It has been found that damage is likely to be caused to the fabric curtains or valances which are worn as attachments to metal shrapnel helmets and like headgear owing to the fact that the material of the curtain or the like may be cut when ripped against the sharp edge of the rim of the helmet, should the latter be bumped or rubbed against a hard object. The object of this invention is to provide a protective cover, applicable to the rim of a helmet, which will provide a cushion beneath the fabric material of an attachment of the kind referred to, thereby preventing such fabric from being cut or otherwise damaged in the aforesaid circumstances.

According to the invention, a protective cover for the said purpose comprises a strip of elastic textile material so fashioned as to assume substantially U-shaped cross-section when its ends are joined and the strip is stretched over the rim of a shrapnel helmet or the like, said material being of a nature, or incorporating some substance, such that a resilient cushion is constituted about the edge of the helmet rim.

Various embodiments of the invention are illustrated in, and are hereinafter described with reference to, the accompanying drawings, whereof Figs. 1 and 2 are diagrammatic cross-sectional views of the strip of fabric material employed in the manufacture of one form of helmet-rim cover in accordance with the invention, respectively showing the strip before and after folding. Fig. 3 is a fragmentary plan view of the same strip, also after folding. Fig. 4 is a perspective view of the completed cover and Fig. 5 a partly sectional elevation of a steel helmet having the cover stretched about its rim in the position of use.

Fig. 6 is a fragmentary sectional view of the cover and helmet-rim illustrated in Fig. 5, drawn to a larger scale. Fig. 7 is a similar view to Fig. 6 depicting a modification. Fig. 8 is a perspective view of the cover shown in Fig. 7, also including a further modification of the means employed for connecting the ends of the strip material. Fig. 9 is a similar view to Fig. 7 illustrating a further modification. Fig. 10 is a view similar to Fig. 2 of the strip material used in making still another modified form of helmet-rim cover and Fig. 11 is a view thereof similar to Fig. 9; both Figs. 10 and 11 are drawn to a slightly larger scale than Figs. 1 and 2.

Referring to Figs. 1 to 6, it will be seen that the form of helmet rim cover there shown consists of a strip of elastic fabric. This is woven in known fashion in the form of a two-ply sheet from combined rubber and textile warp yarns and inelastic textile weft yarns, the woven fabric being cut to approximately four inches wide and a length such that when the ends of the strip are joined the resultant annular or endless cover will be capable of being stretched about the rim of a helmet (as shown in Fig. 5) of the size for which it is intended.

Before the ends of the strip are joined, one face of the strip is treated with a coating of rubber solution or rubber latex. This treated face becomes the inner side and the material is then folded lengthwise along two spaced parallel lines, indicated at A—A, B—B in Fig. 1, so that the outlying portions 14 are turned inwards and the contacting treated faces adhere, thus forming a compact length of doubled material with the inturned edges 15 abutting along the longitudinal centre line, as shown in Figs. 2 and 3.

One or both of the ends of the strip is or are then cut to a point and the corresponding edges 16, 18, 15a, 15b, of the pointed ends are seamed together as at 17 (Fig. 4) forming an annular or endless article which, owing to the said pointing of the ends of the strip before seaming, assumes a substantially U-shaped cross-section; when stretched, the tension in the strip is greatest along the edges of the flanking portions 18 of the folded material.

A coating of rubber solution is then smeared over the inner surface 19, 18 of the cover and allowed to dry. The cover is then ready for use and may be stretched over the rim 20 of a helmet as shown in Fig. 5, the rim 20 lying with its edge within the apex of the U-shaped conformation and coinciding with the longitudinal center line of the cover, whilst the flanking or wing parts 18 of the cover, as viewed in cross-section, lie flat respectively upon the upper and lower faces of the helmet rim. When so arranged, the device constitutes a resilient cushion about the edge of the helmet-rim, so that the material of a gas-curtain attachment or valance which may be secured about the crown of the helmet and draped over the edge of the rim 20 thereof, is effectively protected from damage if nibbled between the edge of said rim 20 and a hard object against which the helmet may be bumped or rubbed in use.

The dried coating of rubber solution which is applied as aforesaid at 19, 18 to the inner face of the flanking or wing portions 18 of the cover provides sufficient frictional adhesion between such portions 18 and the smooth surfaces of the
helmet rim to prevent the cover from accidentally slipping out of place in use.

In the modified form of cover depicted by Figs. 7 and 8, a bead or outer longitudinal rib 22 is formed by stitching through the folded cover along the lines indicated at C—C. Such bead 22 affords an additional cushioning protection for the helmet rim, and if desired, the resilience of said bead may be increased by providing within it a narrow insertion of rubber or other suitable material, as shown at 23 in Fig. 9.

Fig. 8 also illustrates an alternative manner of connecting the ends of the strip of fabric of which the cover is composed; in this case such ends are attached by means of inter-engaging hooks 24 and eyes 25. In this case the cover may be drawn about the helmet rim and affixed by engaging said hooks and eyes. Other alternative means of connecting the ends of the strip may be employed if desired.

A further alternative embodiment of the invention comprises a piece of single-ply elastic fabric 26 folded along two longitudinal lines spaced at different distances from the longitudinal edges of the strip, so that the folded portions 27 are turned inwards with their edges 28 abutting along a line parallel to the longitudinal centre-line, and so that the line of such abutment does not coincide with the edge of the helmet rim 20.

It will be understood that the texture of the fabric and the counts of the constituent rubber and textile yarns thereof utilised in any of the foregoing embodiments of the invention may be modified to suit varying conditions of use, and also that the pieces of component fabric material may alternatively be arranged on the bias.

What we claim as our invention and desire to secure by Letters Patent is:

1. A cover for embracing the rim of a helmet, comprising an elongated strip of elastic textile material, the strip being longitudinally folded along spaced lines parallel to its longitudinal axis and the inturned portions being adhered to the body of the strip with their edges substantially abutting, each of the ends of the folded strip being cut along two angular lines to provide opposed longitudinal edges shorter than the line connecting the apices of the ends thereof, said angular ends being secured together thus forming a folded annulus with resulting maximum tension in the free edges thereof and causing the thus connected strip to assume a substantially U-shaped cross section.

2. A cover for embracing the rim of a helmet, comprising an elongated strip of elastic textile material, the strip being longitudinally folded along spaced lines parallel to its longitudinal axis and the inturned portions being adhered to the body of the strip with their edges substantially abutting, each of the ends of the folded strip being cut along two angular lines to provide opposed longitudinal edges shorter than the line connecting the apices of the ends thereof, one face of said strip bearing a layer of rubber, said angular ends being secured together thus forming a folded annulus with resulting maximum tension in the free edges thereof and causing the thus connected strip to assume a substantially U-shaped cross section.

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