PATENT SPECIFICATION

DRAWINGS ATTACHED

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COMPLETE SPECIFICATION

Apparatus for Supervoltage Potential Therapy

I, HEISUKE HARA, a Japanese subject, of 32 Oyamahigashi-Machi, Itabashi-Ku, Tokyo-To, 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 apparatus for supervoltage potential therapy, that is apparatus for applying a high electric potential to the human body or to the bodies of other animals for therapeutic purposes.

Heretofore, a large number of methods and apparatuses for imparting high electric potential to the human body to treat various ailments thereof has been proposed or practised, but none of these has produced fully satisfactory results as far as I am aware.

The present invention, more specifically, concerns a new and improved device of the kind referred to above whereby a supervoltage (supertension) high-frequency potential is imparted as a charge to a human body suffering from an ailment thereby to cause changes in the blood electrolytic components due to body skin ionization and to bring the human body to a state of alkalosis, whereby the body can be cured or relieved of the ailment.

An object of the present invention is to provide an apparatus for supervoltage potential therapy of relatively simple construction and operation by means of which apparatus living subjects suffering from various ailments can be treated for cure of or relief from the ailments in a safe manner.

In accordance with the present invention, there is provided an apparatus for supervoltage potential therapy comprising the combination of a base made of an electrically insulative material, a supervoltage high-frequency transformer having primary and secondary windings and mounted on said base, a platform made of an electrically insulative material and supported by insulators in a horizontal position above said transformer, a conductor plate disposed on the upper surface of said platform and adapted to support a living subject placed thereon for therapeutic treatment, and a high-frequency generator having an output connected to the primary winding of said transformer, and characterised in that one terminal of said secondary winding of the transformer is earthed and the other terminal thereof is passed through said platform and connected to said conductor plate.

The invention will now be described by way of example with reference to the accompanying drawing in which:

Figure 1 is a plan view showing one example of apparatus embodying the invention; and

Figure 2 is an elevaitonal view of the apparatus shown in Figure 1.

Referring to Figures 1 and 2 which show a preferred embodiment of the invention, the principal components constituting the apparatus illustrated are a high-frequency current generator 1 and a supervoltage high-frequency transformer assembly 2.

The generator 1 comprises, internally, an ordinary high-frequency generating circuit for generating current of high frequency of, for example, from 100 to 500 kilocycles per second, such as, for example, a Hartley oscillator circuit, a Colpitts oscillator circuit, or a Pierce G—C connection type oscillator circuit. The generator 1 is further provided with a high-frequency current adjuster 3, a power source switch 4 for turning on and off power from a high-voltage power line P, and high-frequency current output terminals 5.

The supervoltage high-frequency transformer assembly 2, the transformer of which is designed to produce a high voltage of, for example, from a number of hundreds of kilovolts to a number of thousands of kilovolts, comprises a coil spool 8 made of an insulating material, a high-frequency primary coil 9 and a supervoltage high-frequency secondary coil 10 wound overlappingly on the spool 8, a platform 13 made of an insulator such as a marble, high-voltage insulator columns 14 for

supporting the platform 13, and a base 15 made of an insulating material such as wood on which the columns 14 and transformer coil assembly 8, 9 and 10 are supported.

The low-voltage terminal 16 of the secondary coil 10 is grounded (earthed) at 17 and the other or high-voltage terminal 11 is passed through the platform 13 and connected to a metal conductor plate 12 placed on the platform 13. The high-frequency generator terminals 5 are connected by way of respective connecting lines 7 to the terminals of the primary coil 9.

The apparatus of the above described construction and arrangement operates in the following manner. When the power source switch 4 is closed, a voltage of high frequency of from 100 to 500 kilocycles per second is supplied to the primary coil 9, whereupon a high voltage of a number of hundreds to a number of thousands of kilovolts is induced at the high-voltage terminal 11 of the secondary coil 10 and, therefore, is applied to the conductor plate 12.

In the use of the above described apparatus for treatment of a patient, the patient 6 is first placed on the conductor plate 12 in a sitting position with his exposed legs in contact with the conductor plate 12. Then the power source switch 4 is closed, whereupon a supervoltage high-frequency potential is imparted to the patient 6 through the conductor plate 12. Consequently, the patient's body is directly charged with a supervoltage high-frequency potential.

