invention also has for its objects to provide such means that are positive in operation, convenient in use, easily installed in a working position and easily disconnected therefrom, economical of manufacture, relatively simple, and of general superiority and serviceability.

The invention also comprises novel details of construction and novel combinations and arrangements of parts, which will more fully appear in the course of the following description, and which is based on the accompanying drawing. However, said drawing merely shows and the following description merely describes, preferred embodiments of the present invention, which are given by way of illustration or example only.

In the drawing, like reference characters designate similar parts in the several views.

FIG. 1 is a vertical sectional view of a golf practice device according to the present invention.

FIG. 2 is a broken plan sectional view as taken on the line 2—2 of FIG. 1.

FIG. 3 is an enlarged and fragmentary side elevational view of self-centering clutch means used in the present construction.

FIG. 4 is a broken sectional view of a modified form of securing means for the device.

The present golf practice device comprises, generally, a base 5, a standard 6 affixed to the base, an earth-penetrating member 7 extending downwardly from said standard, a freely rotational spool 8 on the standard 6, clutch means 10 to releasably lock the spool to the standard and embodying self-engaging means that gravitationally couples the sleeve and the standard after the same have been uncoupled, a captive ball 11 connected to said spool and adapted to be struck by the head of a golf club, and means 12 that wraps itself around the spool when the ball is struck. The disposition of the ball relative to the ends of the spool will indicate the proficiency or accuracy of the golf stroke.

The base 5 is shown as a round plate 15 which may be oval or have any other suitable shape, a central hub 16 extending downwardly from said plate and formed with a flange 17 over the central upper surface of the base plate 15, and two or more spikes 18 for penetrating the earth 19 on which the base may be placed to stabilize the base during use of the device. The farther apart the spikes 18 are placed, the more resistant is the base to torque forces when a ball is struck. In cases where the device is to be mounted on a floor or other hard surface, the spikes 18 may be replaced by wood screws 18*a*, as in FIG. 4, if the surface is wood, or by lag screws, if the surface is cement or other such composition.

The standard 6 is shown as a tube 20 that is preferably of metal and has its lower end tightly fitted into the hub

16 of the base 5. Said standard is, therefore, affixed to the base and is non-rotational. In the present instance, a cap 21 is provided on the upper end of said standard.

The earth-penetrating member 7 is telescopically fitted into the lower end of the standard 6, a cross pin 22 being provided to secure the member 7 either with its point 23 in earth-penetrating position, as shown, or inverted with said point within the standard, as during shipment of the device. In the present case, the ends of the cross pin 22 extend radially beyond the outer surface of the standard.

The spool 8 has a tubular body 24 that is rotational on the standard 6, and upper and lower flanges 25 and 26.

The clutch means 10 is provided below the flange 26, and comprises a tubular extension 27 that is divided by four uniformly arranged bifurcating notches 28 into four rounded lobes 29. The mentioned notches 28 receive the ends of cross pin 22, thereby locking the spool 8 to the fixed standard 6. The rounded lobes 29 provide for automatic or self-centering entry of the ends of pin 22 into the notches 28 when, from an upwardly retracted position, the spool 8 is released to fall gravitationally. It will be noted that the standard 6 is sufficiently longer than the spool so that said lobes 29 are clear of the cross pin 22 when the flange 25 of the spool is raised on the standard to the limit allowed by the cap 21.

The ball 11 is a conventional golf ball and, in any suitable manner, is connected to the means 12. Ordinarily, although not necessarily, said ball, when readied to be stroked, is placed on a tee 30 either of conventional form, as in FIG. 1, or designed for use on a hard surface.

The means 12 comprises a cord 31 that connects the ball 11 with the lower flange 26 of the spool, and a cord 32 that connects said ball and the upper flange 25 of the spool. The lengths of the cords are so proportioned that, when the ball is struck and flies centrifugally around the axis of the spool, the same is restrained by cord 31 from rising above the level of the flange 25. This is suggested by the dot-dash line showing of FIG. 1.

When the ball is stroked, the same flies out centrifugally and causes the cords 31 and 32 to wrap themselves around the spool body 24. Since the ball is gravitationally pulled down, as the same flies around, a well-stroked ball will have a final position on the spool body between the flanges, nearer the upper flange. The final position of the ball that is stroked with less force will be nearer the lower flange, proportionally to the lessening of the force of the stroke.

The ball may be returned to the tee 30 by raising the spool 8, as limited by the cap 21 on the standard, thereby declutching the spool from the standard. The spool may now turn freely as the ball is pulled laterally outward and placed on the tee. When the spool is released, the same drops gravitationally and the rounded lobes 29 that are nearest to alignment with the ends of the cross pin 22 will center themselves on said pin ends as the spool drops to locked position on the standard. Now, the ball may be again stroked, as before described.

As will be evident, the device is suitable for use by both right and left handed players.

While the foregoing has illustrated and decribed what is now contemplated to be the best mode of carrying out the invention, the constructions are, of course, subject to modification without departing from the spirit and scope of the invention. Therefore, it is not desired to restrict the invention to the particular forms of construction illustrated and described, but to cover all modifications that may fall within the scope of the appended claims.

Having thus described the invention, what is claimed and desired to be secured by Letters Patent is:

1. A golf practice device comprising:

(*a*) a base,

(*b*) a fixed standard on said base,
(*c*) a cap on the upper end of the standard,
(*d*) a spool rotationally and longitudinally movable on said standard,
(*e*) a clutch to releasably hold the spool non-rotational on the standard and releasable for freeing the spool to rotate freely on the standard upon endwise movement of the spool toward the cap on the standard, said clutch comprising a pin extending through said standard and notches on one end of the spool,
(*f*) a ball,
(*g*) cord means to hold the ball captive to the spool and adapted to wrap around said spool when locked and when the ball is stroked and flies out centrifugally, and
(*h*) a central earth-penetrable base-locating member extending from the standard and attached to said standard by said pin.

2. A golf device comprising:
(*a*) a base member,
(*b*) a hollow standard fixed to said base and extending vertically therefrom,
(*c*) an elongated spool rotationally mounted on said standard and freely movable longitudinally thereon,
(*d*) a clutch normally locking the spool to the standard to hold the former non-rotational and releasable for free rotation of the spool on the standard upon manual endwise movement, thereof, said clutch comprising radially extending ends of a pin extending through the standard and an extension on the spool provided with notches into which said pin ends extend,
(*e*) a ball and flexible members holding said ball captive on the spool, and
(*f*) the hollow standard including an earth-penetrable spike removably secured thereto by said pin, said

spike extending through said base member in a direction opposite to said standard.

3. A golf practice device comprising:
(*a*) a base member,
(*b*) a hollow standard fixed to said base and extending vertically therefrom,
(*c*) an elongated spool rotationally mounted on said standard and freely movable longitudinally thereon,
(*d*) a clutch normally locking the spool to the standard to hold the former non-rotational and releasable for free rotation of the spool on the standard upon manual endwise movement thereof, said clutch comprising radially extending ends of a pin extending through the standard and an extension on the spool provided with notches into which said pin ends extend,
(*e*) a ball and flexible members holding said ball captive to the spool, and
(*f*) a set of lobes defined between said notches and having rounded ends that, when the spool is raised upwardly on the standard to raise the lobes above the ends of the pin and then released to fall gravitationally, will have a camming engagement with the pin ends that cause the spool to be rotationally displaced until the pin ends enter the notches between said lobes to releasably lock the spool against free rotation.

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