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W. P. WHITLEY

SHOULDER AND CHEST PROTECTING DEVICE

Filed April 16, 1921

Fig. 1

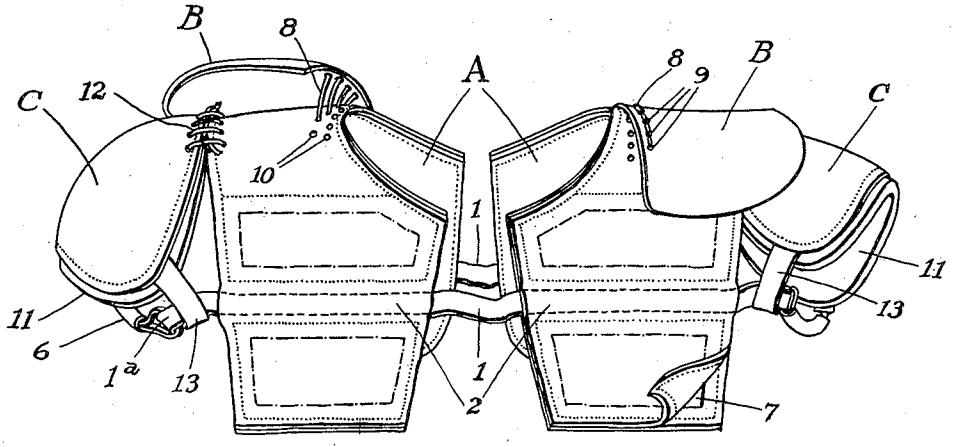


Fig. 2

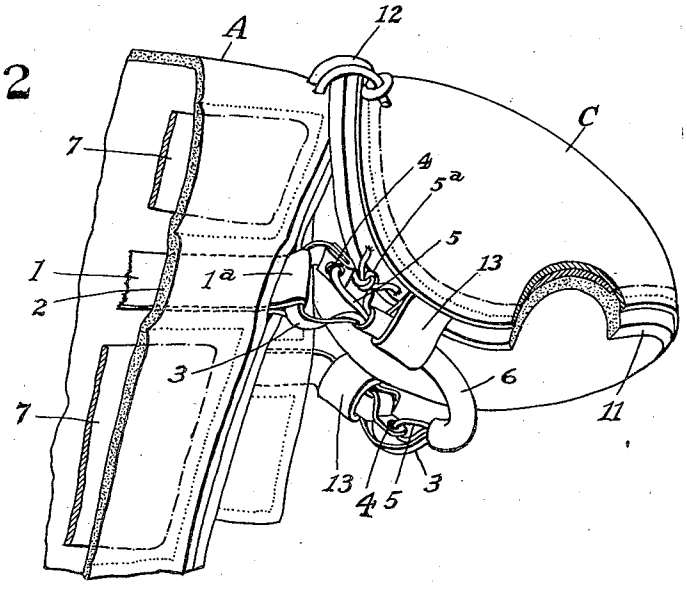
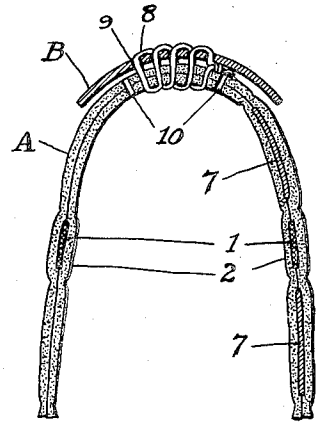


Fig. 3



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UNITED STATES PATENT OFFICE.

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SHOULDER AND CHEST PROTECTING DEVICE.

Application filed April 16, 1921. Serial No. 461,767.

To all whom it may concern:

Be it known that I, WILLIAM P. WHITLEY, a citizen of the United States, residing at St. Louis, Missouri, have invented a certain new and useful Improvement in Shoulder and Chest Protecting Devices; of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to shoulder and chest protecting devices of the kind that are used by foot ball players.

The main object of my invention is to provide a device that will afford adequate protection for the shoulders, collar bone and upper portion of the chest of a foot ball player, and which is so constructed that it will automatically adjust itself to the wearer's body and not restrict or interfere with the natural movements of the wearer's body.

Another object is to provide a protecting device of the general character referred to that is equipped with adjustable guards which protect the bony process on top of the wearer's shoulders.

And still another object is to provide a shoulder protecting device of the character referred to that is equipped with shoulder cap guards that can be adjusted inwardly and outwardly with relation to the pads of the device that extend over the wearer's shoulders, thereby enabling the device to be adjusted so as to adapt it to persons of different sizes.

To this end I have devised a protecting device which consists of two main sections or pads that extend over the shoulders and preferably downwardly over the shoulder blades and upper portion of the chest of the wearer, a connecting means for said pads or sections which is of such a character that said pads will adjust themselves automatically to the wearer's body, and thus not restrict or interfere with the natural movements of the body, guards of relatively stiff material that protect the bony process on top of the wearer's shoulders and which are connected to said pads or main sections in such a manner that they can be adjusted both longitudinally and transversely of the wearer's shoulders, and shoulder cap guards of relatively stiff material hinged to said pads and adjustably connected to same in such a manner that they can be adjusted inwardly and outwardly, thus enabling the device to be used by persons having shoulders of various widths.

Figure 1 of the drawings is a front elevational view of a shoulder and chest protecting device for foot ball players constructed in accordance with my invention.

Figure 2 is a perspective view of a portion of the device, broken away so as to more clearly illustrate the construction of same; and

Figure 3 is a vertical sectional view, taken through one of the shoulder pads so as to show how the guards for the bony process on the top of the shoulders are adjustably connected to said pads.

