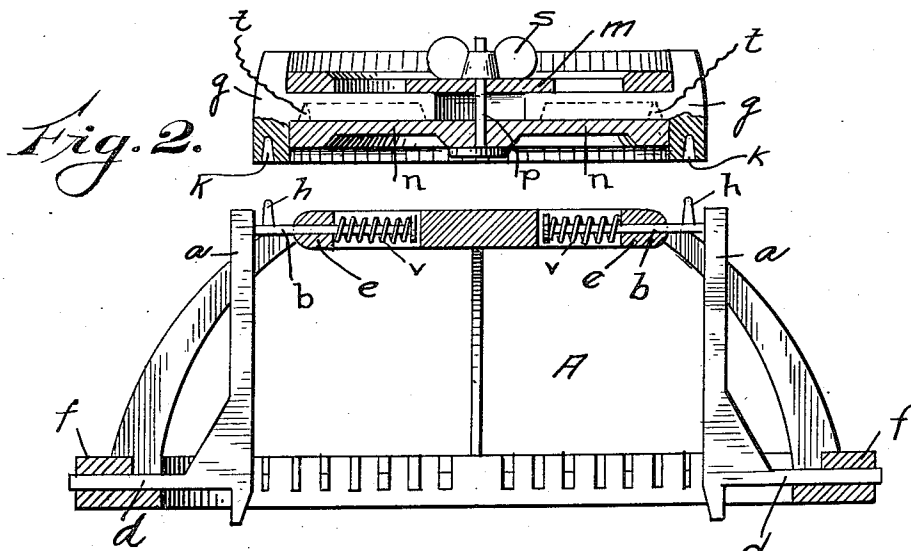


1,017,009.

Fig. 1.



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UNITED STATES PATENT OFFICE.

JAMES R. MCKINLESS, OF OAKLAND, CALIFORNIA, ASSIGNOR, BY MESNE ASSIGNMENTS, TO INTERNATIONAL CONFORMER COMPANY, A CORPORATION OF CALIFORNIA.

HAT-CONFORMATOR.

1,017,009.

Specification of Letters Patent.

Patented Feb. 13, 1912.

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To all whom it may concern:

Be it known that I, JAMES R. MCKINLESS, a citizen of the United States, residing in Oakland, in the county of Alameda and State of California, have invented new and useful Improvements in Hat-Conformators, of which the following is a specification.

This invention relates to improvements in appliances used by hatters for ascertaining the size and peculiar shape of a customer's head, for the purpose of setting or adjusting the hat block by means of which the work of shaping the hat is carried on and an accurate fitting of the hat to the head is obtained.

Appliances of this character are generally termed hat conformators, and as heretofore constructed such an appliance operates to produce a templet or outline of the relative size and conformation of the customer's head, and this templet is afterward used to set or adjust the sectional hat block by means of which the hat is shaped and brought to the required conformation in the usual manner to fit the customer's head; the two operations of first producing the templet by means of the conformator, and then adjusting and making ready the block by means of the templet, being necessary before the work of shaping and sizing the hat is undertaken.

The present invention has as its object to dispense with the production of a templet or profile pattern, and to adjust and set a sectional hat block directly from the head of the customer, thereby materially reducing and simplifying the work of shaping and fitting a hat.

A further object of this invention is the production of a hat conformator having several useful features, and especially the novel feature of setting and adjusting a sectional hat-block which forms a part or element of the complete appliance or apparatus.

To these ends and objects chiefly my said invention comprises a detachable sectional hat-block and means connecting the adjustable segments or elements with the ribs or movable elements of the conformator, whereby the said parts are operatively connected while the appliance is being fitted to the head, with the effect to set or adjust the hat block by the same operation; the hat block

being detached for use after such adjusting or conforming operation is finished.

A hat conformator of my invention consists therefore of the novel parts and combination of parts hereinafter described and pointed out in the claims at the end of this specification.

The accompanying drawing illustrates a hat conformator embodying the invention.

Figure 1 is a perspective view showing the detachable hat-block in position on the conformator body ready for taking the size and profile of a customer's head. Fig. 2 is a vertical longitudinal section, showing the sectional hat block detached from the setting or adjusting mechanism of the appliance.

