Sept. 9, 1930. J. M. RUSSELL 1,775,409

HELMET

Filed June 22, 1928

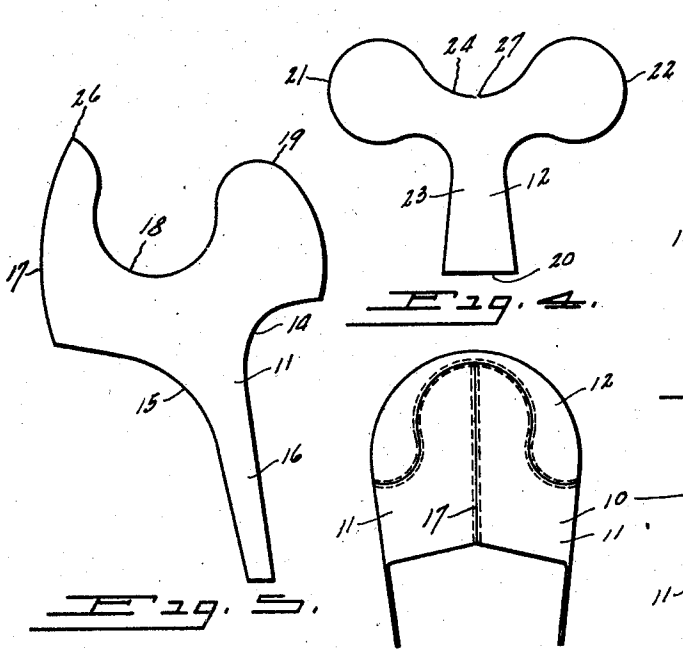


Fig. 5.

Fig. 4.

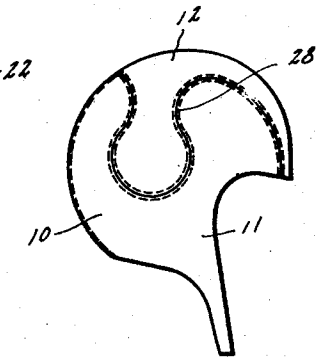


Fig. 1.

Fig. 3.

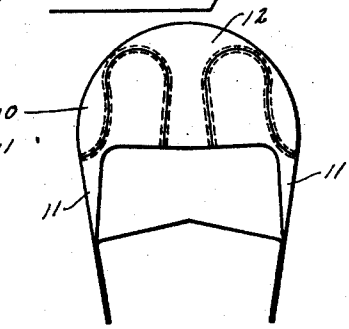


Fig. 2.

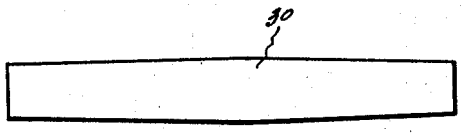


Fig. 7.

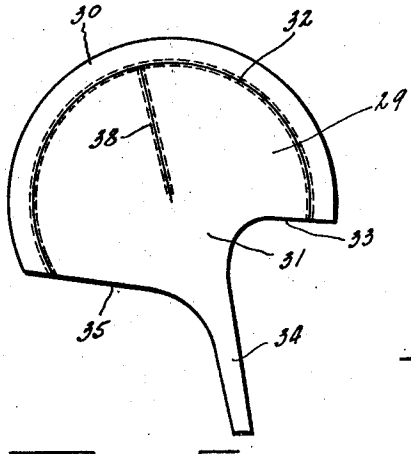


Fig. 6.

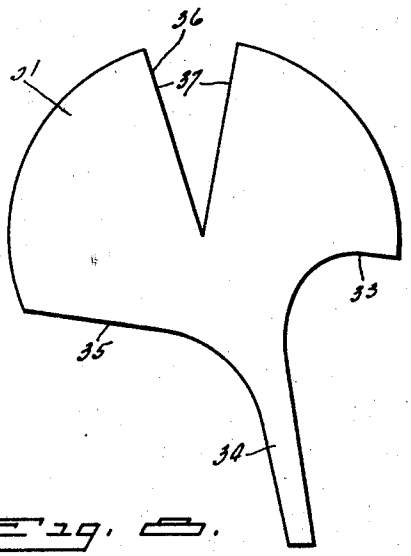


Fig. 8.

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UNITED STATES PATENT OFFICE

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HELMET

Application filed June 22, 1928. Serial No. 287,412.

This invention relates to helmets and particularly to that class of helmets adapted to be worn by aviators.

One object of the invention is the provision of a helmet which is formed of separate sections of material so connected and designed as to impart a head-fitting convexity to the helmet.

Another object of the invention is the provision of a helmet of the character mentioned formed of only three sections of material sewed together in a manner to impart a head-fitting convexity to the helmet and adapted to snugly fit heads of various proportions.

Further objects and advantages of the invention will be apparent from the following description and from the accompanying drawing in which—

Fig. 1 is a side view of a helmet embodying the present invention;

Fig. 2 is a front view thereof;

Fig. 3 is a rear view of the helmet shown in Figs. 1 and 2;

Fig. 4 is a detail view of the top section of the helmet;

Fig. 5 is a detail view of one of the side sections of the helmet;

Fig. 6 is a side view of a modified form of helmet;

Fig. 7 is a detail of the top section of the helmet shown in Fig. 6; and

Fig. 8 is a detail of a side section of the helmet shown in Fig. 6.

