Sept. 18, 1928. 1,684,674

C. H. KRAETSCH

GOLF PRACTICE APPARATUS

Filed April 20, 1927

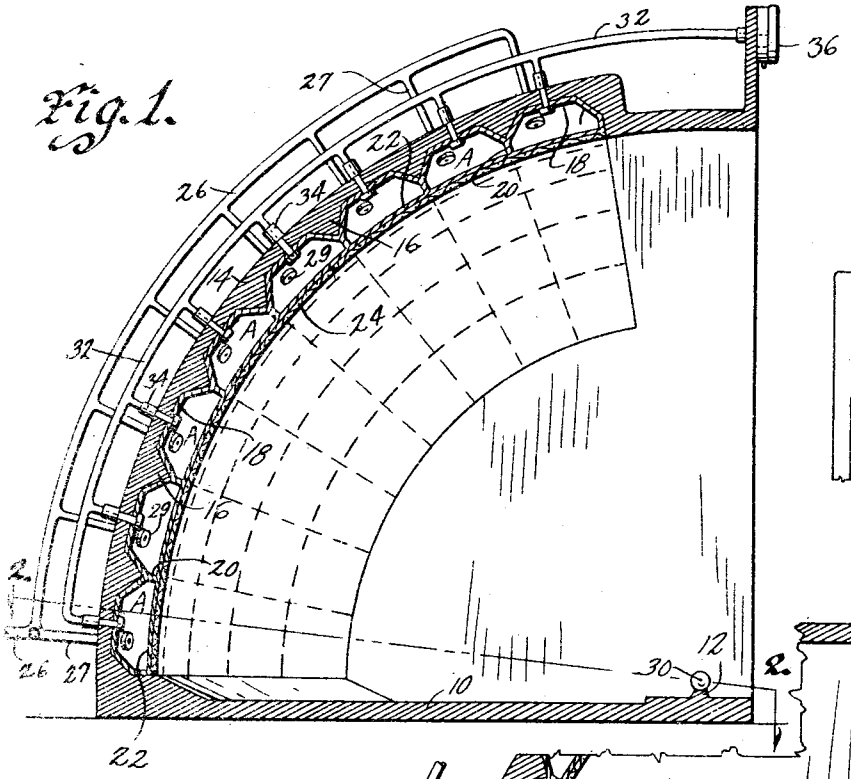


Fig. 1.

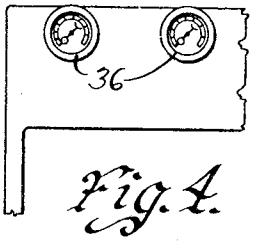


Fig. 4.

