Aug. 20, 1963 S. S. DI VITO 3,101,086

COMBINED DISPENSER AND COMB

Filed Sept. 25, 1961

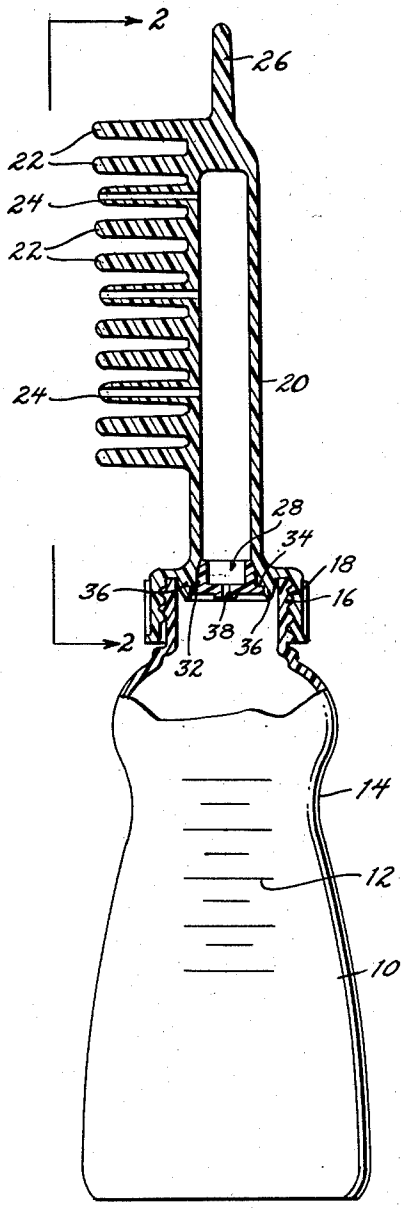


Fig. 1.

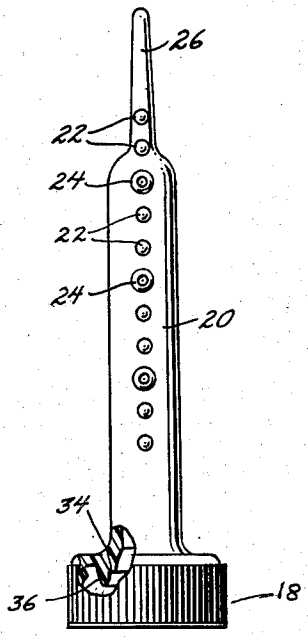


Fig. 2.

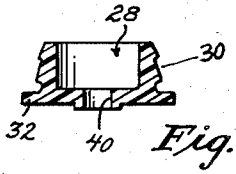


Fig. 3.

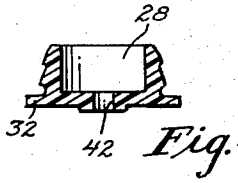


Fig. 4.

INVENTOR.
SALVATORE S. DIVITO
BY Louis Mechs
ATTORNEY.

United States Patent Office

3,101,086
Patented Aug. 20, 1963

3,101,086

COMBINED DISPENSER AND COMB

Salvatore S. Di Vito, 2905 S. 19th St., Philadelphia, Pa.

Filed Sept. 25, 1961, Ser. No. 140,608
2 Claims. (Cl. 132—114)

My invention relates to a fountain comb and formula mixing and dispensing device of the type shown in my Patent No. 2,897,826; in Forte Patent 2,122,715 and Heinrich Patent 2,849,009.

One object of the invention is to produce an improved device of the type set forth.

Formulae for the treatment of hair vary in viscosity and have to be dispensed in various quantities, or at various rates, or both.

It is therefore a further object of the invention to produce an improved device for controllably dispensing liquids of various viscosities.

In the treatment of hair, it is almost always necessary to divide the hair into small wisps, or locks, for proper saturation and for winding on curlers, and this is usually done by the fingers or by means of a comb or other pointed instrument.

