No. 888,902. PATENTED MAY 26, 1908.

J. JAILLET & L. J. TUSSAU.

VENTILATING HAT BAND.

APPLICATION FILED FEB. 29, 1908.

3 SHEETS—SHEET 1.

FIG-1

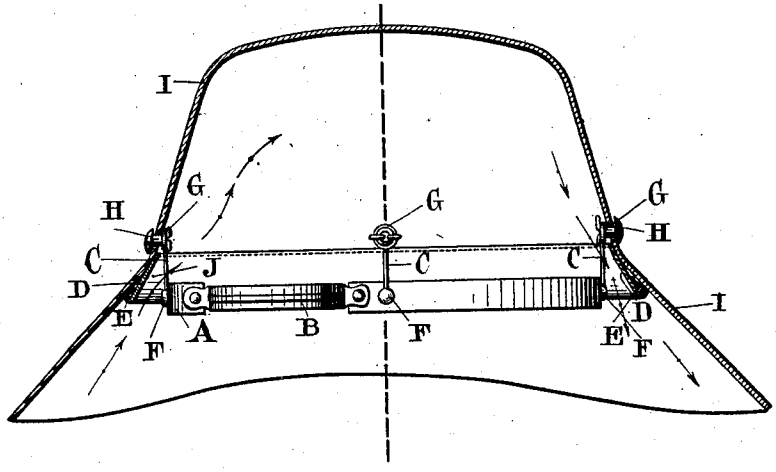
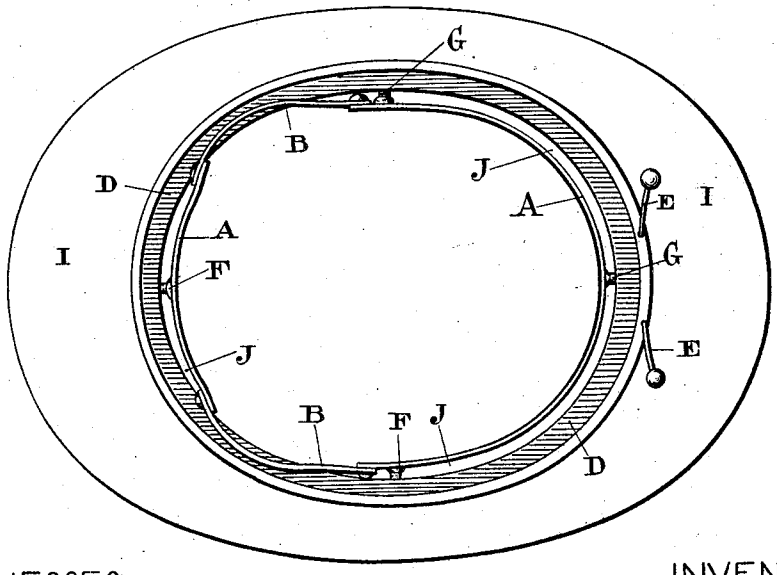


