

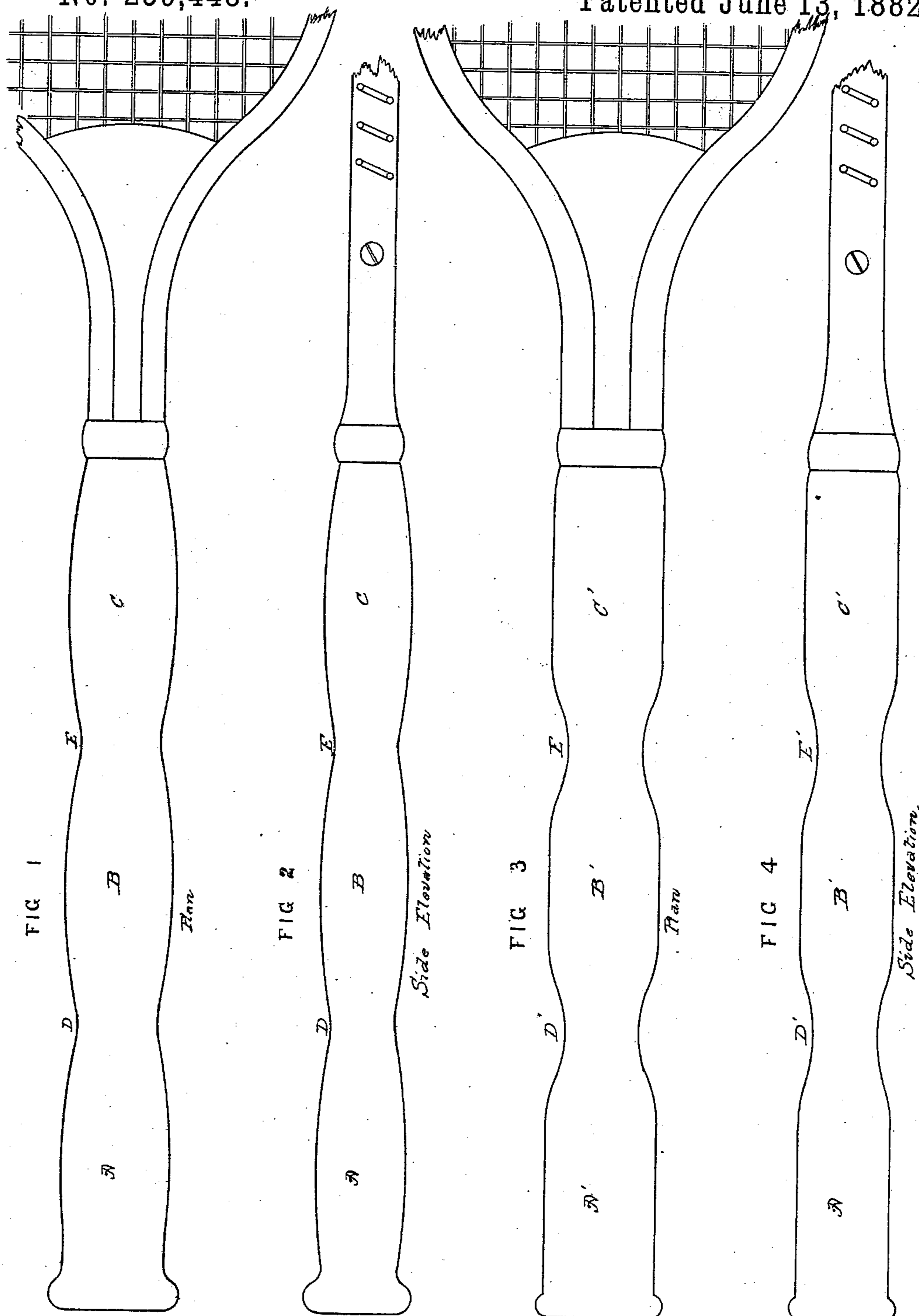
(No Model.)

O. E. WOODHOUSE.

HANDLE FOR RACKETS OR LAWN TENNIS BATS.

No. 259,448.

Patented June 13, 1882.



Witnesses,
 Geo. Bacon
 N. C. Huntman

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UNITED STATES PATENT OFFICE.

