# TENNIS FOR EVERYONE



A Beginner's Guide To Tennis

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Editors Note: The information in this ebook was originally released as The Art of Lawn Tennis by William T. Tilden.

Mr Tilden was a renowned student and player of the game of tennis. The techniques set forth in this ebook hold true to this day.

#### INTRODUCTION

Tennis is at once an art and a science. Yet like all true art, it has its basis in scientific methods that must be learned and learned thoroughly for a foundation before the artistic structure of a great tennis game can be constructed.

Every player who hopes to attain a high degree of efficiency should have a clearly defined method of development and adhere to it. They should be certain that it is based on sound principles and, once assured of that, follow it, even though their progress seems slow and discouraging.

I began tennis wrong. My strokes were wrong and my viewpoint clouded. I had no early training. No one told me the importance of the fundamentals of the game, such as keeping the eye on the ball or correct body position and footwork. I was given a racquet and allowed to hit the ball. Naturally, like all beginners, I acquired many very serious faults. I worried along with moderate success until I graduated from school, beating some fairly good players, but losing some matches to opponents below my class. The year following my graduation the new Captain of my Alma Mater's team asked me if I would aid him in developing the squad for next year. Well, "Fools rush in where angels fear to tread," so I said Yes.

At that point my tennis education began.

The youngsters comprising our tennis squad all knew me well and felt at perfect liberty to ask me as many questions as they could think up. I was besieged withquestions that, frankly, Idid not know the answers to, but I answered them something at the moment and said to myself it was time I learned some fundamentals of tennis. So I began to study the reasons why certain shots are missed and others made. Why certain balls are hit so much faster though with less effort than others, and why some players are great while most are only good. I am still studying, but my results to date have resulted in a definite system to be learned, and it is this which I hope to explain to you in my book.

#### **TENNIS TERMS**

Tennis has a language all its own. The idioms of the game should be learned, as all books on the game are written in tennis parlance. The technical terms and their counterpart in slang need to be understood to thoroughly grasp the idea in any written tennis account.

I do not believe in using a great deal of space carefully defining each blade of grass on a court, or each rule of the game. It gets nowhere. I do advocate teaching the terms of the game.

#### 1. THE COURT.

The Baseline=The back line.

The Service-line=The back line of the service court, extending from side-line to side-line at a point 21 feet from the net.

The Alleys=The space on each side of the court between the side service-line and the outside sideline of a doubles court. They are used only when playing doubles and are not marked on a single court.

The Net=The barrier that stretches across the court in the exact centre. It is 3 feet high at the centre and 3 feet 6 inches high at the posts which stand 3 feet outside the sidelines.

## STROKES (Two General Classes).

A. Ground strokes=All shots hit from the baselines off the bounce of the ball.

B. Volleys=Shots hit while the ball is in flight through the air, previous to its bound.

The Service=The method of putting the ball in play.

The Drive=A ground stroke hit with a flat racquet face and carrying top spin.

The Chop=An undercut ground stroke is the general definition of a chop. The slice and chop are so closely related that, except in stroke analysis, they may be called chop.

Stop Volley=Blocking a ball short in its flight.

Half Volley or Trap Shot=A pick up.

The Smash=Hitting on the full any overhead ball.

The Lob=Hitting the ball in a high parabola.

## 3. TWIST ON THE BALL.

Top Spin=The ball spins towards the ground and in the direction of its flight.

Chop, Cut, or Drag=The ball spins upwards from the ground and against the line of flight. This is slightly deviated in the slice, but all these terms are used to designate the under-struck, back-spinning ball.

Reverse Twist=A ball that carries a rotary spin that curves one way and bounces the opposite.

Break=A spin which causes the ball to bounce at an angle to its line of flight.

- 4. LET=A service that touches the net in its flight yet falls in court, or any illegal or irregular point that does not count.
- 5. FAULT=An illegal service.
- 6. OUT=Any shot hit outside legal boundaries of the court.
- 7. GOOD=Any shot that strikes in a legal manner prescribed by rules of the game.
- 8. FOOTFAULT=An illegal service delivery due to incorrect position of the server's feet.
- SERVER=Player delivering service.
- 10. RECEIVER or STRIKER=Player returning service.

#### THE COURT

# **Playing Lines**

The outside dimensions of the playing lines shall be as follows:

Doubles 36' x 78' (10.973 m x 23.774 m) Singles 27' x 78' (8.230 m x 23.774 m)

All lines shall be not less than 1" (2.54 cm) or more than 2" (5 cm) in width, except the base line which may be up to 4' (10 cm) in width and the center line which shall be 2" (5 cm) in width.

This allowable variation in line width results in non-uniformity and confusion and, therefore, the U.S. Tennis Court and Track Builders Association recommends that all lines be 2" (5 cm) in width, except the base line which may be up to 4" (10 cm) in width.

All measurements shall be to the outer edge of the lines except the center line and the center mark which shall be on the center line of the court.

## **Tolerance**

The lines shall be laid out and applied as close to the exact measurements as is possible within the limitations of the surface on which they are being applied. At no time shall the line dimensions vary more then one-quarter inch from the exact measurement. The type of surface and intended purpose of the court, i.e. recreation, club, tournament, etc., however, shall be the factors considered in determining the allowed tolerance.

# **Back Space**

Tournament play requires a minimum 21' (6.401 m) from base line to fixed obstruction (i.e. backstop, wall, etc.). In non-tournament play, this distance may be reduced to 18' (5.486 m).

## Side Space

Not less than 12' (3.658 m) from side line to fixed obstruction (i.e. sidestop, light pole, wall, etc.).

For indoor courts where netting is used between courts, the netting is considered to be a movable obstruction, in which case 9' (2.743 m) is considered a minimum between sideline and netting. Only where space limitations become a factor and the 12' (3.658 m) minimum cannot be provided may the side space from side line to a fixed obstruction be reduced to a minimum of 9-1/2' (2.896 m). This dimension does not restrict obstructions at the net line; for example, the net post of the adjacent courts or light standards.

# **Net Posts**

Net posts shall be set 3' (.914 m) outside the side line 33' (10.058 m) singles, 42' (12.802 m) doubles, center to center of posts. The top of the net at the inside face of the posts or supports when used to support a net for singles play on a doubles court shall be exactly 42" (1.067 m) above the court surface. There shall be no obstruction above the top of the net at any point, including at the post.

# **Playing Lines**

Base lines shall be not more than four inches (4") wide and playing lines not more than two inches (2") wide, accurately positioned in accordance with regulations of the United States Tennis Association.

# TENNIS TECHNIQUE--STROKES AND FUNDAMENTALS OF THE GAME

#### FOR NOVICES ONLY

I trust this initial effort of mine in the world of writing will find a place among both novices and experts in the tennis world. I am striving to interest the student of the game by a somewhat prolonged discussion of match play, which I trust will shed a new light on the game.

Now I will turn to the novice at my opening and speak of certain matters which are second nature to the skilled player.

The best tennis equipment is not too good for the beginner who seeks really to succeed. It is a saving in the end, as good quality material so far outlasts poor.

Always dress in tennis clothes when engaging in tennis. White is the established colour. Soft shirt, white flannel trousers, heavy white socks, and rubber-soled shoes form the accepted dress for tennis. Do not appear on the courts in dark clothes, as they are apt to be heavy and hinder your speed of movement, and also they are a violation of the unwritten ethics of the game.

The question of choosing a racquet is a much more serious matter. I do not advocate forcing a certain racquet upon any player. All the standard makes are excellent. It is in weight, balance, and size of handle that the real value of a racquet frame depends, while good stringing is, essential to obtain the best results.

The average player should use a racquet that weighs between 13 1/2 and 14 1/2 ounces inclusive. I think that the best results may be obtained by a balance that is almost even or slightly heavy on the head. Decide your handle from the individual choice. Pick the one that fits comfortably in the hand. Do not use too small a handle or too light a racquet, as it is apt to turn in the hand. I recommend a handle of 5 1/4 to 5 3/8 inches at the grip. Do not use a racquet you do not like merely because your best friend advises it. It may suit him perfectly, but would not do for you at all. Do not start children playing tennis with an under-sized racquet. It weakens the wrist and does not aid the child in learning strokes. Start a child, boy or girl, with a full-sized racquet of at least 13 ounces.

After you have acquired your racquet, make a firm resolve to use good tennis balls, as a regular bounce is a great aid to advancement, while a "dead" ball is no practice at all.

If you really desire to succeed at the game and advance rapidly, I strongly urge you to see all the good tennis you can. Study the play of the leading players and strive to copy their strokes. Read all the tennis instruction books you can find. They are a great assistance.

More tennis can be learned off the court, in the study of theory, and in watching the best players in action, than can ever be learned in actual play. I do not mean miss opportunities to play. Far from it. Play whenever possible, but strive when playing to put in practice the theories you have read or the strokes you have watched.

