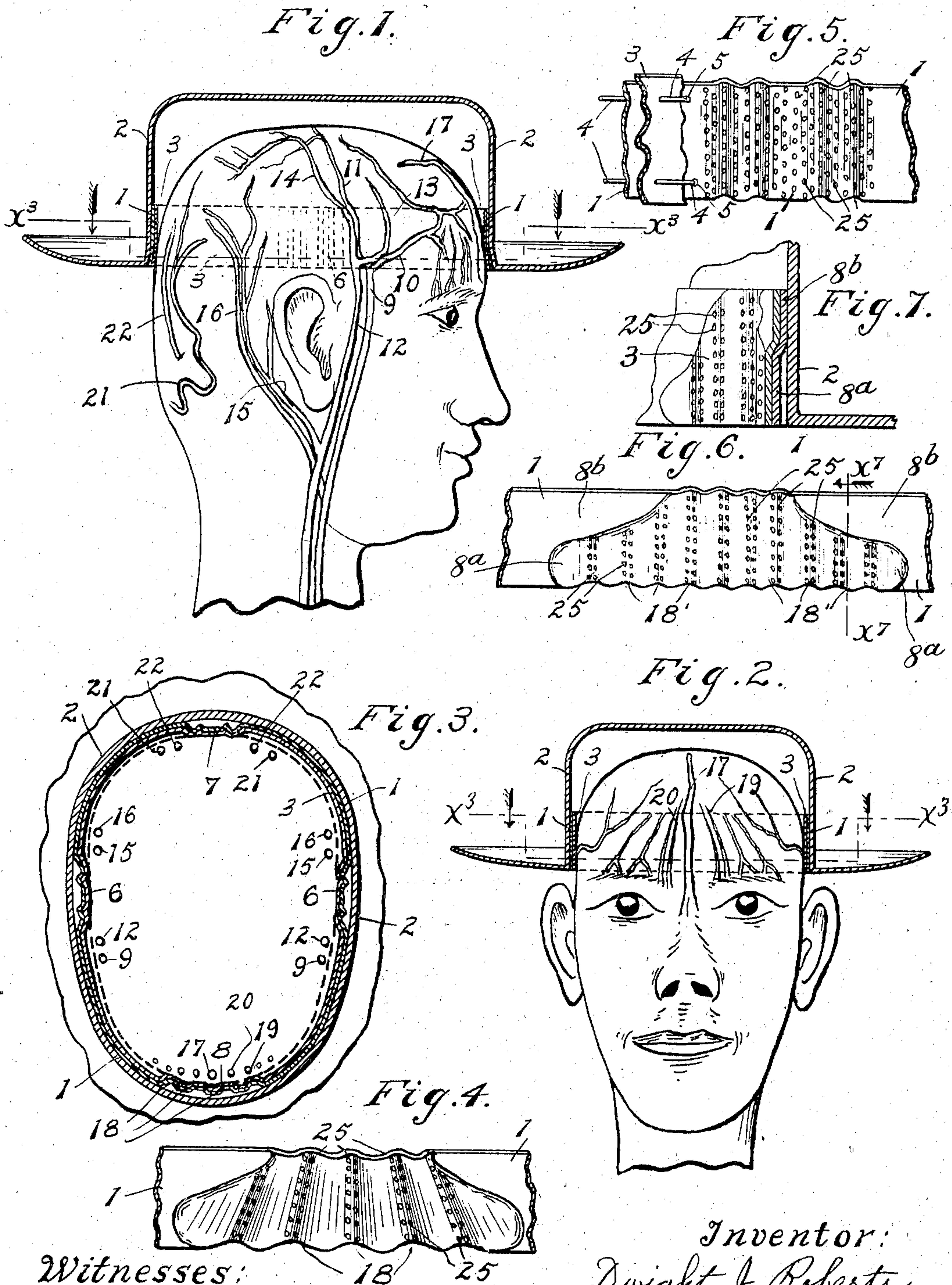


966,770.

