## Discussion on New Syntonic Procedures with Chromography Significance By Dr. Earle C. Sterzer Dayton, O.

This paper really deserves a much longer and more complete discussion than it is possible to give at this time. In the first place it offers a most practical suggestion and I imagine that many of us would like to go over and over the points suggested in order to get their true significance well impressed, ready for application on our return to our practice.

In the second place, the paper demonstrates what to me is a most important attitude of an optometrist toward his practice. It is plain to be seen that Dr. Mayer practices Optometry with the sole purpose in mind of giving his utmost for his patient and not letting that patient leave his care until he has done all that he can find possible to do for him. When you get his paper in your Syntonogram and can sit down and read it leisurely, I hope you will remember my suggestion at this time and note the professional attitude with which Dr. Mayer approached each problem, note the fact that this attitude was as much a part of Dr. Mayer's conception of his duty, as it was natural for him to do as he did.

Perhaps if those who worry about Optometry's future and who think we cannot escape commercialism of our profession could hear these papers we are hearing today and at least that of Dr. Mayer's, they would soon form a different opinion.

The cases cited by Dr. Mayer to prove his contention concerning the alteration of frequencies during an application, could not have been better chosen. They are all within the experiences of all of us, and the difference between the results he obtained, and those we obtain in using the classic prescription are evident. The idea of the alteration is probably as new to most of you as it is to me, so that surely few of the rest of us have had an opportunity to apply it. I cannot at any rate speak from experience.

I can find no fault with Dr. Mayer's reasoning with my own limited knowledge of physiology. From the observations Dr. Mayer made, and they must be correct since they agree with observations of others, it is certainly logical to state that a blue field contracts, especially vertically in connection with or as a result of inhibition of the parasympathetics and the blue fields enlarge with a stimulation of the parasympathetics. I do not like the use of the term "inhibition" which to my mind is of more significance in psychology than in physiology. I can appreciate a depressing of a function or of a structure, but those who write texts on physiology, seem to always end up by making inhibition an action of the cerebrum. Nature's actions are positive and of force and it seems to me most logical to think of them as perhaps being diverted into a different pathway, rather than of being damned up and stopped. But the actual words are immaterial if we grasp the idea. In Dr. Mayer's statement that as infection takes place and the sympathetic nervous system becomes dominant it does so by inhibiting the parasympathetics causing a collapse of the color fields". We, at least can understand that there is a switch of dominance and that as a result of this switch the color fields would be expected to collapse and, according to the experiences of Dr. Mayer and others, they do collapse, in that relationship. Dr. Mayer has tried to find anatomical

authority for his belief that the retina has parasympathetic fibres. As he says physiologists and authorities infer this parasympathetic supply, but no proof is producible. I don't think we need to quibble over the fact; our understanding of the thalamus and its relation to both the eyes and the autonomic system; the action of the pupillary reflex in the syndromes we know of; the very fact that syntonic frequencies so quickly alter physiology in the person applied to, give us sufficient ground on which to accept Dr. Mayer's ascertain. At least here must be some relationship.

And whether we accept Dr. Mayer's explanation and ideas or not, if as we can safely assume from his more than ordinary study and application of these principles, a further delving into them by Dr. Mayer and by other Syntonists after hearing or reading his paper, can lead only one way it seems to me. That is, to the use of chromography to determine which nervous system is in control and to indicate the syntonic application to be used. Dr. Mayer's detailed reports are as significant as we, as syntonists, care to make them. He has shown us a definite way or procedure of altering Syntonic prescriptions. He has shown a logical reason, coupled with demonstrable facts. Surely, he has made a beginning in what may prove to be an unusual contribution to our science. More work must be done for although Dr. Mayer's work is conclusive we cannot say that it is final or that some factor of condition has not been accounted for. But at least the matter is simple enough for us all to use ourselves and thus add the results of hundreds of other experiences to those of Dr. Mayer, his associates and our Research Director.

If I had any criticism of Dr. Mayer's paper it would be that he has defined the DuBois Reynold law in his conclusions instead of calling it to our memories in the beginning. "Continuous stimuli produce no effect upon nerve fibres, which respond only to changes in stimuli". When we get the College building created, I hope that one experiment students there will have to do over and over again, is the demonstration of the truth of that law. Why Dr. Mayer thinks this is contradictory to the laws of optics in some cases, I cannot imagine. Surely if it is a law, it holds good in optics or anything else. Unfortunately, we accept many things in optics today as being gospel in spite of the fact that physiologists recognize laws in absolute contradiction to these accepted facts.

I have attempted to bring out some points, having had the advantage of reading and re-reading Dr. Myer's paper, which you in listening might only causally catch. I hope you will mark this paper as one to be read carefully when you receive it. I hope that you will be moved as I have been, to have a new conception of chromography and that you will do as I intend doing if you have not already been doing it that is, giving more attention to the color fields of our patients and making chromograph as much a part of our practice as is our ophthalmoscope and a few other instruments. Dr. Mayer's work lights a new pathway to be followed, and one all of us can easily follow.