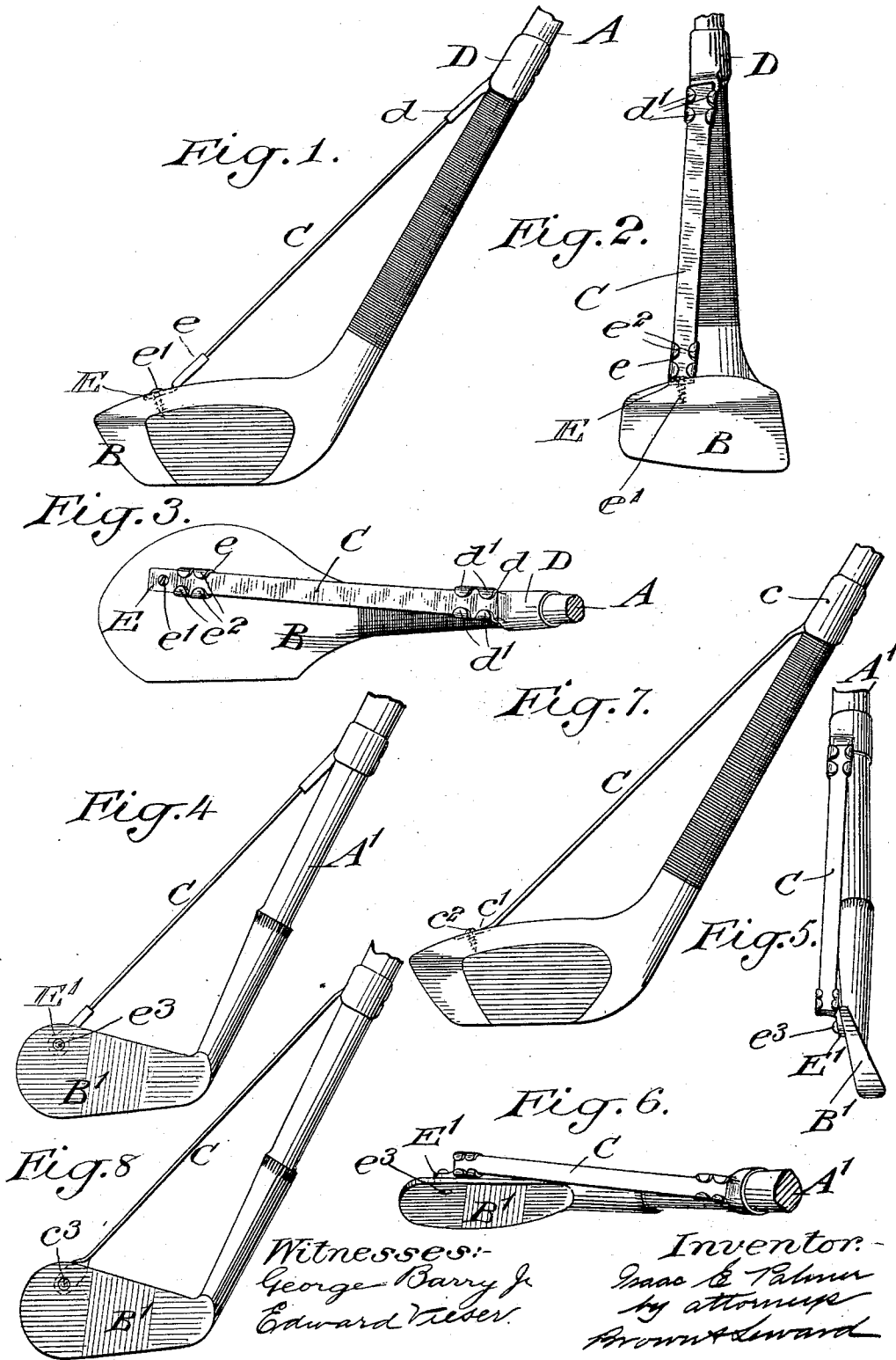


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GOLF CLUB.

(Application filed May 11, 1900.)

(No Model.)



Witnesses:  
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Edward Trever.

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# UNITED STATES PATENT OFFICE.

ISAAC E. PALMER, OF MIDDLETOWN, CONNECTICUT.

## GOLF-CLUB.

SPECIFICATION forming part of Letters Patent No. 687,540, dated November 26, 1901.

Application filed May 11, 1900. Serial No. 16,295. (No model.)

*To all whom it may concern:*

Be it known that I, ISAAC E. PALMER, a citizen of the United States, and a resident of Middletown, in the county of Middlesex and State of Connecticut, have invented a new and useful Improvement in Golf-Clubs, of which the following is a specification.

