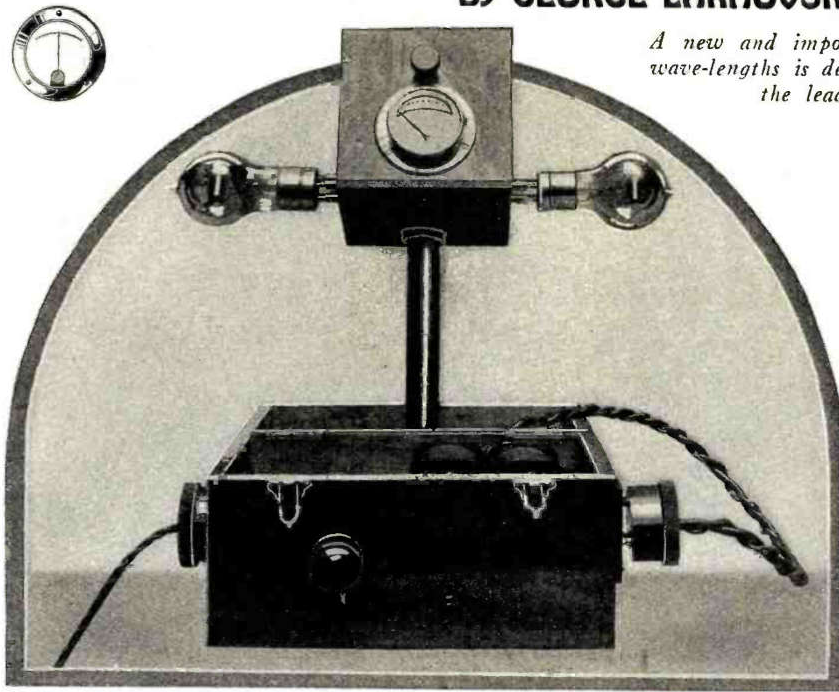


Curing Cancer with Ultra Radio Frequencies

By GEORGE LAKHOVSKY

A new and important application of very short wave-lengths is described in this article by one of the leading French scientists.



The two-meter oscillator used by the author in his experiments with the supply box containing the necessary controls and transformers.

SINCE November, 1923, I have published in various technical and radio publications, several papers in which I explained by theory that the instinct or special feeling, which permits birds to direct themselves in space, is only the results of the emission and reception of rays by living beings. While developing this theory, I explained how thoroughly I was convinced that science will discover, some day, not only the nature of microbes by the radiation which they produce, but also a method of killing disease bacilli within the human body by means of the proper radiations.

The researches I have made by means of special apparatus have shown such results, that I believe my theory is correct. This theory is that life is born from radiations, kept going by radiation and suppressed by any accident producing the destruction of the oscillatory equilibrium, especially by the radiations of certain microbes, which suppress those of the weaker cells.

Before going any further in our reasoning, it is necessary, in order to present the facts to the uninitiated reader, to imagine what oscillations really are. The motion of a pendulum will be used for this explanation. When a pendulum is displaced from the position of equilibrium, it moves back and forth producing what are known as ochrone oscillations, until the energy stored is entirely exhausted. By means of a motor, a spring, or an electro-magnet, it is possible to keep the motion of the pendulum of constant amplitude, producing undamped oscillations. If, on the contrary, the source of power is removed, the oscillations die down and it is necessary not only to re-apply the power sustaining the oscillations, but also to furnish additional energy to start the pendulum in motion. This oscillation of a pendulum reproduces exactly what happens in the cells of a living being.

BODY COMPOSITION

Our organs are composed of cells formed of protoplasm containing various mineral matters and acids, such as iron, chloride,

phosphorous, etc. It is by the combination of these elements that the cells detect outside waves and vibrate continuously at a very high frequency, probably higher than the period of X-rays or over all other vibrations known and measured today. The amplitude of cell oscillations must reach a certain value, in order that the organism be strong enough to repulse the destructive vibrations from certain microbes.

THE new application of short wave-length oscillations described in this article is one of the most important ever found, and we are pleased to present to our readers this article by Mr. George Lakhovsky, the well known French scientist.

The experiments described were carried out in collaboration with several doctors and scientists of high standing and it seems from results obtained, that the very high frequency treatments will play an important rôle in the future.

