Aug. 21, 1956 F. J. TOMEK 2,759,484

HAIR WAVING COMPOSITION CAPSULE

Filed Aug. 12, 1954

2 Sheets-Sheet 1

FIG. 1

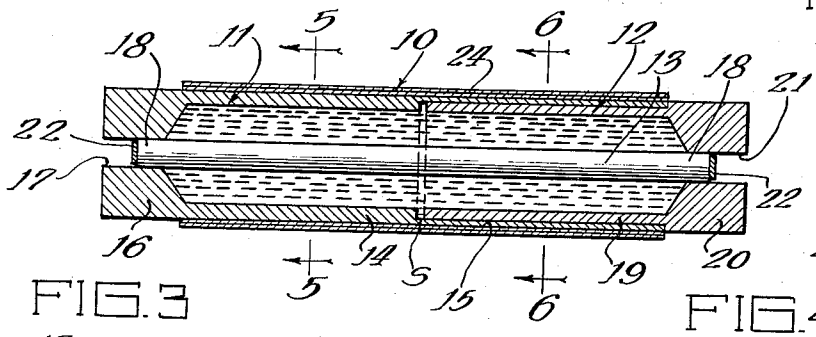


FIG. 2

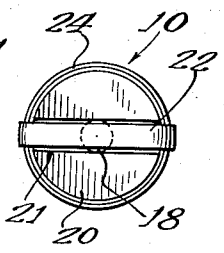


FIG. 3

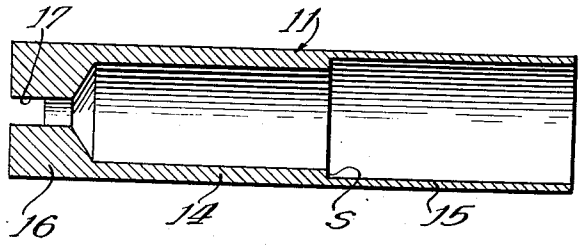


FIG. 4

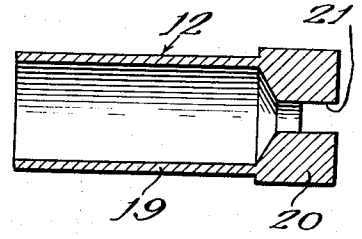


FIG. 5

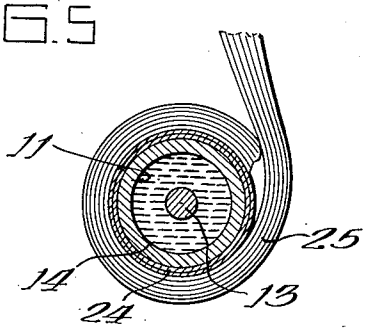


FIG. 6

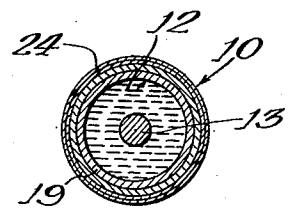


FIG. 7

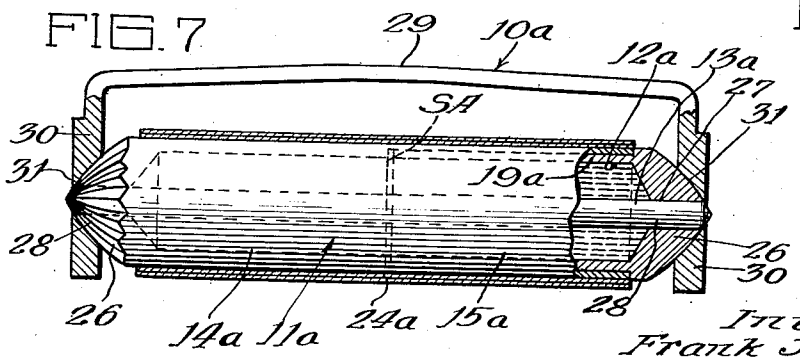
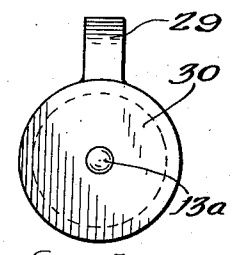


