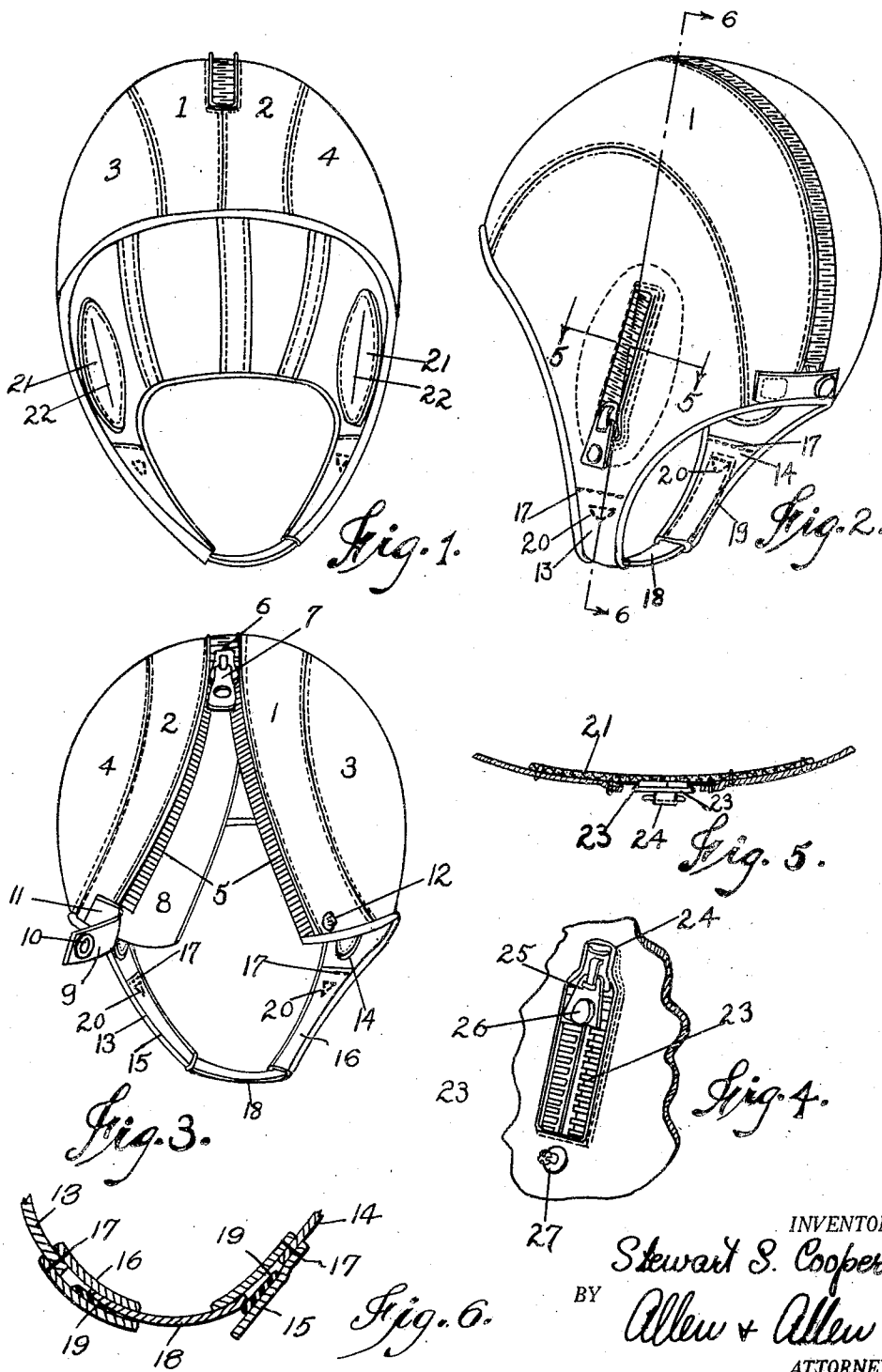


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S. S. COOPER
AVIATOR'S HELMET

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STEWART S. COOPER, OF CINCINNATI, OHIO

AVIATOR'S HELMET

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My invention is addressed to headgear of the type known as helmets and generally used by aviators and the like. Such helmets have ordinarily been made with a portion which more or less tightly encloses the head of the wearer, with depending portions which cover the ears, and approach each other or overlap beneath the chin, where some form of fastening device has been located. This has resulted in a bunching of fabric parts beneath the chin as well as the presence there of fastening devices which are awkward to get at, are in the way, and frequently are uncomfortable. Such helmets are relatively difficult of adjustment, and relatively difficult to put on and remove.

