

No. 724,444.

PATENTED APR. 7, 1903.

J. W. CURTISS.
HEAD HARNESS FOR FOOT BALL PLAYERS.

APPLICATION FILED NOV. 21, 1902.

NO MODEL.

Fig. 4.

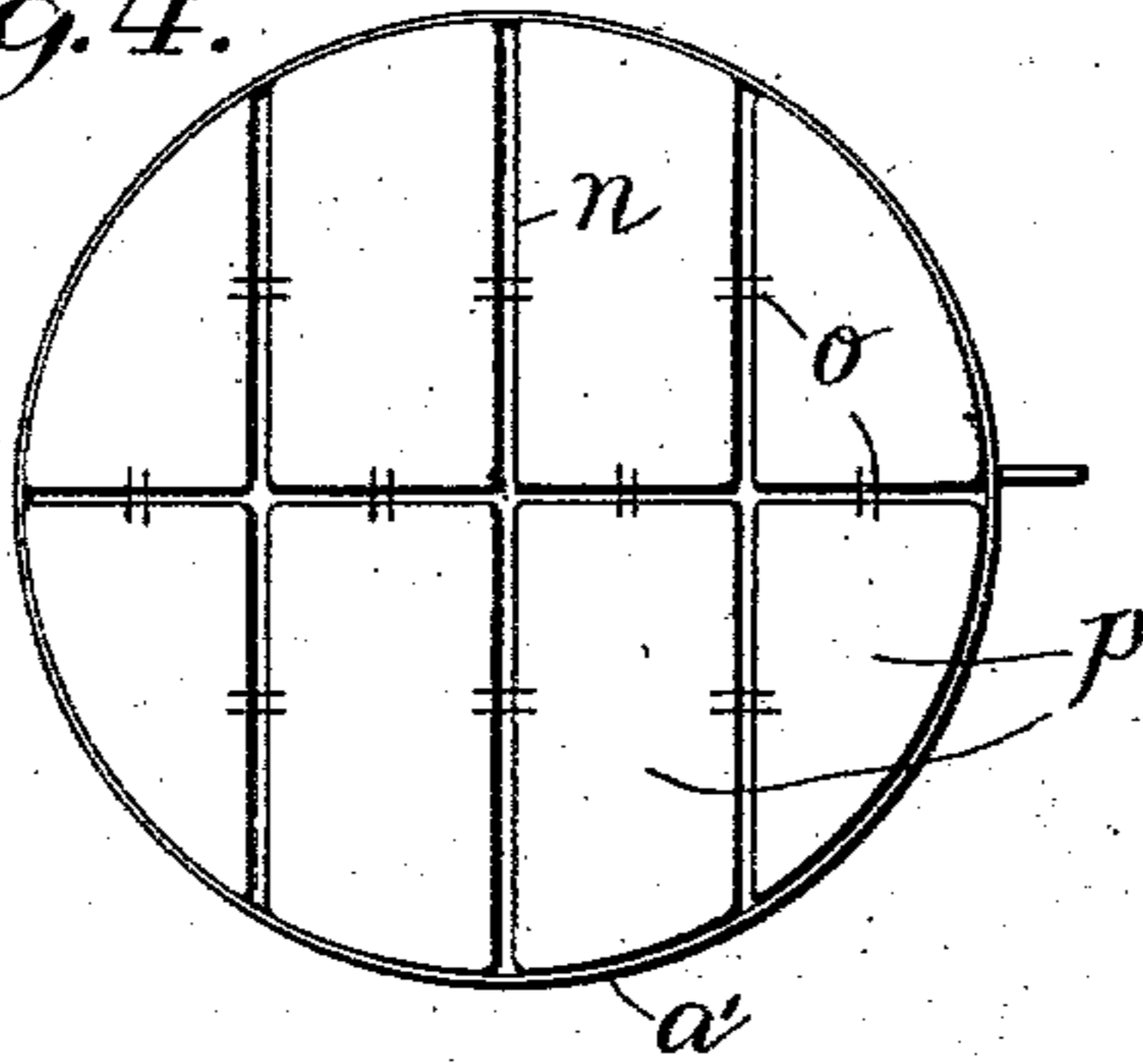


Fig. 1.

