To all whom it may concern:

Be it known that I, Edison D. Clarage, a citizen of the United States, residing at Cleveland, county of Cuyahoga, State of Ohio, have invented certain new and useful Improvements in Game Counters and Recorders, of which the following is a specification.

This invention relates to improvements in game counters and recorders particularly adapted to a golf score.

The main object of the invention is to provide means for keeping a complete score of a golf game, and providing a permanent record of the entire game.

Detailed objects are:

First, to provide a golf game counter an improved means of making a permanent record.

Second, to provide in such a counter improved means of keeping tally of strokes for each hole and at the same time keeping track of the strokes for the entire game.

Third, to provide improved permanent recording means.

Further objects and objects relating to structural details, will definitely appear from the detailed description to follow.

I accomplish the objects of my invention by the devices and means described in the following specification. The invention is clearly defined and pointed out in the claims.

A structure which is a preferred embodiment of my invention is clearly illustrated in the accompanying drawings, forming a part of this application in which:

Fig. I is a front elevation view of my improved golf counter and recorder showing the dial and pointers for counting and regulating the strokes for each hole and the total strokes for the game.

Fig. II is an enlarged detail elevation view of the back of my improved counter with the back cover removed and a portion of the ratchet record supporting disk broken away to show details of construction, the paper record disk being removed and its position indicated by dotted line.

Fig. III is a similar enlarged detail sectional view with a more considerable portion of the said supporting disk cut away to show details of construction, the platen portion of the recorder being omitted to show details.

Fig. IV is an enlarged detail sectional elevation view taken on a line corresponding to line 4—4 of Figs. I, II, III, and V showing the disposition and arrangement of the actuating and return gear mechanism of the main counter and recording mechanism.

Fig. V is an enlarged detail plan view of the disposition and arrangement of the zero setting mechanism for the main hand and the zero setting mechanism for the totalling mechanism with the actuating and transfer mechanism of the total register, the position of the return actuator and cam being shown in full lines and its operation being indicated by dotted lines and the position of the actuating bar for all the counters, the view being taken from the face side, the face and hands being removed, but the position of the main hand being indicated by dotted lines.

Fig. VI is a view similar to Fig. V with the exception that only a part of the face is broken away, the total dials and a portion of the main dial being left in position.

Fig. VII is an enlarged detail, sectional, elevation view taken on the irregular section line 7—7 of Figs. V and VI showing the details of the total register mechanism and the resetting means therefor.

Fig. VIII is an enlarged detail sectional view taken on a line corresponding to line 8—8 of Figs. II, III and IV.

In the drawings similar reference characters refer to similar parts throughout the several views, and the sectional views are taken looking in the direction of the little arrows at the ends of the section lines.

Considering the numbered parts of the drawing by their numbers, 1 is the main body of the case, 2, 2 are the attaching loops therefore provided with a wrist strap 3, or any suitable bracelet for conveniently holding the counter on the wrist of the player. 4 is the main push button. 5 is the projecting lever connection for resetting the main stroke counter to zero. 6 is the projecting push lever connection for resetting the total counters to zero.

7 is the main dial which is provided with a hand 8 for keeping count of the strokes at each hole, the dial being numbered from 1 to 14 as indicated. 9 and 10 are the total dials for keeping count of the strokes for the entire game, being numbered from 1 to 10 respectively and provided with hands 11 and 12 respectively, suitable transfer mechanism being employed to connect the two so
that they will keep the score and register up to 90.

13 is the main actuating lever and is pivoted at the side of the case at 14 and is acted upon by the slide 16, having the stem 17 connected to push button 4. Return spring 15 is provided for this lever 13. A bevelled cam surface 18 is provided on the stem 17 (see Figs. II, III and IV). A pawl 19 is pivoted at 20 on the said lever 13 and is held yieldingly in position by spring 19'. The pawl 19 actuates the ratchet wheel 21 which is secured to pivot 22 for actuating the hand 8 which is carried by a frictional support thereon hereafter to be described. A detent spring 23 (see dotted line in Fig. II) is provided for the ratchet 21.

A disk record supporting wheel 24 is carried on the pivot 25 which is a rear extension of the pivot 22 being supported in spaced relation from the said ratchet wheel. The record disk 26 of paper is carried on this wheel 24, the periphery of which projects beyond the ratchet teeth to receive the recording imprint or impression. This record disk is retained in place by the coiled spring 27 which is between the back case cover 28 of the said disk. A pin 29 projects from the face of the disk wheel 24 and penetrates the paper to insure its rotation with the said ratchet disk 24.

