June 7, 1932. F. GLAHE 1,862,303

KNEE AND ELBOW PAD

Filed Dec. 29, 1930

Fig. 1.

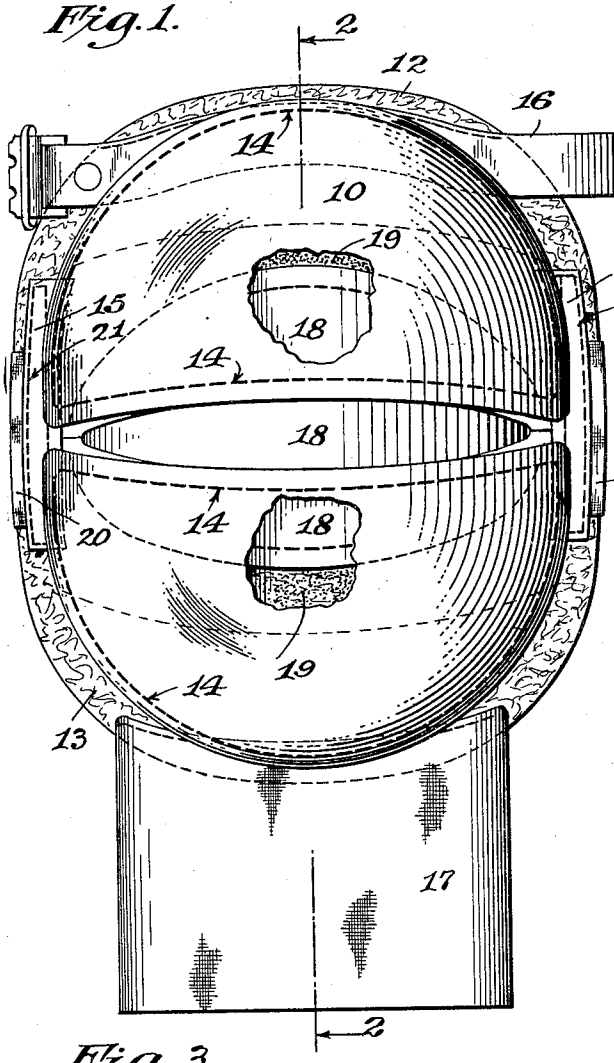


Fig. 2.

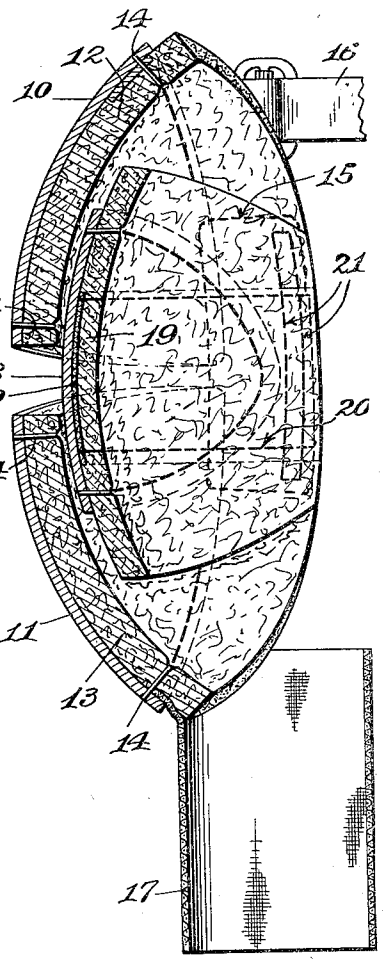
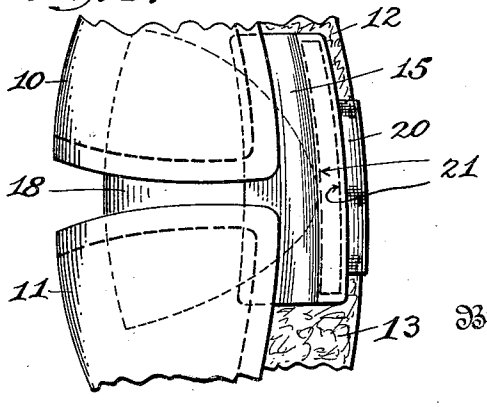


Fig. 3.