FIG-2



WITNESSES

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INVENTORS

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FIG-3

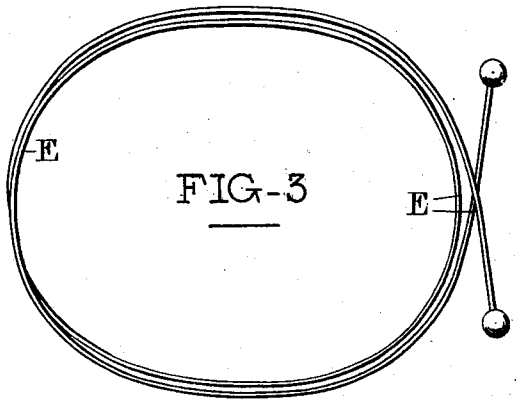


FIG-6

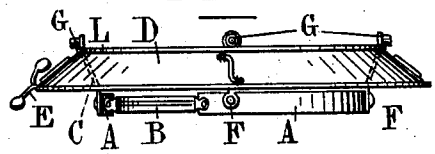


FIG-7

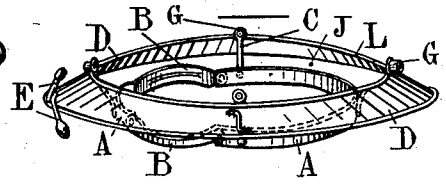


FIG-4

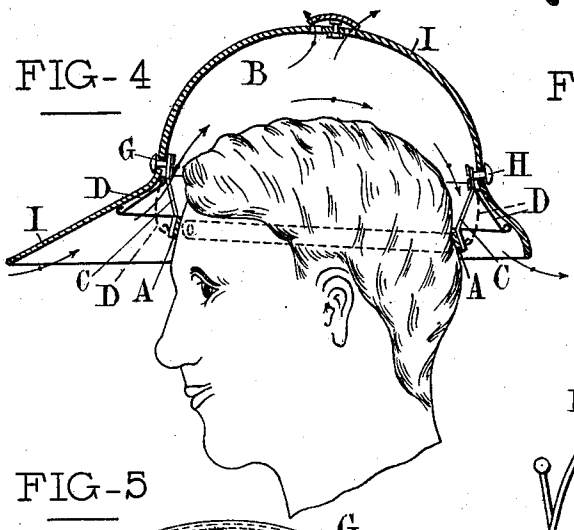


FIG-8

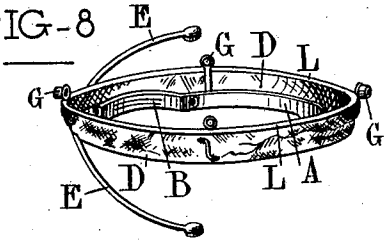


FIG-5

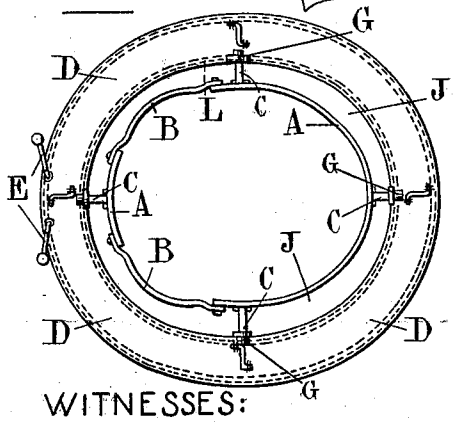


FIG-9

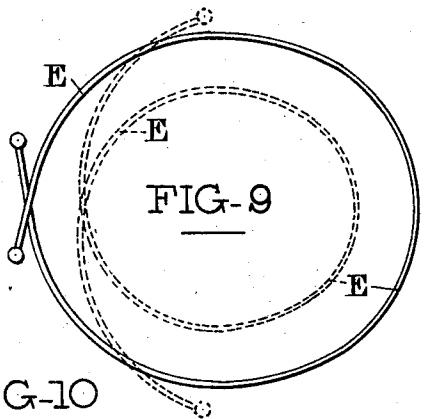
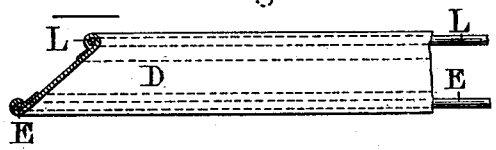


FIG-10



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3 SHEETS—SHEET 3.

