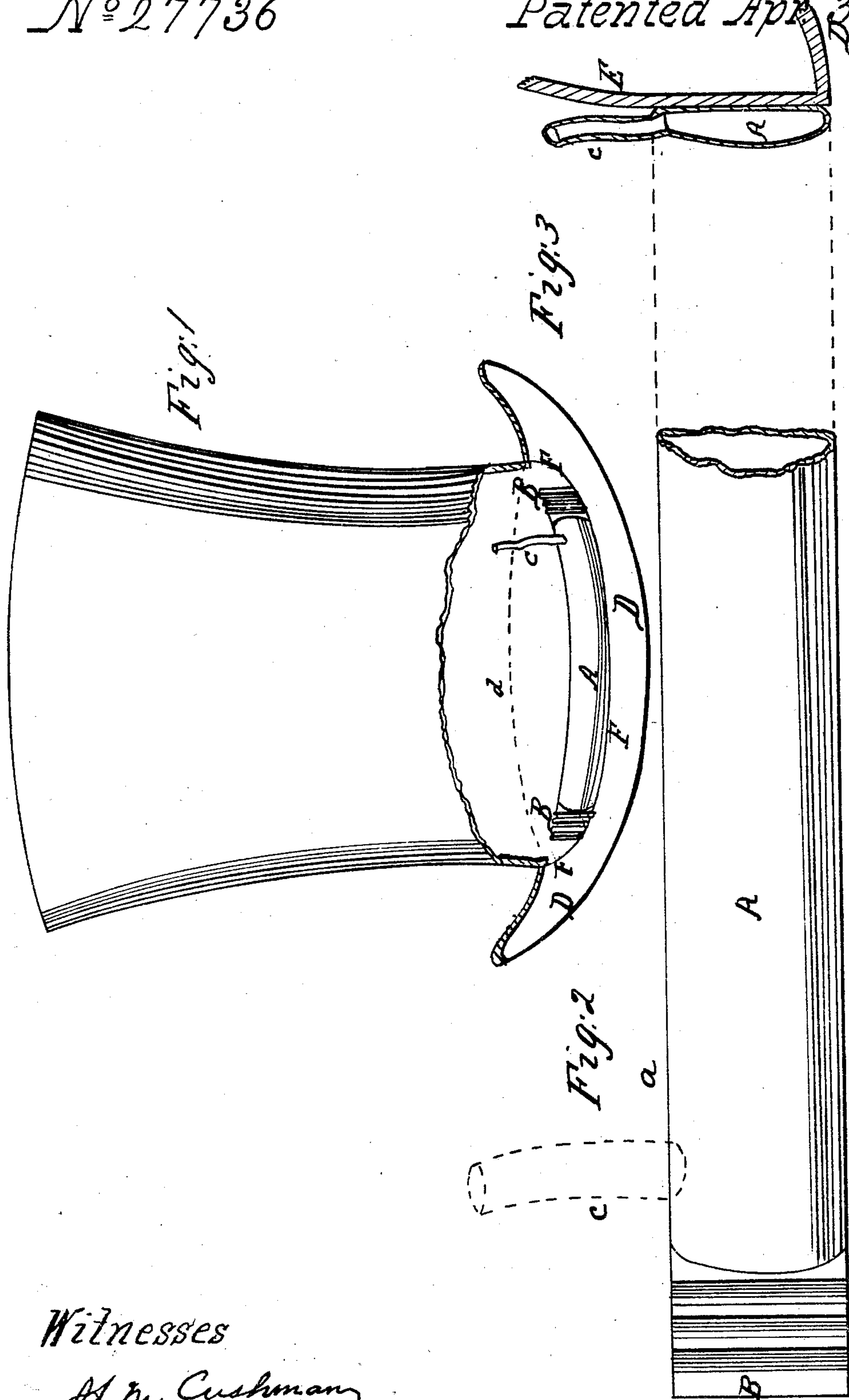


J. Pollock.

Ventilating Hats.

N^o 27736

Patented Apr 3, 1860.



Witnesses

H. M. Cushman

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JULIUS POLLOCK, OF MORRISANIA, NEW YORK.

VENTILATOR FOR HATS.

Specification of Letters Patent No. 27,736, dated April 3, 1860.

To all whom it may concern:

Be it known that I, JULIUS POLLOCK, of the town of Morrisania, county of Westchester, and State of New York, have invented a new and Improved Mode of Relieving and Preventing the Unpleasant Feeling Resulting from the Pressure of Hard, Stiffened, Unventilated Hat-Bodies; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification, in which—

Figure 1 represents a view of the hat with a portion of the hat body removed to exhibit the cushion and its parts. Fig. 2 represents a full front view of a portion of the cushion, detached from the hat body, and Fig. 3, a section of the same across *a*, *b*.