An object of my invention is to provide a type of helmet which is not adjusted from the chin strap, and which consequently does not have at the chin portion a cumbersome construction, extra parts or uncomfortable fastening devices. Another object of my invention is the provision of a helmet which is fastened and adjusted from the rear of the head portion, preferably with one of the continuous types of fasteners, so that the operation of putting on and removing the helmet is greatly facilitated as will hereinafter be made clear. Still another object of my invention is the provision of a new and improved construction of ear-opening and closure therefor. Still another object of my invention is the provision of an improved self-adjusting chin strap construction.

These and other objects of my invention, which will be set forth hereinafter or will be apparent to one skilled in the art upon reading these specifications, I accomplish by that certain construction and arrangement of parts of which I shall now describe a preferred embodiment, reference being made to the drawing which are a part hereof. The embodiment to be described illustrates my invention in its simplest form, namely a summer-weight helmet. It will be understood that modifications may be made in my invention without departing from the spirit thereof, and that other structure may be added such as inner linings, padding, a visor and

the like while employing my improvements for the purpose described.

In the drawing:

Figure 1 is a front view of my helmet.

Figure 2 is a view showing the side and part of the rear portion.

Figure 3 is a rear view with the closure portion open.

Figure 4 is a fragmentary view of an ear covering portion with the closure opening, and

Figure 5 is a sectional view of a portion of my helmet through the ear opening members and on the line 5—5 of Figure 2.

Figure 6 is a partial cross section on line 6—6 of Fig. 2.

My helmet comprises in general a dome shaped portion to cover the head, and depending portions coming down over the ears and beneath the chin. In the summer weight helmet shown the head portion comprises leather pieces 1 and 2 joined by suitable seams and forming the crown of the helmet, and side portions 3 and 4 which join the crown forming portions, and have extended portions covering the ears. My helmet is split from the rearmost portion toward the forehead portion as shown most clearly in Figure 3, and the meeting members of the split portion are adapted to be joined by some suitable form of fastening device. As indicated I prefer to use one of the well known forms of continuous fasteners such as a hookless fastener, and I have shown in the several figures a line of fastening devices 5 joined to the meeting edges of members 1 and 2. The regulation closure device 6 is provided, having a handle 7. Within the helmet to the member 2 in Figure 3 I have attached a supplementary leather flap 8 which protects the head from the fastening device.

It will thus be seen that I may place my helmet on the head and then adjust it in place by closing the hookless fastener, pulling rearwardly and downwardly upon the handle 7 until the helmet is closed, as shown in Figure 2. I have provided a small flap 9 having a portion of a snap fastener 10, which flap is sewed to the member 2 as at 11. When the helmet is closed the fastener 10 engages

with the corresponding fastening device 12 affixed to the member 1, so as to cause flap 9 to cover and hold in place the handle 7 of the fastening device. To remove my helmet I merely release flap 9, grasp handle 7 and pull upwardly and forwardly on it, thereby splitting the helmet as shown. When the opening has become large enough a continuation of the motion will serve to pull the helmet off the head forwardly. Thus it will be seen not only that I have provided my type of helmet which is more easily placed on the head and adjusted than any other type hitherto provided, but which also is not adjusted or fastened from or in the chin portion. I am thus able to provide a chin portion which is continuous in character, but I have devised a construction of the chin strap which provides a desirable resiliency there without an accumulation of cumbersome parts.

