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THERAPEUTIC SHOWER BATH APPARATUS

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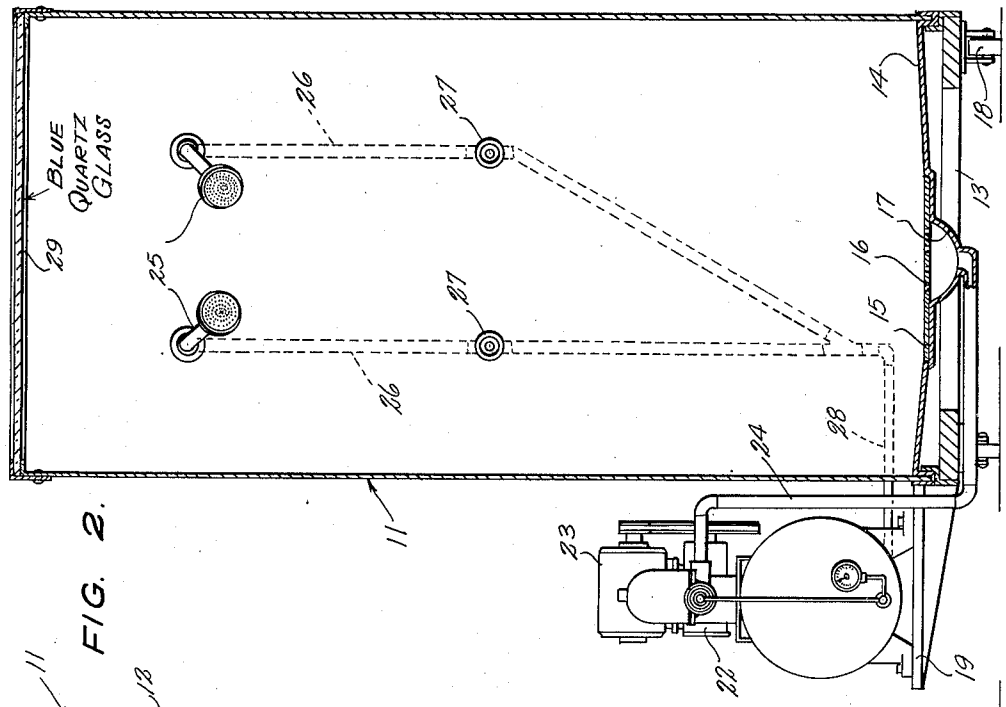



FIG. 2.

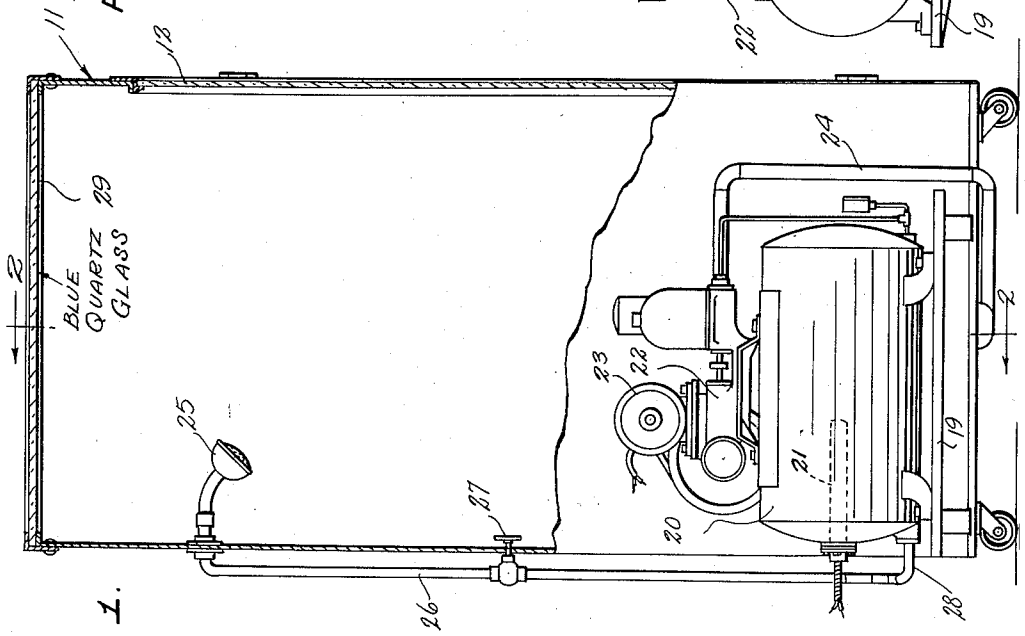



FIG. 1.

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## THERAPEUTIC SHOWER BATH APPARATUS

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1 Claim. (Cl. 128—366)

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This invention relates to shower therapy apparatus, and more particularly to a therapy apparatus employing the combined effects of selected frequencies of radiant energy with sea water spray.

A main object of the invention is to provide a novel and improved therapy apparatus which is relatively simple in construction, which is safe to use, and which provides many beneficial effects to the human system, heretofore available only to those having convenient access to seashore beach resorts.

A further object of the invention is to provide an improved sea water therapy apparatus which is relatively inexpensive to manufacture, which may be installed at any desired inland location, and which utilizes the beneficial effects derived by the irradiation and germicidal action of ultra-violet light on the elements and compounds contained in sea water, whereby therapeutic effects similar to those obtained by ocean bathing are made available to the person using the device.

