

PATENT SPECIFICATION

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DRAWINGS ATTACHED

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(54) APPARATUS FOR MEDICAL TREATMENT

(71) I, YOCHIO KATO, a Japanese subject, of 31, Nishinagahondori, Hyogo, Japan, do hereby declare the invention, for which I pray that a patent may be granted to me, and the method by which it is to be performed, to be particularly described in and by the following statement:—

This invention relates to a medical therapy and provides apparatus for treating a patient with garlic solution.

It is well-known that garlic contains every kind of vitamin, excepting vitamin D, and its stimulative character is useful to warm the human body and/or to promote the circulation of blood. Also, garlic contains about 0.8% of an oily substance named aneurine, and the results of some experiments show that if typhoid bacilli are put in a 1/200 aneurine solution, they are destroyed in only 5 minutes or so. Moreover, it is known from some reports that if a 1/30—40 garlic solution (original juice squeezed from garlic bulbs) is mixed in the nutrient medium where various bacilli are cultured, such bacilli cease to propagate themselves. Thus, garlic has a high sterilizing power which is scarcely found in any other medicinal substances. Moreover, garlic solution has resistance to aneurinase. If there is too much aneurinase in the body, the greater part of vitamin B₁ taken internally will be destroyed before being absorbed into the body. However, the combination of vitamin B₁ with garlic ingredient will prevent vitamin B₁ from being destroyed by aneurinase, with the result of complete absorption of vitamin B₁ into the body. Furthermore, it is well-known that garlic solution, if applied to a feverish affected part, is effective for removing the feverishness of the affected part.

The present invention intends to make good use of such useful components and characteristics of garlic so as to promote metabolism of the human body and to remove cholesterol in the blood vessels for physiological healing of functional disorder and also to heal skin diseases by the sterilizing

power inherent in garlic, by spraying garlic solution vigorously against the affected part of the body to give medicinal stimulus and to have garlic ingredients absorbed into the body.

According to the present invention, there is provided apparatus for treating patients with garlic solution comprising

a casing for enclosing at least part of the patient's body;

a container containing garlic solution;

spraying means including an air stream for spraying garlic solution into the casing so that, in use, said solution is sprayed onto the said part of the patient's body; and

ducting means for supplying garlic solution to the spraying means from the said container.

The casing may be shaped so that the cavity therein receiving said part of the patient's body corresponds generally to the shape of that part. Generally, the casing will be formed of two parts which can be assembled about said part of the patient's body and will be such as to enclose all or substantially all of the patient's body.

The container for garlic solution conveniently may be disposed above the casing in the operative configuration of the apparatus so that the solution can flow through the ducting means at least partially under gravity.

The spraying means may comprise a plurality of spray nozzles each connected to the said garlic solution-ducting means and to compressed gas-ducting means for entraining the garlic solution with a stream of air. Each nozzle may have a central outlet for garlic solution and a plurality of outlets for compressed gas arranged about said central outlet so that the discharged gas sprays the solution debouching from the central outlet into the casing under pressure.

The concentration of garlic solution for use in apparatus of the present invention should vary according to the kind of disease of a patient. For example, for skin diseases, such as favus including water-eczema, skin

cancer, chilblain and alopecia, juice squeezed from garlic bulbs or garlic solution of 100% (as hereinafter defined) is to be used, and for internal diseases, such as stomach trouble, liver trouble, heart trouble and the like, high blood pressure, paralysis, tuberculosis, pneumonia, tonsillitis, asthma, neurosis, women's disease, parasite trouble, constipation, piles and tumor, garlic solution of 10—70% conc. is to be used. Juice pressed out of garlic bulbs shall be regarded as 100% solution. In general, use of garlic solution of 50% conc. is recommended, but the concentration of solution may be varied, depending on the patient's physical condition and the degree of symptom.

Compressed air which is usually fed to the compressed gas ducts ranges from 2 to 7 atmospheres, preferably 4 or 5 atmospheres.

The duration of time for spraying garlic solution from nozzles is also to be varied depending on the degree of disease, but generally it is for 5—10 seconds, preferably 6 seconds, for one treatment. However, the spraying time may be divided into several parts, one or two seconds for each, with a fairly long interval of time therebetween.

