Jan. 12, 1926. 1,569,181

T. J. HARTMAN

FOOTBALL HELMET

Filed Feb. 10, 1922 2 Sheets-Sheet 1

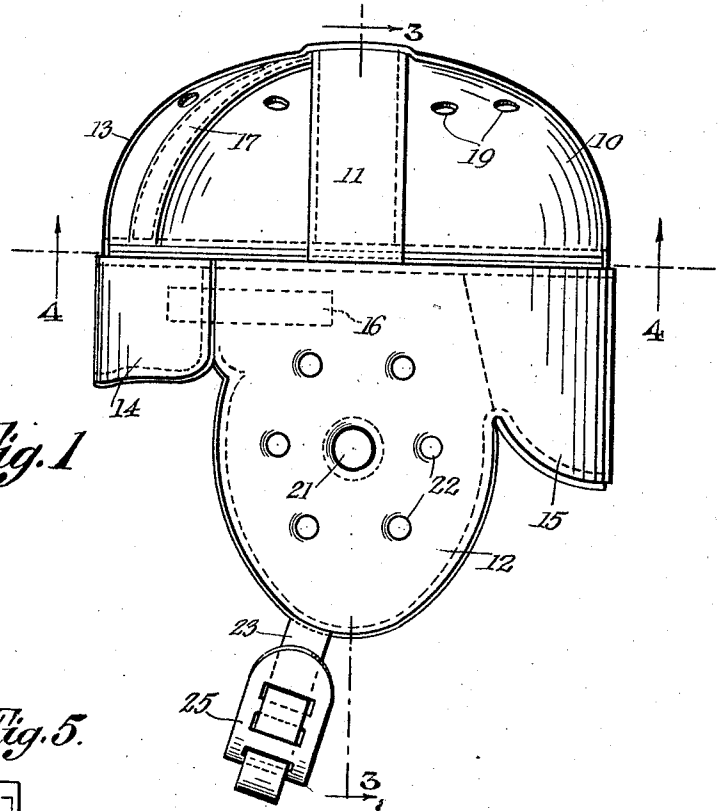
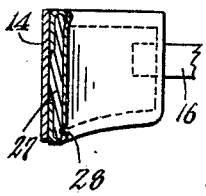


Fig. 1

Fig. 5.



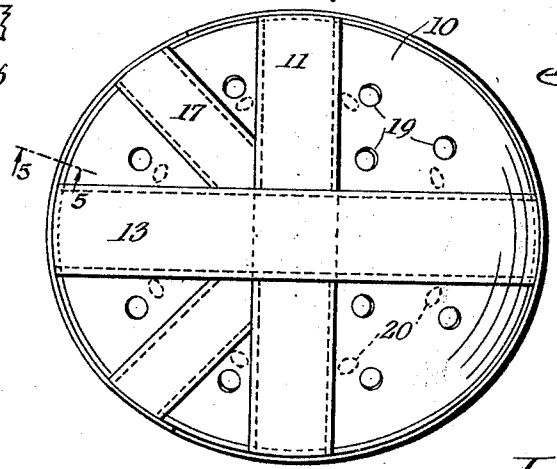


Fig. 2.

Witnesses
Berthold Oblatt.
J. D. Struve.

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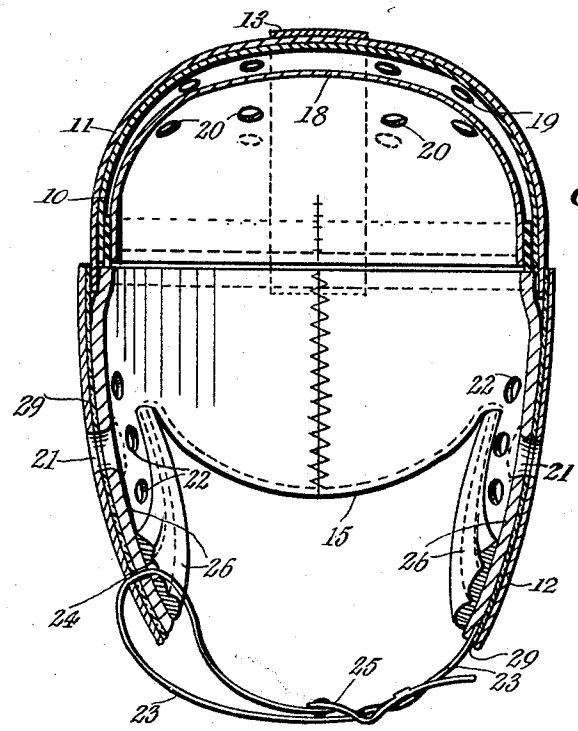


Fig. 3.

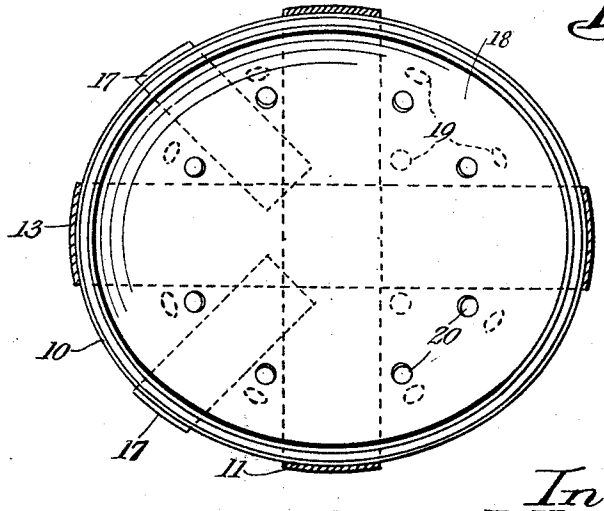


Fig. 4.

