Sept. 12, 1933. H. P. GORMAN 1,926,980

GAME APPARATUS

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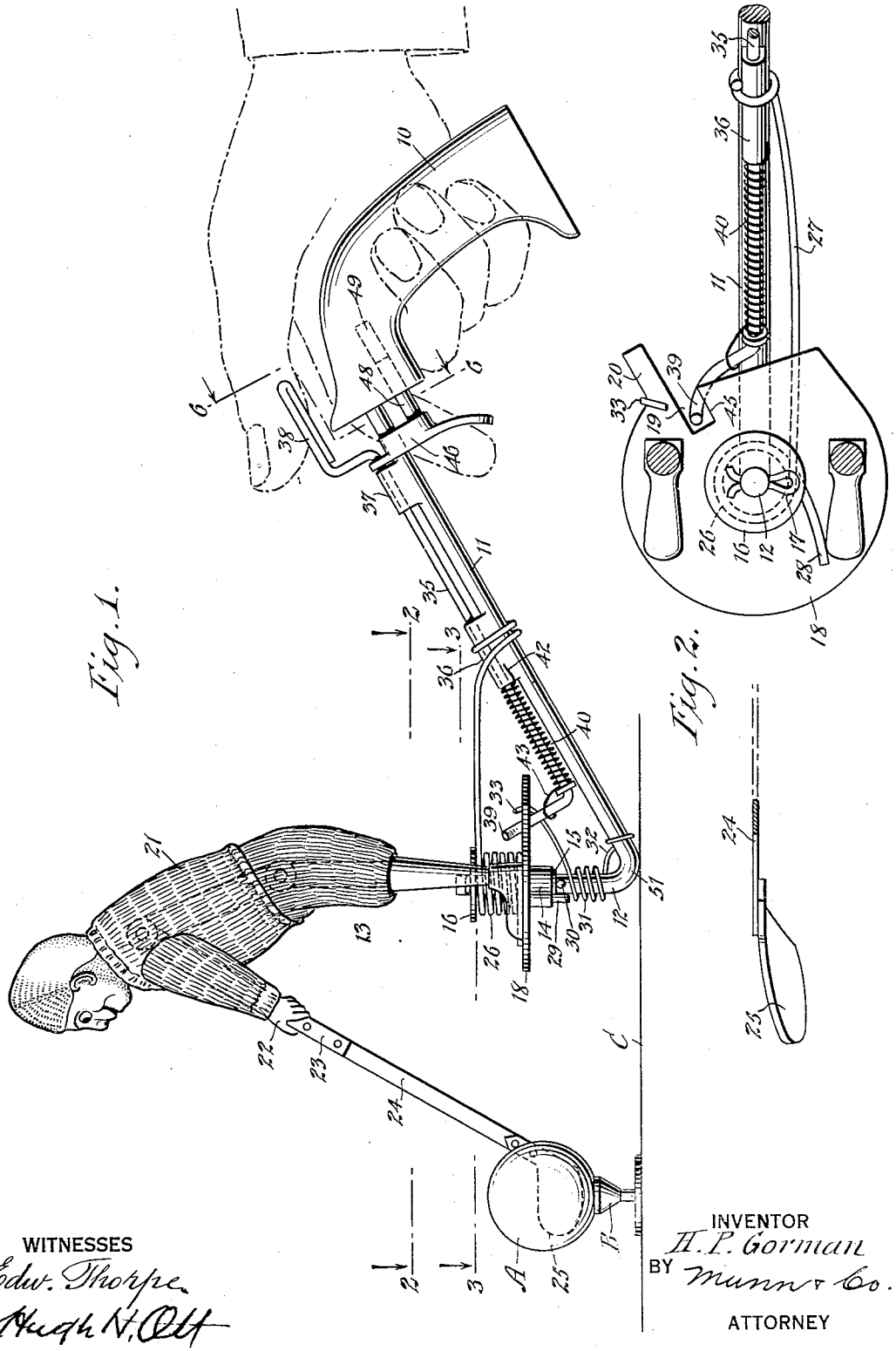


Fig. 1.

Fig. 2.

