May 3, 1949. S. QUATTRIN 2,469,002

GOLF PRACTICE DEVICE

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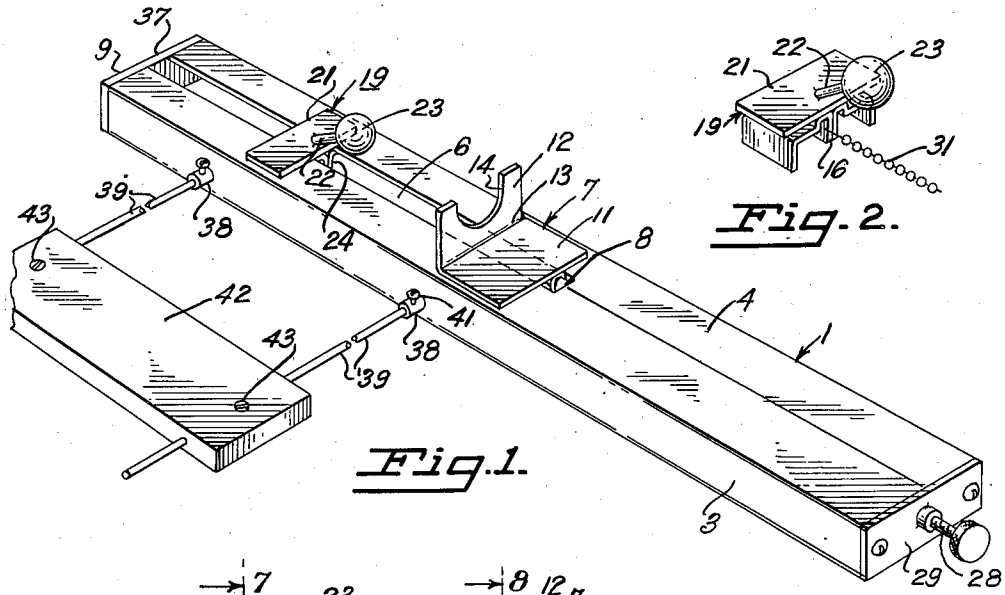

Fig. 1.



Fig. 2.

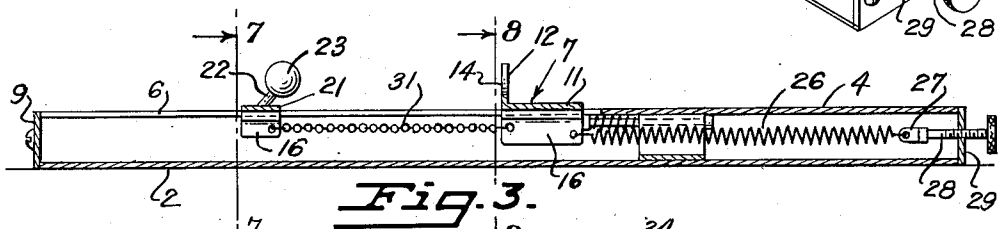

Fig. 3.

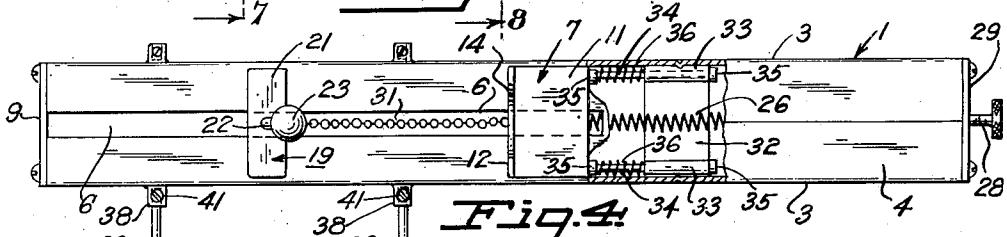

Fig. 4.

