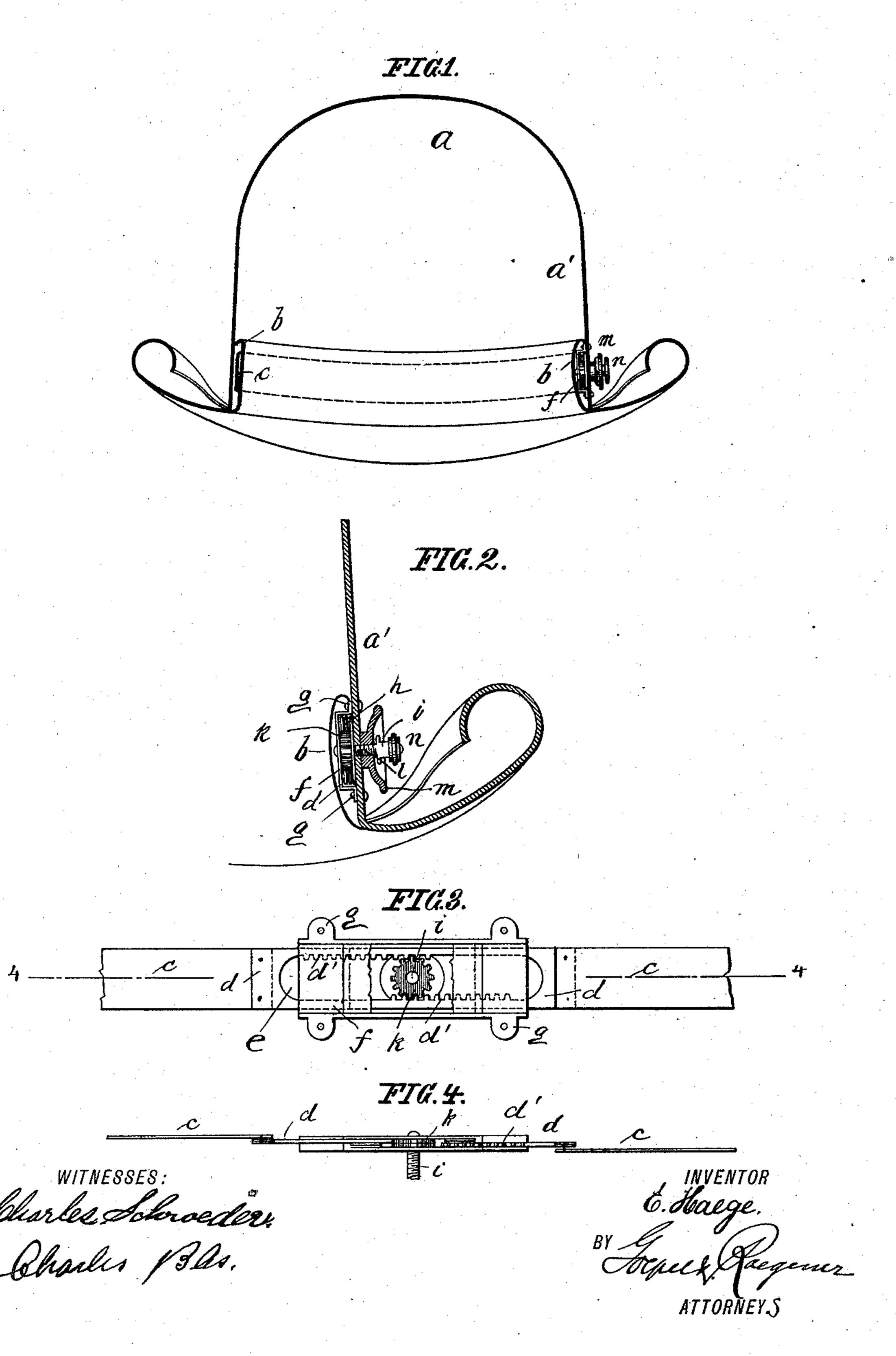
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HAT, &c.

No. 470,618.