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HANDLE FOR RACKETS OR LAWN-TENNIS BATS.

SPECIFICATION forming part of Letters Patent No. 259,448, dated June 13, 1882.

Application filed May 8, 1882. (No model.) Patented in England February 16, 1881, No. 662.

To all whom it may concern:

Be it known that I, OTWAY EDWARD WOODHOUSE, a subject of the Queen of Great Britain, residing at 20 Upper Phillimore Gardens, Kensington, in the county of Middlesex and Kingdom of Great Britain, have invented certain new and useful Improvements in Handles for Rackets or Lawn-Tennis Bats; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

This invention of improvements in handles for rackets or lawn-tennis bats relates to the form of the handle, which is designed to assist the player in accommodating his hand to the position where his hand should be to give an effective stroke in those positions of the ball during the game requiring different manipulations of the bat.

In the game of lawn-tennis the strokes of the bat may be classed into serving or service strokes and into volleying or taking the ball full-pitch, and occasionally a short twist-stroke requires that the bat shall be held very close to the face of the bat. There are therefore three degrees of the hand upon the bat-handle—service-stroke at the end of the handle, volley-stroke at the middle of the handle, and a short twist-stroke at the end nearest to the face. This necessary place for the hand to play effectively is very difficult of acquisition, owing to the player having to watch the ball and finding great difficulty in adjusting his hand from the sameness of diameter of the handle to the exact place required, and as this has to be repeated continually during the game any means of securing this adjustment without thought and by some almost automatic means would be very desirable. I accomplish this by dividing the handle into one or more divisions, according to the desires of the player—whether he wishes the bat to have one division and two positions, two divisions and two positions, or three divisions and three positions—preferably into three—that is, there are three bulges made on the handle, or two de-

pressions—that is, the handle, whether square or round, is made of uneven diameter by reducing the stock of the handle at these two reduced places. Consequently the handle is now divided or defined into three portions, each bulbous or larger than the two reduced portions. These reduced portions form stops for the hand and divisions by which the hand readily and mechanically takes its position, and also prevents the bat from slipping through the hand, and also materially increasing the facility with which the hand grips the handle. Whether the handle is made to this shape by reducing the stock, as described, or by adding to the stock where the bulbous portions are is immaterial, that being merely a question of manufacturing detail. The handle may be described as undulating on each face, or having wave-outlines. The player with this novel handle has now the means of adjusting his hand to the three positions described almost automatically and without taking his attention from the play of the ball. The depressions in the handle serve to give grip for the hand and to prevent slipping, and the bulges allow the hand to arrest the slip of the handle through the hand when changing position.

In the drawings forming part of this specification Figure 1 is a plan of the handle of a lawn-tennis or racket bat fitted with these improvements; Fig. 2, elevation or view on edge of Fig. 1; Fig. 3, plan of the handle of a lawn-tennis or racket bat fitted with a modification of the form shown in Fig. 1, and Fig. 4 an elevation or view on edge of Fig. 3.

In Figs. 1 and 2 the bulges are less undulating, or formed by segments of curved lines, which lines would intersect at points *d e*. In Figs. 2 and 3 the bulges are formed by wave-curves, the depressions *d'* and *e'* not forming intersecting curves. In principle they are the same to afford grip to the hand and distinguish the point where the hand shall hold the bat, and the way in which these depressions and bulges shall be made is simply a question for the manufacturer. The form may be cut out of the solid wood, or it may be built up in layers of wood or other suitable material to the desired form, or partly in one method and

partly in another. In place of intersecting curves or undulating curves the bulges and depressions may be made by straight lines, thus diamonding the handle to give the desired
5 form. If the bat-handle is not square, but oblong in section, the hand can more readily give the angle required to the face of the bat.

Having now described and particularly set forth the nature of the said invention, and the
10 manner of carrying the same into effect, I would have it understood that what I claim is—

A lawn-tennis or racket bat having a handle made in the form substantially as described, for the purposes set forth.

In testimony whereof I affix my signature in 15 presence of two witnesses.

OTWAY E. WOODHOUSE.

Witnesses:

CECIL C. POWELL,

WM. MORGAN BROWN.