Dec. 18, 1956 F. J. JOHNSON 2,774,627

SHOWER CONE

Filed Nov. 2, 1953

Fig. 1.

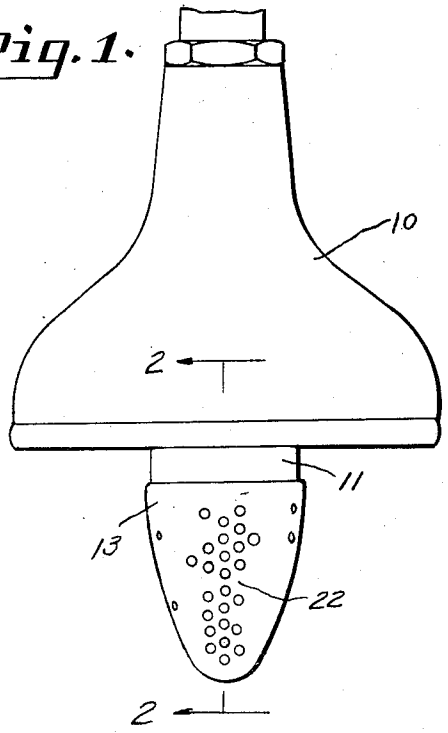


Fig. 2.

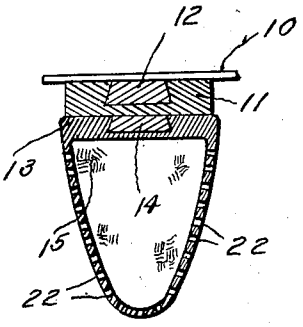


Fig. 3.

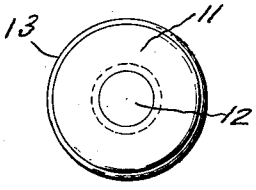


Fig. 5.

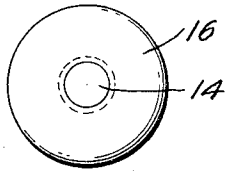


Fig. 4.

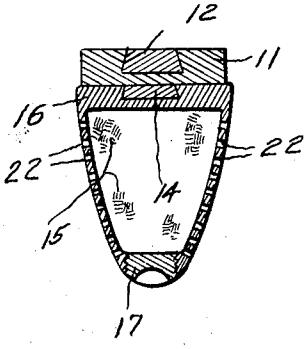
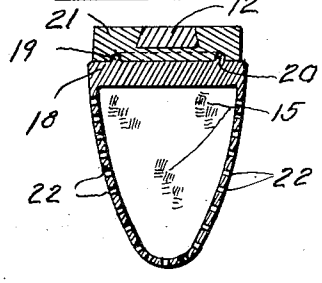


Fig. 6.



INVENTOR.
Felix J. Johnson.

BY

James C. Hamilton, Atty

United States Patent Office 2,774,627 Patented Dec. 18, 1956

2,774,627

SHOWER CONE

Felix J. Johnson, Sausalito, Calif.

Application November 2, 1953, Serial No. 389,666

4 Claims. (Cl. 299—83)

My present invention relates to bathroom shower equipment and more particularly to a shower cone attached to the outlet side of a shower head, in which is placed solvent crystals.

These crystals may be of various types, such as perfumed crystals or soap, or the crystals may be of a medicinal character containing cleansing matter such as Hexachlorophene and the like.

The principal object of the invention is to produce a shower head hollow cone containing solvent agents which is self-attaching to the under side of the shower head by means of magnetic attraction.

Another object is to provide a self-attaching ring directly engaged with the shower head and a self-attaching cone containing solvent matter, the cone being engaged with the said ring by means of magnetism.

Another object of the invention is to produce a shower head cone of the character above described which is non-magnetically attached to a magnetic ring which is magnetically engaged with the said shower head, and which may be very cheaply made and discarded when empty.

Other objects and novel features will be more apparent as the description of the same progresses.

