

[54] **TENNIS RACKET HAVING
INCORPORATED BALL RETRIEVAL
MEANS**

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J, 76, 171, 162 E; 46/DIG. 1; 294/19 R, 19 A

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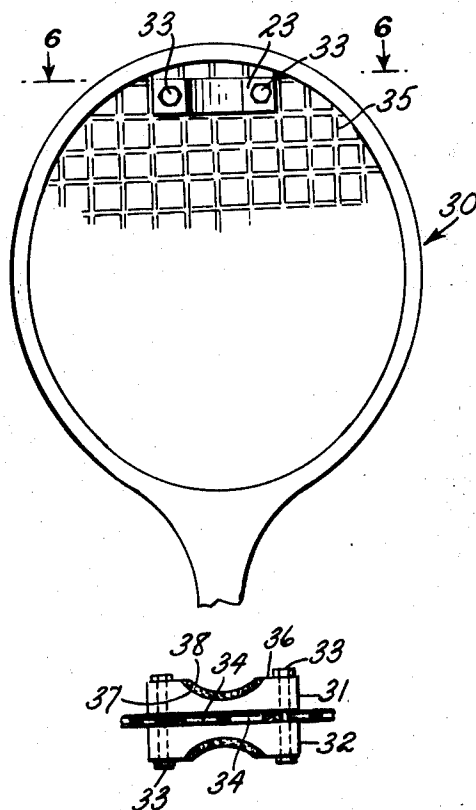
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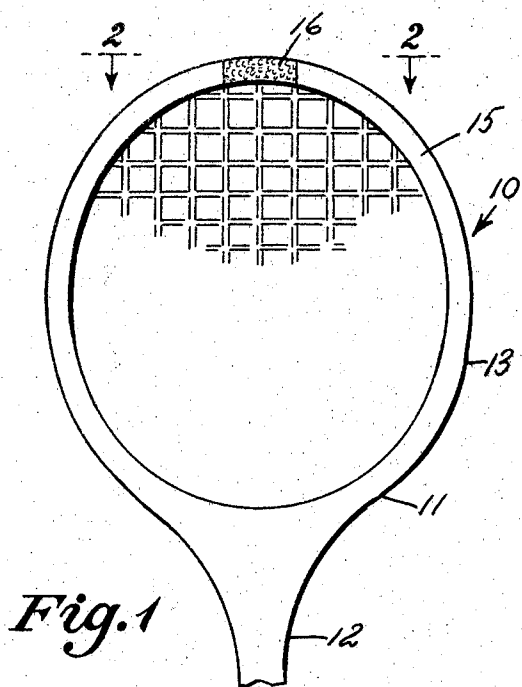
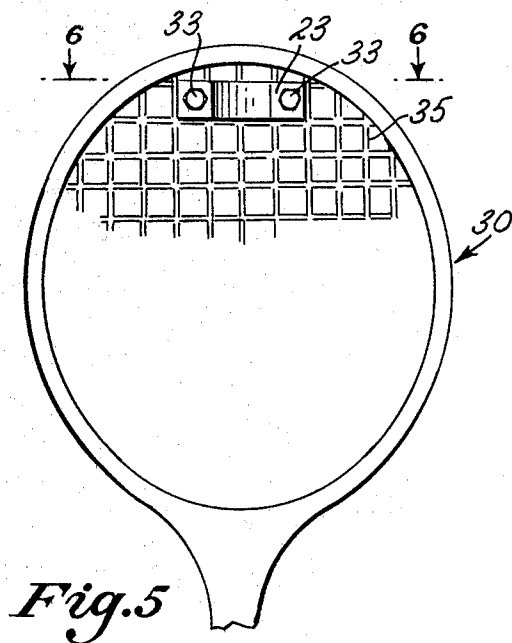
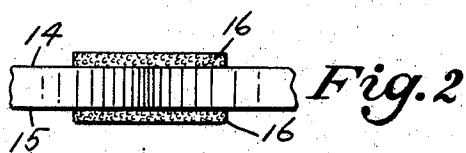
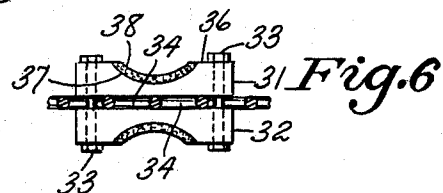
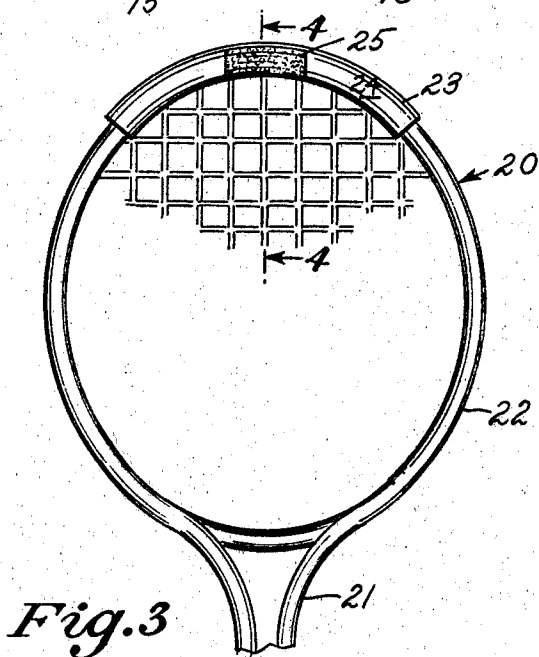
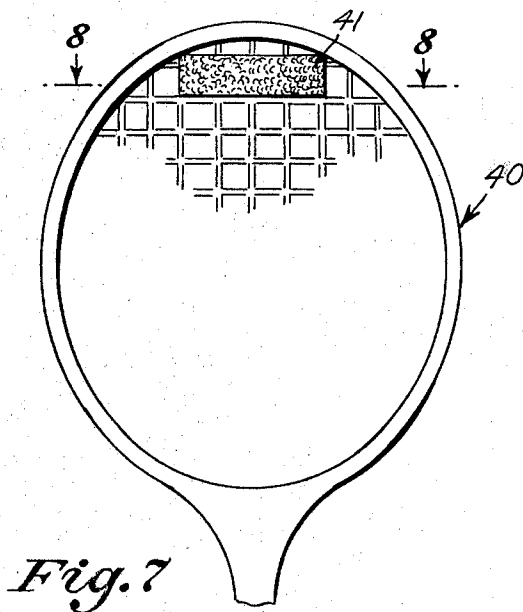
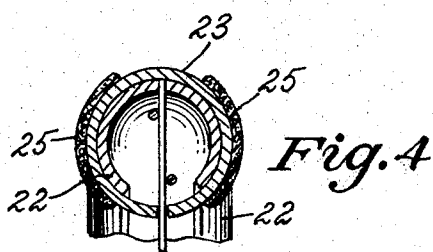
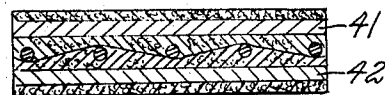
Attorney, Agent, or Firm—Charles E. Temko