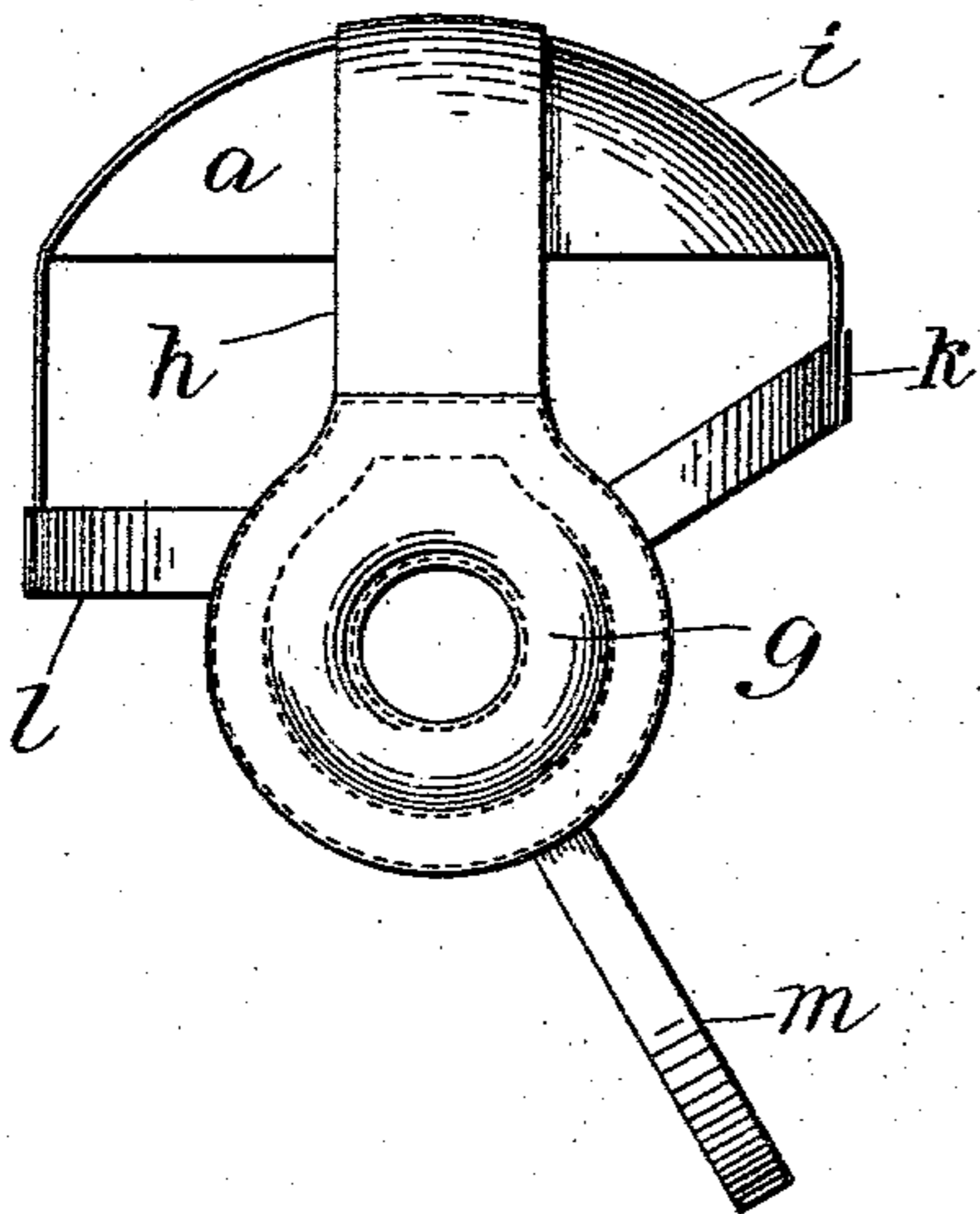


Fig. 2.