FIG. 8



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FIG. 9

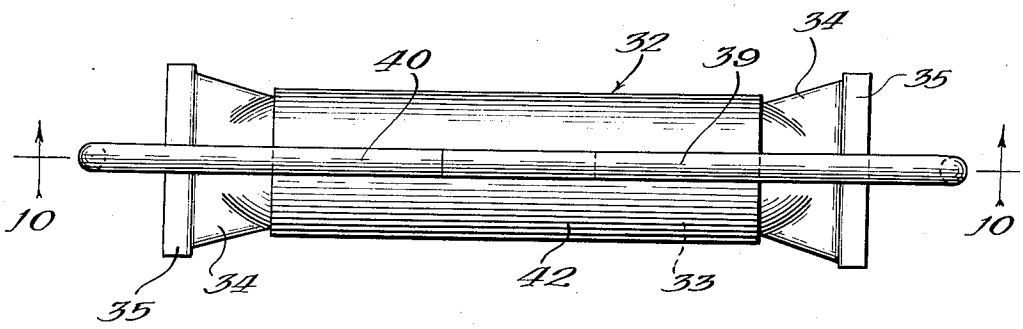


FIG. 10

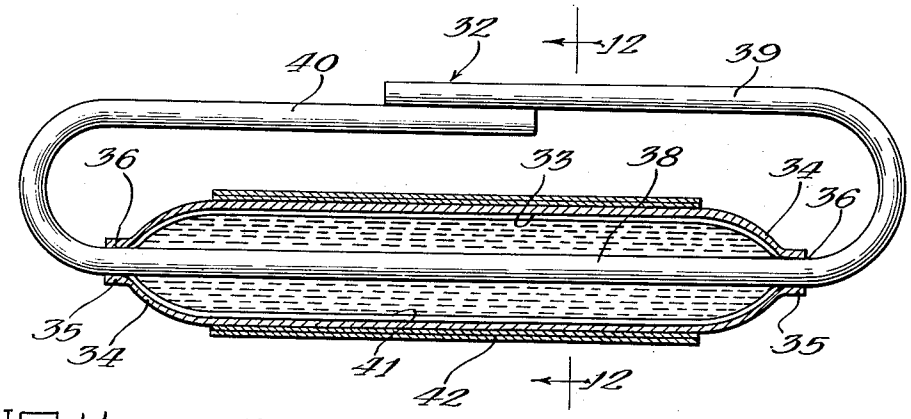


FIG. 11

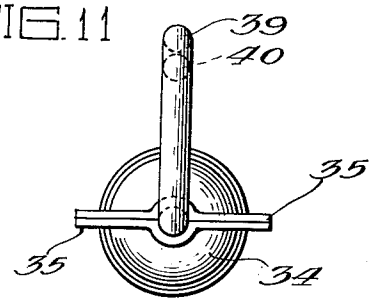
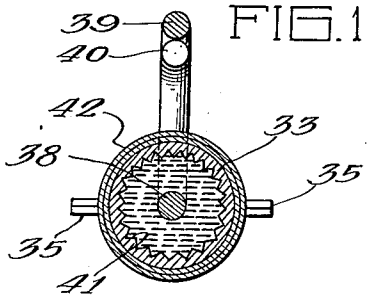


FIG. 12



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2,759,484

HAIR WAVING COMPOSITION CAPSULE

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Application August 12, 1954, Serial No. 449,460

12 Claims. (Cl. 132—40)

This invention relates to a hair waving or other hair-treatment composition capsule adapted to hold liquid hair waving or like hair-treatment compositions used in waving or like treatment of women's hair.

An object of the invention is to provide a new and improved and relatively simple frangible hair waving composition capsule which may be used for applying liquid hair waving compositions to women's hair.

Another object of the invention is to provide a new and improved hair waving or like hair-treatment composition capsule which is so designed and constructed that in use it avoids staining the operator's hands and other disagreeable features involved in prior ways of applying such hair waving compositions to women's hair.

Other objects will appear hereinafter.

In the drawings:

Fig. 1 is a longitudinal central sectional view illustrating a typical form of the present invention;

Fig. 2 is an end elevational view thereof;

Fig. 3 is a sectional view of one of the parts of the hair-treatment composition capsule shown in Fig. 1;

Fig. 4 is a central longitudinal sectional view of another of the parts of the hair waving composition capsule shown in Fig. 1;

Fig. 5 is a transverse sectional view illustrating diagrammatically the manner in which the new frangible hair waving composition capsule is used in applying a hair waving composition to women's hair;

Fig. 6 is a transverse sectional view of line 6—6 in Fig. 1;

Fig. 7 is a view partly in elevation and partly in section of a modified form of the invention;

