which these facts are learned. A brief statement of a few of the prevailing hypotheses is given in Chapter XIV. Whether it will be advisable for the pupils to spend any time in studying this chapter will depend upon their age and their mental attainments.

It should be remembered that the object of the course laid down in this book is not to make chemists. but to help to develop sound minds, and at the same time to awaken interest in a set of natural phenomena of great importance to mankind. It is quite possible to teach the subject in such a way as to destroy all interest in chemical phenomena, and to make the pupil shudder whenever a chemical formula is mentioned. There is no better way to accomplish the latter result than by giving prominence to

incomprehensible theories, and forcing the pupils to master a lot of equations which represent facts of which they are entirely ignorant." In a note to p. 122 Professor Remsen says: "Hypotheses and theories are of great value to science, if founded upon a thorough knowledge of the facts to which they relate. They become dangerous when used by those who are not familiar with the facts. The student who has not received a thorough scientific training should remember that theories and hypotheses, to be of value, must be suggested, not by a superficial, but by a thorough, knowledge of the facts."-W. L. G.]*

* This paper was read before the Science Teachers' Association at the meeting held in Toronto, December 30th, 1890.

CHAIRS OF PEDAGOGY.

BY J. P. GORDY, PH.D.

IN discussing Normal Schools one can confine himself to an attempt to determine their proper work and the means they should employ in doing it. Not so with Chairs of Pedagogy. The very small number of such departments proves conclusively that their utility is by no means universally conceded.

The first question, then, which we have to consider is, Ought our colleges and universities to establish chairs of Pedagogy? That question is, at bottom, the question as to whether the principals of our high schools and academies, the superintendents of our city schools, the professors in our colleges—in a word, all who fill the more important and responsible positions in the profession of teaching, shall receive any instruction in the science and art and history of education. Excepting the

New York College for the training of teachers, which aims to be a purely professional school of the same grade as law and medical schools, and the school of Pedagogy in the University of the city of New York, the only institutions in the United States for the training of teachers are Normal Schools. These schools were founded for the purpose of training teachers for the elementary schools, and this is the work which they have done. Their graduates are, therefore, unable to compete with college graduates for the higher positions in the profession of teaching, because the latter alone have the scholarship which those positions demand.

Hence, unless schools of Pedagogy, schools of university grade, like schools of medicine and law, are founded, and unless chairs of Pedagogy are established in our colleges