In order to enhance the medical effect of the present invention still further, it is desirable that a patient takes a hot wash, bath or shower before using the apparatus of the present invention to open the pores of the body. Upon finishing the spraying of garlic solution, it is desirable for the patient to have a cold wash, bath or shower in order to close the pores, thereby keeping the sprayed garlic solution in the body and maintaining the stimulative property inherent in garlic for as long as possible in the body.

The following is a description by way of example only and with reference to the drawings of apparatus in accordance with the present invention.

In the drawings:—

Figure 1 is a front view of an apparatus according to the present invention;

Figure 2 is a rear elevation of the apparatus shown in Figure 1;

Figure 3 is a side elevation of the apparatus shown in Figure 1 (a hose portion being omitted);

Figure 4 is a side elevation in vertical section of the apparatus shown in Figure 1;

Figures 5, 6 and 7 are side elevations in vertical section of other apparatus according to the present invention;

Figure 8 is a side view of a portion of the apparatus of Figure 1 showing the nozzle assembly; and

Figure 9 is the same view as Figure 8 but in vertical section.

The same reference numerals have been used in each of the Figures for identical or similar parts.

In general, each apparatus illustrated com-

prises a casing formed of a front part 1 and a rear part 2 clamped together by catches 6 to define a chamber shaped as shown in the respective Figures 4, 5, 6 and 7 to receive a patient. These parts may be made, for example, of plastics, aluminium, plaster, paper or clay. The casing parts 1, 2 are secured to base plates 3, 4 respectively and these base plates are supported by castors 5 for movement over a surface. Support members 7 extend upwardly from the base plates 3, 4 and support a plurality of supporting rods 8, each of which rods carries one or more nozzle assemblies 9. A garlic solution supply tank 10 is mounted on the top of each casing part 1, 2 or is supported by the respective support member 7 at a level above the casing. A main hose 11 depends from an outlet in the base of each tank 10 and is connected via "T"-shaped joints 12 to a plurality of hose members 13, each of which hose members 13 is connected to a nozzle assembly 9 (see Figures 8 and 9). Each of the nozzle assemblies 9 is connected also to a hose member 14 for supplying compressed air. These hose members 14 associated with each casing part 1, 2 are connected to a main hose (not shown) for that casing part and these main hoses are in turn connected to a source of compressed air via a control valve.

Figures 1—4 illustrate an apparatus wherein the casing receives a patient in a standing position and encloses the patient's body except for his or her head. In this case, the nozzles 9 are provided, in the required number, at both ankle regions (a), at both knee regions (b), at the abdominal region (c) and at the chest region (d) of the front casing part 1, and at both arm regions (e), at the waist region (f), at the back region (g) and at both shoulder regions (h) of the rear casing part 2.

Figure 5 shows an apparatus according to the present invention wherein the casing receives a patient in a seated position and encloses the patient's body except for his or her head. The nozzles 9 in this apparatus are arranged in similar manner to those in the apparatus of Figures 1—4.

Figure 6 shows an apparatus according to the present invention wherein the casing receives a patient in a seated position with his or her legs stretched out and encloses the lower part of the patient's body. In this case, the nozzles 9 are provided at both knee regions (b), at lower back region (f), at the popliteal region (i) and at the sole region (j) of the casing.

Figure 7 shows a modification of the apparatus of Figures 1—4 wherein the casing covers the patient's head with nozzles 9 provided at the forehead region (k) and at the back neck region (l) of the casing.

Figures 8 and 9 show the detailed con-

struction of the nozzle assembly 9 used in the apparatus of Figures 1—4, 5, 6 and 7. The assembly 9 comprises a nozzle body *n* having a first inlet connected to garlic solution hose member 13 and a second inlet connected to compressed air hose member 14. The first inlet communicates with a garlic solution storage chamber 15 formed in one end of the nozzle body *n*. A nozzle head 16 is secured to said one end (i.e. the front end) of the nozzle body *n* and has a main bore therein communicating with said chamber 15. The main bore is reduced in cross-section at its free end by an insert member which slidably receives a sharp end of a needle 17. The insert member is tapered inwardly at its front end and the needle 17 extends rearwardly through the nozzle body *n* to a regulating cock 18 secured to the rear of said body. The front end of the nozzle head 16 is secured in a bore extending through the wall of the appropriate casing part 1, 2 so that garlic solution flows under gravity from the container, via the main bore 11, and can be sprayed at a rate determined by the spacing of the tip of needle 17 from the front end of the insert member, into the casing.

