June 21, 1932. E. W. TILL 1,864,104

HELMET

Filed May 29, 1930

Fig.1.

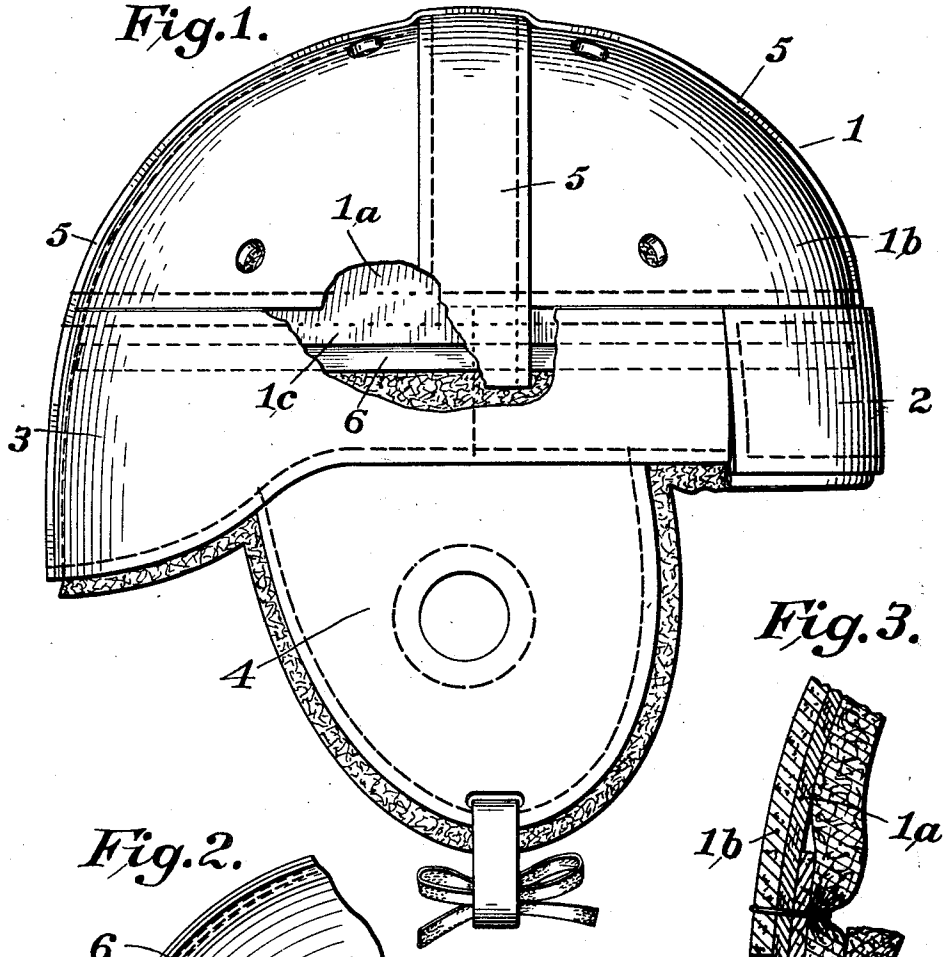


Fig.3.

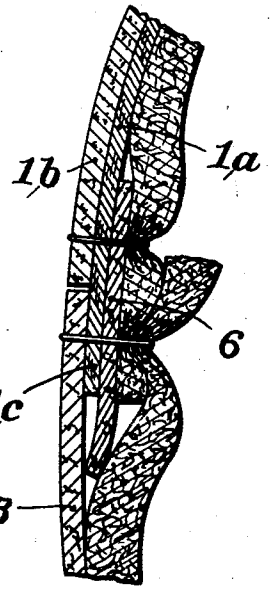
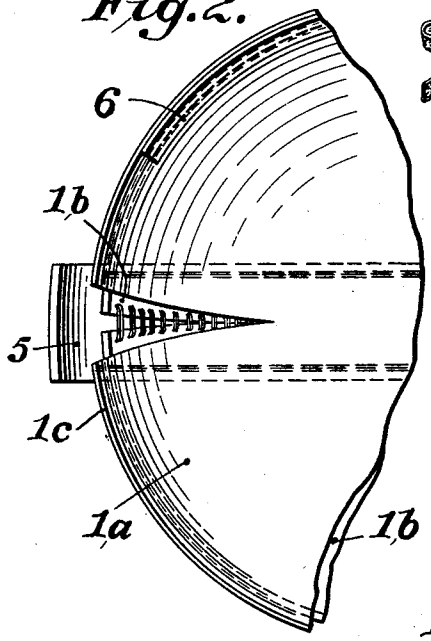


Fig.2.



