

THE TRIUMVIRATE ANALYZED

Second Article

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THE BACK SWING

IN my first article, which dealt with the stance and grip, no attempt was made to describe any of the body movement which constitutes the golf swing. It was necessary, before the actual swing could be taken up, to set forth the proper positions the hands, feet and body must assume if the swing is to be executed in the manner of the great masters. Although I have described these fundamental positions minutely it does not follow that slight variations are not permissible. This is so as regards the overlapping of the little finger, but it is most strongly recommended that this form of gripping be persevered in, until it is easy and natural; for it is in this feature, more than any other, that the chief virtues of the Vardon grip lie.

And these virtues are, to state them briefly, the placing of the strength in the first two fingers and the thumb of the right hand where it ought to be, which, besides allowing the right hand to be used to its full power, removes all necessity of endeavoring to restrain its dominance over the left which is one of the inherent weaknesses of the ordinary grip. It is this reduction of the power of the right, accomplished by the overlapping grip, that automatically makes a unit of the two hands.

Many who think they cannot use the overlapping grip—saying their hands are too small or that their fingers are too short, etc.—could use it comfortably if they would have the grips of their clubs made to fit their hands. A woman or girl who wears a No. 6 glove cannot be expected to use the same size grip as that on the club of a man who wears a No. 8½ glove, yet, this is practically the condition of affairs, as will be found, if you will take the trouble to investigate matters. The great golfers, Vardon, Braid, etc., are very careful to have the grips of their clubs fit their hands—very careful, indeed.

Don't try to make your hands fit the clubs, have the clubs made to fit your hands. It is easier and much more sensible; and if this is done, the club can be gripped in the manner described. But, if after a thorough trial, or through long use and ability to control the club with some other form of grip, the overlapping grip is not used, then at least, adjust the hands in the *position* indicated, for any variation in this feature of the grip, will defeat the purpose I indicated it served: that of placing the wrists in position to respond with correct action, without conscious effort, as the back swing is made.

Now that the first two fundamentals of the golf swing, the grip and stance have been described, the difficulty presents itself of picturing to you clearly the third fundamental, the back swing. This is a far more difficult task and to facilitate the description I have divided it into three parts according to the combinations and order in which they work. These three divisions are the work of the hands and wrists; the arms and shoulders; and the body, legs and feet. Each is distinct in itself, but in actual play the three are naturally blended into a smooth, harmonious, unbroken movement, without the slightest hitch or stiffness. Remember, however, there is a decided difference between stiffness and tension.

Of the three, the work of the hands and wrists is, by far, the most important: for as they lead the others must follow. It is with the hands and wrists the stroke is made, the other parts applying their power through them. In other words, the hands and wrists are the "executive" connection between the player and the club. Hence it follows, that if the hands are allowed to get out of control there is no means whereby the rest of the body can do its work effectively. This should be obvious, although it does not seem to be so well recognized as it might be. Most of the bad strokes in golf can be traced to the hands as the direct and primary cause of failure.

If then the action of the hands is so all important it is necessary to carefully determine the limits within which they work in going to the top of the swing. For this purpose photographs of Vardon, Braid, Taylor and Duncan showing them at this point in their swings are used. They all differ in physique and are generally said to use different types of swings. Yet I think I can conclusively show you, within certain limits that will be defined, that they all follow the same "track" in the back swing when allowance is made for their physical aptitudes and limitations.

