S. C. ICKE ET AL

TENNIS RACKET AND THE LIKE

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To all whom it may concern:

Be it known that we, STANLEY CHARLES ICKE, a subject of the Kingdom of Great Britain, residing at 24 Westfield Road, 5 Acocks Green, Birmingham, in the county of Warwick, England, and CHARLES AUSTIN DANIEL, a subject of the Kingdom of Great Britain, residing at 161 Aston Lane, Handsworth, Birmingham, in the county of Warwick, England, have invented certain new and useful Improvements in or Relating to Tennis Rackets and the like, of which the following is a specification.

The present invention has relation to tennis rackets and the like and relates to the type of racket or the like in which the frame upon which the gut is adapted to be stretched is formed from metal bent to the desired oval or equivalent configuration with the end parts in adjacency adapted to be accommodated in a hollow metal handle and spaced apart by means of a wedge piece or other part disposed between the end parts aforesaid.

According to the present invention external ribs upon the frame are adapted to be accommodated in longitudinal channels in the hollow metal handle whereby a very rigid and efficient union is capable of being effected between these two members. The frame is preferably constructed of tubing involving two externally projecting ribs to thereby virtually constitute a kidney section tubing and such ribs may be adapted to take within dual channels formed on opposite sides of a metal handle of rectangular section.

The handle tubing is strengthened or reinforced at the frame extremity by means of a collar adapted to rest upon the extreme end of the tube and having internal dual slots for the reception of the dual ribs on the frame.

The wedge piece may be tightened through the medium of a screwed shank and nut from a transverse resistance plate within the handle and engaging opposite slots therein. The handle is preferably covered by two wooden halves of channel section engaged with an undercut portion of the collar and these halves may be glued or otherwise secured in position as hereinafter more particularly described. The tubing of the frame may be eyeleted for the reception of the gut.

In order that this invention may be clearly understood and readily carried into practice, reference may be had to the appended explanatory sheet of drawings, upon which:

Figure 1 is a plan view of a tennis racket constructed according to the present invention.

Figure 2 is a longitudinal section taken on line 2—2 of Figure 1.

Figure 3 is a transverse section taken on line 3—3 of Figure 2, and

Figure 4 illustrates in longitudinal section a fragment of the frame with its eyeleting.

In a convenient embodiment of the present invention the outer frame 1 is constructed from a length of tubing the section of which is illustrated in Figures 2 and 3 and has its end parts 2 bent into parallelism and adjacency. This tubing is eyeleted at 3 as shown at Figure 4 for the reception of the gut to avoid any sharp cutting edges. The metal handle 4 is of substantially rectangular section as shown in the Figure 3 and involves two pairs of internal channels 5 into which the ribs 6 are adapted to slide and be snugly accommodated. A collar 7 is provided and has two pairs of internal channels adapted to receive the ribs 5 on the frame and this collar reinforces or strengthens the handle at its inner extremity. A wedge piece 8 is employed between the limbs 2 of the frame where they converge together and such wedge piece is provided with a screwed shank 9 having a nut 10 operating thereon which nut is adapted to bear against a transverse resistance plate 11 accommodated in opposite slots cut in the metal handle 4.

By tightening the nut the wedge piece 8 is drawn between the limbs 2 of the frame to very rigidly retain said limbs with their ribs 6 in engagement with the channels 5 in the metallic handle 4. The frame and handle are preferably firstly tightened in the manner aforesaid and the racket afterwards gutted in the usual manner.

The metal handle is adapted to be covered by two wooden channel members 12 the inner extremities of which are adapted to be accommodated in a recess 13 (Figure 2) in the collar 7 and such channel members may be recessed at 14 for the reception of the projecting parts of the resistance plate 11 which latter assists in fixing the wooden handle parts 12. The outer extremity of
the handle is closed by a cap 15 which may have a sliding fit 16 within the metal part 4 of the handle and be retained therein by a grub screw or other provision, passed laterally through the metal handle into that part 16 of the cap accommodated in such metal handle 4.

The metallic parts of the racket may be constructed from material known under the registered trade mark "Duralumin" or ordinary aluminium or other light metal may be employed in the manufacture of the article.

What we claim as our invention and desire to secure by Letters Patent is:

1. In a racket, a metallic frame of substantially tubular cross section, having end portions arranged in parallel relation and provided on their other sides with spaced longitudinal ribs; a hollow handle arranged on said end portions and provided in its opposite side walls with longitudinal channels in which said ribs of said frame end portions are received, and means to tighten said end portions in said handle, said ribs of the end portions and said channels of the handle coacting to prevent movement therebetween.

2. In a racket, a metallic frame of substantially tubular cross section, having end portions arranged in parallel relation and provided on their other sides with spaced longitudinal ribs; a hollow handle arranged on said end portions and provided in its opposite side walls with longitudinal channels in which said ribs of said frame end portions are received, a wedge element between the ends of the frame and extending into the handle, means to tighten the wedge, and a collar embracing said end portions and said wedge element and having internal channels to also receive the said ribs of the frame.

In witness whereof we have hereunto set our hands.

STANLEY CHARLES ICKE.
CHARLES AUSTIN DANIEL.