Aug. 14, 1956 J. J. GRAF 2,758,604

APPARATUS FOR WAVING HAIR

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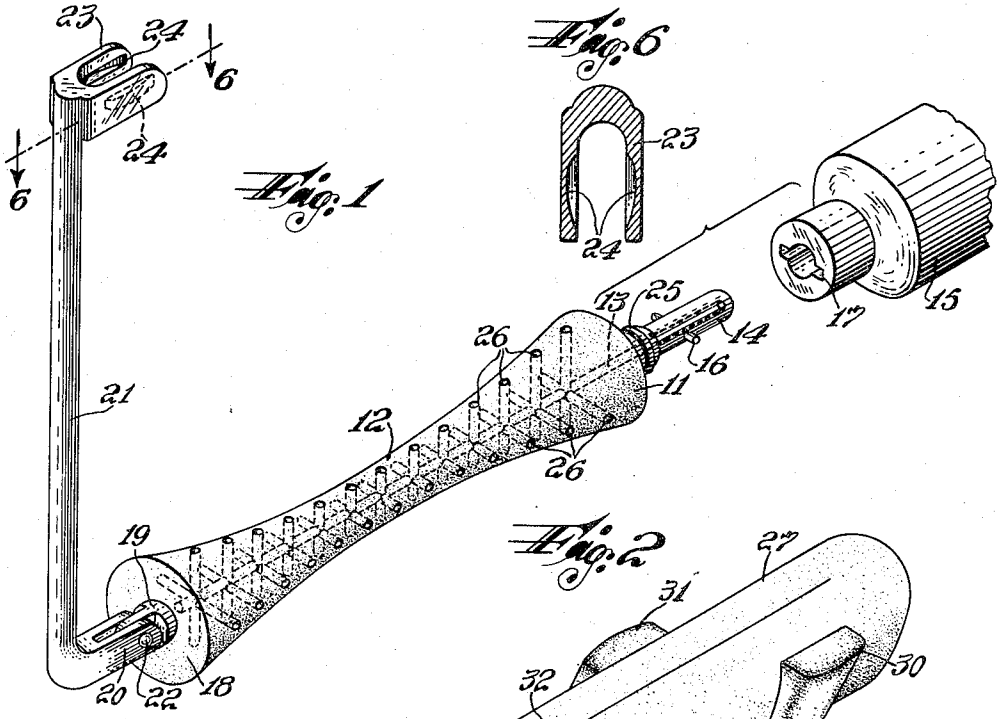

Fig. 1

Fig. 6

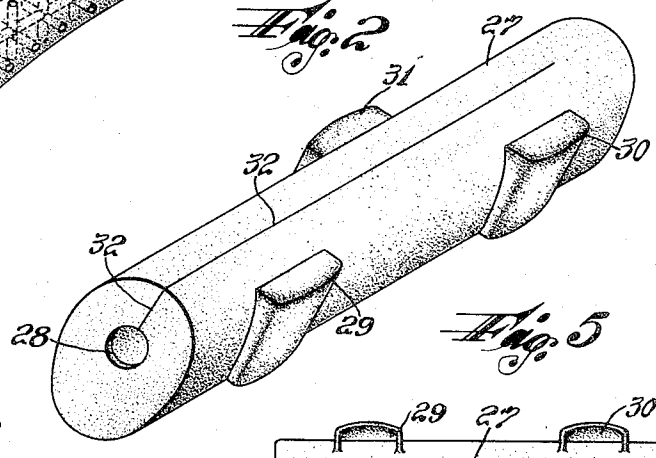

Fig. 2

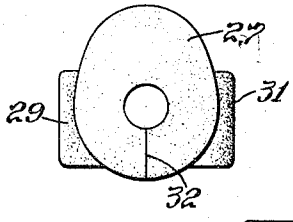

Fig. 3

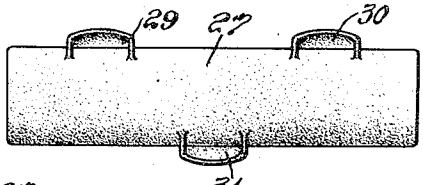

Fig. 5

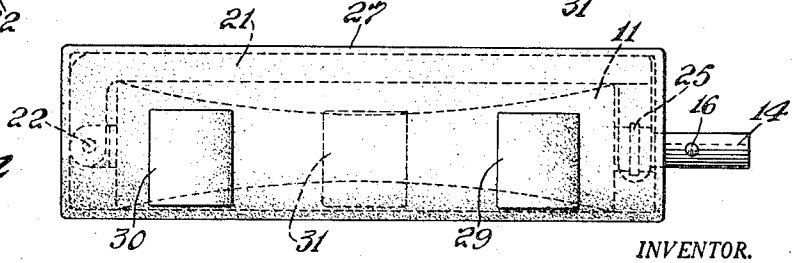

Fig. 4

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APPARATUS FOR WAVING HAIR

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6 Claims. (Cl. 132—41)