Now this first limit which will be considered—and it is the principal element of a correct back swing—is that distance the hands are carried back from the line of play, i. e. the distance they will travel from the line across the feet (shown in the stance photographs) towards a line which runs parallel to it and back of the player. By referring to the stance photographs, illustrating my first article, it will be seen (and can be very easily verified by trying it) that a plumb line, dropped from the "heel" of the left hand, will strike the ground very slightly in front of the line



JAMES BRAID
Top of swing for drive

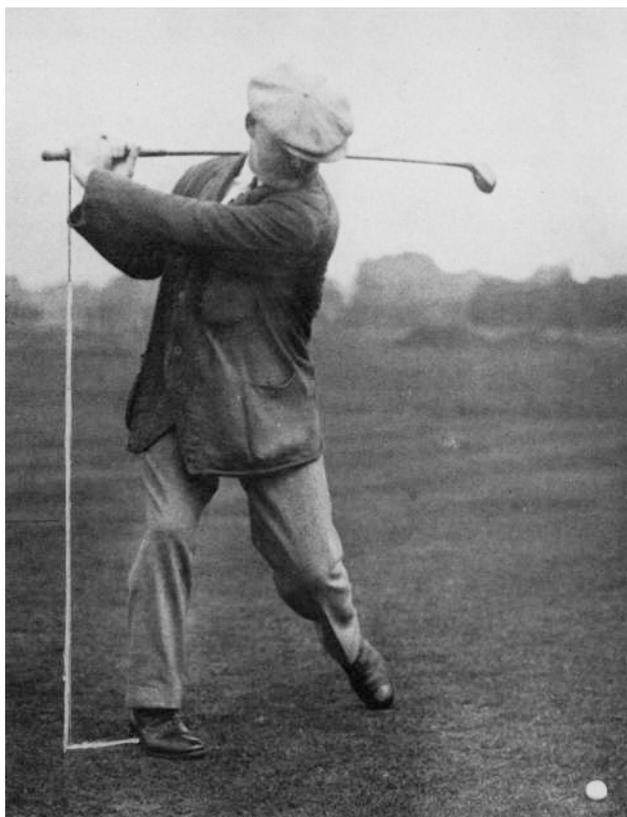
across the feet—about an inch, as a matter of fact. This line, for the purposes of this article, I shall hereafter speak of as "the line of flight." The "heel" of the left hand has been selected, to illustrate the point I desire to make, as it is the pivot of the hands: it is the point around which the hands turn in going to the top of the swing, and again in going back to the ball. On each of the photographs this plumb line has been drawn, and in each instance it comes inside a line drawn back of the right heel, parallel to the line of flight. The point where this line would strike the ground, both at the address and at the top of the swing, was very carefully determined while the photographs were being viewed in a stereoscope. This led me to observe the action of good players when driving, which proved my stereoscopic observation to be a fact. The height to which the hands are carried, is another matter of importance, that will be considered later. It will be sufficient to say, at this time, that the players selected for illustration show the proper height of the hands for those of similar build.

Now these photographs indicate more particularly how the hands assume the position you see them in at the top of the swing. In all the articles I have ever read, in books and magazines, talks with professional golf instructors, it has always been distinctly stated that the "hands are carried around the body." Some advocate one method and some another, but all agree that the hands are carried around the body, by and of, themselves: that the hands leave the direct back line and are carried around the body by

their own movement. This agreement is not the result of analysis but merely the delineation of sensation which creates a state of mind destructive of any true view of the action that takes place.

The sensation *is* that the hands are being swung around the body. This I fully agree with, but it will be seen, at least as I have analyzed the stroke, that they are not swung around the body, so far as any independent movement of their own is concerned.

To swing back in the correct track and to get into the position shown in the photographs, take the grip and stance as described in the first article, remembering to keep the head still, the eye on the ball and to be careful not to let the body sway. Now let the body turn on an axis. This axis can be best understood if we assume that the spine is fastened to a rod that would be a continuation of it and set at the angle of inclination of the upper body. At the lower end, this rod would be fastened to the ground some distance back of the feet and at the upper end at a point over and in front of the head. The head, if you will remember its position described in my remarks upon the stance, will be inclined slightly forward of the angle of inclination of the body. If now you imagine your body fastened to this rod you will readily see why it cannot sway but must *turn* on a very definite axis. In the article on the down swing, this point will be made very clear: a thorough "sensing" of this important element will be attempted: a method explained which has been of



J. H. TAYLOR
Top of swing for drive

the utmost satisfaction to myself and others. For the present purpose however, that of explaining the turn of the body without sway, the foregoing is sufficient.

