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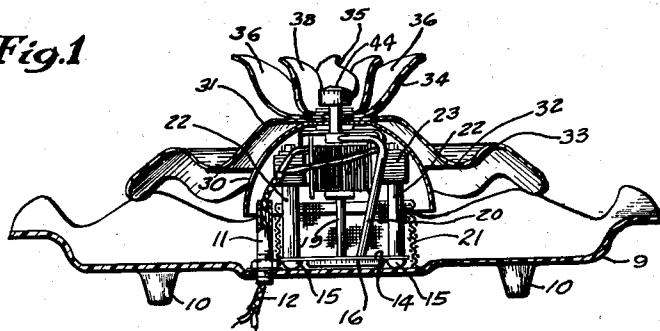
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PORTABLE ELECTRIC FOUNTAIN

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Fig. 1



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PORTABLE ELECTRIC FOUNTAIN

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This invention relates to portable fountains, and more particularly to fountains of the character which are adapted to be placed upon tables or the like for decorative and air conditioning purposes.

The principal object of the present invention is to provide a fountain having a multiplicity of jets of fluid projected upwardly with collecting structure interposed between the jet and a vessel above which the collecting means is supported.

The present invention contemplates, in a portable fountain, improved means for supporting the spray head, the pump and motor, and the collecting structure.

The present invention contemplates, in a portable fountain, improved means for protecting the electric motor employed therewith.

The present invention further contemplates the provision of an improved shield, which conceals the mechanism from the eye, but affords an enlarged chamber for the air required for cooling the motor.

The present invention further contemplates the provision of improved mounting means for the jet head in a portable fountain.

The invention further contemplates improved structure which is also ornamental in character for catching the falling water and reducing the likelihood of splashing.

The present invention further contemplates an improved spray head with which a more attractive fountain or spray is obtained.

The present invention further contemplates the provision of a bushing, which permits an improved regulation of the spray height.

Referring to the drawing which illustrates, merely by way of example, a suitable embodiment of the invention,

Figure 1 is a vertical section;

Figure 2 is a plan view with part broken away;

Figure 3 is an underside plan view of the pump, part of the casing being broken away to show the interior;

Figure 4 is a fragmentary vertical section on an enlarged scale showing the spray head and associated structure; and

Figure 5 is a horizontal section on the line 5—5 of Figure 4.

Similar numerals refer to similar parts throughout the several views.

In the example illustrated, the fountain includes a large lower bowl 9 supported on suitable feet 10 projecting downwardly from the lower side and provided near the central portion thereof with a vertically extending pipe 11 secured

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thereto in fluid-tight relationship. The pipe 11 serves to form a passage for the lead wires 12 for the motor, as hereinafter explained.

A fountain assembly 13 is provided which is adapted to be positioned at the central of the bowl 9 and be supported thereby. The fountain assembly 13 includes a lower plate 14 having a plurality of feet 15 of rubber or similar material secured thereto and below the plate 14 a rotary pump casing 16 is mounted. A pump rotor 18 is provided within the casing 16. The plate 14 has a pump inlet 17 through which a pump rotor shaft 19 extends, and also has a fluid delivery pipe 20 extending upwardly, as hereinafter explained.

A cylindrical screen 21 is provided which is adapted to surround the lower part of the fountain assembly 13 and rest on the bowl 9 for preventing access of solid material to the pump inlet 17.

A pair of vertical posts 22 are secured to the plate 14 and support an electric motor 23, to which the lead wires 12 are connected, for operating the pump rotor shaft 19. The top of the motor 23 has a bracket 24 secured thereto and held in position by means of nuts 25. The bracket 24 has a bushing 26 secured thereto and extending therethrough, and the fluid delivery pipe 20 is connected to the interior of the lower portion of the bushing 26. The portion of the bushing 26 extending above the bracket 24 is threaded on the exterior thereof as at 27. The bushing 26 has a metallic washer 28 mounted thereon immediately above the bracket 24, and above the washer 28, one or more rubber washers 29. A downwardly extending substantially semi-spherical casing 30, preferably of metal or other opaque material, is provided for protecting the motor 23 and preventing the access of water thereto. The casing 30 is mounted on the bushing 26 which extends upwardly through the central part of the casing 30. The casing 30 and the pipe 11 are preferably proportioned so that the lower edge of the casing 30 is a short distance below the upper extremity of the pipe 11.

A skirt 31 is provided and is also carried on the bushing 26 and may, if desired, be of transparent synthetic plastic material. The skirt 31 preferably has a depressed portion 32, for collecting falling water, surrounded by a rim 33 over which the water is adapted to flow for return to the bowl 9. The bushing 26, also has mounted thereon, above the skirt 31, one or more petal-like assemblies 34 and 35 for reducing the tendency to splashing. The outer assembly 34, as

illustrated, includes the provision of a plurality of upwardly extending petals 36 with the interiors concaved, the petals 36 being separated by cutaway portions 37 to permit of fluid discharge. The inner assembly 35 is similar to the outer assembly 34, but the petals 36 are disposed in a position more closely approaching the vertical and with the petals 36 in overlapped relationship at their base portions. The openings between the petals 36 permit of the discharge of fluid.

On the upper end of the bushing 26 and in contact with the upper face of the interior petal assembly 35, a rubber washer 39 is provided with which a metal washer 40 is in engagement, and a nut 41 in engagement with the threads 27 on the bushing 26 is provided for holding the washer 40 in engagement with the washer 39 so that the casing 30, the skirt 31 and the petal assemblies 34 and 35 are held in assembled relationship.