The second inlet communicates with a chamber 19 formed in the rear end of the nozzle body *n*. A bore 20 extends from the cavity 19 through the body *n* and the nozzle head 16 to an air distributing chamber 21 formed in the nozzle head. A plurality of fine bores 22 extend forwardly from the chamber 21 to direct air into the stream of garlic solution discharged from the nozzle head, thereby to entrain the garlic solution in the air stream.

The nozzle assembly is secured to the respective supporting rod 8 by passage of the rod through a hole 25 in a bracket portion 24 of the nozzle body *n* and clamping the body *n* to the rod 8 by means of screw 26.

In operation of the apparatus illustrated in any one of Figures 1, 5, 6 and 7, the casing is assembled about the patient by clamping together the casing parts 1, 2 by means of the catches 6. Compressed air is then supplied to the nozzle assemblies 9 via the hose members 14 whilst garlic solution from tanks 10 flows via main hose 11, joints 12 and hose members 13 to said nozzle assemblies. The garlic solution supplied to each nozzle assembly passes into chamber 15 and thence through the main bore of the nozzle head 16 at a rate controlled by the position of the tip of needle 17 as set by operation of the regulating cock 18. The compressed air passes via chamber 19, lateral bore 20 and chamber 21 to be discharged through slit 22 into the stream of garlic solution. This causes the garlic solution to be vigorously sprayed into the casing in the form of a mist against the appropriate part of the patient's body. It is

preferable to spray the garlic solution at 4 to 5 atmospheres for a period of 6 seconds. A suitable concentration of garlic solution is 50%, although it should be varied according to the kind of disease to be treated and the physical condition of the patient. Furthermore, waste of garlic solution can be prevented by selective use of the casing shape (as shown in Figures 4 to 7) according to the affected part of the patient's body, and by selective use of nozzles by means of the regulating cocks 18. The apparatus shown in Figures 1—4, 5, 6 and 7 are effective in spraying garlic solution evenly against the whole of the affected part of a patient's body at a pressure which not only stimulates the surface of the body but also makes the garlic solution penetrate deep into the body.

WHAT I CLAIM IS:—

1. Apparatus for treating patients with garlic solution comprising a casing for enclosing at least part of the patient's body;

a container containing garlic solution; spraying means including an air stream for spraying garlic solution into the casing so that, in use, said solution is sprayed onto the said part of the patient's body; and

ducting means for supplying garlic solution to the spraying means from the said container.

2. Apparatus as claimed in claim one wherein the garlic solution is delivered under gravity into an air stream emitting from a nozzle under between 2 and 7 atmospheres pressure.

3. Apparatus as claimed in claim 1 or 2 wherein the casing is shaped so that the cavity therein receiving said part of the patient's body corresponds generally to the shape of that body part.

4. Apparatus as claimed in claims 1, 2 or 3 wherein the casing is formed of two parts which can be assembled about said part of the patient's body.

5. Apparatus as claimed in any one of the preceding claims wherein the casing is adapted to enclose substantially all of a patient's body.

6. Apparatus as claimed in any one of the preceding claims wherein the container is disposed above the casing in the operative configuration of the apparatus.

7. Apparatus as claimed in any one of the preceding claims wherein the spraying means comprises a plurality of spray nozzles each connected to the said garlic solution ducting means and to compressed gas-ducting means for spraying the garlic solution.

8. Apparatus as claimed in claim 7 wherein each nozzle comprises a central outlet for garlic solution and a plurality of outlets for compressed gas arranged about said central outlet so that the discharged gas sprays the



struction of the nozzle assembly 9 used in the apparatus of Figures 1—4, 5, 6 and 7. The assembly 9 comprises a nozzle body *n* having a first inlet connected to garlic solution hose member 13 and a second inlet connected to compressed air hose member 14. The first inlet communicates with a garlic solution storage chamber 15 formed in one end of the nozzle body *n*. A nozzle head 16 is secured to said one end (i.e. the front end) of the nozzle body *n* and has a main bore therein communicating with said chamber 15. The main bore is reduced in cross-section at its free end by an insert member which slidably receives a sharp end of a needle 17. The insert member is tapered inwardly at its front end and the needle 17 extends rearwardly through the nozzle body *n* to a regulating cock 18 secured to the rear of said body. The front end of the nozzle head 16 is secured in a bore extending through the wall of the appropriate casing part 1, 2 so that garlic solution flows under gravity from the container, via the main bore 11, and can be sprayed at a rate determined by the spacing of the tip of needle 17 from the front end of the insert member, into the casing.

