TENNIS RACKET GRIP

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Filed: Nov. 7, 1972
Appl. No.: 304,348

U.S. Cl. .................................................. 273/75
Int. Cl. .................................................. A63b 49/08
Field of Search....... 273/73 J, 75, 29 A, 81 R,
273/81 B, 81.4, 81.5, 81.6, 163, 194 R

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ABSTRACT
A detachable grip for tennis racket handles having finger and hand indentations accommodating different positions of the hand for forehand and backhand strokes.

3 Claims, 7 Drawing Figures
TENNIS RACKET GRIP

BACKGROUND OF INVENTION

In the game of lawn tennis it has become recognized that the tennis racket shall be gripped in different positions for different types of strokes. Basically the strokes may be divided into forehand and backhand strokes with the serve being sometimes considered as a modification of the forehand stroke. In teaching tennis to a beginner it is necessary to instruct the student how to hold the racket for a forehand stroke and how to hold the racket for a backhand stroke. While it is possible to provide this instruction, it is quite difficult for the student to carry out the instructions during play. It is not possible during a game of tennis to look at the racket and the position of the hand thereon because the player must at all times keep his eye on the tennis ball in order that the player will be in the proper position to hit the ball returned by his opponent. Thus it is necessary for a player to automatically switch his grip upon the racket during play.

This problem has been recognized for sometime and various solutions have been advanced. In one prior art device, two or three bulges were provided on a tennis racket handle so that the player may grip the racket closer to or further from the strings for different types of tennis strokes employed in the 1800’s. Another prior art device provides a rotatably mounted tubular sleeve on a round racket handle with a lever to rotate the sleeve between predetermined positions. Aside from the fact that tennis racket handles are not round, this latter solution incorporates undue complications and, furthermore, is totally inapplicable to the teaching of proper tennis racket gripping.

The present invention provides a tennis racket grip which is substantially impossible of being grasped improperly and which does provide for both forehand and backhand grips so that a student employing the present invention must learn to place his fingers and thumb in the right positions.

SUMMARY OF INVENTION

The present invention is preferably provided as either one or two molded pieces of plastic or the like which are adapted to be clamped upon a tennis racket handle.

The present invention is provided with a plurality of indentations upon the exterior surface thereof; more specifically, these indentations are provided as five diagonally located finger indentations, two spaced thumb indentations and one heel indentation. A player grasps the improved tennis racket grip of the present invention by placing his four fingers in the first four finger indentations and his thumb in the first thumb position with the heel of his hand in the heel indentation so as to thus automatically grip the racket in proper position for a forehand stroke with the racket. In order to switch his grip the player moves his fingers into the second to fifth finger indentations, i.e., shifts his hand slightly forwardly on the handle, and places his thumb in the second thumb position which crosses the handle. The heel indentation is provided with sufficient dimensions to accommodate the slightly different position of the heel of the hand in the backhand grip.

Preferably the present invention is provided as a unit which may be detachably clamped to a conventional tennis racket handle primarily as a training aid. The detachable feature is also advantageous in providing for reversing the attachment so that the other sides of the tennis racket strings will be employed for a forehand stroke, which is the one most employed. In practice the invention may comprise but a single, somewhat flexible, molded unit which may be sprung apart to fit upon a handle and then clamped together as by means of inset bolts.

DESCRIPTION OF FIGURES

The present invention is illustrated as to a single preferred embodiment thereof in the accompanying drawings wherein:

FIG. 1 is a perspective view of a preferred embodiment of this invention upon a tennis racket handle with a hand depicted as gripping the invention for a forehand stroke;

FIG. 2 illustrates the same embodiment of the present invention with a hand gripping the invention for a backhand stroke;

FIG. 3 is a top plan view of the embodiment of the present invention illustrated in FIGS. 1 and 2;

FIG. 4 is a side elevational view of the invention as illustrated in FIG. 3;

FIG. 5 is a longitudinal sectional view taken in the plane 5—5 of FIG. 3; and

FIGS. 6 and 7 are transverse sectional views taken in the planes 6—6 and 7—7 of FIG. 4.

DESCRIPTION OF PREFERRED EMBODIMENT

In the drawings the preferred embodiment of this invention is illustrated as a single unit which may be provided as a hollow, molded plastic element 11 having a central opening adapted to fit a conventional tennis racket handle 12. The unit 11 is provided with a slit 13 along one longitudinal side so that the unit may be flexed or sprung apart to fit over a tennis racket handle and then clamped therewith. This clamping may be accomplished by means of bolts 14 extending through bores in the unit and each having a nut 16 threaded on the end thereof. Both the round slotted bolt head and nut are inset as illustrated so as to provide no protuberance in the way of a person gripping the unit.