Referring to the drawings which illustrate the preferred form of my invention, A designates two pads or main sections that extend over the shoulders and preferably downwardly over the shoulder blades and upper portion of the chest of the wearer and 1 designates two strips of elastic webbing or other suitable material that extend transversely of the body of the wearer through casings 2 in the pads A, and thus serve as a connecting means for said pads. The ends of the strips 1 are joined together by connecting devices that pass under the arm pits of the wearer and which are of such a construction that they can be shortened or lengthened so as to adapt the device to persons of different sizes. In the form of my invention herein illustrated the adjustable connecting devices that join the ends of the transversely-disposed strips 1 together each consists of a piece 3 of elastic webbing or other suitable material that has some elasticity, extending through loops 1^a in the ends of the transversely-disposed strips 1 and provided at its opposite ends with eyelets 4, as shown in Figure 2, through which a lacing 5 is passed and secured by a knot 5^a, the lacing being doubled so as to enable the connecting device to be shortened or lengthened by simply tying the lacing at one point. In order to insure comfort to the wearer and prevent

the connecting means for the ends of the transversely-disposed strips 1 from cutting into the arm pits of the wearer, each of said connecting means comprises a tubular member 6 of rubber or the like through which the elastic strip 3 and the lacing 5 pass. Such a device can be adjusted easily to adapt it to persons of different sizes by simply shortening or lengthening the lacings 5, and as the transversely-disposed members 1 that connect the pads A together have some elasticity, the device will yield or give sufficiently so as to not restrict the natural movements of the wearer's body. The pads A are preferably formed of heavy felt, and in order to afford adequate protection for the upper portion of the wearer's chest, the depending front portions of said pads are equipped with reinforcing devices or elements 7 of fibre or other relatively stiff material that are combined with or imbedded in the pads in any preferred manner.

The device comprises guards B of sole leather or other suitable relatively stiff material that are combined with the pads A in such a way as to protect the bony process on the upper side of the wearer's shoulders, said guards being curved slightly in cross section, as shown in Figure 3, and of such length that the outer end portions of same will lap over the shoulder cap guards C, hereinafter described. In order that the shoulder guards B may be arranged in various positions, so as to insure the device accurately fitting the wearer, the guards B are connected to the pads A in such a manner that they can be adjusted inwardly or outwardly lengthwise of the wearer's shoulders and also forwardly and rearwardly transversely of the wearer's shoulders. One convenient way of accomplishing this is to connect each of the guards B to the pad A with which it co-operates by a lacing 8 that passes through holes formed in the guard B and in its co-operating pad at such points as to permit the guard to be arranged in various positions. For example, each of the guards B may be provided with a row of holes 9 and the co-operating pad may be provided with two rows of holes 10, the number of holes in the rows in the pads A exceeding the number of holes of the rows in the guards B. If it is desired to adjust the guards B outwardly the lacings 8 can be inserted through the outermost rows of holes in the pads A, and if it is desired to shift the guards B forwardly or rearwardly, the lacings are first removed, the guards B are then arranged in the desired position, and thereafter the lacings are inserted in the co-operating holes in the guards B and pads A, so as to secure said guards in adjusted position. It will, of course, be obvious that various other means could be used for connecting the guards B to the pads A. Therefore, I wish it to be understood that my invention is not limited to the particular construction herein illustrated, as this feature of my invention consists of shoulder guards adjustably mounted on the shoulder pads of the device in such a way that said guards can be adjusted longitudinally and also transversely of the wearer's shoulders.

The shoulder cap guards C previously referred to each consists of a concavo-convex rigid member equipped with a lining 11 of felt or the like and secured to the pad A with which it co-operates in such a manner that said guards C can be adjusted inwardly and outwardly with relation to the pad A, so as to insure its fitting snugly against the shoulder cap of the person wearing the device. Preferably each of the shoulder cap guards C is connected to the pad A with which it co-operates by means of an elastic cord 12 that is laced back and forth through holes in the guard C and in the adjacent edge portion of the pad A. If it is desired to move the shoulder cap guards C outwardly so as to adapt the device to a person having relatively broad shoulders, the cords 12 are untied and lengthened so as to permit the guards C to move outwardly with relation to the pads A. This method of connecting the shoulder cap guards C to the shoulder pads A not only makes it possible to arrange the shoulder cap guards in various positions, but it also forms a flexible hinge connection between the shoulder cap guards and the shoulder pads which insures the device adjusting itself automatically to the wearer's body. Means are provided for holding the shoulder cap guards C snugly down on the wearer's shoulder caps, and while various means can be used for this purpose, I prefer to equip each of the shoulder cap guards C with a plurality of loops 13 of elastic webbing or the like for receiving one of the connecting devices that joins the ends of the transversely-disposed strips 1 together.

A device of the construction above described affords adequate protection to the shoulders, collar bones, shoulder caps and the upper portion of the chest of a foot ball player, and it is so constructed that it will automatically adjust itself to the wearer's body and not interfere with or restrict the natural movements of the body. Furthermore, it is of such design that it can be adjusted easily to adapt it to persons of different sizes, the shoulder cap guards C being connected to the pads A in such a manner that they can be moved inwardly and outwardly and the shoulder guards B being so mounted that they can be adjusted both longitudinally and transversely of the wearer's shoulders.

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

A chest and shoulder protecting device

comprising oppositely disposed pads adapted to cover the shoulders, collar bones, and chest of a wearer, elastic means for connecting the inner adjacent edges of said pads, concave shoulder guards removably hinged to said pads, means connecting the outer edges of said pads to said shoulder guards, and a second pair of substantially rigid shoulder guards connected to the inner and upper edges of said pads and overlying the portions of said pads which bear on the wearer's shoulders and crossing the joint between the first mentioned shoulder guards and pads.

WILLIAM P. WHITLEY.