Keeping these points in mind—stance, grip and the body turn—*swing* the club with the *hands* directly backward. As it is the action of the hands we are considering, and as the club must go where the hands take it, and thus, naturally, the club head will lead, the track of the club head will not be considered at this time, but only the track of the hands. This being understood, swing the hands backward along a line which would be a continuation of the line across the feet, the line of flight, previously referred to. Notice carefully I say the hands. Don't try to start any other part, for as I have already stated, if the hands lead, the other parts of the body will follow, if you allow them to do so.

If the arms are allowed to follow the hands naturally as they swing back, the left shoulder will go down and the right one up and the hands will gradually reverse their positions, the right one becoming the upper and the left one the lower. If no restraint is placed upon the body it will naturally accompany this movement of the hands, arms and shoulders, by turning toward the right at the hips and cannot sway if we remember the spine is attached to the rod spoken of above. This turning or twisting of the hips will cause the left hip to go down as well as around, and the left leg to bend at the knee. As this turning motion continues, the left knee will gradually bend in toward the right and the left heel will rise bringing the left foot into a position where it touches the ground only on the inside, from the end of the great toe to the ball of the foot.

This action of the left leg and foot will not be a conscious effort, but the result of keeping the spine still and turning *under it*. Try and get this very clearly in mind: *you turn under the spine, while holding it still* and in its original position.

You will find—without any attempt on your part to accomplish it—that as the hands swing back and the body turns, the left and right shoulders, besides going down and up respectively, are rotating. As these indicated motions continue—without the least effort to get the hands around the body—the hands will be stopped when they have reached a point about the height of the right ear and the club shaft will drop to the position shown in the photographs by a sharp bending down of the *wrists* and the wrists *only*. This wrist motion—and it is *the* wrist action of the golf stroke—has been prepared for all the time you were swinging back, if you followed the line indicated and did not allow the least change to take place in the position of the hands on the grip of the club. The left wrist was turning over all the time (you did *not* try to turn it) and was being prepared for the quick drop into position. It is this drop of the wrists, without slackening the grip or giving way

anywhere, that sets the tension for the down stroke. It is the percussion cap which fires the loaded gun.

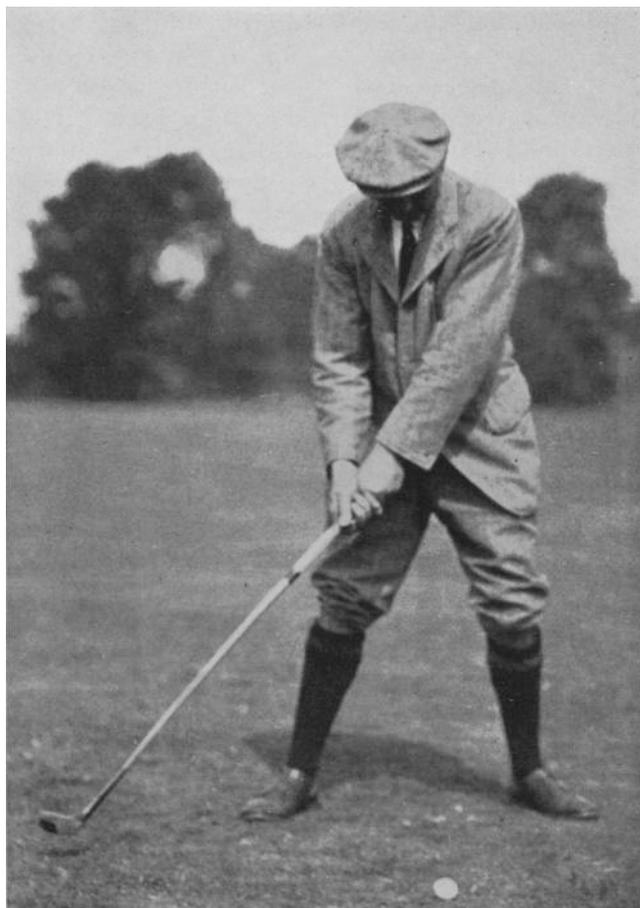
Remember clearly that there has been no conscious turning over of the left wrist in going back. It was the position of the left wrist in the grip that, following the line of the back swing, made this action involuntary and hence natural. If you have swung the hands straight back and have kept the left elbow



