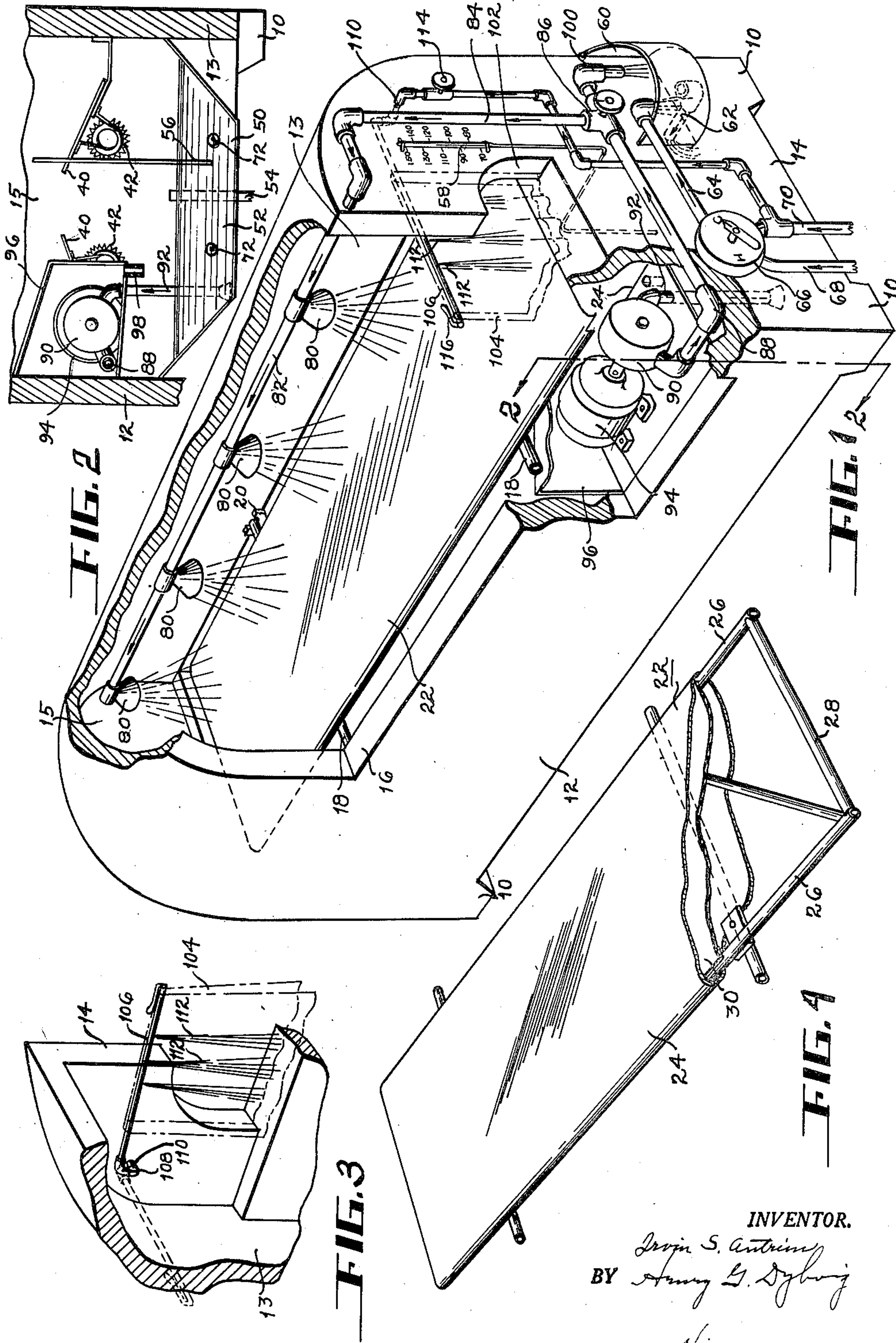


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HYDROTHERAPY CABINET

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## HYDROTHERAPY CABINET

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This invention relates to hydrotherapy treatments and more particularly to the cabinet and the accessories used for hydrotherapy treatments.

An object of this invention is to provide a hydrotherapy cabinet wherein the temperature of a spray of water is absolutely under the control of the attendant at all times, irrespective of the temperature of the hot water and cold water intake sources of supply.

Another object of this invention is to provide a reservoir for use in providing a shower bath in association with hydrotherapy treatments, wherein the temperature of the water in the reservoir may be accurately controlled.

Another object of this invention is to effectively cool the neck and throat of a patient undergoing hydrotherapy treatments.

Another object of this invention is to provide a hydrotherapy cabinet having a stainless steel rest or support for the patient, which rest includes insulating material so arranged as to protect the patient from extreme temperatures.

Other objects and advantages reside in the construction of parts, the combination thereof and the mode of operation, as will become more apparent from the following description.

In the drawings:

Figure 1 is a perspective view of a hydrotherapy cabinet and its accessories, having parts broken away.

Figure 2 is a cross sectional view of the cabinet taken substantially on the line 2—2 of Figure 1.

