Oct. 15, 1957 H. F. FRAKES ET AL 2,809,645

COMBINED HAIR CURLING AND WAVING ASSEMBLY

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Fig-1

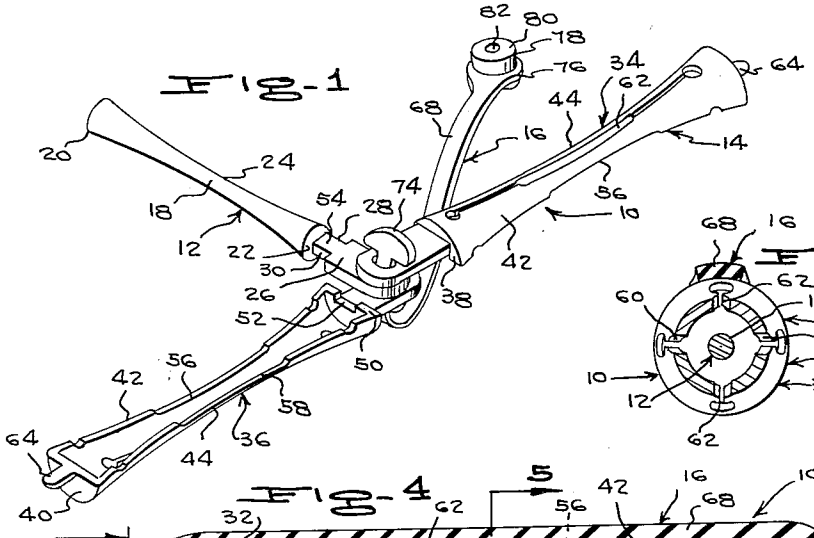


Fig-5

Fig-4

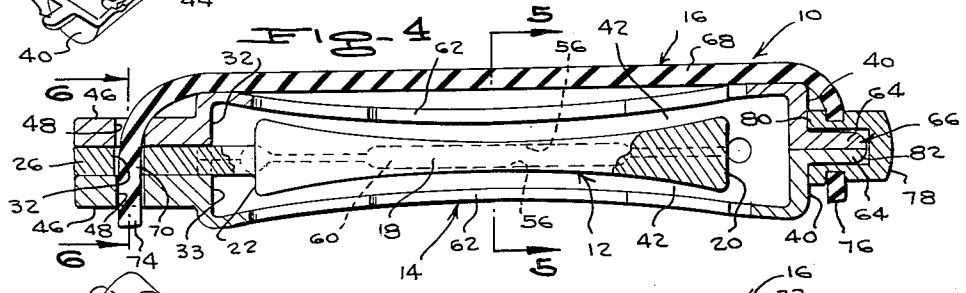


Fig-6

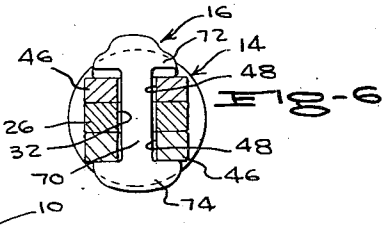
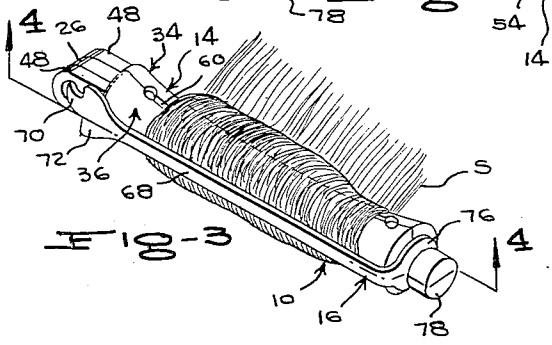


Fig-2

Fig-3



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COMBINED HAIR CURLING AND WAVING ASSEMBLY

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5 Claims. (Cl. 132—42)

This invention relates generally to improvements in assemblies for treating one's hair to provide waves or curls therein, and is more particularly concerned with novel apparatus incorporating means for providing a relatively tight curl on the ends of a strand of hair, and further including means for providing a wave in an intermediate portion of a strand of hair which will have the tight curls formed on the end thereof.

