M. D. KLIN.

GOLF CLUB.

APPLICATION FILED JAN. 3, 1919.

1,318,325. Patented Oct. 7, 1919.

Fig. 1

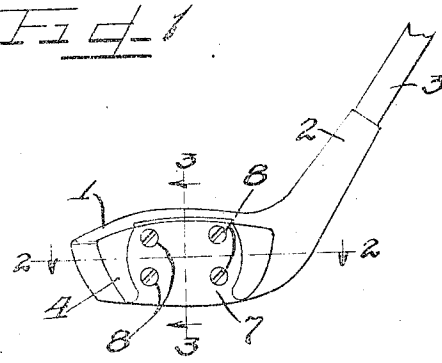


Fig. 5

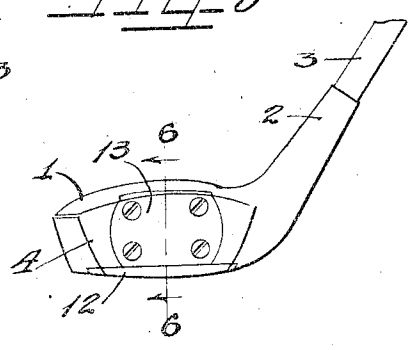


Fig. 2

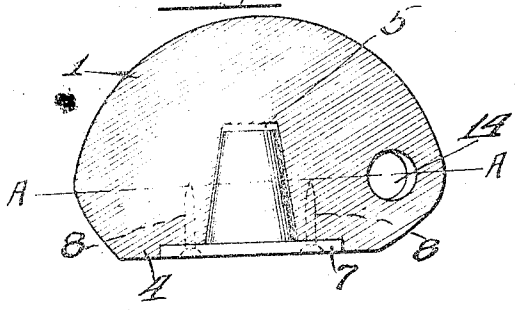


Fig. 6

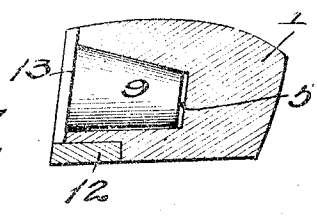


Fig. 3

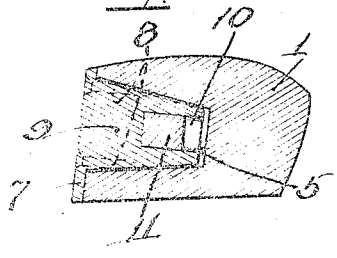
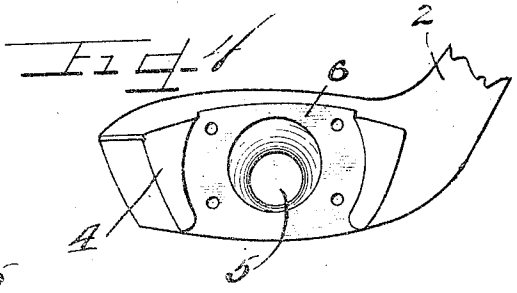


Fig. 4



Witnesses

J. W. Angell

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UNITED STATES PATENT OFFICE.

MARTIN D. KLIN, OF CHICAGO, ILLINOIS.

GOLF-CLUB.

1,318,325. Specification of Letters Patent. Patented Oct. 7, 1919.

Application filed January 3, 1919. Serial No. 269,395.

To all whom it may concern:

Be it known that I, MARTIN D. KLIN, a citizen of the United States, and a resident of the city of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Golf-Clubs; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the numerals of reference marked thereon, which form a part of this specification.

My invention has reference more particularly to a golf club of the type that is usually made of wood, and has a weight attached to or embedded in the head to balance and give driving power thereto.

In clubs of this character, heretofore provided, it has been customary to apply the weight at the rear of the head, with the result that there is a lack of desired balance between the portions of the head at the front and the rear of the handle, and this lack of balance imposes stresses and strains which twist the head as the club is swung and strikes the ball, and thereby affects the accuracy of the drive. This manner of placing the weight also separates the weight from the front or striking face of the club and interposes a portion of the material of the head therebetween, which acts as a cushion and diminishes to some extent the driving force of the weight, so that the full force of the momentum of the weight is not applied to the ball. Also, owing to the fact that the momentum of the weight is overcome less readily than the momentum of the wood portion of the head, the connection between the weight and the head has a tendency to give somewhat and not only diminishes the force of the impact, but also in time loosens the connection between the weight and the head.

It is an object therefore of my invention to place the weight at the front of the head of the club, so that the momentum of the weight acts directly upon the ball, and avoids diminution of the force of the weight which is experienced with structures in which the weight is placed at the rear of the head.

It is a further object of my invention to place the weight at the front of the head of the club so as to counterbalance the larger portion of the head at the opposite side of the handle connection, and thereby avoid the twisting or springing of the head during the stroke and the moment of impact, which interferes with accuracy of driving.

