D. FREEDLINE.

HAT CONFORMATOR.

APPLICATION FILED AUG. 16, 1920.

1,383,922. Patented July 5, 1921.

Fig. 1.

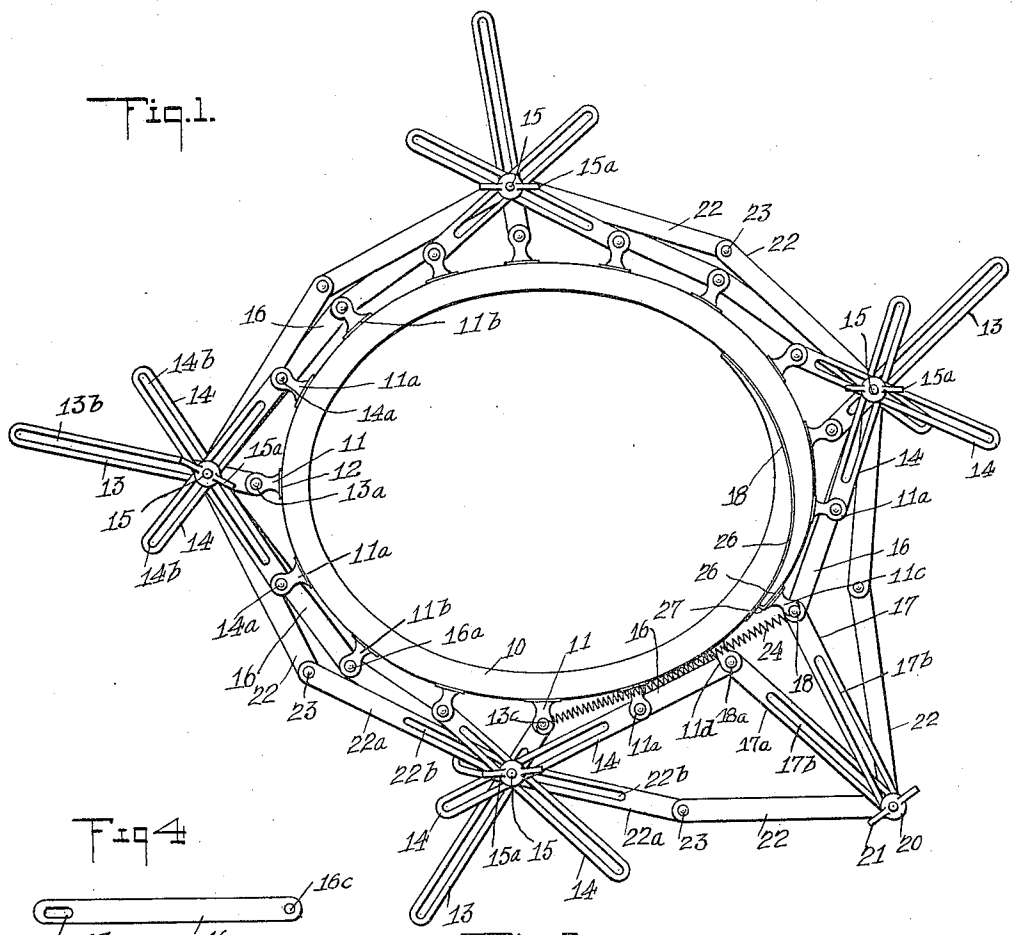


Fig. 4

Fig. 2.

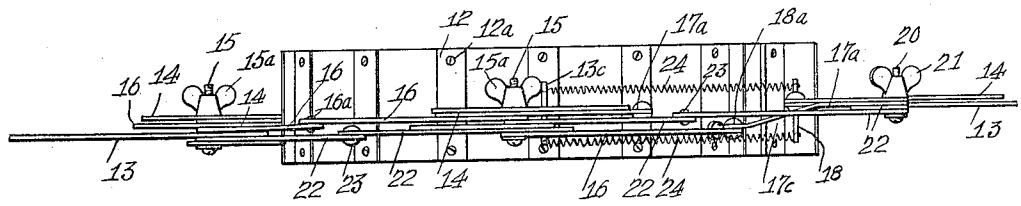
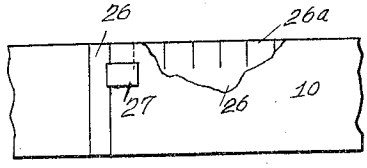


Fig. 3.