Inventor:
Fred Glahe

By his Attorneys
Redding, Greeley, O'Shea & Campbell

Patented June 7, 1932 1,862,303

UNITED STATES PATENT OFFICE

FRED GLAHE, OF CHICAGO, ILLINOIS, ASSIGNOR TO A. G. SPALDING & BROS., OF NEW YORK, N. Y., A CORPORATION OF NEW JERSEY

KNEE AND ELBOW PAD

Application filed December 29, 1930. Serial No. 505,307.

The present invention relates to protective devices for the body of a player engaged in games such as football, hockey, etc., and embodies, more specifically, an improved pad designed for the protection of the knee, elbow or other joint.

More particularly, the invention relates to protective pads of the above character, wherein relatively movable portions of the pad are adapted to conform to the variations of movement of the body members of a player adjacent the joint to be protected. In this connection, existing pads and protective devices have formed as a unit in such fashion that the elements yield only to the blows received during play and do not follow the movements of the part of the body to be protected, particularly where the protected portion is a joint, such as the knee or elbow. When the knee or elbow is bent, the existing forms of pads do not extend to fully protect the extended surface presented by such joint and as a result inadequate protection frequently results.

An object of the present invention is to provide a device which is formed of a plurality of portions adapted to be secured as a unit upon the body and adapted to automatically extend or contract itself with the bending or straightening of the joint to protect, fully, all portions thereof under all conditions.

A further object of the invention is to provide a protective device of the above character which offers no impediment to the movement of the joint. In this respect, the present invention differs widely from existing protective pads in that these existing forms often seriously impede the free use of the joint during play.

Further objects, not specifically enumerated above, will be apparent as the invention is described in further detail in connection with the accompanying drawing, wherein:

Figure 1 is a plan view of a pad constructed in accordance with the present invention.

Figure 2 is a view in section, taken on line 2—2 of Figure 1, and looking in the direction of the arrows.

Figure 3 is a detail view showing the manner in which the knuckle elements are secured together.

Referring to the above drawing, a pad is shown as provided with two spherical or cup-shaped elements 10 and 11. These elements are preferably formed of stiff leather shaped as shown in the drawing and mounting felt padding members 12 and 13, respectively. Stitching 14 serves to secure the padding to the outer members 10 and 11 and a leather or other suitable hinge member 15 is provided at the sides of the outer members to secure the same together at such points with provision for relative movement about an axis passing through such hinge points upon either side of the members. The member 10 is provided with a strap 16 while the member 11 is provided with an elastic stocking member 17, the strap and stocking serving to secure the respective portions 10 and 11 to the body members upon opposite sides of a joint. For example, if the pad is used as an elbow pad, the strap 16 may be secured to the upper arm portion while the stocking 17 is inserted over the forearm. The portion 11 thus follows the movement of the forearm while the portion 10 follows the movement of the upper arm.

Within the portions 10 and 11, and formed upon a radius greater than the portions 10 and 11, is an inner knuckle member 18 which has secured thereto padding 19. This inner member is curved on a different radius than the surface of the members 10 and 11. A suitable reinforcing strap or hinge member 20 may be secured between the padding 19 and the member 18 and the unit thus formed is secured adjacent the hinge strap 15 upon opposite sides of the pad. For example, stitching 21 may serve to secure the inner knuckle member 18 to the outer members at their hinged connection and the three members are thus adapted to turn about a common axis which passes through the hinged portions. Upon bending the elbow, the elements 10 and 11 follow the movements of the respective arm portions and widen the gap between the adjacent sides of such elements. Protection of the elbow is not impaired at this time since the inner knuckle member 18 lies below

the gap to prevent any portion of the elbow from being exposed.

While the invention has been described with specific reference to the accompanying drawing, it is not to be limited, save as defined in the appended claims.

I claim as my invention:

1. A protective pad comprising a plurality of portions curved on equal radii, means to hinge the portions together adjacent the sides thereof, an auxiliary portion curved on a different radius than that of the first portions, and means to secure the auxiliary portion within the first portions and below the adjacent edges thereof.

2. A protective pad comprising a plurality of portions curved on equal radii, means to secure the portions to a body, means to hinge the portions to move about a common axis, an auxiliary portion curved on a different radius than that of the first portions, and means to secure the auxiliary portion within the first portions and below the adjacent edges thereof, the securing means lying substantially in the axis of the hinge means.

This specification signed this 22nd day of December, A. D. 1930.

FRED GLAHE.