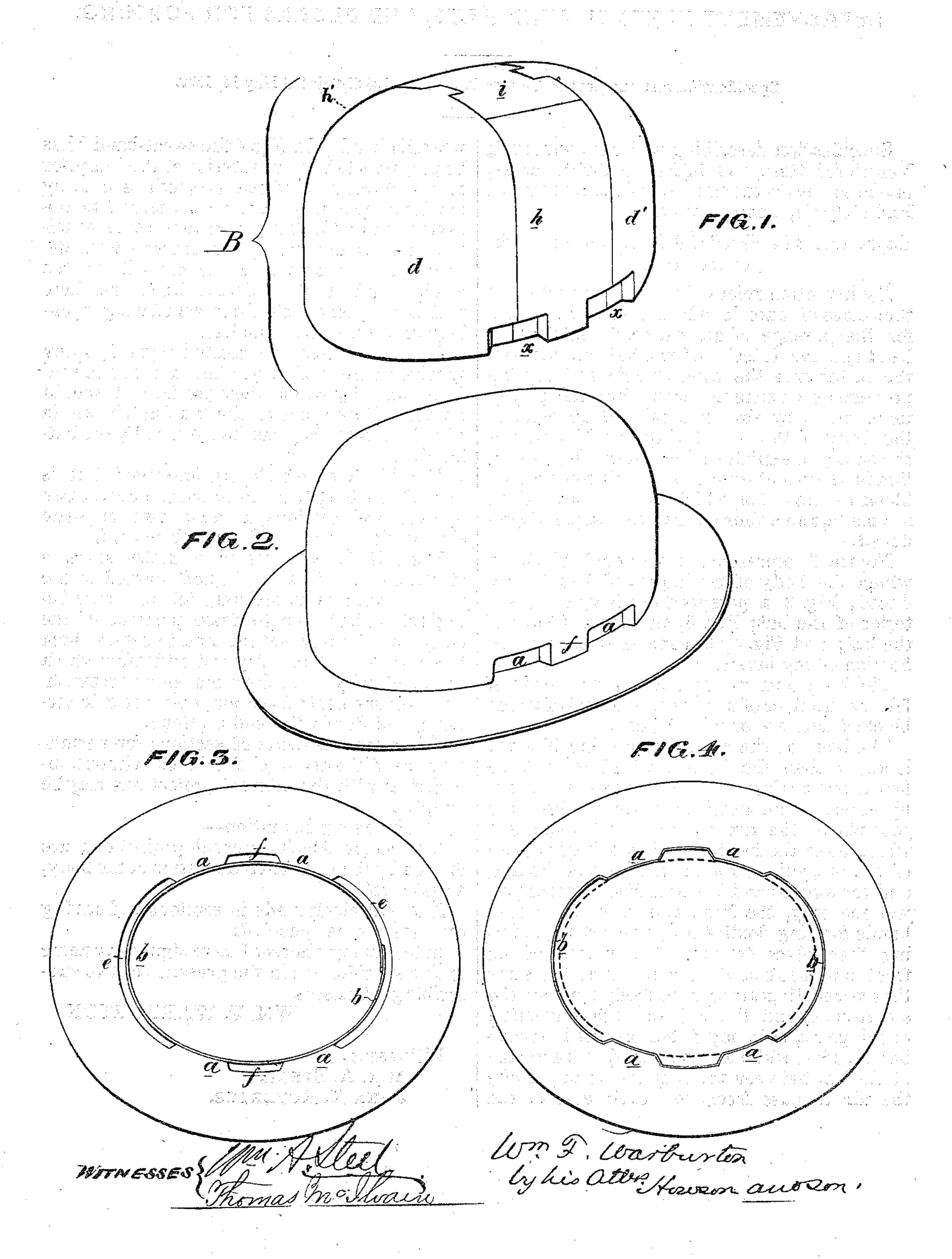
## WILLIAM F. WARBURTON.

Ventilated Hats, and Blocks for Forming.

No. 126,854. Patented May 14,1872.



## UNITED STATES PATENT OFFICE.

WILLIAM F. WARBURTON, OF PHILADELPHIA, PENNSYLVANIA.

## IMPROVEMENT IN VENTILATED HATS, AND BLOCKS FOR FORMING.

Specification forming part of Letters Patent No. 126,854, dated May 14, 1872.

Specification describing an Improvement in Ventilated Hats, and in Blocks for the same, invented by William F. Warburton, of Philadelphia, Pennsylvania.

Improvement in Ventilated Hats, and in Blocks for the same.

My invention relates to the construction of that class of hats in which there are spaces for the passage of air between the wearer's head and the interior of the hat, or between the latter and the sweat-band; and my improvement consists in certain internal projections made by the external indentations of the body of the hat during the blocking of the same, as explained hereafter. My invention further consists of a peculiarly constructed block by the aid of which the said projections are made, and a thoroughly ventilated hat produced.

Figure 1 represents a sectional block on which the body of my improved hat is produced; Fig. 2, a perspective view of the exterior of the hat; Fig. 3, an inverted view of the hat; and Fig. 4, the same showing a modification of my invention.

The body and rim of the hat are made of felt, as usual, or of any other material of which

blocked hats are usually formed.

The body of the hat prior to being blocked is larger than the head to which it is to be fitted, but during the blocking process I form, by external indentations made in the body just above the rim, internal projections a a, which fit to the head. In Fig. 3 there are two of the projections a a on each side of the hat, and the sweat-band b is attached to these projections only, the front and rear of the said bands forming flexible strips for accommodating themselves to the conformation of the front and back of the head, and at the same time permitting air to pass freely between the sweat-band and the hat through segmental openings cc, as in my patent granted December 11, 1860, while an opening, f, on each side of the hat between the projections aa permits the air to pass freely on each side of the

wearer's head. In Fig. 4 the sweat-band b has been connected to the interior of the hat prior to the formation of the projections a a, by blocking, or it may have been secured to the hat after the blocking operation, so as to follow the projections a, and intermediate depressions. In this case the hat will fit the head, as indicated by dotted lines, and there will consequently be three ventilating openings on each side of the hat.

I do not desire to confine myself to any specific number of projections a a, but the indentations by which they are formed should be immediately above the rim, as shown in Fig. 2, so that they can be covered by the hat-

band.

The block on which my improved hat is formed consists, in the present instance, of two opposite end sections, d and d', two opposite side sections, h, and a central piece, i.

The felt body, while in a moist state, is stretched over this block, and treated in the same manner as an ordinary felt-hat, care being taken, however, to force portions of the body into the recesses x x, and to retain them there until the hat is dry and stiff, after which the block may be easily removed by first withdrawing the central section, then the side sections, and finally the end sections.

Other arrangements of sections for permitting the withdrawal of the block without interfering with the internal projections may be

adopted.

I claim as my invention—

1. A hat in which internal projections are formed by the external indentation of the body, as set forth.

2. A hat-block made in sections and having

recesses x x, as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WM. F. WARBURTON.

Witnesses:
WM. A. STEEL,
JOHN K. RUPERTUS.