WITNESSES

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HAT-CONFORMATOR.

1,383,922. Specification of Letters Patent. Patented July 5, 1921.

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To all whom it may concern:

Be it known that I, DAVID FREEDLINE, a citizen of the United States, and a resident of the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Hat-Conformator, of which the following is a description.

My invention relates to a device to be placed about the head and adjustable to conform to the anatomy thereof.

The general object of the invention is to provide a device for the indicated purpose and lighter and of more simple form than the conformators usually employed.

A further important object of the invention is to provide adjusting means that will readily adapt themselves to the different shapes of heads and at the same time may be readily adjusted and then locked in the adjusted position.

A further object is to provide a hat conformator having extensible and contractible means to fit the head, variable at different points about the same to conform to the head at local points together with means to maintain the conformator against the possibility of changing its form after having been adjusted to the head.

Reference is to be had to the accompanying drawings forming a part of this specification, it being understood that the drawings are merely illustrative of one example of the invention.

Figure 1 is a plan view of a hat conformator constructed in accordance with my invention;

Fig. 2 is a side elevation thereof;

Fig. 3 is a detail at the overlapped ends of the bands, the view being given to show the means for indicating the ascertained size of the hat;

Fig. 4 is a plan view of one of the elements involving the adjusting means and to be hereinafter referred to.

In carrying out my invention in accordance with the illustrated example, a split band 10 is provided having tapered overlapped ends and adapted to extend about the head, said band in practice being made of felt, flexible metal or other suitable material. Disposed about the band at the exterior are laterally projecting brackets or equivalent members.

Certain of the brackets are designated by the numeral 11 and have groups of adjusting elements connected therewith, there being additional brackets 11^a and 11^b, disposed laterally at each side of the brackets 11 and spaced from one another for the connection of elements in the adjusting assemblage as will appear. All the brackets may be formed on vertical strips 12 secured by screws 12^a or other means to the band A at the outer periphery of the latter.

A series of groups of adjusting devices is provided about the band 10 and as each group and assemblage, except that at one point are alike, it will suffice to describe in detail one of the plurality of groups.

To each bracket 11 is secured by a pivot 13^a the inner end of a main arm 13, having a longitudinal slot 13^b. Crossed adjustable bars 14 having longitudinal slots 14^b are pivotally and adjustably secured to each arm 13 by a screw or bolt 15 having a thumb nut 15^a, said bolt extending through the slots 13^b, 14^b. The crossed bars 14 extend from the bolts 15 laterally in opposite directions to the next adjacent studs 11^a to which they are secured by pivots 14^a. Each group of adjusting elements includes also a pair of bars 16 secured at their adjacent ends by the bolt 15 and extending laterally from said bolt beyond the brackets 11^a to the next adjacent brackets 11^b. One end of each bar has a slot 16^b for the bolt 15, the opposite end of the bar having a hole 16^c for the rivet or pivot pin 16^a.

It will be seen that the adjusting assemblage includes with the main pivoted arm 13 two pairs of adjusting bars 14, 16, all adjustably connected with said arm 13 and the bars of the respective pairs connecting pivotally with the band 10 at different points on the latter.

In addition to the plurality of groups or assemblages of adjusting elements as described, I provide at the overlapping terminals of the band 10, a modified adjusting assemblage which forms a connection between one end of the band and a point on the band near the overlapped opposite end of said band. Thus, a slotted bar 17 is pivotally secured as at 18 to a bracket 11^c near the extreme end of the outer overlapping portion of the band. A similar bar 17^a is secured at its inner end as at 18^a to a bracket 11^d on the band 10 adjacent to the overlapped portion of the band. Said bars 17, 17^a have slots 17^b and the bars converge at their outer ends and are pivotally con-

nected by a bolt or screw 20 having a thumb nut 21. Thus, a loosening of the several nuts 15^a of the several bolts 15 and the loosening of the nut 21 will permit of the band 10 being expanded or contracted. The brackets 11^c, 11^d in their relation to adjacent brackets 11, 11^a, occupy positions similar to the brackets 11^b and the pivots 18, 18^a secure the adjacent ends of the adjacent adjusting bars 16.