WITNESSES

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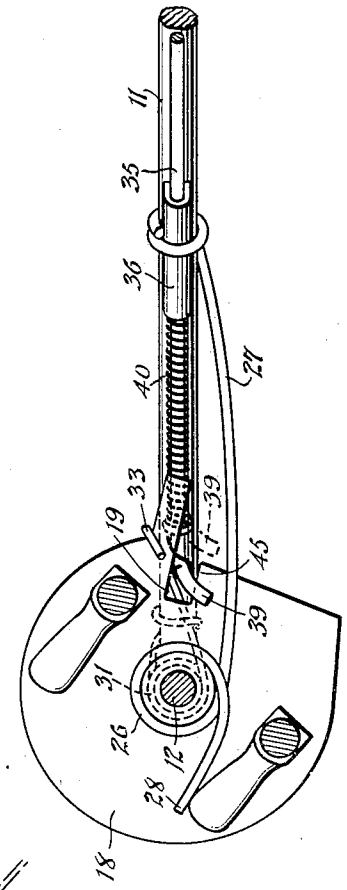
ATTORNEY

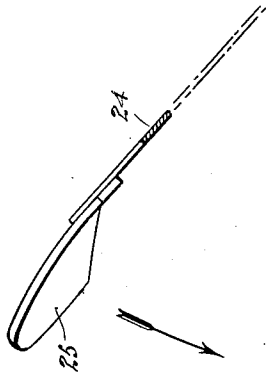
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GAME APPARATUS

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Fig. 3.





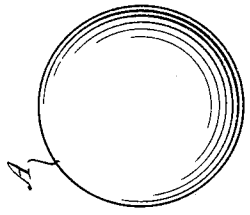


Fig. 6.

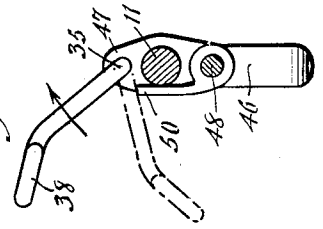


Fig. 5.

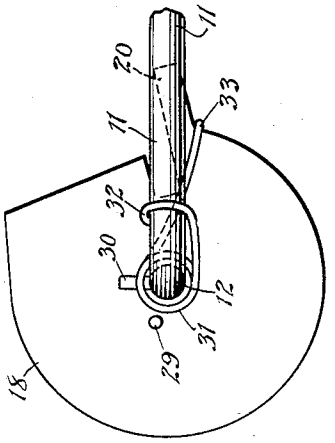
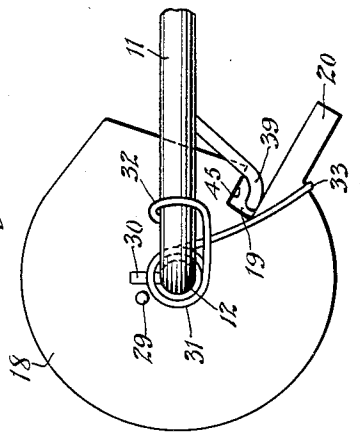


Fig. 4.



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UNITED STATES PATENT OFFICE

1,926,980

GAME APPARATUS

Horace P. Gorman, Rye, N. Y.

Application September 10, 1930
Serial No. 481,059

8 Claims. (Cl. 273—129)

This invention relates to games, and comprehends a game apparatus which is in the nature of an improvement over my prior United States Letters Patent No. 1,657,388.

In addition to accomplishing the same general objects attained by the prior patent above referred to, the present invention aims to improve thereupon by simplifying the mode of use of the device so as to admit of a more accurate positioning of the club head with respect to the ball and the obtaining of a better direction of the shots, due to a follow-through of the swing, after contact of the club head with the ball.

The invention more specifically contemplates a game apparatus of the indicated character, in which independently manipulated means are provided for separately placing the club supporting element under the desired tension and releasing the same, which means are located in such close proximity to each other and to the hand grip, as to permit of their manipulation by the digits of the same hand which holds the device in position.

As a further feature, the invention aims to provide a manually controlled device for supporting and swinging a club, to cause the same to strike and project a ball over a playing field in which manually operable means is provided for setting the club head in a wide range of different retracted set positions to vary the tension of the spring which when subsequently released swings the club into contact with the ball.

The invention furthermore comprehends in a device of the indicated character, a turnably mounted club support having opposed springs of relatively different tensions which function to dispose the club support in a predetermined position representing the balance between said opposed springs whereby upon retraction of the club support against the action of one of the springs, the opposed spring acts as a yieldable limiting stop for checking the swing at the time of contact of the club head with the ball and directly thereafter to obtain the effect of a follow-through.

The invention further resides in the provision of a device of the character set forth which includes few and simple parts, which may be inexpensively produced and assembled and which functions effectually to attain the end in view.

With the above recited and other objects in view, reference is had to the following description and accompanying drawings, in which there is exhibited one example or embodiment of the invention, while the claims define the actual scope of the same.

In the drawings:

Figure 1 is a side view of the device illustrating the manner in which the same is used.

Figure 2 is an enlarged sectional plan view taken approximately on the line 2—2 of Figure 1, illustrating the normal position of the parts.

Figure 3 is a similar view taken approximately on the line 3—3 of Figure 1, illustrating the set retracted position of the device.