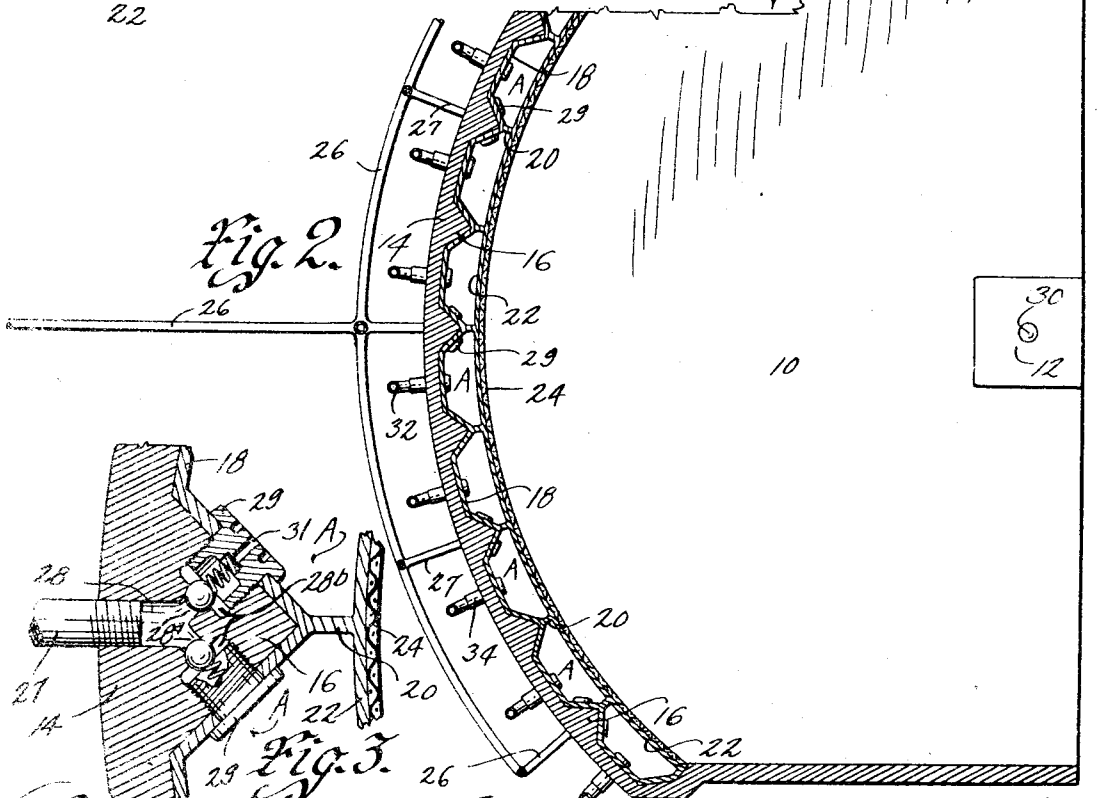


Fig. 2.

Fig. 3.

Witness

Inventor: Carl H. Kraetsch

by Baur & Freeman Attorneys

Patented Sept. 18, 1928. 1,684,674

UNITED STATES PATENT OFFICE.

CARL H. KRAETSCH, OF DES MOINES, IOWA.

GOLF PRACTICE APPARATUS.

Application filed April 20, 1927. Serial No. 185,204.

The object of my invention is to provide a golf practice apparatus of simple, durable and inexpensive construction.

More particularly, it is my purpose to provide a golf practice apparatus, comprising one or a series of pneumatic pockets.

Preferably, I provide a series of said pockets arranged substantially in the shape of the inside of a portion of a sphere, so that the ball may be driven at right angles against the face of the pockets.

Another purpose is to provide means for indicating the force of the blow struck against the pockets.

An additional purpose is to provide means for automatically maintaining a certain degree of pressure in the pockets.

With these and other objects in view, my invention consists in the construction, arrangement and combination of the various parts of my golf practice apparatus, whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claims, and illustrated in the accompanying drawings, in which:

Figure 1 is a vertical, sectional view through a golf practice apparatus embodying my invention.

Figure 2 is a horizontal, sectional view through the same, taken on the line 2—2 of Figure 1.

Figure 3 is an enlarged, detail, sectional view of a portion of the device as shown in Figure 2; and

Figure 4 is a front view of one of the indicators.

In the drawings herewith, I have used the reference numeral 10 to indicate a floor or the like of a room used for golf practice. The floor 10 may have a tee 12 if desired.

Properly located, I arrange a substantially rigid back, such as that shown at 14, which has generally the shape of the surface of a portion of a sphere, being thus on its inner face concave from top to bottom and from side to side.

The inner face of the rigid back 14 is provided with the ribs 16 arranged in vertical and horizontal lines in such manner as to divide such surface into a plurality of squares. Each square formed by the ribs 16 is provided with a rubber pocket or casing 18, which fits the inner surface of the square, and has at its periphery radially inwardly extending walls 20 connected by a face member 22. The pocket is indicated generally at A.

Secured to the inner faces 22 of all the pockets is a resilient covering 24 preferably of some substantially resilient canvas or the like impregnated with rubber, so as to allow for considerable give or stretch.

It will thus be seen that viewed from the inside or from the tee 12, the exercise apparatus will look like a large canvas having the form of a portion of the inside surface of a sphere.

I provide for supplying air under pressure to all of the pockets A.

An air supply pipe 26 has branches 27 connected with passages 28 projected through the back 14 and the rear walls of the pockets A. Each passage 28 has branches 28^a leading to adjacent pockets A. In the respective branches of each passage 28 are mounted tubular nipples 29 extended through the walls of the pockets A and into the back 14, as shown in Figure 3, and provided with bores 31 communicating with the respective branches 28^a. The branches 28^a are enlarged to receive the nipples 29, as at 28^b, and are provided with check valves 33 normally held seated by springs 35.

Any suitable means is provided for maintaining a certain pressure in the pipe 26, and this in turn will maintain the same pressure in each of the pockets A.