Witnesses
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Patented Jan. 12, 1926. 1,569,181

UNITED STATES PATENT OFFICE.

THOMAS J. HARTMAN, OF CHICAGO, ILLINOIS.

FOOTBALL HELMET.

Application filed February 10, 1922. Serial No. 535,526.

To all whom it may concern:

Be it known that I, THOMAS J. HARTMAN, a citizen of the United States, and a resident of the city of Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Football Helmets, of which the following is a specification.

My invention relates to new and useful improvements in football helmets, and has for its main object to provide a helmet with a pliable inner lining placed a distance inward from the crownpiece, whereby localized pressure or bumps against any part of the crownpiece will be gradually distributed over the head.

Another object is to provide additional reenforcing straps extending diagonally over the front of the helmet.

And another object is to provide the rear pads with additional reenforcing means.

Other objects will appear hereinafter.

The invention consists in the combinations and arrangements of parts hereinafter described and claimed.

The invention will be best understood by reference to the accompanying drawings forming a part of this specification, and in which,

Fig. 1 is a side elevation of the football helmet,

Fig. 2 is a top plan view of the helmet,

Fig. 3 is a vertical sectional view taken on line 3—3 of Fig. 1, looking in the direction of the arrows,

Fig. 4 is a horizontal sectional view taken on line 4—4 of Fig. 1, looking up into the helmet, in the direction of the arrows, and

Fig. 5 is a sectional detail view taken on line 5—5 of Fig. 2, looking in the direction of the arrows.

The helmet illustrated comprises a leather crownpiece 10 which has a leather cross strap 11 fastened thereover, the ends of which are connected to the ear pads 12, also a longitudinal leather strap 13 fastened over the crownpiece and over the cross strap, and having its ends connected to the front shield 14 and rear shield 15. The rear shield is made integral with the ear pads 12 but the front shield is made separate therefrom and is connected thereto by means of two elastic strips 16, enabling the front shield to move away from the ear pads, thus adapting the helmet to various sized heads. The connecting means for fastening the parts together preferably consists of rows of stitches as shown in the drawings.

I reenforce the crownpiece by fastening additional bracing members 17 thereto, which extend from the intersection of the straps 11 and 13 diagonally forward to the lower edge of the crownpiece, thus taking up shocks coming diagonally to the forward quarters of the helmet and making the forward part of the helmet especially strong and resistive.

The means for distributing equally and gradually over the head any localized pressure or bumps coming to any point of the forward part of the helmet, consists of a pliable lining 18, preferably composed of leather, positioned a short distance inward of the crownpiece, the lower edges of said lining and crownpiece being stitched together, and a space being thereby formed between said lining and crownpiece, as best shown in Fig. 3. Ventilating openings 19 are provided in the crownpiece, and corresponding ventilating openings 20 are provided in the pliable lining. With this form of inner lining 18, and especially with the assistance of the additional reenforcing straps 17, any bumps or knocks on the forward portion of the crownpiece are evenly distributed over the head and are entirely prevented from producing a localized effect on the head, thus greatly increasing the usefulness of this helmet over the ordinary forms.

The ear pads 12 are each provided with a central sound opening 21, and surrounding sound and ventilating openings 22. A fastening strap 23 has one end attached to one of the ear pads and is passed through an opening 24 in the other ear pad, having a slotted piece of leather 25 fastened to its other end, through the slots of which the strap is movably adjustable. A felt padding 26 is stitched on the inside of the ear pads, and extends around the inner side of the rear shield 15, while a similar felt padding 27 is placed in the front shield 14 and a soft lining 28 is placed over the inside of said padding 27, as best shown in Fig. 5. I provide the ear pads with stiffening and strengthening means in the form of a stiff or substantially rigid layer of fibre 29, fastened between the inner cushioning layer of felt 26 and the outer covering layer of leather 12 to assist the layer of leather to retain its desired outward curved form, in

spite of severe local pressure brought against any part of the ear pad.

It is thus evident that I have produced a particularly strong and comfortable football helmet by the use of a complete pliable inner lining placed at a distance inward from the upper portion of the crownpiece, and by the use, in addition thereto, of the diagonal reenforcing straps with the customary lateral and longitudinal straps fastened upon the outside of the crownpiece, have provided the helmet with means for distributing evenly over the head any localized pressure brought against the crownpiece; and I also provide the helmet with especially strong and desirable ear pads by the use of the additional intermediate reenforcing layers of stiff fibre.

While I have illustrated and described the preferred form of construction for carrying my invention into effect, this is capable of variation and modification without departing from the spirit of the invention. I, therefore do not wish to be limited to the precise details of construction set forth, but desire to avail myself of such variations and modifications as come within the scope of the appended claims.

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

1. A football helmet having a crownpiece provided with lateral, longitudinal and diagonal stiff reenforcing straps fastened thereon, a perforated pliable leather lining extended over the entire head and fastened to the inner edge of the crownpiece, there being a space provided between said crownpiece and lining to distribute localized pressure evenly over the head, and ear pads fastened to said crownpiece by means of said lateral reenforcing straps.

2. A football helmet having a crownpiece provided with lateral, longitudinal and diagonal stiff reenforcing straps fastened thereon, a perforated pliable leather lining extending over the entire head and being fastened to the inner edge of the crownpiece, there being a space provided between said crownpiece and lining, and ear pads fastened to said crownpiece by means of certain of said reinforcing straps.

In testimony whereof I have signed my name to this specification.

THOMAS J. HARTMAN.