March 30, 1937. H. SCHLESINGER 2,075,626

HAT STRETCHER

Filed Nov. 18, 1935

Fig. 1.

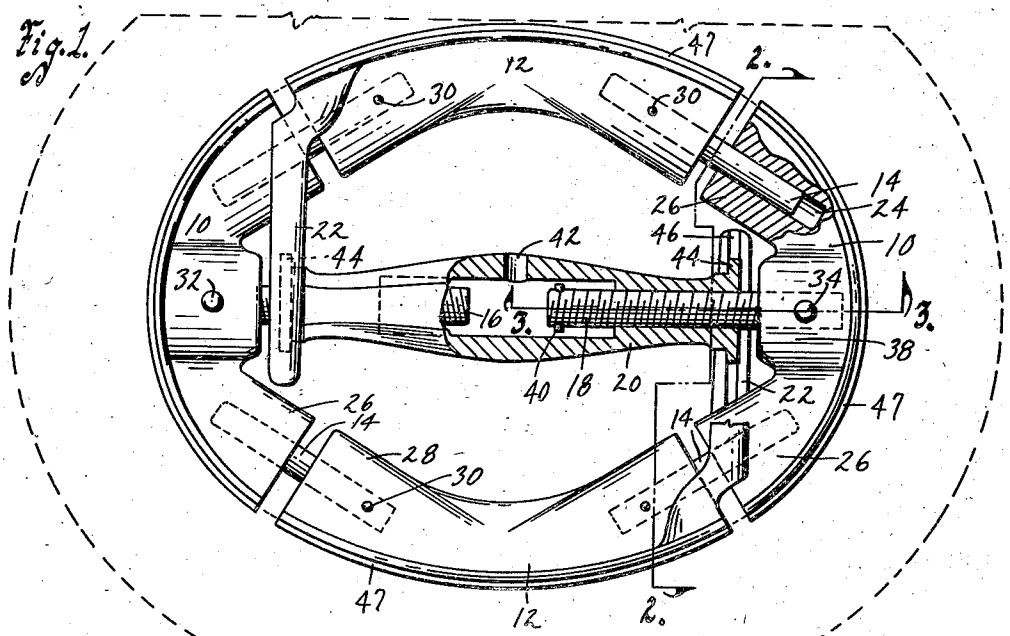


Fig. 2.

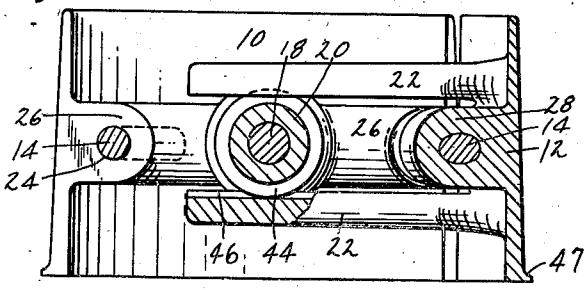


Fig. 4.

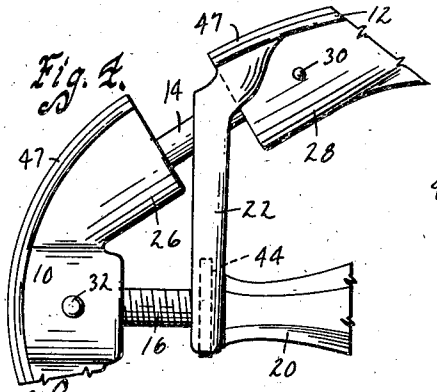
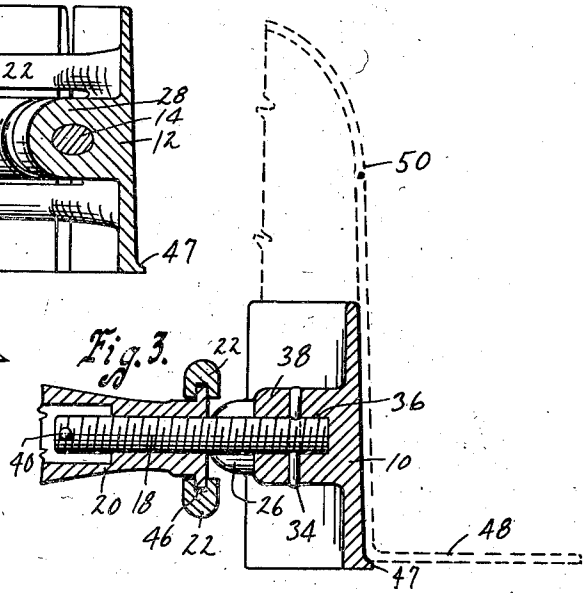