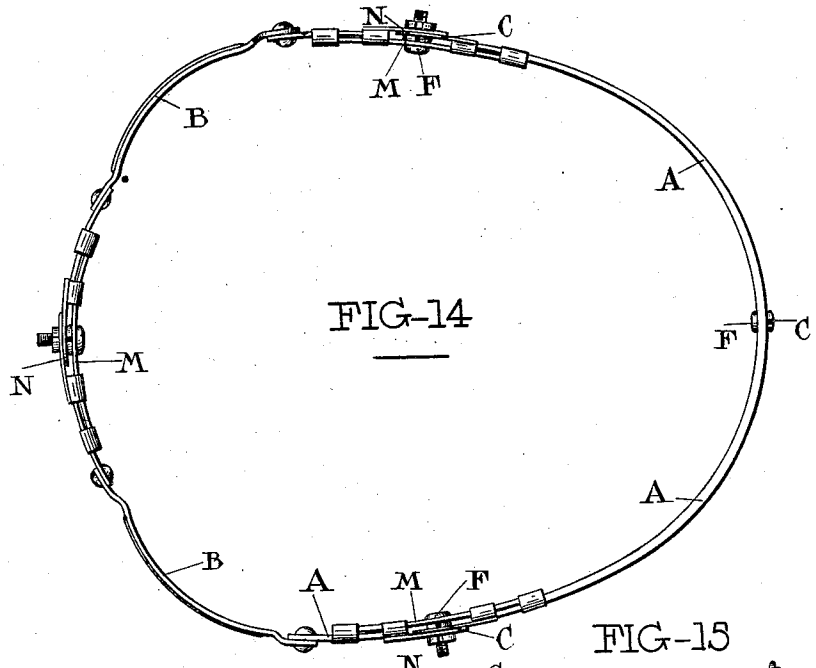


FIG-14

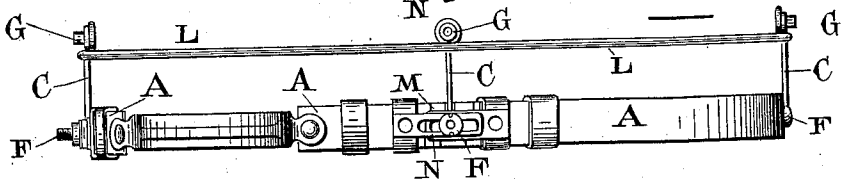
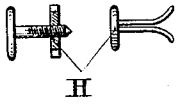


FIG-15

FIG-16



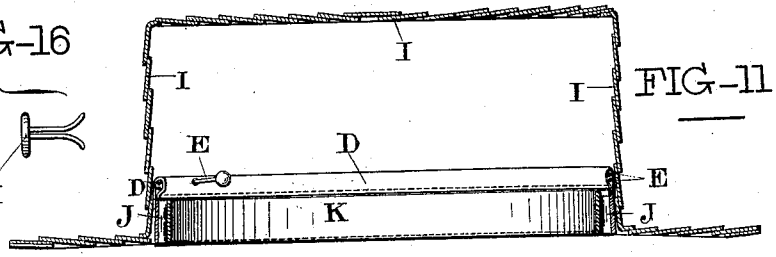


FIG-11

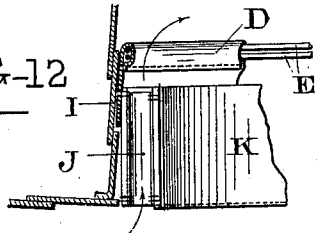


FIG-12

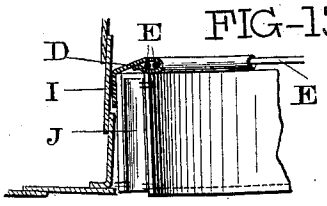


FIG-13

WITNESSES

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UNITED STATES PATENT OFFICE.

JULES JAILLET, OF MÂCON, AND LOUIS JULES TUSSAU, OF LYON, FRANCE.

VENTILATING-HATBAND.

No. 888,902. Specification of Letters Patent. Patented May 26, 1908.

Application filed February 29, 1908. Serial No. 418,506.

To all whom it may concern:

Be it known that we, JULES JAILLET and LOUIS JULES TUSSAU, citizens of the French Republic, residing at Mâcon and Lyon, respectively, both in France, have invented certain new and useful Improvements in Ventilating-Hatbands, of which the following is a specification.