Fig. 8 is an end elevational view of the modification shown in Fig. 7;

Fig. 9 is a top plan view of another modified form of the invention;

Fig. 10 is a view partly in longitudinal vertical section and partly in elevation of the modification of the invention shown in Fig. 9;

Fig. 11 is an end elevational view as seen from the right hand end in Fig. 10; and

Fig. 12 is a transverse vertical sectional view on line 12—12 in Fig. 10;

A typical form of the invention as shown in Figs. 1 to 6, inclusive, of the drawings, and is therein generally indicated at 10 and includes a frangible tubular unit including a tubular portion 11 which may be made of any suitable frangible synthetic resinous plastic material, or the like, having a relatively thick wall portion 14 and a relatively thin wall portion 15 joined centrally of the capsule by a shoulder S. The relatively thick wall portion 14 is flared outwardly into an end portion 16 having a central slot 17 formed therein. The hair waving composition capsule 10 includes a second tubular member 12 having a wall portion 19 which is adapted to be telescopically fitted into the relatively thinner wall portion 15 of the tubular member 11 so that the inner end portion thereof abuts the shoulder S. The outer end portion of

the wall 19 is similar to the end wall portion 16 of the tubular member 14 and has a centrally arranged slot 21 therein which is similar to the slot 17 in the end portion 16 of the tubular member 11.

The hair waving composition capsule 10, shown in Figs. 1 to 6, inclusive, of the drawings, includes a cylindrical supporting rod 13 which extends longitudinally through the assembled tubular members 11 and 12, as shown in Fig. 1, and has its end portions 18 and 22 adhesively or otherwise fastened in the central slots 17 and 21 of the end portions 16 and 20 of the tubular members 11 and 12, respectively, as best shown in Fig. 1.

In the use of the form of the new hair waving composition capsule shown in Figs. 1 to 6, inclusive, of the drawings, the central reinforcing rod 13 may be adhesively or otherwise anchored centrally in the tubular member 11 whereupon a suitable hair waving composition in liquid form may be introduced into the tubular member 11. The tubular member 12 may then be telescopically fitted into the tubular member 11.

The thus assembled parts will be held in position by the frictional engagement of the tubular members 11 and 12, and a flexible elastic rubber band 22 may be extended around the assembled tubular members 11 and 12, axially thereof, on the outer side thereof, passing through the slots 17 and 21 and engaging the end portions of the reinforcing rod 13.

With the parts thus assembled the capsule filled with a fluid or liquid hair waving composition, the new hair waving composition capsule is ready for use whereupon several thicknesses of absorbent paper, such as a relatively thin blotter paper 24, may be wrapped about the assembled capsule, and a woman's hair 25 wound thereabout, as shown in Fig. 5.

When the hair 25 is thus wound around the assembled hair waving composition capsule, as shown in Figs. 1 to 6, inclusive, and with the absorbent paper 24 wound thereon, as shown, the new hair waving composition capsule 10 having the absorbent paper 24 and hair 25 wound thereon, may then be grasped in and by the hands of the operator and pressure applied thereto centrally thereof and transversely along the shoulder "S." This operation will rupture the frangible tubular capsule member 11 along the line of weakened union provided at the shoulder "S" at the junction between the walls 14 and 15, allowing the hair waving liquid in the capsule to flow out into the absorbent paper or like absorbent paper 24 and onto the hair 25 to perform its desired hair waving function.

When the new frangible hair waving composition capsule 10 is thus ruptured along the shoulder S of the frangible tubular capsule member 11, the reinforcing rod 13 and the elastic rubber band 10, cooperative to retain the parts 11 and 12 in assembled relationship while, at the same time, cooperating with the absorbent paper 24 to give the still assembled tubular members 11 and 12 sufficient structural strength, to prevent the parts from becoming disassembled, while, at the same time, allowing the liquid hair waving composition in the capsule to flow out into the absorbent paper 24.

A modification of the invention is illustrated in Figs. 7 and 8 of the drawings and those parts thereof which correspond to or are similar to corresponding parts embodied in the form of the invention shown in Figs. 1 to 6, inclusive, have been given similar reference numerals followed by the distinguishing and additional reference character "*a*."