Never be discouraged at slow progress. The trick over some stroke you have worked over for weeks unsuccessfully will suddenly come to you when least expected. Tennis players are the product of hard work. Very few are born geniuses at the game.

Tennis is a game that pays you dividends all your life. Tennis provides relaxation, excitement, exercise, and pure enjoyment to the man who is tied hard and fast to his business until late afternoon. Age is not a drawback. Vincent Richards held the National Doubles Championship of America at fifteen, while William A. Larned won the singles at past forty. Men of sixty are seen daily on the courts enjoying their game as keenly as any boy. It is to this game, in great measure, that they owe the physical fitness which enables them to play at their advanced age.

Tennis is a game worth playing and playing well. It deserves your best, and only by learning it correctly can you give that best.

If in my book I help you on your way to fame, I feel amply repaid for all the time spent in analyzing the strokes and tactics I will set before you in these pages.

I am going to commence my explanation by talking to the players whose games are not yet formed. At least once every season I go back to first principles to pull myself out of some rut into which carelessness dropped me.

From a long and, many times, sad experience over a period of some ten years of tennis, I believe the following order ofdevelopment produces the quickest and most lasting results:

- 1. Concentration on the game.
- 2. Keep the eye on the ball.

- 3. Foot-work and weight-control.
- 4. Strokes.
- 5. Court position.
- 6. Court generalship or match play.
- 7. Tennis psychology.

Tennis is a game of intimate personal relation. You constantly find yourself meeting some definite idea of your opponent. The personal equation is the basis of tennis success. A great player not only knows himself, in both strength and weakness, but he must study his opponent at all times. In order to be able to do this a player must not be hampered by a glaring weakness in the fundamentals of his own game, or he will be so occupied trying to hide it that he will have no time to worry his opponent. I am trying to make clear the importance of such first principles as I will now explain.

## CONCENTRATION

Tennis is played primarily with the mind. The most perfect racquet technique in the world will not suffice if the directing mind is wandering. There are many causes of a wandering mind in a tennis match. The chief one is lack of interest in the game. No one should play tennis with an idea of real success unless he cares sufficiently about the game to be willing to do the drudgery necessary in learning the game correctly. Give it up at once unless you are willing to work. Conditions of play or the noises in the gallery often confuse and bewilder experienced match-players playing under new surroundings. Complete concentration on the matter in hand is the only cure for a wandering mind, and the sooner the lesson is learned the more rapid the improvement of the player.

The surest way to hold a match in mind is to play for every set, every game in the set, every point in the game and, finally, every shot in the point. A set is merely a conglomeration of made and missed shots, and the man who does not miss is the ultimate victor.

Please do not think I am advocating "pat-ball." I am not. I believe in playing for your shot every time you have an opening. I do not believe in trying to win the point every time you hit the ball. Never allow your concentration on any game to become so

great that you do not at all times know the score and play to it. I mean both point score and game score. In my explanation of match play in a later chapter I am going into a detailed account of playing to the score. It is as vital in tennis as it is in bridge, and all bridge players know that the score is the determining factor in your mode of bidding. Let me urge again concentration. Practise seriously. Do not fool on the court, as it is the worst enemy to progress. Carelessness or laziness only results in retrogression, never progress.

Let me turn now to the first principle of all ball games, whether tennis, golf, cricket, baseball, polo, or football.

## KEEP YOUR EYE ON THE BALL!

Just a few statistics to show you how vital it is that the eye must be kept on the ball UNTIL THE MOMENT OF STRIKING IT.

About 85 per cent of the points in tennis are errors, and the remainder earned points. As the standard of play rises the percentage of errors drops until, in the average high-class tournament match, 60 per cent are errors and 40 per cent aces. Any average superior to this is super-tennis.

Thus the importance of getting the ball in play cannot be too greatly emphasized. Every time you put the ball back to your opponent you give him another chance to miss.

There are several causes for missing strokes. First, and by far the largest class, is not looking at the ball up to the moment of striking it. Fully 80 per cent of all errors are caused by taking the eye from the ball in the last one-fifth of a second of its flight. The remaining 20 per cent of errors are about 15 per cent bad footwork, and the other 5 per cent poor racquet work and bad bounces.

The eye is a small camera. All of us enjoy dabbling in amateur photography, and every amateur must take "action" pictures with his first camera. It is a natural desire to attain to the hardest before understanding how to reach it. The result is one of two things: either a blurred moving object and a clear background, or a clear moving object and a blurred background. Both suggest speed, but only one is a good picture of the object one attempted to photograph. In the first case the camera eye was focused on the background and not on the object, while in the second, which produced the result desired, the camera eye was firmly focused on the moving object itself. Just so with the human eye. It will give both effects, but never a clear background and moving object

at the same time, once that object reaches a point 10 feet from the eye. The perspective is wrong, and the eye cannot adjust itself to the distance range speedily enough.

Now the tennis ball is your moving object while the court, gallery, net, and your opponent constitute your background. You desire to hit the ball cleanly, therefore do not look at the other factors concerned, but concentrate solely on focusing the eye firmly on the ball, and watching it until the moment of impact with your racquet face.

"How do I know where my opponent is, or how much court I have to hit in?" ask countless beginners.

Remember this: that a tennis court is always the same size, with the net the same height and in the same relation to you at all times, so there is no need to look at it every moment or so to see if it has moved. Only an earthquake can change its position. As to your opponent, it makes little difference about his position, because it is determined by the shot you are striving to return. Where he will be I will strive to explain in my chapter on court position; but his whereabouts are known without looking at him. You are not trying to hit him. You strive to miss him. Therefore, since you must watch what you strive to hit and not follow what you only wish to miss, keep your eye on the ball, and let your opponent take care of himself.

Science has proved that given a tennis ball passing from point A to point B with the receiving player at B, that if the player at B keeps his eye on the ball throughout its full flight his chance of making a good return at B is five times as great as if he took his eye off the ball at a point 4, or 4/5 of a second of its flight. Likewise it is ten times as great at B as it is if the eye is removed from the ball at 3, or 3/5 of a second of its flight. Why increase your chances of error by five times or ten times when it is unnecessary?

The average player follows the ball to 4, and then he takes a last look at his opponent to see where he is, and by so doing increases his chance of error five times. He judges the flight of the ball some 10 feet away, and never really sees it again until he has hit it (if he does). A slight deflection caused by the wind or a small misjudgment of curve will certainly mean error. Remembering the 85 percent errors in tennis, I again ask you if it is worth while to take the risk?

There are many other reasons why keeping the eye on the ball is a great aid to the player. It tends to hold his attention so that

outside occurrences will not distract you and movements in the gallery are not seen

# GRIP, FOOTWORK, AND STROKES

Footwork is weight control. It is correct body position for strokes, and out of it all strokes should grow. In explaining the various forms of stroke and footwork I am writing as a right-hand player. Left- handers should simply reverse the feet.

Racquet grip is a very essential part of stroke, because a faulty grip will ruin the finest serving. There is the so-called Western or Californian grip which is a natural grip for a top forehand drive. It is inherently weak for the backhand, as the only natural shot is a chop stroke.

The English grip, with the low wrist on all ground strokes, has proved very successful in the past. Yet the broken line of the arm and hand does not commend itself to me, as any broken line is weak under stress.

The Eastern American grip, which I advocate, is the English grip without the low wrist and broken line. To acquire the forehand grip, hold the racquet with the edge of the frame towards the ground and the face perpendicular, the handle towards the body, and "shake hands" with it, just as if you were greeting a friend. The handle settled comfortably and naturally into the hand, the line of the arm, hand, and racquet are one. The swing brings the racquet head on a line with the arm, and the whole racquet is merely an extension of it.

The backhand grip is a quarter circle turn of hand on the handle, bringing the hand on top of the handle and the knuckles directly up. The shot travels ACROSS the wrist.

This is the best basis for a grip. I do not advocate learning this grip exactly, but model your natural grip as closely as possible on these lines without sacrificing your own comfort or individuality.

Having once settled the racquet in the hand, the next question is the position of the body and the order of developing strokes.

In explaining footwork I am, in future, going to refer in all forehand shots to the right foot as R or "back" foot, and to the left as L or "front." For the backhand the L foot is "back" and R is "front."

All tennis strokes, should be made with the body' at right angles to the net, with the shoulders lined up parallel to the line of flight of the ball. The weight should always travel forward. It should pass from the back foot to the front foot at the moment of striking the ball. Never allow the weight to be going away from the stroke. It is weight that determines the "pace" of a stroke; swing that, decides the "speed."

