(Model.)

J. R. HOPKINS.

FIREMAN'S HAT.

No. 560,213. Patented May 19, 1896.

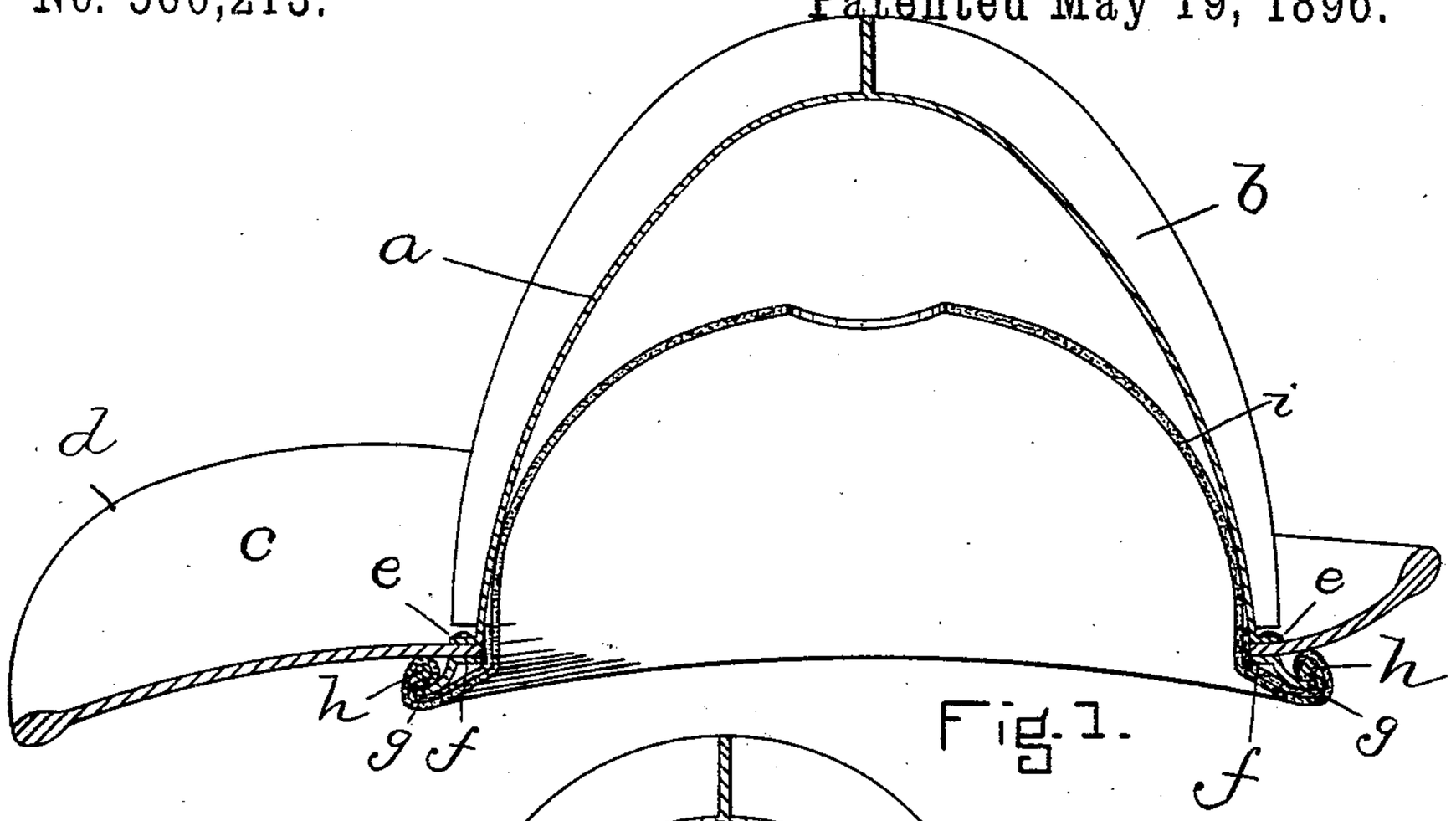

Fig. 1.

