

(No Model.)

H. H. WADDINGTON.

LAWN TENNIS BALL.

No. 398,558.

Patented Feb. 26, 1889.

Fig 1

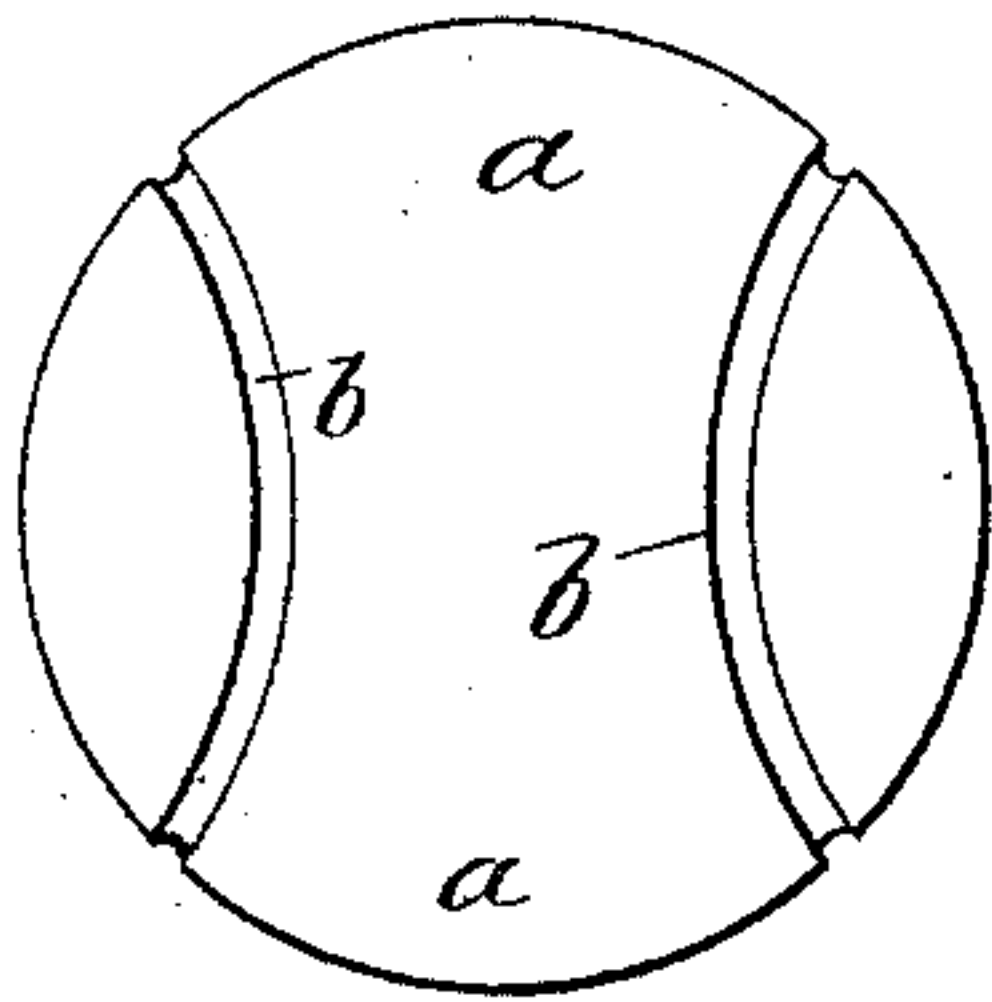


Fig 2

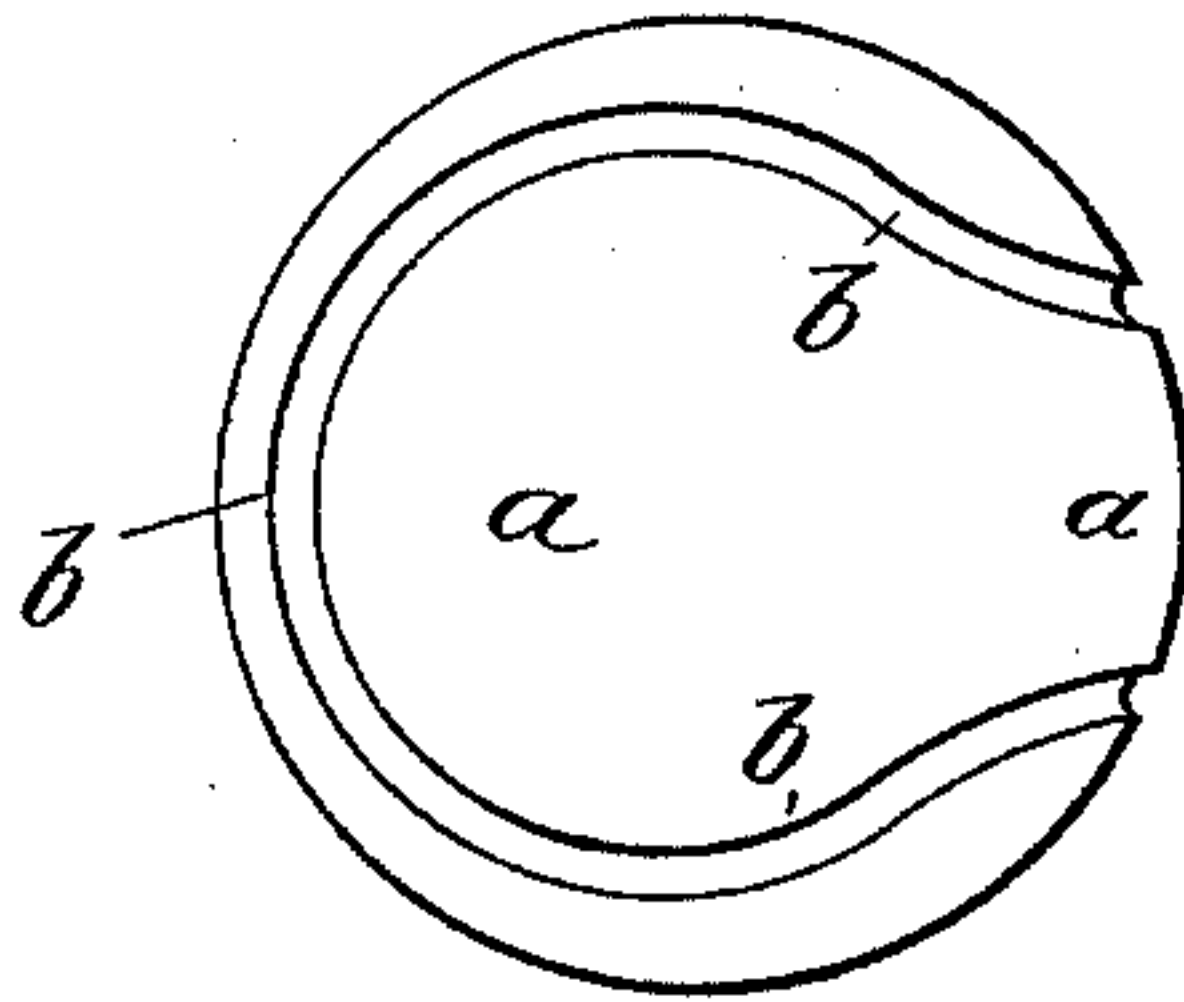