A primary object of invention is to provide a combined hair curling and waving assembly including an elongated curling rod for having convoluted thereupon an end portion of a strand of hair to be treated, and further including an elongated tubular waving sleeve incorporating a pair of complementary shell members juxtapositionable in circumposed relationship about the curling rod wherein an intermediate portion of the strand of hair being treated extends through a slot portion formed in one side of the tubular sleeve at the cooperating edges thereof whereby the strand of hair may be convolutely disposed about an intermediate portion of said sleeve to form a wave in the strand of hair, and further including means comprising a retaining strap securable at opposite ends of the sleeve for retaining the same in juxtaposed relationship about the curling rod, said retaining strap incorporating an intermediate portion extendible transversely of the strand of hair being treated for retaining it in its convoluted relationship about the curling rod and waving sleeve.

A still further object of invention in conformance with that set forth is to provide a combined hair curling and waving assembly which is readily and economically manufactured, easily used, and highly satisfactory, practical and acceptable for the purpose intended.

These together with other objects and advantages which will subsequently become apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawing forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

Figure 1 is a perspective view of the combined hair curling and waving assembly, showing the same in an open position prior to having a strand of hair disposed thereon;

Figure 2 is a perspective view of the combined hair curling and waving assembly, showing the manner in which the end portion of a strand of hair will be convolutely disposed on the curling rod of the assembly, further showing the manner in which one of the shell members of the waving sleeve is disposed in relation to the curling rod when the assembly is being used;

Figure 3 is a perspective view showing the manner in which an intermediate portion of a strand of hair being treated is disposed and retained on the novel assembly;

Figure 4 is an enlarged section taken substantially on the plane of line 4—4 of Figure 3, portions being broken away and shown in section for clarity;

Figure 5 is a section taken substantially on the plane of line 5—5 of Figure 4; and

Figure 6 is a section taken substantially on the plane of line 6—6 of Figure 4.

Referring to the drawing in detail, indicated generally at 10 is an exemplary embodiment of a combined hair curling and waving assembly comprising a curling rod 12, a waving sleeve 14 and a retaining strap 16. The curling rod 12 and waving sleeve 14 may be constructed of any suitable material, plastic, rubber, light weight metal, etc. The retaining strap 16 may be also constructed of any suitable material, plastic or rubber, for example.

The curling rod 12 comprises an elongated body member 18 including enlarged end portions 20 and 22 converging toward a reduced diameter center portion 24 being generally described as having an elongated hyperbolic solid shape, this configuration tending to center the strand of hair S, see Figure 2, for example, toward the central portion of the curling rod when the same is convolutely disposed on the curling rod as seen in Figure 2. Extending longitudinally from the curling rod body member 18 on the end 22 thereof is an integral flattened plate 26 incorporating notches 28 and 30 at opposite sides adjacent the end 22 of the curling rod, said plate having extending transversely therethrough an aperture portion 32 as clearly seen in Figure 4, for example.

The waving sleeve 14 incorporates a pair of complementary symmetrical shell members 34 and 36 which when disposed in overlying relationship as seen in Figure 3, for example, incorporate a hollow elongated hyperbolic shape. Each of the shell members 34 and 36 include semi-circular end portions 38 and 40 integral with an elongated body member 42, said body member being uniformly curved at its center portion 44. Extending longitudinal and integral from the end portions 38 are plate members 46 incorporating transversely therethrough apertures 48 which will be in axial alignment with the aperture 32 through the plate 26 of the curling rod and in axial alignment therewith when the assembly is assembled. The end portions 38 incorporate in the edge 50 thereof a rectangular notch portion 52 which will be disposed on opposite sides of the notch portions 28 and 30 of the curling rod when the assembly is disposed in the condition seen in Figures 3 and 4, for example, receiving therein the reduced width portion 54 of the plate 26 forming by the notch portions 28 and 30 therein. The longitudinal edges of the body members 42 of sleeve members 34 and 36 incorporate therein an intermediate notched out portion 56 and 58 which are complementary, and when the edge portions of the sleeve members are juxtaposed in the condition shown in Figures 3 and 4, will define a transverse slot portion 60 extending longitudinally of the tubular waving sleeve for having extending therethrough an intermediate portion of the strand of hair S which is being treated, see Figure 2, for example. If preferred, the shell members 34 and 36 may have extending longitudinally through an intermediate portion thereof slot portions 62 insuring the proper permeation of a treating fluid normally applied to a strand of hair to insure that a curl is retained therein.