Figure 4 is a fragmentary bottom plan view showing the parts in normal position.

Figure 5 is a similar view showing the parts in set retracted position.

Figure 6 is a detail enlarged transverse sectional view taken approximately on the line 6—6 of Figure 1.

Referring to the drawings by characters of reference, the device includes a handle composed of a hand grip 10 and a shank 11 projecting forwardly therefrom, and which shank is preferably in the nature of a rod having an upturned free end 12 disposed at an acute angle to the shank 11, so that ordinarily with the free end disposed vertical, the shank is disposed at an inclination as illustrated in Figure 1 of the drawings. A club support designated generally by the reference character 13 is turnably mounted on the free end 12 and includes a cylindrical bearing or hub 14 which fits over the upper extremity of the free end 12 and bears upon a collar 15 underlying the lower end of the bearing. A washer 16 engages the upper end of the bearing, and a cotter pin 17 extending through the upper extremity of the free end 12 retains the washer and bearing in place thereon. Between its ends the bearing or hub is provided with a disk like flange 18 having a substantially radially disposed peripheral notch 19, from one side of which a guide lug 20 projects. In practice, the club support will include a figure 21 representative of the participants of the same, and the hand portions 22 will removably receive the handle 23 of the shank 24 which carries at its free end the club head 25. A spring 26 is mounted to surround the hub portion and is located between the flange 18 and the washer 16, with the upper terminal 27 anchored to the shank 11 and the lower terminal 28 engaging the flange 18 to normally turn the club and club support in the direction indicated by the arrow in Figure 3 of the drawings. Stop pins 29 and 30 are provided respectively on the flange 18 and the free end 12 to provide a definite interengaging means for limiting the turning

movement of the club support in one direction. An opposed spring 31 surrounds the free end 12 of the handle shank, and its lower extremity 32 is anchored while its upper extremity 33 engages the guide lug 20 of the flange 18 to exert a normal tension in an opposite direction to that of the spring 26. In practice, the spring 26 will be of greater strength than the spring 31, and in the normal position of the club support 13 illustrated in Figure 2, the springs will be so balanced that the stop pins 29 and 30 are disposed slightly out of contact with each other, as particularly shown in Figure 4.

In order to provide means for manually effecting a retrograde movement of the club support against the action of the spring 26 to place said spring under various tensions, a rock shaft 35 is journaled in bearings 36 and 37 formed on the handle shaft 11, and said rock shaft is provided with a manipulating crank 38 at the terminal which is disposed adjacent the hand grip 10 and with a crank arm 39 at its opposite terminal which normally engages within the notch 19 of the flange 18. A coiled expansion spring 40 surrounds the rock shaft 35 and is interposed between the bearing 36 and a collar 41 adjacent the crank arm terminal 39, while one extremity 42 of the spring 40 engages the bearing 36 and the other extremity 43 engages the crank arm 39. The spring 40 functions in two capacities, namely, to normally effect an axial sliding movement of the rock shaft in the bearings 36 and 37 while serving to turn or rock the said shaft in the direction indicated by the arrow in Figure 6, where the crank arm 39 engages the wall of the notch 19 which is provided with the projecting guide lug 20. By virtue of this arrangement, pressure exerted upon the manipulating crank against the action of the spring 40 by one of the digits of the hand which grasps the hand grip 10, will cause the crank arm 39 to engage the wall 45 of the notch to turn the club support against the action of the spring 26 to set the club and support in the desired retracted position for the shot to be made. This also permits a rocking action to be imparted to the club support to simulate the action of a golfer in addressing the ball A arranged upon the tee B or directly resting upon the supporting surface C.

In order to provide manual means for releasing the club supporting means when under the desired tensioned retracted position, a trigger 46 is provided which is slidably mounted on the handle shank 11 between the hand grip 10 and the bearing 37. The apertured upper portion 47 of the trigger receives the rock shaft 35 and engages the offset manipulating crank portion 39. The trigger 46 is further provided with a guide pin 48 which extends into a socket 49 formed in the hand grip 10, and said trigger 46 is further provided with an upstanding stop shoulder 50 disposed in the path of movement of the offset manipulating crank terminal 38 for limiting the depression thereof. The trigger 46 is normally shifted forwardly away from the hand grip 10 and into contact with the bearing 37 by the expansive action of the spring 40, and is designed to be manually retracted by one of the digits of the same hand which grasps the hand grip that holds the device. Obviously, when the club support 13 and club have been retracted to place the spring 26 under the desired tension, a rearward pull exerted on the trigger will withdraw the rock arm 39 from its engaged position with the wall 45 of the notch 19, thereby permitting the spring 26 to forcibly turn the club support 13 and swing the club into contact with the ball A. After the shot has been made, the turning tension of the spring 40 will rock the rock shaft 35 in the direction indicated by the arrow in Figure 6 to cause the rock arm to engage with the guide lug 20, and the expansive action of the spring 40 will slide the rock shaft and trigger 46 forwardly, re-positioning the rock arm 39 in the notch 19 for a subsequent operation of the device. It will be observed that the rod from which the handle shank 11 is constructed forms a curved rest portion 51 at the juncture of the free end 12 therewith, which in many instances will serve as a support for engagement with the supporting surface C to steady the device when manipulating the same.