A ratchet pawl 30 is pivoted at 31 on the main actuating lever 13 and is held in engagement with the ratchet teeth of the disk 24 by the spring 32 retained by screw 32' so that on each actuation of the push button 4 the disk 24 will be advanced one notch. A spring arm 33 is disposed transversely across the stem 17 of the push button mechanism and is secured by screw 34 and rests against stop 34' (see Figs. II and III), and it is provided with projecting impression pin 35 projecting towards the rear case cover.

A platen 36 is supported opposite this impression pin 35 on post 36' and is provided with a cooperating depression 37. The platen 36 projects between the projecting periphery of the recording sheet 26 and the rear case so that when the pin 35 is pushed towards the rear case cover it makes an impression on the said recording disk. This is caused to act by the cam surface 18 on the stem 17 forcing the said spring arm 13 outwardly as will clearly appear from an inspection of Fig. VIII. Then on each depression of the main push button 4 a recording imprint is made upon the record disk 26 and as the same is advanced by the holder, one step for each push of the button, each impression indicates a stroke.

When the record for a hole has been made, the hand 8 is reset for the next hole.

This is accomplished by depressing the projecting return lever connection 5 which acts to return the hand to zero in the same manner that a stop watch structure returns the hand to zero. To accomplish this the hand 8 is secured by sleeve 38 to the heart-shaped cam 39 which is held in frictional engagement with the stem 22 by the usual friction spring 40 (see Figs. IV, V, VI and VII). The return lever 41 is pivoted at 42 and has the cam actuating projection 43 disposed to co-operate with the said heart-shaped cam 39. The finger piece 5 is connected to the lever 41 by its shank 5' bearing the pivot 5" so that the hand is returned to zero by simply pushing in the projecting finger 80 piece 5.

The pivot 5" projects also towards the back of the case and actuates the disk 24. Of course, in so doing, it does not actuate the recording mechanism, thus leaving a gap 85 on the record disk. Thereby the impressions are grouped and the series of holes played is thus recorded. This actuating mechanism comprises the actuating lever 45 pivoted at 46 and held in its initial position by spring 47. The lever has a cam surface 45' which cooperates with the actuating pin portion 5" which, it will be observed, causes the lever to reciprocate.

Actuating pawl 48 is pivoted at 49 on the opposite arm of the lever and is held into engagement by spring 50 secured to the lever by screw 51 (see Figs. II and III) so that when the main hand 8 is returned to zero the record disk is advanced one step 100 without an imprint, thus recording the number of the hole, a second space in the record indicating that the score for the next hole begins.

I also provide, as heretofore, indicated, 105 a total register to register the full number of strokes for the game. I provide star wheels 52, 53 for the actuation of the hands 11 and 12. The wheel 52 is actuated from the main bar or lever 13 by the actuating dog 54 secured thereto by pivot 55 (see Fig. V). This dog is slotted at 56 and plays upon the screw pin 57. Its bevelled forward end 58 acts upon the teeth of the star wheel 52 successively advancing the same step by step each time the main push button 4 is depressed.

A spring detent 58 with bevelled head 59 engages between the teeth of the star wheel and locks and retains the same yieldingly in position. A finger 60 is carried by the star wheel 52 and engages the star wheel 53 and advances it one step at each revolution of the wheel 52 so that the pointer 11 on the dial 9 indicates units and the 125 pointer 12 on the dial 10 indicates tens and the combined indications of the two dials register up to 99.

I provide a spring detent 61 with bevelled head 62 for the star wheel 53. I provide 130
heart cams 63, 64 for the return of the pointers 11 and 12 to zero, the same being actuated by the push lever connection 6 acting upon the lever 65 pivoted at 66 and pivoted with the return projections 67 and 68 respectively. The push lever connection 6 is pivoted thereto at 67. Return spring 65 is provided for the pivoted lever 65 (see Fig. V). It will be seen that whenever the push button 4 is depressed the total stroke mechanism is actuated by the connections thus described and the same is reset at the end of the game by merely depressing the connector 6.

From this description of these parts it will be seen that contained within the same case is mechanism for registering the strokes at each hole with a return thereof, also, by the same means a permanent record is made upon a record disk and by the spacing thereof the number of the hole is recorded. Also, by the same push button a total register of the strokes of the game is kept, which register can be set at zero at the end of the game by a mere pushing of the connection to the lever thereof. The disk can be removed and the impressions can be checked thereon with a fine pointed pencil. The same can be dated with the name of the club and the total score written on the disk which can be suitably printed as indicated in Figs. IX for the purpose.