Let me explain the definitions of "speed" and "pace." "Speed" is the actual rate with which a ball travels through the air. "Pace" is the momentum with which it comes off the ground. Pace is weight. It is the "sting" the ball carries when it comes off the ground, giving the inexperienced or unsuspecting player a shock of force which the stroke in no way showed.

A great many players have both "speed" and "pace." Some shots may carry both.

The order of learning strokes should be:

- 1. The Drive. Fore- and backhand. This is the foundation of all tennis, for you cannot build up a net attack unless you have the ground stroke to open the way. Nor can you meet a net attack successfully unless you can drive, as that is the only successful passing shot.
- 2. The Service.
- 3. The Volley and Overhead Smash.
- 4. The Chop or Half Volley and other incidental and ornamental strokes.

#### THE DRIVE

The forehand drive is the opening of every offensive in tennis, and, as such, should be most carefully studied. There are certain rules of footwork that apply to all shots. To reach a ball that is a short distance away, advance the foot that is away from the shot and thus swing into position to hit. If a ball is too close to the body, retreat the foot closest to the shot and drop the weight back on it, thus, again, being in position for the stroke. When hurried, and it is not possible to change the foot position, throw the weight on the foot closest to the ball.

The receiver should always await the service facing the net, but once the serve is started on the way to court, the receiver should at once attain the position to receive it with the body at right angles to the net.

The forehand drive is made up of one continuous swing of the racquet that, for the purpose of analysis, may be divided into three parts:

- 1. The portion of the swing behind the body, which determines the speed of the stroke.
- 2. That portion immediately in front of the body which determines the direction and, in conjunction with weight shift from one foot to the other, the pace of the shot.
- 3. The portion beyond the body, comparable to the golfer's "follow through," determines spin, top or slice, imparted to the ball.

All drives should be topped. The slice shot is a totally different stroke.

To drive straight down the side-line, construct in theory a parallelogram with two sides made up of the side-line and your shoulders, and the two ends, the lines of your feet, which should, if extended, form the right angles with the side-lines. Meet the ball at a point about 4 to 4 1/2 feet from the body immediately in front of the belt buckle, and shift the weight from the back to the front foot at the MOMENT OF STRIKING THE BALL. The swing of the racquet should be flat and straight through. The racquet head should be on a line with the hand, or, if anything, slightly in advance; the whole arm and the racquet should turn slightly over the ball as it leaves the racquet face and the stroke continue to the limit of the swing, thus imparting top spin to the ball.

The hitting plane for all ground strokes should be between the knees and shoulders. The most favourable plane is on a line with the waist.

In driving across the court from the right (or No. 1) court, advance the L or front foot slightly towards the side-line and shift the weight a fraction of a second sooner. As the weight shifts, pivot slightly on the L foot and drive flat, diagonally, across the court. Do not "pull" your cross-court drive, unless with the express purpose of passing the net man and using that method to disguise your shot.

NEVER STEP AWAY FROM THE BALL IN DRIVING CROSS COURT. ALWAYS THROW YOUR WEIGHT IN THE SHOT.

The forehand drive from the No. 2 (or left) court is identically the same for the straight shot down your opponent's forehand. For the cross drive to his backhand, you must conceive of a diagonal line from your backhand corner to his, and thus make your stroke with the footwork as if this imaginary line were the side-line. In other words, line up your body along your shot and make your regular drive. Do not try to "spoon" the ball over with a delayed wrist motion, as it tends to slide the ball off your racquet.

All drives should be made with a stiff, locked wrist. There is no wrist movement in a true drive. Top spin is imparted by the arm, not the wrist.

The backhand drive follows closely the principles of the forehand, except that the weight shifts a moment sooner, and the R or front foot should always be advanced a trifle closer to the side-line than the L so as to bring the body clear of the swing. The ball should be met in front of the right leg, instead of the belt buckle, as the great tendency in backhand shots is to slice them out of the side-line, and this will pull the ball cross court, obviating this error. The racquet head must be slightly in advance of the hand to aid in bringing the ball in the court. Do not strive for too much top spin on your backhand.

I strongly urge that no one should ever favor one department of his game, in defense of a weakness. Develop both forehand and backhand, and do not "run around" your backhand, particularly in return of service. To do so merely opens your court. If you should do so, strive to ace your returns, because a weak effort would only result in a kill by your opponent.

Do not develop one favourite shot and play nothing but that. If you have a fair cross-court drive, do not use it in practice, but

strive to develop an equally fine straight shot.

Remember that the fast shot is the straight shot. The cross drive must be slow, for it has not the room owing to the increased angle and height of the net. Pass down the line with your drive, but open the court with your cross-court shot.

Drives should have depth. The average drive should hit behind the service-line. A fine drive should hit within 3 feet of the baseline. A cross-court drive should be shorter than a straight drive, so as to increase the possible angle. Do not always play one length drive, but learn to vary your distance according to your man. You should drive deep against a baseliner, but short against a net player, striving to drop them at his feet as, he comes in.

Never allow your opponent to play a shot he likes if you can possibly force him to one he dislikes.

Again I urge that you play your drive:

- 1. With the body sideways to the net.
- 2. The swing flat, with long follow through.
- 3. The weight shifting just as the ball is hit.

Do not strive for terrific speed at first. The most essential thing about a drive is to put the ball in play. I once heard William A. Larned remark, when asked the most important thing in tennis, "Put the ball over the net into the other man's court." Accuracy first, and then put on your speed, for if your shot is correct you can always learn, to hit hard.

#### **SERVICE**

Service is the opening gun of tennis. It is putting the ball in play. The old idea was that service should never be more than merely the beginning of a rally. With the rise of American tennis and the advent of Dwight Davis and Holcombe Ward, service took on a new significance. These two men originated what is now known as the American Twist delivery.

From a mere formality, service became a point winner. Slowly it gained in importance, until Maurice E. M'Loughlin, the wonderful "California Comet," burst across the tennis sky with the first of those terrific cannon-ball deliveries that revolutionized the game, and caused the old-school players to send out hurry calls for a severe footfault rule or some way of stopping the threatened destruction of all ground strokes. M'Loughlin made service a great factor in the game. It remained for R. N. Williams to supply the antidote that has again put service in the normal position of mere importance, not omnipotence. Williams stood in on the delivery and took it on the rising bound.

Service must be speedy. Yet speed is not the be-all and end-all. Service must be accurate, reliable, and varied. It must be used with discretion and served with brains. I believe perfect service is about 40 per cent placement, 40 per cent speed, and 20 per cent twist.

Any tall player has an advantage over a short one, in service. Given a man about 6 feet and allow him the 3 feet added by his reach, it has been proved by tests that should he deliver a service, perfectly flat, with no variation caused by twist or wind, that just cleared the net at its lowest point (3 feet in the centre), there is only a margin of 8 inches of the service court in which the ball can possibly fall; the remainder is below the net angle. Thus it is easy to see how important it is to use some form of twist to bring the ball into court. Not only must it go into court, but it must be sufficiently speedy that the receiver does not have an opportunity of an easy kill. It must also be placed so as to allow the server an advantage for his next return, admitting the receiver puts the ball in play.

Just as the first law of receiving is to, put the ball in play, so of service it is to cause the receiver to fall into error. Do not strive unduly for clean aces, but use your service to upset the ground strokes of your opponent.

There are several style services in vogue in all countries. The American twist has become one of the most popular forms of

delivery and as such deserves special treatment. The usual forms of service are (1) the slice service, (2) the American twist, (3) the reverse delivery, (4) the "cannon ball" or flat serve.

The slice service is the easiest and most natural form for all beginners, and proves so effective that many great players use it.

Service should be hit from as high a point as the server can COMFORTABLY reach. To stretch unnecessarily is both wearing on the server and unproductive of results.

The slice service should be hit from a point above the right shoulder and as high as possible. The server should stand at about a forty-five degree angle to the baseline, with both feet firmly planted on the ground. Drop the weight back on the right foot and swing the racquet freely and easily behind the back. Toss the ball high enough into the air to ensure it passing through the desired hitting plane, and then start a slow shift of the weight forward, at the same time increasing the power of the swing forward as the racquet commences its upward flight to the ball. Just as the ball meets the racquet face the weight should be thrown forward and the full power of the swing smashed into the service. Let the ball strike the racquet INSIDE the face of the strings, with the racquet travelling directly towards the court. The angle of the racquet face will impart the twist necessary to bring the ball in court. The wrist should be somewhat flexible in service. If necessary lift the right foot and swing the whole body forward with the arm. Twist slightly to the right, using the left foot as a pivot. The general line of the racquet swing is from RIGHT to LEFT and always forward.

At this point and before I take up the other branches of serving, let me put in a warning against footfaulting. I can only say that a footfault is crossing or touching the line with either foot before the ball is delivered, or it is a jump or step. I am not going into a technical discussion of footfaults. It is unnecessary, and by placing your feet firmly before the service there is no need to footfault.