HARRY VARDON
Top of swing for drive

from bending more than was absolutely necessary to take off undue strain, and have twisted the body to the right to the proper degree, then, when you drop the club into position with the wrists, it will just miss the back of the head and finally come to rest almost touching the back of the neck, close to the base of the skull. It is a good idea, in practising this movement, to let it touch, in order to know that the club is on the right track. When swinging freely in this manner the club head can be seen out of the "corner" of the left eye, surely an indication that there is no stiffness in it nor anything mechanical.

Now, note carefully, you have not carried the hands around the body a single inch by any independent movement of their own. They have simply been swung backward and upward—it was the twisting or turning of the body at the hips and the rotating motion of the shoulders that have taken the hands to a place that allowed the club shaft to be



HARRY VARDON
Starting the back swing for drive

dropped by the wrists to its correct position. In no other way can the club be *swung directly* to this point. If the hands are swung *around* the body and the shoulders are allowed to work properly, then the dropping of the wrists will bring the club shaft outside the point of the right shoulder instead of inside and close to the neck. This position is wrong, taking Vardon, Braid, Taylor and others of the great golfers as examples of correct methods, and the down swing cannot be correctly performed. This point will be discussed in a later article.

Furthermore, a deliberate swing around the body with the hands will bend the left elbow, which is *distinctly* and *fundamentally* wrong, and is not done by the great players.

Always remember, that while I have described the parts of the back swing in detail, they must be done in one unbroken movement when swinging at the ball, and done without stiffness (again remembering that proper tension is not stiffness). To get them in order and feel the reason for each part in relation to all other parts, they will, of course, have to be done slowly and carefully. Once getting the idea, the rhythm can be worked up to.

The action of the right arm has not been gone into, for the reason that it has worked correctly if the original position of grip has not been allowed to

change. It has bent at the elbow in response to the changing position of the hands, the right going around the left and coming in toward the body, shortening the distance from right shoulder to hand. If the left arm has been kept as straight as possible, without too much strain, the right arm has been compelled to accommodate itself to this condition. The right elbow has only gone back to the position it would naturally go back to in making the movement described. Any deliberate attempt to get the right elbow back, will result in cramping the right arm and will take the club head off the track it should follow.

When you have arrived at the top of the swing in the manner I have described, your hands will be inside the limits indicated as necessary for control, and a person standing at your right will see that a vertical line dropped from the "heel" of the left hand would strike the ground at a point inside your right heel, as shown in the photographs. The left arm will be extended, practically straight, the left arm pit will be closed, but from this point the left arm will not touch the chest.

All the positions I have described as taking place from swinging in this manner are quite correct, according to the "books," and are correct as a matter of fact. You have reached these positions and have correctly placed yourself by not trying any complicated movement such as a conscious preliminary turning over of the left wrist. Your methods have been the simplest possible: you have merely followed the "lines of least resistance."

I have laid stress on the keeping of the left arm straight—a point the books and professional golfers do not go into, so, far as I know—but it is, nevertheless, a very important factor in the correct golf stroke.

Mr. Walter Camp, the famous Yale authority on sports, the "Father of American Football," has, I understand, written on the subject of the straight left arm in the golf stroke. I have not read his articles on this subject, but I am satisfied that so keen a student of all things athletic as Mr. Camp, has correctly seen the reason for this feature of the golf stroke, as exemplified by the players whom he has studied. So I feel that I am in the very best company when I call attention to this particular feature. I will give my own thoughts on the subject, and will be interested to read later Mr. Camp's article and see if we agree. I would advise all to read Mr. Camp's article, as anything he has to say is always well worth serious consideration.

