H. GOLDSMITH.

ATHLETIC PROTECTIVE HARNESS.

APPLICATION FILED MAR. 10, 1916.

1,264,916. Patented May 7, 1918.

Fig. 1.

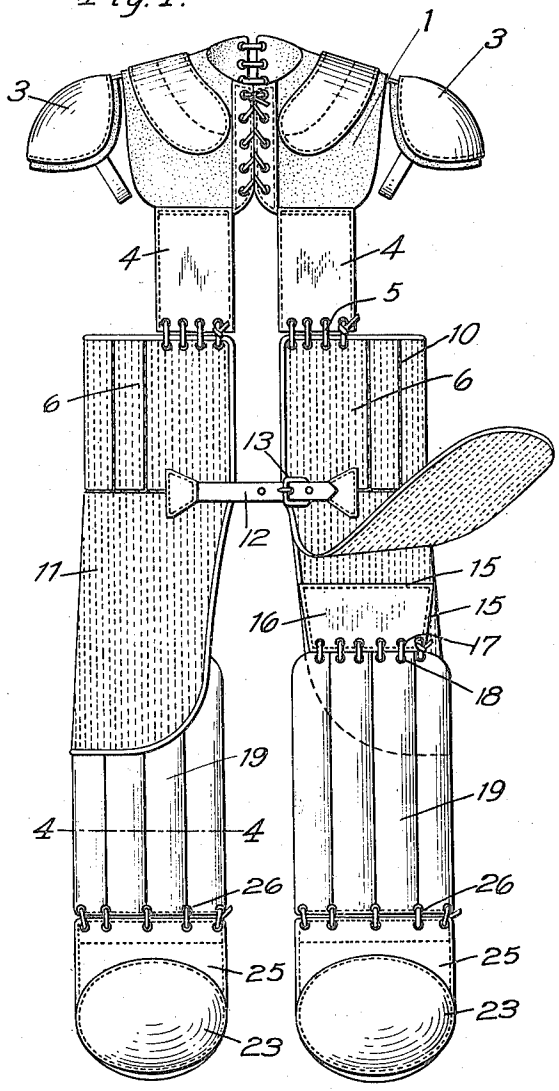


Fig. 2.

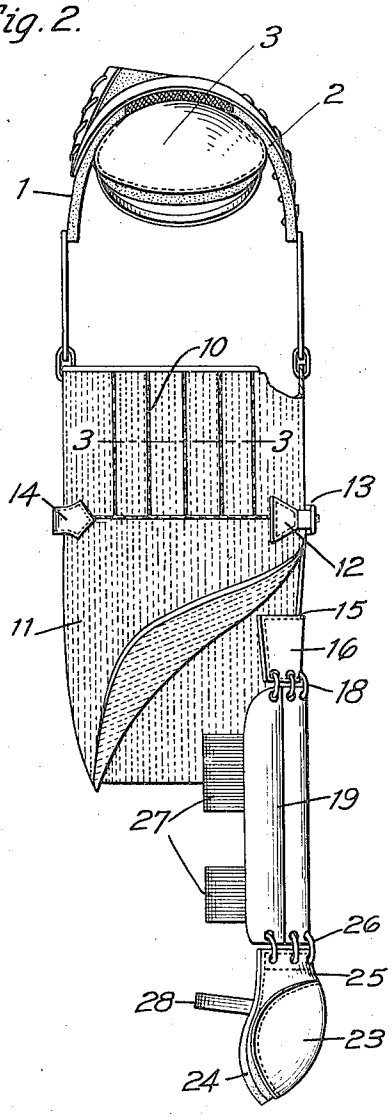


Fig. 4.

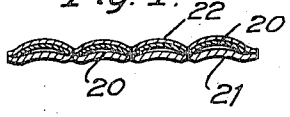
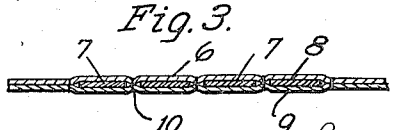


Fig. 3.



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ATHLETIC PROTECTIVE HARNESS.

1,264,916. Specification of Letters Patent. Patented May 7, 1918.

Application filed March 10, 1916. Serial No. 83,398.

To all whom it may concern:

I, HUGO GOLDSMITH, a citizen of the United States, and a resident of the city of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Athletic Protective Harness, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, forming part of this specification.

My invention relates to protective devices which are worn underneath the outer costume for football players and the like. One of the greatest difficulties with the devices employed at the present time is that the various pads do not fit the wearer closely enough to fully protect him from injury. Thus the knee pads, which are shaped for the wearer, if they do not hang directly over the knee, are likely to do harm rather than good by throwing the knee out of place.

Another great fault in most protective harness is that the padding is likely to become out of place, or else it is so stiff that it does not give freedom of use of his limbs to the wearer.

It is the object of my invention to do away with the above difficulties and generally to provide a harness which is strong and durable and completely adjustable to the wearer. These objects I accomplish by that certain construction and arrangement of parts to be hereinafter more specifically pointed out and claimed.

In the drawings,

Figure 1 is a front elevation of the harness complete.

Fig. 2 is a side elevation thereof.

Fig. 3 is a horizontal section through the abdominal pads, on the line 3, 3, of Fig. 2.

Fig. 4 is a like section through the leg guards, on the line 4, 4, of Fig. 1.

