

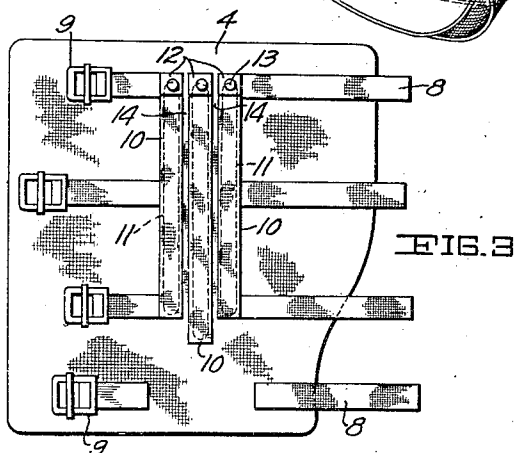
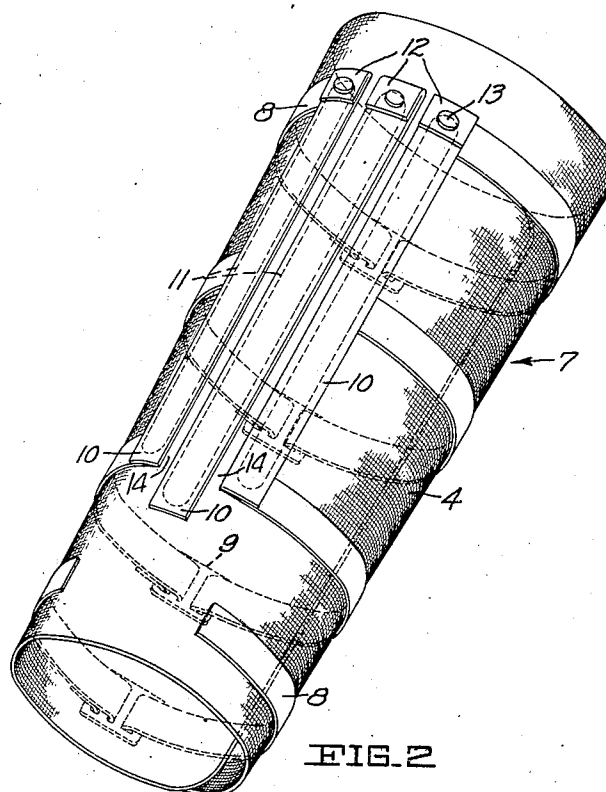
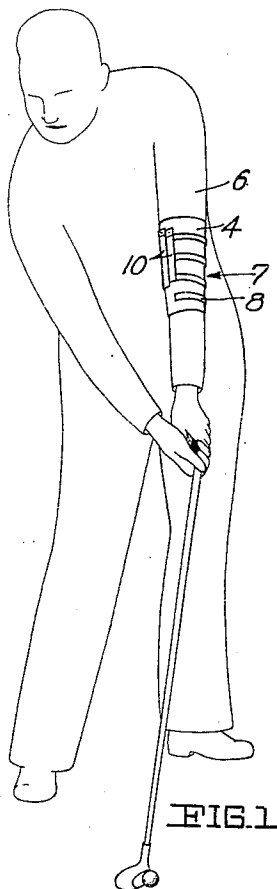
April 26, 1949.

A. H. WEIS ET AL

2,468,580

INSTRUCTION DEVICE

Filed Nov. 9, 1945



INVENTOR.
ANTHONY H. WEIS
BERTHA M. WEIS
BY
Gardner & Warren
attys.

UNITED STATES PATENT OFFICE

2,468,580

INSTRUCTION DEVICE

Anthony H. Weis and Bertha M. Weis,
Oakland, Calif.

Application November 9, 1945, Serial No. 627,616

3 Claims. (Cl. 273—35)

1

This invention relates to devices to be worn on the arm for confining flexure of the latter to certain definite limits.

It is an object of the invention to provide a device of the character described by means of which a golfer may self-instruct himself in the substantially perfect execution of playing strokes.

Another object of the invention is to provide a device, for restraining flexure movements of the arm, in which the degree of resistance to flexure may be adjustably varied as desired.

A further object of the invention is to provide an arm flexure restraining device which is sufficiently light as to impose no perceptible weight burden on the wearer's arm nor cause any unbalance of the body in the execution of strokes.

Still another object of the invention is to provide in an arm flexure restraining device, flexible resistance members arranged so as to prevent, when flexed, the ends thereof from pressing into the wearer's flesh and causing him discomfort.

Yet another object of the invention is to provide a device of the character described designed to afford bilateral resistance to longitudinal flexure when the wearer tends to bend his arm.