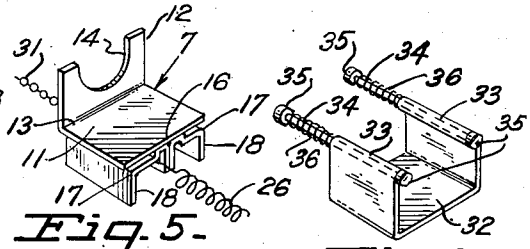

Fig. 5.

Fig. 6.

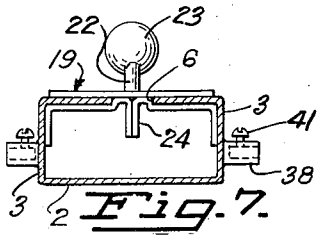

Fig. 7.

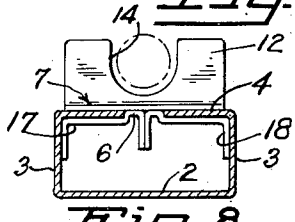

Fig. 8.

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## GOLF PRACTICE DEVICE

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11 Claims. (Cl. 273—35)

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This invention relates to a golf practice device.

Wrist action is a very important part of a golf stroke. As the golf club is swung back at a certain angle of the back stroke, the wrists turn upwardly. On the down stroke of the golf club the arms bring the club down to an angle approaching the ball. In order to have a true and forceful stroke it is necessary that the wrists be snapped just before the golf club hits the ball so as to forcefully hit the club head against the golf ball. This so-called wrist action requires training and developing of the wrists to this part of the stroke.

The primary object of my invention is to provide a device on which the wrist action in the golf stroke may be practiced, and in which the club head encounters increasing resistance in about the same proportion as it would encounter in actually hitting a ball.

Another object of the invention is to provide a golf practice device for wrist action in which the resistance to the wrist action is adjustable.

I am aware that some changes may be made in the general arrangements and combinations of the several devices and parts, as well as in the details of the construction thereof without departing from the scope of the present invention as set forth in the following specification, and as defined in the following claims, hence I do not limit my invention to the exact arrangements and combinations of the said device and parts as described in the said specification, nor do I confine myself to the exact details of the construction of the said parts as illustrated in the accompanying drawings.

With the foregoing and other objects in view, which will be made manifest in the following detailed description, reference is had to the accompanying drawings for the illustrative embodiment of the invention, wherein:

Fig. 1 is a perspective view of my practice device.

Fig. 2 is a detailed view of the slide which holds the golf ball in position in the device.

Fig. 3 is a longitudinal sectional view of my practice device.

Fig. 4 is a top plan view of my device, partly in section.

Fig. 5 is a perspective view of the abutment slide which is first engaged by the golf club in the practice stroke.

Fig. 6 is a perspective view of the cushion for the return stroke of the abutment slide.

Fig. 7 is a cross sectional view of the device the section being taken on the line 7—7 of Fig. 3.

Fig. 8 is another sectional view of the device the section being taken on lines 8—8 of Fig. 3.

The device includes a tubular frame 1. This frame, in the present illustration, consists of a base 2 the opposite longitudinal edges of which

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are bent at right angles to form sides 3. The top of the sides 3 are bent inwardly toward one another and parallel with the base 2 to form the top 4. These top flanges are integrally united at their meeting edges. The top edges of the top 4 are cut away at a portion thereof so that when in position they form a guide slot 6. The tubular frame 1 is initially open at its opposite ends for assembly purposes.