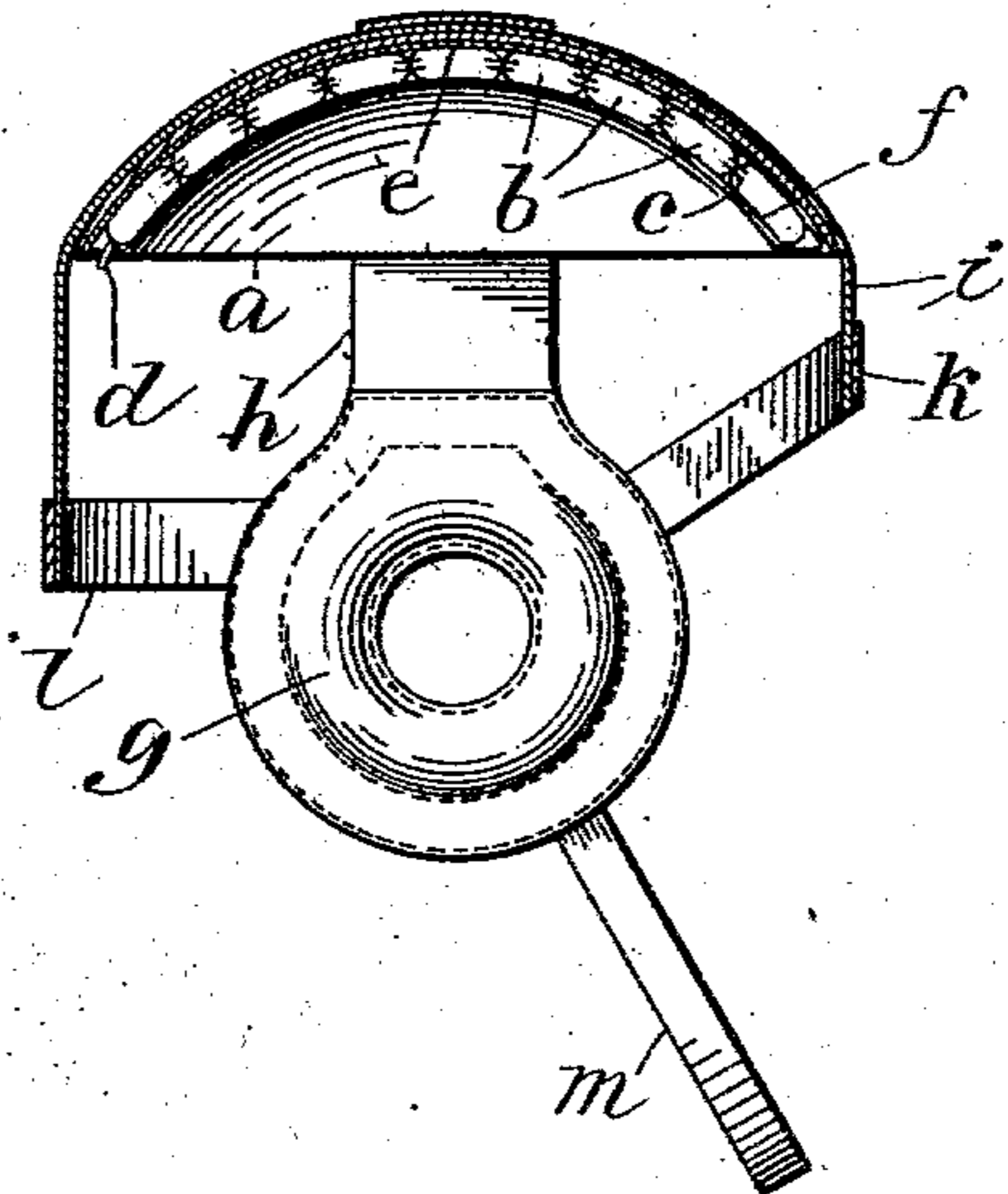
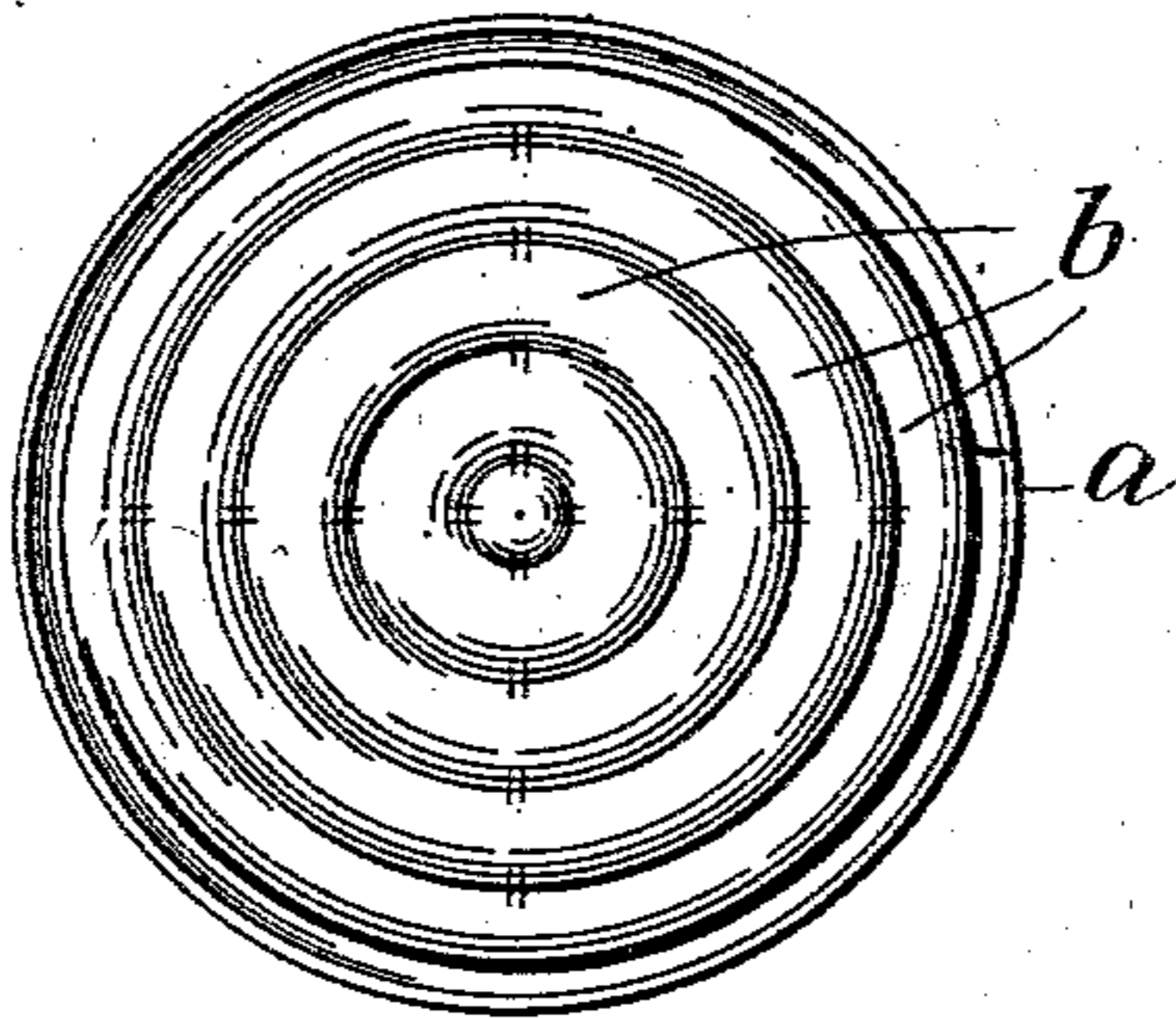


