

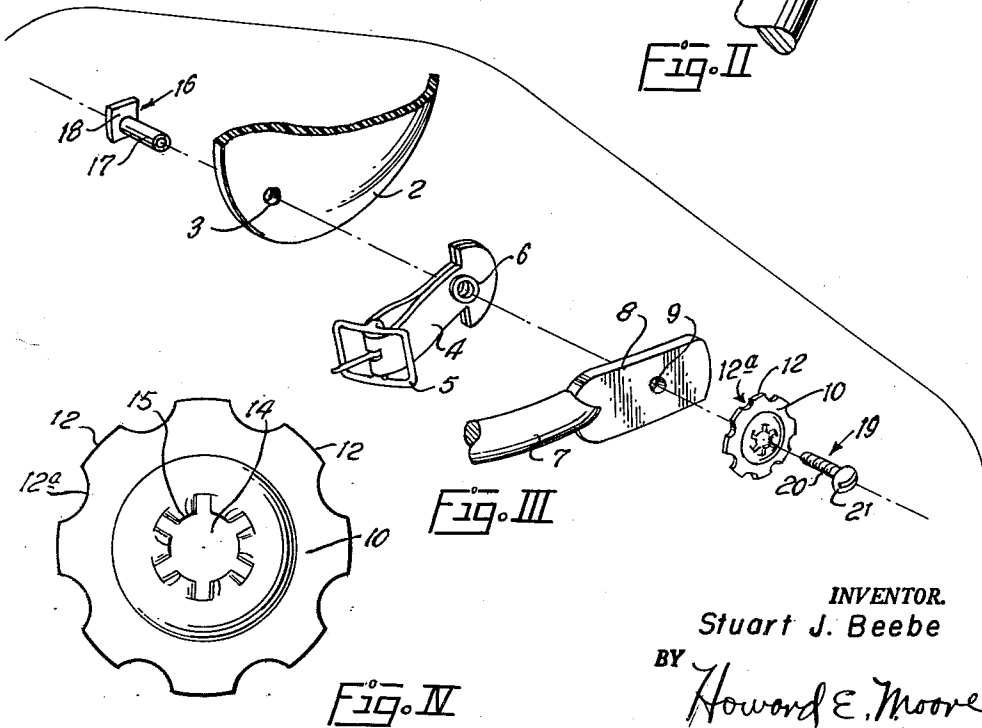
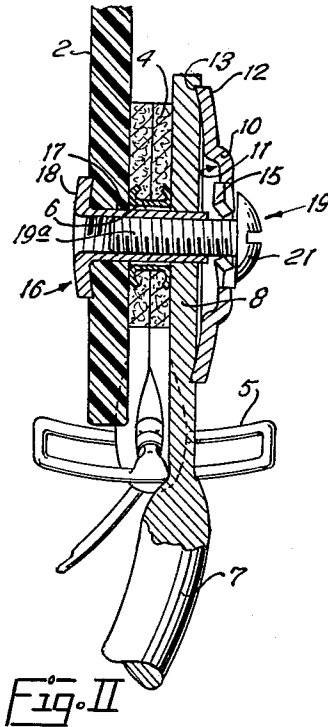
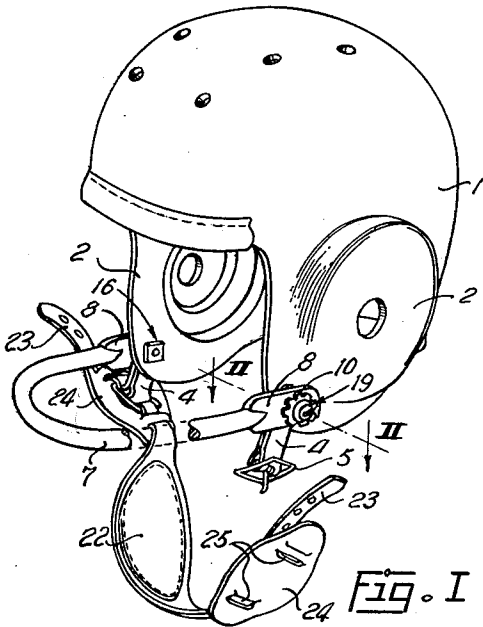
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FOOTBALL HELMET FACE GUARD AND CHIN STRAP ATTACHMENT MEANS

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FOOTBALL HELMET FACE GUARD AND CHIN STRAP ATTACHMENT MEANS

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1 Claim. (Cl. 2-9)

This invention is concerned with means for attaching a face guard and chin strap tabs to a football helmet, and is particularly concerned with a common attachment means whereby the chin strap attachment tabs are pivotally mounted with relation to the helmet and the face guard is mounted so that it will not pivot with relation to the helmet.

It is, therefore, a primary object of the invention to provide common means for securing chin strap attachment tabs and a face guard on a football helmet in such a way that the attachment tabs may pivot for adjustment in angular disposition with relation to the helmet ear portions, and for securing the face guard to the helmet in such a manner that the face guard will not have a tendency to pivot with relation to the helmet.

Another object of the invention is to provide means for securing a face guard to a football helmet in such a way that it is fixed against pivotal movement whereby it will not have a tendency to tilt and pivot when a blow is imparted thereto.

Still another object of the invention is to provide a securing disk or washer for attaching a face guard to a football helmet in such a way that the face guard will be clamped and fixed against rotational movement.