It is just as unfair to deliberately footfault as to miscall a ball, and it is wholly unnecessary. The average footfault is due to carelessness, over-anxiety, or ignorance of the rule. All players are offenders at times, but it can quickly be broken up.

Following this outburst of warning let me return to the American twist service. The stance for this is the same as for the slice, but the ball is thrown slightly to the left of the head while the

racquet passes up and over the call, travelling from left to right and slightly forward. The result is a curve to the left and the break of the bound to the right. This service is not fast, but gives an excellent chance to follow to the net, since it travels high and slowly and its bound is deep. The American twist service should be hit with the muscles of the side. The slice is a shoulder swing.

The reverse twist is of an absolutely distinct type. The stance is facing the net with both toes fronting the line. The racquet is gripped as a club. The ball is thrown in front of the body and not high. The swing is a sharp wrist twist from right to left, the ball carried for some distance on the face of the racquet. The curve is from left to right while the bound is high and breaks sharply to the left. This delivery is slow, ineffective and very uncertain. There is little opportunity to follow it to the net.

The "cannon-ball" service is nothing but a slice as regards swing and stance, but it is hit with a flat racquet face, thus imparting no spin to the ball. It is a case of speed alone. This service is a point winner when it goes in; but its average must necessarily be poor since its margin of error is so small. It is only useful to a tall man.

Varied pace and varied speed is the keynote to a good service. I spent hours in serving alone, striving to disguise the twist and pace of the ball. I would take a box of a dozen balls out on the court and serve the whole dozen to No. 1 court with one style of delivery. Then, crossing, I would serve them back with another type of service. Next, I would try the left court from both sides. My next move would be to pick out a certain section of the service court, and serve for that until I could put the ball where I wanted it. Finally, I would strive to put it there with speed.

All the time spent in this practice has stood me in good stead, for to-day it is my service that pulls me out of many a deep hole, and causes many a player to wish he was delivering the ball.

Do not try freak services. They are useless against high-class players. Sharp breaking underhand cuts can be easily angled off for points by a man who knows anything of the angles and effects of twist. These deliveries are affectation if used more than once or twice in a long match. A sudden shift may surprise your opponent; but to continue to serve these freaks is to destroy their use.

The object of service is to obtain the maximum return with the minimum effort. This statement holds true for all tennis strokes, but in none so strongly as in service.

The average player hits, his first service so hard, and with so little regard for direction, that about nine out of ten first deliveries are faults. Thus, one half your chances are thrown away, and the chance of double faulting increased proportionately.

There is a well-known tennis saying to the effect that one fault is a mistake, but two faults are a crime--that sums up the idea of service adequately. A player should always strive to put his first delivery in court. In the first place it is apt to catch your opponent napping, as he half expects a fault. Secondly, it conserves your energy by removing the need of a second delivery, which, in a long five-set match, is an item of such importance that it may mean victory or defeat.

I urge all players to put their service into court with just as much speed as they can be sure of, but to serve both deliveries at about the same speed. Do not slog the first ball and pat the second, but hit both with average pace.

Try for service aces whenever reasonable, but never do so at the risk of double faulting. The first ball is the ball to ace. The second should never be risked. Your aces must at least equal your double faults, or your service is a handicap and not an advantage.

The importance of service in doubles is more pronounced than in singles as regards holding it; but the need for individual brilliancy is not so great, as you have a partner already at the net to kill off any weak returns.

Service is an attack, and a successful attack should never break down.

## THE VOLLEY AND OVERHEAD SMASH

The net attack is the heavy artillery of tennis. It is supposed to crush all defense. As such it must be regarded as a point-winning stroke at all times, no matter whether the shot is volley or smash.

Once at the net hit from the point at the first opportunity given to get the racquet squarely on the ball. All the laws of footwork explained for the drive are theoretically the same in volleying. In practice you seldom have time to change your feet to a set position, so you obviate trouble by throwing the weight on the foot nearest to the ball and pushing it in the shot.

Volleys are of two classes: (1) the low volley, made from below the waist; and (2) the high volley, from the waist to the head. In contradistinction to the hitting plane classification are the two styles known as (1) the deep volley and (2) the stop volley.

All low volleys are blocked. High volleys may be either blocked or hit. Volleys should never be stroked. There is no follow through on a low volley and very little on a high one.

You will hear much talk of "chop" volleys. A chop stroke is one where the racquet travels from above the line of flight of the ball, down and through it, and the angle made behind the racquet is greater than 45 degrees, and many approach 90 degrees. Therefore I say that no volleys should be chopped, for the tendency is to pop the ball up in the air off any chop. Slice volleys if you want to, or hit them flat, for both these shots are made at a very small angle to the flight-line of the ball, the racquet face travelling almost along its plane.

In all volleys, high or low, the wrist should be locked and absolutely stiff. It should always be below the racquet head, thus bracing the racquet against the impact of the ball. Allow the force of the incoming shot, plus your own weight, to return the ball, and do not strive to "wrist" it over. The tilted racquet face will give any required angle to the return by glancing the ball off the strings, so no wrist turn is needed.

Low volleys can never be hit hard, and owing to the height of the net should usually be sharply angled, to allow distance for the rise. Any ball met at a higher plane than the top of the net may be hit hard. The stroke should be crisp, snappy, and decisive, but it should stop as it meets the ball. The follow through should be very small. Most low volleys should be soft and short. Most high volleys require speed and length.

The "stop" volley is nothing more than a shot blocked short. There is no force used. The racquet simply meets the oncoming ball and stops it. The ball rebounds and falls of its own weight. There is little bounce to such a shot, and that may be reduced by allowing the racquet to slide slightly under the ball at the moment of impact, thus imparting back spin to the ball.

Volleying is a science based on the old geometric axiom that a straight line is the shortest distance between two points. I mean that a volleyer must always cover the straight passing shot since it is the shortest shot with which to pass him, and he must volley straight to his opening and not waste time trying freakish curving volleys that give the base- liner time to recover. It is Johnston's great straight volley that makes him such a dangerous net man. He is always "punching" his volley straight and hard to the opening in his opponent's court.

A net player must have ground strokes in order to attain the net position. Do not think that a service and volley will suffice against first-class tennis.

I am not a believer in the "center" theory. Briefly expressed the center theory is to hit down the middle of the court and follow to the net, since the other player has the smallest angle to pass you. That is true, but remember that he has an equal angle on either side and, given good ground strokes, an equal chance to pass with only your guess or intention to tell you which side he will choose.

I advise hitting to the side-line with good length and following up to the net, coming in just to the centre side of the straight returns down the line. Thus the natural shot is covered and your opponent's court is opened for an angle volley 'cross. Should your opponent try the cross drive, his chances of beating you clean and keeping the ball in court are much less than his chances of error.

Strive to kill your volleys at once, but should your shot not win, follow the ball 'cross and again cover the straight shot. Always force the man striving to pass you to play the hardest possible shot.

Attack with your volleys. Never defend the ball when at the net. The only defensive volley is one at your feet as you come in. It is a mid-court shot. Volleys should win with placement more than speed, although speed may be used on a high volley.

Closely related to the volley, yet in no way a volley stroke, is

the overhead smash. It is the Big Bertha of tennis. It is the long range terror that should always score. The rules of footwork, position, and direction that govern the volley will suffice for the overhead. The swing alone is different. The swing should be closely allied to the slice service, the racquet and arm swinging freely from the shoulder, the wrist flexible and the racquet imparting a slight twist to the ball to hold it in court. The overhead is mainly a point winner through speed, since its bounce is so high that a slow placement often allows time for a recovery.

The overhead is about 60 per cent speed, and 40 per cent combined place and twist. Any overhead shot taken on or within the service-line should be killed. Any overhead, behind the service-line, and back to the baseline, should be defended and put back deep to, allow you another advance to the net.

The average overhead shot that is missed is netted. Therefore hit deep. It is a peculiar fact that over 75 per cent of all errors are nets with only 25 per cent outs. Let this be a constant reminder to you of the fact that all ground strokes should have a clear margin of safety of some 8 inches to a foot above the net, except when attempting to pass a very active volleyer. In the latter case the shot must be low, and the attendant risk is compensated by the increased chances of winning the point with a pass.

Do not leap in the air unnecessarily to hit overhead balls. Keep at least one foot, and when possible both feet, on the ground in smashing, as it aids in regulating the weight, and gives better balance. Hit flat and decisively to the point if desired.

Most missed overhead shots are due to the eye leaving the ball; but a second class of errors are due to lack of confidence that gives a cramped, half- hearted swing. Follow through your overhead shot to the limit of your swing.

The overhead is essentially a doubles shot, because in singles the chances of passing the net man are greater than lobbing over his head, while in doubles two men cover the net so easily that the best way to open the court is to lob one man back.