My invention relates to an improvement in golf-clubs; and it consists more particularly in providing means for strengthening the golf-clubs without impairing their elasticity and resiliency and at the same time reducing the tendency to twist in the head when the ball is not struck absolutely at the center of the striking-surface of the head.

A further object is to provide an attachment which may be readily applied to wooden or metal clubs now in use, whereby the advantages above referred to may be obtained, the attachment being so arranged as to produce very little additional wind resistance when the club is swung.

A practical embodiment of my invention is represented in the accompanying drawings, in which—

Figure 1 represents in front elevation the lower portion of a wooden golf-club with my improvement applied thereto. Fig. 2 is a side view of the same. Fig. 3 is a top plan view. Fig. 4 represents in front elevation the lower portion of a metal golf-club with my improvement applied thereto. Fig. 5 is a side view of the same. Fig. 6 is a top plan view. Fig. 7 is a detail front view of a portion of a wooden club with a modified form of brace applied thereto; and Fig. 8 is a front view of a metal club, showing the modified form of brace applied thereto.

In the form shown in Figs. 1 to 3, inclusive, a wooden golf-club is represented, in which the shaft is denoted by A and the wooden head by B, the two being securely jointed together in the usual manner. A flat brace C connects the outer end of the head B with the shaft A at a point a considerable distance from the head. This flat brace C may be made of metal, wood, or other suitable material and is disposed with its side edges toward the front and back of the club. This flat brace C is preferably made of very thin spring-steel, so that it will not impair the re-

siliency of the club to a material degree and will also present very little wind resistance when the club is swung. The upper end of the brace C is inserted into a socket *d*, extended downwardly from a malleable-metal clip D, which clip is adapted to embrace the shaft A at a point considerably above the head B and be firmly clamped to the said shaft. This socket *d* is preferably provided with oppositely-disposed clamping-teeth *d'*, which may be bent snugly against one face of the brace for holding it securely in position within the socket *d*. The lower end of the flat brace C is seated within a socket *e*, uprising from a socket-plate E, which is in the present instance secured to the top of the wooden head B by means of a screw *e'*. This socket *e* is preferably provided with oppositely-disposed clamping-teeth *e''*, which may be caused to snugly impinge against one face of the said brace C. The connection of the brace with the head is located to the rear of the shaft plane of the head, so that the line of vision is not in any way impaired. By the expression "shaft plane" it is understood to be that plane which extends through the head parallel with the striking-face of the head and through the center line of the shaft at the point of connection of the shaft with the head.

In Figs. 4 to 6, inclusive, I have represented a metal club, in which the shaft is denoted by A' and the head by B'. The upper end of the flat brace C is connected with the shaft A' in the same manner as in the form shown in Figs. 1 to 3, inclusive. The socket-plate E', which receives the lower end of the flat brace C, is secured to the back of the head B', preferably by a rivet *e''*.

In the form shown in Fig. 7 I have represented the flat brace as being developed into a clip *c* at its upper end for securing the brace to the shaft and the lower end of the brace C being turned at an angle, as shown at *c'*, where the brace engages the wooden head B' for the reception of a fasteningscrew *c''*.

In the form shown in Fig. 8 I have shown the lower end of the brace C as being secured directly to the metal head B' by a rivet *c''*.

By use of this brace I am enabled to so strengthen the golf-club as to practically

eliminate the danger of breaking the head from the shaft and I am also enabled to practically eliminate the twisting strain which is so noticeable when the ball is struck by the  
5 head a slight distance too far out thereon away from the shaft. Thus I am enabled to secure greater accuracy in the flight of the ball. Furthermore, the resiliency of the club is not impaired, as the brace preferably extends from a point on the shaft only a short  
10 distance above the head to the head.

The attachment as a whole is very simple and complete and can be very quickly and easily attached to any of the golf-clubs in  
15 use.

It is evident that changes might be resorted to in the form and arrangement of the several parts without departing from the spirit and scope of my invention. Hence I do  
20 not wish to limit myself strictly to the structure herein set forth; but

What I claim is—

1. The combination with the shaft and head of a golf-club, of a brace connecting the shaft and head, the connection of the brace with  
25 the head being located to the rear of the shaft plane of the head, substantially as set forth.

2. The combination with the shaft and head of a golf-club, of a flat spring metallic brace  
30 connecting the head with the shaft, the brace being disposed with its edges toward the front and rear of the club, substantially as set forth.

In testimony that I claim the foregoing as  
35 my invention I have signed my name in presence of two witnesses.

ISAAC E. PALMER.

Witnesses:

PAUL S. CARRIER,  
GEORGE A. WELLMAN.