Figure 3 is a fragmentary perspective view of the parts used in maintaining the throat of the patient cool and at the same time providing a closure for the cabinet.

Figure 4 is a perspective view with parts broken away, showing the supporting rest or table for the patient.

Referring to the drawings, legs 10 support the side walls 12 and 13 and the end walls 14 and 15 of a cabinet. This cabinet is provided with an opening 16 in one side thereof that is normally closed by a door or lid that has not been shown, as this is a common expedient in hydrotherapy cabinets.

The side walls 15 and 16 support a pair of tubular supporting members 18 removably mounted upon brackets 20, only one of which has been shown in Figure 1. These supporting members support a rest or table 22, the outside of which is preferably made from a sheet of stainless steel 24, supported upon a longitudinal frame member 26 and transverse end members 28, only one of which has been shown. The sheet of stainless

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steel 24 is wrapped around the frame, so as to form an envelope for the frame, and in order to insulate the top portion, the cavity between the upper and lower portions of member 24 is preferably insulated by a sheet of insulating material 30, such as fiber glass or any other suitable insulating material. Due to the fact that water and steam are used in the treatment of a patient, the insulating material is preferably made from a non-corrosive material that does not have affinity for water.

As may best be seen by referring to Figure 2, inclined ledges 40 are supported from the side walls. Each of the ledges 40 supports an electric heater element 42, used in heating the cabinet. The ledges 40 and the heater element 42 are positioned below the table 22.

The bottom of the cabinet is provided with a metallic reservoir 50, fixedly attached to the walls in any suitable manner. This reservoir 50 provides a basin for a quantity of water 52, the height of which is limited by an overflow drain pipe 54. The lower end 56 of a thermometer 58 projects into the water, so that the temperature of the water may be read at any time.

The end wall 14 of the cabinet has mounted thereon a semi-cylindrical container 60, the bottom of which is provided with an outlet pipe 62, draining into the cabinet above the reservoir 50. A pipe 64 drains into the semi-cylindrical container 60 from a mixing valve 66, connected to a hot water main 68 and to a cold water main 70. By this arrangement, it can readily be seen that the temperature of the water in the reservoir 50 may be raised or lowered by changing the ratio of the water supplied to the reservoir from the hot water main 68 and the cold water main 70.

An electric heater element or electric heater elements 72, shown schematically in Figure 2, may be used in heating the water in the reservoir 50. These heater elements are especially desirable when an inadequate supply of hot water is available, or for some reason, the hot water supply fails. Furthermore, in the event water is added to the cabinet without being used immediately, the temperature of the water in the reservoir may cool and in that event, the temperature may be increased by using the heater elements. The temperature may be read at any time upon the thermometer 58.

In giving a hydrotherapy treatment, it is desirable to provide a shower bath for the patient. This has been accomplished by the use of a plurality of shower bath sprinklers or spray nozzles 80 connected to the water pipe 82, supplied with



water from the exterior pipe 84, having a two-way valve 86 mounted therein supplied with water from the outlet pipe 88 of a fluid pump 90 having an intake pipe 92 submerged in the water in the reservoir 50. The fluid pump 90 is driven by an electric motor 94 mounted in a cabinet 96, secured to the side wall 12. The cabinet 96 is provided with a suitable drain pipe 98, so that in the event the fluid pump 90 leaks, the water leaking is drained from the cabinet 96.

By manipulating the valve 86, the water from the fluid pump may be supplied to the spray nozzle 80, the water from the spray nozzles providing a shower bath for the patient and draining back into the reservoir 50. Whenever it is found desirable to operate the shower bath or spray bath, it is merely necessary to actuate the valve 86, so as to cause the water from the fluid pump 90 to drain through the outlet 100 into the semi-cylindrical container 60, thereby returning the water to the reservoir 50. This eliminates the necessity of stopping the motor 94 every time that the spray is interrupted.

The temperature of both the air and the mist in the cabinet and of the shower bath is preferably much higher than the normal body temperature. That being the case, it is quite desirable to provide a cool towel wrapped around the throat and neck of the patient. As may best be seen by referring to Figures 1 and 3, the head of the patient is located on the outside of the cabinet, the neck extending through an opening 102. A towel 104 is folded over a pipe 106 connected by means of a suitable swivel joint 108 to a pipe 110 extending through the end wall 14 of the cabinet. This pipe 106 is provided with openings permitting a plurality of sprays of water 112 to flow between the folds of the towel 104 that is draped or wrapped around the throat and neck of the patient. The pipe 110 is connected through a suitable valve 114 to the cold water main 70. By opening the valve 114, a cold spray of water is supplied to the towel wrapped around the patient's neck.

A suitable clip 116 attached to the end of the pipe 106 is used in holding the towel in position. As may best be seen in Figure 3, the pipe 106 may be oscillated about the elbow 108 into the dot-dash position, so as to be out of the way for the patient when entering and leaving the cabinet.