E is the hat body.

The nature of my invention consists in the combination, with a hollow inflated cushion, of a series of small tubes or corrugations so located, that when the hat is put on the head the said tubes or corrugations will lie in the hollows formed by the depressions of the head at the temples; by reason of such location these tubes or corrugations will always remain open for the passage of air to ventilate the inside of the hat in connection with any of the usual openings.

To enable others skilled in the art, to make and use my invention I will proceed to describe its construction and operation.

I make my cushion *A* of any known air proof material—as for instance vulcanized rubber-cloth—with a series of corrugations or grooves *B* at each end, which may be made either by piercing, or pressure between wires, or in any other similar manner. This cushion is flat and must be made thin in substance and then cemented with an adhesive cement, or in any other manner secured, to the lower fore part of the hat body. A small supply tube *C* is attached to any part of the cushion *A* through which the air or other fluid is supplied to the chamber of the cushion, which when filled, the tube is tightly compressed by tying or in any other convenient mode so that none of the air or other fluid can by any possibility escape. This tube should be made of the same material as the cushion and carefully attached to it, and should be no longer than is absolutely necessary to inject the fluid

into the chamber of the cushion, else it is obvious that it would interfere with the comfort and ease of the wearer of the hat.

I now proceed to fill the cushion *A* with a liquid-alcohol for instance—which I force into the cushion through the supply tube *C*; the cushion will of course, when filled, then assume a convex shape, on the inside. Now it is obvious that water may be applied instead of alcohol, air or any other liquid or gas, but this fluid is rendered objectionable from the fact that it is liable to freeze thus precluding its adoption for the purposes above set forth. When the hat is placed on the head the thin stratum of fluid contained within the cushion, intervenes between the head and the hat body, and the great mobility of its particles enables it to yield and fit snugly, and with ease rest on the forehead, thus removing the point of contact from the edge of the hat, *F* to the yielding surface of the cushion, avoiding pain to the head, and insuring a more ready and better fit to the wearer. The corrugations, grooves or channels *B* at the ends of the cushion, I arrange so that they shall cause a more snug fit at the hollow just above the temples on each side of the head, at the same time that they are of a yielding nature. These corrugations I also use for the purposes of ventilation, for being placed just where a depression of the head occurs, and thus being always free and open to the admission of fresh air, more perfect ventilation to the hat must result. The hat, of course being perforated in any convenient manner at the top part.

To get rid of the unnatural caloric arising from accumulated evaporation of the head, openings must be made both for egress of the vitiated air and ingress of the fresh. The simple opening at the top is not sufficient to secure a proper ventilation, neither is one at the lower part only, since it is absolutely necessary to create a current before the heated air can be displaced. I obviate the difficulty heretofore experienced by hat manufacturers and others, by making an opening or series of openings or perforations at the crown, and making the corrugations at the ends of the cushions so that a current of air will always force itself up through these corrugations, and displace the vitiated air contained within the hat above the head, until it becomes impregnated with the gases thrown off from the head, and it in its turn

is displaced by more pure or fresh air, which continuing to rush upward through the corrugations forces the more rarefied to ascend, but this cannot be the case if no
5 means be provided for the admission of fresh air.

I am aware that cushions made of elastic substances have been applied to hats with the view to be self-fitting to the head, but
10 such cushions have not accomplished the desired object because they do not relieve the protuberant parts of the head from undue pressure. The more a spring is compressed the greater is its tension, and hence the in-
15 creased pressure on the most protuberant parts of the head. But by my improvement the cushion adapts itself to the shape of the head, however irregular, by reason of the mobility of the contained fluid without un-
20 due pressure on the protuberant parts. And hence I do not wish to be understood as

making claim to the combination of any kind of a cushion with a hat. And I am also aware that tubes, apertures or corruga-
25 tions have been arranged between the sweat leather and hat for the purpose of ventilation, and hence I do not wish to be understood as making claim broadly to the employment of ventilating tubes or corruga-
30 tions in hats.

What I claim as my invention, and desire to secure by Letters Patent, is—

In combination with a hollow inflated cushion the employment of tubes or corruga-
35 tions for the passage of air, and so placed in the hat as to fit in the cavities of the head over the temples, as herein described and for the purpose set forth.

JULIUS POLLOCK.

Witnesses:

WM. STURDIVANT,
JAMES L. PARSHALL.