Dec. 22, 1953

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2,663,021

OPTICAL DEVICE FOR GOLF INSTRUCTION

Filed May 3, 1950

FIG. I

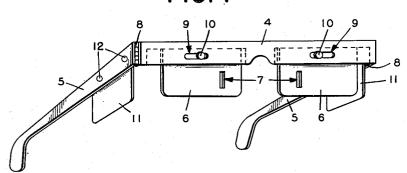


FIG. 2

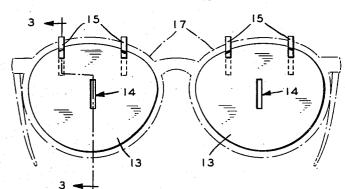
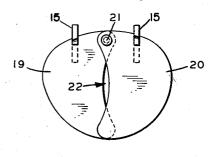


FIG. 3 16.--13

FIG. 4



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2,663,021

OPTICAL DEVICE FOR GOLF INSTRUCTION

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Application May 3, 1950, Serial No. 159,685

3 Claims. (Cl. 2-14)

This invention relates to an optical device to be used by a golf pupil or player to aid in improving his golf stroke and obtaining increased proficiency in playing the game of golf.

It is a well established principle of a properly executed golf stroke or swing that the players head must remain in a substantially fixed position until after the ball is struck. In the teachings and writings of recognized professional golfers, this function of keeping the head in a 10 fixed position is referred to or expressed in various ways such as "keeping the eye on the ball," "looking at the ball," "keeping the chin back," "keeping the head down" and other terms. It is also recognized that developing the practice of 15 keeping the head in a fixed position is generally difficult of attainment among players learning the game of golf and that even among experienced players and those who have acquired conthe head in a fixed position frequently causes a faulty golf stroke to be executed.

The object of this invention is to provide a device to prevent a golf player from removing his eyes from the golf ball during the stroke.

Another object of this invention is to provide a device which automatically compels the wearer to assume the correct visual stance in viewing the golf ball in playing golf.

Various other objects and advantages of the 30 present invention will become apparent from the accompanying description and disclosure.

My invention is a device to limit the field of vision by means of an eye screen or screens which can be worn in a manner similar to eyeglasses, 35 or a screen or screens to be mounted on eye-The screen or glasses or eyeglass frames. screens comprise opaque or translucent members containing a substantially vertical aperture therein, either fixed or variable, through which the vision of the wearer is limited in extent and in particular to such an area as would permit him to view a golf ball lying or to be placed in a position to be struck with a golf club. Because of the limitations placed on the field of vision by the opaque or translucent screen containing the vertical visual apertures, the wearer can keep the golf ball in view only by holding his head in a subquired to view the ball is the correct position for hitting the ball with a club. Moving the head, except to a very limited extent, would remove the golf ball from the field of vision. The tendency to look up or follow the ball before hitting 55 the ball is thus minimized or obviated.

For a better understanding of my invention, reference may be had to the accompanying drawing in which Figure 1 is a perspective view diagrammatically illustrating the optical device of this invention for use of individuals who do not require eyeglasses when playing golf. Figure 2 is a front view diagrammatically illustrating eye screens of my invention for use of golf players who wear some type of eyeglasses. Figure 3 is an enlarged cross-section of the screen taken along line 3-3 of Figure 2 showing the attachment of the screen to conventional eyeglasses. Figure 4 is a diagrammatic illustration of a screen having a variable aperture.

According to Figure 1 of the drawing, numeral 4 designates a front frame of slotted construction containing attached to each extremity thereof bows or supports 5 by means of conventional hinges 8. Rectangular screens 6 contain subsiderable proficiency in the game, failure to keep 20 stantially vertical visual apertures or slots 7 and are inserted in the slotted portion of front frame 4. Apertures 7 are preferably $\frac{1}{32}$ to $\frac{3}{16}$ of an inch at the center and about $\frac{1}{2}$ to 1 inch in length. Apertures 7 may be rectangular or elliptical in 25 shape without departing from the scope of this invention. The screens & may be constructed of conventional materials, such as glass, plastic and metal, and are preferably opaque but may also be translucent. The purpose of screen 6 is to limit and confine the field vision of the wearer. Therefore, it is essential that such screens be constructed in such a manner as to prevent the wearer from clearly observing objects outside the visual range of the golf ball when lying in position. Apertures 7 may be either openings in screens 6 or may be constructed of suitable materials which are transparent for visual purposes. For example, screen & may be constructed of glass which, except for aperture 7, is etched to prevent vision therethrough. Apertures 7 should be positioned substantially in front of the pupils of the eyes of the wearer. As the distance between the eyes of different wearers may be different, it is desirable to provide means for adjusting the positions of the screens 6 and, consequently, the positions of visual slots 7. According to the illustration of Figure 1, this is accomplished by providing horizontal slits 9 in frame 4 and conventional thumb screws 10 in the upper stantially fixed position. This fixed position re- 50 portion of screens 6. By this manner of construction as shown, the position of each screen 6 may be varied as desired. In some instances, the wearer has a tendency to watch objects at the extremities of the eyes thus preventing concentrated vision upon the ball. This may be eliminated or minimized by the use of side shields,