From the foregoing it may be readily seen that a patient receiving a treatment is kept comfortable by the use of cold applications to the throat and neck, the table is kept sanitary by being made from highly polished stainless steel, it feels comfortable by being properly insulated and a shower bath may be provided having the proper temperature without fear of scalding the patient or without fear of suddenly chilling the patient.

Before opening the cabinet after giving the patient a hydrotherapy treatment, the water in the reservoir is gradually cooled by adding cold water. As the water in the reservoir is being cooled, the shower is continually spraying the patient, so as to gradually reduce the temperature of the shower from the original hot temperature, which may be on the order of 120° F., to room temperature. Then, when the lid is opened, the patient does not suffer a shock from the sudden change of temperature. This is made possible by utilizing the reservoir, the cold water source of supply and the fluid pump for gradu-

ally reducing the temperature of the shower bath.

The use of the reservoir in the bottom of the cabinet for water lends itself to the use of medicated treatment, in that chemicals or drugs, having certain beneficial properties, may be added to the water in the reservoir. Thus, it is possible to provide sodium chloride baths, magnesium sulphate baths, eucalyptus baths, pine needle oil baths, wintergreen oil baths, or any other medicated bath. The chemicals or drugs are added to the water in the reservoir and dissolved therein or mixed therewith, as the case may be, before giving the patient a shower bath.

Although the reservoir has been shown in the bottom of the cabinet, the reservoir may be located elsewhere within the purview of this invention, if this is desirable.

Furthermore, heat may be radiated upon the patient by the use of suitable lamps, such as infra-red lamps, ultra-violet lamps, or other wave length lamps that may be mounted within the cabinet, preferably above or to the side of the patient, which lamps have not been shown in the drawings.

Although the preferred embodiment of the device has been described, it will be understood that within the purview of this invention various changes may be made in the form, details, proportion and arrangement of parts, the combination thereof and mode of operation, which generally stated consist in a device capable of carrying out the objects set forth, as disclosed and defined in the appended claims.

Having thus described my invention, I claim:

1. A hydrotherapy cabinet assembly including a cabinet, a removably mounted rest the outside of which is formed from stainless steel, said rest providing a heat conducting support for the patient in the cabinet, a reservoir for water mounted in the bottom of the cabinet, spray nozzles mounted in the top of the cabinet above the patient supported upon the rest, and a fluid pump for pumping water from the reservoir to the spray nozzles to provide a shower for the patient the water of which is supplied from the reservoir.

2. A hydrotherapy cabinet assembly including a cabinet, a removably mounted rest the outside of which is formed from sheet metal so as to provide a heat conducting support for the benefit of the patient in the cabinet, a reservoir for water mounted in the bottom of the cabinet, a thermometer having its scale located on the outside of the cabinet, said thermometer projecting into the water in the reservoir, spray nozzles mounted in the top of the cabinet above the patient supported upon the rest, and a fluid pump for pumping water from the reservoir to the spray nozzles to provide a shower for the patient the water of which is supplied from the reservoir.

3. A hydrotherapy cabinet assembly including a cabinet, a removably mounted rest including a stainless steel casing for supporting the patient in the cabinet, a reservoir for water mounted in the bottom of the cabinet, a thermometer having its scale located on the outside of the cabinet, said thermometer projecting into the water in the reservoir, spray nozzles mounted in the top of the cabinet above the patient supported upon the rest, a fluid pump for pumping water from the reservoir to the spray nozzles to provide a shower for the patient the water of which is supplied from the reservoir, and means for automatically cooling the throat and neck of the patient.



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4. A hydrotherapy cabinet assembly including a cabinet, a rest including a stainless steel casing forming a hollow cavity having a sheet of insulating material extending across said cavity, said rest providing a support for the patient in the cabinet, a reservoir for water mounted in the bottom of the cabinet, spray nozzles mounted in the top of the cabinet above the patient supported upon the rest, and a fluid pump for pumping water from the reservoir to the spray nozzles to provide a shower for the patient the water of which is supplied from the reservoir.

5. A hydrotherapy assembly including a cabinet, a rest including longitudinally and transversely extending frame members encased in a steel casing forming a hollow cavity in which cavity a sheet of insulating material is housed, said rest being removably mounted in the cabinet for supporting the patient, a reservoir for water mounted in the bottom of the cabinet, spray means for providing a shower for the patient supported upon the rest, and a fluid pump for pumping water from the reservoir to the spray means to provide a shower for the patient the water of which is supplied from the reservoir.

6. A hydrotherapy cabinet assembly including a cabinet, a rest mounted in the cabinet for supporting the patient, a reservoir for water associated with the cabinet, a thermometer for indicating the temperature of the water in the reservoir, spray means mounted in the cabinet for

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spraying the patient supported upon the rest, and a fluid pump for pumping water from the reservoir to the spray means to provide a shower for the patient, the water of which is supplied from the reservoir.

7. A rest for a patient receiving a hydrotherapy treatment in a cabinet, said rest including a frame, an envelope of stainless steel enclosing the frame, and insulating material positioned in the frame and located between opposite sides of the stainless steel envelope.

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