An abutment slide 7 is slidable from the closed end 8 of the slot 6 toward the outer end 9 of the frame 1. This abutment slide includes a base plate 11 extended transversely across the top of the frame 1. An abutment 12 extends at right angles from the leading edge 13 of this base plate 11. In this abutment 12 is cut a substantially semi-circular recess 14 extending from the top downwardly, which recess 14 receives therein and overlaps the ball to be hit. On the under side of the base plate 11 is preferably integrally secured a guiding structure which includes a central securing rib 16 from which extends in each direction transversely a flange 17 spaced from the underface of the base plate 11. Preferably the ends of the flanges 17 are bent downwardly to form side guides 18. The space between the flanges 17 and the underface of the base plate 11 are such as to slidably fit upon the thickness of the top 4 adjacent the opposite sides of the slot 6. This unit is assembled by sliding the guiding space between the flange 17 and the base plate 11 over the top 4 at the slot 6 as shown in Fig. 5 and Fig. 8. In this position the side guides 18 are in slidable engagement with the opposite sides 3 of the tubular frame 1.

A ball slide 19 is positioned between the abutment slide 7 and the slotted end 9 of the frame 1. This ball slide 19 includes a base plate 21 from which extends a slanting or inclined shaft 22 solidly secured at one end to the base plate 21. Onto the free end of the shaft 22 is fixed a golf ball 23. The length and direction of the shaft 22 is such as to hold the ball 23 spaced substantially beyond the trailing edge of the base 21 so that as the abutment slide 7 reaches the ball slide 19 the ball is nested in the recess 14 of the abutment 12, and the leading edge of the abutment can engage the trailing edge of the ball slide base plate 21 and push the latter. On the under side of the ball slide base plate 21 is provided a guiding structure 24 of the same construction as the guiding structure on the under side of the base plate 11 of the abutment slide 7. This ball slide is assembled by sliding it into the slot 6 from the slotted end 9 of the frame 1 after the abutment slide 7 is in position. The ball slide allows the movement of the ball after it is struck by the club head so as to approximate the feel of the so called "follow through" in the

golf stroke, instead of an abrupt stopping of the wrist action at the ball.

Resistance to the wrist action is provided by suitably resiliently yieldable means which may be adjustable to various tensions. In the present illustration this resilient resistance is accomplished by a coil spring **26**, one end of which is hooked into the central rib **16** of the under structure of the abutment slide **7**. The other end of the coil spring **26** is hooked into the rotatable end **27** of an adjusting screw **28**, which latter is threadably secured in a detachable end plate **29** on the end of the frame **1**. In this manner by threading the set screw **28** outwardly of the end plate **29** the tension on the spring is tightened, because it is lengthened, and vice versa. This resistance compels the player to exert force by the wrist at the proper time of the stroke in approaching the ball and thereby trains a firm well timed snapping of the wrist into the ball striking position.

In order that the ball slide **19** be returned to the initial position shown in Fig. 1 when the abutment slide **7** is returned by the spring **26**, a suitable connection is provided between the slides **7** and **19**. In the present form a light chain **31** has one end connected to the central rib **16** of the abutment slide **7**. The other end of the chain **31** is connected to the central rib **16** of the under structure **24** of the ball slide **19**. Thus after the abutment slide **7** is released by the golf club and is being pulled back by the spring **26** to its initial position it will pull, by means of the chain **31**, the ball slide **19** with it to its initial position.

Suitable cushioning means are provided adjacent the initial position of the abutment slide **7** for preventing injury to the device. The cushioning device herein illustrated includes a substantially U-shaped bracket **32** which is fixed inside of the frame **1**. In the free ends of the legs of the U-shaped bracket **32** are provided longitudinal tubes **33** to function as holders for cushion pins **34** which are slidably held therein. Each cushion pin **34** has a head **35** at each end thereof. A coil spring **36** is positioned around each cushion pin between the tube **33** and the head **35** facing toward the abutment slide **7**. Inasmuch as the U-shaped bracket **32** is about the same width as the inner width of the tubular frame **1**, the cushioning pins **34** are substantially opposite the side guides **18** of the under structure of the abutment slide **7**. Thus when the spring **26** pulls the abutment slide **7** back to its initial position the side guides **18** abut against the respective heads **35** of the pins **34** and compress the spring **36**. In this manner the return stroke of the abutment slide **7** is effectively cushioned.

