June 21, 1955 N. B. WILLIAMSON 2,711,027

YARDAGE INDICATOR FOR GOLF BAG CARTS

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FIG. 1.

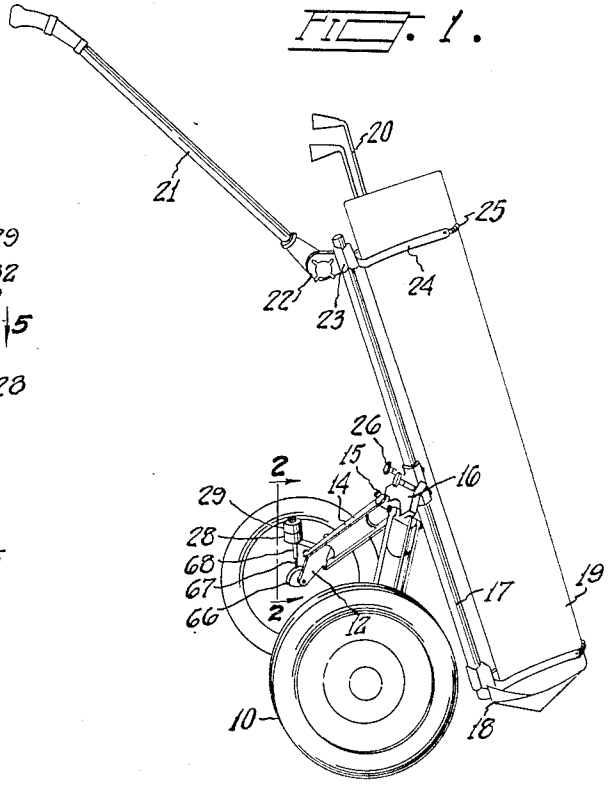


FIG. 3.

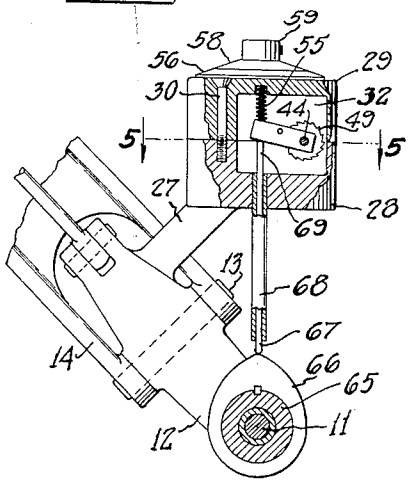


FIG. 2.

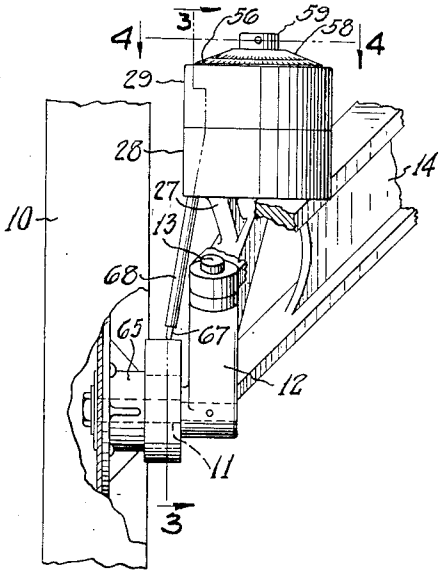
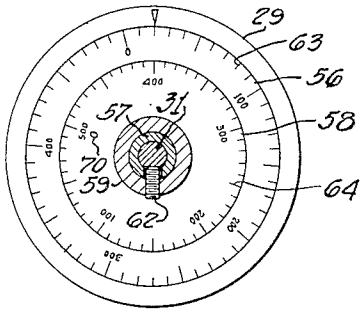


FIG. 4.



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FIG. 5.

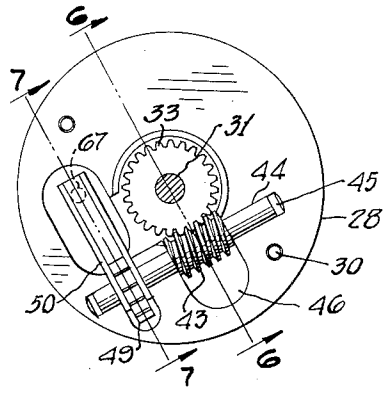


FIG. 6.

