# Dec. 20, 1960

### G. C. GETTELMAN SPRINKLING CAN

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Filed March 6, 1957

2 Sheets-Sheet 1

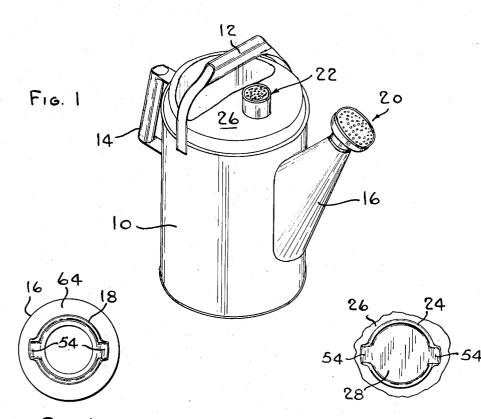


Fig. 4

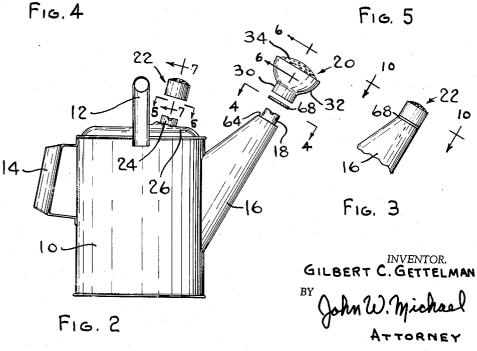


FIG. 2

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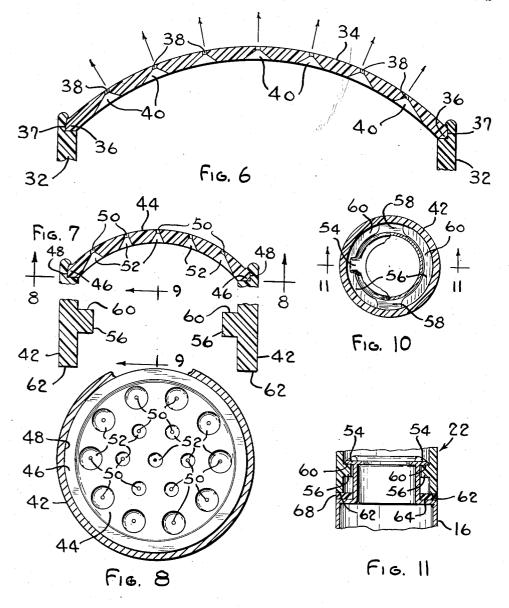
# G. C. GETTELMAN

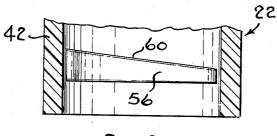
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SPRINKLING CAN

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Fig, 9

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United States Patent Office

2,965,310 Patented Dec. 20, 1960

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#### SPRINKLING CAN

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Filed Mar. 6, 1957, Ser. No. 644,286

#### 2 Claims. (Cl. 239-391)

This invention relates to sprinkling cans and particularly to an improved rose and rose attachment means 15 for a sprinkling can having interchangeable roses.

Although not limited thereto, this invention is particularly applicable to sprinkling cans of the type having interchangeable roses where the rose which is not in use is conveniently mounted on the breast of the can available for 20 use when needed. Sprinkling cans of this type have in the past employed roses made from sheet metal with a threaded neck for connection to the threaded spout and breast ferrules. Interchanging roses becomes difficult as the threads corrode and dirt accumulates. The roses are 25 difficult to clean and are often dented during shipment and use.

It is an object of this invention, therefore, to provide a rose which can be quickly and easily installed and removed, is easily cleaned, light in weight, will not dent **30** in normal use, can be made in colors which will not fade or chip, and can be made at a lower cost than previous types.

Another object is to provide a rose with a face piece of sufficient thickness to permit repeated removal and 35 assembly and prevent denting and yet will produce a sprinkling pattern which covers a large area as required in some sprinkling operations.

These objects are attained by a molded plastic rose which, because of the lower cost of the material and the 40 manufacturing process used, provides a substantial cost saving. The plastic will not corrode, has a removable face piece for easy cleaning, and can be made in colors which will not fade or chip. A quick-disconnect connection is provided between the roses and the pouring and breast ferrules for ready interchange when desired. The removable face piece which must be of sufficient thickness to prevent denting and to snap securely in place in the body of the rose has a dished-shape with the surfaces immediately surrounding the outer rows of openings of reduced thickness to provide a sprinkling pattern which covers a large area.

Other objects and advantages will be pointed out in, or be apparent from the specification and claims, as will obvious modifications of the embodiment shown in the drawings, in which: 55

Fig. 1 is a perspective view of the sprinkling can;

Fig. 2 is a side elevation with the roses in exploded position;

Fig. 3 is a fragmentary side elevation showing the 60 spout with the small rose mounted thereon;

Fig. 4 is an end view of the spout ferrule taken on line 4-4 of Fig. 2;

Fig. 5 is an end view of the dummy breast ferrule taken on line 5-5 of Fig. 2;

Fig. 6 is a sectional view of the large rose taken along line 6-6 of Fig. 2;

Fig. 7 is a sectional view of the small rose taken along line 7-7 of Fig. 2 with a portion of the neck removed;

Fig. 8 is a view taken along line 8—8 of Fig. 7 showing the inner surface of the face plate; 2

Fig. 9 is a view taken along line 9—9 of Fig. 7 showing one section of the ridge on the neck;

Fig. 10 is a view taken along line 10—10 of Fig. 3 with a part of the ferrule broken away; and

Fig. 11 is a view taken along line 11—11 of Fig. 10. Referring now to the drawings in detail, the sprinkling can has a conventional cylindrical body 10 provided with a carrying handle 12 and another handle 14 utilized when tilting the can. A spout 16 projects outwardly and upwardly from the wall of body 10 at a point diametrically opposed to handle 14. Spout 16 is provided with a ferrule 18 adapted to receive either a large rose 20 or a small rose 22. Similarly, a dummy ferrule 24 is provided on a breast 26 adapted to receive either of the two roses. The end of dummy ferrule 24 is sealed by a wall 28 to prevent flow of liquid therethrough.