[57] **ABSTRACT**

A tennis racket having the hooked portion of hook and pile mating means mounted thereon substantially opposite the handle member thereof at a location facilitating the engagement of the hooked portion with the felt-like covering of a conventional tennis ball. Several embodiments are disclosed which illustrate installation which can be removed from the racket to permit restringing or other repair without damage to the hooked means.

4 Claims, 8 Drawing Figures





TENNIS RACKET HAVING INCORPORATED BALL RETRIEVAL MEANS

This invention relates generally to the field of sporting equipment, and more particularly to an improved tennis racket having means incorporated at the looped end thereof for retrieval of a tennis ball without the necessity of stooping for such retrieval. This is accomplished by providing a hooked means selectively engageable under pressure with the felted cover normally present upon a conventional tennis ball, whereby the ball will remain in engaged condition on the hook means until manually removed by the user.

BRIEF DESCRIPTION OF THE PRIOR ART

One prior art device discloses a target game in which the ball-like leading end of a projectile is made to adhere to a target by means of hook and pile interconnection. Another prior art device discloses a lace type sleeve useful for adding a weight to the distal end of a tennis racket for balancing purposes. Spring-like devices are known which spread to engage the normal spherical surface of a tennis ball, but such devices have normally been too heavy to use in conjunction directly with a tennis racket for the reason that they upset the balance of the same.

BRIEF DESCRIPTION OF THE PRESENT INVENTION

Briefly stated, the invention contemplates the incorporation of the hooked portion of hook and pile interconnecting means, commercially available as a patented article of manufacture under the Trademark VELCRO upon the frame of the tennis racket at the distal end thereof, or on mounting means engageable directly with the strings of the racket, so that the distal end of the racket may be brought into contact with the felted cover of a tennis ball to obtain sufficient purchase therewith that the ball will remain engaged as the racket is lifted, and the ball manually detached. The hooked means may be installed directly by cementing to the frame, or be mounted by a sleeve which engages the rim of the racket, or by installing the hooked portion on a curved surface of a mounting member which interconnects with a similar mounting member on the opposite side of the racket by means penetrating the interstices between the strings thereof.