Don't bend it at the elbow: or as I have said before, bend it as little as possible. The turning of the body, with the hands going straight back, will remove any tendency in this direction. I emphasize this point for two reasons: in the first place, a straight left arm gives a sure guide to bringing the club head back to the exact spot from where it started; secondly, it is the foundation upon which the wrists acquire

their tension as they drop the club back of the head, giving them that tremendous spring which I pointed out above is the *only* wrist action in the golf stroke. The straight left arm is the one sure guide that this powerful release of wrist tension will be delivered at the proper time and in the proper direction, assisted, of course, by the other parts of the body coming properly into the stroke. The left arm, from the shoulder to the wrist joint, is the pivot on which the hands, wrists, arms and shoulders work in the golf stroke, or perhaps, one should say it is the rudder, for it steers the work of these members.

To impress on your mind the *fact* of the straight backward swing of the hands, and also the *fact* that the left arm can be kept straight without discomfort try the following simple exercise. Take stance and grip, keeping the head still and the eyes on the ball. Without moving the hands or the arms, but allowing them to go with the movement of the body, turn the body at the hips, to the right, to the point to which it turned in swinging back, easing the left leg and foot. When this position has been reached, raise the hands straight up from the ground, retaining a firm grip, until they are about the height of the right shoulder. Now raise the club with the wrists (don't bend the left elbow and notice the right hand go around the left and that it bends the right elbow) until the shaft is raised as much as it can be without absolute strain on the left wrist—but get all the tension you can. In this position the shaft will be pointing upward and backward at an angle and will pass opposite the right ear. Now, turn the shoulders, letting the left go down and around under the chin and the right up and back. This will bring the club shaft into correct position back of the neck. The hands will be at the height of the right ear, the left arm straight, and the right arm and elbow will be correctly positioned. Right here, let me say, that any attempt to keep the right elbow down, in and close to the body is wrong: has caused a lot of misconception: and has cramped the style of many a golfer. Let this arm work naturally and it will take its proper place easily and automatically (see the position of the right elbow in the photographs).

When you have performed this simple exercise, you will find your hands are where they ought to be: that a line dropped as indicated will strike the ground inside the right heel: and that they have reached this position without any swing around the body of themselves. They have been taken around the body by the turning of the hips and the movement of the shoulders. You will further notice that you have not had to bend the left elbow to get the club to a horizontal position, back of the neck. It was the bending of the wrists and the movement of the shoulders that did this, and it is the bending of the wrists which constitutes "wrist action" in the golf stroke, and puts tension in them, ready for action in the down stroke.

If you have not allowed the body to sway in performing this exercise a very valuable sense of the action of the left leg and foot will be obtained, as well as the stiffening or tension, of the right leg and hip, so you will know when they are working right in the actual swing.

The really valuable thing about the foregoing exercise is to prove that you *can* place yourself correctly: therefore, it follows, you can *swing* to the correct position by following the methods which have been pointed out. At first, possibly, and very probably, this position cannot be reached comfortably, when swinging the club back, but continuous practice will loosen the muscles and enable you to get to the proper position easily.

Another way to get this idea of the straight swing back of the hands and the keeping of the left arm straight clearly in mind is as follows: Take an object directly in line back of the ball, or have someone stand at a safe distance back of it, out of range of the club head. This will be to your right: but it is a line from the ball which must be taken, not from yourself. Stand and grip correctly, and allowing the body to turn in the proper way, and the shoulders to respond freely, try to swing the club head straight back to



GEORGE DUNCAN
Top of swing for drive

the object or person back of the ball. Look at the club head while doing it, and see the track it takes and where your hands go. You certainly are not trying to get them around the body: still they will go directly to the correct position at the top of the swing, and the wrists will drop the club shaft into quite the correct position when the hands stop at the right height. This is the very simplest method I can think of to get the idea of the straight back swing of the hands into your mind, and to convince you that if you do swing them so, the club will go in the proper track: always providing you allow the body to turn correctly and the shoulders to work properly. Furthermore, by this exercise, you will loosen the swing and get rhythm into it.