The second inlet communicates with a chamber 19 formed in the rear end of the nozzle body *n*. A bore 20 extends from the cavity 19 through the body *n* and the nozzle head 16 to an air distributing chamber 21 formed in the nozzle head. A plurality of fine bores 22 extend forwardly from the chamber 21 to direct air into the stream of garlic solution discharged from the nozzle head, thereby to entrain the garlic solution in the air stream.

The nozzle assembly is secured to the respective supporting rod 8 by passage of the rod through a hole 25 in a bracket portion 24 of the nozzle body *n* and clamping the body *n* to the rod 8 by means of screw 26.

In operation of the apparatus illustrated in any one of Figures 1, 5, 6 and 7, the casing is assembled about the patient by clamping together the casing parts 1, 2 by means of the catches 6. Compressed air is then supplied to the nozzle assemblies 9 via the hose members 14 whilst garlic solution from tanks 10 flows via main hose 11, joints 12 and hose members 13 to said nozzle assemblies. The garlic solution supplied to each nozzle assembly passes into chamber 15 and thence through the main bore of the nozzle head 16 at a rate controlled by the position of the tip of needle 17 as set by operation of the regulating cock 18. The compressed air passes via chamber 19, lateral bore 20 and chamber 21 to be discharged through slit 22 into the stream of garlic solution. This causes the garlic solution to be vigorously sprayed into the casing in the form of a mist against the appropriate part of the patient's body. It is

preferable to spray the garlic solution at 4 to 5 atmospheres for a period of 6 seconds. A suitable concentration of garlic solution is 50%, although it should be varied according to the kind of disease to be treated and the physical condition of the patient. Furthermore, waste of garlic solution can be prevented by selective use of the casing shape (as shown in Figures 4 to 7) according to the affected part of the patient's body, and by selective use of nozzles by means of the regulating cocks 18. The apparatus shown in Figures 1—4, 5, 6 and 7 are effective in spraying garlic solution evenly against the whole of the affected part of a patient's body at a pressure which not only stimulates the surface of the body but also makes the garlic solution penetrate deep into the body.

WHAT I CLAIM IS:—

1. Apparatus for treating patients with garlic solution comprising
a casing for enclosing at least part of the patient's body;
a container containing garlic solution;
spraying means including an air stream for spraying garlic solution into the casing so that, in use, said solution is sprayed onto the said part of the patient's body; and
ducting means for supplying garlic solution to the spraying means from the said container.
2. Apparatus as claimed in claim one wherein the garlic solution is delivered under gravity into an air stream emitting from a nozzle under between 2 and 7 atmospheres pressure.
3. Apparatus as claimed in claim 1 or 2 wherein the casing is shaped so that the cavity therein receiving said part of the patient's body corresponds generally to the shape of that body part.
4. Apparatus as claimed in claims 1, 2 or 3 wherein the casing is formed of two parts which can be assembled about said part of the patient's body.
5. Apparatus as claimed in any one of the preceding claims wherein the casing is adapted to enclose substantially all of a patient's body.
6. Apparatus as claimed in any one of the preceding claims wherein the container is disposed above the casing in the operative configuration of the apparatus.
7. Apparatus as claimed in any one of the preceding claims wherein the spraying means comprises a plurality of spray nozzles each connected to the said garlic solution ducting means and to compressed gas-ducting means for spraying the garlic solution.
8. Apparatus as claimed in claim 7 wherein each nozzle comprises a central outlet for garlic solution and a plurality of outlets for compressed gas arranged about said central outlet so that the discharged gas sprays the



solution debouching from the central outlet into the casing with a stream of air under pressure.

- 5 9. Apparatus as claimed in any one of the preceding claims wherein the garlic solution is of 100% concentration (as hereinbefore defined).

- 10 10. Apparatus as claimed in any one of claims 1 to 8 wherein the garlic solution is of 10—70% concentration.

11. Apparatus as claimed in claim 10 wherein the garlic solution is 50% concentration.

12. Apparatus as claimed in claim 1 substantially as hereinbefore described with reference to and as illustrated in Figures 8 and 9 and 1 to 4, 5, 6 or 7. 15

For the Applicants:

F. J. CLEVELAND & COMPANY,
Chartered Patent Agents,
Lincoln's Inn House,
40—43, Chancery Lane,
London, W.C.2.

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