

that the work of the medical teacher is rendered doubly difficult, as his work is then one, not only of upbuilding, but of undoing. This does not apply in most instances to those who have received their training in colleges and universities, as there the work done is of necessity of a higher grade.

In speaking of medical chemistry in this connection, may be mentioned the department of medical physics, to which it is so closely related. Here also, the need of a sound preliminary training is felt, so that the work of the teacher might be that of demonstrating the medical application of principles already learnt, rather than the inculcation of elementary laws which should have been thoroughly mastered before entrance to a medical school.

On the part of the teacher, it should be the constant aim to see that all the facts presented to the medical student are placed in the strictest correlation with those taught in the other branches of medicine. This would appear to be an obvious necessity, but from a somewhat careful examination into the methods of teaching which are followed out in many of the medical schools, both here and abroad, one is led to believe that either the necessity is not felt in many instances, or, is lost sight of in the press of routine work. For this reason, it is undesirable in a large university that the teaching should be done by men who have not had the opportunity of a medical training. In many cases the subject is taught with great thoroughness from a chemical standpoint, but in this thoroughness, the relation, and the intimate connection between the physiological and clinical process and the chemical fact, is not insisted upon. It has been an interesting matter of experiment with the writer, on pointing out such a relation, that a chemical fact difficult to remember and harder to understand, has been bound up with a clinical experience in such a way that both have been remembered and understood.

In the chemical work of the last decade and a half, no branch of the science has made such strides as physical chemistry. It was thought that at one time, organic chemistry would be the solution of many of those physiological problems which have been the subject of work by physiological chemists since the time of Wöhler. That this has not been so, subsequent events have proved, and the questions of physiology, although furthered, have not been solved through its agency. It is too early to say what will be the fruits of work done in physiological chemistry, working along the lines of physical chemistry, but one may be assured that the work done in digestion and in metabolism generally, will receive its greatest help in this direction.

For this reason, therefore, the subject of chemistry should be approached with the medical student from the physical point of view.