Since the patient's body is charged with a high-voltage charge of from a number of hundreds to a number of thousands of kilovolts, a powerful corona discharge is produced from the surface of the patient's body, particularly from the projecting or prominent parts such as the head and shoulders. It has been found that, because of this powerful corona discharge, the patient experiences a light sensation at the parts where the discharge occurs which sensation feels as though a shower of sand were falling thereon.

However, since the electric charge, itself, is at a frequency of from 100 to 500 kc./s., no irritation or shock is imparted electrically to the patient. Although in actual practice this electrical charge is applied for a period of from 5 to 10 seconds for each dose of treatment, it has been found that a longer period of application, for example 60 seconds, produces no danger or harmful effect whatsoever to the patient. In some cases where the sensation due to the corona discharge as felt by the patient is excessively uncomfortable, the frequency of the applied charge is suitably adjusted by means of the current adjuster 3.

When the probable effects of applying a supervoltage high-frequency potential to a patient are considered, it is logical to conceive, in the first place, of ionization at the surface of the patient's body. However, since a high-voltage charge results in a surface current, no effect other than the co-called skin effect has heretofore been considered to occur when a human body is charged with a high-voltage charge. Accordingly, such treatment has been thought to have therapeutic value only in treatment of skin diseases and ailments.

As a result of research extending over a long period, I have discovered that, when the apparatus as herein described and claimed is used to treat a human body, changes occur in the electrolytic components of the blood of the human body. More specifically, I have found during experiment in general that an increase in the calcium ions in the blood and, simultaneously, a decrease in the phosphorus and magnesium in the blood occur.

From other experiments on human bodies, it has been learned that the above described treatment has almost no effect on a healthy human body. Almost no changes are detectable in the blood plasma (serological) total calcium (Ca), the blood serum calcium ions (Ca^{++}), the blood serum magnesium (Mg), the blood serum inorganic phosphorus (P), cholesterol, and proteins. The only change observable is a slight decrease in the blood sugar value.

It has been found to be safe to apply a voltage as high as 1,000 kv. by means of the apparatus of the invention.

It has been found that, in the case of a person having a disease or bodily disorder, the above described treatment results in an increase in the blood serum calcium ions (Ca^{++}) and a decrease in the blood serum inorganic phosphorus (P) and blood serum magnesium (Mg), whereby the patient is brought to a state of alkalosis, and improvement is observable even after only 10 days of treatment as is indicated in the accompanying Table 1.

TABLE 1:
Blood Analysis Before and After 10 Day's Treatment of 10 Patients Having Various Ailments, Each Being Subjected To One Dose Per Day of 1,000 KV Applied For 10 Seconds.

Example No.	Patient	Age	Sex	Ailment (diagnosis)	Before or after treatment	Components within blood serum (mg./dl)				Progress
						Total Ca	Ca^{++}	Total Mg	P	
1	H	8	Male	Enuresis Nocturna	Before	9.7	3.4	1.8	3.8	Treatment stopped After Seventh Day
					After	9.8	4.0	1.7	3.7	
2	0	40	Male	Common Headache	Before	9.3	3.3	1.6	3.6	Improved
					After	9.7	3.8	1.4	3.4	
3	F	29	Female	Morning Sickness	Before	9.4	3.2	2.1	3.9	Improved
					After	9.8	3.9	1.8	3.4	
4	Y	48	Male	Stiff Shoulder	Before	10.0	3.1	2.0	4.0	Complete Recovery
					After	9.7	3.8	1.7	3.8	
5	I	42	Female	Gastritis	Before	9.6	3.4	1.9	3.9	Stomach Ache Disappeared
					After	9.6	3.8	1.9	3.9	

TABLE 1: Continued

Blood Analysis Before and After 10 Day's Treatment of 10 Patients Having Various Ailments, Each Being Subjected To One Dose Per Day of 1,000 KV Applied For 10 Seconds.