Further objects and advantages of the invention will become apparent from the following description and claim, and from the accompanying drawings, wherein:

Figure 1 is a side elevational view, partly in vertical cross-section, of a therapeutic sea water spray apparatus constructed in accordance with the present invention;

Figure 2 is a vertical cross-sectional view taken on line 2—2 of Figure 1.

Referring to the drawings, 11 designates a suitable cabinet or booth made of relatively light corrosion-resistant material, such as galvanized sheet metal or the like, the cabinet being provided with a hinged door 12. The cabinet 11 may be mounted on a wheeled frame 13, whereby said cabinet may be readily moved to a desired location. The floor of the cabinet 11 is shown at 14, and, as shown in Figure 2, slopes downwardly toward the center thereof. The center portion of floor 14 is recessed, as shown at 15, and is formed with a well 17. An apertured drain plate 16 is seated in the recessed portion 15 overlying the well 17. The various parts 13, 14, 16 and 17 are preferably made of metal, and the wheels, shown at 18, are likewise made of metal so that the plate 16 is effectively grounded.

Secured to the lower portion of booth 11 at one side thereof is a supporting bracket or shelf 19, on which is mounted a tank 20 containing sea water. Secured in tank 20 is an electrical immersion heater 21 connected to a suitable source of electric power, and provided with conventional thermostatic switch means, not shown, for maintaining the sea water in tank 20 at a substantially constant elevated temperature of the order of 80° Fahrenheit. Mounted on tank 20 is a conventional pump 22 driven by an electric motor 23, the inlet of the pump being connected by a conduit 24 to the bottom of the drain well 17. The outlet of the pump 22 is connected to the top of tank 20 so as to discharge into the tank and to build up air pressure therein. Designated at 25, 25 are a pair of shower spray heads mounted on the upper portion of the rear wall of the booth 11 and connected by conduits 26, 26 through respective control valves 27, 27 to a sea water supply conduit 28 connected to the bottom of tank 20.

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The top wall of booth 11 comprises a panel 29 of material which is opaque to substantially all the components of solar radiation except the shorter wave lengths in the blue, violet and ultra-violet region. Said material may be, for example, blue quartz glass, which acts as a filter, allowing ultra-violet radiation to pass freely therethrough and substantially suppressing radiation whose wave length is longer than the wave length of blue light.

Alternatively, an ultra-violet lamp may be mounted in the upper portion of the booth 11, but in view of the salt water spray present in the booth during use of the apparatus and consequent possibility of short-circuiting the lamp, the use of the solar radiation filter 29 is preferred.

In use, the ultra-violet radiation acts on the sea water and irradiates same. Since it is contemplated that the sea water will be transported from the ocean to the site at which the apparatus is located, which may be a considerable distance inland, many of the beneficial organisms and radiation-sensitive chemicals in the sea water are reduced in activity due to transportation. It has been found that by moderately heating the sea water and by subjecting the sea water in the form of a fog-like spray to the action of ultra-violet radiation, these beneficial organisms and radiation-sensitive chemicals are reactivated, and that the irradiated spray provides substantially the same stimulation and tonic effect on the human system as ocean bathing at the seashore.

It is, therefore, apparent that by the use of the above apparatus in a course of regular treatments which may be carried on during all seasons of the year, the therapeutic effects of ocean bathing may be made continually available to any individual requiring such treatments without

the necessity of traveling to expensive seashore bathing resorts. In view of the restorative effects of the ultra-violet radiation, the sea water in tank **20** may be used over and over again, since all that is necessary to freshen the sea water is to allow the spray heads **25** to operate for a sufficient period of time under exposure to ultra-violet radiation through the filter panel **29**.

From the above description, it will be seen that the apparatus may be used to provide continuous therapeutic sea water treatments at locations many miles distant from the seashore, and that renewal of the supply of sea water in the tank **20** will be necessary only at comparatively infrequent intervals.

It is also apparent that the person using the apparatus enjoys the beneficial effects of ultra-violet radiation, in combination with the stimulating effects of the ocean water spray, without being exposed to the warmer components of solar radiation, and thereby avoids harmful effects incident to absorption by the human system of the warmer radiation components during long periods of exposure.

The apparatus may be employed either outdoors or may be installed indoors beneath a skylight or the like, open to solar radiation.

While a specific embodiment of a sea water therapeutic spray apparatus has been disclosed in the foregoing description, it will be understood that various modifications within the spirit of the invention may occur to those skilled in the art. Therefore, it is intended that no limitations be placed on the invention except as defined by the scope of the appended claim.



What is claimed is:

A sea water therapy apparatus of the character described comprising a shower stall having a bottom wall, upstanding side walls and a top wall, said top wall being of an ultraviolet ray transmitting material, a spray head mounted in one of the side walls and disposed within the stall at a point slightly below the top wall, a support mounted laterally on the outside of one of the side walls adjacent the bottom wall, a tank adapted to contain sea water mounted on said support, a heater in said tank, a pump on the top of the tank, conduit means connecting said tank and the spray head, said bottom wall being sloped and formed at its lowest point with a drain, conduit means connecting said drain and the pump, said pump having its outlet side discharging into the top of the tank to create a pressure head and force sea water in the tank through the conduit means leading to the spray head and having its inlet side connected to the conduit means coming from the drain in the bottom wall of the stall.

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