The form of the invention illustrated in Figs. 7 and 8 of the drawings is similar to the form of the invention shown in Figs. 1 to 6, inclusive, of the drawings except that in this form of the invention the end portions 26 of the tubular capsule members 11*a* and 12*a* are formed

in a general conical-shape and are provided with internal recesses 27 which are adapted to receive the end portions 28 of the reinforcing rod 13*a* which may be adhesively or otherwise fastened therein.

Likewise, the form of the invention shown in Figs. 7 and 8 of the drawings differs from that shown in Figs. 1 to 6, inclusive, in that in the form of the invention shown in Figs. 7 and 8 the generally conical-shaped end portions 26 are provided with serrations or ridges 28 on their outer surfaces and these serrated conical-shaped end portions 26 and 28 are adapted to be projected into corespondingly shaped recesses 31 formed in arms 30 of a U-shaped bale member 29 which is preferably formed of a somewhat resilient synthetic plastic resinous material.

The use and operation of the form of the new hair waving composition capsule shown in Figs. 7 and 8 of the drawings are similar to the use and operation of the form of the invention shown in Figs. 1 to 6, inclusive, except that in this form of the invention the parts 11*a* and 12*a* of the frangible capsule 10*a* are held in assembled relation by the U-shaped bale member 29 and the engagement of the end portions 30 thereof with the serrated coincal-shaped end portions 26—28 of the capsule members 11*a* and 12*a*, as best shown in Fig. 7.

Another modification of the invention is shown in Figs. 9 to 12, inclusive, of the drawings and is therein generally indicated at 32 and comprises a single unitary frangible capsule member 33 which may be made of any suitable frangible synthetic resinous plastic material and has its end portions flared outwardly, as at 34—35. In this form of the invention a reinforcing rod 38 extends centrally and longitudinally through the frangible capsule member 33 and through the centrally arranged openings 36 formed in the end portions 35 thereof. The reinforcing member 38 has its end portions 39—40 overlapping, as shown in Figs. 9 and 12, inclusive, outwardly of the capsule and above the latter, as shown in Figs. 10 and 12.

Absorbent paper or like material 42 is wound about the capsule, as shown.

In the form of the invention shown in Figs. 9 to 12, inclusive, the internal surface of the frangible tubular capsule member 33 is serrated or notched, as at 41, as best shown in Figs. 10 and 12, so that when the absorbent paper 42 is wound about the capsule and the hair wound around the same, the capsule 33 may be ruptured by applying manual pressure centrally thereof and transversely relative thereto, this rupturing operation being facilitated by the weakening of the wall of the capsule 33 by reason of the notched or serrated internal surface thereof, which is provided by forming parallel longitudinally extending grooves 41 therein.

The use and operation of the form of the invention shown in Figs. 9 to 12, inclusive, is otherwise similar to the use and operation of the form of the invention shown in Figs. 1 to 6, inclusive, as hereinbefore described.

It will thus be seen from the foregoing description, considered in conjunction with the accompanying drawings, that the present invention provides a new and improved frangible hair waving composition capsule having the desirable advantages and characteristics and accomplishing its intended objects, including those hereinbefore pointed out and others which are inherent in the invention.

I claim:

1. A frangible hair-treatment composition capsule comprising an imperforate outer frangible tubular member adapted to contain a fluid hair-treatment composition and adapted to be ruptured transversely thereof by manual pressure applied centrally thereof and transversely relative thereto, a thickness of absorbent material wound about the said frangible tubular capsule on the outer surface thereof, and means including a centrally arranged rod-like member extending longitudinally through said imperforate outer frangible tubular member and cooperating with the said absorbent material for retaining the parts of the said frangible capsule in assembled relationship after the said frangible capsule has been ruptured centrally thereof and transversely relative thereto.

2. A frangible hair-treatment composition capsule as defined in claim 1 in which the said frangible capsule includes a pair of inner and outer telescopically interconnected tubular members.

3. A frangible hair-treatment composition capsule as defined in claim 1 in which the said frangible capsule includes a pair of inner and outer telescopically interconnected tubular members, and in which the said outer one of said telescopically interconnected tubular members includes a relatively thick wall portion and a relatively thin wall portion joined by an annular shoulder providing a line of weakened union along which the said outer one of said telescopically interconnected tubular members may be ruptured transversely thereof by manual pressure applied thereto.

