## Bodily electrical constants under $\alpha\delta$ and $\nu\omega$

by Harry F. Smejkal New York, N. Y.

From one of our greatest scientists Dr. Marie Telke we learn that in the higher forms of multicellular organism, life is the adaptively changing difference in POTENTIAL between the brain and the other organs and the tissues.

Dr. Spitler has also shown that the polarity of the brain is positive and polarity of the liver is negative. The over-changing potential between these two important parts is required so that the body may function.

Electricity is life itself. It is the primal substance from which the human is composed.

All newer studies of physiology which include Syntonics are closely related and analogous to the behavior of electrons and protons in electrical circuits.

The more one studies these relationships the easier it becomes to understand the complex functions of the human body. It obeys the same laws.

McDonagh brings to the fore new measurements on blood serum. His physical and chemical tests are of the greatest significance, for they actually have underlying electrical relationships and thus indicate the potentialities in developments along electrical lines.

Nowadays a good physiologist closely aligns himself with the electrical engineer and both together are scoring hits in modern science.

Even under the ultra-microscope, it is seen that drugs, chemicals and other therapeutic agencies including physical therapy methods do this indirectly by adding to or subtracting electricity from the protective particles of the blood. By going deeply into the study of light you cannot help but agree to the theory that the sun has no LIGHT or HEAT. Light itself is invisible. There are no such things as visible light rays. We must deal with Electro-magnetic waves instead, and the sooner we realize this, the better.

The chemical element theory was exploded long ago. The so-called elements are nothing but compounds.

Radium under atomic disintegration generates an emanation called Niton (radon) which has the atomic weight of 222.000. When you add this to the atomic weight of Helium is 4.002 you have as a result the weight of radium which is 226.000. The  $\alpha$  ray from the disintegration of radium is Helium gas.

Scientists are continually smashing atoms and blasting age worn theories of the past.

Yale University of New Haven announced thru Associated Press that three of her scientists, Dr. Ernest C. Pollard and assistants Howard L. Schultz and D Gordon Brubacker, succeeded in transmuting Chlorine to Potassium by bombarding the gas with nuclei of Helium. This can be easily explained thusly. The atomic weight of Chlorine is 35.457 and the Atomic Weight of Helium is 4.002. The result would naturally be Potassium, which Atomic weight is 39.10.

A report by Dr. Leslie A Chambers and Dr. Earl W. Flosdort of the University of Pennsylvania in Philadelphia, Pa., states in the Proceedings of the Society for Experimental Biology and Medicine that high pitched Sounds oscillating at 8,900 frequency per second, are able to destroy Streptococcus Hemolyticus by blasting the germs through "Cavitation". They say, "So powerful is the vibration that it

overcomes the cohesive strength of the water, tears the molecules apart and leaves vacuum spaces or vacuoles which look like bubbles." During the process, Light also is evolved. In other words, gentlemen, it makes a good formula. Water plus Sound equal Light.

This is to give you an idea of the enormous velocity or speed with which the emanated particles of matter composing Light bombard an object.

We Syntonists can go them one better by using the potency of our  $\mu$  (MU) which is approximately 534 trillion oscillations per second. This tremendous speed is enough to slay all the Streptococci and pneumococci and all the rest of the cocci in this cocci-ied world, if you know what I mean.

While attending one of the Dr. Spitler's Advanced Courses last August a thought occurred to me that if one could actually see by ultra-sensitive scientific apparatus of present day perfection, the changes in bodily electrical constants before Syntonization and after Syntonization and correlate these changes with the Autonomic Nervous System, it would be a most helpful idea.

We could prove lots of reactions. We could determine objectively what filters would react best for certain biotypes definitely. It would make Syntonics more of an exact Science and enable us to get uniformly good results. This would also cure forever and ever, the so called skeptical doubting Thomas's, who went to be shown.

After many discouragements and set-backs I finally built, with the help of my son a collection of apparatus that will show these changes objectively as they occur. When perfected I hope it will pave a way to a better understanding of that "Principle" – Syntonics. There appears to be a tremendous possibility in this set-up. It will help put us Optometrists on an equal footing with the higher biological professions.

Although my apparatus is far from perfect and very fundamental, I believe I am working in the right direction. I gave Riley a preview demonstration July 20, 1937, and received plenty of encouragement. He is satisfied with the advance made so far, and I believe I will be able to report actual clinical application and results in the very near future. At the present writing some of the equipment was further improved and modified but with not enough time to report clinically at this present convention. I hope to present at the earliest opportunity the latest research so each member will be informed of the progress being made.

With the college building nearing completion and access to a real laboratory headed by our brilliant teacher Riley himself, you can except great doings, or as Riley would say, "Something's going to pop".

My original plan when preparing this paper was to go into all kinds of theories of electrical phenomena, capacitance, inductance, electronics, atoms which may sound big but mean little or nothing to the average Syntonist, but after mulling it over in my mind decided to omit all this and only describe some of the basic principles involved.

<u>INDUCTANCE</u> – The thought to keep in mind constantly is that wherever a current passes thru a wire it sets up a magnetic field around the coil, that the strength of the field varies as the current varies, and that the direction of the field is reversed if the direction of the current flow is reversed. This phenomena provides us with an explanation of the many electrical effects used in my apparatus.

<u>THE CONDENSER OR CAPACITOR</u> – In my apparatus the condenser plays just as important part as inductance – or coils -. In fact, they are used together. The Condenser or Capacitor consists essentially of two or more plates separated by a thin layer of some insulating material and is called the di-electric, Unvarying direct current cannot flow thru a condenser because of the insulation between the plates. But a steady voltage applied to the terminals of such a condenser will cause it to become charged. The effect to

return to a discussion of electrons is simply that one element of the condenser is provided with an excess of electrons – thus becoming negatively charged while the other plate suffers a deficiency of electrons and is therefore positively charged.

It is well to keep this phenomena in mind as this will make the workings of my apparatus more easily understood.

However, at the actual demonstration of the apparatus a further, clearer explanation of the devices will be given and more details explained.

It is obvious that certain details must be withheld and especially away from those who are constantly working against us.

## 

## DISCUSSION By H. Riley Spitler

Those of you who are ere on the floor of this assembly have already seen dr. Smejkal's demonstration of his device and have noted its extreme sensitivity.

You have seen him demonstrate changes in body capacitance so slight that it would have been an utter impossibility three yers ago to detect. This device, the product of Dr. Smejkal's thought assisted by his son, bids fair to revolutionize scientific thought in reference to physiological stimuli. Of course, we in Syntonics are interested in stimuli well within the physiological limits, just liminal stimuli, the effects of which it has been almost impossible to detect by former research methods.

A continuation of Dr. Smejkal's work will, I am sure, reveal to Syntonists and others that Syntonics IS a coming science, despite the fact that a present we are dealing to a large extent with responses, the exact mechanisms of which are not fully clear. That, however, does not mitigate against the intelligent application of the method to ocular departures from the normal within physiological limits.

I am sure that we will all be looking forward to a progress report if not a final one by Dr. Smejkal at the next assembly. May I also suggest that you each secure one of the daily papers containing the photograph of Dr. Smejkal's device, take it home with you and show it to "doubting Thomases".