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H. GOLDSMITH ET AL

FOOTBALL PROTECTIVE HARNESS

Filed May 2, 1925

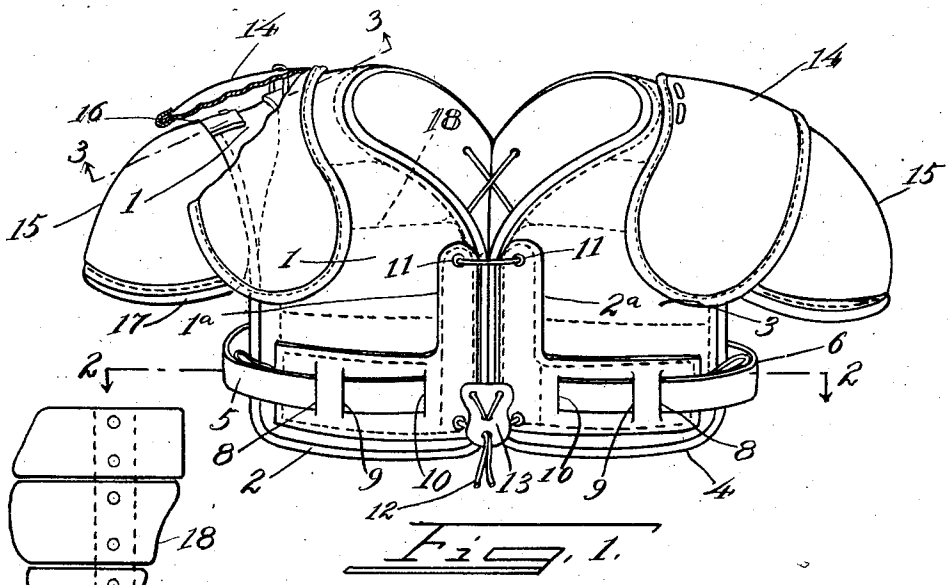


Fig. 1.

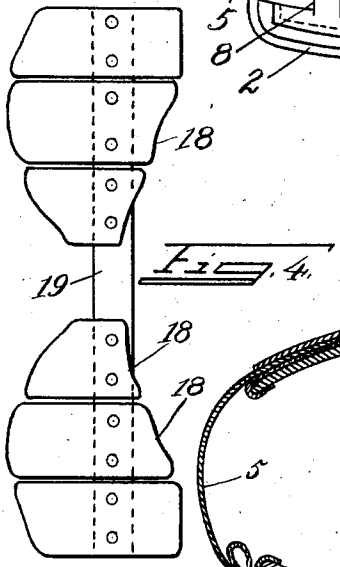


Fig. 4.

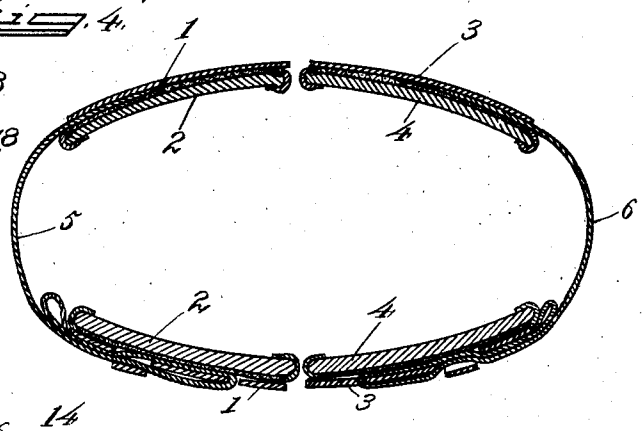


Fig. 2.

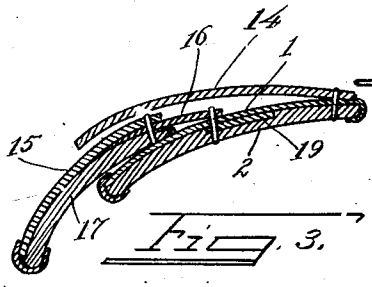


Fig. 3.

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UNITED STATES PATENT OFFICE.

HUGO GOLDSMITH AND WILLIAM A. SONNETT, OF CINCINNATI, OHIO, ASSIGNORS TO THE P. GOLDSMITH SONS COMPANY, OF CINCINNATI, OHIO, A CORPORATION OF OHIO.

FOOTBALL PROTECTIVE HARNESS.

Application filed May 2, 1925. Serial No. 27,592.

Our invention relates to football protective harness in general and particularly to harness for the protection of the chest and shoulders.

It is the object of our invention to provide for a football player a shoulder and chest protective harness which will be readily adjustable, which will thoroughly protect the portions of the shoulder liable to injury and which will at the same time permit perfect freedom of arm movement which is required in the present "open" style game. Specifically our invention has for its object the construction of a football shoulder pad and chest protector which comprises an outer cover member and a soft inner protecting backing and which may be drawn together to fit the form of the wearer.