My invention relates generally to devices for waving hair, and particularly to devices embodying a curler having an enclosing casing.

It is among the objects of my invention to provide a curler that will conduct the curling liquid to the hair, and a casing which will permit the thorough application of the lotion so that it can completely impregnate the hair.

It is another object of my invention to provide a curler that will have a casing that will forcibly circulate the lotion around the hair.

It is yet a further object of my invention to provide a method for curling hair in which the lotion is retained within a casing, involved with the hair, and forcibly impelled by the flexure of the casing to thoroughly impregnate the hair.

It is a further object of my invention to insure complete penetration of the hair by the lotion.

A still further object of my invention is to permit the application of the lotion by the subject desiring the treatment, without the aid of another person.

These objects and advantages as well as other objects and advantages may be achieved by the device illustrated in the appended drawings in which:

Figure 1 is a view in perspective showing my curler without the casing;

Figure 2 is a top view in perspective of the casing;

Figure 3 is an end view of the casing;

Figure 4 is a side elevational view of the assemblage;

Figure 5 is a bottom view of the casing;

Figure 6 is a cross-sectional view taken on the line 6—6 in Figure 1.

Referring now to the drawings in detail, my curler presents a cylindrical member 11 tapering to a narrow waist 12. The tapered portion 12 defines a seat for the hair (which is to be curled) to be wrapped around. The cylinder 11 is provided with an axial bore 13. One end of the cylinder 11 has an extended portion 14 to which a charge of curling lotion may be applied. A syringe 15 may be used for this purpose and it may be caused to engage the extended portion 14 tightly by means of the pin 16 engaging the slot 17. The axial passage 13 extends through the extended portion 14. The axial bore 13, however, terminates short of the opposite end 18 of the cylinder 11, at which end 18 there is another extended portion 19 which mounts a hinge 20 on the clamp 21. The clamp 21 is secured to this extended portion 19 by a hinge pin 22 and it pivots thereon so that its bifurcated end 23 may engage the extended portion 14 at the opposite end of the cylinder. The internal surfaces of the bifurcated end 23 are each provided with opposed semi-circular depressions 24 which are adapted to engage an annular ring 25 formed on the extended portion 14. Intersecting with the axial bore 13 and with each other, pairs of passages 26 are arranged at suitable intervals along the length of the cylinder 11. These passages 26 are perpendicular to the axial passage or bore 13 and

are disposed at 90° to each other. They communicate from the axial passage 13 to the periphery of the cylinder 11. The cylinder 11, and its accessory portions may be formed of any material which is chemically resistant to the waving lotion. I prefer plastic materials, although metal, glass, or other substances may serve equally well.

My invention also provides a cooperative casing 27 to slip over and substantially enclose the cylinder 11. This casing is in hollow cylindrical form having an opening 28 at one end for the extended portion 14. The casing 27 is resilient. It has three finger sockets 29, 30, 31 formed on its outer surface. Two sockets 29, 30 are on one side, and one socket 31 is on the other. The pair of sockets 29, 30 are for the first and second fingers to be inserted, and the single socket 31 is intended to accommodate the thumb. The casing 27 is preferably formed of some flexible material (which is chemically resistant to wave lotions) such as rubber, although flexible plastic materials and the like may also be used. The casing has a longitudinal slot 32 running completely from one end to the other, and also up the end to opening 28, so that it can be spread to encompass the curler.

The operation of my device is as follows: The cylinder 11 is arranged with the strand of hair to be curled. The strand is wrapped around the cylinder 11. The clamp 21 is moved so that the depressions 24 engage with the ring 25. The hair is thus clamped in place. The casing 27 is applied by inserting the fingers in the sockets 29, 30, 31 so that the slot 32 is distended. The casing 27 then surrounds the cylinder 11. The syringe 15 is attached to the extended portion 14 and a charge of wave lotion injected into the bore. The lotion is exuded from transverse passages 26 and wets the strand of hair. If a small excess amount of lotion is present, it will be retained by the casing 11. If the fingers are applied to compress the casing 27, the excess lotion in the casing 11, and some of the lotion which wets the hair will be distributed more evenly over the hair, so as to thoroughly moisten the strand of hair.