It is a further object of my invention to provide a weight which is adapted to be varied in amount, to suit the requirements of the particular user, and without requiring a special construction in each particular case.

Another object of my invention is to provide a golf club with a striking plate and weight combined, the latter being embedded in the body of the head to assist in holding the front plate in place and to balance the head.

It is a further object of my invention to provide a golf club having a combined front plate and weight, the former being extended downwardly to serve as a guard or protection for the lower front edge of the head.

My invention also has other important objects, which will appear from the disclosures in the specification and drawings, in which I have described and illustrated my invention in a preferred form.

On the drawings:

Figure 1 is a front view of the head of a golf club constructed in accordance with my invention and having the handle broken away.

Fig. 2 is an enlarged sectional view on the line 2—2, of Fig. 1, showing the combined weight and striking plate in elevation.

Fig. 3 is an enlarged vertical sectional view on line 3—3, of Fig. 1.

Fig. 4 is an enlarged front view of the head of the club with the weight and front plate removed.

Fig. 5 is a view similar to Fig. 1, showing a modified form of this invention.

Fig. 6 is an enlarged vertical sectional view on the line 6—6, of Fig. 5.

As shown on the drawings:

The reference numeral 1, indicates the head of the club, said head being made of wood or other suitable material and provided with a neck 2, at one side with an opening 14 therethrough in which the shaft 3 of the handle of the club is secured. The front of the head is provided with a flat face 4, which may be slanted to the extent desired, for example as shown in Fig. 3, to lift or elevate the ball somewhat, upon impact. This front face 4, is arranged a short distance in advance of the plane passing through the handle of the club, the position of said plane being indicated by the line A—A in Fig. 2. The portion of the club

at the rear of the line A—A is enlarged or extended at a greater distance from the line A—A than the front face 4 so that the greater portion of the weight of the head is at the rear of the line A—A, or the plane passing through the handle.

Extending rearwardly from the front face 4, is an opening 5, the axis of which passes through the point on the front face of the head where contact occurs between the head and the ball when the latter is properly struck, and the front face 4, of the head is recessed as shown at 6, in Fig. 4, to receive the front or striking plate 7, which is secured to the head of the club by means of the screws 8. Extending rearwardly from the front plate 7, and seated in the opening 5, is a weight 9, which, together with the plate 7, counterbalances to the extent desired, the enlarged portion of the golf club head at the rear of the line A—A, and avoids twisting of the head as the club swings and strikes the ball. This weight also, being of greater specific gravity than the material of which the head of the club is made, accumulates the effective force, as the club is swung, for driving the ball, and inasmuch as this weight and the plate 7, are at the front of the head, the momentum thereof is expended directly upon the ball so that there is a sharp impact therebetween and the full force of the momentum of the weight is applied to drive the ball.

The weight 9, may be a solid piece of material, or if desired may be constructed as shown in Fig. 3, with a hole bored into the rear thereof, which is filled to the desired extent with a filler 11, of lead or other material so as to properly balance the head of the club, and provide for variation in the amount of weight to suit the requirements of the particular user of the club.

The front plate 7, is preferably extended down to the bottom face of the head of the club as shown in Figs. 1 and 3, so as to protect the lower front edge of the head and obviate the necessity of using a separate wearing plate at this point.

In Figs. 5 and 6 I have shown a modified form in which a strip 12, of fiber, metal or any other suitable material may be embedded in the bottom of the head at the front thereof to afford a protection and sustain the wear at this point, and when this strip is used the front plate 13 is narrower, and rests upon the upper face of the strip 12, as shown.

From the foregoing it will be noted that by placing the weight at the front of the head of the club I not only counter-balance the enlarged rear portion of the head so as to avoid twisting and strain in swinging the club and striking the ball which interferes with the accuracy of the drive, but I also secure a direct impact of the weight with the ball so that the full momentum of the weight is expended in driving the ball and is not absorbed to any extent by the body of the head as in former constructions. This construction also obviates the tendency of the weight to jar loose from the head of the club, and affords a firm connection of the front plate with the head of the club.

While I have shown and described my invention in a preferred form, I am aware that various changes and modifications may be made therein without departing from the principles of my invention, and I therefore do not purpose limiting the patent granted hereon otherwise than necessitated by the prior art.

I claim as my invention:—

1. In a golf club the combination of a driving head having a front striking face, a plate on the striking face having a weight extending rearwardly therefrom into the body of the head, and a recess in the weight, adapted to receive a filler for varying the weight.

2. In a golf club the combination of a driving head having a front striking face, a plate on the striking face having a weight integral therewith extending rearwardly into the body of the head, and a recess in the weight adapted to receive a lead filler for increasing the weight.

In testimony whereof I have hereunto subscribed my name in the presence of two subscribing witnesses.

MARTIN D. [illegible].

Witnesses:
CHARLES W. HILLS, Jr.,
EARL M. [illegible].