In order to provide for proper placement of the hand upon the tennis racket grip of the present invention the exterior of the grip is formed as an uneven surface, as described below. The general location of indentations and protuberances may be discerned from FIGS. 1 and 2; however, with regard to particular locations of same, reference is made to FIGS. 3 to 5. The tennis racket grip 11 hereof is provided with somewhat of a rectangular exterior configuration conforming to the shape of a tennis racket handle. Upon a broad side of the rectangle, adjacent the forward end of the grip, nearest the string portion of the racket as the invention is assembled upon the racket handle, there is provided a first thumb indentation 21 extending almost parallel to the handle. A second thumb indentation 22 is provided at an angle of about 45° to this first thumb indentation upon the same side of the grip and merging with the first thumb indentation at the rear thereof. Both of these thumb indentations 21 and 22 merge into a heel indentation 23 of substantial extension, i.e., to the rear of the grip 11, which is generally disposed upon the same side of the grip as the thumb indentations. A ridge 26 extends along the left side of the heel indentation 23 as viewed from the lower end of the grip.
In addition to the aforementioned indentations there are further provided upon the exterior surface of the grip some five finger indentations 31, 32, 33, 34, and 35. These finger indentations are provided in the aforementioned numerical succession from the forward portion of the grip to the rear end thereof in extension diagonally across the short side of the grip displaced from the broad side containing the thumb indentations in a clockwise direction as viewed from the rear end of the grip. These finger indentations also extend somewhat into the flat side of the grip opposite the thumb indentations and furthermore extend to and terminate at rounded ends adjacent the ridge.

It is particularly noted that between the first and second finger indentations 31 and 32, there is provided a smoothly contoured protuberance 36 to specifically and intentionally separate these indentations. The first indentation 31 is substantially aligned with the second thumb indentation 22 and the remainder of the finger indentations 32 to 35 are generally directed toward the heel indentation 23, as may be clearly seen in FIG. 1, for example. Between each of the finger indentations 32 to 35 there are provided ridges separating the indentations as best seen, for example, in FIGS. 4 and 5.

The back side of the grip, i.e., the flat side opposite the one in which the thumb indentations are formed, is generally rounded as is the short side opposite the finger indentations so that the palm of the hand will readily fit thereon and thereabout. The configuration of this remaining portion of the grip is preferably provided in a manner somewhat as illustrated in FIGS. 6 and 7 wherein there will be seen to be provided a rounded protuberance 41 generally outward from the forward upper right hand corner of the grip as viewed from the rear end of the grip. This protuberance 41 is disposed between the first thumb indentation 21 and the base of the first finger indentation 31 and extends rearwardly and longitudinally of the grip from the forward end thereof adjacent the first thumb indentation 21 with decreasing width and increasing height to the juncture of first thumb indentation 21 and heel indentation 23 to fit in the "V" formed between the thumb and index finger. The remainder of the contour of the grip will be seen to be generally one or more smooth curves extending to the sides of the grip having the indentations thereon, as described above.

Further with regard to construction of the grip of the present invention, it is noted that the interior surface thereof adapted to engage the racket handle is preferably provided with a relatively non-slip surface as, for example, by roughening this interior surface of the grip. It is also noted that the grip of the present invention is particularly contoured so that the hand of a user may grasp same in only one of two positions. It is recognized that different users may have different sized hands and, consequently, in order to accommodate all users, it is necessary to provide the present invention in a variety of sizes. As an approximation of suitting all people, the present invention may be provided for sale in three different sizes, i.e., small, medium, and large. For more precise fitting it is possible for the present invention to be formed in accordance with the exact size of the hand of any individual user by molding the present invention to the hand of such user. This may be readily done in plaster of Paris, for example, by properly positioning the hand of a user upon the handle of a racket having a relatively thick coating of plaster of Paris thereon and squeezing the hand sufficiently to provide the proper indentations for the grip. This would then be repeated for the other hand position, as provided by the present invention.

Considering now use of the present invention once same has been affixed to the handle of a tennis racket as, for example, by placing it over the handle and tightening the gripping means, the user grasps the grip 11 for a forehand stroke of the racket by placing the thumb in the indentation 22 and the index finger in the depression 31 with successive fingers in the indentations 32, 33 and 34 as illustrated in FIG. 2. The heel of the hand rests in the indentation 23 so that the hand is thus positioned much as shaking hands as in the Continental grip. With the racket so held the user is in position for a forehand and or serving stroke. It is not possible for the user to partially shift his grip and thus he is forced to place his thumb and fingers in the proper gripping position of the racket.

