

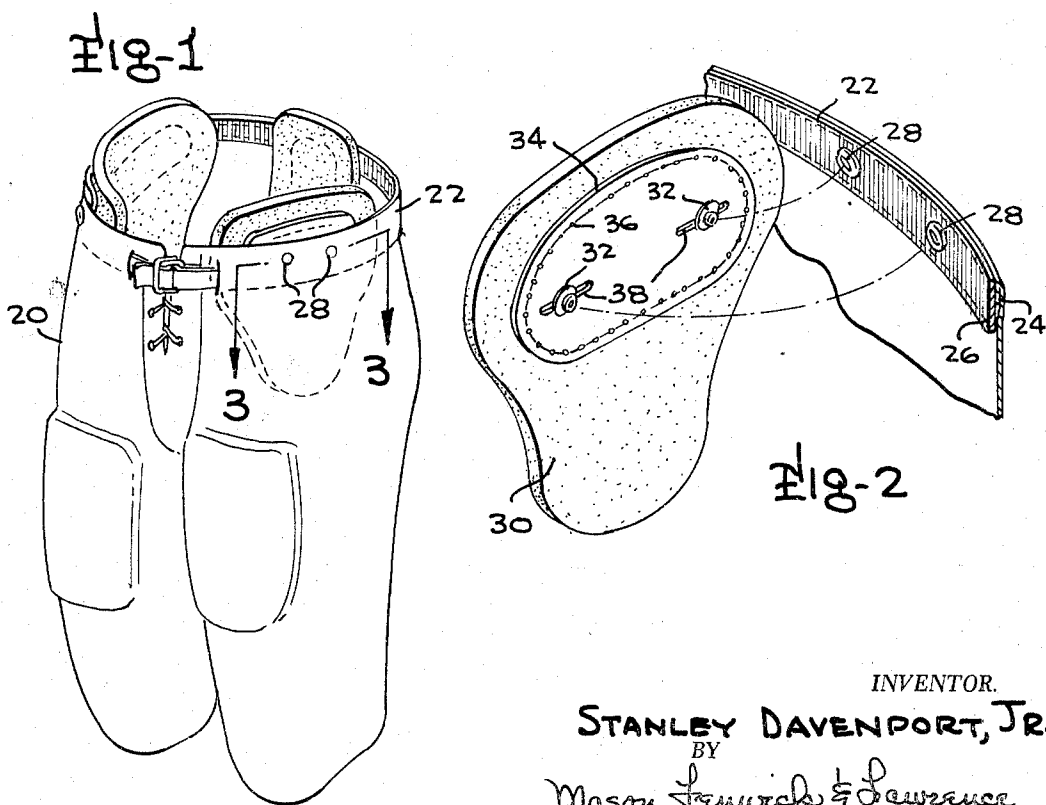
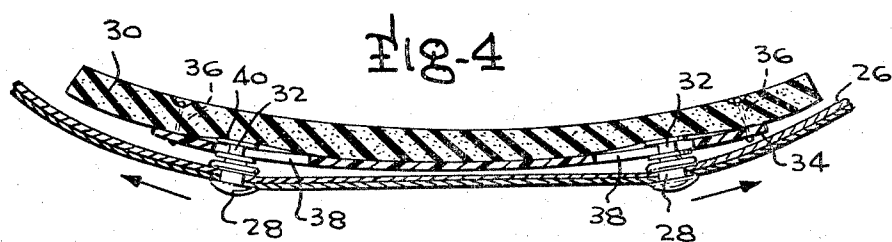
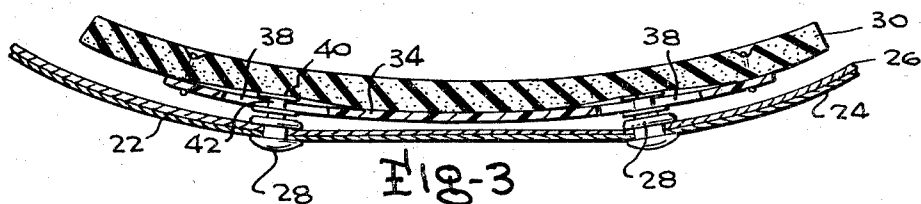
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S. DAVENPORT, JR

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ATHLETIC PAD FOR ATTACHMENT TO ELASTIC SUPPORT

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INVENTOR.

STANLEY DAVENPORT, JR.