The guard 1 for the upper chest and neck is laced front and back at 2, being formed of a reinforced pad of gray felt or the like. Secured to this guard at the side are the shoulder guards 3, 3, sewed in place and each comprising a felt lined portion of stiff leather shaped to the conformation of the shoulder. These two parts are illustrative merely of the usual upper member of a complete harness, and it is to be understood that it is shown merely to indicate the usual means of suspending from the shoulder the lower portions of the harness in which my invention resides.

Depending from the chest guard, front and rear, are strips 4, 4, of elastic material, provided with eyelets for laces 5. The abdominal pads 6 are reinforced by longitudinal strips of fiber 7, bounded at the outside with a suitable lining 8 and at the inside with a lining 9, or when desired the fiber can be made in a single piece, instead of being formed in longitudinal strips. These linings may be quilted if desired. The stitches 10 are made between the portions of fiber, thereby forming a guard which can bend easily to accommodate the wearer, and still is stiff against strains and has no tendency to slip into wads or lumps as is the usual type of pad, tufted or otherwise.

These abdominal guards have depending from them the thigh guards 11, 11, extending entirely around them, and a belt portion 12 having a buckle 13 is secured at the front to the two assembled portions and a strap 14 joins the sections at the rear. The two parts do not, of course, have to have an integral lining. Thus the thigh and the abdominal guards are formed in two sections joined together by a belt at the rear and front and adjustable by said belt to the body of the wearer. The upper forward portions of the abdominal guards are provided with eyelets for the laces 5, whereby the two guard portions are adjusted for height to the wearer by means of the laces. The thigh guards are formed of double pieces of suitable gray felt or the like joined together at the top, and hanging loosely down over the thighs, so as to leave an opening at the front and rear.

Sewed to the inside flap, at 15, 15, is a duck or canvas tab 16 which has eyelets 17 for laces 18. The tabs are stitched in place to the thigh guards at about their median line at the portion thereof which will be in front of the wearer when the harness is in place, and secured to the tabs by means of said laces are the leg guards 19 which thus lie, for their upper portion, between the two flaps of the thigh guards, thereby preventing any rubbing or pinching of the wearer.

The leg guards are formed like the abdominal guards of strips of fiber 20 stitched between an inner lining 21, which in this

case is of felt or the like, and an outer lining 22 of preferably khaki. It should be noted of the fiber pieces 20, that they are curved in cross section. This gives them great rigidity against bending longitudinally and also tends to help the guards to conform to the leg. This results as above noted in the flexibility and durability of the guards. Moreover guards are adjustable on the laces 18 so as to bring them into the proper position on the leg of the wearer. They are supported on a loosely hanging flap and thus allow for free movement of the body at the waist.

The knee caps or guards are formed in the usual manner of leather portions 23, shaped to the knee and lined with felt 24 and being mounted on khaki strips 25. These strips are laced by means of the laces 26 to the lower end of the leg guards, said strips and guards having suitable eyelets for this purpose. Thus the knee caps or guards can be exactly adjusted to the correct position for the wearer, and are capable of bending at the joint with the leg guards.

Sewed to the rear of the leg guards are the elastic bands 27, which serve to hold the guards on the wearer, and a like band 28 is secured to the knee cap for the same purpose.

It will be understood that the adjustments from the leg guards to the knee guards, and the various other adjustments are not necessarily dependent upon each other, as, for example, the knee guard adjustment could be operated in connection with some other type of leg guard, such as one sewed into a trouser, and so also with the thigh guards, and leg guards.

I do not wish to be limited in the claims that follow to the exact structure described in the foregoing specification, as the description refers but to the preferred form of my invention; on the contrary I wish to be entitled to the full scope of the doctrine of equivalents in the construction of my claims. Also I do not wish to be limited in my claims because of my failure at this time to appreciate the full usefulness of my invention, as I intend it to be used in the future in any manner that may turn out to be economical and convenient, and that mere mechanical changes necessary to adapt it to future uses be fully included in the scope of my invention.

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

1. In a protective pad for athletes and the like, the combination with suitable binding material, of longitudinal strips of hard material set into the material adjacent each other, said strips being concave on the inner side.

2. In a protective pad for athletes and the like, the combination with an outer binding piece, and a piece of felt for an inner binding, strips of hard material set close together and longitudinally of the pad between the binding pieces, and the binding pieces stitched between said strips, said strips being concave on the inner side, for the purpose described.

3. In a protective leg guard for athletes, a series of stiffener strips arranged longitudinally of the guard and adjacent each other, said strips having a concave inner surface, a member for securing said stiffener strips in place to form the guard pad, and elastic bands secured to the pad so formed and adapted to encircle the leg in a plane transverse the longitudinal line of the guards.

4. In a protective harness for athletes and the like, in combination with a supporting member over the shoulders of the wearer, abdominal guards suspended therefrom by means of laces, thigh guards on the abdominal guards, leg guards suspended by laces from the said thigh guards, and knee guards suspended by laces from the leg guards.

5. In a protective harness for athletes and the like, in combination with a supporting member on the body of the wearer, leg guards mounted thereon, eyelets on the leg guards and laces in the eyelets, and knee guards having eyelets whereby they may be adjustably mounted on the leg guards, with elastic straps to hold the leg guards in place.

6. In a protective harness for athletes, the combination of a pair of abdominal pads, one for each side of the abdomen, said pads having stiffening material therein, connection for said pads at the back of the wearer, and belt sections for the two pads at the front for retaining the pads against the body.

HUGO GOLDSMITH.