It is further our object to secure overlapping shoulder protecting members to the chest protector over the clavicle, the shoulder, the shoulder blades and below the arm sockets so as to permit the upper members to move independently of the lower, with the raising of the arms.

A further object is to provide elastic fastenings for the portions of the pads which cover the chest and back so that the protector will be firmly held in position fitting the shape of the chest and back.

We accomplish these several objects by that novel construction hereinafter described.

In the drawings:

Figure 1 is a perspective view of our football shoulder pads as they would appear adjusted about the body of a football player, with a cutaway portion showing the shoulder pad support.

Figure 2 is a section of the pads shown in Figure 1 taken along the lines 2—2.

Figure 3 is a sectional view along the lines 3—3 in Figure 1.

Figure 4 is a plan view of a method of constructing articulated protecting members to be retained between the front portion and the backing which will permit the form fitting feature.

Generally indicated at 1 is shown one side of the chest and back covering portions. This is composed of a material such as canvas or leather which may be reinforced with pieces of leather 1^a to which are stitched or otherwise secured the backing portions 2 which are preferably of some soft and fibrous material such as felt, rubber or the like. For the other side of the chest and back a corresponding material piece 3 is provided which will fit the form of the shoulder, chest and back of the opposite side of the body which may also be reinforced with similar leather pieces as at 2^a and backing material 4 is secured to the material piece 3. In the back, in alignment with the central portion of the chest of the wearer on one side is preferably an elastic strip 5 which is secured or tacked to the back of the pad. A corresponding elastic strap 6 is secured on the opposite side to the back portion of the backing or outer piece in a similar manner. These straps extend around to the front portions of the harness where they may be secured, as shown, by interlacing in slots cut in the leather. We have found that a very satisfactory way of adjustably securing these straps is in accordance with the method illustrated. In this method the straps are first inserted from the outer face inwardly through a slot 8, then they are brought to the outer side of the leather portions through slots 9. The straps are then drawn along the leather pieces and inserted in slots 10 from which they are drawn back through the slots 9 and 8. The location of the slots and the friction caused by the faces of the straps rubbing against each other will retain the straps in whatever adjusted position they are drawn.

To fasten the two pieces 1 and 3 together so that they will be retained in snug fitting position about the chest, shoulders and back of the wearer the front and back portions of the leather pieces are provided with eyelets 11, and laces 12 may be used to draw the two pieces together snugly about the body. The laces may be tied together in adjusted position or they may be passed through a quick lacing device, as shown, which will hold the laces in a series of slots in the securing piece 13. Lacing for tying the two pieces together across the back may be used similar to that used in front or the two back pieces may be sewed together with a suitable strap.

On each side in the peak of the leather pieces at the top of the shoulder blade shoul-

der cap members 14 are secured to the pieces 1 and 3. These members are of roundly molded material such as leather or fibre and are so secured to the pieces 1 and 3 that they are freely movable. The pieces 1 and 3 are extended so that when worn they will pass like straps over the top of the shoulders. Shoulder caps 15 are secured in position on their outer edges overlapping the pieces 1 and 3 with a strap 16 which will permit free up and down and also free rotary movement underneath upper cap members 14. These underneath protecting caps 15 are made of leather or fibre molded to the shape of the shoulder and on their underside, pieces of felt or rubber 17 are securely fastened to the caps.

In order to provide adequate protection for the chest and back, articulated stiff members 18 (Figure 4) which may be of any desired stiff substance are secured to straps 19 by any suitable means, and these articulated sections are stitched within the protector between the outer pieces and the backing and when the elastic straps are drawn in will conform to the shape of the wearer.

Much of the structure hereinbefore described is old in the art but to the best of our knowledge and belief no other adequately protecting shoulder pads have ever been devised which do not need to be fastened with straps under the arm pits. The elastic side straps which fasten the form fitting pieces snugly about the chest also are novel constructive features. Further novel features of our construction are shown also in the method of support of the shoulder pads 15 with overlapping shoulder protecting members 14, protecting the clavicle, the shoulder blades and the arm sockets against shocks common in tackling in the game of football. The construction also allows the underneath pads 15 to yield to any raised position of the arms. This combination of cap members which permits freedom of shoulder action and at the same time which furnishes complete protection for the shoulder, clavicle, arm socket, chest and collar bone, is the most important novel feature of our construction taken in combination with the lack of any straps binding under the arms.

The harness is light and easily adjusted and permits use with complete protection and at the same time allows for agile movement.

Having thus described our invention, what we claim as new and desire to secure by Letters Patent is:

In combination with an athlete's protective vest provided with means for adjusting the vest along a front opening therein, auxiliary adjustments for the sides of the vest comprising elastic straps secured at the back of the vest, at least one strap for each side, said straps adapted to pass under a wearer's arms, with slots on both sides in the lower front part of the vest, and at least one strap on each side inserted within the slots and interlaced therein so that sufficient widthwise surfaces of interlaced portions of the straps will lie in frictional engagement to retain the straps in adjusted position, said straps so arranged that the pulling of the straps through the slots will adjust the vest to the size of the wearer's chest.

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