4. A frangible hair-treatment composition capsule as defined in claim 1 in which the said frangible capsule includes a pair of inner and outer telescopically interconnected tubular members, and in which the said outer one of said telescopically interconnected tubular members includes a relatively thick wall portion and a relatively thin wall portion joined by an annular shoulder providing a line of weakened union along which the said outer one of said telescopically interconnected tubular members may be ruptured transversely thereof by manual pressure applied thereto, and in which the said inner one of said telescopically interconnected tubular members is arranged within the said relatively thin wall portion of said outer tubular member.

5. A frangible hair-treatment composition capsule as defined in claim 1 in which the said frangible capsule includes a pair of inner and outer telescopically interconnected tubular members, and in which the said means for retaining the parts of said frangible capsule in assembled relationship after the said frangible capsule has been ruptured transversely thereof includes a tubular reinforcing rod extending centrally longitudinally through the said frangible capsule and having its outer end portions attached to the end portions of the said inner and outer telescopically interconnected tubular members.

6. A frangible hair-treatment composition capsule as defined in claim 1 in which the said frangible capsule includes a pair of inner and outer telescopically interconnected tubular members, and in which each of the said inner and outer telescopically interconnected tubular members has an outer end portion having an inwardly extending slot formed therein, and in which the said means for retaining the said inner and outer telescopically interconnected tubular members together and in assembled relationship after rupture of the said outer tubular member includes a flexible elastic band encircling the said frangible capsule axially thereof on the outer side thereof and having its end portions extended through the said slots in the outer end portions of said telescopically interconnected tubular members.

7. A frangible hair-treatment composition capsule as defined in claim 1 in which the said frangible capsule includes a pair of inner and outer telescopically interconnected tubular members, and in which the said means for retaining the parts of said frangible capsule in assembled relationship after the said capsule has been ruptured transversely thereof includes a tubular reinforcing rod extending centrally longitudinally through the said frangible capsule and having its end portions attached to the end portions of the said inner and outer telescopically interconnected tubular members, and in which the said means for retaining the parts of said frangible capsule in assembled relationship after the

same has been ruptured transversely thereof includes a generally U-shaped bale member having end portions clampingly engageable with the end portions of said telescopically interconnected tubular members at the ends of the latter.

8. A frangible hair-treatment composition capsule as defined in claim 1 in which the said frangible capsule includes a pair of inner and outer telescopically interconnected tubular members, and in which the said means for retaining the parts of said frangible capsule in assembled relationship after the said frangible capsule has been ruptured transversely thereof includes a tubular reinforcing rod extending centrally longitudinally through the said frangible capsule and having its end portions attached to the end portions of the said inner and outer telescopically interconnected members, and in which the said means for retaining the parts of said frangible capsule in assembled relationship after the same has been ruptured transversely thereof includes a generally U-shaped bale member having end portions clampingly engageable with the end portions of the said telescopically interconnected tubular members, and in which each of the said inner and outer telescopically interconnected tubular members has a serrated generally conical-shaped outer end portion, and in which the said generally U-shaped bale member has a pair of spaced arms each having a recess formed therein for the reception of one of the said conical-shaped end portions of one of the said telescopically interconnected tubular members.

9. A frangible hair-treatment composition capsule as defined in claim 1 which includes a single generally tubular-shaped frangible capsule.

10. A frangible hair-treatment composition capsule as defined in claim 1 which includes a single generally tubular-shaped frangible capsule, and in which said tubular-shaped frangible capsule has its internal surface provided with a series of axially extending grooves providing lines of weakened union in the wall of said frangible capsule and across which the said frangible capsule may be ruptured by manual pressure applied transversely thereto.

11. A frangible hair-treatment composition capsule as defined in claim 1 which includes a single generally tubular-shaped frangible capsule, and in which the said means for retaining the parts of said tubular frangible capsule together and in assembled relationship after the same has been ruptured transversely thereof includes a reinforcing rod member extending centrally longitudinally through the said capsule and having its end portions extending outwardly thereof.

12. A frangible hair-treatment composition capsule as defined in claim 1 which includes a single generally tubular-shaped frangible capsule, and in which the said means for retaining the parts of said tubular frangible capsule together and in assembled relationship after the same has been ruptured transversely thereof includes a reinforcing rod member extending centrally longitudinally through the said capsule and having its end portions extending outwardly thereof in overlapping parallel relationship above the said capsule.

References Cited in the file of this patent

UNITED STATES PATENTS

1,592,688	Webster	July 13, 1926
2,243,173	Smalley	May 27, 1941
2,677,380	Schoendorf	May 4, 1954
2,693,809	Spencer	Nov. 9, 1954