Referring more particularly to the drawing by reference numerals and more particularly to Figs. 1 to 5, 10 indicates a helmet adapted to be worn by an aviator and constructed of sections of soft pliable leather or other suitable material. This helmet embodies a pair of similar side sections 11 sewed to a top section 12.

Each side section 11 is cut out along a line 14 to provide a face opening. The lower rear portion of this side section is cut out along a curved line 15 to form the neck opening of the helmet, and a chin strap 16 is provided, adapted to be fastened under the chin of the aviator in a suitable manner. The rear of the side section is convexly curved as shown at 17, the two side sections being seamed together along this line at the rear of the helmet. The upper portion of the side section is provided with an enlarged recess 18 between the curved forward portion 19 and the rear upper part of the side section, as shown.

The top section 12 as shown in Fig. 4 extends rearwardly from the front edge 20 along the top of the head. Near the top of the helmet this top section is bulged outwardly on each side as indicated at 21 and 22, these two bulges being connected integrally with the forwardly projecting tongue 23 by means of comparatively narrow portions of material as indicated at 24, these portions being considerably less in width than the width of the enlargements or bulges 21 and 22. The bulges are shown as approximately circular in peripheral outline.

The side sections are sewed to the top section, the front edge of side section at 19 being sewed to the side of the tongue portion 23 of the top section, and the recess 18 receiving the bulge 21 or 22 of the top section. The top rear peak portion 26 of the side section is attached to the part 27 at the center of the top section 12, the seam 28 between the top and side sections being indicated in Fig. 1. As the bulges 21, 22 are of a width at 24 considerably less than the width between the peak 26 and the top front convex portion 19 of a side section it will be apparent that when the side and top sections are fastened together the forward and rearward upper portions of the side section will be drawn toward one another, and the helmet will thus be given a convex head-fitting contour adapted to fit the aviator's head without causing undue pressure on any portion. The smoothly curved contours of the sections provide a construction in which the seams do not pucker and the convexity of the helmet is properly distributed. As the chin straps are pulled the helmet will fit very even and an even tension is permitted on all parts of the head. A helmet of this construction of one size will fit a great number of varying face and neck contours due to this even pull. The contour of the sections is such that they may be easily interlocked when they are cut out from large sheets of material for the conservation of

material. Only two patterns need to be used in the construction of helmets of this character since the side sections are identical in contour.

In Figs. 6, 7 and 8 a modified form of helmet is shown. In this form the helmet 29 is also made of three sections, a top section and two side sections. The top section 30, shown in Fig. 7, is adapted to extend from the front at the center of the helmet to the nape of the neck, and comprises an elongated strip of material preferably having a width substantially larger at its central portion than at the two ends thereof. On each side of this central section 30 is sewed a side section 31, the seam being indicated at 32 in Fig. 6.

Each side section 31 is cut out along a line 33 to provide a face portion and is extended downwardly as at 34 to provide a chin strap. The rear part of this side section is cut out at 35 providing a neck opening for the helmet.

In order to give the helmet a head fitting and convex contour so that any helmet is adapted to fit heads of different sizes in a snug manner, each side section, which is preferably cut as a single piece from a sheet of material, is provided with a recess 36 shown in the form of a notch of substantially V-shape, adjacent the central upper portion of each side section as shown. The opposite sides of the recessed portion of the side sections are drawn towards one another to provide for convexity of the helmet, the two edges 37 of the notched-out opening being seamed together as indicated at 38 in Fig. 6. The cut or recess 36 extends to about the center of the side section, or, more definitely, to the ear position so that pressure of the ear will not obtain, and the helmet is thus adapted to fit the head snugly without undue pressure at any point.

While the forms of apparatus herein described constitute preferred embodiments of the invention, it is to be understood that the invention is not limited to these precise forms of apparatus, and that changes may be made therein without departing from the scope of the invention which is defined in the appended claims.

What is claimed is:

1. An aviator's helmet comprising a central top section extending rearwardly from the front of the helmet and having a curved bulge portion at each side thereof, and side sections connected to said top section and each having cut-out portions to which said bulge portions are fastened.

2. An aviator's helmet formed of different sections interlocked together to impart a convex curvature to the helmet, one section having an outwardly bulged portion connected thereto by a comparatively narrow strip of material, an adjacent section having a recessed portion to which the bulged portion and strip of said one section is sewed.

3. An aviator's helmet formed of different sections and comprising a top section extending rearwardly from the front of the helmet having a downwardly and laterally extending bulge portion connected thereto by material of less width than the bulge portion, and a side section having a recessed portion the edges of which are fastened to the edges of the bulge portion of the top section.

4. An aviator's helmet formed of three sections of flexible material and comprising a top section extending rearwardly from the front of the helmet and having side bulge portions connected adjacent the top of the helmet to the main portion of said top section through a comparatively narrow portion of material, and side sections attached to the said top section and each having a recessed portion the edges of which are fastened to the bulge portions of the top section to impart a convex contour to the helmet, the front and rear upper portions of each side section being drawn towards one another to interlock with the bulge portions of the top section.

In testimony whereof I hereto affix my signature.

JAMES M. RUSSELL.