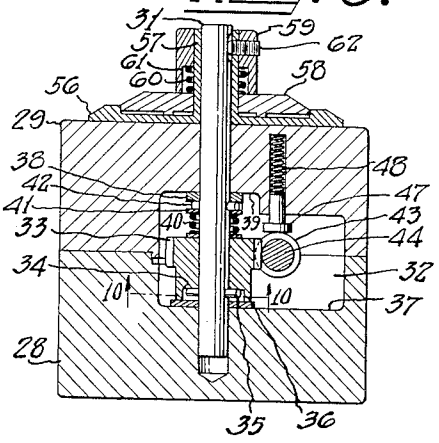


FIG. 7.

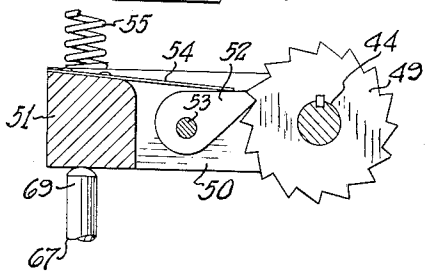


FIG. 8.

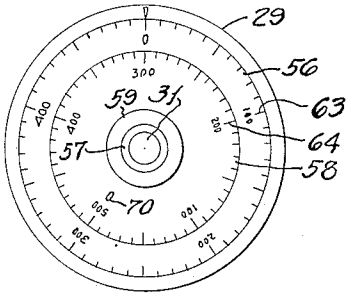


FIG. 10.

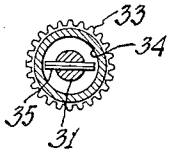
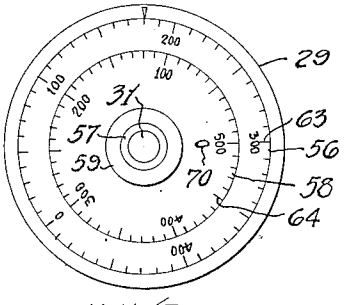


FIG. 9.



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YARDAGE INDICATOR FOR GOLF BAG CARTS

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Application September 16, 1952, Serial No. 309,812

1 Claim. (Cl. 33—141)

This invention relates generally to the game of golf and particularly to a yardage indicator for golf bag carts.

The main object of this invention is the provision of a simple and efficient yardage indicator, which is mounted on a golf bag cart and driven by its ground engaging wheels.

The second object is to provide an indicator, which will indicate the distance between a pair of holes and also any unplayed distance between the playing position and the cup.

The third object is to provide an indicator, which will operate in either direction in which the cart may be travelling.

The fourth object is to so construct the indicator that it will operate satisfactorily without precision manufacture and smooth in operation and not easily rendered inoperative by normal usage.

I accomplish these and other objects in the manner set forth in the following specification as illustrated in the accompanying drawings, in which

Fig. 1 is a perspective view of a golf bag cart to which my indicator is attached.

Fig. 2 is a fragmentary elevation taken along the line 2—2 at an enlarged scale.

Fig. 3 is a section taken along the line 3—3 in Fig. 2.

Fig. 4 is a section taken along the line 4—4 in Fig. 2.

Fig. 5 is a section taken along the line 5—5 in Fig. 3.

Fig. 6 is a section taken along the line 6—6 in Fig. 5.

Fig. 7 is a section taken along the line 7—7 in Fig. 5.

Fig. 8 is a plan of the indicator dial, which is set for a three hundred yard distance.

Fig. 9 is a view similar to Fig. 8, showing the relative position of the dials after walking one hundred eighty yards, showing one hundred twenty yards to go.

Fig. 10 is a section taken along the line 10—10 in Fig. 6.

Like numbers of reference refer to the same or similar parts throughout the several views.

Referring in detail to the drawings, there is shown in Fig. 1 a golf bag carrier of the type shown in my U. S. Patent No. 2,443,847, for which this device is an attachment.

The carrier comprises a pair of ground engaging wheels 10 whose axles 11 are fixed in the arms 12, which in turn are pivoted on the spindle 13, which hinge the arm 12 to the forked links 14, the upper ends of which are joined by the pins 15 to the frame 16 through which extends the tubular frame 17 at the lower end of which is disposed a foot 18 upon which rests a bag 19 for holding golf clubs 20. A handle 21 is attached by a swivel clamp 22 to a head 23, to which are attached the bands 24, which hold the upper end of the bag 19 by means of a spring 25, which unite the ends of the bands 24. The vehicle thus far described is in common use. Such vehicles are foldable by releasing the latches 26, allowing the links 14 to swing and move the

wheels 10 apart or bring them together for storage purposes.

