

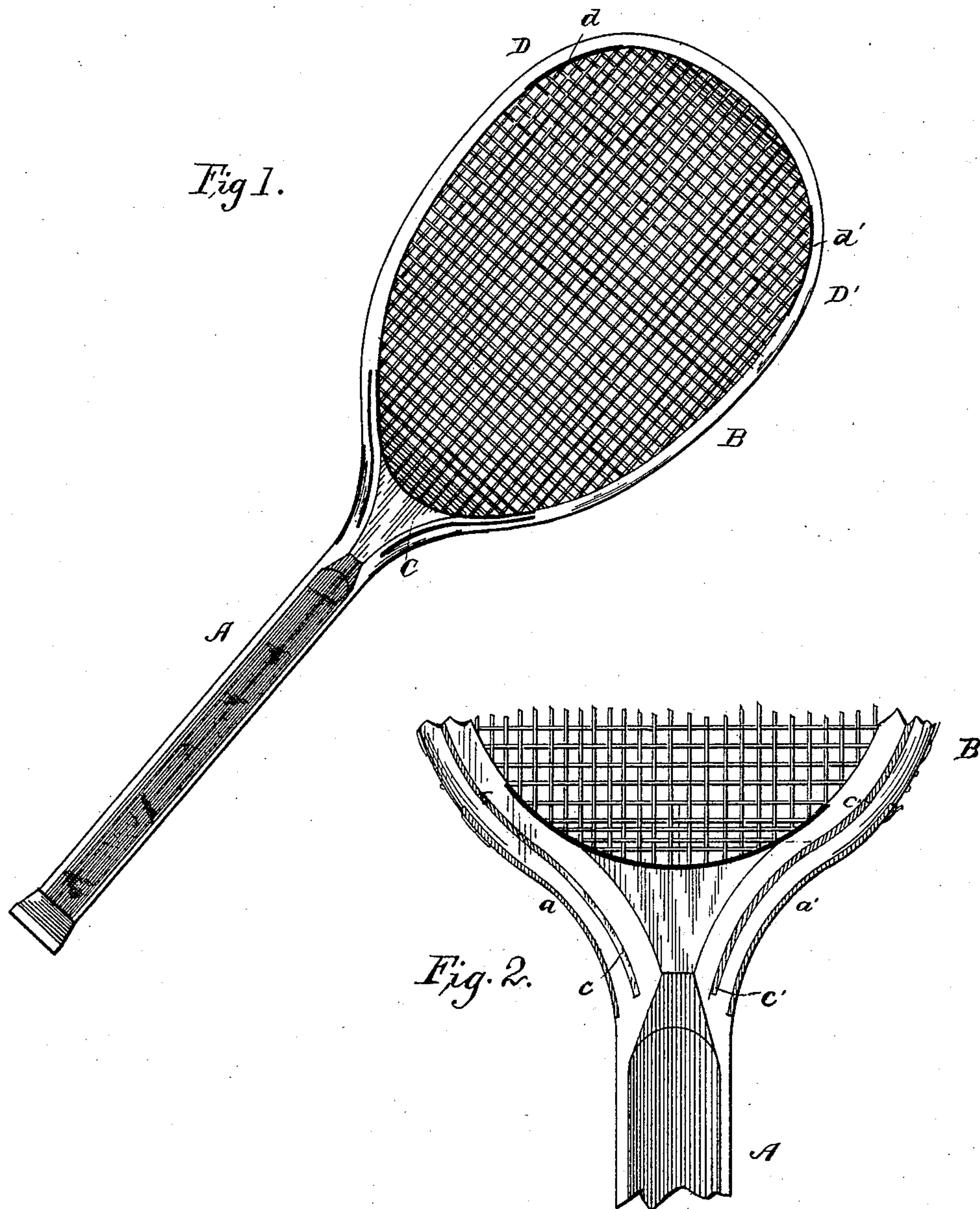
(No Model.)

R. B. BROWN.

TENNIS RACKET.

No. 397,220.

Patented Feb. 5, 1889.



Witnesses.  
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# UNITED STATES PATENT OFFICE.

ROBERT B. BROWN, OF WASHINGTON, DISTRICT OF COLUMBIA.

## TENNIS-RACKET.

SPECIFICATION forming part of Letters Patent No. 397,220, dated February 5, 1889.

Application filed September 29, 1888. Serial No. 286,748. (No model.)

*To all whom it may concern:*

Be it known that I, ROBERT B. BROWN, a citizen of the United States of America, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Tennis-Rackets, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to various new and useful improvements in tennis-rackets, and by the use of my invention the resulting article is much stronger than rackets as heretofore constructed, while the shape and weight of the racket remains unchanged.

The principal novelty in the construction of my invention consists in an ordinary tennis-racket provided with a novel arrangement of thin metallic bracing-strips, so that the racket is thereby rendered much stronger than other varieties of rackets, and any tendency toward warping is effectively prevented. The arrangement of bracing-strips is capable of many changes without departing from the spirit of my invention, and although I have shown in the accompanying drawings the preferable arrangement of such strips, I do not wish to be limited to any particular arrangement.

My invention is clearly illustrated in the drawings accompanying the specification.

In the drawings, Figure 1 is a plan view of a racket of a well-known form, showing the braces in position; and Fig. 2 an enlarged view of the throat and neck of the racket.

In each of the two views like parts are indicated by similar letters of reference.

I have found from practical experience that the weakest parts of all tennis-rackets are those adjacent to the throat and neck; and it is the primary object of this invention to thoroughly strengthen these parts, as well as such other parts on which any great strains may be imposed.

All rackets as now made are composed of a handle, A, to which is secured the head B, provided with suitable stringing. At the lower portion of the head, directly at the point of connection with the handle, is a

wedge-shaped throat-piece, C, for strengthening the fastening at that point. All of the parts just mentioned are old, and I make no claim thereto.

On each side of the neck of the racket—i. e., the point of connection between the head and the handle—I securely fasten a short metallic strip, *a a'*, by means of screws or other suitable fastening device. In order that these strips may be effectively concealed, it is preferable, though not absolutely necessary, to countersink the same, so as to be flush with the outside of the racket. Within the lower part of the head is another, but curved, metallic strip, *b*, passing directly over the top of the throat-piece and adapted to be fastened in position in a manner similar to the strips *a a'*. The ends of this curved strip *b* should preferably be on a horizontal plane a little above the upper ends of the strips *a a'*. Embedded in each of the side pieces of the head, extending from side to side thereof, is a strip, *c c'*, of about the length of the strip *a a'*. These strips *c c'* each extend a short distance down into the throat, and are secured in position in any suitable way. It will be seen that by the use of these strengthening-strips the neck of the racket will be made very rigid and will be incapable of warping.

At the curved portions D D' of the head of the racket, and on the under sides thereof, I make use of two curved strips, *d d'*, made and secured in position precisely like the curved strip *b*.

The arrangement of strengthening-strips just described can be varied in many ways without the exercise of inventive ingenuity.

Having now described my invention, what I claim as new therein, and desire to secure by Letters Patent, is—

The combination, with the solid frame of a racket, of a thin short re-enforcing strip of metal secured to the frame at its throat.

In testimony whereof I affix my signature in presence of two witnesses.

ROBERT B. BROWN.

Witnesses:

Z. MOSES,

W. L. S. TOWNSHEND.