Fig. 3.



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UNITED STATES PATENT OFFICE.

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HEAD-HARNESS FOR FOOT-BALL PLAYERS.

SPECIFICATION forming part of Letters Patent No. 724,444, dated April 7, 1903.

Application filed November 21, 1902. Serial No. 132,187. (No model.)

To all whom it may concern:

Be it known that I, JULIAN W. CURTISS, a citizen of the United States, residing in Greenwich, in the State of Connecticut, have invented certain new and useful Improvements in Head-Harness for Foot-Ball Players, of which the following is a specification, reference being had to the accompanying drawings, forming a part hereof.

This invention relates to the head-covering worn by foot-ball players and intended to protect the head and ears of the players against injury from blows or otherwise. Various forms of head-covering for this purpose have been devised and have been used to a greater or less extent. One form of such covering, comprising inner and outer shells, one of which fits snugly to the head, while the other, of relatively hard and tough material, is separated from the inner shell except at its edges, but well ventilated, the shape and hardness of the outer shell being relied upon to prevent injury, has been generally used since its production and has been found to protect excellently the head of the wearer, although by reason of its unyielding character it has been somewhat uncomfortable to the wearer and has also been found under some conditions of the play to be somewhat dangerous to the opponents of the wearer.

The object of the present invention is to produce a head-covering of this general description which shall afford ample protection to the head of the wearer, shall be comfortable to the wearer, and shall not be dangerous to the opponents of the wearer.

