

Abstracts

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IN the March *Cosmos* Dr. J. Leon Williams has a paper entitled: "Which shall it be?" This article is a scholarly plea for the cultivation of the true scientific spirit, as opposed to the empirical methods by which we learn and accept too many of the ideas we have imbibed. "All great teachers and investigators," he says, "discourage the use of books as primary sources of knowledge. Is it true," he asks, "that the results of scientific research meet in the dental profession with open hostility, and with what is worse, apathy and inability to appreciate the significance of those results? Is it true that the dental practice of to-day is largely founded upon empiricism? Is it true that our dental literature is saturated to the core with pseudo-science, and with ancient metaphysical habits of thought that have come down from the time of the Greek sophists and from the theology of the middle ages?" By quotations from certain very recent journals he proves that all this is true. From a consideration of the general position of dentistry with regard to science, Dr. Williams passes on to some of the questions on which we are still practically in the dark, and to advocate that a fund be provided from which any genuine original research may be rewarded suitably. Such questions are submitted as: "1. An inquiry into the causes and best methods of treating chemical erosion. 2. An inquiry into the causes of the disease or diseases which attack the pericemental membrane, with best methods of treatment. 3. An investigation which shall comprise a thorough comparative test of the germicidal power of such substances as are provided for the destruction of the micro-organisms of the mouth, and the adaptation of the best of these germicides to use in dentifrices. 4. An investigation for determining the chemical differences, if any, between human saliva and the saliva of various animals which do not suffer from dental caries, and also for determining the comparative inhibitive power of various salivas with reference to the development of micro-organisms. 5. A microscopic investigation which shall involve the preparation by well-known operators of a large number of cavities in extracted teeth, and the filling of some of these cavities by different methods of using gold and filling others with amalgams from the formulæ of Dr. Black and others, and then examining and photographing through the microscope the polished margins where metal and tooth substance meet; and, afterwards, grinding sections of these specimens to ascertain to what extent enamel, affected by the acid of caries, has been removed from the