

J. J. CURLEY.
TENNIS RACKET.
APPLICATION FILED JAN. 6, 1914.

1,094,705.

Patented Apr. 28, 1914.

Fig. 1.

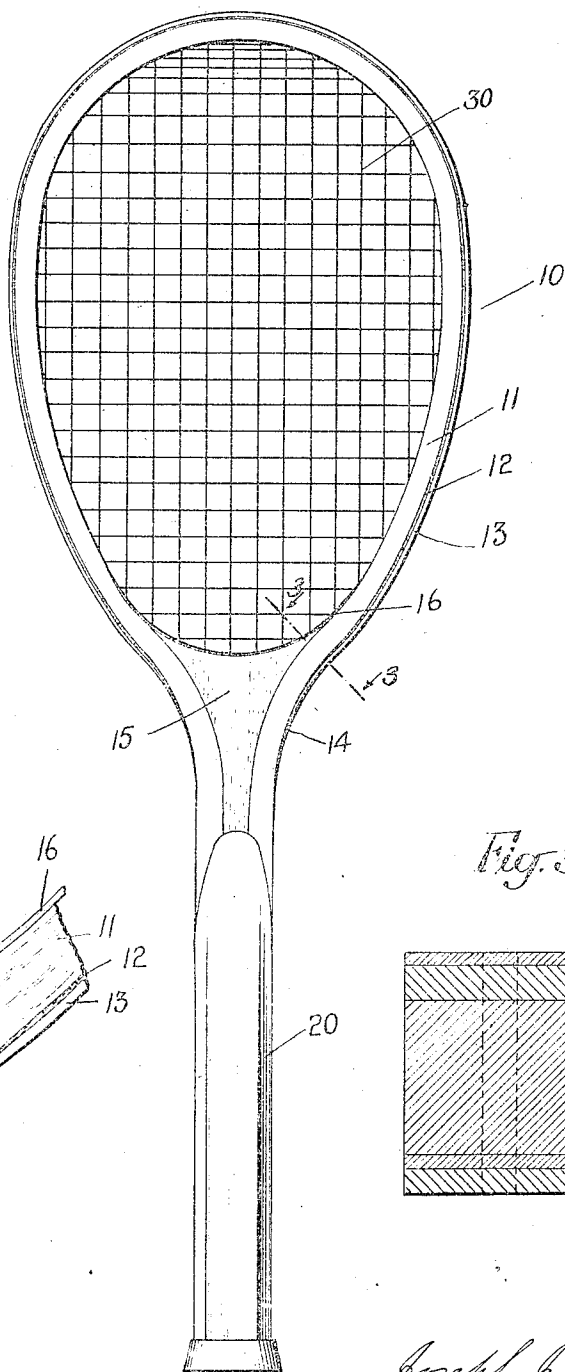


Fig. 2.

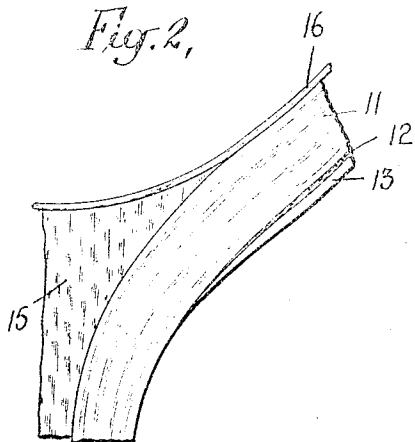
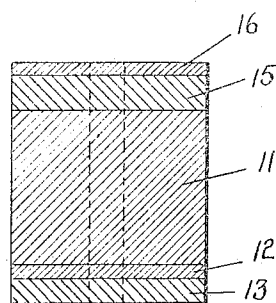


Fig. 3.



WITNESSES
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TENNIS-RACKET.

1,094,705.

Specification of Letters Patent.

Patented Apr. 28, 1914.

Application filed January 5, 1914. Serial No. 810,560.

To all whom it may concern:

Be it known that I, JOSEPH J. CURLEY, a citizen of the United States of America, and a resident of New York, N. Y., have invented certain new and useful Improvements in Tennis-Rackets, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof.