By simply placing these in a suitable album or scrap book the record of the game is permanently preserved without any material effort beyond pushing the button at each stroke and the actuator projection at each hole as indicated.

I have shown my improved record in the form of a disk which is very advantageous, but the same can be made in other forms. I have shown preferred mechanism in each instance but wish to state that the same can be very considerably varied without departing from the broad features of my invention.

The total register mechanism might be omitted, depending upon the final record to determine the score for the game. However, the whole is exceedingly convenient, simple in operation and effective.

I desire to claim the same specifically and broadly as pointed out in the appended claims.

Having thus described my invention what I claim as new and desire to secure by Letters Patent is:

1. The combination of a suitable case, a main recording dial, a hand thereof, a main lever with pawl for actuating the said hand, a return spring for the said lever, a push button with stem provided with a cam surface for actuating the said lever, a record supporting disk carried by the same spindle, ratchet teeth thereon, a pawl carried by the actuating lever for actuating the said disk, a paper record disk of larger diameter than the ratchet disk support with means for retaining it in position on said ratchet disk, a platen part overhanging the edge of said record disk, a spring arm disposed transversely across the stem of the said push button means arranged to be acted upon by the cam thereof to be forced laterally thereby, a recording impression pin on the said arm disposed to cooperate with the said platen to make impressions on the record disk, a set-back cam and cam actuator means for returning the said hand to zero with a suitable projecting connector for actuating the same, a lever with pawl disposed and arranged to act upon the teeth of the record supporting disk, a cam surface thereon disposed to be acted upon by a projecting portion of the said actuator to advance the disk a step when the main hand is returned to zero, whereby a vacant space will be left in the record to indicate the succession of holes, a total register means comprising a pair of index dials with hands therefor, star wheels therefor with transfer mechanism there-between, an actuator for the unit wheel connected to the main actuating bar whereby the same will register an additional unit at each depression of the push button, heart cams for each dial, an actuating arm with actuators therefor to return the same to zero, and a projecting connection for depressing the same to reset the total register mechanism to zero, as described.

2. The combination of a suitable case, a main recording dial, a hand thereof, a main lever with pawl for actuating the said hand, a return spring for the said lever, a push button with stem provided with a cam surface for actuating the said lever, a record supporting disk carried by the same spindle, ratchet teeth thereon, a pawl carried by the actuating lever for actuating the said disk, a paper record disk of larger diameter than the ratchet disk support with means for retaining it in position on said ratchet disk, a platen part overhanging the edge of said record disk, a spring arm disposed transversely across the stem of the said push button means arranged to be acted upon by the cam thereof to be forced laterally thereby, a recording impression pin on the said arm disposed to cooperate with the said platen to make impressions on the record disk, a set-back cam and cam actuator means for returning the said hand to zero with a suitable projecting connector for actuating the same, a lever with pawl disposed and arranged to act upon the teeth of the record supporting disk, and a cam surface thereon disposed to be acted upon by a projecting portion of the said actuator to advance the disk a step when the main hand is returned.
to zero, whereby a vacant space will be left in the record to indicate the succession of holes.

3. The combination of a suitable case, a main record dial with a hand therefor, mechanism for actuating the said hand step by step, a push button connected to said mechanism provided with a suitable stem having a cam surface, a record supporting disk with connections therefrom to be actuated by the said push button, a paper record disk of larger diameter than the said supporting disk, a platen part overhanging the edge of said record disk, a spring arm disposed transversely across the stem of said push button arranged to be acted upon by the cam thereof to be forced laterally thereby, a recording impression pin on the said arm disposed to cooperate with the said platen to make impressions on the record disk, a separate pawl means to actuate the said disk connected with the set-back means for actuating the record disk a step when the set-back is operated, as specified.

4. The combination of a suitable case, a main record dial with a hand therefor, mechanism for actuating the said hand step by step, a push button connected to said mechanism provided with a suitable stem having a cam surface, a record supporting disk with connections therefrom to be actuated by the said push button, a paper record disk of larger diameter than the said supporting disk, a platen part overhanging the edge of said record disk, a spring arm disposed transversely across the stem of said push button, arranged to be acted upon by the cam thereof to be forced laterally thereby, a recording impression pin on the said arm disposed to cooperate with the said platen to make impressions on the record disk, and a set-back means with suitable projecting actuator to return the hand to zero, as specified.