Inventor:

Edwin W. Till,

By Spear Middleton Donaldson & Hall

Attys.

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UNITED STATES PATENT OFFICE

EDWIN W. TILL, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO A. J. REACH COMPANY, OF PHILADELPHIA, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA

HELMET

Application filed May 29, 1930. Serial No. 457,405.

My said invention relates to improvements in protective helmets such as are used in foot ball and similar games.

Heretofore, so far as I am aware, such helmets have customarily been made with a hard unyielding crown and a lower flexible portion or portions overlying the forehead and sides and back of the head such lower portion or portions abutting at their upper edges against the lower edge of the crown portion and being held in position by the depending ends of the customary straps which overlie the crown and to which they are secured.

Such construction is open to the objection that there is a gapping between the parts and lack of protection for the head which becomes more pronounced with use due to the shrinking of the leather under the effects of alternate wetting from rain or perspiration and drying.

The present invention aims to provide a helmet which will be free from such defects or objections and in the manner and by the means hereinafter described, my invention being defined by the claims appended hereto.

A helmet constructed in accordance with my invention is illustrated in the accompanying drawing in which

Figure 1 is a side elevation of a helmet partly broken away.

Fig. 2 is an inside or bottom view of the crown portion partly broken away; and

Fig. 3 is an enlarged vertical section through one side portion of the helmet, also partly broken away at the ends.

Referring by reference characters to this drawing, 1 designates the top or crown of the helmet which comprises an inner crown part of hard fibre 1*a* and an outer covering of leather 1*b*. 2, 3 and 4 designate the lower portions thereof for protecting the forehead, back of the head, and sides and ears, such parts being made of leather, with a suitable lining of felt or similar padding material and having their upper edges juxtaposed to or abutting against the lower edges of the crown portion.

Instead of supporting these parts entirely by the straps 5 which overlie the crown and depend below the edges thereof, as heretofore, I extend the hard fiber lining 1*a* below the lower edge of the crown portion, as indicated at 1*c* so that it overlaps the joint between the upper edges of the portions 2, 3 and 4 and the lower edge of the leather crown portion, and forms a support therefor.

The upper edges of the portions 2, 3 and 4 are secured to this downward projection of the fiber crown by stitches as indicated in the drawing and preferably a narrow strip or band of leather 6 is provided on the inside of said depending edge of the fiber crown part through which the stitches also pass, said band having its lower margin or edge depending below the lower edge of the fiber extension. In practice the hard fiber crown and its leather cover are generally glued together, and further secured by stitches which pass through both layers and also the exterior reinforcing straps 5.

Such a construction has been found in practice to be highly advantageous and to prevent any gapping between the crown and lower helmet portions under all conditions of service and weather, and to stiffen the lower portions and prevent injuries which have heretofore occurred with previous constructions by reason of the leather portions being forced in at the point of gap under the impact of an opposing player's toe or other shoe part.

Having thus described my invention what I claim is:

1. A protective helmet having a crown of rigid inflexible material provided with a leather covering, said crown having its margin depending below the edge of the covering and terminating on a line above the ears at all points, leather protectors for the forehead and sides and back of the head having their upper margins secured to the outer face of the depending portion of said crown and with their upper edges in juxtaposition to the edge of the leather cover, and a reinforcing strip overlying the inside of the lower edge of the crown and secured thereto.

2. In a protective helmet having a crown portion of rigid inflexible material, the lower edge extremity of which is on a line above the ears at all points, and said inflexible crown portion having a covering of softer ma-

terial, said inflexible crown extending below the lower edge of said covering, and protector means for the lower parts of the head covering the forehead, sides, and back of the head, said protector means having an upper edge portion secured to the outside of said uncovered lower portion of the inflexible crown and abutting the said lower edge of the covering.

In testimony whereof, I affix my signature.

EDWIN W. TILL.