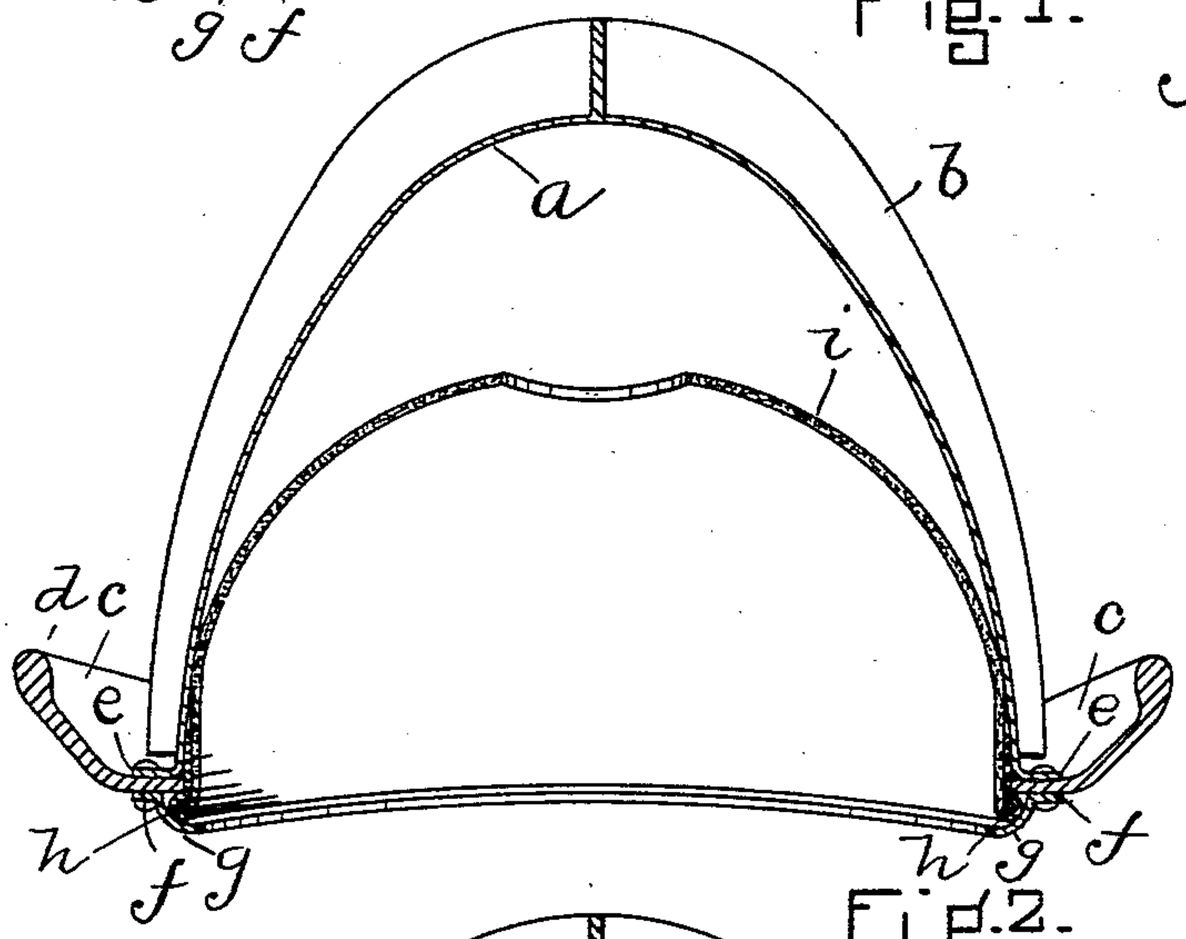

Fig. 2.