Referring particularly to my invention, there is shown projecting from and integral with an arm 12, a standard or bracket 27 on the outer end of which is formed a cylindrical base 28 having a cylindrical head 29 secured thereon by means of the screws 30. A shaft 31 projects through the heads 29 into the base 28.

The base 28 and head 29 form a housing having a cavity 32. A worm wheel 33 is mounted on the shaft 31, which is frictionally driven thereby. The worm wheel 33 is provided with a counterbore 34, which is occupied by a thrust pin 35, which extends through the shaft 31. A washer 36 is placed on the shaft 31 between the wheel 33 and the bottom 37 of the cavity 32. A washer 38 is placed on the shaft 31 against the top 39 of the cavity 32.

A spring 40 is placed on the shaft 31 on the top side of the wheel 33. A washer 41 is placed on top of the spring 40 and a thrust pin 42 is inserted through the shaft 31 between the washers 38 and 41. The worm wheel 33 meshes with a worm 43 on the shaft 44, which journals in the holes 45 formed in the members 28 and 29 on each side of the extension 46 of the cavity 32.

A pressure foot 47 rides on the worm 43 and is urged toward the worm 43 by a spring 48. Keyed on the shaft 44 is a ratchet wheel 49. The ratchet wheel 49 is disposed between the fork arms 50, which are united by the end 51. The pawl 52 is mounted on the pin 53 between the arms 50. A flat spring 54 secured to the end 51 engages the pawl 52 and urges it against the wheel 49. A spring 55 in the head 29 urges the end 51 downwardly.

Mounted on the shaft 31 and resting on the head 29 is the main dial 56 having an elongated hub 57. The top side of the dial 56 is counterbored to receive a second dial 58, which is free to rotate on the hub 57. A knob 59 having a spring 60 in its counterbore 61 is secured to the hub 57 and shaft 31 by the setscrew 62.

On the main dial 56 are calibrations 63 representing yards. On the second dial 58 are calibrations 64 also representing yards. On the hub 65 of the wheel 10 is secured a cam 66 on which rides a plunger 67, which is held within a tubular guide 68 projecting downwardly from the base 28. The upper end 69 of the plunger 67 engages the under side of the end 51.

The operation of the device is as follows: Assuming a player is to tee off for a hole three hundred yards distant, he sets the main or played distance dial 56 at zero and the second unplayed distance dial 58 at three hundred yards. Now, as he moves the cart in either direction; that is, by pulling or pushing it, the cam 66 actuates the ratchet wheel 49, causing it to drive the worm wheel 33. If, by the time he reaches his ball, he finds that his shot has netted him two hundred yards as indicated on the main dial 56, he can then look at his second dial and find that he must shoot one hundred yards to the next hole.

Obviously, the manner of using the dials may be varied without departing from the invention. The function of the device is to measure the yardage travelled and, at the same time, indicate the yardage needed to reach the next hole.

Obviously, other means than the cam shown may be employed to transmit motion from the wheel 10 to the counters, such as an eccentric.

The position of the device is, of course, optional. Some prefer it near the handle 21 and others at a lower point, but the operation is the same.

For convenience in resetting the second dial 58, there is provided a notch 70 in the dial 58 by means of which the dial can be reset manually. The dials

56 and 58 are individually re-settable by reason of the friction drive between shaft 31 and worm wheel 33 and the friction drive between the two dials themselves.

I claim:

In a golf bag cart and the like having a ground wheel with a hub mounted on a non-rotating axle, an eccentric element on said wheel hub, an indicator housing, a bracket for mounting said housing on the cart, a played distance indicator on said housing, an unplayed distance indicator on said housing, a gear mechanism in said housing, a ratchet wheel driving said gear mechanism, a pawl engaging said ratchet wheel, a plunger reciprocable by said eccentric element for actuating said pawl to drive said ratchet wheel, a tubular guide on said housing for said plunger, and friction drive means for driving said indicators in unison from said gear mechanism, said played distance indicator being calibrated to register increasing values and said unplayed distance indicator being calibrated to register

decreasing values as said wheel rotates, and said indicators being individually re-settable whereby when said played distance indicator is set at zero distance rotation of said wheel on the ground will produce an indication of travelled distance on said played distance indicator and whereby when said unplayed distance indicator is set at a predetermined distance calibration rotation of said wheel on the ground will produce an indication of the untravelled portion of said predetermined distance on said unplayed distance indicator.

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