

Jan. 24, 1933.

E. BECK

1,895,307

SPRAY

Filed July 10, 1930

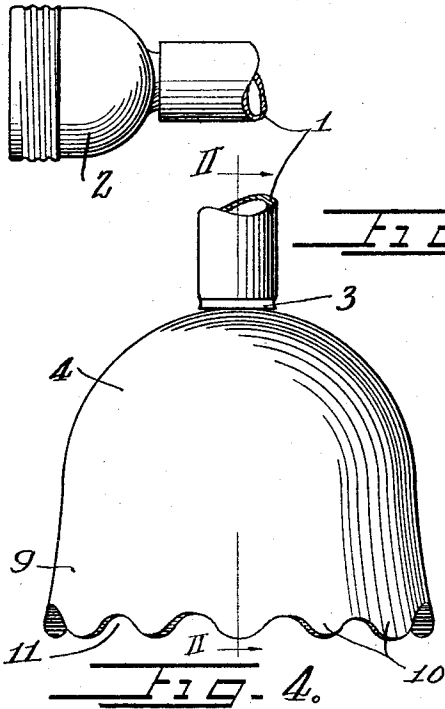


FIG. 2.

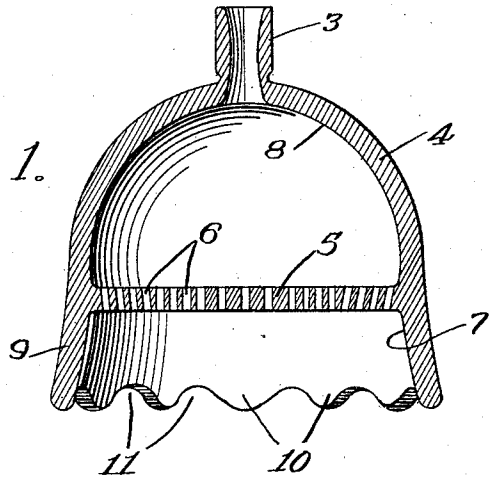


FIG. 3.

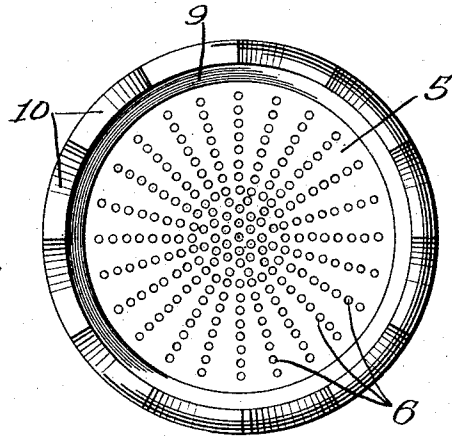
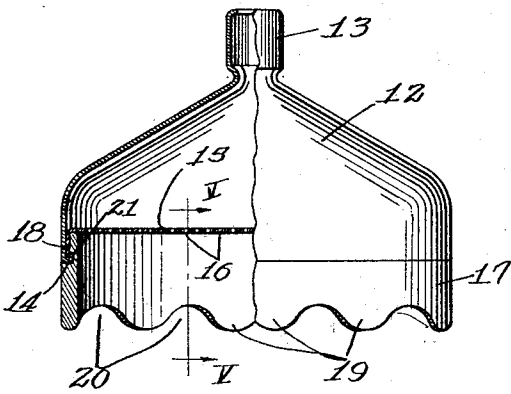
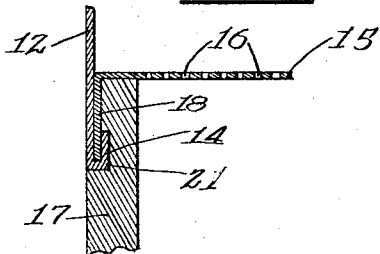


FIG. 5.



INVENTOR

Emil Beck.

BY: Charles W. Kelly ATTORNEY

UNITED STATES PATENT OFFICE

EMIL BECK, OF CHICAGO, ILLINOIS

SPRAY

Application filed July 10, 1930. Serial No. 467,009.