In smashing, the longest distance is the safest shot since it allows a greater margin of error. Therefore smash 'cross court when pressed, but pull your short lobs either side as determined by the man you are playing.

Never drop a lob you can hit overhead, as it forces you back and

gives the attacking position to your opponent. Never smash with a reverse twist, always hit with a straight racquet face and direct to the opening.

Closely connected to the overhead since it is the usual defense to any hard smash, is the lob.

A lob is a high toss of the ball landing between the service-line and the baseline. An excellent lob should be within 6 feet of the baseline.

Lobs are essentially defensive. The ideas in lobbing are: (1) to give yourself time to recover position when pulled out of court by your opponent's shot; (2) to drive back the net man and break up his attack; (3) to tire your opponent; (4) occasionally to, win cleanly by placement. This is usually a lob volley from a close net rally, and is a slightly different stroke.

There is (1) the chop lob, a heavily under-cut spin that hangs in the air. This, is the best defensive lob, as it goes high and gives plenty of time to recover position. (2) The stroke lob or flat lob, hit with a slight top spin. This is the point-winning lob since it gives no time to, the player to run around it, as it is lower and faster than the chop. In making this lob, start your swing like a drive, but allow the racquet to slow up and the face to tilt upward just as you meet the ball. This, shot should seldom go above 10 feet in the air, since it tends to go out with the float of the ball.

The chop lob, which is a decided under cut, should rise from 20 to 30 feet, or more, high and must go deep. It is better to lob out and run your opponent back, thus tiring him, than to lob short and give him confidence by an easy kill. The value of a lob is mainly one of upsetting your opponent, and its effects are very apparent if you unexpectedly bring off one at the crucial period of a match.

If a shot can win two such matches as these, it is a shot worth learning to use, and knowing when to use. The lob is one of the most useful and skilful shots in tennis. It is a great defense and a fine attack.

The strokes already analysed, drive, service, volley, overhead and lob, are the orthodox strokes of tennis, and should be at every player's command. These are the framework of your game. Yet no house is complete with framework alone. There are certain trimmings, ornaments, and decorations necessary. There are the luxuries of modern improvements, and tennis boasts of such

improvements in the modern game.

Among the luxuries, some say the eccentricities, of the modern game one finds (1) the chop stroke, (2) the slice stroke (a close relative), (3) the drop shot, (4) the half-volley or "trap" shot.

All these shots have their use. None should be considered a stock shot.

## CHOP, HALF VOLLEY, AND COURT POSITION

A chop stroke is a shot where the angle towards the player and behind the racquet, made by the line of flight of the ball, and the racquet travelling down across it, is greater than 45 degrees and may be 90 degrees. The racquet face passes slightly OUTSIDE the ball and down the side, chopping it, as a man chops wood. The spin and curve is from right to left. It is made with a stiff wrist.

The slice shot merely reduced the angle mentioned from 45 degrees down to a very small one. The racquet face passes either INSIDE or OUTSIDE the ball, according to direction desired, while the stroke is mainly a wrist twist or slap. This slap imparts a decided skidding break to the ball, while a chop "drags" the ball off the ground without break.

The rules of footwork for both these shots should be the same as the drive, but because both are made with a short swing and more wrist play, without the need of weight, the rules of footwork may be more safely discarded and body position not so carefully considered.

Both these shots are essentially defensive, and are labour-saving devices when your opponent is on the baseline. A chop or slice is very hard to drive, and will break up any driving game.

It is not a shot to use against a volley, as it is too slow to pass and too high to cause any worry. It should be used to drop short, soft shots at the feet of the net man as he comes in. Do not strive to pass a net man with a chop or slice, except through a big opening.

The drop-shot is a very soft, sharply-angled chop stroke, played wholly with the wrist. It should drop within 3 to 5 feet of the net to be of any use. The racquet face passes around the outside of the ball and under it with a distinct "wrist turn." Do not swing the racquet from the shoulder in making a drop shot. The drop shot has no relation to a stop-volley. The drop shot is all wrist. The stop-volley has no wrist at all.

Use all your wrist shots, chop, slice, and drop, merely as an auxilliary to your orthodox game. They are intended to upset your opponent's game through the varied spin on the ball.

#### THE HALF VOLLEY

I have now reached the climax of tennis skill: the half volley or

trap shot. In other words, the pick-up.

This shot requires more perfect timing, eyesight, and racquet work than any other, since its margin of safety is smallest and its manifold chances of mishaps numberless.

It is a pick-up. The ball meets the ground and racquet face at nearly the same moment, the ball bouncing off the ground, on the strings. This shot is a stiff-wrist, short swing, like a volley with no follow through. The racquet face travels along the ground with a slight tilt over the ball and towards the net, thus holding the ball low; the shot, like all others in tennis, should travel across the racquet face, along the short strings. The racquet face should always be slightly outside the ball.

The half volley is essentially a defensive stroke, since it should only be made as a last resort, when caught out of position by your opponent's shot. It is a desperate attempt to extricate yourself from a dangerous position without retreating. NEVER DELIBERATELY HALF VOLLEY.

So much for the actual strokes of the game. It is in the other departments such as generalship and psychology that matches are won. Just a few suggestions as to stroke technique, and I will close this section.

Always play your shot with a fixed, definite idea of what you are doing and where it is going. Never hit haphazard.

Play all shots across the short strings of the racquet, with the racquet head and handle on the same hitting plane for ground strokes and the head above the handle for volleys. The racquet head should be advanced slightly beyond the wrist for ground strokes.

## COURT POSITION

A tennis court is 39 feet long from baseline to net. Most players think all of that territory is a correct place to stand. Nothing could be farther from the truth. There are only two places in a tennis court that a tennis player should be to await the ball.

- 1. About 3 feet behind the baseline near the middle of the court, or
- 2. About 6 to 8 feet back from the net and almost opposite the ball.

The first is the place for all baseline players. The second is the net position.

If you are drawn out of these positions by a shot which you must return, do not remain at the point where you struck the ball, but attain one of the two positions mentioned as rapidly as possible.

The distance from the baseline to about 10, feet from the net may be considered as "no-man's-land" or "the blank." Never linger there, since a deep shot will catch you at your feet. After making your shot from the blank, as you must often do, retreat behind the baseline to await the return, so you may again come forward to meet the ball. If you are drawn in short and cannot retreat safely, continue all the way to the net position.

Never stand and watch your shot, for to do so simply means you are out of position for your next stroke. Strive to attain a position so that you always arrive at the spot the ball is going to before it actually arrives. Do your hard running while the ball is in the air, so you will not be hurried in your stroke after it bounces.

It is in learning to do this that natural anticipation plays a big role. Some players instinctively know where the next return is going and take position accordingly, while others will never sense it. It is to the latter class that I urge court position, and recommend always coming in from behind the baseline to meet the ball, since it is much easier to run forward than back.

Should you be caught at the net, with a short shot to your opponent, do not stand still and let him pass you at will, as he can easily do. Pick out the side where you think he will hit, and jump to, it suddenly as he swings. If you guess right, you win the point. If you are wrong, you are no worse off, since he would have beaten you anyway with his shot.

Your position should always strive to be such that you can cover the greatest possible area of court without sacrificing safety, since the straight shot is the surest, most dangerous, and must be covered. It is merely a question of how much more court than that immediately in front of the ball may be guarded.

A well-grounded knowledge of court position saves many points, to say nothing of much breath expended in long runs after hopeless shots.

Save your steps by using your head. It pays in the end. Time spent in learning where to play on a tennis court is well

expended, since it returns to you in the form of matches won, breath saved, and energy conserved.

It is seldom you need cover more than two-thirds of a tennis court, so why worry about the unnecessary portions of it?

# THE LAWS OF TENNIS PSYCHOLOGY

#### **GENERAL TENNIS PSYCHOLOGY**

Tennis psychology is nothing more than understanding the workings of your opponent's mind, and gauging the effect of your own game on his mental viewpoint, and understanding the mental effects resulting from the various external causes on your own mind. You cannot be a successful psychologist of others without first understanding your own mental processes, you must study the effect on yourself of the same happening under different circumstances. You react differently in different moods and under different conditions. You must realize the effect on your game of the resulting irritation, pleasure, confusion, or whatever form your reaction takes. Does it increase your efficiency? If so, strive for it, but never give it to your opponent.

Does it deprive you of concentration? If so, either remove the cause, or if that is not possible strive to ignore it.

Once you have judged accurately your own reaction to conditions, study your opponents, to decide their temperaments. Like temperaments react similarly, and you may judge men of your own type by yourself. Opposite temperaments you must seek to compare with people whose reactions you know.

A person who can control his own mental processes stands an excellent chance of reading those of another, for the human mind works along definite lines of thought, and can be studied. One can only control one's, mental processes after carefully studying them.