In accordance with the invention the head-covering, having suitable appliances for securing it upon the head of the wearer, with devices to protect the ears, comprises a cellular covering for the upper portion of the head, which cellular covering may be inflated, so as to make it a sufficient protection to the head of the wearer against the blows to which it is ordinarily exposed.

The invention will be more fully described hereinafter with reference to the accompanying drawings, in which—

Figure 1 is a view in side elevation of a head-harness which embodies the present in-

vention. Fig. 2 is a longitudinal central section thereof, illustrating in detail one convenient mode of construction. Fig. 3 is a plan view of the head-piece without the devices for securing it to the head, the outer covering being removed. Fig. 4 is a plan view of a modified form of the head-piece.

The protective covering *a* for the upper part of the head is a saucer-shaped cellular structure adapted to be inflated. Obviously such a structure may be formed in different ways, one approved construction being indicated in Figs. 2 and 3. In this the head-covering is shown as consisting of a series of concentric annular chambers *b*, communicating at intervals through comparatively small apertures *c*, so that the entire structure may be inflated without difficulty, while the displacement of air from one part to another will not be too readily permitted. A stem *d* may be attached at any convenient point for convenience in inflating. This head-piece will preferably be made of a fabric embodying more or less rubber and of such a character as to permit the head-piece to be blown up quite tightly without material distortion. For the protection of the head-piece from injury it may have upper and lower coverings *e* and *f*, of canvas, leather, or any suitable material, such covering being preferably secured to the cellular structure at intervals, as by cement or stitching. This head-piece is large enough to cover the top of the head and to extend down upon the sides somewhat and is intended to conform snugly to the top of the head. For the purpose of securing this head-piece to the head of the wearer and at the same time providing protection for the ears, which are not covered by the head-piece, padded earpieces *g* are provided to cover the ears, and a band *h*, of leather or any suitable material, is extended from one earpiece to the other across the top of the head-piece. A similar band *i* extends from front to rear across the top of the head-piece, to which both of these bands are secured, while provision may be made at the rear to accommodate the stem *d* of the head-piece. A lighter band *k* may extend across the forehead of the wearer, connecting the earpieces and the front end of the band *i*.

An elastic band *l* may extend across the back of the head, connecting the earpieces and the rear end of the band *i*, while another elastic band *m* may be arranged to extend across the chin of the wearer, connecting the two earpieces.

Any suitable securing devices may be used with the head-piece, and the latter may be constructed in various ways. As shown in Fig. 4, the cellular head-piece *a'* may consist of an elliptical bag divided by partition-walls *n*, having apertures *o* to form a series of cells *p*, and, as will be obvious, the intercommunicating cells may be formed in other ways.

Formed substantially as described, with the head-piece relatively thin, but adapted to be inflated quite hard, the improved head-harness is light, reasonably cool, and quite comfortable to the head of the wearer, which it amply protects against any ordinary blow, while at the same time it is not of such a character as to cause injury to any opponent of the wearer.

I claim as my invention—

1. A head-harness for foot-ball players, comprising a cellular head-piece consisting of a plurality of small air-chambers adapted to conform to the head of the wearer and to be tightly inflated, and means for securing said head-piece in place, substantially as described.

2. A head-harness for foot-ball players, comprising a cellular head-piece adapted to

conform to the head of the wearer and to be tightly inflated, inner and outer flexible coverings to which the cellular structure is secured, and means to secure said head-piece in place, substantially as described.

3. A head-harness for foot-ball players, comprising a cellular head-piece adapted to conform to the head of the wearer and to be tightly inflated, bands crossing from front to rear and from side to side and secured thereto, and means to secure said bands upon the head of the wearer, substantially as described.

4. A head-harness for foot-ball players, comprising a cellular head-piece adapted to conform to the head of the wearer and to be tightly inflated, a band crossing said head-piece from side to side and secured thereto, earpieces secured to said band, a second band crossing said head-piece from front to rear and secured thereto, a band connecting the front end of the last-named band with said earpieces, an elastic band connecting the rear end of the same band with said earpieces, and an elastic band connecting said earpieces, substantially as described.

This specification signed and witnessed this 12th day of November, A. D. 1902.

JULIAN W. CURTISS.

In presence of—

ANTHONY N. JESBERA,
M. A. BRAYLEY.