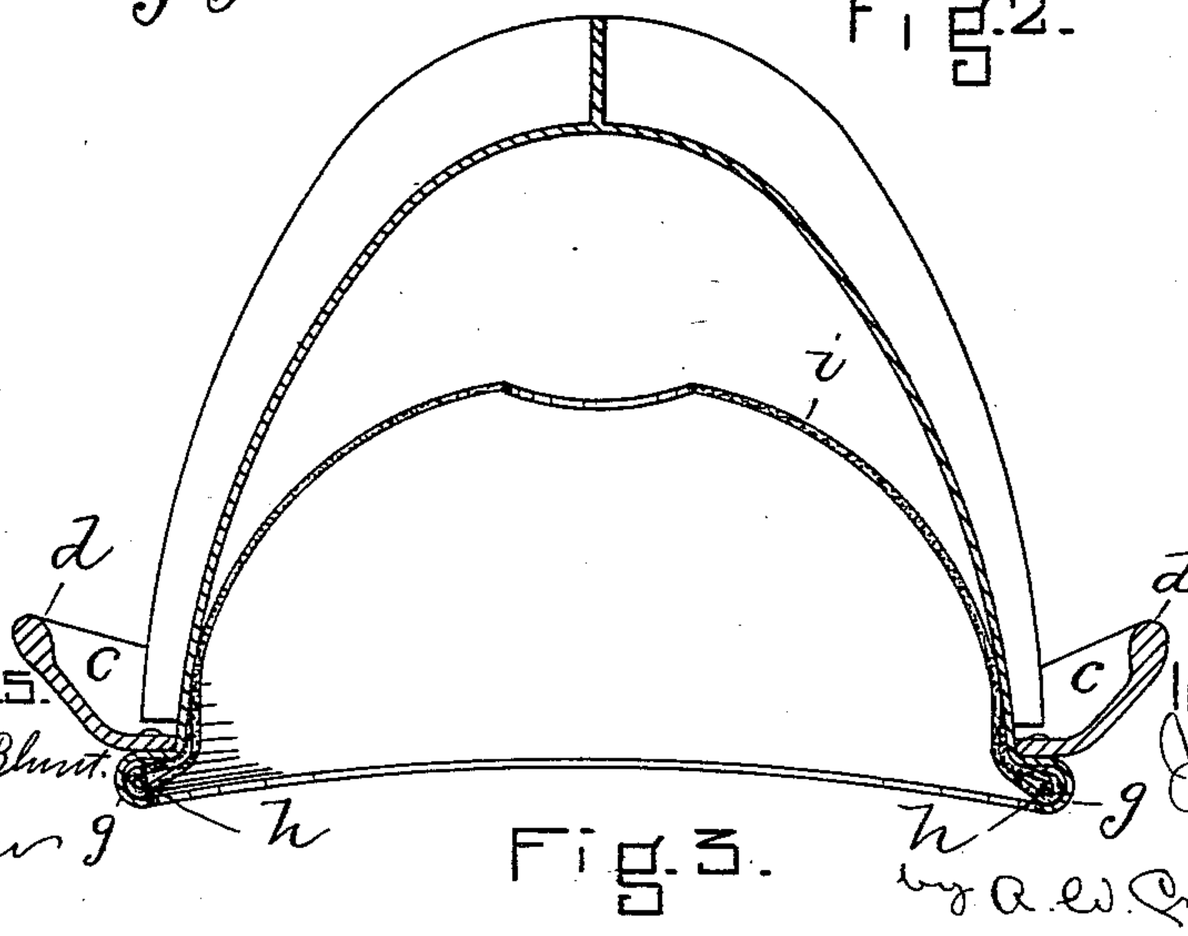

Fig. 3.

WITNESSES.
Matthew M. Blunt.
C. C. Stecher 9

INVENTOR.
J. R. Hopkins
by A. W. Crossley
his ATT'Y.

UNITED STATES PATENT OFFICE.

JAMES R. HOPKINS, OF SOMERVILLE, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO ROBERT S. WRIGHT, OF SAME PLACE.

FIREMAN'S HAT.

SPECIFICATION forming part of Letters Patent No. 560,213, dated May 19, 1896.

Application filed August 6, 1895. Serial No. 558,454. (Model.)

To all whom it may concern:

Be it known that I, JAMES R. HOPKINS, of Somerville, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Firemen's Hats, of which the following is a specification.

This invention has relation to firemen's hats generally, and particularly to that kind or type of hats disclosed by Letters Patent of the United States granted to me July 16, 1889, No. 407,209.

It is the object of the invention to provide such improvements in firemen's hats of the class mentioned as will render the inner crown or head rest or support readily removable and adjustable, so that in case of renewal, repair, or refitting the said inner crown or crown-cloth may be easily taken out and replaced.

It is also the object of the invention to provide other improvements in the construction of firemen's hats, all as will more fully appear from the explanation hereinafter given.

To the foregoing ends my invention consists in improvements in firemen's hats comprising in their construction an outer crown and a brim or cape, an annular groove formed in the structure at or near the junction of the crown with the brim or cape for the reception of a wire hoop or resilient ring normally of greater circumference than the bottom of the said groove, so that the lower edge of the inner crown or head-rest may be caught between the hoop or ring and the walls of the groove and held in place by friction after the ring or hoop shall have been sprung into position, the construction and arrangement of parts being such that the ring may be, when desired, sprung out of place to adjust, repair, or renew the inner crown.

The invention further consists of improvements in the structural character of the outer crown and brim or cape of a fireman's hat, as will presently appear.

Reference is to be had to the annexed drawings, and to the letters marked thereon, forming a part of this specification, the same letters designating the same parts or features, as the case may be, wherever they occur.