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United States Patent Office.

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SPECIFICATION forming part of Letters Patent No. 470,618, dated March 8, 1892.

Application filed October 7, 1891. Serial No. 407,978. (No model.)

To all whom it may concern:

Be it known that I, EUGEN HAEGE, a citizen of the Empire of Germany, residing in Stuttgart, in the Kingdom of Würtemberg and Empire of Germany, have invented certain new and useful Improvements in Head-Coverings, of which the following is a specification.

This invention relates to improvements in hats, caps, and other head-covering.

The object of my invention is to provide a hat, cap, or other head-covering with means for adjusting the same so that it will fit heads of different sizes or adjusting the same so that it will hold more firmly and securely on the head during windy and stormy weather or while a person wearing the same is moving rapidly or is on a rapidly-moving conveyance, such as a car, wagon, &c.

The invention consists in an article of headwear in the opening of which a band of spring material is arranged, to the ends of which slotted plates having racks formed on the edges of the slots are fastened, which racks are in engagement with a pinion contained in a casing fastened to the interior of the hat and containing the overlapping plates on the ends of the band.

The invention also consists in the construc-30 tion and combination of parts and details, as will be fully described and set forth hereinafter, and finally pointed out in the claims.

In the accompanying drawings, Figure 1 is a vertical transverse sectional view of a hat provided with my improvement. Fig. 2 is an enlarged detailed cross-sectional view through the rim part of the hat and sweat-band and the mechanism for adjusting the steel band. Fig. 3 is a detailed view of the overlapping ends of the band, showing the mechanism for adjusting the band. Fig. 4 is a horizontal sectional view on the line 4 4 of Fig. 3.

Similar letters of reference indicate like parts in all the figures.

Between the sides a' of the hat a and the sweat-band b the elastic circular band c is arranged, the same being preferably made of steel or other like material. To each end of the band c a metal plate d is riveted or otherwise fastened, said plates d overlapping each other. Each plate d is provided with a longi-

tudinal slot e, on one edge of which a rack d'is formed, the rack being formed on the top edge of one slot and on the bottom edge of the other. Said overlapping plates d are con- 55 tained within the casing f, having lugs g, by means of which it is fastened on the sides a'of the hat, between it and the sweat-band. The covering-plate h is placed into the opening of the casing f adjacent to the sides of 60 the hat. A pinion k, engaging both racks d', is fixed on an arbor i, mounted to turn in suitable apertures of the casing f and the plate h, said arbor projecting from the outer surface of the side of the hat behind the rim, 65 as shown. Said arbor is provided on its outer end with a handle-knob n for turning it, and is also provided with a screw-threaded part l, on which a locking-nut m is screwed.

To adjust the hat for different sizes, the 70 arbor *i* is turned, whereby the circle described by the band *c* is either increased or decreased in area, and thus the opening of the hat is increased or decreased. After the opening has been adjusted according to the size of the 75 head and by turning said arbor *i* the band is locked in place by means of the nut *m*.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with an article of head-wear, of a band of spring material located in the opening of the same and having overlapping ends, a casing fastened to the interior of the hat and containing said overlapping ends, 85 means for shifting said overlapping ends over each other, and means for locking them in place, substantially as set forth.

2. The combination, with an article of head-wear, of a band of spring material arranged 90 within the opening of the same, slotted plates secured to the ends of said band, racks formed on the edges of the slots, a pinion engaging said racks, means for turning said pinion, and a casing fastened to the interior of the 95 hat and containing the overlapping rack ends of the band and the pinion, substantially as set forth.

3. The combination, with an article of head-wear, of a band of spring material in the 100 opening of the same, slotted plates having racks formed on the edge of their slots, fast-

ened on the ends of said band, and overlapping each other, a casing containing said overlapping ends, a pinion arranged in said casing and engaging the racks, a screw-threaded arbor on which the pinion is fixed, and a locking-nut on the threaded part of the arbor for locking it in place, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

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EUGEN HAEGE.

Witnesses:
W. Blossfeldt.
Carl Fischer.