The slotted end **9** of the frame **1** is also covered by a removable plate **37**.

The device is adapted to be used both by left handed or right handed golfers. For instance, in the illustration shown in Fig. 1 and Fig. 4, it is adapted for the swing of a right handed golfer. In order that the player is suitably aligned with the device, a pair of bushings **38** are integrally secured on each side **3** of the frame **1**, properly positioned with respect to the initial position of the abutment slide **7**. Rods **39** are inserted in the respective bushings **38** and are held in there by suitable screws **41**. On the pair of rods **39** is slidable a platform **42**. The platform **42** is of such thickness that the person standing on the same is standing at level with the top of the frame **1**. The platform has suitable holes therethrough which slide over the rods **39**, and suitable set screws **43** secure the platform at a selected distance from the frame **1** according to the height of the person using the device. According to whether the player is right handed or left handed the platform structure may be secured in the bushings on the respective sides of the frame **1**.



I claim:

1. In a golf practice device of the character described, a frame, an abutment slide slidably held on the frame, a member on the abutment slide extended above the frame to be engaged by the head of a golf club, a ball supporting slide guided on the frame normally spaced from said abutment member toward the end of the frame away from the direction of approach of the golf club to said abutment member and being aligned with said member to hold a ball in the path of said club when the said slide is shifted to said member, and resiliently yieldable means to return said abutment slide to an initial position when released by the head of the golf club.

2. In a golf practice device of the character described, a frame, an abutment slide slidably held on the frame, a member on the abutment slide extended above the frame to be engaged by the head of a golf club, a ball supporting slide guided on the frame normally spaced from said abutment member toward the end of the frame away from the direction of approach of the golf club to said abutment member and being aligned with said member to hold a ball in the path of said club when the said slide is shifted to said member, resiliently yieldable means to return said abutment slide to an initial position when released by the head of the golf club, and means to adjust the tension of said resiliently yieldable means.

3. In a golf practice device of the character described, a frame, an abutment slide slidably held on the frame, a member on the abutment slide extended above the frame to be engaged by the head of a golf club, a ball supporting slide guided on the frame normally spaced from said abutment member toward the end of the frame away from the direction of approach of the golf club to said abutment member and being aligned with said member to hold a ball in the path of said club when the said slide is shifted to said member, resiliently yieldable means to return said abutment slide to an initial position when released by the head of the golf club, and means to return said ball supporting slide to the initial spaced position from said abutment slide when said abutment slide is returned to its initial position.

4. In a golf practice device of the character described, a frame, an abutment slide slidably held on the frame, a member on the abutment slide extended above the frame to be engaged by the head of a golf club, a ball supporting slide guided on the frame normally spaced from said abutment member toward the end of the frame away from the direction of approach of the golf club to said abutment member and being aligned with said member to hold a ball in the path of said club when the said slide is shifted to said member, resiliently yieldable means to return said abutment slide to an initial position when released by the head of the golf club, said abutment slide having a recess in the abutment portion thereof and being slidable to said ball slide, an element on said ball slide offset toward said recess and adapted to hold said ball overlapping

into said recess when said abutment slide is adjacent to said ball slide.

5. In a golf practice device of the character described, a frame, an abutment slide slidable on the frame, an abutment extended upwardly from said slide being adapted to be engaged by the head of a golf club, a ball slide slidable on the frame spaced from said abutment and aligned therewith, a ball holder on said slide extended toward said abutment and holding a ball in overlapping relation to said abutment when said abutment slide is pushed by the golf club head to said ball slide, resiliently yieldable means to resist the movement of said abutment slide and to return said abutment slide to an initial position, connecting means between the abutment slide and the ball slide for returning said ball slide into the initial spaced position when said abutment slide is returned to its initial position, said resiliently yieldable means and said connecting means being within said frame and leaving the top of said frame unobstructed.