The nut 41 is provided on the exterior thereof with flattened portions 42 for tightening and with threaded portions 43 for engagement of a spray head 44. The spray head 44 preferably consists of a sleeve or cap with a plurality of discharge openings 45 inclined slightly outwardly from the vertical, as desired. The spray head 44 is adapted to be positioned with its lower edge in engagement with the washer 40, if a maximum height of spray is desired. By spacing the spray head 44 above the washer 40, discharge passageways are available, between the flattened portions 42 and the threaded interior of the spray head 44, for the discharge of a part of the water delivered to the interior of the spray head 44. The height of the spray may thus be regulated by adjustment of the spray head to vary the size of these discharge passageways.

Upon the rotation of the motor 23 the water delivered by the pump rotor 18 to the discharge pipe 20 and therefrom to the bushing 26 is directed through and by the openings 45 in the spray head 44. The inner row of petals 36 serves to confine the spray from the openings 45 and prevent sidewise delivery thereof. As the water falls from the spray, it is caught in part by the inner ring of petals 36 and in part by the outer ring of petals 36 which collect the down flowing or falling fluid for delivery to the skirt 31. The skirt 31 also acts as a collector and the water collected in the depressed portion 32, as well as the water delivered thereto, flows over the rim 33 and is returned to the bowl 9 for re-circulation.

The screen 21 prevents the access of any vegetable or other material which might tend to interfere with the proper action of the pump 18, so that, if desired, the fountain may also be used with living floral displays.

The interior space within the casing 30 and above the level of the pipe 11 provides an air space for the cooling of the motor 23, and the air confined between the skirt 31 and the casing 30 and cooled by the passage of fluid downwardly on the exterior of the skirt 31 also aids in the cooling of the motor 23. The supporting of the entire fountain assembly 13 on the feet 15 greatly facilitates the setting up of the fountain and eliminates the necessity for making any separate leveling or other adjustments.

What I claim is:

1. In a portable fountain of the type comprising a bowl and a fountain assembly positioned at the central portion of the bowl having a fluid return means, a motor and a pump operated by said motor, the means for supporting said fountain assembly comprising spaced legs extending

downwardly from said motor and having lower end portions resting in supporting engagement with the bowl, a bracket secured to the motor at the upper portion thereof, a bushing secured to said bracket and to which said fluid return means is secured, a spray head mounted on the upper end of said bushing and a fluid connection from said pump to the lower end of said bushing.

2. In a portable fountain of the type comprising a bowl and a fountain assembly positioned at the central portion of the bowl having a motor and a pump operated by said motor, the means for supporting said fountain assembly comprising spaced legs extending downwardly from said motor having lower end portions resting in supporting engagement with the bowl, a pump supporting plate connecting the lower portions of said legs, a bracket secured to said motor at the top thereof, a bushing secured to said bracket, fluid return means including a skirt member disposed above said bracket and superimposed concaved upwardly extending petal-like fluid directing members mounted on said bushing, a retaining member on said bushing for securing said fluid return means, a spray head connected to the upper end of said bushing, and a fluid connection from said pump to the lower end of said bushing.

3. In a portable fountain of the type comprising a bowl and a fountain assembly positioned at the central portion of the bowl having a motor and a pump operated by said motor, the means for supporting said fountain assembly comprising spaced legs extending downwardly from said motor and having lower end portions resting in supporting engagement with the bowl, a bracket secured to said motor at the top thereof, a threaded bushing secured to said bracket, fluid return members mounted on said bushing, a threaded retaining member in engagement with said bushing for securing said fluid return members in position, a spray head mounted on said retaining member, passageways between said retaining member and said spray head for bypassing fluid to said return members, and a fluid connection from said pump to the lower end of said bushing.

4. In a portable fountain of the type comprising a bowl and a fountain assembly positioned at the central portion of the bowl having a motor and a pump operated by said motor, the means for supporting said fountain assembly comprising spaced legs extending downwardly from said motor and having lower end portions resting in supporting engagement with the bowl, a bracket secured to said motor at the top thereof, a bushing secured to said bracket, fluid return means mounted on said bushing including a skirt member disposed above said bracket and superimposed concaved upwardly extending petal-like fluid directing members, a spray head connected to the upper end of said bushing, and a fluid connection from said pump to the lower end of said bushing.

5. In a portable fountain of the type comprising a bowl and a fountain assembly positioned at the central portion of the bowl having a fluid return means, a motor and a pump operated by said motor, the means for supporting said fountain assembly comprising spaced legs connecting said pump and said motor, a bracket secured to the motor at the upper portion thereof, a bushing secured to said bracket and to which said fluid return means is secured, a protective hood for said motor mounted on said bushing, a spray

head mounted on the upper end of said bushing and a fluid connection from said pump to the lower end of said bushing.

6. In a portable fountain of the type comprising a bowl and a fountain assembly positioned at the central portion of the bowl having a motor and a pump operated by said motor, the means for supporting said fountain assembly comprising spaced legs connecting said motor and said pump, a bracket secured to said motor at the top thereof, a threaded vertical bushing secured to said bracket, fluid return members mounted on said bushing, a threaded retaining member in engagement with said bushing for securing said fluid return members in position, a spray head mounted on said retaining member, passageways between said retaining member and said spray head for bypassing fluid to said return

members, and a fluid connection from said pump to the lower end of said bushing.

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