A novel feature in a hat conformator of my invention consists in temporarily or detachably connecting each segment or movable element of the sectional hat-block with a rib or movable element or member of the conformator-body in such manner that the position of the segments of the hat block will correspond to and represent the relative position of the ribs or movable elements of the conformation after the appliance has been properly adjusted and fitted on the customer's head, and it only remains then to detach and remove the hat block from the other part of the appliance after its segments or elements are locked or otherwise confined in position, when it is ready for use in the work of shaping the hat.

A further novel feature of the invention consists in improved means of locking or fixing the segments of the hat block after their adjustment by the conformator, by operating a single clamping screw.

As embodied in the appliance illustrated in the drawing the conformator A is composed of a plurality of radially set movable ribs each having a perpendicular bar *a*, a horizontal top bar *b* and a foot *d*, both lying in substantially a vertical plane and extending in radial lines, the one inward or toward the center and the other extending radially outward. These two horizontally extending bars of each upright rib serve primarily to space and guide the ribs in their movements on radial lines, and to that end the sockets are provided in the top frame *e* and in the bottom frame *f* of the conformator body in which the bars before mentioned

are fitted to slide with the required extent of movement on radiating lines.

The detachable part B of the appliance—herein termed the hat-block—is provided with the same number of segments *g* slidable on radiating lines in planes corresponding generally with the movable top-bars of the ribs *a* with which they are separately connected, so as to move uniformly with those parts. Such connection or attachment of the hat block to a rib is preferably made by a stud or standing projection *h* on the top bar *b*, and a socket or aperture *k* in the underside of the segment situated directly over the bar, the projection fitting closely in the socket, and both projection and socket being tapered to center the segment and join or connect the parts rigidly together for the time. This style or character of connecting means is employed on account of the readiness with which the parts can be detached and the block removed for the further operation of shaping the hat after the adjustment is effected.

A further novel feature in the construction of the hat-block consists in a means for clamping or rigidly holding all the movable segments by one operation of a single screw, in place of a number of clamping devices requiring a number of separate and successive operations in every adjustment of the hat block before removing it from the conformator.

In the preferred construction herein illustrated the segments *g* are confined between a top plate *m* and a bottom plate *n* drawn together by a bolt *p* passing through the top plate and fitted with a thumb-nut *s*. Stop-pins *t* in the bottom-plate taking in slots in the slidable segments serve to confine and limit the latter in their movements.

A coiled spring *v* on the top bar of each rib or movable element of the conformator controls the movements of those parts, causing them to contract or expand in the proper manner to conform to the shape of the head on which the appliance is placed. These springs situated in this manner at or near the upper ends of the ribs have the effect to apply their force or strain in such a direct manner upon the slidable segments when they are attached to the ribs, that they will respond to and follow the movements of the ribs without producing any binding or undue strain upon the latter.

As the space heretofore provided for the

perforating mechanism of the templet or profile recording means in appliances of this character is not required in my present appliance, the springs *v* can be applied to the guide-bars *e* of the movable ribs *a*, with the advantage before mentioned.

I claim:—

1. A hat conformator having a plurality of movable elements arranged around an oval space adapted to admit the head of a person and having yielding movement under contact therewith, whereby said elements are set to conform to the profile of the inserted head; in combination with a detachable hat-block composed of a plurality of slidable segments, means detachably connecting each slidable segment with a movable element on the conformator, and means for clamping all the movable segments before detaching the hat-block.

2. In a hat-conformator, a plurality of movable elements arranged around an oval space adapted to admit the head of a person and having yielding movement on radial lines whereby said elements are set to conform to the shape and size of the inserted head by contact therewith, in combination with a detachable hat-block having a plurality of movable segments, means operating to connect each segment with a movable element of the conformator whereby the same will be correspondingly set by the movement of the movable element, and means for fixing the said segments in position after such adjustment.

3. In a hat conformator, a sectional hat-block having a plurality of movable segments adjustable generally radially around an oval center, and means for clamping said segments after adjustment, comprising a top plate and a bottom plate and a centrally operating means for tightening said plates upon the segments, in combination with a conformator including in its structure adjustable elements movable radially in corresponding manner to the segments of the hat-block by contact with the head on which the conformator is placed, and means detachably connecting each adjustable element on the conformator with a segment in the hat-block.

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Witnesses:

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