such as side shields 11, which may be attached to bows 5 in a conventional manner, such as by screws 12. These side shields 11 may be detached from bows 5 by removing screws 12 depending upon whether the wearer desires the use of further restriction of his vision. Side shields 11 may be constructed of similar materials and in a similar manner as screens 6, previously discussed

Figure 2 shows a type of screen for use with 10 eyeglasses. Numeral 13 of Figure 2 designates optical screens 13 of an oval shape and similar in construction to screens 6 of Figure 1. Screens 13, as well as screens 6, of Figure 1 may be of any desired shape either oval, rectangular, square or 15 polygonal without departing from the scope of this invention. Screens 13 contain visual apertures 14 similar to visual apertures 7 of Figure 1. Spring clips 15 are attached to the upper portion of screens 13, as shown, so that the eye shields 20 13 may be snapped onto conventional eyeglasses as shown. In Figure 3, the conventional eyeglasses are designated by numeral 16. Numeral 17 designates the rim of the lense. Clips may be provided in the lower portion of shields 13 as 25 well as in the upper portion thereof, if desired, without departing from the scope of this inven-Various other methods may be employed to attach optical screens 13 to eyeglasses or sunglasses. The screens may be adjusted for the cor- 30 rest position in viewing the ball depending upon the preferred position for the individual wearer.

Figure 4 shows a form of screen in which the aperture is variable. According to Figure 4, the optical screen consists of two overlapping semi- 35 elliptical screen members 19 and 20 held together by means of a screw 21 or like means. The semi-elliptical screens 19 and 20 are pivotable upon screw 21 and the inner edge of each screen member is semi-elliptical forming a vertical visual aperture 22. The movement of semielliptical screen members 19 and 20 away or toward each other adjusts the size of the vertical visual aperture 22. Each screen member 19 and 20 contains spring clips 15, similar to clips 15 of 45 Figure 3. The screen members 19 and 20 are held to eyeglasses by means of these spring clips 15. Alternatively, screen members 19 and 20 of Figure 4 may be attached to a device similar to that shown in Figure 1, by means of screw 21, 5 and clips 15 will then be omitted.

Having described the preferred form of my invention and having pointed out the principal considerations to be observed in the construction of equivalent devices it is obvious that various changes and modifications may be made without departing from the scope of this invention.

Having described my invention, I claim:

1. A device for limiting the field of vision of a golf player to the immediate region of the golf 60

ball to be struck by the wearer which comprises two substantially opaque optical screens containing visual portions consisting of a single substantially vertical visual aperture in each screen, said visual apertures having a maximum width of not more than $\frac{1}{16}$ of an inch and a minimum width of not less than $\frac{1}{32}$ of an inch and the length of said apertures being between about ½ and about 1 inch, and means for positioning the optical screens before the eyes such that the visual apertures are substantially in front of the pupils of the eyes of the wearer, said vertical visual apertures being similar in shape and location in each of said optical screens.

2. A device for limiting the field of vision of a golf player to the immediate region of the golf ball to be struck by the wearer which comprises a substantially opaque optical screen containing a visual portion consisting of a single substantially vertical visual aperture, said optical screen comprising two separate and overlapping semi-elliptical sections having semi-elliptical inner edges and pivoted about a common pivot positioned in the upper portion of said semi-elliptical sections.

3. An optical device for limiting the field of vision of a golf player to the immediate region of the golf ball to be struck by the wearer which comprises in combination a frame, bows attached to the extremity of said frame, two substantially opaque optical screens containing visual portions consisting of a single substantially vertical visual aperture in each screen, said visual apertures having a maximum width of not more than 3 of an inch and a minimum width of not less than $\frac{1}{32}$ of an inch and the length of said apertures being between about 1/2 and about 1 inch, and means for attaching said optical screens to said frame, said vertical visual apertures being positioned centrally and similar in shape and location in each of said optical screens.

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