6. In a golf practice device of the character described, a frame, an abutment slide slidable on the frame, an abutment extended upwardly from said slide being adapted to be engaged by the head of a golf club, a ball slide slidable on the frame spaced from said abutment and aligned therewith, a ball holder on said slide extended toward said abutment and holding a ball in overlapping relation to said abutment when said abutment slide is pushed by the golf club head to said ball slide, resiliently yieldable means to resist the movement of said abutment slide toward said ball slide and to return said abutment slide to an initial position, connecting means between the abutment slide and the ball slide for returning said ball slide into the initial spaced position when said abutment slide is returned to its initial position, said resiliently yieldable means and said connecting means being within said frame and leaving the top of said frame unobstructed, said frame being hollow, and a top on said frame on which said slides are slidable.

7. In a golf practice device of the character described, a tubular frame adapted to rest on the ground, a top of said tubular frame being spaced above the ground, an abutment slide slidable on said top, a ball slide slidable on said top and being spaced from said abutment slide, an abutment on said abutment slide extending in the path of the movement of the club head, a ball holder on said ball slide extended toward said abutment and holding a ball in overlapping relation to said abutment to be engaged by said club head when said abutment is pushed to said ball, resiliently yieldable means urging the abutment slide to an initial position, means in said frame to stop and cushion said abutment slide on its return stroke to said initial position.

8. In a golf practice device of the character described, a tubular frame adapted to rest on the ground, a top of said tubular frame being spaced above the ground, an abutment slide slidable on said top, a ball slide slidable on said top and being spaced from said abutment slide, an abutment on said abutment slide extending in the path of the movement of the club head, a ball holder on said ball slide extended toward said abutment and holding a ball in overlapping relation to said abutment to be engaged by said club head when said abutment is pushed to said ball, resiliently yieldable means urging the abutment slide to an initial position, means in said



frame to stop and cushion said abutment slide on its return stroke to said initial position, means to return said ball slide to its initial spaced position when said abutment is returned to the initial position, said resiliently yieldable urging means being inside of said tubular frame and leaving the said frame top unobstructed.

9. In a golf practice device of the character described, a tubular frame adapted to rest on the ground, a top of said tubular frame being spaced above the ground, an abutment slide slidable on said top, a ball slide slidable on said top and being spaced from said abutment slide, an abutment on said abutment slide extending in the path of the movement of the club head, a ball holder on said ball slide extended toward said abutment and holding a ball in overlapping relation to said abutment to be engaged by said club head when said abutment is pushed to said ball, resiliently yieldable means urging the abutment slide to an initial position, means in said frame to stop and cushion said abutment slide on its return stroke to said initial position, means to return said ball slide to its initial spaced position when said abutment is returned to the initial position, said resiliently yieldable urging means being inside of said tubular frame and leaving the said frame top unobstructed, said abutment having a recess therein to overlap said ball and permit pushing said slides together when the ball is engaged by the club head.

10. In a golf practice device of the character described, a frame, a golf practice device on the frame including an abutment movable on the frame and engageable by the club head and resiliently yieldable means on the frame connected to said abutment for yieldably resisting movement of said abutment and for urging said abutment to an initial position and a platform for the feet of the player being connected to said frame to hold said frame stationary by the weight of said player, said platform being in alignment with said initial position of said abutment.

11. In a golf practice device of the character described, a frame, a golf practice device on the frame including an abutment movable on the frame and engageable by the club head and resiliently yieldable means on the frame connected to said abutment for yieldably resisting movement of said abutment and for urging said abutment to an initial position, a platform adapted to support the weight of a player, connecting means between the platform and the frame to hold the frame stationary by the weight of the player on the platform, and adjustable connection between said connecting means and said platform to support said platform at a selected distance from said frame, said platform being in alignment with said initial position of said abutment.

SANTE QUATTRIN.


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