In barber shops, shampooing parlors and similar establishments, spraying devices have been used in the form of a hose connection having an applicator or water spraying head engaged on one end thereof. The applicators heretofore in use have been provided either with an apertured plate at one end thereof or with an apertured plate recessed into or set back within a rim or flange having a straight peripheral edge. With this type of applicator, it has been found difficult to manipulate or move the same over a person's head or section of a body which is to be sprayed, due to the fact that the water entering the applicator head through the hose attachment is retained within the applicator under pressure and is not permitted to escape unless the applicator is removed. It has also been found that, when the applicator is removed from a person's head or other section of a person's body which requires spraying, the water within the applicator head, being under pressure, splashes out in all directions.

The use of water sprays of this type for shampooing and rinsing purposes is, therefore, not very desirable on account of the difficulty encountered in moving the applicator over a person's head and on account of the fact that the soapy or dirty water is not allowed to escape except when the applicator is released, in which case the water is splashed with force in all directions, producing a messy and undesirable condition.

This invention relates to an improved type of spraying device applicator in which the passaged or apertured spraying disc or plate is recessed or set back into the applicator to afford a needle spray chamber, the margin or edge of whose wall is scalloped, thereby affording an arrangement permitting the applicator to be easily and conveniently moved over a person's head and also affording an arrangement whereby the soapy or dirty water is permitted to be conveniently and continuously discharged through the scalloped openings of the applicator rim, thereby obviating splashing, as well as facilitating movement of the applicator.

It is an object of this invention to provide a spray applicator with a scalloped rim to

permit of a continuous discharge of rinsing water from the applicator when in use.

It is a further object of this invention to provide an improved type of rinsing spray applicator having an irregular rim projecting beyond the apertured spray plate of the applicator to obviate the formation of a suction action taking place in the applicator and furthermore obviating splashing and permitting a continuous discharge of rinsing water from the applicator over the part to be washed and rinsed.

It is an important object of this invention to provide an improved spraying or rinsing device having an improved applicator provided with a set-back apertured spraying plate and having a scalloped rim to obviate splashing and permitting a continuous stream of clean water to be brought into contact with parts to be rinsed and allowing the continuous escape of the water from the applicator as it is moved around.

Other and further important objects of this invention will be apparent from the disclosures in the specification and the accompanying drawing.

The invention (in a preferred form) is illustrated in the drawing and hereinafter more fully described.

On the drawing:

Figure 1 is a side elevation of an improved spraying device having the hose section partly broken away and provided with an improved head or applicator embodying the principles of this invention.

Figure 2 is a vertical detail section of the applicator taken on line II—II of Figure 1.

Figure 3 is a bottom plan view of the applicator.

Figure 4 is a side elevation of a modified form of applicator with parts broken away and shown in section.

Figure 5 is an enlarged fragmentary detail section of the modified form of applicator taken on line V—V of Figure 4.

As shown on the drawing:

The improved spraying device comprises a flexible hose or pipe 1 having a faucet attachment 2 secured or connected in one end thereof to permit the device to be connected

with a suitable source of water, such as a faucet or the like. The other end of the flexible hose 1 is engaged over a passaged water intake neck, collar or stem 3. The neckpiece or coupling sleeve 3 is integrally formed centrally upon the top of an applicator body section or hood 4 having integrally formed transversely therein a disc, plate or partition 5 having a plurality of apertures or passages 6 formed therein. The middle apertures or passages 6 are substantially straight, while the surrounding passages are directed at an angle, as clearly illustrated in Figure 2, to permit the needle sprays formed by the apertured disc or plate to be concentrated toward the center of the outlet chamber 7 provided in the body section of the applicator by the partition plate or disc 5. The partition plate or disc 5 also provides a water distributing or intake chamber 8, into which water from the hose 1 is adapted to be delivered before being discharged through the apertured plate in the form of needle sprays. The rim or flange 9, which, in the present showing, is integral with the body section 4 of the applicator, has the edge or margin thereof scalloped or waved to provide a plurality of rounded teeth or fingers 10, affording outlet notches or recesses 11 therebetween to facilitate discharge of the rinsing water continuously during the use of the spraying device when the same has the applicator thereof movably applied over a section which is to be rinsed.