Fig. 3.



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HAT STRETCHER

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5 Claims. (Cl. 223—15)

The object of my invention is to provide a hat stretcher which is simple, durable and comparatively inexpensive to manufacture.

A further object is to provide a hat stretcher in which a hat block of oval shape is made expandible in such manner as to retain its oval shape, a single adjusting means being provided for accomplishing the expanding operation.

More particularly it is my object to provide a hat stretcher comprising a hat block formed of a pair of curved side members and a pair of curved end members, the ends of these members having pin sockets, pins being slidably mounted in the sockets and a turnbuckle nut-like handle means for sliding two of the members and thereby the other two members through the sliding connections of the pins.

Another object is to provide flanges on the ends of the adjusting handle and arms extended from two of the members and engageable with these flanges in such manner as to prevent rotation of the members of the hat block relative to each other about the pins in the sockets and to equalize the expansion of the hat block when adjusting it.

Another object is to provide on each member of the hat block a flange adjacent one edge thereof to engage the inner edge of a hat brim to facilitate alignment of the hat stretcher in a hat and thereby prevent twisting the hat out of shape when stretching it.

With these and other objects in view my invention consists in the construction, arrangement and combination of the various parts of my device, whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claims and illustrated in the accompanying drawing, in which:

Figure 1 is a plan view, partly in section, of a hat stretcher embodying my invention.

Figure 2 is a sectional view on the line 2—2 of Figure 1.

Figure 3 is a sectional view on the line 3—3 of Figure 1; and

Figure 4 is a view of a portion of Figure 1 showing the parts in a partially expanded position.

On the accompanying drawing, I have used the reference numerals 10 to indicate end members or sections and 12 side members or sections of an oval shaped hat block which comprises the major portion of my hat stretcher. Other parts of the invention are pins 14, threaded shafts 16 and 18, a handle 20 and arms 22 which together with the members 10 and 12 make up the hat stretcher.

The pins 14 are received in pin sockets 24 formed in bosses 26 and 28 of the members 10 and 12. The pins 14 may be pinned in the sockets of the bosses 28 by small transverse pins 30.

The axes of the sliding pins 14 are less than 45° to the longitudinal axis of the hat block which axis is also the axis of rotation of the handle 20. The axes of the pins 14 are substantially tangential to the curved periphery of the hat block at the ends of the bosses 26 and 28 so that upon sliding movement being imparted to the members 10 the pins 14 will impart sliding movement of the members 12 in such proportion that the oval shape of the hat block will be maintained in all positions of adjustment.

The threaded rods 16 and 18 have respectively right and left hand threads and are secured as by pins 32 and 34 in sockets 36 of bosses 38 formed on the members 10 of the hat block. The inner end of one of the rods such as 16 is preferably provided with limited pins 40 to prevent the handle 20 from unscrewing entirely from the rods. These pins may be inserted after assembly through an opening 42 in the handle.

From the foregoing, it is obvious that rotation of the handle 20 in one direction or the other will either expand or contract the end members 10 and that consequently the side members 12 will be either expanded or contracted.

The ends of the handle 20 are provided with annular flanges 44 which are adapted to rotate in channels 46 of the arms 22. Two of the arms 22 are provided for each member 12 and these are located on opposite sides of the handle 20 and its flanges 44 as shown in Figures 2 and 3.

