

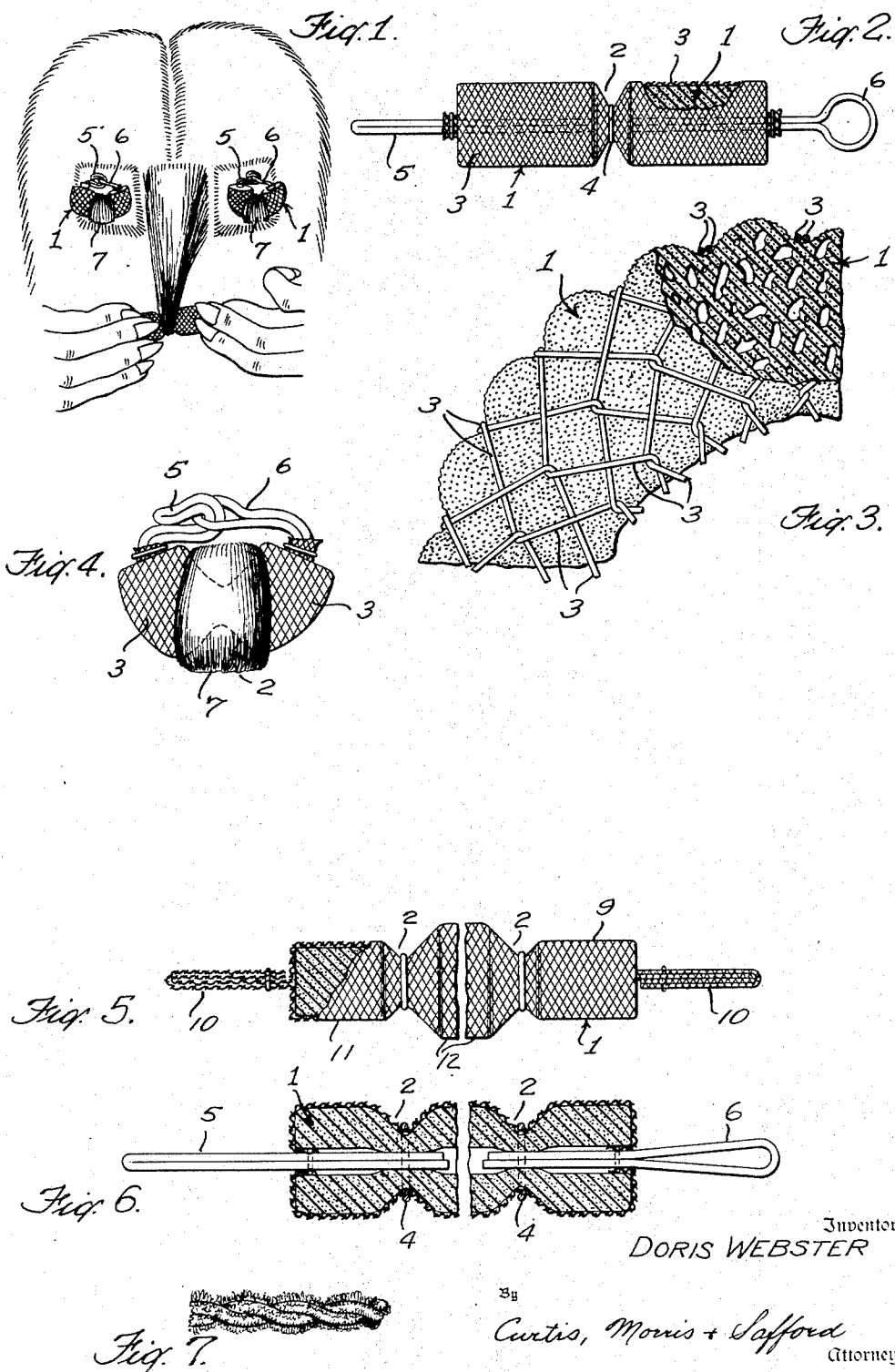
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HAIR CURLER

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HAIR CURLER

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1 Claim. (Cl. 132—43)

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The present invention relates to hair curlers. An object thereof has been to provide a hair curling device which will in certain respects be superior in operation to known devices for a similar purpose. For example, it has previously been suggested that hair curlers or wavers be made at least in part of elastic or resilient material such as sponge rubber, hollow rubber tubing or the like which may have a flexible covering, such as a knitted or woven fabric. Although curlers of this kind afford certain advantages due to the yielding character of the body material, this feature is in some instances offset by hard or unduly bulky fastening devices. Furthermore, where the over-all shape of the body portion of such a hair waver or curler is substantially cylindrical or of other uninterrupted cross-sectional contour, it is difficult to maintain the strand of hair thereon in properly wound condition for curling; and curls produced on such devices are frequently unsatisfactory in appearance.

A hair curler according to my invention comprises essentially a resilient strand supporting body of any suitable cross-sectional contour having a circumferentially extending strand receiving channel located between its ends. Such a resilient body may comprise a piece of foam rubber, sponge rubber, or other equivalent material. In winding a strand of hair thereon, the tip end portions of the strand are engaged in the deepest portion of said channel, and the winding proceeds in gradually widening layers with the under layers closely engaging the channel walls. By this procedure, a curl of novel form can be produced and the likelihood of accidental displacement between the body of the curler and the strand wound thereon for curling will be substantially precluded.

One form of hair waver or curler embodying my invention and several modifications thereof are illustrated in the drawings accompanying the present specification and wherein:

Figure 1 illustrates a curler in process of having a strand of hair wound upon it and two other similar curlers in place after the winding has been completed.