My invention relates to tennis rackets and similar articles comprising a strip of wood bent to the shape required, a handle by which the device is manipulated, and a net of woven gut strings.

Rackets as hitherto constructed are liable to become warped in service due to variable weather conditions or other causes, and cumbersome presses have been employed by all users of high grade rackets.

One of the objects of my invention is to provide a simple and effective means for preventing the racket from becoming warped, and for strengthening the bow without detracting from its resiliency or adding to its weight.

A further object is to provide a suitable means that shall fulfil the above-mentioned conditions, and that shall at the same time be tough and impervious to moisture, and possess many of the characteristics of wood.

Other objects and advantages of my invention will be set forth hereinafter, and in order that my invention may be thoroughly understood, I will now proceed to describe the same in the following specification and then point out the novel features thereof in appended claims.

Referring to the drawings: Figure 1 is a front elevation of a tennis racket embodying my invention. A portion of the racket is shown on a larger scale in Fig. 2. Fig. 3 is a sectional elevation on the line 3—3 of Fig. 1.

The racket shown comprises a bow 10 of usual shape, a handle 20, and a net 30. The bow 10 comprises a strip 11 of wood which is bent to the required shape and the ends of which extend into and form a part of the handle. A reinforcing strip 12 of relatively thin bakelite or bakelized material, and an outer strip 13 of wood. The strip of bakelite is equal in width to the thickness of the bow and extends from the neck of the racket at 14 completely around the bow to the opposite side. This material is not only moisture proof but is very tough and has no

tendency to twist or warp, and consequently holds the bow against warping. The strip 13 is of wood and is slightly thicker than the bakelite. The bow strips 11, 12 and 13 are very carefully and firmly cemented or glued together so that they have the appearance of a single strip except for the difference in color between the bakelite and the wood. This contrast may be such as to very materially improve the appearance of the racket.

A throat piece 15 is set between the shoulders in the usual way. Its outer surface is concave as shown in Fig. 1 and a strip 16 of bakelite extends completely over its curved surface and onto the bow for a material distance on either side. This strip cooperates with the strip 12 in preventing the racket from warping; it furthermore maintains the shape of the bow at the shoulders and prevents their separation.

The handle 20 is formed in the usual manner and need not be described in detail. The bow is provided with holes and is strung in the usual way.

I am aware that the use of metal wires or metal pieces has been suggested for the purpose of reinforcing tennis rackets but metal is particularly disadvantageous because it adds materially to the weight of the racket, provided the size of the reinforcement and the metal of which it is formed are such as to be of any value in respect to preventing warping. Furthermore, the metal cannot be joined to the wood in such a way as to render the article serviceable under varying weather conditions. There is still another very important reason why metal cannot be utilized successfully in a tennis racket, that is, the fact that no metal has the life and resiliency which is found in wood and even a small amount of metal makes a racket absolutely worthless. On the other hand, bakelite possesses many of the properties of which wood is inherently characteristic. At the same time it possesses unique characteristics which render it particularly adapted for the purpose to which it is applied in the carrying out of my invention,—for example, it is not only water-proof in the ordinary sense of the word, but is absolutely impervious to moisture. It will not warp and has a marked rigidity which is depended upon for holding the bow of the racket in position.

By bakelite or bakelized material I refer

to a condensation product resulting from the reaction of a phenolic body and formaldehyde, or some substance having like characteristics.

What I claim is:

1. A tennis racket having a bow of wood, an outer strip of wood and an interposed strip of bakelite united with the bow and the strip to form an integral structure and extending the full width of the bow.

2. A racket having a bow of wood having therein a reinforcing strip of light resilient water-proof material extending transversely through the full width of the bow, a throat piece and a reinforcing and binding strip extending across the throat piece and for a material distance on the inside of the bow.

3. A tennis racket having a bow of wood, an outer strip of wood and an interposed strip of bakelite united with the bow and the strip to form an integral structure and extending the full width of the bow, a throat piece and a reinforcing and binding strip extending across the throat piece and for a material distance on the inside of the bow.

In witness whereof, I have hereunto set my hand in the presence of two subscribing witnesses, this 2nd day of January, 1914.

JOSEPH J. CURLEY.

Witnesses:

ERNEST W. MARSHALL,
R. J. DEARBORN.