In the drawings illustrating more desirable features of the invention:

Fig. 1 is a side elevation of the said cone and ring as applied to the under side of shower head unit, the shower head unit being shown in dot-and-dash lines;

Fig. 2 is a typical vertical cross-section taken on the lines 2—2 of Fig. 1, the dot-and-dash lines being the under side of the shower head unit;

Fig. 3 is a top plan view of the ring portion and the cone top;

Fig. 4 is a cross-section similar to Fig. 2, but showing a modified cone portion which is refillable;

Fig. 5 is a top plan view of the cone portion of Fig. 4, and

Fig. 6 is another typical cross-section similar to Figs. 2 and 4 in which the cone portion and the magnetic ring are frictionally held together.

Referring more in detail to the drawings, **10** indicates a common type of shower head in common use. **11** is a magnetic ring, molded from any suitable material. In the central portion adjacent one side is located a powerful magnet **12** of the aluminum-nickel type. The ring **11** is magnetically held to the shower head **10**.

At **13** is illustrated a removable cone member indicated in Figs. 1, 2 and 3. This cone member is provided in a similar manner with another magnet member of lesser power than magnet **12**. The cone portion **13** is filled with soluble crystals, soap or the like, as indicated at **15**.

In the type shown in Figs. 2 and 3, the cone **15** is held against the ring **11** by magnetic force of the two magnets **12** and **14**. When the cone **13** is empty it is disengaged with the ring **11** and discarded and another one is put in place.

At this point it is desired to point out a very important feature of my invention. At any time, the operator may

disconnect one cone and substitute another having soluble matter enclosed of a quite different character. In this manner different members of a family having differing preferences in perfumes may substitute his or her preferred type.

Figs. 4 and 5 disclose a slightly different type, in which the cone **16** is provided with a removable plug member **17** which may be removed for reloading the said core **16**.

In Fig. 6 is a still further modified form in which the cone portion **18** does not have a magnet but is provided on the top with an annular rib portion **19** which frictionally engages in an annular groove **20** formed in the under side of the magnetic ring **21**.

In all types of cones, perforations **22** are provided to permit water from the shower head to penetrate the interior of the cone and dissolve the crystal or soap matter therein. Water from the shower head face, flows down the surface and around the cone member **13**. In addition to surrounding water flow there is formed a small vortex around the point of the cone. This vortex is formed from a surrounding blanket of water around the sides of the cone which produces a vacuum in the crystal filled interior of the cone. In this manner a reduced amount of water flows through the crystals preventing the crystals from becoming quickly dissipated as would be the case if the hot water was to be forced through the crystals from the back of the cone.

While I have described my invention somewhat in specific detail, yet it is to be understood that I may vary the proportions and make use of patentable equivalent structure within wide latitude within the spirit of the appended claims.

Having thus described my invention, what I claim as new is:

1. A hollow cone member having a cavity in the lower portion of the cone filled with water soluble perfumed crystals, said cavity having outside perforated side walls for admitting water to the interior of said cavity when said cone is in use, said cone having a permanent imbedded magnet in its upper structure magnetically engaging with a shower head.

2. A shower head cone for holding perfumed crystals, said cone having perforated sides and a cavity filled with said crystals, a head portion of said cone having an imbedded permanent magnet located therein for magnetically holding said cone against a shower head.

3. A perfume filled shower head cone for magnetically attaching to a shower head comprising, a magnetic ring having an imbedded magnetic member of high power located therein, a hollow cone member having a magnetic member of lesser power than said ring being imbedded in the head of said cone and engaging against said ring, said cone having a perfumed crystal cavity below said head and sides perforated to admit a limited amount of water.

4. A perfumed crystal shower head cone as set forth in claim 3 in which said cone is provided with refillable plug member in the apex of the cone.

References Cited in the file of this patent

UNITED STATES PATENTS

425,768	Ezell	Apr. 15, 1890
1,762,518	MacKenzie	June 10, 1930
1,973,319	Nelson	Sept. 11, 1934
2,212,326	Piken	Aug. 20, 1940
2,414,653	Lookholder	Jan. 21, 1947
2,485,112	Rose	Oct. 18, 1949
2,597,925	Edger	May 27, 1952
2,647,797	Moss	Aug. 4, 1953
2,659,627	McConnell	Nov. 17, 1953