

(No Model.)

W. R. THOMLINSON.
FOOT BALL.

2 Sheets—Sheet 1.

No. 526,136.

Patented Sept. 18, 1894.

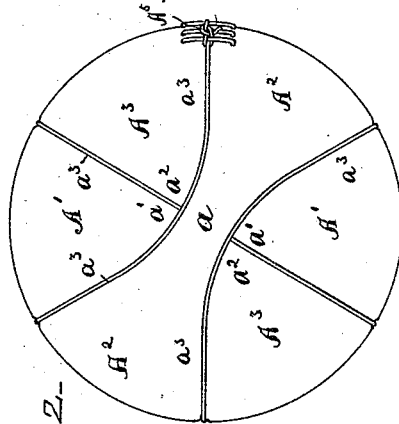


Fig. 2-

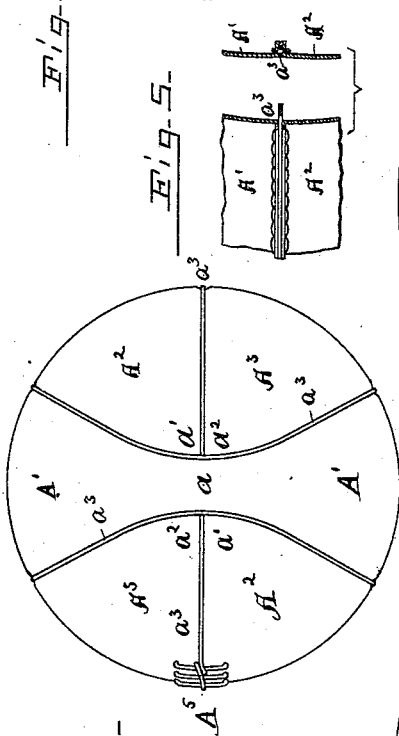


Fig. 1-

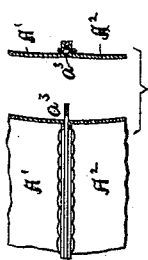


Fig. 3-

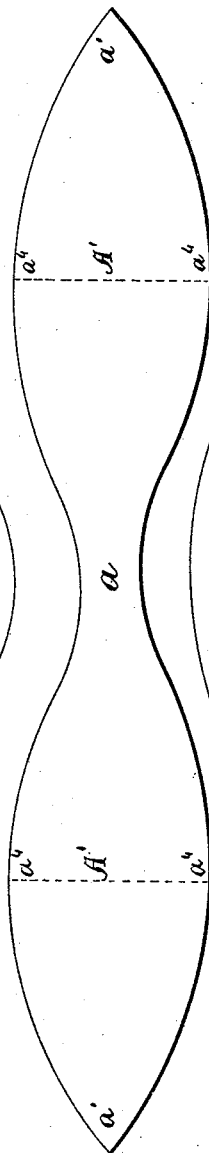


Fig. 4-

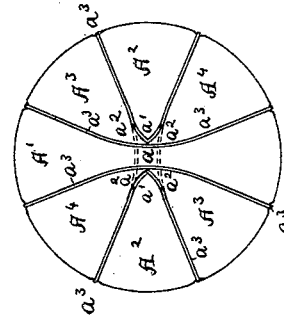


Fig. 6-

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(No Model.)

W. R. THOMLINSON.
FOOT BALL.

2 Sheets—Sheet 2.

No. 526,136.

Patented Sept. 18, 1894.

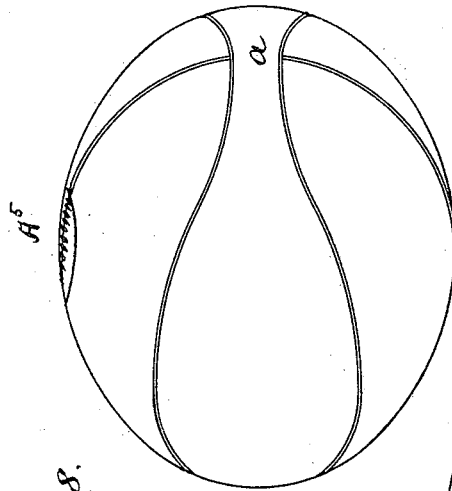


Fig. 8.

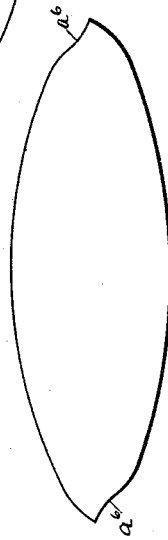


Fig. 9.

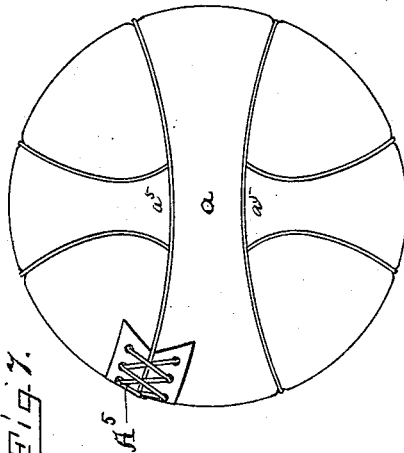


Fig. 10.

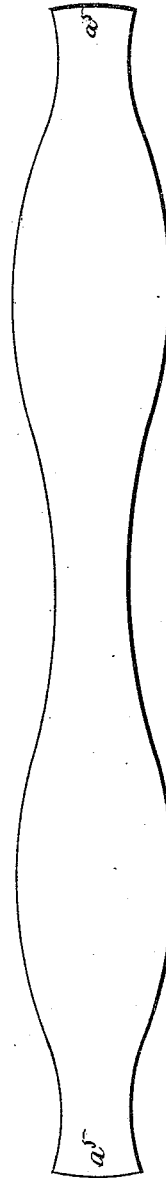


Fig. 11.

