My invention relates to athletic equipment and relates more particularly to thigh pads for use in football equipment, soccer, hockey, lacrosse, etc. equipment.

In football pants, an inner pocket is generally provided in the forward thigh portions thereof in which fabric and fibre board shaped pads are inserted to protect the player against injury in play. It is an object of my invention to provide an improved thigh pad structure for insertion within football pants, said structure being simple in construction, economical to manufacture and highly efficient in use.

Another object of my invention is to provide an improved thigh pad which will be considerably of lighter weight than prior existing pads and which will afford greater protection to the player using the same.

A still further object of my invention is to provide a thigh pad of the character described which will absorb external blows uniformly and express the force thereof gradually.

Other objects of my invention and the invention itself will become more readily apparent to reference the following description in which description reference will be made to the accompanying drawings, in which drawings:

Fig. 1 is a perspective view of the thigh pad of my invention;

Fig. 2 is a plan view of the pad of Fig. 1, a portion of the cover being removed for clarity;

Fig. 3 is a horizontal sectional view taken on the line 3–3 of Fig. 2;

Fig. 4 is a view taken on the line 4–4 of Fig. 2 showing the effect upon the application of external force to the pad;

Fig. 5 is a perspective view of the lower portion of a football player showing the position of the pad in relation to the pants;

Fig. 6 is a longitudinal sectional view of the tube of Figs. 2, 3 and 4 showing the seal thereof.

Referring now more particularly to the drawings, in all of which like parts are designated by like reference characters, at 10, Fig. 1, I show the improved thigh pad of my invention, preferably comprising a corrugated body portion 11 with strengthening ribs 12 preferably formed of fiber board, plastic or like semi-rigid material, as sole leather or the like, a rim slip cover 13 preferably formed of flexible material, such as rubber, and having a continuous air confining cylindrical tube 14 positioned about the inner surfaces of the concave outer edges 15 of the body portion 11, as best shown in Figs. 2, 3, and 4.

The slip cover 13 preferably conforms in external shape to the body portion 11 but is of slightly smaller extent wherefore, since the same is preferably formed of rubber and is flexible, when the same is placed on the body portion of the pad, it is stretched thereover and hence tightly fitted thereon. The said slip cover 13 is also provided with an edge cover 19 adapted to be fitted over the outer edges 15 of the body portion 11 and over the outer guide strip 16 secured thereto, as best shown in Figs. 1 and 3. The cover 13 is also provided with a hem 18 of relatively less width adapted to overlap the outer edges on the convex side of the body portion 11 snugly engaging the same and with a hem 19 of relatively greater width adapted to be disposed on the inner concave side of the body portion. The hem 18 is thus adapted to completely cover the guide strips 16, 16' on either side of the tube 14 as well as the tube 14 when extending over the peripheral edges of the inner side of the pad.

On either side of the tube 14 and cementsitiously secured to the body 11 said strips 16 and 16' are disposed, preferably formed of continuous strips of foraminous material, such as sponge rubber, such strips 16 and 16' being preferably disposed about said tube, as best shown in Fig. 3, acting as guides to dispose the same about the periphery of said body 11 and to restrict the lateral movement thereof as well as auxiliary blow dampening means, shown in Fig. 4 and as later described herein.

It will be noted that one of said peripheral strips 16 is immediately disposed adjacent the outer edges of the body portion 11 on the underside thereof, the tube 14 is disposed inwardly thereof and immediately adjacent said outer strip 16 and said second strip 16' is disposed inwardly of the continuous tube 14 and immediately adjacent the said tube in spaced relation to said first strip 16.

The tube 14 is preferably shown inflated to a desired pressure and said tube sealed at such pressure, as shown in Fig. 6, by a plug 20 inserted in the ends thereof, the tube being maintained by the cover 13, in seal and in seated engagement with the body 11 preventing collapse, crumbling or shifting of the same during use.

It will be noted that when the thigh pad of my invention is inserted within the pockets 31 provided for that purpose in a football player's pants, having been placed under predetermined, proper, preferably low pressure, that that pressure is directed against the leg of the player and absorbs any shock or impact from external force by distributing said impact over the entire area covered by the pad. Hence, a blow is not localized but absorbed and de-accelerated over a considerable area and injury to a player's upper leg is avoided.

By the use of the foraminous tube confining strips 16, 16' on either side of the tube, it is further obvious from Fig. 4 that impact on the external face of the body of the thigh pad will be first absorbed over the circumference of the entire tube 14 and the strips 16, 16' laterally expanded due to slight expansion of the tube 14; that the strips 16, 16' limit such expansion and that the force of the blow, owing to the communication openings in the material of the strips 16, 16' will be dampened and diffused thereby.

It will be obvious that the thigh pad of my invention will be adapted to be inserted within the playing pants of a football player, as shown in Fig. 5, and that the body portion of such pads may be differently constructed, as desired, for use in body contact sports without however departing from the spirit of my invention or the scope of the appended claims.

What I claim is:

1. A protective thigh pad for contact sports adapted to be worn upon the thigh of a player and comprising a rigid body portion, a pair of guide strips positioned upon the inner surface of said body portion at the edge thereof, a flexible tube containing air disposed between said guide strips, said guide strips adapted to restrain the lateral thrust of said tube when said body portion is subjected to a sudden blow whereby the force of said blow is distributed throughout said tube.

2. A protective thigh pad for contact sports adapted to be worn upon the thigh of a player and comprising a laterally curved, substantially rigid body portion, a...
3. A protective thigh pad for contact sports adapted to be worn upon the thigh of a player and comprising a laterally curved, substantially rigid body portion, said body portion having laterally directed strengthening ribs, a pair of continuous, uniformly interspaced, resilient guide strips cohering to the inner concave surface of said body portion at the edge thereof, a continuous, flexible tube containing air, said tube disposed between said guide strips and being retained against lateral displacement thereby, a flexible rim slip cover positioned over the edge of said body portion and having a flap extending over said guide strips and said tube whereby said tube is retained against displacement away from said body portion, said guide strips adapted to restrain the lateral thrust of said tube when said body portion is subjected to a sudden blow whereby the force of said blow is distributed throughout said tube.

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