Of the drawings, Figure 1 is a vertical central sectional view taken through my improved fireman's hat from front to rear, and showing one form of the means whereby the inner flexible crown is secured to the outer crown and brim or cape. Fig. 2 is a vertical central sectional view taken through the hat from side to side, and showing a slightly-modified form of the means represented in Fig. 1. Fig. 3 is a view similar to Fig. 2, but representing a different form of means for maintaining the inner crown in place.

In the drawings, *a* designates the outer crown, which is composed of sheet metal, preferably of aluminium, and may be corrugated or otherwise formed to add stiffness and strength to the structure without enhancing its weight.

b designates ribs extending over the crown from front to rear and from side to side. Other ribs may also extend between the ribs first mentioned, the said ribs being provided for the purpose of securing greater safety to the head of the wearer of the hat in case falling missiles should strike thereon.

c designates the brim or cape, which is also composed of sheet metal, preferably aluminium, and is provided at its outer edge with a bead *d* for the purpose of strengthening the brim. The crown *a* is provided at its lower edge with a flange *e*, as shown in Fig. 1, in order to facilitate the riveting of the cape or brim at its lower edge to the crown, as will fully appear from an inspection of the drawings.

f in Figs. 1 and 2 designates a rim or ring, preferably of sheet metal, which is adapted to be secured to the under surface of the brim at the inner edge thereof. The said ring *f* is bent throughout its length in the projecting part or portion thereof, so as to form an annular groove *g* therein, into which a wire or other resilient ring or hoop *h* may be sprung, so as to fit fairly closely in the said groove for a purpose to be presently explained.

i designates the inner crown or head-rest, which is made of proper form and composed of textile or other flexible material. The construction of the inner crown *i* is such that the lower edge or skirt may be laid over the groove *g* and a wire sprung thereover into said groove in order to hold the inner crown in place and permit of its adjustment to suit circumstances.

It frequently happens that the inner crown becomes stretched or is not originally adjusted so as to best fit the head of the wearer, and where the lower edge of the inner crown is permanently secured to the outer crown or brim in the construction of the hat it is difficult to adjust the inner crown so as to make it fit the head of the wearer. By the means herein shown and described it will be observed that the inner crown may be readily removed and replaced — that is, the inner crown is not permanently secured in place and may be taken out—for the purpose of adjustment, renewal, and repair. This is a very important matter in the construction of firemen's hats, as has already been explained.

The groove *g* may be formed in the structure at the junction of the outer crown with the frame in various ways. It is formed, as shown in Fig. 1, by curving or curling up the outer edge of the ring *f*, so that the lower edge of the inner crown may be caught between the ring and the inner walls of the groove and held in place, the said lower edge covering the outer surface of the ring *f*. As shown in Fig. 2, the inner edge of the ring *f* is curved inward and upward, so as to form the groove *g*, for the same purpose as shown in Fig. 1.

In Fig. 3 I have shown the crown *f* as not only provided with a flange *e*, as in Figs. 1 and 2, but the outer edge of said flange is curved or curled, so as to form a groove therein, in which case I dispense entirely with the ring *f*. In all cases, however, I form a groove *g* in the structure at the junction of the base of the crown with the inner edge of the brim or cape *c* and in all cases employ the wire ring or hoop *f* of a circumference corresponding to the circumference of the groove *g*, so that the wire may be sprung in place and grasp the lower edge of the material forming the inner crown between it and the said groove.

By forming the crown and brim or cape of aluminium I am enabled to provide a structure which is readily affected neither by fire nor water, and hence is more durable than firemen's hats as at present constructed, and, furthermore, the structure is as light in weight as though it were made of the material now commonly used, and, indeed, is much lighter than when the commonly-used material becomes wet or saturated with water, as is the case in the use of that hat.

Having thus explained the nature of the invention and described a way of constructing and using the same, though without attempting to set forth all of the forms in which it may be made or all of the modes of its use, it is declared that what is claimed is—

1. A fireman's hat comprising in its construction an outer crown and a cape or brim, the structure being provided with an annular groove at the junction of the crown with the brim, a flexible inner crown or head-rest and a resilient hoop or ring adapted to be sprung therein and to frictionally hold the skirt or edge of the inner crown between it and the walls of said groove.

2. A fireman's hat comprising in its construction an outer aluminium crown, an aluminium cape, a ring or rim secured at one edge to the cape and crown and bent throughout its length in the projecting part or portion thereof to form a groove, combined with a flexible inner crown or head-rest, and a resilient hoop or ring adapted to be sprung into the said groove over the skirt of the inner crown to frictionally hold the latter in place.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 19th day of June, A. D. 1895.

JAMES R. HOPKINS.

Witnesses:
M. B. MAY,
C. C. STECHER.