April 28, 1942. T. P. HOLLINGSWORTH 2,281,152

PROTECTIVE DEVICE

Filed Nov. 29, 1940

Fig. 1.

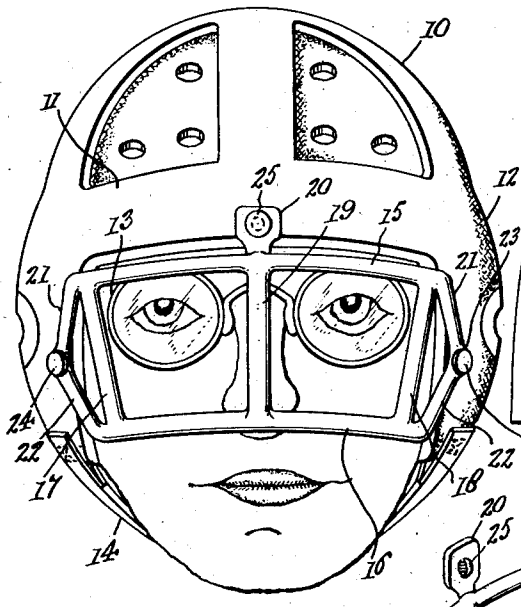


Fig. 2.

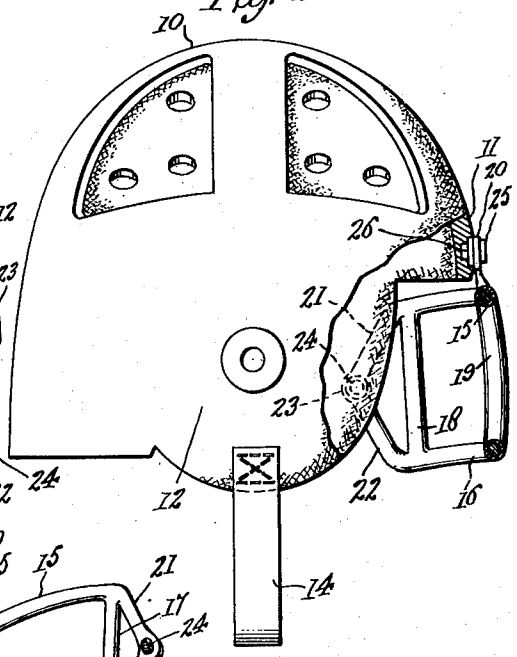


Fig. 3.

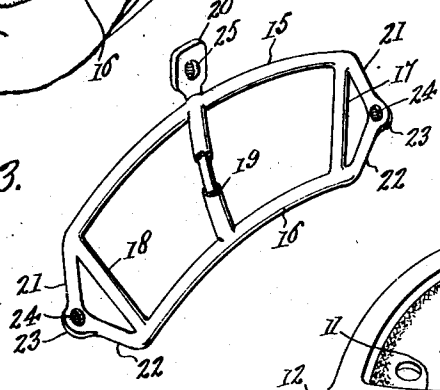


Fig. 4.

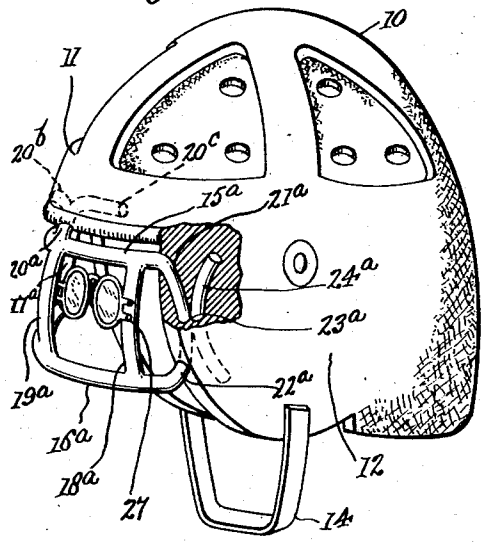
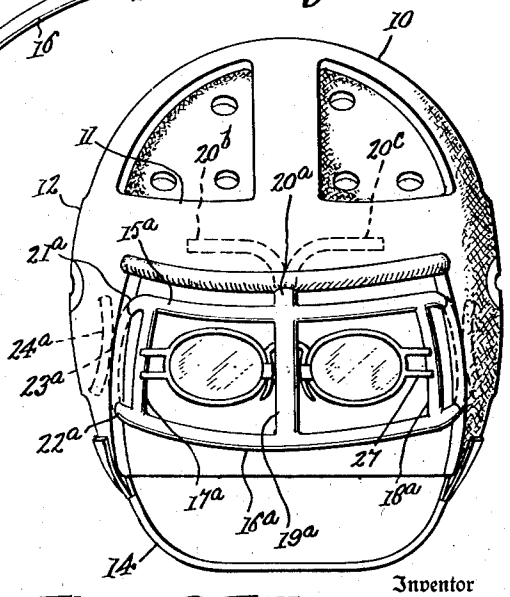


Fig. 5.