To the depending portions 13 and 14 of my helmet I sew extensions of leather or other fabric 15 and 16 by stitching 17, forming pockets, which are not themselves joined together, but are finished off by a suitable seam at their open bottoms, as will be readily understood, and are closed at the top portions by the stitching 17. I provide a chin strap comprising a central portion 18, preferably of non-elastic fabric such as leather, and to this at either end I attach pieces of the elastic 19. The elastic is held at its outward ends in each pocket by stitching 20 as shown. The members 13, 14 and 18 thus form a substantially continuous strap under the chin which is not bunglesome and has no buckles or other fastening devices. It is resilient, however, in that the member 18 may slide in and out of the pockets on either side, its movements being controlled by the elastic within.

It will be clear that my invention is not limited to any particular type of fastener nor to any particular construction of helmet, being adaptable to lined helmets or to helmets constructed from other materials or from other pieces than those shown herein.

Ear openings in a helmet of this character are advisable, and while any type of ear opening may be employed, I prefer to construct the ear openings in the manner shown in the several figures, in which I have indicated a piece of felt 21 sewn on either side of the helmet within it and covering the ear portions. These felt pieces are split as at 22. The helmet top part 3 overlying them is correspondingly split and to this portion on either side are attached portions 23 preferably of a continuous fastener of the type used on the head portion of the helmet, and having a closure member 24 and a handle 25. The handle bears one part 26 of a snap fastener, the other part 27 of which is attached in the proper position to the helmet below the fastener portions 23. Thus when

my ear openings are closed as shown in Figure 2, the handle may be snapped into place so that it will not rattle. When the ear openings are open as in Figure 4 the nature of the continuous fastener in conjunction with the closure member 14 enforces a slight separation of the parts, thereby making an actual opening through the helmet.

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

1. An aviator's helmet or the like having a head enclosing portion and a portion engaging beneath the chin, the said helmet being split in the head portion from the rear toward the front thereof, and means for joining the split edges thereof, a supplementary flap within the helmet underlying the meeting edges of said split portion, said portion engaging beneath the chin comprising interspaced pockets and a chin strap entering said pockets and resiliently held there within.

2. An aviator's helmet or the like comprising a head covering portion and a portion engaging beneath the chin, said head covering portion being split longitudinally from the rearmost portion toward the front and being closed by a continuous fastening member operable rearwardly to close it and upwardly and forwardly to open it and remove the helmet, and a supplementary flap within such helmet underlying said fastener, said portion engaging beneath the chin comprising interspaced pockets and a chin strap entering said pockets and resiliently held there within.

3. In a helmet a chin strap construction comprising members approaching beneath the chin, said members constituting hollow pockets, a chin strap having a non-resilient central portion and resilient ends, said strap being engaged at either end within said pockets, the resilient portions being attached to said first mentioned members, and the resilient portions lying wholly within said pockets.

4. An aviator's helmet or the like comprising a head covering portion and a portion engaging beneath the chin, said head covering portion being split longitudinally from the rearmost portion toward the front and being closed by a continuous fastening member operable rearwardly to close it and upwardly and forwardly to open it and remove the helmet, and a supplementary flap within such helmet underlying said fastener, said portion engaging beneath the chin comprising interspaced pockets and a chin strap entering said pockets and resiliently held there within, and a supplementary flap with a snap fastener attached to the rearmost portion of said helmet, and adapted to cover the operating device of said continuous fastener when in closed position.

5. An aviator's helmet or the like compris-

ing a head covering portion and a portion engaging beneath the chin, said head covering portion being split longitudinally from the rearmost portion toward the front and being closed by a continuous fastening member operable rearwardly to close it and upwardly and forwardly to open it and remove the helmet, said portion engaging beneath the chin comprising interspaced pockets and a chin strap entering said pockets and resiliently held there within, and a supplementary flap with a snap fastener attached to the rearmost portion of said helmet and adapted to cover the operating device of said continuous fastener when in closed position.

6. A helmet comprising a head covering portion and a portion engaging beneath the chin and ear members, comprising a supplementary layer of fabric covering the ears and attached within said helmet, said fabric and said helmet being split over the ear portions and a continuous fastening attached to the meeting edges of said slits in said helmet.

STEWART S. COOPER.