In practice, the spring 31 will serve as a yieldable stop means for gradually arresting the swing of the club so as to permit said club swing to follow through after actual contact with the ball, and only when the club support is retracted to the fullest extent will the force of the swing be sufficient to actually bring the stop pins 29 and 30 into engagement.

From the foregoing, it will thus be seen that an improved device of the indicated character has been set forth, and while for the purpose of illustration certain structural details are exhibited herein, it is to be clearly understood that no limitation is necessarily made thereto, but that variations and modifications which properly fall within the scope of the claims may be employed in lieu thereof when desired.

What is claimed is:

1. In a game apparatus, means for supporting, retracting, tensioning and releasing a club to strike and project a ball over a playing field, including a rotatably mounted club support, means for tensioning the same upon retraction, means for manually retracting the club support and for manually holding said club support in various retracted positions and an independent means for manually releasing said club support when it is manually held in retracted position by the manually operable retracting and holding means.

2. In a device of the character set forth, a handle including a hand grip and a shank, an upstanding terminal at the free end of the shank, a club support including a notched portion turnably mounted on said terminal, a spring for normally turning said support in one direction, a releasable element slidably and rockably carried by the handle and normally engaging the notched portion of the club support whereby to admit of manual retrograde turning thereof to place the spring under tension and a releasing trigger carried by the handle and engaged with said element.

3. In a device of the character set forth, a handle including a hand grip and a shank, an upstanding terminal at the free end of the shank, a club support including a notched portion turnably mounted on said terminal, a spring for normally turning said support in one direction, a releasable element slidably and rockably carried by the handle and normally engaging the notched portion of the club support whereby to admit of manual retrograde turning thereof to place the spring under tension and a releasing trigger carried by the handle and engaged with said element, said element having a manipulating portion which together with the trigger is disposed in close proximity to the handle grip whereby the device may be held in one hand and manipulated by the digits thereof.

4. In a game apparatus, a manually controlled device for supporting and swinging a club to cause the same to strike and project a ball over a playing field, said device including a handle, a club support turnably carried thereby, opposed springs of relatively different strength functioning to dispose said club support in a predetermined position, manually operable means for adjusting and for manually holding the club support in different retracted set positions, whereby to vary the tension of the stronger spring and an independent manually operable means for releasing said support when set.

5. In a game apparatus, a manually controlled device for supporting and swinging a club to cause the same to strike and project a ball over a playing field, said device including a handle, a club support turnably carried thereby, opposed springs functioning to dispose said club support in a predetermined position, manually operable means for adjusting and for manually holding the club support in different retracted set positions whereby to vary the tension of one of the springs and an independent manually operable means for releasing said support when set.

6. In a game apparatus, a manually controlled device for supporting and swinging a club to cause the same to strike and project a ball over a playing field, said device including a handle, a club support turnably carried thereby, opposed springs functioning to dispose said club support in a predetermined position, manually operable means for adjusting and for manually holding the club support in different retracted set positions whereby to vary the tension of one of the springs and an independent manually operable means for releasing said support when set, said setting and releasing means having manipulating extremities located in close proximity to the handle whereby said extremities may be actuated by the digits of the hand which holds the handle.

7. In a device of the character set forth, a handle including a hand grip and a shank, an upstanding terminal at the free end of the shank, a club support including a notched portion turnably mounted on said terminal, a spring for normally turning said support in one direction, an element slidably and rockably carried by the handle shank, a spring normally acting to slide and rock said element for engagement with the notched portion of the club support and independent means for successively rocking and sliding said element to place the first mentioned spring under tension and to release the same.

8. In a device of the character set forth, a handle including a hand grip and a shank, an upstanding terminal at the free end of the shank, a club support including a notched portion turnably mounted on said terminal, a spring for normally turning said support in one direction, an element slidably and rockably carried by the handle shank, a spring normally acting to slide and rock said element for engagement with the notched portion of the club support and independent means for successively rocking and sliding said element to place the first mentioned spring under tension and to release the same, said means being disposed in close proximity to the hand grip whereby digits of the same hand which holds the device may be employed for manipulating the device.

HORACE P. GORMAN.