I provide in addition to the adjusting elements a chain of locking elements extending about the band 10. The locking means comprises a series of toggle links 22, the links of a pair being pivotally connected by a rivet 23 and the opposite ends of said links being pivotally secured by the bolts 15. Thus, each pair of toggle links is tied up at its its ends with the groups of adjusting elements through the medium of the bolts 15 and when the bolts are tightened, the toggle elements serve as a lock to further insure the holding of the conformator in a given adjustment. Those toggle links 22 adjacent to the overlapping portions of the band 10 are connected to each other and to the bars 17, 17^a, by the bolt 20. Two adjacent toggle links designated 22, 22^a have their adjacent ends formed with longitudinal slots 22^b for the adjacent securing bolt 15.

Retractile springs 24 are provided tending to contract the band 10. The springs 24 are secured at one end to the outer overlapping terminal of the band 10 and secured at their opposite ends at a point on the band distant from its opposite end. The springs 24 are fastened at their ends to any convenient members. In the illustrated form the pivot 18 projects sufficiently at the top and bottom for the connection of said springs. The opposite ends of the springs may be secured to the pivots 13^c connecting the adjacent arm 13 with its bracket 11, said pivot 13^c corresponding with the pivots 13^a, but being elongated for the connection of the springs.

To indicate and register the hat size to which the band 10 is adjusted, I provide on the outer surface of the overlapped terminal portion a plate 26 having a scale 26^a over which a pointer or indicator 27 moves, said indicator being secured in any suitable manner to the band 10 at the overlapping terminal thereof. In use the band 10 having been placed on the head the nuts 15^a and 21 are loosened so that the band may contract under the tension of the springs 24 or may expand to fit the head. The band having been fitted to the head, the several nuts 15^a and the nut 21 are tightened. By the described connections between each group of adjusting elements and the band 10 at various points about the same at the brackets 11, 11^a, 11^b, all portions of the band are constrained to remain in the adjusted form. 17^c indicates a bend in an arm 17^a to afford clearance for springs 24.

With the above described conformator after the same has been adjusted to the size and shape of the head, the conformator may be laid on a piece of paper and the size and shape taken by pencil or the paper may be cut out within the conformator, a permanent record in either case being obtained for the making of a hat block, for example.

I would state in conclusion that while the illustrated example constitutes a practical embodiment of my invention, I do not limit myself strictly to the mechanical details herein illustrated, since manifestly the same can be considerably varied without departure from the spirit of the invention as defined in the appended claims.

Having thus described my invention, I claim:—

1. A hat conformator comprising a split band, and groups of adjusting elements disposed about the band and pivotally secured thereto at various points about the band.

2. A hat conformator comprising a split band, and groups of adjusting elements disposed about the band and secured thereto at various points about the band; together with clamp means associated with each group of elements, and means to hold said elements in a given adjustment.

3. A hat conformator comprising a split band, and groups of adjusting elements disposed about the band and secured thereto at various points about the band; together with a series of locking means connecting the several groups.

4. A hat conformator including a split band, adjustable means pivotally connecting one terminal of the band with a point on the band distant from the other terminal, and means to lock said means in adjusted position.

5. A hat conformator including a split band, adjustable elements connecting one terminal of the band with a point on the band distant from the other terminal, groups of adjustable elements disposed about the band, the elements of each group being connected with the band at different points about the same, and means connecting the first-mentioned adjustable elements with the adjacent groups of adjusting elements.

6. A hat conformator including an overlapping split band, spring means tending to contract the band, bars connected respectively with the band adjacent to the outer overlapping terminal and with a point on the band distant from the other terminal, and means adjustably connecting said bars.

7. A hat conformator including a split band, groups of adjustable elements disposed about the band, each group comprising an arm pivotally secured to the band, and elements adjustably and pivotally se-

cured to said arm and to each other as well as to the band at points distant from the pivotal connection of said arm.

8. A hat conformator including groups of adjustable elements disposed about the band, each group comprising an arm pivotally secured to the band, a pair of bars pivotally secured at their inner ends to the band and pivotally connected with each other and with said arm, and a second pair of bars pivotally secured at their inner ends to the band at points more distant from said arm than the first pair of bars, said second pair of bars being pivotally connected with each other and with said arm.

DAVID FREEDLINE.