It is therefore a still further object of the invention to produce an improved combined dispensing and hair dividing apparatus whereby the need for a separate instrument, or for manual division of the hair, is obviated.

These and other objects are attained by my invention as set forth in the following specification and as shown in the accompanying drawings in which:

FIG. 1 is a view, partly in section and partly in elevation, showing a combined fountain comb and formula mixing device embodying the invention.

FIG. 2 is an elevational view looking in the direction of line 2—2 on FIG. 1.

FIGS. 3 and 4 are sectional views showing different size orifices for regulating the flow of the hair treating material according to its viscosity and according to the rate of flow required.

In the illustrated embodiment, **10** designates a flask of the desired size which is calibrated as at **12**, and is transparent, or translucent. The flask is preferably made of a flexible, resilient material so that it may be squeezed controllably to dispense the contents thereof and is preferably waisted, as at **14**, for more convenient handling. The flask is provided with an externally-threaded neck **16** which is engageable with the internally-threaded collar **18** at the end of a hollow comb **20** to establish a flow relation between the interior of the flask and the interior of the comb. The comb is provided with solid, or imperforated teeth **22** which are interspersed with hollow, open-ended teeth **24**. At its free end, the comb is provided with a tapered hair divider **26** which may be solid, as shown, or which may be hollow and open-ended, the same as teeth **24**.

For sprinkling water, shampoo, or other non-critical fluid, the device described is quite adequate. But for dispensing a critical fluid such as a hair dyeing, or setting, solution, it is necessary that the quantity of material dispensed, or the rate at which it is dispensed, be controlled. To this end, I provide control plug **28** which is provided with a conical, externally serrated tip **30** adapted snugly

and frictionally to engage the interior of the adjacent end of the comb, and a flange **32** which is adapted to engage seat **34** and to engage pendent flange **36** on the adjacent end of the comb, as shown in FIGS. 1 and 2. Plug **28** is provided with a relatively small orifice **38** in FIG. 1, with a relatively large orifice **40** in FIG. 3, and with an intermediate orifice **42** in FIG. 4.

Plug **28** is made of a resilent, slightly compressible material such as rubber, or plastic, so that it may be easily and quickly inserted or removed and so that, once it is inserted, it will remain in position. The plug used for dispensing any given material is selected according to the viscosity of the material, as well as according to the rate at which it is desired to dispense the material. It will be noted that, when dismantled, the comb, flask and the flow control plug are readily accessible for cleaning.

What I claim is:

1. An adjustable liquid dispenser and comb comprising
an elongated, flexible container,
an externally threaded neck of reduced diameter integral with one end of said container and defining a mouth therefor,
a comb including a hollow shank having one end thereof closed and pointed,
teeth integral with said shank,
at least some of said teeth hollow and open at their inner and outer ends,
an internally threaded collar at the other open end of said shank and engageable with said neck,
a cylindrical flange depending from said other end of said shank into said neck,
said cylindrical flange being offset outwardly of said other end of said shank and coacting therewith to form a seat of a diameter greater than the inside diameter of said shank,
a flexible plug including a cylindrical portion tightly insertable in said other end of said shank,
and a disc integral with said cylindrical portion and tightly insertable in said cylindrical flange into abutment with said seat, there being an orifice of a predetermined size in said disc to control the flow of liquid from said container into said shank and out through said hollow teeth.

2. The structure recited in claim 1 in which the cylindrical portion of said plug and the end of said shank which receives it are both conical.

References Cited in the file of this patent

UNITED STATES PATENTS

1,186,697	Smith	June 13, 1916
2,007,036	Cornell	July 2, 1935
2,213,812	Harper et al.	Sept. 3, 1940
2,244,311	Nee et al.	June 3, 1941
2,532,001	Williams	Nov. 28, 1950
2,672,875	Kovacs	Mar. 23, 1954
2,897,826	Di Vito	Aug. 4, 1959
2,956,570	Stanford	Oct. 18, 1960
2,968,441	Holcomb	Jan. 17, 1961

FOREIGN PATENTS

653,023	Great Britain	May 9, 1951