Roses 20 and 22 are made from a molded plastic material which, because of the lower cost of the raw materials used and the lower cost of manufacturing, results in a substantial cost saving over roses made from metal. Plastic roses will not corrode, are light for improved handling of the sprinkling can, durable to withstand denting from normal use and shipment, and can be made in a variety of colors which will not fade or chip.

Large rose 20 comprises a neck portion 30, a cupshaped portion 32 and a face piece 34 removably secured in the cup-shaped portion. Face piece 34, because it is made from plastic can be of sufficient thickness to prevent denting and permit removal and assembly for cleaning and yet still remain light in weight. A tongue 36 extends outwardly from the edge of face piece 34 for engagement in groove 37 in the inside surface of the cupshaped portion 32 of the rose where it is held securely in assembled position. The face piece can be readily removed for cleaning by pressure applied on the inside surface thereof through the open neck portion 30.

Face piece 34 is dish-shaped with a plurality of openings 38 therethrough to permit passage of fluid. The axes of openings 38 necessarily run parallel to the central axes of the rose to facilitate the manufacture of the face piece. Therefore, the openings are countersunk as at 40 on the concave inside surface of the face piece to reduce the effective wall thickness at the openings and thereby allow liquid to flow therethrough in streams substantially perpendicular to planes tangent to the convex outside surface at the openings as shown by the arrows in Fig. 6.

Small rose 22 comprises a neck 42 of the same diameter as neck portion 32 of large rose 20 and a face piece 44 removably secured in one end of neck 42. A tongue 46 on face piece 44 and a groove 48 allow ready removal of the face piece in the manner previously described with regards to large rose 20. As previously described with regards to face piece 34 for large rose 20, openings 50 countersunk from the inside as at 52 are also provided in face piece 44.

Although as shown in Figs. 6 and 7 all the openings in face pieces 34 and 44 are countersunk, it should be understood that the effect of the reduction in wall thickness at the openings is of greatest importance near the edge of the face piece and diminishes as you move toward the center thereof where it makes little difference to the resultant spray pattern whether the wall thickness is reduced or not.

Roses 20 and 22 are removably secured to the ferrules by a quick-disconnect connection to facilitate quick and easy interchange of the roses between the spout and breast ferrules. A pair of diametrically opposed ears 54 protrude outwardly from the outer surface of ferrules 18 and 24 at the open ends thereof. On the inner surface of neck portion 30 and neck 42 of large rose 20 and small rose 22, respectively, is a ridge 56 with oppositely facing grooves

58 (Fig. 10). To install a rose on a ferrule, the rose is first inserted on the ferrule with ears 54 and grooves 58 in alignment to permit ears 54 to pass through the grooves in the ridge. The rose is then rotated to engage ears 54 with ridge 56. The surfaces 60 of the ridge facing the interior of the rose between grooves 58 are sloped as shown in Fig. 9 to impart a slight axial movement to the rose to bring edge 62 on the rose in tight contact with shoulders 64 and 66 formed at the joint between ferrule 18 and spout 16 and ferrule 24 and breast 26, respec- 10 tively. The surfaces 60 can be made to slope in either direction. The slope shown in Fig. 9 will cause tightening when the rose is rotated in a clockwise direction, when viewed from the outside opposite the face piece. A gasket 68 (Fig. 11) may be used on shoulder 64 to insure against 15 the face plate. leakage at spout ferrule 18.

Although but one embodiment of the present invention has been illustrated and described, it will be apparent to those skilled in the art that various changes and modifications may be made therein without departing from the 20 spirit of the invention or from the scope of the appended claims.

I claim:

1. An improved rose for a sprinkling can comprising a body portion having a can attaching member adapted 25 to be attached to the spout of a sprinkling can and an enlarged opening adapted to receive a face piece, an annular recess surrounding said opening and a resilient perforated face piece having a tongue portion extending around the periphery thereof of slightly greater diameter than the 30

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internal diameter of the annular recess, said recess being adapted to receive said tongue under compression and to thereby hold said face piece securely in place, said face piece being provided with a plurality of openings, said openings being countersunk on the rear of the face plate so that the wall thickness adjacent the edges of the face plate are reduced to a greater degree than the wall thickness at the center of the face plate whereby liquid flows through the openings in streams substantially perpendicular to planes tangent to the outside surface of the openings.

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2. A rose for a sprinkling can as claimed in claim 1 wherein the axes of the openings and associated countersink lie on parallel lines passing through the openings in

#### References Cited in the file of this patent UNITED STATES PATENTS

| 240,833   |          | May 3, 1881    |
|-----------|----------|----------------|
| 437,915   | Castigan | Oct. 7, 1890   |
| 453,530   | Baker    | June 2, 1891   |
| 479,979   | Glenn    | Aug. 2, 1892   |
| 969,292   | Lawler   | Sept. 6, 1910  |
| 1.027.112 | Eckert   | May 21, 1912   |
| 1.555.393 | Hermann  | Sept. 29, 1925 |
| 1.699.459 | Ullrich  | Jan. 15, 1929  |
| 2,124,184 | Buchanan | July 19, 1938  |
| 2,571,871 | Hayes    | Oct. 16, 1951  |
|           |          |                |