These and other objects of the invention will be specifically set forth in the detailed description thereof hereunto annexed. It is to be understood that the invention is not to be limited to the specific form thereof herein shown and described as various other embodiments thereof may be employed within the scope of the appended claims.

Referring to the drawing:

Figure 1 is a front elevation view of a golfer showing, attached to the latter's arm, the restraining device of my invention.

Figure 2 is a perspective view of the restraining device, and

Figure 3 is a view showing the device in unwrapped and flat condition.

Observations of the driving swings of master golfers reveal that, without exception, all maintain a substantially stiff leading arm during the major portions of the back-swing and the follow-through, this rigidity of the arm being most pronounced at the moment of impact of the club head with the ball, at which instant the longitudinal axes of the golf club shaft and the said leading arm appear to be exactly colinear. This stroke technique is the key to the unusual distance and accuracy of direction which the better golfers achieve in their drives.

The novice and the average golfer may, if not properly instructed, unconsciously develop a seri-

2

ous defect in his drive stroke technique solely because he may follow the natural urge to flex his leading arm at the elbow either during the portion of the stroke preceding the impact with the ball or at the instant thereof. This invariably causes a slicing or topping of the ball with the result that insufficient loft is obtained and the ball may curve to the right or left from its desired line of flight. The most serious result however is the loss of drive power which is effected by the cushioning of the impact of the club head with the ball due to the arm flexure.

I have provided a restraining device which, when worn by the golfer for a short time during periods of driving practice, will so indelibly impress on him the proper arm action in the swing that, after the device is dispensed with, the said action will thereafter be unconsciously duplicated. In detail, the device comprises a substantially rectangular wrapper 4 of elasticized fabric of sufficient length to extend considerably above and below the crook of the arm 6 and of sufficient width to encircle the arm with a degree of overlap so as to form the tubular arm sleeve 7 as shown in Figures 1 and 2 respectively. The wrapper, as shown in Figure 3, is provided with oppositely extending sets of straps 8 one set of which is fitted with buckles 9, or other similar devices, relatively engageable so that the wrapper may be secured around the user's arm in the manner shown in Figure 2. The straps 8 are preferably formed of non-elastic fabric so that, in their planes of encirclement, they will resist radial expansion of the sleeve 7 due to bulging of the underlying arm muscles and thus lend a certain degree of rigidity to the sleeve useful in a manner to be explained presently. Such muscular bulging may occur however in the spaces between the straps where the intervening wrapper material is elastic.

Means are provided, extending longitudinally of the sleeve 7 for resiliently resisting longitudinal flexing thereof. Preferably sewn to the fabric 4, at a position substantially medially of the latter's width and spanning the group of at least the three upper straps 8, is a plurality of separated fabric pockets 10 each being adapted to receive, through an open end thereof, one or more strips 11 of recoilable material such as spring metal or the like. Flaps 12, secured to and overlying the open ends of the pockets 10 and fitted with fasteners 13, are provided for confining the strips 11 in the pockets. It will be noted that the centermost of the pockets 10 is longer than the others. This is

done for a reason which will be explained presently.

The sleeve is positioned on the user's arm, as shown in Figure 1, with the pockets 10 and the strips 11 contained therein located directly over and bridging the crook of the arm, the straps 8 being then drawn as snugly as possible without causing the person undue discomfort. This, depending on the degree of flexibility in the strips 11, will produce a decided resistance to unconscious bending of the arm at the elbow although not an extraordinary amount of effort will be required to deliberately cause flexure of the arm. In the execution of a driving shot the golfer addresses the ball in the usual way and starts his back-swing by first swinging the club backward by a movement of his wrists and then continuing with a twist of his body until the club has reached the rear limit of its travel. During all of this time the left or leading arm has been forcibly urged to retain a rigid condition which is the proper technique. However, it may be desired to flex the leading arm at the end of the upswing so as to bring the club head around in back of the player in order that the distance of travel required by the club head to reach the ball may be extended as far as possible. This may be done without a great amount of effort by contracting the arm muscles until the strips 11 are bent to the desired degree. Assistance in obtaining this flexure of the strips 11 is afforded by the intervening portions 14 of the elastic web material between the respective pockets 10 which, when the arm is forcibly flexed, expand to compensate for the muscular bulging adjacent the elbow which such flexing causes. Thus the tightening of the sleeve about the arm which would occur if the non-elastic strips 8 were continuous across the pockets 10 is obviated and wearing comfort is increased. The down swing is now started by simultaneously instituted recovery movements of the body and arm, the former being retarded relative to the latter so that, at the moment of impact of the club head with the ball, the leading arm will be substantially at right angles to the desired line of flight and the player will be directly facing the ball. At the start of the down swing the contracted muscles of the leading arm will become relaxed which will cause the flexed strips 11 to straighten out and consequently stiffen the arm. This stiffness fully obtains during the latter portion of the down stroke and at the moment of impact of the club head with the ball. The start of the follow-through portion of the stroke is also accomplished with this stiff arm motion, which is maintained for an interval after the tee-off position of the ball has been passed. This arm motion coupled with the impetus of the club head and the motion of the player's body produces a solid impact of the club head with the ball and serves to effect a resulting drive which is possessed of the maximum distance and a minimum of deflection from the designed line of flight of the ball.