A suitable embodiment of the invention is shown in the attached drawing, wherein:

FIGURE I is a perspective view of a football helmet showing the novel means for attachment of the chin strap securing tabs and face guard thereto;

FIGURE II is a cross-sectional view taken on the line II-II of FIGURE I;

FIGURE III is an exploded view showing the various parts of the attachment elements, the chin strap attachment tab, and one end of the face guard; and

FIGURE IV is an outside elevational view of the retaining lock washer for locking the face guard against rotational movement.

Numeral references are employed to indicate the various parts shown in the drawings, and like numerals indicate like parts throughout the various figures of the drawings.

The numeral 1 indicates a conventional football helmet, customarily made of relatively rigid plastic material, having downwardly extending ear portions 2 thereon.

Aligned attachment holes 3 are provided through the ear portions 2.

The chin strap attachment tabs 4 are each formed by a folded piece of leather which extends about the cross member of the buckle 5, and is secured together by a hollow bushing or rivet member 6, which also acts as a bearing for the chin strap tab 4 to rotate upon, in the manner hereinafter described.

The face guard bar 7 is shown as being a single bar, but of course, could be a double bar, if desired. The bar 7 is customarily made of relatively rigid, plastic material, which has flattened ends 8 thereon through which are provided holes 9.

The retaining lock washer 10 has a concavity 11 on the inner side, and spaced spoke members 12 on the outer periphery thereof, which are formed providing spaced slots 12a thereabout.

It will be observed from FIGURE II that the spokes 12

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are curved inwardly so that the sharpened inner edges thereof will bite into the material of the flat portion 8 of the face guard 7, when the screw 21 is tightened down.

The lock washer 10 has a central hole 14 therethrough which is surrounded by offset locking prongs 15. The locking prongs 15 are bent and turned diagonally in relation to the hole 14, so that the offset edges thereof will bite into the inner face of the screw 21, to prevent the screw and lock washer from rotating with relation to each other.

A tubular nut 16 is provided, having an internally threaded tubular extension 17, and an enlarged head 18 thereon. It will be noted that the head 18 (FIGURE II) is curved inwardly about its outer periphery, so that it will have a tendency to bite into the material of the helmet when the screw 19 is turned downwardly.

The screw 19 includes a threaded shank 20 arranged to be threaded into the tubular extension 17 of the nut 16, and has an enlarged head 21 thereon.

The chin strap 22, includes the usual enlarged chin engaging mid-portion, having attachment straps 23 made integral therewith and extending outwardly from the mid-portion. The extensions 23 have spaced holes therein for engagement with the tongues of the buckles 5.

The protector tabs 24 are provided, each having spaced slits 25 therein through which the tabs 23 may be extended. The protector tabs 24 are arranged to overlie the buckles 5, to protect competitive game participants from scratching and injury by contact with the buckles.

In assembling the attachment members to secure the chin strap tabs 4 and face guard 7 to the helmet at each side of the helmet, the tubular extension 17 of nut 18 is passed through the aligned holes 3, 6, and 9, in the order shown in FIGURES II and III.

The washer 10 is then placed against the outer face of the flattened portion 8 of the face guard 7, the threaded shank 19a of the screw 19 is passed through the hole 14, and the screw is turned inwardly on the threads on the inner side of the tubular extension 17. This causes the inner faces of the spokes 12 to bite into the outer surfaces of the flattened portions 8 of the face guard 7, and the head 21 of the screw 19 impinges against the outwardly turned offset portions of the locking prongs 15, so that the washer 10 cannot rotate about the screw shank 19a, and since it is in penetrating engagement with the flattened portions 8 of the face guard 7, the face guard cannot rotate. The washer 10 exerts a sufficient force upon the inner face of the screw head 21 to prevent any tendency of the screw 19 to become loosened. Therefore, the face guard is rigidly attached against rotation so that upon a blow being imparted thereto, it will not rotate out of position to allow injury to the wearer's face.

However, the chin strap tab 4 is freely rotatable because the bushing 6 is rotatably disposed about the nut extension 17, which provides a bearing surface therefor so that the chin strap tab 4 may be rotated for positioning and adjusting same for attachment of the straps 23 of the chin strap to the buckles 5.

It will thus be seen that I have provided an effective means to prevent rotation of a face guard on a football helmet but at the same time provides means in conjunction with the attachment means to allow the face guard attachment tabs to rotate for adjustment. An important advantage of this attachment means is that the face guard and chin strap attachment tab are connected to a single hole and in a single position on the ear portions of the football helmet, which provides for simplicity and economy, yet secure, attachment means.

Having described my invention, I claim:

In combination with a football helmet having an ear portion with a hole therethrough; a chin strap attachment

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tab, having a tubular bushing extending therethrough providing a bearing; a face guard having a hole through the end thereof; a retaining washer having a concaved inner surface; inwardly turned spokes on the outer periphery thereof, a central passage therethrough and angularly offset prongs about the passage; a nut having a head thereon with inwardly turned edges, an internally threaded hollow extension; a screw having a threaded extension thereon arranged to be threaded into the hollow extension, and a head arranged to contact the outer surface of the lock washer about the passage therethrough, and engage the angularly offset edges of the prongs; the said hollow extension being extendable through the hole in the ear portion of the helmet, through the bushing in the chin strap tab, and through the hole in the face guard; and the screw being extendable through the passage in the lock washer to threadedly engage the threads in the tubular

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extension of the nut, to thereby cause the head of the nut to penetratingly engage the inner wall of the ear portion of the helmet, the outer edges of the spokes on the lock washer to penetratingly engage the outer surface of the face guard, and the inner face of the head of the screw to penetratingly engage the outwardly turned edges of the prongs about the passage in the lock washer, to thereby secure the face guard against rotation with relation to the helmet and permitting the chin strap tab to rotate about the tubular extension of the nut.

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