A steady phlegmatic baseline player is seldom a keen thinker. If he was he would not adhere to the baseline.

The physical appearance of a man is usually a pretty clear index to his type of mind. The stolid, easy-going man, who usually advocates the baseline game, does so because he hates to stir up his torpid mind to think out a safe method of reaching the net. There is the other type of baseline player, who prefers to remain on the back of the court while directing an attack intended to break up your game. He is a very dangerous player, and a deep, keen- thinking antagonist. He achieves his results by mixing up his length and direction, and worrying you with the variety of his game. He is a good psychologist. The first type of player mentioned merely hits the ball with little idea of what he is doing, while the latter always has a definite plan and adheres to it. The hard-hitting, erratic, net-rushing player is a

creature of impulse. There is no real system to his attack, no understanding of your game. He will make brilliant coups on the spur of the moment, largely by instinct; but there is no, mental power of consistent thinking. It is an interesting, fascinating type.

The dangerous man is the player who mixes his style from back to fore court at the direction of an ever-alert mind. This is the man to study and learn from. He is a player with a definite purpose. A player who has an answer to every query you propound him in your game. He is the most subtle antagonist in the world. Second only to him is the man of dogged determination that sets his mind on one plan and adheres to it, bitterly, fiercely fighting to the end, with never a thought of change. He is the man whose psychology is easy to understand, but whose mental viewpoint is hard to upset, for he never allows himself to think of anything except the business at hand.

Pick out your type from your own mental processes, and then work out your game along the lines best suited to you.

When two men are, in the same class, as regards stroke equipment, the determining factor in any given match is the mental viewpoint. Luck, so-called, is often grasping the psychological value of a break in the game, and turning it to your own account.

We hear a great deal about the "shots we have made." Few realize the importance of the "shots we have missed." The science of missing shots is as important as that of making them, and at times a miss by an inch is of more value than a, return that is killed by your opponent.

Let me explain. A player drives you far out of court with an angle-shot. You run hard to it, and reaching, drive it hard and fast down the side- line, missing it by an inch. Your opponent is surprised and shaken, realizing that your shot might as well have gone in as out. He will expect you to try it again, and will not take the risk next time. He will try to play the ball, and may fall into error. You have thus taken some of your opponent's confidence, and increased his chance of error, all by a miss.

If you had merely popped back that return, and it had been killed, your opponent would have felt increasingly confident of your inability to get the ball out of his reach, while you would merely have been winded without result.

Let us suppose you made the shot down the sideline. It was a seemingly impossible get. First it amounts to TWO points in that

it took one away from your opponent that should have been his and gave you one you ought never to have had. It also worries your opponent, as he feels he has thrown away a big chance.

The psychology of a tennis match is very interesting, but easily understandable. Both men start with equal chances. Once one man establishes a real lead, his confidence goes up, while his opponent worries, and his mental viewpoint becomes poor. The sole object of the first man is to hold his lead, thus holding his confidence. If the second player pulls even or draws ahead, the inevitable reaction occurs with even a greater contrast in psychology. There is the natural confidence of the leader now with the second man as well as that great stimulus of having turned seeming defeat into probable victory. The reverse in the case of the first player is apt to hopelessly destroy his game, and collapse follows.

It is this twist in tennis psychology that makes it possible to win so many matches after they are seemingly lost. This is also the reason that a man who has lost a substantial lead seldom turns in the ultimate victory. He cannot rise above the depression caused by his temporary slump. The value of an early lead cannot be overestimated. It is the ability to control your mental processes, and not worry unduly over early reverses, that makes a great match player.

Playing to the score is the first requisite of a thinking match player. The two crucial points in any game are the third and fourth. If the first two points are divided for 15-all, the third means an advantage gained. If won by you, you should strive to consolidate it by taking the next for 40-15 and two chances for game, while if lost, you must draw even at 30-all to have an even chance for game.

In order to do this, be sure to always put the ball in play safely, and do not take unnecessary chances, at 15-all or 30-15. Always make the server work to hold his delivery. It worries him to serve long games, and increases the nervous strain of the match.

In the game score the sixth, seventh, and eighth games are the crux of every close set. These games may mean 4-2 or 3-all, 5-2 or 4-3, the most vital advantage in the match, or 5-3 or 4-all, a matter of extreme moment to a tiring player. If ahead, you should strive to hold and increase your lead. If behind, your one hope of victory rests in cutting down the advantage of the other man BEFORE one slip means defeat. 5-2 is usually too late to start a rally, but 4-3 is a real chance.

Never throw away a set because a player has a lead of 4-1, or even 5-1, unless you already have two sets in a 5-set match, and do not wish to risk tiring by trying to pull it out, and possibly failing at 6-4. The great advantage Of 3-1 on your own service is a stumbling-block for many players, for they unconsciously let up at the fifth game, thinking they have a 2-game lead. However, by dropping that game, the score will go 2-3 and 3-all if your opponent holds service, instead of 1-4 and 4-2, thus retaining a distinct advantage and discouraging your opponent in that set.

The first set is vital in a 2 out of 3 match. Play for all of it. The second and third sets are the turning-point in a best of 5-set match. Take the first where possible, but play to the limit for the next two. Never allow a 3 out of 5-set match to go to, the fifth set if it is possible to win in less; but never give up a match until the last point is played, even if you are two sets and five games down. Some occurrence may turn the tide in your favour.

The primary object in match tennis is to break up the other man's game. The first lesson to learn is to hold your nerve under all circumstances. If you can break a player's nerve by pounding at a weakness, do it. I remember winning a 5-set doubles match many years ago, against a team far over the class of my partner and myself, by lobbing continually to one man until he cracked under the strain and threw the match away. He became so afraid of a lob that he would not approach the net, and his whole game broke up on account of his lack of confidence. Our psychology was good, for we had the confidence to continue our plan of attack even while losing two of the first three sets. His was bad, for he lost his nerve, and let us know it.

Sensational and unexpected shots at crucial moments have won many a match. If your opponent makes a marvellous recovery and wins by it, give him full credit for it, and then forget it, for by worrying over it you not only lose that point but several others as, well, while your mind is still wandering. Never lose your temper over your opponent's good shots. It is bad enough to lose it at your own bad ones. Remember that usually the loser of a match plays just as well as the winner allows him. Never lose your temper at a bad decision. It never pays, and has cost many a match.

Tennis psychology is far more than the effect of certain shots, made or missed, on the player. One can sum up such things by saying that every kill gives confidence, every error tends to destroy it. These things are obvious. The branch of psychology that is interesting is the reaction on the various players of

different courts, different crowds, and other players.

I could go on writing tennis psychology as explained by external conditions for hundreds of pages, but all I want to do is to bring to mind a definite idea of the value of the mind in the game. Stimulate it how you will, a successful tennis player must admit the value of quick mind. Do it by a desire for personal glory, or team success, or by a love of competition in matching your wits against the other man's, but do it some way.

Do, not think that tennis is merely a physical exercise. It is a mental cocktail of a very high "kick."

#### THE PSYCHOLOGY OF MATCH PLAY

The first and most important point in match play is to know how to lose. Lose cheerfully, generously, and like a sportsman. This is the first great law of tennis, and the second is like unto it--to win modestly, cheerfully, generously, and like a sportsman.

The object of match play is to win, but no credit goes to a man who does not win fairly and squarely. A victory is a defeat if it is other than fair. Yet again I say to win is the object, and to do so, one should play to the last ounce of his strength, the last gasp of his breath, and the last scrap of his nerve. If you do so and lose, the better man won. If you do not, you have robbed your opponent of his right of beating your best. Be fair to both him and yourself.

"The Play's the thing," and in match play a good defeat is far more creditable than a hollow victory. Play tennis for the game's sake. Play it for the men you meet, the friends you make, and the pleasure you may give to the public by the hard- working yet sporting game that is owed them by their presence at the match.

Many tennis players feel they owe the public nothing, and are granting a favour by playing. It is my belief that when the public so honours a player that they attend matches, that player is in duty bound to give of his best, freely, willingly, and cheerfully, for only by so doing can he repay the honour paid him. The tennis star of to-day owes his public as much as the actor owes the audience, and only by meeting his obligations can tennis be retained in public favour. The players get their reward in the personal popularity they gain by their conscientious work.

There is another factor that is even stronger than this, that will always produce fine tennis in championship events. It is the competitive spirit that is the breath of life to every true sportsman: the desire to prove to himself he can beat the best of the other man; the real regret that comes when he wins, and feels the loser was not at his best.

The keen competitive spirit that stimulates a match player also increases the nervous strain. This should be recognized by tournament committees, and the conditions of play should be as nearly standardized as weather permits.