5. The combination with the case, a main record dial with indicator therefor, a main push button with connections to actuate the indicator, a record supporting means with connections therefrom to the said push button to actuate the same step by step, a record sheet adapted to be carried by said support, impression means also connected to the said push button for marking the said record at each actuation, a set back means for the said indicator with actuating means projecting to the exterior of said case, connections to the said set back means to advance the support a step at each actuation, independent total indicating means, connections to the main push button for actuating the same, and independent set back means for said total indicator, coating as specified.

6. The combination with the case, a main record dial with indicator therefor, a main push button with connections to actuate the indicator, a record supporting means with connections therefrom to the said push button to actuate the same step by step, a record sheet adapted to be carried by said support, impression means also connected to the said push button for marking the said record at each actuation, a set back means for the said indicator with actuating means projecting to the exterior of said case, connections to the said set back means to advance the support a step at each actuation, independent total indicating means, connections to the main push button for actuating the same, and independent set back means for said total indicator, coating as specified.

7. The combination with the case, a main record dial with indicator therefor, a main push button with connections to actuate the indicator, a record supporting disk with connections therefrom to be actuated by the said push button step by step, a paper record disk with means for securing it to said record carrying disk, impression means connected to be actuated by the said push button for marking the said record at intervals, a set back means for the said indicator with actuating means projecting to the exterior of said case, and connections to the said set back means to advance the record supporting disk a step at each actuation, coating as specified.

8. The combination with the case, a main record dial with indicator therefor, a main push button with connections to actuate the indicator, a record supporting means with connections therefrom to the said push button to actuate the same step by step, a record sheet adapted to be carried by said support, impression means also connected to the said push button for marking the said record at each actuation, a set back means for the said indicator with actuating means projecting to the exterior of said case, and connections to the said set back means to advance the support a step at each actuation, coating as specified.

9. The combination with the case, a main record dial with indicator therefor, a main push button with connections to actuate the indicator, a record supporting disk with connections therefrom to be actuated by the said push button step by step, a paper record disk with means for securing it to said record carrying disk, impression means connected to be actuated by the said push button for marking the said record at intervals, a set back means for the said indicator with actuating means projecting to the exterior of said case, and connections to the said set back means to advance the support a step at each actuation, coating as specified.
connections therefrom to the said push button to actuate the same step by step, a record sheet adapted to be carried by said support, impression means also connected to the said push button for marking the said record at each actuation, and a set back means for the said indicator with actuating means projecting to the exterior of said case, coating as specified.

11. The combination of a suitable case, a main recording dial, a hand therefore, a main lever with pawl for actuating the said hand, a return spring for the said lever, a push button with stem provided with a cam surface for actuating the said lever, a record supporting disk carried by the same spindle, ratchet teeth thereon, a pawl carried by the actuating lever for actuating the said disk, a paper record disk of larger diameter than the ratchet disk support with means for retaining it in position on said ratchet disk, a platen part overhanging the edge of said record disk, and impression means disposed to mark the projecting edge of said paper disk.

13. The combination of a suitable case, a main recording dial, a hand therefore, a main lever with pawl for actuating the said hand, a return spring for the said lever, a push button with stem provided with a cam surface for actuating the said lever, a record supporting disk carried by the same spindle, ratchet teeth thereon, a pawl carried by the actuating lever for actuating the said disk, and a paper record disk adapted to be carried by said supporting disk with means connected to the said push button for marking the same.

14. The combination with a suitable case, a main indicator therefor with a push button for actuating the same, a record supporting disk, a ratchet for actuating the same step by step, a paper record disk of larger diameter than the said supporting disk, whereby the periphery projects to receive impressions, a platen part overhanging the projecting edge of said record disk, an arm disposed to be acted upon by the said push button, a record impression pin on the said arm disposed to cooperate with the said platen to make impressions on the record disk.

12. The combination of a suitable case, a main recording dial, a hand therefore, a main lever with pawl for actuating the said hand, a return spring for the said lever, a push button, a record supporting disk carried by the same spindle, ratchet teeth thereon, a pawl carried by the actuating lever for actuating the said disk, a paper record disk of larger diameter than the ratchet disk support with means for retaining it in position.

In witness whereof, I have hereunto set my hand and seal in the presence of two witnesses.

EDSON D. CLARAGE. [L.S.]

Witnesses:
ROBT. M. MORGAN.
ALICE M. CAVENY.