The arms 22 are confined by the flanges 44 against swinging about the axes of the pins 14. This keeps the outer surfaces of the hat block members 10 and 12 in accurate alignment with each other. With the arms 22 there is also some tendency for the members 12 to slide further from one member 10 than from the other one, thus causing a binding action which, of course, is undesirable. The flanges 44 since they are part of the handle 20 and the handle advances the rods 16 and 18 simultaneously at the same speed, will always keep the members 12 equalized in their movement and the spaces between their ends and the ends of the members 10 all equal. This both prevents binding and maintains the proper oval shape of the hat block in all positions of adjustment.

Along the base of each member 10 and 12, I provide a flange 47 which is adapted to engage the inner edge of a hat brim 48 of a hat 50, as shown in Figure 3, to limit the position

of the hat stretcher into the hat. Without this flange, there is a danger of positioning one side or one end of the hat stretcher further into the hat than the other end or side and when the stretcher is then manipulated for stretching the hat, the hat is stretched unevenly and becomes misshapen.

Some changes may be made in the construction and arrangement of the parts of my device without departing from the real spirit and purpose of my invention and it is my intention to cover by my claims any modified forms of structure or use of mechanical equivalents which may be reasonably included within their scope.

I claim as my invention:

1. In a hat stretcher, an oval shaped hat block comprising a pair of curved side members and a pair of curved end members, slidable connections between the ends of said side and end members, the sliding axes being at an acute angle relative to the longitudinal axis of the hat block, means for moving said end members toward or away from each other along said longitudinal axis and thereby moving said side members by means of said slidable connections and means rigid relative to said side members and projecting therefrom, and engaging said last means to prevent misalignment of said members relative to each other and equalize the movement of the side members relative to each other and in proportion to the adjustment of the end members.

2. In a hat stretcher, an oval shaped hat block comprising a pair of curved side members and a pair of curved end members, slidable connections between the ends of said side and end members, the sliding axes being at an angle relative to the longitudinal axis of the hat block, means for moving one pair of said members toward or away from each other and means rigid relative to the other pair of members and projecting therefrom and engaging said last means to prevent misalignment of said other pair of members relative to each other and to equalize movement of the one relative to the other and in proportion to the pair of members moved toward or away from each other by said first means.

3. In a hat stretcher, an oval shaped hat block comprising a pair of curved side members and a pair of curved end members, slidable connections between the ends of said side and end members, the sliding axes being at an angle relative to the longitudinal axis of the hat block, means for moving one pair of said members toward or away from each other and means projecting from the other pair of said members and engaging said last means to prevent misalignment of said other pair of said members relative to each other and to equalize movement of the one relative to the other and in proportion to the pair of members moved toward or away from each other by said first means, said first means comprising a turnbuckle-like handle and a pair of rods and said second means comprising arms rotatably associated with said handle and rigid relative to said other pair of said members and coacting means between said first and second means to limit the position of the second means longitudinally of the first means.

4. In a device of the class described, an oval shaped hat block comprising a pair of curved side members and a pair of curved end members, the ends of each of said members having a pin socket therein at an angle relative to the longitudinal axis of the hat block, pins in said sockets and means to spread two of said members, said pins thereby spreading the other two members and means rigid with and extending from said other two members and engaging said first means to prevent rotation of said members about said pins and thereby misalignment in relation to each other.

5. In a hat stretcher, an oval shaped hat block comprising a pair of curved side members and a pair of curved end members, slidable connections between the ends of said side and end members, the sliding axes being at an angle relative to the longitudinal axis of the hat block, turnbuckle-like means for moving said end members toward or away from each other, said turnbuckle-like means comprising a pair of oppositely threaded rods and a handle-like nut, said slidable connections simultaneously moving said side members toward or away from each other, annular flanges on the ends of said handle-like nut and a pair of arms connected with each of said side members and each having grooves to rotatably receive the flanges of said nut.

HARRY SCHLESINGER.