Fig 3

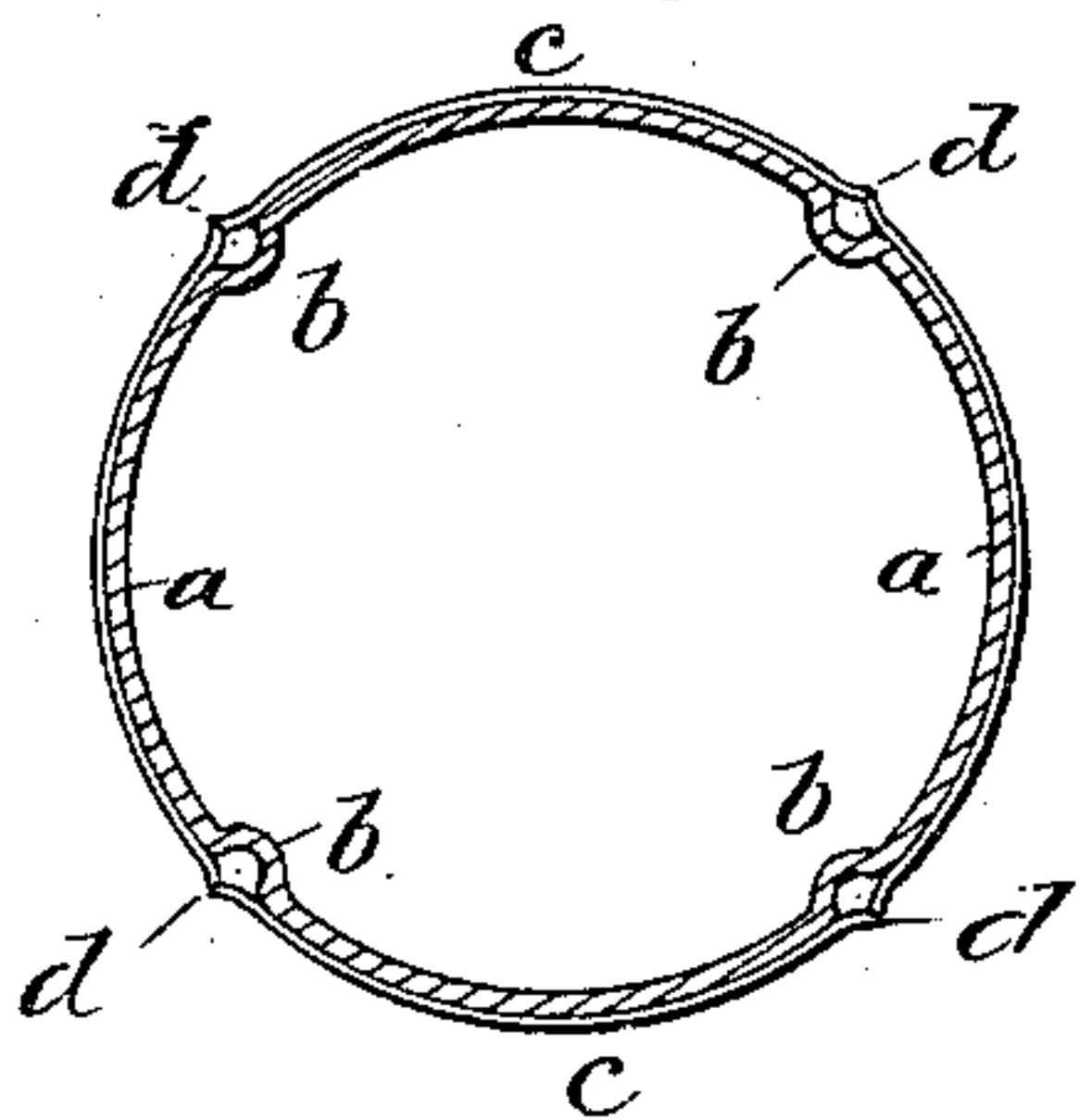
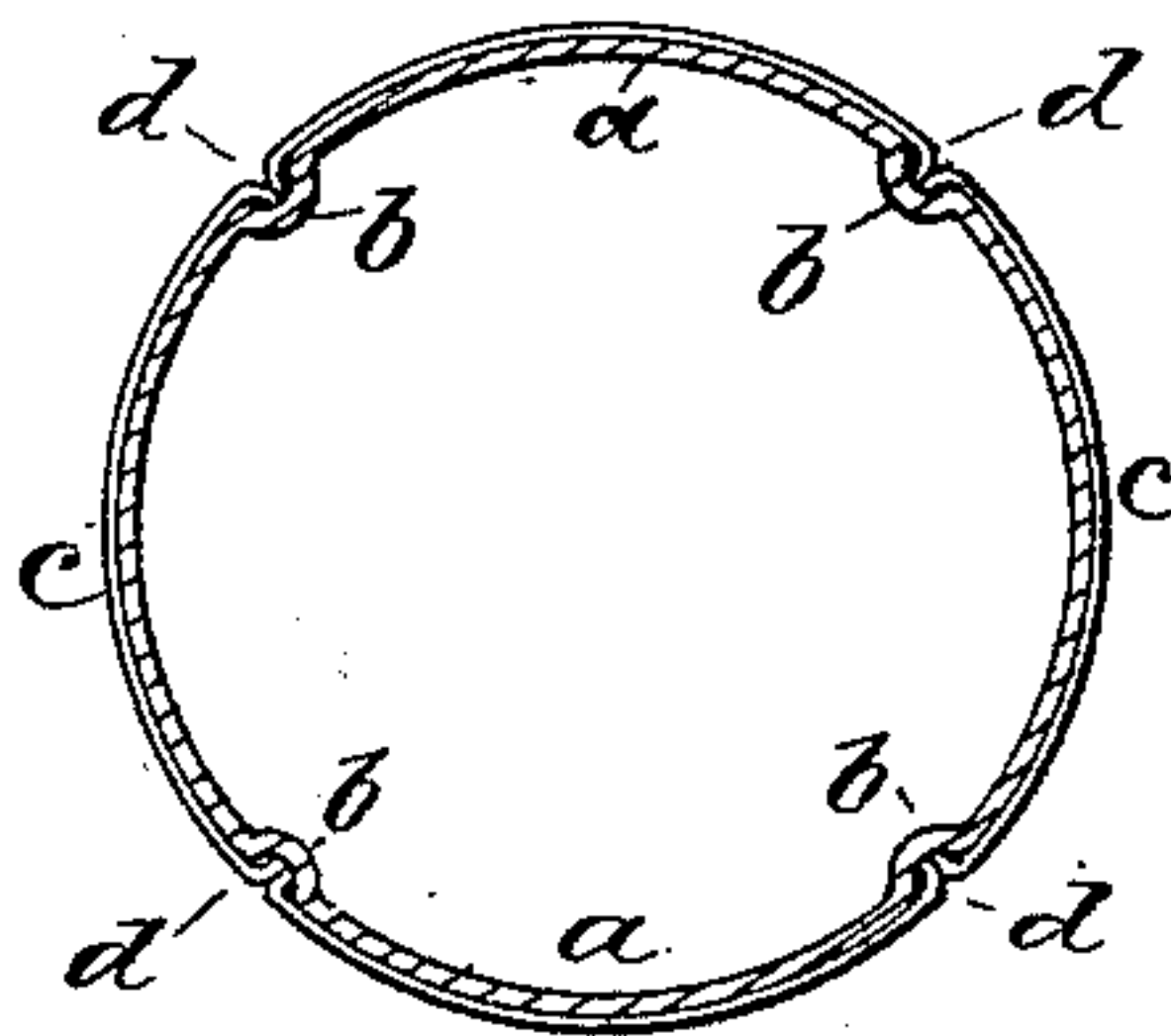