A tournament committee should never keep a player waiting for an important match to commence while they scour through the crowd for linesmen. These necessary, and I trust useful, accessories to

every match of importance should be picked and on hand when the players appear. A good linesman is a great aid to match tennis. A poor one may ruin a great battle. Not only will bad decisions turn the tide by putting a point in the wrong columns, but slow decisions will often upset players, so they dare not play to the line kept by slumberous linesmen.

A linesman should take his first judgment as the ball strikes. If outside he should call "out" at once clearly, decisively, but not too loudly; a yell is often a shock to the nerves. If the ball is good he should remain discreetly silent.

The umpire should announce the score after each point in a voice sufficiently loud to be heard by the entire gallery. His decisions as to "lets" or balls "not up" should be made only loud enough to ensure that they are heard by the players. The gallery has eyes. Following each game, the game score should be called, giving the leading player's name and the set being played. For example, "Four games to three, Parke leads. Second set." About every third game following the completion of the first set, an announcement as to the winner of the first set is an excellent idea. The umpire could add to the above announcement, "First set, Parke, 6-3." This latter announcement is unnecessary when there is a score board that gives full details of the match.

Tournament committees should see that all courts have sufficient room behind the baseline and at the sides to insure a player against running into the stops.

Galleries should strive to retain their appreciation and enthusiasm until a point is completed, since noise is very disconcerting to a player. However, all players enjoy an enthusiastic gallery.

The players themselves must now be considered in relation to the reaction of the match.

The first thing to fix firmly in your mind in playing a match, is never to allow your opponent to play a shot he likes if it is possible to force him to make one he does not. Study your opponent both on and off the court. Look for a weakness, and, once finding it, pound it without mercy. Remember that you do not decide your mode of attack. It is decided for you by the weakness of your opponent. If he dislikes to meet a netman, go to the net. If he wants you at the net, stay back and force him to come in. If he attacks viciously, meet his attack with an equally strong offensive.

Remember that the strongest defense is to attack, for if the other man is occupied in meeting your attack, he will have less time to formulate his own system.

If you are playing a very steady man, do not strive to beat him at his own game. He is better at it than you in many cases, so go in and hit to win. On the other hand, if you find that your opponent is wild and prone to miss, play safe and reap the full crop of his errors. It saves you trouble and takes his confidence.

ABOVE ALL, NEVER CHANGE A WINNING GAME.

ALWAYS CHANGE A LOSING GAME, since, as you are getting beaten that way, you are no worse off and may be better with a new style.

The question of changing a losing game is a very serious thing. It is hard to say just when you are really beaten. If you feel you are playing well yet have lost the first set about 6-3 or 6-4, with the loss of only one service, you should not change. Your game is not really a losing game. It is simply a case of one break of service, and might well win the next set. If, however, you have dropped the first set in a 2 out of 3 match with but one or two games, now you are outclassed and should try something else.

Take chances when you are behind, never when ahead. Risks are only worth while when you have everything to win and nothing to lose. It may spell victory, and at least will not hasten defeat. Above all, never lose your nerve or confidence in a match. By so doing you have handed your opponent about two points a game--a rather hard handicap to beat at your best.

Never let your opponent know you are worried. Never show fatigue or pain if it is possible to avoid, since it will only give him confidence. Remember that he feels just as bad as you, and any sign of weakening on your part encourages him to go on. In other words, keep your teeth always in the match.

Don't worry. Don't fuss. Luck evens up in the long run, and to worry only upsets your own game without affecting your opponent. A smile wins a lot of points because it gives the impression of confidence on your part that shakes that of the other man. Fight all the time. The harder the strain the harder you should fight, but do it easily, happily, and enjoy it.

Match play, where both men are in the same class as tennis

players, resolves itself into a battle of wits and nerve. The man who uses the first and retains the second is the ultimate victor.

I do not believe in a man who expects to go through a long tournament, going "all out" for every match. Conserve your strength and your finesse for the times you need them, and win your other matches decisively, but not destructively. Why should a great star discourage and dishearten a player several classes below him by crushing him, as he no doubt could? A few games a set, well earned, would be a big factor in encouraging that rising player to play in tournaments, while it would in no way injure the reputation of the star.

Never hurry your opponent by serving before he is fully set to receive. This is a favourite trick of a few unscrupulous players, yet is really an unfair advantage. Do your hurrying after the ball is in play, by running him to unexpected places in the court. Should anyone attempt to work the hurried service on you, after several attempts, proving it is intentional, let the ball go by and say "not ready." The server will shortly realize that you will take your time regardless of him, and he will slow up.

I do not advocate stalling--nothing is worse. It is a breach of ethics that is wholly uncalled for. Play the game naturally, and give your opponent full courtesy in all matters. If you do, you will receive it in return.

Take every advantage of any and every weakness in your opponent's game; but never trespass on his rights as regards external advantages.

Personally I do not believe in "defaulting" a match. To "scratch" or "retire," as the term goes, is to cheat your opponent of his just triumph, and you should never do this unless it is absolutely impossible to avoid. Sickness or some equally important reason should be the sole cause of scratching, for you owe the tournament your presence once your entry is in.

Match play should stimulate a player. He should produce his best under the excitement of competition. Learn your shots in practice, but use them in matches.

A great player sizes up his opponent, and seizes every opening and turns it to his own account. He is ever ready to change his plan to meet the strategy of his opponent, and has both the variety of stroke and versatility of intellect to outguess the other the majority of times.

A great star is always at his best in a match, as it stimulates his mental and physical faculties to the utmost.

Certain players are more effective against some men than others who are not so good. It is the uncertainty of match tennis that is its greatest charm. Two men may meet for tennis during a season, and be so closely matched that each man will win two matches and the score seem almost one-sided each time. It is a case of getting the jump on the other player.

Abnormal conditions for match play always tend to affect the better player more than the poorer, and bring play to a level.

The reason for this is in the fact that the higher the standard of a player's game, the smaller his margin of error, the more perfect his bound must be, and any variation from the normal is apt to spell error. The average player allows himself more leeway, and unknowingly increases his chances on a bad court. His shot is not judged to the fraction of an inch in swing as is the top-flight player, so a slight variation does not affect him.

Many a great match has been ruined by abnormal conditions.

The clever match player must always be willing to change his game to meet conditions. Failure to do so may spell defeat.

It is this uncertainty, due to external conditions, that makes comparative records so useless in judging the relative merits of two players you know nothing of. Rankings based on mathematical calculations of scores are absolutely useless and childish, unless tempered by common sense.

The question of the fitness of conditions of play can never be standardized. A match player shouldnot only be able to play tennis, but should combine the virtues of an aeroplane and a submarine as well.

## THE PSYCHOLOGY OF PHYSICAL FITNESS

Physical fitness is one of the great essentials of match play. Keenness can only be acquired if the physical, mental, and nervous systems are in tune. Consistent and systematic training is essential to a tournament player.

Regular hours of sleep, and regular, hearty food at regular hours are necessary to keep the body at its highest efficiency. Food is particularly important. Eat well, but do not over-eat, particularly immediately before playing. I believe in a large hearty breakfast on the day of a big match. This should be taken by nine-thirty. A moderate lunch at about one o'clock if playing at three. Do not eat very rich food at luncheon as it tends to slow you up on the court. Do not run the risk of indigestion, which is the worst enemy to dear eyesight. Rich, heavy food immediately before retiring is bad, as it is apt to make you "loggy" on the court the next day.

It is certain injury to touch alcoholic drink in any form during tournament play. Alcohol is a poison that affects the eye, the mind, and the wind--three essentials in tennis. Tobacco also hits eye and wind. A man who is facing a long season of tournament play should refrain from either alcohol or tobacco in any form. Excesses of any kind are bad for physical condition, and should not be chanced.

Late hours cause sluggishness of mind and body the next day. It is very dangerous to risk them before a hard match. Television immediately before playing tennis is bad, owing to the eye strain caused the strong light. Lead a normal, healthy life, and conserve your nervous force wherever possible, as you will need it in the hard matches.

"Staleness" is the great enemy of players who play long seasons. It is a case of too much tennis. Staleness is seldom physical weariness. A player can always recover his strength by rest. Staleness is a mental fatigue due often to worry or too close attention to tennis, and not enough variety of thought. Its symptoms are a dislike for the tennis game and its surroundings, and a lack of interest in the match when you are on the court. I advocate a break in training at such a time. Go to the theatre or a concert, and get your mind completely off tennis. Do your worrying about tennis while you are playing it, and forget the unpleasantness of bad play once you are off the court. Always have some outside interest you can turn to for relaxation during a tournament; but never allow it to interfere with your tennis when you should be intent on your game. A nice balance is hard to

achieve, but, once attained is a great aid to a tournament player.

The laws of training should be closely followed before and after a match. Do not get chilled before a match, as it makes you stiff and slow. Above all else do not stand around without a wrap after a match when you are hot or you will catch cold.