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PROTECTIVE DEVICE

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Application November 29, 1940, Serial No. 367,841

3 Claims. (Cl. 2—9)

The present invention relates to improvements in protective devices, and more particularly relates to an attachment for the helmets of football players or other helmets used in sports in which the improved protective device is designed to permit wearing of eyeglasses and to protect the player wearing same.

An object of the invention is to provide a spectacle or eyeglass guard shield or protector for use in all branches of athletics adapted to be originally made in or attached to a football helmet or any other athletic head guard so that the player may wear his or her glasses, or wherein the glasses may be attached to the guard itself.

The invention also contemplates the use of a guard or protective device of the character above outlined in which the nose is also protected by the guard and in which the side edges of the eyeglasses are protected from end thrusts while leaving the vision substantially clear ahead.

A further object of the invention is to provide an improved protective device for eyeglasses of athletes in which a strong and rigid guard frame of an open character is provided upon a helmet.

With the foregoing and other objects in view, the invention will be more fully described hereinafter, and will be more particularly pointed out in the claims appended hereto.

In the drawing, wherein like symbols refer to like or corresponding parts throughout the several views,

Figure 1 is a front elevation of an improved protective device constructed according to the present invention and shown as in use.

Figure 2 is a side elevation of the same with parts broken away and parts shown in section.

Figure 3 is a perspective view of a portion broken away and showing the improved protective device separate and apart from the helmet.

Figure 4 is a perspective view of a helmet, with parts broken away and parts shown in section, and illustrating a modified form of the device in which the protective device is built into the helmet, and

Figure 5 is a front elevational view of the device shown in Figure 4.

Referring more particularly to the drawing 10 designates generally a football or other athletic helmet or head gear in which 11 is the frontal member and 12 the ear lobes. The space below the frontal member 11 and defined between the ear lobes 12 is ordinarily open for purposes of vision and breathing and this space extends a substantial distance above the eyebrows, the member 11 extending across the upper part of the frontal bone of the head.

Such open space is inimical to the wearing of eyeglasses by those indulging in such athletic sports as football where tackling, blocking and other such features of the play introduce a very grave hazard in the wearing of eyeglasses.

In accordance with the present invention I provide a frame carried in this open space at the front of the helmet, which frame may be either an attachment to an already manufactured helmet or as a built-in device forming a part of the helmet during original manufacture.

Figures 1, 2 and 3 show the attachable form of the invention; while Figures 4 and 5 show the built-in construction.

In Figure 3 the improved frame is shown in and by itself in which it is shown to comprise generally the top bar 15, bottom bar 16 and the side bars 17 and 18 combining in a general way to form a substantially rectangular construction which is reinforced and strengthened by the middle bar 19 also functioning as a nose protector and extending directly in front of the bridge of the nose of the user as illustrated in Figure 1. The center bar 19 makes space small enough so foot or hand cannot be pushed through to reach glasses.

In line with this middle bar 19 and extending upwardly above the top bar 15 is a tab 20 having therein a socket 25 or a member of a ball and socket or glove fastener or any other form of fastening device, the other member of which 26 is carried by the frontal member 11 of the helmet in a substantially central position.

This rectangular open frame must be left open at sides of the middle bar 19 so as not to interfere with the vision of the player, as suggested in Figure 1. However such rectangular frame is subject to collapse and I therefore reinforce the same at both ends, and particularly in line with the side edges of the eyeglasses so as to avoid thrusts from this quarter. In accomplishing such objects I provide substantially triangular side frames or A-frames which consist of top legs 21 and bottom legs 22 joining with respectively the side bars 17 and 18 which form the hypotenuse members of the triangles and toward the outer ends of which the legs 21 and 22 diverge. Such legs converge outwardly of the ends of the frame and meet in apex lobes 23 which carry members or fasteners 24 having mating fastener members upon the ear lobes 12 of the helmet near the side edges of the front open portion of the helmet. The helmet may be held in place by the helmet strap 14 extending beneath the chin of the wearer.

In the use of the device the helmet is put in place in the usual manner over the head of the player and assumes the position indicated generally in Figure 1. The improved protector frame may be secured to the helmet before or after such helmet is donned. An old helmet may be equipped to receive the improved protective device by simply fabricating such old helmet with fastener members upon the frontal member and

upon the ear lobes in position to receive the complemental fastening members 24 and 25. I prefer rivets 24 and 25 to attach the device permanently to the helmet although the glove type of fastener will enable the protective frame to be easily and quickly attached in place. It is sometimes desirable in certain types of helmets to spread the ear lobes 12 in the act of inserting the helmet over the head. In such cases the protective frame may be either left off the helmet entirely until the helmet is in place or one of the fastenings 23 may be simply undone which will allow for the necessary separation of the ear lobes 12.