In order for the user of the present invention to shift from the aforementioned forehand grip to a backhand grip, it is necessary for the person to rotate his hand about 30° on the handle and move his fingers downwardly one indentation or notch while at the same time shifting his thumb from the thumb indentation 22 to the thumb indentation 21. The position of the hand, as indicated in FIGS. 1 and 2, for the forehand and backhand grips, respectively, are generally those recommeded by teachers of tennis and thus, in learning to play tennis a student must learn to shift his hand between these two positions. The present invention provides finger and thumb indentations accommodating these two grips, i.e., forehand and backhand, so that anyone attempting to grasp the handle in any other position or location will find it extremely difficult to do so. In the forehand grip illustrated in FIG. 1, the index finger is placed in the groove 31 with subsequent fingers placed in the grooves 32, 33 and 34, and the thumb is placed in the second or inclined groove 22. The palm of the hand is wrapped about the back sides of the grip and the heel of the hand is placed in the heel indentation 23 but at a slightly different angle from that of the backhand grip. It is the general practice in playing tennis for the hand to be shifted between forehand and backhand grips by giving the racket a slight twist and releasing it followed by a quick gripping of the handle with the fingers and thumb in the other gripping position. This same action is carried out in using the present invention; however, the fingers and thumb must fit into the indentations for the racket to be fully and comfortably gripped. Consequently a user of the present invention soon becomes accustomed to moving the fingers and thumb appropriately during switching between strokes to fit the fingers and thumb into the proper indentations and thus in the proper gripping position.

It will be seen that the present invention provides a simple attachment to the handle of tennis rackets affording the user predetermined hand positions for forehand and backhand strokes of the racket. The hand of the user naturally fits onto the grip of the present invention in either the forehand or backhand positions but does not readily grasp the handle in any other position. Thus, particularly for a student or beginning player of the game of tennis, the present invention provides a material advancement in the art which almost automatically teaches the student or beginner the separate grips.
of the racket so that the user learns to automatically place the hand, thumb and fingers in the proper position for different strokes in the game of tennis. It is noted in this respect that the forehand stroke is often employed or at least may be employed for the serve. It is, of course, recognized that there are at least some acknowledge variations in hand grips of tennis rackets for different circumstances during the game of tennis. It is not intended by the present invention to attempt to identify one particular type of grip as being advantageous over another. It is recognized that variations in the particular angle of indentations or specific locations thereof are possible and also that further provision may be made for a third serving grip, for example, if it is felt necessary that such be incorporated in the present invention for any particular application thereof.

It will be appreciated that there is provided by the present invention a substantial advancement in the art of teaching tennis by the provision of gripping means upon the handle of a tennis racket whereby the user thereof will necessarily grip the racket in proper position for at least two separate types of strokes in the game of tennis. While the present invention is particularly applicable to the teaching of tennis racket gripping, it is also recognized that same may be actually employed in competitive tennis. It is not intended to limit the present invention to the details of illustration or terms of description of the single preferred embodiment of the present invention set forth above for it will be appreciated by those skilled in the art that various modifications and alterations therein may be made within the scope of the present invention.

What is claimed is:

1. As a novel article of manufacture, a tennis training aid comprising the combination of a tennis racket and an elongated hollow grip therefor, having a central opening adapted to enclose the tennis racket handle, said opening being defined by a pair of wide sides and a pair of narrow sides; and means for detachably securing said grip to said handle, said grip being provided with indentations for positioning the four fingers and thumb of a user's hand in either a forehand stroke position or a backhand stroke position, said indentations including: a first thumb indentation adapted to locate said user's thumb along one of said wide sides when said user's hand is in a backhand stroke position; a second thumb indentation adapted to locate said user's thumb across said one wide side when said user's hand is in a forehand stroke position, said first and second thumb indentations overlapping at a location intermediate the length of said first wide side; an upper finger indentation adapted to locate the index finger of said user's hand in a forehand stroke position, said upper finger indentation being formed in the other of said wide sides in general alignment with said second thumb indentation; a lower finger indentation adapted to locate the little finger of said user's hand across the other of said wide sides in a backhand stroke position; a plurality of three finger indentations extending across the other of said wide sides and adapted for positioning various of said user's fingers around said grip, said indentations defining the location of the index, middle and ring fingers when said user's hand is in a forehand stroke position and further defining the location of said middle, ring and little fingers when said user's hand is in the backhand stroke position; a heel indentation extending rearwardly of the handle from the joiner of said first and second thumb indentations and adapted to locate the heel of said user's hand when in either said forehand or backhand stroke position; a protuberance extending longitudinally along said grip from adjacent said first thumb indentation with a decreasing width and increasing height to a juncture of said first thumb indentation and said heel indentation to fit between the user's thumb and index finger.

2. An article of manufacture in accordance with claim 1 wherein said upper finger indentation is separated from the next adjacent of said plurality of finger indentations by a contoured protuberance having a maximum width adjacent the ends of the indentations and tapering down to the side of the handle opposite the side of the thumb indentations.

3. An article of manufacture in accordance with claim 1 wherein said detachably securing means comprises a plurality of bolts extending through bores in said grip, each said bolt having a nut adapted to be respectively threaded thereon.