Patented Aug. 9, 1910.



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UNITED STATES PATENT OFFICE.

DWIGHT J. ROBERTS, OF LOS ANGELES, CALIFORNIA.

HYGIENIC HAT.

966,770.

Specification of Letters Patent.

Patented Aug. 9, 1910.

Application filed April 8, 1908. Serial No. 425,937.

To all whom it may concern:

Be it known that I, DWIGHT J. ROBERTS, a citizen of the United States, residing at Los Angeles, California, have invented a new and useful Hygienic Hat, of which the following is a specification.

This invention relates to a simple and effective hat construction for preserving the health of the scalp, being particularly designed for use on men's and boys' hats, although it may be applied to hats worn by the female sex should their style of head gear so change as to require the wearing of a sweat band similar to that worn by the male sex.

An increasing number of the medical profession are becoming convinced that the chief cause of baldness among men is the deprivation of the hair follicles of a normal quantity and quality of blood by reason of ligation under the sweat leather of the blood vessels supplying the head. This conclusion is founded upon the following facts, which have not only been noted by myself during a number of years' practice as a physician, but are well known in general to the medical profession:—All men with thin hair have an evident anemia of the scalp and more or less adhesion thereof to the underlying tissues, a condition unquestionably secondary to the restriction of the normal blood flow to and from the terminal vessels of that region; baldness invariably begins among men at the distal or terminal points of the cephalic circulation, while baldness, when observed among women is of a more general nature; cases are not infrequently observed in which a luxuriant growth of hair extends up to the lower margin of the band but the rest of the head is entirely devoid of hair.

Sweat bands now in general use impede the escape of the venous blood from the scalp to even a greater extent than the entrance of the arterial blood thereto as the venous blood has little or no pressure behind it. This results in constant auto-infection of the hair follicles and other tissues of the scalp during the time that the hat is worn by reason of the toxic gas in the venous blood which more or less escapes to the contiguous tissues when the blood stream is impeded.

Attempts have hitherto been made to construct hats in a manner to relieve the pressure from the blood vessels of the head.

Such constructions however have not specially provided for relieving pressure from the blood vessels which nourish the front portion of the scalp,—the locality where baldness almost invariably begins and also where it is most difficult to conceal and generally considered most detrimental to the personal appearance of the afflicted individual.

In a hat band constructed according to the principles of this invention special provision is made for relieving pressure from those important temporal veins and arteries which nourish the portion of the scalp above, and also at the corners of, the forehead, and at the same time a superior construction is provided for preventing the hat from being removed from the wearer's head by the force of the wind.

An object of this invention is to provide more effective means than hitherto known in the art to which the invention relates for retaining a hat on the head of the wearer without impeding the circulation of the blood in the scalp or irritating through pressure, the nerve trunks and filaments leading to the scalp.

Another object is to provide means for attaining this desirable result, which may be applied to hats already manufactured.

A further object is to provide improved means for ventilating a hat.

Other objects and advantages may hereinafter appear.

In a hat constructed according to the principles of this invention the pressure under the sweat band is relieved from all the major blood vessels of the scalp and transferred to points of the cranium that are sparsely supplied with minor vessels.

Referring to the accompanying drawings, which illustrate the invention,—Figure 1 is a side view of the head of a person wearing a hat constructed according to the principles of this invention, indicating the location of the principal veins and arteries of the scalp, and showing the hat in section. Fig. 2 is a front view drawn according to the same general plan as Fig. 1. Fig. 3 is a plan section of the hat approximately on line X^s of Figs. 1 and 2 the outline of the head being indicated by a dotted line and the location of the principal veins and arteries being indicated in a diagrammatic manner. Fig. 4 is a detail front view, slightly in perspective of a fragment of the frame with

which the hat is provided. Fig. 5 is a like view of another portion of said frame, showing in addition a fragment of the sweat leather. Fig. 6 is a view similar to Fig. 4 illustrating a modified form of the parts shown in the latter figure. Fig. 7 is a section on line X' of Fig. 6.