In this aspect the protective frame when in place serves to hold the two ear lobes 12 together and against accidental separation and has the function to tend to retain the helmet in place while also protecting the eyeglasses of the wearer. The members of the frame are curved as indicated in Figures 2 and 4 in order to follow facial form and the curvature of the frontal member 11 and the position of the ear lobes 12. The lower member 16 preferably extends substantially across the bottom of the nose while the upper member 15 extends in spaced relation below the frontal member 11 of the helmet. The end bars 17 and 18 throughout their major lengths will lie in the space between the ear lobes 12 although these members may possibly overlap slightly the ear lobes at their upper portions. However these members 12 not only reinforce and strengthen the rectangular frame of which they are a part but they are also positioned in closely spaced relation to the ear lobes to act as defensive armor against side thrusts which might reach the eyeglasses. In this respect the legs 21 and 22 also function as a guard against such thrusts while the openings through the triangles, insufficient in size to allow of the penetration of any such thrust to the eye or the eyeglasses, serve for visibility. The fact that the members of the triangular frames and the rectangular frame are bowed also serves to increase the rigidity and resistant action of such members to thrust.

Referring more particularly to Figures 4 and 5, there is therein shown a built-in construction of protective device in which the top bar is designated at 15a and the lower bar at 16a such bars being connected together by the side bars 17a and 18a in a substantially rectangular frame construction. The middle bar 19a in front of the nose is in alinement with a top stem 20a which extends up and into the frontal member 11 of the helmet having forks 20b and 20c diverging in opposite directions and embedded and fastened in such frontal member 11.

The side frames are, or may be, of slightly different form but they are substantial triangles and consist of the legs 21a and 22a with points of meeting 23a which are the same points utilized for joining such side frames to an embedded anchor or reinforcement 24a. Such anchors 24a are embodied in the ear lobes 12 of the helmet and the legs 21a and 22a are likewise embedded in the material of the ear lobes 12 and project therefrom so as to enable the spacing of the vertical bars 17a and 18a away from the ear lobes.

While eyeglasses of the usual variety may be worn with this type of helmet, a built-in form of eyeglass may also be used in which the eyeglass fits upon the nose in the usual manner but the temples of the same are dispensed with, the side frames of the glasses being attached to the side bars 17a and 18a as shown at 27.

The frames may be made of metal covered with leather tape and rubber or any other material which will pass inspection and constitute a protection against hurting opposing players.

It will be appreciated from Figure 3 that the protective frame is bent both horizontally and vertically. The horizontal bending brings the open triangular frames in alinement with the side edges of the eyeglasses to a protective position with respect to the same; while the vertical bending causes the nose piece 19 to follow the bridge of the nose and also to add strength to the device; although this vertical bending is not so essential in the side members of the device.

It is obvious that various changes and modifications may be made in the details of construction and design of the above specifically described embodiment of this invention without departing from the spirit thereof, such changes and modifications being restricted only by the scope of the following claims.

What is claimed is:

1. In combination with a head gear having a frontal member and ear lobes adapted to be worn by players with eyeglasses, a protective frame comprising upper and lower bars, said bars at the ends of said upper and lower bars forming a frame substantially into a rectangle, a middle bar extending between said upper and lower bars and curved vertically, means for suspending the middle portion of the top bar from the frontal member of the head gear, an open triangular frame at each end of said rectangular frame having the divergent ends of its legs joined to the frame at the intersection of the upper and lower bars with the side bars, and fastening members on said triangular frames for attachment to the ear lobes.

2. In combination with a football or other head gear having a frontal member and ear lobes, a projective device comprising a frame carried by said frontal member and ear lobes and comprising upper and lower bars, side bars connecting said upper and lower bars and extending in closely spaced relation to the ear lobes, and substantially triangular frames having legs connecting with the upper and lower ends of said side bars.

3. In combination with a football helmet cut horizontally to form a frontal member and having downwardly extending ear lobes adapted to be worn by players with eyeglasses, a protective frame comprising upper and lower bars, side bars connecting said upper and lower bars adjacent said ear lobes, a middle bar connecting said upper and lower bars in front of the nose leaving spaces to opposite sides of the same for visibility, the said middle bar having a projection extending above said upper bar, means for attaching the projection to the frontal member to hold said frame with its upper bar in spaced relation below the frontal member of the helmet, open triangular frames extending beyond said side bars bent both horizontally and vertically along with said protective frame, and fastening members carried by said triangular frames for attachment to said ear lobes.

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