The end wall portions 40 have extending longitudinally therefrom complementary stub shaft portions 64 having a flattened surface which will be in juxtaposition when the shell members are in overlying relationship as seen in Figure 4, for example, forming a longitudinally extending stub shaft indicated generally at 66.

The retaining strap 16 comprises an elongated intermediate body portion 68 including at one end a reduced width portion 70 extending through the axially aligned apertures 32 and 48, see Figure 4, the reduced width portion being disposed on opposite sides of a transverse intermediate abutment portion 72 on one side thereof, and an enlarged terminal end abutment portion 74 extend-

ing transversely of the end of the body member, see Figure 1, for example. The portion **70** of the body member **68** defines an axis of rotation permitting relative rotation between the shell members **34** and **36** and the curling rod **12**. The other end of the body member **68** incorporates an enlarged eye portion **76**, incorporating transversely therethrough an intermediate portion of a suitably secured retaining cap **78** incorporating in the end **80** thereof, see Figure 1, a blind bore portion **82** which will be on the stub shafts **66** of the waving sleeve when the stub shafts **64** are juxtaposed in the manner seen in Figure 4. The body portion **68** will extend longitudinally of the outer surface of the waving sleeve in transverse relationship across an intermediate portion of the strand of hair S being treated, see Figure 3, for example.

The assembly is first disposed in the condition shown in Figure 1, wherein the end portion of the strand of hair S is tightly rolled about the central or intermediate portion of the curling rod **12**, forming relatively tight curls in the end of the strand of hair, thereafter one of the shell members, shell member **36**, for example, as seen at Figure 2, is pivoted in longitudinal relationship relative to the curling rod **12** aiding in retaining the convoluted portion of the strand of hair about the curling rod **12**, whereafter the other shell member **34** is pivoted in juxtaposed relationship on the shell member **36**, and the strand of hair is rotated in convoluted relationship in the same direction as the convolution on the curling rod or in an opposite direction, whereafter the retaining strap **16** is disposed in longitudinally extending relationship relative to the outer surface of the waving shell **14** as previously mentioned and as clearly seen in Figure 3.

The novel combined hair curling and waving assembly accordingly will form relatively tight curls on the ends of one's hair and waves in an intermediate portion of a strand of hair, simultaneously, obviating the necessity for separate instrumentality for this purpose.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the appended claims.

What is claimed as new is as follows:

1. A combined hair curling and waving assembly comprising an elongated curling rod for receiving thereabout a convoluted end portion of a strand of hair to be treated, a tubular elongated waving sleeve including mating shell members juxtaposable in circumposed relationship about the curling rod, said sleeve members including mating elongated notches in one edge thereof providing an elongated slot through one side of said sleeve for having an intermediate portion of the strand of hair extending therethrough, an intermediate portion of the sleeve member receiving thereabout an intermediate convoluted portion of the strand of hair being treated, and a flexible retaining strap operatively engaged with opposite ends of the tubular sleeve retaining the shell members in juxtaposition and circumposed relation about the curling rod, an intermediate portion of said strap extending longitudinally of the outer surface of the waving sleeve for transverse engagement with an intermediate portion of the strand of hair being treated retaining the same in its convoluted relationship on the curling rod and waving sleeve.