Figures 4 and 5 illustrate a modified form of spraying device applicator constructed of a plurality of assembled sections. The modified form of applicator comprises a hood or body section 12 having a passaged neck or collar 13 integrally formed on the upper converging end thereof. The applicator body section 12 and the neck or collar 13 thereof are adapted to be constructed of metal or any other suitable material. The margin or rim of the body section 12 is bent inwardly and then upwardly to afford a channel cross-sectioned rim or inwardly directed bead 14. Mounted within the body section 12 is a spray disc or plate 15 having a plurality of passages or apertures 16 provided therein to permit water under pressure which is admitted into the body section 12 to be discharged in the form of needle sprays into an outlet chamber provided within a continuous rim or flange section 17 adapted to be formed from hard rubber, bakelite or any other suitable material. Integrally formed on the spray plate or disc 15 is an outwardly directed peripheral flange 18 which contacts against the inner peripheral surface of the body section 12 and seats in the inwardly directed bead or channel cross-sectioned rim 14 of the body section. The mouthpiece or flange section 17 of the applicator has the outer edge or margin thereof scalloped to provide a plurality of

teeth or fingers 19 which are rounded and afford a plurality of discharge recesses or openings 20 therebetween. The upper or inner margin of the mouthpiece 17 is peripherally grooved at 21 for the reception of the flange 18 of the spray plate and of the channel bead rim section 14 forming a part of the body section 12 of the device. The hook or channel-shaped, inwardly directed rim of the body section 12 of the applicator is adapted to lockingly spring into engagement with the scalloped mouthpiece of the device to hold the various parts in proper assembled relation, as illustrated in Figure 4.

Attention is called to the fact that the improved applicator illustrated in Figures 1 to 3, inclusive, may be of one-piece construction formed of hard rubber, bakelite or other suitable material, or, if preferred, the applicator may be constructed of a plurality of assembled parts as covered in the showing of the device illustrated in Figures 4 and 5.

The operation and use of the improved applicator appears to be self-evident. Attention is, however, called to the fact that the improved scalloped rim or mouthpiece of the applicator affords an important improvement in the art in that the mouthpiece is adapted to be applied and moved over a surface or a material to be rinsed. The easy sliding operation of the scalloped mouthpiece of the applicator over a surface is permitted due to the scalloped construction of the edge of the applicator mouthpiece, allowing the water passing through the applicator and issuing in the form of needle sprays through the apertures or passages of the separator spray plate to flow continuously from the applicator through the outlet recesses or openings afforded between the teeth or fingers of the scalloped rim. Due to the scalloped construction of the mouthpiece rim, no suction action is permitted to develop in the outlet or distributing chamber of the applicator and, since the scalloped arrangement permits the rinsing water to be continuously discharged through the scallop openings during the use of the applicator, splashing is entirely obviated and a clean supply of water is permitted to be continuously applied to the parts to be rinsed, allowing the soap and other foreign matter which has been washed from material or from the said parts to be continuously carried off.

It will, of course, be understood that various details of construction may be varied through a wide range without departing from the principles of this invention, and it is, therefore, not purposed to limit the patent granted hereon otherwise than necessitated by the scope of the appended claim.

I claim as my invention:

In a one piece spray applicator comprising an inflexible body section, a passaged neck integrally formed thereon, an apertured

partition integrally formed in said body section dividing the body section into intake and outlet chambers, with said outlet chamber having the margin thereof formed to provide an inflexible scalloped edge.

⁵ In testimony whereof I have hereunto subscribed by name at Chicago, Cook County, Illinois.

EMIL BECK.

10

15

20

25

30

35

40

45

50

55

60

65