Referring in detail to the drawings, an annular band or frame 1, desirably formed of aluminum, is fastened between the hat body 2 and the sweat leather 3 by stitching 4, said stitching being desirably of fine wire and led through small perforations 5 through said metal frame 1. Band 1 is provided with inwardly depressed segmental portions so disposed as not to press upon any of the major blood vessels or nerves of the head. With this end in view, inwardly depressed sections, preferably four in number, are provided, namely, segmental side depressions 6 above the ears, a depressed rear segment 7, and a depressed front segment 8. As shown in Fig. 1, each side depression 6 bears upon a portion of the scalp practically barren of blood vessels, said depressions touching the head just to the rear of the temporal artery 9 and its upward branches, the anterior temporal artery 10 and posterior temporal artery 11; and also to the rear of the temporal vein 12 and its upward branches, the anterior temporal vein 13 and posterior temporal vein 14. Said depressed portion 6 is also located well in front of the posterior auricular artery 15 and posterior auricular vein 16. A front depression 8 is desirably placed in the band over the middle of the forehead to avoid pressure upon the anterior temporal artery and vein. When thus located said depression 8 necessarily overlies some rather large blood vessels, for example, the frontal vein 17, but means are provided, as will next be described, for removing the pressure from said blood vessels.

18 designates corrugations extending transversely to band 1 to remove the pressure from the frontal vein 17 and also from the supra-orbital veins 19 and supra-orbital arteries 20. The arteries, like elastic rubber tubes, maintain a resilient condition, and will therefore adjust themselves to the grooves 18. The veins will do so but to a less extent. These attributes of the blood vessels will prevent the arteries and veins of the forehead from being materially obstructed by the depressed portion 8 of the band because they will adapt themselves to the corrugations 18, 18'. The depressed portion which engages the front part of the head is provided with an extended portion 8^a the lower edge of the hat band thus affording a relatively wide bearing surface just above the eye-brows adapted to prevent wind from blowing the hat off the head, but not compressing any important blood-ves-

sels, the blood-vessels of this part of the head not extending upwardly far enough to contribute to any great extent to the nourishment of the hair follicles. Said depressed portion is omitted at 8^b on each side where it would otherwise press upon those branches of the temporal veins which extend to the upper corners of the forehead, as well shown in Figs. 6 and 7 of the drawings.

In Fig. 4 the corrugations 18 converge as they approach the top of band 1 to conform more closely to the path of the veins and arteries which in the human anatomy converge approximately as shown in Fig. 2. This construction concentrates upon the front portion of the scalp the cooling air-currents which ascend under the corrugations. In the modification shown in Fig. 6, the corrugations 18' are directly transverse to the band.

The frontal depressed section 8 is made narrower at the top than at the lower edge to provide room for the terminal portion of the anterior temporal artery and its attendant blood vessels.

There is reason to believe that the impeding of the flow of the venous blood from the scalp caused by the tight sweat bands now in general use produces many of the headaches which afflict the male sex, and also that various other ailments of the head are caused by poisoning from the retarded venous blood. It, therefore, follows that men provided with hats constructed according to the principles of this invention will not be likely to suffer from these abnormal conditions.

I claim:

1. The combination, with a hat body, of a comparatively rigid band, said band having a depressed portion at the front of the hat, said depressed portion widening toward the lower edge of the band, and holding free from the head the portions of the band above the end portions of the depression.

2. The combination, with a hat body, of a comparatively rigid band, said band having a depressed portion at the front of the hat, said depressed portion widening toward the lower edge of the band, and holding free from the head the portions of the band above the end portions of the depression, said depressed portion being provided with upwardly converging corrugations.

In testimony whereof I have hereunto signed my name in the presence of two subscribing witnesses at Los Angeles, in the county of Los Angeles and State of California, this second day of April 1908.

DWIGHT J. ROBERTS.

Witnesses:

ALBERT H. MERRILL,
FLORA H. FOSS.