2. A combined hair curling and waving assembly comprising an elongated curling rod for receiving thereabout a convoluted end portion of a strand of hair to be treated, a tubular elongated waving sleeve including mating shell members juxtaposable in circumposed relationship about the curling rod, said sleeve members including mating elongated notches in one edge thereof providing an elongated slot through one side of said sleeve for having an intermediate portion of the strand of hair extending therethrough, an intermediate portion of the sleeve member receiving thereabout an intermediate convoluted portion of the strand of hair being treated, and a flexible retaining strap operatively engaged with opposite ends of the tubular sleeve retaining the shell members in juxtaposition and circumposed relation about the curling rod, an intermediate portion of said strap extending longitudinally of the outer surface of the waving sleeve for transverse engagement with an intermediate portion of the strand of hair being treated retaining the same in its convoluted relationship on the curling rod and waving sleeve, said curling rod and shell members including longitudinally extending integral plates at one end thereof in overlying juxtaposed relation, said plates including axially aligned transverse apertures therethrough, an end portion of the retaining strap extending through the aligned apertures defining an axis of rotation for relative rotation between the curling rod and shell members.

3. A combined hair curling and waving assembly comprising an elongated curling rod for receiving thereabout a convoluted end portion of a strand of hair to be treated, a tubular elongated waving sleeve including mating shell members juxtaposable in circumposed relationship about the curling rod, said sleeve members including mating elongated notches in one edge thereof providing an elongated slot through one side of said sleeve for having an intermediate portion of the strand of hair extending therethrough, an intermediate portion of the sleeve member receiving thereabout an intermediate convoluted portion of the strand of hair being treated, and a flexible retaining strap operatively engaged with opposite ends of the tubular sleeve retaining the shell members in juxtaposition and circumposed relation about the curling rod, an intermediate portion of said strap extending longitudinally of the outer surface of the waving sleeve for transverse engagement with an intermediate portion of the strand of hair being treated retaining the same in its convoluted relationship on the curling rod and waving sleeve, said curling rod and shell members including longitudinally extending integral plates at one end thereof in overlying juxtaposed relation, said plates including axially aligned transverse apertures therethrough, an end portion of the retaining strap extending through the aligned apertures defining an axis of rotation for relative rotation between the curling rod and shell members, said shell members including longitudinally extending complementary stub shafts on the ends opposite the ends from which the plates extend, said stub shafts defining a shaft extending from one end of the tubular waving sleeve, the retaining strap including on the end opposite that end extending through the aligned apertures a loop portion circumpositionable about the shaft formed by the complementary stub shafts.

4. A combined hair curling and waving assembly comprising an elongated curling rod for receiving thereabout a convoluted end portion of a strand of hair to be treated, a tubular elongated waving sleeve including mating shell members juxtaposable in circumposed relationship about the curling rod, said sleeve members including mating elongated notches in one edge thereof providing an elongated slot through one side of said sleeve for having an intermediate portion of the strand of hair extending therethrough, an intermediate portion of the sleeve member receiving thereabout an intermediate convoluted portion of the strand of hair being treated, and a flexible retaining strap operatively engaged with opposite ends of the tubular sleeve retaining the shell members in juxtaposition and circumposed relation about the curling rod, an intermediate portion of said strap extending longitudinally of the outer surface of the waving sleeve for transverse engagement with an intermediate portion of the strand of hair being treated retaining the same in its convoluted relationship on the curling rod and waving sleeve, said waving sleeve including elongated slot portions therethrough for facilitating the permeation of a hair setting

fluid therethrough to the convoluted strand of hair circumposed on the assembly.

5. A combined hair curling and waving assembly comprising an elongated curling rod for receiving thereabout a convoluted end portion of a strand of hair to be treated, a tubular elongated waving sleeve including mating shell members juxtaposable in circumposed relationship about the curling rod, said sleeve members including mating elongated notches in one edge thereof providing an elongated slot through one side of said sleeve for having an intermediate portion of the strand of hair extending therethrough, an intermediate portion of the sleeve member receiving thereabout an intermediate convoluted portion of the strand of hair being treated, and a flexible retaining strap operatively engaged with opposite ends of the tubular sleeve retaining the shell members in juxtaposition and circumposed relation about the curling rod, an intermediate portion of said strap extending longitudinally of the outer surface of the waving sleeve for transverse engagement with an intermediate portion of the strand of hair being treated retaining the same in its convoluted relationship on the curling rod and waving sleeve, said curling rod and waving sleeve including an elongated hyperbolic exterior shape for facilitating the disposition of the convoluted strand of hair on an intermediate central portion thereof.

No references cited.