BY

Mason, Fenwick & Lawrence
ATTORNEYS

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ATHLETIC PAD FOR ATTACHMENT TO ELASTIC SUPPORT

Stanley Davenport, Jr., Knoxville, Tenn., assignor to Southern Athletic, Inc., Knoxville, Tenn., a corporation of Tennessee

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9 Claims

ABSTRACT OF THE DISCLOSURE

An athletic pad having a retaining plate attached to one side with slots in the retaining plate slidably mounting male snap connector members connectable to female connector members on an elastic portion of an athletic uniform so that stretching of the elastic portion is enabled by sliding movement of the male connectors in their support slots.

BACKGROUND OF THE INVENTION

This invention is directed to the field of protective padding and is more specifically directed to the field of protective padding of the type worn by athletes. Even more specifically, the invention is directed to a protective hip pad to be worn with an elastic uniform such as football trousers.

A wide variety of padding has been employed in the past for the purpose of protecting athletes from bruises or more serious injury. Hip pads have been employed in a wide variety of forms for protecting the hips of the user and have generally proven to be satisfactory for this purpose. Previously, such pads have been attached by means of straps or belting in a manner analogous to a corset or the like. However, in more recent years, individual pads have been attached by means of snap connectors receivable within the athlete's outer uniform trousers and connectable thereto by means of snap connectors or other similar connecting means.

While the last mentioned arrangement has proven to be fairly satisfactory when employed with trousers formed of conventional non-stretch material, the advent of stretchable material for use in football trousers and the like in recent years has presented problems which have not been solved until the present invention. Specifically, the connection of a hip pad to a stretchable trouser by means of snap connectors attached to the hip pads has not proven to be satisfactory in that the connection prevents the trouser from stretching in that portion between the connectors or, alternatively, the force exerted on one of the connectors by the stretchable material serves to disconnect the connector from the stretchable material so that the pad is no longer retained in desired position with respect to the trousers. In either case, the result is unsatisfactory in that when the connectors remain connected to the trousers, the wearer does not obtain all of the advantages of elasticity since a portion of the trousers remain in effect inelastic. On the other hand, disconnection of the connectors is also obviously undesirable since the pad can shift to undesired positions causing discomfort and loss of protection for the wearer. Therefore, the problem of providing an adequate connection between the pads and the elastic trouser members of athletic uniforms has remained uncorrected until the advent of the present invention.

Another problem found in both the elastic and inelastic pad constructions is that the connector members of both the trousers and the pads must be in substantial alignment in order to provide an effective connection.

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Therefore, care must be taken in constructing both the pad and the trouser in order that the connectors be spaced apart an equal distance. The instant invention, by enabling movement of the connectors on the pad prior to connection to the trousers, obviates the necessity for the accuracy of the spacing between the connector elements previously required.

Therefore, it is the primary object of this invention to provide a new and improved hip pad construction which is connectable to either elastic or inelastic athletic uniform trousers.

Obtainment of the object of this invention is enabled through the provision of a padding member which has a retaining plate that is peripherally attached to the padding member by means of stitching or other suitable connection means. The retaining plate is formed of strong, yet somewhat flexible, plastic or the like and has at least two elongated parallel slots formed within its interior portion. Each slot mounts a male snap-type connector member which is connectable with a female snap-type connector member attached to the uniform trousers. Connection of the male snap-type connectors to the female snap-type connectors of the trouser is a simple matter and the connection can be retained upon subsequent stretching of that portion of the trouser having the female connectors mounted therein since the slots of the retaining plate permit movement of the male snap-type connectors toward and away from each other.

Moreover, another advantage obtained by the instant invention is that the padding can be connected to a wide variety of uniform trousers in which the distance between the female connector members may vary with fairly substantial latitude. This is true because the male connectors can be positioned in alignment with the female connectors by movement along their support prior to connection to the female connector members.

DESCRIPTION OF THE DRAWINGS

FIGURE 1 is a perspective view of the preferred embodiment of the subject invention as mounted in football trousers;

FIGURE 2 is a perspective enlargement of the pad showing the manner of attachment to the football trouser waistband;

FIGURE 3 is a sectional view taken along lines 3—3 of FIGURE 1 showing the parts in one position in which the elastic supporting member is not stretched; and

FIGURE 4 is a sectional view similar to FIGURE 3 but showing the elastic support member in a stretched condition.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Attention is initially invited to FIGURE 1 of the drawings which illustrates football trousers 20 of conventional design and construction formed of elastic material having the capability of being stretched substantially during use by the wearer. Trousers 20 are provided with a waistband 22 which is formed of the outer trouser material 24 and an inner waist encircling elastic band 26. A plurality of female snap connectors 28 are attached to waistband 22 to face inwardly for receiving male type connectors of hip pads to be worn with the trousers.

The above-discussed trouser construction is conventional and forms no part of this invention. Moreover, it should be understood that the similar constructions can be employed in non-elastic trouser constructions.