Many a player has acquired a touch of rheumatism from wasting time at the close of his match instead of getting his shower while still warm. That slight stiffness the next day may mean defeat. A serious chill may mean severe illness. Do not take chances.

Change your wet clothes to dry ones between matches if you are to play twice in a day. It will make you feel better, and also avoid the risk of cold.

Tournament players must sacrifice some pleasures for the sake of success. Training will win many a match for a man if he sticks to it. Spasmodic training is useless, and should never be attempted.

The condition a player is, in is apt to decide his mental viewpoint, and aid him in accustoming himself to the external conditions of play.

All match players should know a little about the phenomenon of crowd-psychology since, as the crowd may play an important part in the result.

It seldom pays to get a crowd down on you. It always pays to win its sympathy. I do not mean play to the gallery, for that will have the opposite effect than the one desired.

The gallery is always for the weaker player. It is a case of helping the "under-dog." If you are a consistent winner you must accustom yourself to having the gallery show partiality for your opponent. It is no personal dislike of you. It is merely a natural reaction in favour of the loser. Sometimes a bad decision to one play will win the crowd's sympathy for him. Galleries are eminently just in their desires, even though at times their emotions run away with them.

Quite aside from the effect on the gallery, I wish to state here that when you are the favoured one in a decision that you know is wrong, strive to equalize it if possible by unostentatiously losing the next point. Do not hit the ball over the back stop or into the bottom of the net with a jaunty air of "Here you are."

Just hit it slightly out or in the net, and go on about your business in the regular way. Your opponent always knows when you extend him this justice, and he appreciates it, even though he does not expect it. Never do it for effect. It is extremely bad taste. Only do it when your sense of justice tells you you should.

The crowd objects, and justly so, to a display of real temper on the court. A player who loses his head must expect a poor reception from the gallery. Questioned decisions by a player only put him in a bad light with the crowd and cannot alter the point. You may know the call was wrong, but grin at it, and the crowd will join you. These things are the essence of good sportsmanship, and good sportsmanship will win any gallery. The most unattractive player in the world will win the respect and admiration of a crowd by a display of real sportsmanship at the time of test.

Any player who really enjoys a match for the game's sake will always be a fine sportsman, for there is no amusement to a match that does not give your opponent his every right. A player who plays for the joy of the game wins the crowd the first time he steps on the court. All the world loves an optimist.

The more tennis I play, the more I appreciate my sense of humour. I seldom play a match when I do not get a smile out of some remark from the gallery, while I know that the gallery always enjoys at least one hearty laugh at my expense. I do not begrudge it them, for I know how very peculiar tennis players in general, and myself in particular, appear when struggling vainly to reach a shot hopelessly out of reach.

## THE PSYCHOLOGY OF SINGLES AND DOUBLES

Singles, the greatest strain in tennis, is the game for two players. It is in this phase of the game that the personal equation reaches its crest of importance. This is the game of individual effort, mental and physical.

Singles is a game of daring, dash, speed of foot and stroke. It is a game of chance far more than doubles. Since you have no partner dependent upon you, you can afford to risk error for the possibility of speedy victory. Much of what I wrote under match play is more for singles than doubles, yet let me call your attention to certain peculiarities of singles from the standpoint of the spectator.

A gallery enjoys personalities far more than styles. Singles brings two people into close and active relations that show the idiosyncrasies of each player far more acutely than doubles. The spectator is in the position of a man watching an insect under a microscope. He can analyse the inner workings.

The freedom of restraint felt on a single court is in marked contrast to the need for team work in doubles. Go out for your shot in singles whenever there is a reasonable chance of getting it. Hit harder at all times in singles than in doubles, for you have more chance of scoring and can take more risk.

Singles is a game of the imagination, doubles a science of exact angles.

Doubles is four-handed tennis. Enough of this primary reader definition. I only used that so as not to be accused of trying to write over the heads of the uninitiated.

It is just as vital to play to your partner in tennis as in bridge. Every time you make a stroke you must do it with a definite plan to avoid putting your partner in trouble. The keynote of doubles success is team work; not individual brilliancy. There is a certain type of team work dependent wholly upon individual brilliancy. Where both players are in the same class, a team is as strong as its weakest player at any given time, for here it is even team work with an equal division of the court that should be the method of play. In the case of one strong player and one weaker player, the team is as good as the strong player can make it by protecting and defending the weaker. This pair should develop its team work on the individual brilliancy of the stronger man.

The first essential of doubles play is to PUT the ball in play. A double fault is bad in singles, but it is inexcusable in doubles. The return of service should be certain. After that it should be low and to the server coming in. Do not strive for clean aces in doubles until you have the opening. Remember that to pass two men is a difficult task.

Always attack in doubles. The net is the only place in the court to play the doubles game, and you should always strive to attain the net position. There are two formations for the receiving team: one is the Australian formation with the receiver's partner standing in to volley the server's return volley; the other is the English and American style with both men back, thus giving the net attack to the server. This is safer, but less likely to produce a winning result unless the team is a wonderful lobbing combination. Lobbing is a sound defense in doubles, and is used to open the court.

I believe in always trying for the kill when you see a real opening. "Poach" (go for a shot which is not really on your side of the court) whenever you see a chance to score. Never poach unless you go for the kill. It is a win or nothing shot since it opens your whole court. If you are missing badly do not poach, as it is very disconcerting to your partner.

The question of covering a doubles court should not be a serious one. With all men striving to attain the net all the time every shot should be built up with that idea. Volley and smash whenever possible, and only retreat when absolutely necessary.

When the ball goes toward the side-line the net player on that side goes in close and toward the line. His partner falls slightly back and to the centre of the court, thus covering the shot between the men. If the next return goes to the other side, the two men reverse positions. The theory of court covering is two sides of a triangle, with the angle in the centre and the two sides running to the side-lines and in the direction of the net.

Each man should cover overhead balls over his own head, and hit them in the air whenever possible, since to allow them to drop gives the net to the other team. The only time for the partner to protect the overhead is when the net man "poaches," is outguessed, and the ball tossed over his head. Then the server covers and strives for a kill at once.

Always be ready to protect your partner, but do not take shots over his head unless he calls for you to, or you see a certain kill. Then say "Mine," step in and hit decisively. The matter of

overhead balls, crossing under them, and such incidentals of team work are matters of personal opinion, and should be arranged by each team according to their joint views. I only offer general rules that can be modified to meet the wishes of the individuals.

Use the lob as a defense, and to give time to extricate yourself and your partner from a bad position. The value of service in doubles cannot be too strongly emphasized since it gives the net to the server. Service should always be held. To lose service is an unpardonable sin in first-class doubles. All shots in doubles should be low or very high. Do not hit shoulder-high as it is too easy to kill. Volley down and hard if possible. Every shot you make should be made with a definite idea of opening the court.

Hit down the centre to disrupt the team work of the opposing team; but hit to the side-lines for your aces.

Pick one man, preferably the weaker of your opponents, and centre your attack on him and keep it there. Pound him unmercifully, and in time he should crack under the attack. It is very foolish to alternate attack, since it simply puts both men on their game and tires neither.

If your partner starts badly play safely and surely until he rounds to form. Never show annoyance with your partner. Do not scold him. He is doing the best he can, and fighting with him does no good. Encourage him at all times and don't worry. A team that is fighting among themselves has little time left to play tennis, and after all tennis is the main object of doubles.

Offer suggestions to your partner at any time during a match; but do not insist on his following them, and do not get peevish if he doesn't. He simply does not agree with you, and he may be right. Who knows?

Every doubles team should have a leader to direct its play; but that leader must always be willing to drop leadership for any given point when his partner has the superior position. It is policy of attack not type of stroke that the leader should determine.

Pick a partner and stick to him. He should be a man you like and want to play with, and he should want to play with you. This will do away with much friction. His style should not be too nearly your own, since you double the faults without greatly increasing the virtues.

I am a great believer in a brilliant man teaming up with a steady

player. Let your steady man keep the ball in play, and allow your brilliant man all the room he wants to "poach" and kill. Thus you get the best of both men.

Doubles is a game of finess more than speed.

It requires more than speed of shot to beat two men over a barrier 3 to 3 1/2 feet high with a distance of some 32 feet. It is angles, pace, and accuracy that should be the aim in a great doubles game. Resource, versatility, and subtlety, not speed, win doubles matches.

## CONCLUSION

Tennis fills many needs of mankind. It provides an outlet for physical energy, relaxation, mental stimulus, and healthful exercise. The moral tone is aided by tennis because the first law of tennis is that every player must be a good sportsman and inherently a gentleman.

Tennis has spread so rapidly that the old idea of class and class game has passed away with so many other ancient, yet snobbish, traditions. Tennis is universally played.