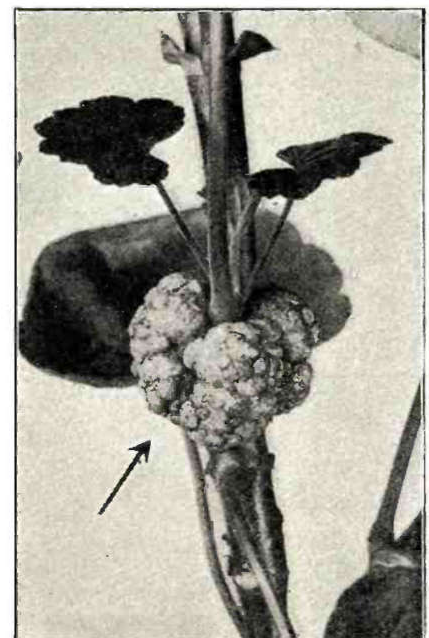
We shall publish in a later issue another article on this new system, together with the effects of ultra radio frequencies in the treatment of other diseases in human beings.

The astrophysicians are actually carrying out experiments of great interest on the existence of vibrations, which have been called penetration rays and of which the frequency is higher than that of X-rays and of the alpha, beta and gamma rays of radium. Such rays, according to the theory, are produced by the earth itself and some others come from outside space. Some accurate measurements have proved the correctness of this theory. Therefore, it is quite permissible to believe that these penetration rays, or at least some of them, produce the vibratory motion of living cells and consequently their life.

For instance, let us suppose a cell vibrates at a certain frequency and a microbe vibrates at a different frequency; the microbe begins to fight the cell, and sickness is started. If the cell cannot repel the stronger vibrations and if the amplitude of its own vibration decreases, the microbe gains and its vibrations in decreasing and stopping those of the cells, bring dangerous sickness or death. If, on the contrary, the living cell is started vibrating with the proper amplitude by inside or outside causes, the oscillatory attack is repulsed. Such is my theory. The problem is somewhat similar to the situation in which a rescuer finds himself when, coming to help a friend in a dangerous situation, finds himself fighting hand to hand against strong aggressors. The rescuer does not dare to fire his gun, fearing to harm his friend mixed up with the aggressors in the melee. Similarly, microbes and healthy cells are all exposed to electric or radio-active action, which could be used to destroy the unwanted rays and it is difficult to suppress them without harming or killing at the same time the cells which are to be treated. In fact, since Pasteur, scientists have been constantly searching for means of destroying microbes. The great difficulty with all methods found was that in destroying, the bacillae cell was attacked too. The experience gained in cancer and tuberculosis treated with radium, X-ray, or ultra-violet rays, shows how difficult is the work of the investigators.

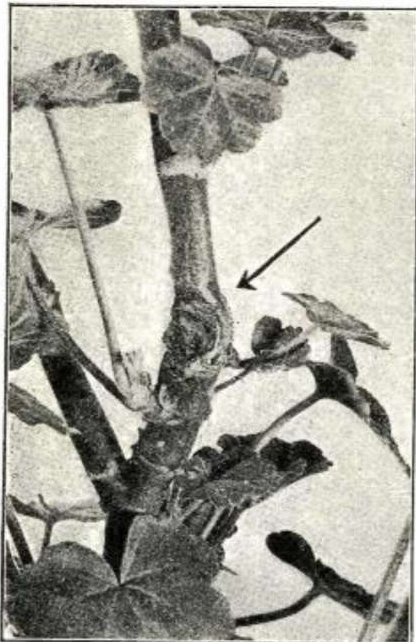
A NEW METHOD

The remedy in my opinion, is not to kill the microbes in contact with the healthy cells, but to reinforce the oscillations of the cell either directly by reinforcing the radio activity of the blood or in producing on the cells a direct action by means of the proper rays. During January, 1924, I began to build, according to this theory, and with



A plant inoculated with cancer before treatment. The arrow points to the tumor growing on the limb.

the purpose of therapeutic applications, an apparatus, which I have called Radio-Cellulo-Oscillator, with the firm belief that the cells vibrating at extremely short wave-lengths would find their own in the Hertzian waves, which have the properties of producing extremely short harmonics. The cell with very weak vibrations, when placed in the field of multiple radiations, finds its own frequency and starts again to oscillate normally through the phenomenon of resonance. This type of vibration produced by radio waves which I propose to use, is harmless, unlike those of x-rays and radium. Their applica-



The plant after treatment. The arrow shows the part of limb where the tumor was.

two living beings such as a cell and a microbe, are in contact, that the rays produced by the Radio-Cellulo-Oscillator have any direct effect upon cellular structure.

The experiments which I carried out at the Salpetriere Hospital in Paris, in the service and with the collaboration of Prof. Gosset, were made with plants innoculated with cancer, and the results were described in a paper presented on July 26, last year, before the Biological Society. The text of this paper follows.

"One knows that it is possible to produce by innoculation of *Bacterium tumefaciens* in plant tumors similar to those of cancer in animals. One of us obtained experimentally by this method, a great number of tumors. These had various degrees of development. Some of them dry up partially, but do not die entirely until the entire plant or at least the limb bearing the tumor dies. Even removed by surgical methods, these tumors grew again on the sick limb.

