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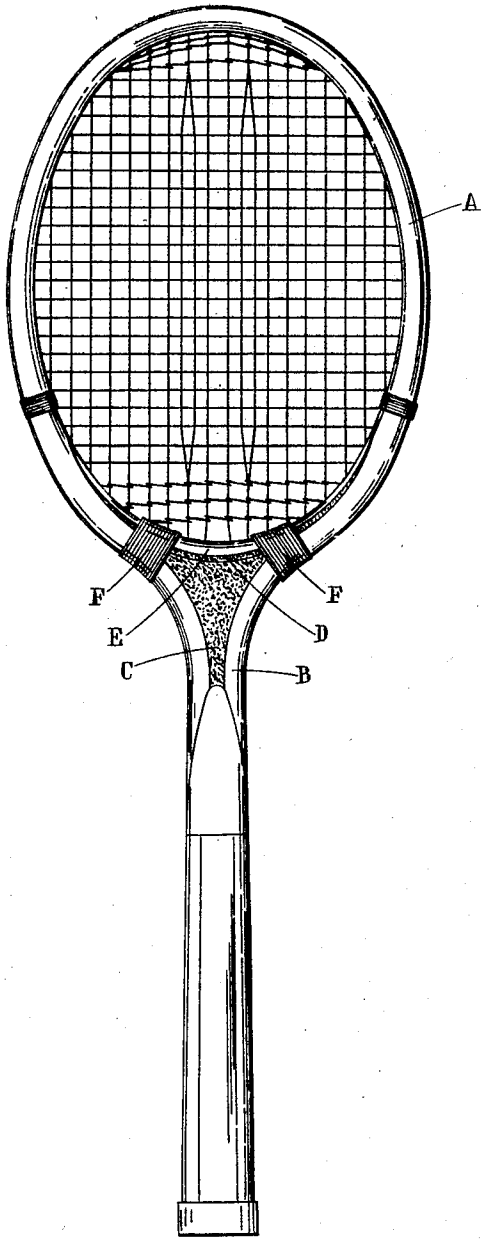
B. DE MEZA

TENNIS AND BADMINTON RACKET

Filed April 9, 1923



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TENNIS AND BADMINTON RACKET.

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To all whom it may concern:

Be it known that I, BERTIE DE MEZA, a subject of the King of Great Britain, residing at 142 Liverpool Road, London, N., England, have invented certain new and useful Improvements in Tennis and Badminton Rackets, of which the following is a specification.

This invention relates to rackets for use when playing tennis, lawn tennis, badminton and like games, and its has for its object to improve the construction of such rackets whereby to impart resilience thereto while retaining the desired strength and rigidity.

Rackets of the kind referred to are usually constructed with a wedge of comparatively heavy wood which is inserted at that part where the "bend" of ash which constitutes the frame merges into the handle, extending from the shoulders of the frame towards the butt end of the handle, and a metal screw is driven transversely through the two frame members and the wedge embraced thereby, the parts being previously glued together.

It frequently happens that in use, especially where climatic conditions are abnormal, the glued joints part, and in excessively hot and dry climates the clamping screw becomes loose, with the result that the efficiency of the racket is seriously impaired, sometimes to the extent that the racket becomes useless.

The present invention aims to obviate these disadvantages.

Accordingly, a racket is constructed with a wedge composed of cork composition, that is to say ground or granulated cork mixed and compressed with an agglutinant and also with one of the phenol formaldehyde condensation products or syntheses of same; which wedge is retained in position by being glued to the frame.

This cork composition is also known as "compressed cork" and will be referred to as such hereafter.

If desired, the two "claps" which cover the handle portion of the frame on two of its faces may be constituted of the same material whereby to impart an improved gripping surface.

The invention is illustrated by way of example in the accompanying drawing of a lawn tennis racket which is shown in front elevation.

A is the "bend" of ash which constitutes the frame of the racket and which is strung with gut in the usual way, and B is the handle portion of the frame.

C is the wedge of "compressed cork" which may be pressed by any suitable or known means into the required configuration; or said wedge may be cut to shape from a sheet, slab or block of ready made "compressed cork" and fitted in place between the shoulders of the frame A where it is retained by glue of such a composition that it will be unaffected by abnormal temperature or climatic conditions.

If desired the wedge C may be built up of a plurality of portions of "compressed cork" glued together.

Along the top of the wedge C there may be a strip D of "compressed cork", glued thereto and to the insides of the two opposite members of the frame A, and above said strip D there may be glued a second strip or fillet E of ash or other suitable material along the top of the strip D. Above the shoulders of the frame A and reinforcing the strips D and E there are lashings or bindings F, F, cemented to the frame.

By reason of its composition the "compressed cork" presents surfaces which afford a much stronger glued joint than is the case with wood to wood, and the adhesion is found to be so secure that it is not necessary to employ the usual clamping screw the presence of which in rackets as now constructed invariably constitutes a source of weakness.

Another advantage possessed by the "compressed cork" is its resilience and consequent ability to absorb the shocks to which rackets are subjected in play, so that the jars which are transmitted by a hard wood wedge to the handle of a racket are eliminated or considerably reduced in intensity.

What I claim is:—

1. A racket for tennis, badminton and like games, comprising a frame of bent wood, said frame being formed with shoulders and with a handle portion, stringing secured in said frame, and a resilient wedge member occupying the space between said shoulders of said frame.

2. A racket for tennis, badminton and like games, comprising a frame of bent wood,

said frame being formed with shoulders and with a handle portion, stringing secured in said frame, and a resilient wedge member filling the space, and glued in place between said shoulders of said frame.

3. A racket for tennis, badminton and like games, comprising a bend of ash wood constituting a frame, said bend being shaped to have shoulders and a handle portion, stringing secured in said frame, a resilient wedge member occupying the space between said shoulders of said frame, said wedge member being composed of compressed granulated cork mixed with an agglutinant and a filler.

4. A racket for tennis, lawn tennis, badminton and like games, comprising, a bend of ash wood constituting a frame, said bend being shaped to have shoulders and an integral handle portion, gut stringing secured in said frame above said shoulders, a resilient wedge member occupying the space between said shoulders of said frame and extending within said handle portion, said wedge member being composed of compressed granulated cork mixed with an agglutinant and with a phenol formaldehyde condensation product and being retained in position by gluing to said shoulders and said handle.

5. A racket for tennis, lawn tennis, badminton and like games, comprising, a bend of ash wood constituting a frame, said bend being shaped to have shoulders and an integral handle portion, gut stringing secured in said frame above said shoulders, a resilient wedge member located between said shoulders of said frame and extending within said handle portion, a strip of resilient material above said resilient wedge member, a fillet of hard wood above said strip of resilient material, said wedge, strip and fillet being united by glue and combining as one to strengthen said racket at said shoulders of said frame.

6. A racket, for tennis, lawn tennis, badminton and like games, comprising, a bend of ash wood constituting a frame, said bend being shaped to have shoulders and an integral handle portion, gut stringing secured in said frame above said shoulders, a resilient wedge member located between said shoulders of said frame and extending within said handle portion, said wedge member being composed of compressed granulated cork mixed with an agglutinant and with a phenol formaldehyde condensation product, a strip of resilient material of the same composition as said wedge member arranged above said wedge member from shoulder to shoulder of said frame, a fillet of hard wood above said strip of resilient material, said wedge, strip and fillet being united by glue and combining as one to strengthen said racket at said shoulders of said frame.

In testimony whereof I have hereunto set my hand.

BERTIE DE MEZA.