Prior known hip pad constructions employing male connector members connectable to the female connector members 28 have failed to provide satisfactory service since that portion of the waistband between the female

connector members 28 cannot stretch by virtue of the connection of the female connectors to the fairly ridged inelastic hip pad by means of male connectors on the hip pad. However, sufficient force would sometimes be exerted on the female connectors as to cause them to become disconnected from the male connectors on the hip pad so as to consequently result in an improper positioning of the hip pad within the trousers. Consequently, the wearer would be subjected to possible injury, discomfort, or in the very minimum, the inconvenience of having to reattach the hip pads to the trouser connectors 28.

The instant invention provides a solution to the foregoing problems through the provision of a hip pad including a resilient padding member 30 formed of suitable conventional material such as foam rubber, foamed vinyl or other suitable flexible and sufficiently soft padding material which can be selected from any one of many conventional compositions. Normally, such padding material is provided with a protective coating such as a vinyl resin varnish about its outer surfaces for protecting the padding from moisture, dirt or other environmental materials which might prove harmful to the padding material per se.

The connector retaining plate 34 is attached to the resilient padding member 30 by means of peripheral stitching 36 extending about the periphery of the plate. Moreover, first and second aligned parallel slots 38 are provided in plate 34 for the purpose of mounting the male snap connector member 32 thereon. The slots 38 enable the male snap connectors 32 to reciprocate along their length but prevent the male connector member from being removed from connection to plate 34 by virtue of the fact that each male connector member comprises a base flange 40 of greater diameter than the width of slots 38 and having a rod 42 extending through the slot as illustrated in FIGURE 3. The diameter of base flange 40 being greater than the width of slot 38, it obviously is impossible for the male snap connector member 32 to be removed from its retaining plate 34. That portion of the male connector receivable in the female connector 28 is mounted on the outer end of rod 42.

Attention is invited to FIGURE 3 for a better understanding of the operation of the invention which illustrates the parts in position with the elastic waistband 22 being relatively unstretched and with the male connector members 32 being in an intermediate position approximately in the middle of their respective slots 38. However, should the elastic waistband material be stretched outwardly in the direction indicated by the arrows in FIGURE 3, it can be seen that the male connectors can freely slide outwardly along their respective slots 38 to the FIGURE 4 position. Consequently, great versatility and comfort is enabled by the construction of the preferred embodiment.

Moreover, it can be seen that the male connectors 32 have a substantial latitude of positioning movement along their slots prior to connection to the female connector members in the waistband as illustrated in FIGURE 2 so that it is not absolutely essential that the distance between the female snap connectors and the waistband be maintained with great accuracy at a given value.

I claim:

1. A hip pad adapted to be connected to uniform

mounted connectors mounted on a stretchable portion of an athletic uniform, said hip pad comprising a resilient padding member, pad-mounted connector members connectable with said uniform-mounted connectors and retaining means connecting said pad-mounted connector members to said padding member for permitting relative movement of said pad-mounted connector members with respect to each other while preventing any substantial movement of said pad-mounted connector members away from said padding member so that said padding connector members can follow movement of said uniform-mounted connector members when connected to said uniform-mounted connector members without becoming disconnected to consequently maintain said pad in proper connection to said uniform while concurrently permitting stretching of said stretchable portion of said uniform.

2. The invention of claim 1 wherein said retaining means comprises a retaining plate attached to the exterior of said resilient padding member and having slots in which said pad-mounted connector members are retained for movement along the length of said slots.

3. The invention of claim 2 wherein each of said pad-mounted connector members comprises a male snap connector which is connectable to said uniform-mounted connector.

4. The invention of claim 3 wherein each of said male connector members includes a base flange on the interior side of said plate and having a diameter greater than the width of said slots and a rod extending outwardly from one face of said base flange through its associated slot and terminating in a peripheral flange which retains a generally cylindrical snap fitting on said rod exteriorly of said plate.

5. The invention of claim 4 wherein said retaining means includes stitching attaching said retaining plate to said padding member.

6. The invention of claim 2 wherein said slots are in horizontal aligned relationship.

7. The invention of claim 6 wherein each of said pad-mounted connector members comprises a male snap connector which is connectable to said uniform-mounted connector.

8. The invention of claim 7 wherein each of said male connector members includes a base flange on the interior side of said plate and having a diameter greater than the width of said slots and a rod extending outwardly from one face of said base flange through its associated slot and terminating in a peripheral flange which retains a generally cylindrical snap fitting on said rod exteriorly of said plate.

9. The invention of claim 8 wherein said retaining means includes stitching attaching said retaining plate to said padding member.

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MERVIN STEIN, Primary Examiner

GEORGE H. KRIZMANICH, Assistant Examiner