Fig 4



WITNESSES:

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UNITED STATES PATENT OFFICE.

HARRY H. WADDINGTON, OF MANCHESTER, COUNTY OF LANCASTER,
ENGLAND.

LAWN-TENNIS BALL.

SPECIFICATION forming part of Letters Patent No. 398,558, dated February 26, 1889.

Application filed October 16, 1888. Serial No. 288,256. (No model.) Patented in England October 21, 1887, No. 14,300.

To all whom it may concern:

Be it known that I, HARRY HERBERT WADDINGTON, a subject of the Queen of Great Britain, residing at the city of Manchester, county of Lancaster, England, have invented a new and useful Improvement in the Manufacture of Lawn-Tennis Balls, (patented to me in Great Britain by Letters Patent No. 14,300, dated October 21, 1887,) of which the following, taken in connection with the accompanying drawings, is a full, clear, and accurate description.

The object of my invention is to obviate the projecting ridge caused by the seam or seams produced by the sewing together of the edges of the cover, so as to manufacture a finished ball in the form of a perfect sphere.

The nature of my said invention will be readily understood on reference to the annexed sheet of drawings and the following explanation thereof.

Figures 1 and 2 on the drawings represent two views of the exterior of my improved ball before covering, the form selected as an example being that in which the cover is made of two pieces somewhat in the form of a figure 8. Fig. 3 is a section showing the cover with the seams sewed and forming a projecting ridge, and Fig. 4 is a similar view showing the finished ball.

According to my invention I mold the india-rubber ball *a a* in the ordinary way; but the mold, instead of being a perfect hollow sphere as heretofore, has a projection formed in the inside thereof, following the line of the sewed seam or seams of the cover, which is afterward applied to the ball. This projecting line in the mold forms a corresponding

groove or grooves, *b b*, (see Figs. 1 and 2,) on the india-rubber ball *a a*, and the edges of the cloth or other cover, *c c*, when sewed on, as shown at Fig. 3, meet above the middle of this groove, and, being drawn tightly together in sewing, form a raised seam, as at *d d*. The ball is then placed in a spherical mold, and, being submitted to pressure, the raised seam *d d* is pressed into the groove *b b*, as shown at Fig. 4, and there is in consequence no perceptible ridge on the finished ball, which is a perfect sphere, and the stitches of the seam thereby drawn below the general surface are also protected from wear and tear.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

The improvement in the manufacture of lawn-tennis balls, consisting in molding in the surface of the india-rubber ball a groove or grooves corresponding in form with the seam or seams, and after sewing on the cover, as usual, pressing the seam or seams into the said groove or grooves, so as to produce a ball in the form of a perfect sphere and with the stitches below the surface, substantially as hereinbefore described, and illustrated by the drawings annexed.

In witness whereof I have hereunto set my hand this 1st day of October, 1888.

HARRY H. WADDINGTON.

In presence of—

HENRY ELTON,

Fallowfield, Manchester.

CHARLES COOPS,

Cambridge St., Manchester.