Example No.	Patient	Age	Sex	Ailment (diagnosis)	Before or after treatment	Components within blood serum (mg./dl)				Progress
						Total Ca	Ca^{++}	Total Mg	P	
6	T	51	Male	Asthma	Before	9.8	3.2	1.8	3.8	Improved
					After	9.8	3.7	1.7	3.6	
7	S	55	Female	Neuralgia	Before	9.7	3.4	1.9	3.9	Improved
					After	9.8	3.8	1.6	3.6	
8	F	36	Female	Articular Rheumatism	Before	9.4	3.5	2.0	4.0	Improved
					After	9.7	3.8	1.8	3.7	
9	K	62	Male	Hypertension	Before	9.4	3.6	2.1	4.1	Blood Pressure Lowered
					After	9.5	4.0	1.8	3.6	
10	N	51	Male	Insomnia	Before	9.7	3.7	1.9	4.0	Complete Recovery
					After	10.0	4.1	1.7	3.5	

The results shown in Table 1 are from a report on experiments by Fumimasa Yanagisawa, M.D., Doctor of Agriculture, Head of the Clinical Testing Department, Tokyo Municipal Health Research Institute.

The remarkable efficacy of therapy by the apparatus of the invention for a very wide range of ailments can be further shown by the results of clinical experiments over long periods as exemplified by the results indicated in the accompanying Table 2.

The clinical experiments to which Table 2 relates were carried out under the direction of Heisuke Hara, M.D., Director of Hakuju Clinic, Itabashi-ku, Tokyo, Japan.

TABLE 2

Results of clinical experiments (Dosage: 1,000 kv., 200 kc./s., applied 10 seconds per dose, 1 dose per day)

Example No.	Patient	Age	Sex	Ailment (diagnosis)	Progress period before start of therapy	Number of doses	Side effects	Efficacy
1	A	55	Male	Insomnia	6 months	20	None	Complete cure
2	B	48	Male	Thoracic neuralgia	2 months	15	„	Remarkable; complete cure
3	C	62	Male	Common headache	1 year	50	„	Remarkable; complete cure
4	D	42	Male	Ischiatic neuralgia	2 months	60	„	Remarkable; complete cure
5	E	50	Male	Angina pectoris	1 year	120	„	Remarkable; complete cure
6	F	57	Male	Myocardiac infarction	1 yr. 6 mos.	20	„	Remarkable; improvement
7	G	15	Female	Ozena	2 years	35	„	Remarkable; improvement
8	H	65	Male	Hypertension	1 yr. 6 mos.	68	„	Remarkable; normally stabilized
9	I	70	Female	Arteriosclerosis	3 years	55	„	Effective; improvement
10	J	34	Female	Pyrrhoea	2 years	64	None	Remarkable; complete cure
11	K	58	Male	Myasthenia	1 yr. 6 mos.	60	„	Remarkable; complete cure
12	L	30	Male	Neurosis	1 year	30	„	Remarkable; improvement

TABLE 2 (continued)

Example No.	Patient	Age	Sex	Ailment (diagnosis)	Progress period before start of therapy	Number of doses	Side effects	Efficacy
13	M	62	Male	Cataract (initial stage)	8 months	70	„	Remarkable; complete cure
14	N	31	Female	Constipation	over 2 years	60	„	Effective; improvement
15	O	28	Female	Acid Dyspepsia	6 months	30	„	Remarkable; improvement
16	P	73	Male	Hemiplegia	2 years	80	„	Effective; improvement
17	Q	71	Female	Hemiplegia	over 2 years	40	„	No change
18	R	64	Female	Hemiplegia	3 years	30	None	Effective; a little improvement
19	S	35	Female	Facial paralysis	1 yr. 2 mos.	20	„	No change
20	T	41	Female	Facial paralysis	20 days	30	„	Remarkable; complete cure
21	U	56	Male	Chronic nephritis	over 2 years	30	„	No change
22	V	50	Male	Chronic nephritis	over 1 year	60	„	Remarkable; improvement
23	W	8	Male	Enuresis nocturna	over 5 years	55	„	Remarkable; complete cure
24	X	7	Female	Enuresis nocturna	over 4 years	70	„	Remarkable; complete cure
25	Y	30	Female	Loss of appetite; insomnia	over 1 year	30	„	Effective; improvement

The output frequency of the generator used in the apparatus of the present invention is from 100 kc./s. to 500 kc./s., and the output potential of the transformer generally is from 200 kv. to 2,000 kv., but depending on the necessity, an output potential of 4,000 kv. can be used.