THE RADIO CELLULO-OSCILLATOR

"We propose to describe in this paper, the action of electromagnetic waves of very high frequency obtained by means of the Radio-Cellulo-Oscillator of George Lakhovsky. This apparatus produces wave-lengths of the order of two meters and less, corresponding to 150 million cycles per second. A first plant was submitted to the effect of the radiation one month after being innoculated with cancer; at this time small tumors of the size of a cherry stone were visible upon it. This plant was submitted to the rays twice, for three hours each time. During the following days, the tumors continued to grow rapidly in the same way as those on plants, which had not been submitted to the effect of radiations. However, 16 days after the first treatment, the tumors began to shrink and dry up. A few days later the tumors were entirely dried up and could be very easily detached from the limb of the plant by merely touching them. The drying action of the radio frequency radiations is selective and affects only the sick part of the plant. Even the inside sick tissues were destroyed, although they were next to healthy cells in the center of the limb, showing that the radiations had not affected the healthy parts.

THE LENGTH OF TREATMENT

Another plant was treated in the same way, except that it was exposed 11 times, for three hours each time, to the radiations of the oscillator. Sixteen days after the first exposure the tumors, which were rather large as shown in one of the photographs, began to shrink and dry up and were easily



Mr. George Lakhovsky

detached from the limb exactly as in the first case. Again in this case, the healthy parts of the plant were not affected in the least. A third plant exposed to the radiations for nine hours, that is, three treatments of three hours each, was cured in the same manner as the two others. Sixteen plants also innoculated with cancer, were left without treatment. They have tumors in full activity, several of which are very large. These experiments show conclusively that plants innoculated with cancer can be treated and cured by means of the ultra radio frequency vibrations, whereas surgical treatment fails.

"In conclusion I wish to call the attention of the reader to the fact that I have obtained very conclusive results not only with a wave-length of two meters, but with longer and shorter wave-lengths. The main thing is to produce the greatest number of harmonics possible."

Such are the results of my researches with plants. At the present time, similar experiments are being carried out with animals and it seems that the effect on cancerous animals is the same as on cancerous plants.

I am highly pleased to present my theory and the results of my work in a scientific review of the United States, this great country, which has always been in the lead in the fight against this terrible sickness, cancer, and whose sympathy and help I would greatly appreciate.

Hoover Wants No New Radio Laws

THAT any further radio legislation will hinder the proper progress of the science is the opinion of Secretary of Commerce Herbert C. Hoover.

The only change, which Mr. Hoover desires, is in the first section of the law passed in 1912 relating to the control of the Government over the licensing of transmitting stations. He wants Congress to change this provision of the law so as to give the Secretary discretionary power over the wave-lengths, power and times of transmission of all stations of American registry.

The full text of his letter to Chairman White is as follows:

THE LETTER

December 4, 1924.

"Hon. Wallace H. White, House of Representatives, Washington, D. C.

"My dear Mr. White: I am inclosing herewith a suggestion of a very short bill, clarifying the powers of this department as to radio regulation as to interference. It does not pretend to confer complete regulatory authority, nor does it cover many mat-

ters, which must sooner or later receive legislative attention. It is intended only to enable the department to retain firm control of a situation, which is very rapidly changing, in which there are some elements of danger. If such a bill is passed, it will give time for more consideration of the whole subject.

"We have long agreed that this industry will ultimately require exhaustive legislation, and you have given a vast amount of valuable time, care and study to the subject, not only as manifested by the bills which you have introduced, but by your co-operation in the annual radio conferences we have held. I have, of course, been in full sympathy with your efforts.

"I feel, however, that the new developments in the art during the last twelve months have taken such a departure as to require somewhat further time for ascertaining its ultimate result to the public before we can adequately determine the proper course of legislation. There is a probability that by the end of that time we may require wholly new legislative provisions.

"The short bill proposed will reinforce the fundamental situation, so that no public damage can result from delay, whereas much public advantage might result from a further clarity of our knowledge as to the application of this new system of communication. As you are aware, there is no monopoly in the radio world at the present time, there being more than 500 broadcast stations, of which not more than four are the property of any one institution.

"With only 57 wave-lengths and 500 stations—rapidly increasing—we are today forced to certain duplications of waves and to the division of time between stations. If there were enough wave-lengths for all, the matter would be much simpler. Any attempt to give preference among stations in the allotment of wave-lengths on the basis of quality of programs raises the question of censorship, the implications of which I cannot at present accept.

"Beyond this, three major things have developed during the last twelve months. The

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