BRIEF DESCRIPTION OF THE DRAWINGS

In the drawing, to which reference will be made in the specification, similar reference characters have been employed to designate corresponding parts throughout the several views.

FIG. 1 is a fragmentary view in elevation of a tennis racket constituting a first embodiment of the invention.

FIG. 2 is an end elevational view thereof, as seen from the plane 2—2 in FIG. 1.

FIG. 3 is a fragmentary view in elevation showing a second embodiment of the invention.

FIG. 4 is an enlarged transverse fragmentary sectional view as seen from the plane 4—4 in FIG. 3.

FIG. 5 is a fragmentary view in elevation showing a third embodiment of the invention.

FIG. 6 is an enlarged transverse sectional view as seen from the plane 6—6 in FIG. 5.

FIG. 7 is a fragmentary elevational view showing a fourth embodiment of the invention.

FIG. 8 is an enlarged fragmentary sectional view as seen from the plane 8—8 in FIG. 7.

DETAILED DESCRIPTION OF THE DISCLOSED EMBODIMENT

In accordance with the first embodiment of the invention, the device, generally indicated by reference character 10 includes a conventional tennis racket 11 having a handle portion 12 and a string-retaining loop portion 13 having first and second side surfaces 14 and 15. A hooked patch 16 preferably of a type in which the hooks are of stainless steel wire are cemented to the surfaces 14 and 15 at the portions most distal from the handle portion, in such manner that the individual hooks (FIG. 2) project at right angles to the principal plane of the racket. Most preferred is a hooked patch formed of material commercially available under the Trademark MID-TEMP VELCRO, although other types of hooked material are also suitable for many brands of tennis balls (not shown).

In the second embodiment illustrated in FIG. 3, and generally indicated by reference character 20, the racket is of a type constructed entirely of metal, including a bifurcated handle portion 21, and a hollow string-retaining portion 22. Because of the unavailability of a suitable surface for cementitious attachment, a curvilinear plastic guard 23 is provided, the outer surface 24 of which mounts a hook patch 25 cemented thereto. This may maintain its engagement upon the racket either by resilient means, or maybe installed in a manner analogous to that disclosed in the other prior device.

In the third embodiment illustrated in FIGS. 5 and 6, the device, generally indicated by reference character 30, includes first and second interconnectable blocks 31 and 32 having nut and bolt means 33 passing through the interstices 34 in the tensioned strings 35 of the racket. The outer surface 36 of each block is provided with a curvilinear portion 37, the radius of which corresponds to that of a tennis ball, and the hooked patch 38 is cemented therein. This embodiment has the advantage of ready detachability from the racket, and also of presenting a greater area of potential contact with the tennis ball in permitting theoretical line contact, as distinguished from theoretical point contact in the case where the hooked surface is flat.

The fourth embodiment illustrated in FIGS. 7 and 8, and generally indicated by reference character 40, is a somewhat simplified version of the third embodiment. A first element 41 includes an outer surface having stainless steel hooked means thereon, and an inner surface having nylon hooks. A second element 42 includes an inner surface having a nylon loop member and an outer surface having stainless steel hooks. The first and second elements are pressed together from either side of the stringed portion of the racket, so that they may mutually engage between the interstices at points adjacent the distal end of the racket. The elements may be separated for removal by merely pulling the engagement apart.

I wish it to be understood that I do not consider the invention limited to the precise details of structure shown and set forth in this specification, for obvious modifications will occur to those skilled in the art to which the invention pertains.

I claim:

1. In combination, a tennis racket having a ball retrieval means attached thereto, said tennis racket in-

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cluding a handle element and a loop element connected thereto, said loop element having strings supported thereby, said strings defining interstices and a string plane; said retrieval means being disposed solely on said strings, said retrieval means including first and second blocks located respectively on opposite sides of said string plane and having interconnecting means passing through said interstices and said strings, the outer surface of at least one of said blocks having a curvilinearly-shaped portion, and tennis ball engaging means on said shaped portion of said outer surface.

2. Structure in accordance with claim 1, in which each of said blocks has an outer surface having a curvilinearly shaped portion having ball engaging means thereon.
- 5 3. Structure in accordance with claim 1, in which said ball engaging means is in the form of closely spaced flexible steel hooks.
- 10 4. Structure in accordance with claim 2, in which said ball engaging means is in the form of closely spaced flexible steel hooks.

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