The present invention relates to an improved ventilating appliance for head gear, and its principal objects are as follows:—Firstly, to obtain complete peripheral contact with the cranium, so that the hat, helmet or the like has a firm seat without exerting pressure on the veins and arteries at the temples, which are not naturally protected by muscular tissue. Secondly, to insure an abundant ventilation, regulatable according to temperature and other conditions, in order to prevent alternations of heat and cold liable to cause neuralgia, congestion, apoplexy and other maladies.

The invention also provides means of adapting the appliance to heads of different dimensions. The appliance is interchangeable and can be used with head gear of all types, for example sporting caps, slouch hats, bowlers, top hats and the like.

The present invention provides an appliance which is independent of the head gear, and can be separately manufactured, not necessarily in a hat factory.

Several constructions embodying the invention are shown in the annexed drawing, in which

Figure 1 is a longitudinal vertical section of a helmet provided with the improved ventilating appliance, and Fig. 2 a view of the same, from below. Fig. 3 is a plan view of a device used for regulating the air gap. Fig. 4 shows a helmet, with the ventilating appliance, in section, on the head of the wearer, and Fig. 5 is a plan view of the ventilating appliance alone. Fig. 6 is a side view of the appliance shown in Fig. 5. Figs. 7 and 8 are elevations showing the annular band or curtain in the positions in which it exposes and closes the gap respectively. Fig. 9 is a plan view of a device for regulating the gap, the dotted lines indicating its shape when the gap is closed. Fig. 10 shows part of the curtain, with its support and the regulating device. Fig. 11 is a longitudinal vertical section of a straw hat provided with a modified form of the ventilating appliance. Figs. 12 and 13 are sections of this modified appliance, on a larger scale, showing the air passage open and closed respectively. Figs. 14 and 15 are respectively a plan and side view of a supporting ring of adjustable diameter. Fig. 16 shows devices for attaching the ventilating appliance to the hat.

The appliance comprises an annular band or curtain D of fabric the free edge of which is engaged by a spiral steel wire E. This wire can be loosened or tightened, so that the edge of the fabric is either thrust outwards towards the walls of the hat, leaving free a gap between the hat and a supporting ring or sweat band A for the passage of air, or it is thrust against the ring or sweat band to close the gap and prevent passage of air.

At the temples the supporting ring A consists of outwardly curved flexible springs B, which clear the temples without making contact therewith. A narrow lining of soft leather or other suitable material inside the ring adapts itself to the curves and protuberances of the head.

The supporting ring A is connected to the hat by short rods C sufficiently rigid to support the hat, but also sufficiently flexible to allow of expansion of the ring. The curtain or band of fabric D hereinbefore referred to may also be supported by these rods.

The supporting ring adapts itself readily to heads of all shapes, provided that its circumference corresponds with the size of the wearer's head. Screws, spring-studs, attachments known as Parisian attachments, or like devices H are used for rapidly attaching the appliance to the hat, and allow of easily changing it from one hat to another.

The supporting ring A may consist of sections adjustably connected to each other, to allow of adjusting the ring to fit heads of different sizes, and of applying it to different types of head gear.

The supporting ring consists of two narrow flexible bands A of celluloid, horn, whalebone, metal, or any other suitable material, connected to each other by outwardly curved metal bands B at the part(opposite the temples. The metal bands are sufficiently flexible to allow of slight expansion of the ring. The ring thus formed fits heads of all shapes, round, oval, or irregular, without an adapter of any kind. The ring fits closely against the head except at the temples, with which the parts B do not make contact, and which do not come into contact with the hat itself. It is obvious that this composite ring

has advantages over a substantially rigid ring, which will rarely exactly fit the head of the wearer, and which has cavities or projections arranged to protect the temples but uncomfortable by reason of the corners and angles which they form.