It will be seen that the ball 30 may be driven against the cover 24, which will give to some extent.

It is desirable to determinate the distance a ball would travel and to give credit not only for the force of the impact of the ball but for its direction of travel, either directly in front of the player or to right or to left thereof, as the case may be, in order to add to the interest of the user of the apparatus.

I have therefore provided an indicating means for each vertical series of pockets A.

For each vertical series of pockets A, there is provided a pipe 32, which has branches 34 projecting through the back 14 and through the rear walls of the pockets A and having tight joints.

Connected with the pipe 32 is any suitable sort of indicator 36 for registering the force of the blow of the ball against the pocket.

In the practical use of my device, a uniform pressure is maintained in all the pockets by forcing compressed air into them,

which is maintained by means of some pressure creator not here shown.

When the ball 30 is driven against the surface 24 of one of the pockets, its impact will drive the air therefrom through one of the branches 34 and the appropriate pipe 32 for affecting the hand 38 on the pressure indicator.

This will then show the credit to which the player is entitled for that stroke. The air can not escape from the pocket past the check valves 33.

A device of this kind can be built at a reasonable expense and will enable players to determine the effectiveness of their respective strokes.

It will be noted that by providing the covering 24, it is possible for the faces of the pockets to be concave. This means that every blow of the ball will strike square against the face of a pocket instead of striking a glancing blow.

I claim as my invention:

1. In a golf practice apparatus, a substantially rigid back, a series of resilient pockets arranged on the face thereof, and means for registering the impact of a blow on any of the pockets, the inner faces of the pockets being arranged to form a substantially continuous concave surface.

2. In a golf practice apparatus, a substantially rigid back, a series of resilient pockets arranged on the face thereof in vertical rows, and means for registering the impact of blows struck on pockets in the respective rows.

3. In a golf practice apparatus, a substantially rigid back, a series of resilient pockets arranged on the face thereof, means for registering the impact of a blow on any of the pockets, and means for maintaining air in all the pockets at a predetermined uniform pressure.

4. In a golf practice apparatus, a substantially rigid back, a series of resilient pockets arranged on the face thereof in vertical rows, means for registering the impact of blows struck on pockets in the respective rows, and means for maintaining air in all the pockets at a predetermined uniform pressure.

5. In a golf practice apparatus, a substantially rigid back, a series of resilient pockets arranged on the face thereof in vertical rows, means for registering the impact of blows struck on pockets in the respective rows, and means for maintaining air in all the pockets at a predetermined uniform pressure, the inner or striking faces of the pockets being arranged substantially as in the surface of a portion of a sphere.

6. In a golf practice apparatus, a substantially rigid back, a resilient pocket projecting forwardly therefrom having its front face concave, means for registering the impact of a blow on the pocket, and means for maintaining a predetermined pressure in the pocket.

7. In a golf practice apparatus, a substantially rigid back, a series of resilient pockets arranged on the face thereof, means for registering the impact of a blow on any of the pockets, and means for maintaining air in all the pockets at a predetermined uniform pressure, the inner faces of the pockets being arranged to form a substantially continuous concave surface.

8. In a golf practice apparatus, a substantially rigid back, a series of resilient pockets arranged on the face thereof, the inner faces of the pockets being arranged to form a substantially continuous concave surface.

9. In a golf practice apparatus, a tee, a spaced device for receiving the impact of a ball driven from the tee and having a substantially rigid, concave back with resilient pneumatic pockets arranged in vertical and horizontal rows projecting forwardly therefrom and having closed resilient front faces adjacent to the tee concave from bottom to top and from side to side, using the tee as an axis, so that a ball driven from the tee against the concave face will strike all parts of the face traveling substantially at right angles to the surface struck to thus impart the full force of its blow to the air in the pockets.

10. In a golf practice apparatus, a tee, a spaced device for receiving the impact of a ball driven from the tee and having a substantially rigid back, and a resilient pneumatic pocket projecting forwardly therefrom having a closed resilient front face adjacent to the tee concave so that a ball driven from the tee against the face will strike all parts of the face traveling substantially at right angles to the surface struck, to thus impart the full force of its blow to the air in the pocket, and means for registering the impact of the blow on the air in the pocket.

Des Moines, Iowa, April 14, 1927.

CARL H. KRAETSCH.