Figure 2, a side elevation of a preferred type of curler with a portion of the outer cover broken away to illustrate characteristics of interior structure.

Figure 3, an enlarged fragmentary view with portions broken away to indicate typical foam or sponge rubber structure;

Figure 4, an enlarged view in perspective of a

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curler of the type shown in Figure 1 with a strand of hair wound thereon and with the fastening devices arranged in releasable fastening position;

Figure 5, a modification wherein a suitable resilient body is provided with circumferentially extending strand receiving channels produced by the compressing action of an encircling member or cincture; and end portions of the resilient body are provided with a cover of suitable fabric having portions extending beyond the ends of the curler to provide means whereby the curler may be fastened in place by hair pins, or the like;

Figure 6, a further modification wherein the body blank is formed with a central longitudinal passageway and the fastening members are secured therein with portions extending outwardly from the ends of said body and with the inner ends of said members locked in assembled position by means of cinctures or other suitable securing devices which compress portions of the resilient body upon said fastening members and also form circumferentially extending strand receiving channels in the exterior contour of the body of the curler; and

Figure 7 is an enlarged fragmentary view illustrating a portion of a typical fastener, of the form shown in Figures 1, 2, 4 and 6, and including short lengths of fiber laid transversely and bound between twisted flexible wires to form an externally soft and bendable stem or the like such as is characteristic of conventional pipe cleaners.

Referring to the drawings, and more particularly to Figure 2 thereof, a curling device according to my invention comprises a strand supporting body 1 preferably of resilient material, such for example as foam rubber, sponge rubber, or the like, provided with a circumferentially extending strand receiving channel 2. This channel may be formed in a suitably shaped core of resilient material of generally cylindrical shape, for example, and a flexible cover 3 preferably of a net-like fabric material affording meshes for a purpose to be described. The circumferentially extending channel 2, in the device shown in Figure 2, may conveniently be formed by the compressive action of a cincture, tie or the like, which encircles a portion of the body 1 compressing the material thereof to a trough-like or V-shaped contour to form the channel 2. A suitable cincture for this purpose is provided by a closed loop 4 of a filament, as thread, string, or the like, tied firmly around body 1.

A curler according to my invention also preferably includes means whereby, after a strand of hair is wound thereon, the curler may

be secured in such position on the user's head that it will not readily be displaced until the curl is set and the curler is to be removed. One form of device appropriate for this purpose, as shown in Figure 2 for example, includes a fastening member or clasp 5 consisting of a length of twisted flexible wire having short lengths of fiber engaged between and extending outwardly therefrom to form an externally soft and bendable stem. For satisfactory flexibility and softness such a stem can be made of twisted wire carrying laterally extending fibers of a kind employed commonly in short lengths as pipe cleaners, Figure 7. Said clasp 5 has a loop 6 at one end. To secure the wound strand 7 of hair and the curler in curl setting relation, Figure 4, the straight end of clasp 5 is passed through and bent around a portion of loop 6. In this relation, a portion of clasp 5 passes across a portion of wound strand 7 which is thereby held in secure operative relation on the user's head until the clasp is released by the user.

The clasp 5 as above described not only serves to prevent the hair strand from coming loose from the curler, but accomplishes this useful result with minimum discomfort to the user.

The strand gripping quality of a curler as shown in the drawings is materially enhanced where the body or core is of a resilient rubber or rubber-like material having a rough outer surface. In a device employing a net-like fabric as a cover 3, the irregularities of such a core project outwardly through the mesh, as seen more clearly in Figure 3. In any case, the rough or irregular surface of the curler closely engages the wound strand of hair and provides means, in addition to that afforded by the channel 2, for preventing slippage of said strand.

The curler shown in Figure 5 includes a resilient body 1 with irregular surface and having a cover 9 of net-like construction. End portions of said cover are drawn over the ends of body 1 and shaped to form tabs 10 through which a hair pin or the like may be passed to secure the curler to the hair of the user.

Curlers embodying features of my invention are also usefully employed in rolling the hair, as distinguished from forming curls. In this case, the curler may be of any desired length so that the roll is developed on a single device; or several curlers may be connected end to end by means of the fasteners above described. A hair roll of graduated diameter is conveniently formed by employing a plurality of curlers of different diameters, or a single curler having sections of different diameters, as seen in Figure 5, for example, where the end sections 11 are of less diameter than the adjacent sections 12, it being understood that any desired and appropriate number of sections of different diameters may be provided.

The curl of novel appearance, approximately a tapering spiral, produced by use of the curler above described differs from a conventional curl in that its several loops present a materially wider range of size or diameter from end to end of the strand than those of curls set on conventional or known curlers. Thus, the usual strand of hair wound on the curler shown in Figure 2, for example, ordinarily includes some long hairs having their ends extending beyond the ends of a greater number of shorter hairs. Accordingly, end portions of the longest hairs engage the curler in the trough of channel 2 and consequently at the position of minimum circumference of the curler. The curls produced in these longer hairs are therefore set with resulting end loops of minimum size or diameter. The loops formed in any hair of such a strand are of successively increasing diameter from the outer end of the hair to the inner end of the curled portion thereof. In this case, the over-all difference in loop size is due to and may be controlled in part by the depth of channel 2 in relation to the diameter of the adjacent body sections of the curler body.

I claim:

Hair curler comprising a body formed of foam rubber having a rough textured strand receiving surface, a cincture compressively engaging an intermediate portion of said body to form re-entrant surfaces defining a circumferentially extending channel arranged and adapted to receive strands of hair wound thereon for curling and to impede accidental lateral displacement of said strands from their wound positions on said body, and securing means extending outwardly from end portions of said body to retain the latter in operative curling relation to strands of hair wound thereon.

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