The foregoing description is merely intended to illustrate an embodiment of the invention. The component parts have been shown and described. They each may have substitutes which may perform a substantially similar function; such substitutes may be known as proper substitutes for the said components and may have actually been known or invented before the present invention; these substitutes are contemplated as being within the scope of the appended claims, although they are not specifically catalogued herein.

I claim:

1. An apparatus for waving hair comprising a cylindrical member with a narrow central waist adapted to have a strand of hair wrapped around it, extended portions at each end of the cylindrical member, a clamp hingedly secured to the extended portion at one end of the cylindrical member and releasably engageable with the extended portion at the other end of the cylindrical member whereby a strand of hair may be secured to the cylindrical member against unwrapping, said cylindrical member having an inlet port at one end communicating with a central bore and a plurality of passages communicating with the central bore and extending to the surface of the cylindrical member, a substantially cylindrical casing of flexible material enclosing the cylindrical member and having an aperture at one end and a slot extending across that end and along the casing, a plurality of pockets disposed upon the outside of the casing, and adapted to receive the fingertips of the user whereby the casing may be distended to receive the cylindrical member.

2. An apparatus for waving hair comprising a cylin-

drical member with a narrow central waist adapted to have a strand of hair wrapped around it, a clamp hingedly secured at one end of the cylindrical member and releasably engageable at the other end of the cylindrical member whereby the strand of hair is secured thereon against unwrapping, said cylindrical member having an outlet port at one end communicating with a central bore and a plurality of passages communicating with the central bore and extending to the surface of the cylindrical member, a substantially cylindrical casing of flexible material enclosing the cylindrical member and having an aperture at one end and a slot extending across that end and along the casing, a plurality of pockets disposed upon the outside of the casing and adapted to receive the fingertips of the user, whereby the casing may be distended to receive the cylindrical member.

3. An apparatus for waving hair comprising a cylindrical member gradually tapered toward a narrow central waist adapted to have a strand of hair wrapped around it, extended portions on both ends of the cylindrical member, a clamp hingedly secured to the extended portion of the cylindrical member at one end a bifurcated end on said clamp having internal grooves, an annular ring on the other end to receive the bifurcated end of said clamp, said clamp releasably engageable with the extended portion of the cylindrical member at the other end, whereby the strand of hair is secured against unwrapping, said cylindrical member having an inlet port at one end communicating with a central bore and a plurality of passages connecting with the central bore and extending to the surface of the cylindrical member.

4. An apparatus for waving hair comprising a cylindrical member with a narrow central waist adapted to have a strand of hair wrapped around it, a clamp hingedly secured to the cylindrical member at one end, a bifurcated end on said clamp having internal grooves, an annular ring on the other end to receive the bifurcated end of said clamp, said clamp releasably engageable with the cylindrical member at the other end, whereby the strand of hair is secured against unwrapping, said cylindrical member having an inlet port at one end communicating with a central bore and a plurality of passages communicating with the central bore and extending to the surface of the cylindrical member.

5. An apparatus for waving hair comprising a cylindrical member with a narrow central waist adapted to have a strand of hair wrapped around it, a first extended portion at one end of the cylindrical member, a clamp hingedly secured to the first extended portion, a second extended portion at the opposite end of the cylindrical member, an annular ring formed on the said second extended portion, a bifurcated end on the clamp having internal grooves and engageable with the annular ring, an inlet port in the cylindrical member at one end thereof communicating with a central bore in the cylindrical member and a plurality of passages communicating with the central bore and extending to the surface of the cylindrical member.

6. An apparatus for waving hair comprising a cylindrical member with a narrow central waist for releasably securing a strand of hair in a curled position, a substantially cylindrical casing of flexible material normally enclosing said cylindrical member, a slot in the casing adapted to be distended to receive and discharge the said cylindrical member, and a plurality of finger sockets disposed upon the outside of the said casing and adapted to receive the fingertips of the user, whereby the casing may be spread to receive the cylindrical member to compress and distribute the lotion more uniformly and thoroughly moisten the hair.

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