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UNITED STATES PATENT OFFICE.

WILLIAM RENNIE THOMLINSON, OF GLASGOW, SCOTLAND.

FOOT-BALL.

SPECIFICATION forming part of Letters Patent No. 526,136, dated September 18, 1894.

Application filed February 6, 1893. Serial No. 461,142. (No model.) Patented in England February 26, 1887, No. 3,025.

To all whom it may concern:

Be it known that I, WILLIAM RENNIE THOMLINSON, a subject of the Queen of Great Britain, residing at Glasgow, in the county of Lanark, Scotland, have invented certain new and useful Improvements in Foot-Balls, (for which I have obtained a patent in Great Britain, No. 3,025, bearing date February 26, 1887,) of which the following, taken in connection with the accompanying drawings, is a specification.

My invention comprises, and has for its object a new mode of constructing the outer leather covers for foot-balls and sewing them together, so as to avoid the evil of having so many seams at the ends of the sections coming together at the poles of the balls, which heretofore has formed a weakness and in most cases required the use of a covering and strengthening button or patch sewed over these joining or pole parts which is also found to be objectionable; which improvements will make the covers and foot-balls more durable than as heretofore constructed.

The invention will be best understood by reference to the accompanying drawings, in which—

Figure 1 shows an elevation of a blown up and complete foot-ball looking at one of the poles, or that end of the ball where the contracted ends of the segments of leather forming the outer covering come toward each other and are joined. Fig. 2 represents the opposite end of the ball turned quite half round on a horizontal plane. Fig. 3 shows a face view of one of the double parts of the leather as cut out to form the covering of the ball in accordance with my improvements. Fig. 4 is a face view of the two corresponding short parts as cut out to complete the covering of the ball in accordance with my improvements. Fig. 5 is a side and a sectional elevation of a part of the seam. Fig. 6 is a plan view of a cover consisting of six pieces or sections, and Figs. 7 to 10 show various modifications as hereinafter fully described.

Referring to these figures, 1 to 4, the nature and novelty of my improvements consist in forming each of two diametrically opposite pairs A', A' , and A^2, A^2 , of the elliptical sections of the cover, each pair out of one piece of the leather or other covering material em-

ployed as shown detached in Fig. 3, that is each double section A', A' , and A^2, A^2 , has a band of some considerable width passing round each opposite end or pole at a , and only have their other two free ends a', a' , to join the band of the opposite pair some distance from the pole a . The full circumference of the ball or cover A , is completed or made up of two similar single elliptical sections A^3 , shown detached in Fig. 4, sewed between these two pair of double sections A', A^2 , so as to have their free ends a^2 to join the pole bands a , and the free ends a' , of these double elliptical sections at a little distance from the poles a , thus leaving a strong solid band of leather at each of the poles a , without a seam across the two poles, which forms the essential feature, purpose and advantage of my invention, with the fewest possible ends and seams joined together at each end near the poles. The seams a^3 , of all these sections of the cover A , are otherwise sewed together as usual, preferably with a single narrow welt between them, to give strength to the sewing, as shown full size in side and sectional elevations of a part of the inside of seam a^3 in Fig. 5. A part of one of the seams a^3 is left open at A^5 near the middle, preferably bound for the insertion of the india rubber ball and admission to its blowing up and closing tube, and have the usual holes along the open edge for lacing it close over the rubber ball and orifice with a small loose projecting flap of leather inside, to prevent the laces from injuring the rubber ball. In this way it will be seen that each opposite pole a , is formed and strengthened by a band of the solid leather of the cover A without seams; and a cover which would usually be made in six sections would thus be formed in four sections, and one usually made of eight sections would in this way be made of six sections or pieces of leather as indicated in Fig. 6, that is as A', A^2, A^3, A^4 , and have fewer ends and seams, and those would be removed considerably from the poles, thus making the whole cover more equally strong, and the strain more equally upon the seams; and in cutting out the double and single sections for these forms of balls, little waste of leather is incurred, as the short single parts A^3 or A^4 can be cut out of the hollows in the double parts

A', as indicated in Figs. 3 and 4. Although these double parts A', A' and A², A², crossing the poles with solid leather at *a* are shown in Figs. 1 to 6 as preferably cut and jointed at 5 their narrow free ends *a'*, *a'*, they might be cut and jointed by cross seams as indicated by the dotted lines at *a'*, *a'*, and thus be diametrically disposed opposite each other, instead of an angle as shown in Figs. 1 and 2 10 and completing the ball by two or more single pieces A³ on either side of the polar bands A', A', A², A².

In Figs. 7 to 10 I have shown what is known as the "Rugby" ball and which practically 15 is the same as that shown and described with reference to Figs. 1 to 4, the only difference being that the ball is oval or egg shaped instead of round, the different sections being formed accordingly. That is, each end of the double 20 sections is slightly expanded as shown at *a'* to compensate for the oval shape of the ball. This enlargement or slight expansion of the ends of the double section necessitates

the providing each of the elliptical sections with a slight notch or recess *a'* at each end; but 25 as the construction of the cover for the ball is otherwise identical, I wish to be understood as embracing both forms of the sections in the term "substantially elliptical" in the 30 claim.

What I claim is—

A cover for balls consisting of a plurality of sections, two of which are each substantially elliptical at each end with a reduced 35 portion between the elliptical portions, and the remaining sections are substantially elliptical, substantially as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 26th day 40 of February, A. D. 1892.

WILLIAM RENNIE THOMLINSON.

Witnesses:

DAVID BECK,

WILLIAM ROBERTSON.