The ring is connected to the hat by short rods C, which hold the hat clear of the ring, so that air currents can pass between the ring and the hat. When walking, the wearer thus experiences the same relief as if he were temporarily raising a hat unprovided with the ventilating appliance, and holding it above his head. The rods C, which are fixed to the ring by rivets F, have eyes G at their upper ends, and tubular projections which pass through holes in the circumference of the hat. Spring-studs, screws, or the like H (Fig. 16) are inserted into the outer ends of the tubular projections, to fasten the appliance to the hat. Somewhat below the level of the eyes G the upper edge of a band or curtain of fabric D is fastened to the inner circumference of the hat (Figs. 1 and 11) or to a steel wire L (Figs. 6, 7, 10) engaging the rods C. The wire L serves to impart rigidity to the upper edge of the curtain. A hem at the lower edge of the curtain is traversed by a spiral wire E, the ends of which protrude from the hem and are crossed, as shown in Fig. 3. Knobs are fixed to the ends of the wire E, and by drawing these knobs apart, or thrusting them towards each other the wire and the lower edge of the curtain D can be tightened or loosened round the head of the wearer (Fig. 9). The air passage can thus either be fully opened (Figs. 5, 6, and 7), or partly closed, or entirely closed (Figs. 4, 8). When the passage is closed the lower edge of the curtain is pressed by the wire E against the outer surface of the supporting ring A. The protruding parts of the wire E withdrawn from the hem are pushed between the lower edge of the curtain and the supporting ring A, and are retained inside the hat by the pressure of the curtain against the ring.

Fig. 14 shows a supporting ring made in sections adjustable relatively to each other, to allow of adjusting the circumference of the ring. The ends of adjacent sections overlap each other, and the extent to which they overlap can be regulated by means of set-screws working in slotted guides N. Scales are marked on plates M, to allow of obtaining exact adjustment. If there are four adjustable lap-joints, for example, a ring of 50 centimeters circumference can be increased to 58 centimeters circumference by reducing the lap by two centimeters at each joint.

In the construction shown in Figs. 11, 12, and 13, applied to a straw hat I, air passages J are formed by inserting pieces of cork or fabric or bent springs or the like between the sweat-band K and the inner circumference of the hat. The annular strip of fabric D is attached to the hat near the upper ends of the air passages, and by adjusting the wire E the said band can be made to fully expose, or partly or entirely close the inner orifices of the said passages. Fig. 12 shows an air passage with its orifice fully exposed, and Fig. 13 shows the same with the band D closing the orifice.

What we claim as our invention and desire to secure by Letters Patent of the United States is:—

1. The combination with head gear of a band for supporting said head gear on the head of the wearer, said band being spaced from said head gear, a curtain contacting at one edge with the head gear, and a spiral wire at the other edge of the curtain adapted to be contracted or extended to adjust the said edge in contact with or at a desired space from the said band.

2. The combination with head gear of a band for supporting said head gear on the head of the wearer, said band being spaced from said head gear by flexible standards removably attached to the head gear, a curtain contacting at one edge with the head gear, and a spiral wire at the other edge of the curtain adapted to be contracted or extended to adjust the said edge in contact with or at a desired space from the said band.

3. The combination with head gear of a band for supporting said head gear on the head of the wearer, said band being spaced from said head gear and comprising flexible portions of a shape to fit to parts of the head and outwardly curved portions corresponding to the position of the temples, a curtain contacting at one edge with the head gear, and a spiral wire at the other edge of the curtain adapted to be contracted or extended to adjust the said edge in contact with or at a desired space from the said band.

4. The combination with head gear of a band for supporting said head gear on the head of the wearer, said band being spaced from said head gear and comprising flexible longitudinally extensible portions of a shape to fit to parts of the head and outwardly curved portions corresponding to the position of the temples, a curtain contacting at one edge with the head gear, and a spiral wire at the other edge of the curtain adapted to be contracted or extended to adjust the said edge in contact with or at a desired space from the said band.

In witness whereof we have signed this specification in the presence of two witnesses.

JULES JAILLET.
LOUIS JULES TUSSAU.

Witnesses:
JEAN GERMAIN,
GUILLAUME PIOCHE.