What must be apparent to you now is the simplicity and naturalness reflected in the easy movements of the great golfers that is at bottom the reason for the power and accuracy of their strokes. They never assume unnatural and strained postures, rather, every position they take holds latent the correct position that is to follow it.

REMARKS

While I have said that the grip does not relax when the wrists are dropped, or bent, at the top of the swing, this does not mean that a "death grip" is ever taken or maintained. The very fact that the wrists can be bent freely, with the hands kept in position, indicates the grip is not too tight. The wrists must be allowed to work as freely as is consistent with keeping proper tension. The manner in which the wrists work will be a safe guide as to whether your grip is of the proper tightness.

The hands must not be opened to drop the club back of the neck nor must the grip be so tight as to cramp the wrists in this action. It is all a matter of getting sufficient control in the grip without too tight a grip. Certainly one must have strength in the grip, for without it no power can be applied.

The most careful observation has shown me that Vardon, Taylor and Braid do not allow the slightest change in the *position* of their hands on the club to take place. Any change in *tension* which may take place during the swing is unconscious, is inherent in the swing.

By following the track of the back swing as it has been described, it will be found to be perfectly easy and natural to keep the hands always in close contact with the club grip, and there will be no necessity of opening them at the top to drop the club to the horizontal.

They are always in position to do their work at exactly the proper time, and no thought will be necessary after a little practice. Their work will be done instinctively.

To prevent any misconception on the matter of the opening of the hands, it is well to say, that with-

out any *conscious* opening, the left hand will slightly open at the back, i. e. the little and third finger will not be gripping so very firmly as to prevent this slight relaxing. The point I am trying to fix in mind, is the danger of trying to open the hands deliberately.

It is undoubtedly a fact that the ball can be "struck" from quite a different position to that shown in the photographs of Vardon, Braid, Taylor and Duncan, but, as Taylor says, "It may be a game, but it is not golf." It may be that one can get to the position these men are in at the top of their stroke, in a way different from that which I have set forth, but he will have to waste energy to do so: will have to force the club back into the right track somewhere during the swing, and will thus lose the smooth action so necessary to timing the stroke.

The great feature of Vardon's play, is the exceeding smoothness of his stroke. There is no waving of his club anywhere, it goes direct to the top of the swing and as directly back to the ball. The swing I have indicated, will take the club to the top of the swing smoothly and easily and will place one in a position to deliver the swing at the ball with power and snap, if he has followed the track and has not allowed the tension to relax.

This tension is momentary, it cannot be sustained for an appreciable time, but nevertheless, it must be distinctly felt at the top of the swing.

While the golf stroke is made with all the power that can be applied, this power is limited and controlled by the conditions. It is in no sense a slugging proposition, but a swinging blow, or hit, with a lot of snap in it just at the ball.

Before one is ready for the down swing, he should accustom himself to the grip: once acquired it will be perfectly easy and comfortable. A feeling of control and unity of action of the hands is engendered, and it will never be discarded (as witness the greatest players in the world).

The stance should be taken carefully and correctly until habit will cause one to take it instinctively, when addressing the ball.

Then the motions of the back swing should be gone through in detail, until the club can be taken to the top of the swing with an easy, natural, *swinging* motion, following the track described, with the left arm kept fairly straight and the wrists bent to get the tension.

Then he is ready for what Braid has aptly called "the bursting of the tension": in other words the down stroke, the impact and the follow through.

I was very careful to say in my introduction to this series of articles, that I wanted the analysis which I am making, to be judged as a whole, in its completed form. I again repeat this, as only in the "final analysis" will the reason and relation of all the things I am trying to make clear be apparent.

As the immortal Bunsby said, "the bearing of my observations will lay in the application of them."