As is apparent from the above description, by the use of the apparatus of the present invention, a supervoltage high-frequency potential is imparted as a charge to a human body to ionize the body and to cause changes in the electrolytic components within the blood of the body without causing an electric current to flow directly through the body as in electrical therapeutic techniques known heretofore. As a result of this treatment, the human body is brought to a constitutional state of alkalosis, whereby substantial therapeutic efficacy is exhibited in the treatment for a wide range of ailments as indicated in Tables 1 and 2.

Since the electrical charge used in the apparatus of the invention is at a high frequency, there is no danger to the patient, even in the unlikely event that the patient, through error or accident, comes into contact with a grounded (earthed) object.

The apparatus of the present invention should not be confused with any of the electrical therapy apparatuses known heretofore. For example, it differs completely from apparatuses designed for franklinization (therapy utilizing direct-current electrostatic charge) which are relics from the history of scientific therapy, the use of a supervoltage high-frequency charge being a unique feature of the present invention.

Furthermore, the apparatus of the invention differs completely in construction, therapeutic technique, and principle from apparatuses for the so-called solenoid and d'arsonvalization therapeutic methods which were practised for certain periods several years ago. Thus, the present invention provides an absolutely new therapeutic apparatus.

The most important feature of the present invention is that the platform 13 and conductor plate 12 for applying electric charge to the patient are disposed above a high-voltage transformer, the patient to be treated being placed on the conductor plate 12. The conductor plate preferably is separated by a substantial distance, advantageously over four feet, from any electrically grounded part of the apparatus.

By this arrangement, the following advantages are attained, maximum therapeutic efficacy being obtained.

a) Since the conductor plate 12 for charging the patient and platform 13 are disposed at a high position relative to the ground (earth) and the apparatus base, the electrostatic capacitance of the conductor plate 12 with respect to the ground can be minimised, and the impedance with respect to high frequency of the circuit in which the conductor plate 12 is inserted becomes high. Accordingly, both the loss of corona discharge from the patient's body due to the supervoltage high-frequency potential and the discomfort to the patient can be minimized.

This advantage is of high importance in actual practice of therapy.

b) Since it is possible to keep the above-mentioned electrostatic capacitance relative to ground at a minimum value, there is no cause for concern over resonance phenomena, and a potential at an extremely high frequency can be readily used thereby to facilitate the effective ionization of the body skin of the patient.

While in the foregoing disclosure the present invention has been described with respect to an embodiment thereof and examples of practice all related to the use of the apparatus of the invention for therapeutic treatment of the human body, it will be obvious that the apparatus can, with minor changes, be used with equal effectiveness for the treatment of animals other than humans, principally for veterinary purposes.

WHAT I CLAIM IS:—

1. Apparatus for supervoltage potential therapy comprising the combination of a base made of an electrically insulative material, a supervoltage high-frequency transformer having primary and secondary windings and mounted on said base, a platform made of an electrically insulative material and supported by insulators in a horizontal position above said transformer, a conductor plate disposed on the upper surface of said platform and adapted to support a living subject placed thereon for therapeutic treatment, and a high-frequency generator having an output connected to the primary winding of said transformer, and characterised in that one terminal of said secondary winding of the transformer is earthed and the other terminal thereof is passed through said platform and connected to said conductor plate.

2. Apparatus as claimed in claim 1 in which the generator is capable of producing an output at any output frequency from 100 kilocycles per second to 500 kilocycles per second.

3. Apparatus as claimed in claim 1 in which the transformer is capable of producing an output across the transformer secondary coil having any potential from 200 kilovolts to 4,000 kilovolts.

4. Apparatus as claimed in claim 1 in which the conductor plate is separated by a substantial distance, preferably over four feet, from any electrically grounded part of the apparatus.

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2. Apparatus as claimed in claim 1 in which the generator is capable of producing an output at any output frequency from 100 kilocycles per second to 500 kilocycles per second.

3. Apparatus as claimed in claim 1 in which the transformer is capable of producing an output across the transformer secondary coil having any potential from 200 kilovolts to 4,000 kilovolts.

4. Apparatus as claimed in claim 1 in which the conductor plate is separated by a substantial distance, preferably over four feet, from any electrically grounded part of the apparatus.

* C L M S *

5. Apparatus for supervoltage potential therapy substantially as herein described with reference to and as illustrated in the accompanying drawing.

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