The particular design and arrangement of the pockets 10 have their advantages. By providing access to each pocket through the open end thereof covered by the flap 12, additional strips 11 may be added to the one or more originally contained therein so that the resistance to flexure of the sleeve may be adjustably varied to accommodate a person with a comparatively strong arm or one with a relatively weak arm. Thus the sleeve may be readily adapted to men and women alike.

It will be noted that the centermost pocket

10 is longer than the others. The purpose of this arrangement is to place the ends of the strips 11 in staggered relation rather than in alignment so that, when the arm is flexed, the pressure of the strip ends against the arm will not be concentrated in a line which would create a measurably greater degree of discomfort than will the dispersal of the pressure points as shown.

The arm sleeve of my invention is not intended as an accessory for use during regular game play but rather as an aid during practice in correcting imperfections in the driving strokes. It has been found that after use of the device for only a comparatively short period of time it may be thereafter dispensed with for the reason that its corrections in the driving stroke will have become so impressed on the player that he will thereafter automatically and unconsciously follow them without the aid of the sleeve.

Having thus described our invention in detail, what we claim as new and desire to secure by Letters Patent is:

1. An instruction device for use by golfers comprising a wrapper of elastic material adapted to be positioned on the arm overlying the crook of the elbow, said wrapper having longitudinal and transverse dimensions of a size whereby the opposite edges of said wrapper may be placed in overlapped relationship to form a sleeve for enclosing the arm above and below the elbow, a plurality of pockets secured in parallel relationship on the surface of said wrapper and adapted to be positioned to bridge the crook of said arm longitudinally of the latter, non-elastic means secured to said wrapper and extending thereon rectangularly from said pockets, means associated with said non-elastic means for securing said opposite edges of the wrapper in overlapped position, and said non-elastic means limiting the elasticity of said sleeve, circumferentially, to portions of the wrapper lying between adjacent pockets and extending longitudinally of the latter.

2. An instruction device for use by golfers comprising a wrapper of elastic material adapted to be positioned on the arm overlying the crook of the elbow, said wrapper having longitudinal and transverse dimensions of a size whereby the opposite edges of said wrapper may be placed in overlapped relationship to form a sleeve for enclosing the arm above and below the elbow, a plurality of pockets secured in parallel relationship on the surface of said wrapper and adapted to be positioned to bridge the crook of said arm longitudinally of the latter, said pockets being of varying length whereby their respective ends are in staggered relationship, non-elastic straps secured to said wrapper and extending thereon rectangularly from said pockets, means associated with said non-elastic means for securing said opposite edges of the wrapper in overlapped position, and said non-elastic means limiting the elasticity of said sleeve, circumferentially, to portions of the wrapper lying between adjacent pockets and extending longitudinally of the latter.

3. An instruction device for use by golfers comprising a wrapper of elastic material adapted to be positioned on the arm overlying the crook of the elbow, said wrapper having longitudinal and transverse dimensions of a size whereby the opposite edges of said wrapper may be placed in overlapped relationship to form a sleeve for enclosing the arm above and below the elbow, non-elastic means for securing together the opposite edges of said wrapper, said non-elastic means

5

encircling substantially all the circumference of said sleeve except for small fractional portions of the zones to provide for limited expansibility of the sleeve in said zones, and a plurality of resilient strips secured on a surface of said sleeve and positioned to bridge the crook of the elbow, said strips bordering the limited expansible portions of said circumferential zones of the sleeve.

ANTHONY H. WEIS.

BERTHA M. WEIS.

REFERENCES CITED

The following references are of record in the file of this patent:

	Number
	802,623
5	932,066
	1,258,052
	1,388,772
	1,414,012
10	1,635,230

6

UNITED STATES PATENTS

Name	Date
Camp -----	Oct. 24, 1905
Smith -----	Aug. 24, 1909
Stall -----	Mar. 5, 1918
Sheehan -----	Aug. 23, 1921
Flint -----	Apr. 25, 1922
Spicer -----	July 12, 1927

FOREIGN PATENTS

Number	Country	Date
10,439	Great Britain -----	May 8, 1903