compilation of this kind, dogmatism cannot be avoided. The compiler may secure some assistance from experts, but must in the main be guided by the "inner light." The pamphlet represents a large amount of labor and will be of much aid along the lines for which it is prepared.

HENRY LEFFMANN.

LECTURE DEMONSTRATIONS IN PHYSICAL CHEMISTRY. By Henry S. van Klooster, Ph.D., Rensselaer Polytechnic Institute, 187 pages, illustrations, bibliography, index, 12mo. Easton, Pa., The Chemical Publishing Company, 1919. Price, \$2.

This is a timely and interesting book. The literature of physical chemistry is immense and growing at a geometrical ratio, and while many illustrative experiments are detailed in the larger treatises, teachers of general chemistry, especially those who entered upon their work a generation or more ago, will find the collection of simple demonstrative methods very useful and convenient. Numerous illustrations aid in the construction and arrangement of apparatus. The author quotes Arrhenius to the effect that there are few departments of exact science in which so few lecture experiments are shown as in physical chemistry, and holds that this is due to the fact that so large a portion of the investigations is quantitative, while lecture experiments as a rule can only show qualitative changes. Doctor van Klooster also points out that many manuals of general chemistry spread the facts of physical chemistry over the whole of the descriptive text. Thus, adsorption is discussed in connection with charcoal, colloids with silicon, allotropy with oxygen. The book in hand is written in opposition to this plan. The classification is by type of phenomena, not by substance.

One of the most interesting chapters is that on Actino-chemistry. A number of very interesting experiments have been collected. The subject of flame, combustion and explosion is also interestingly treated. Another useful chapter is that on catalysis, but it is too brief.

The book is well printed, the type being that now so familiar to American chemists through the publications of the Easton firm. A few typographic errors have been noted, but are mere slips of the compositor and not misleading. The paper is not as good as it ought to be. It is to be hoped that the present edition will soon be exhausted and that the author will find time to prepare a second one on a much larger scale.

HENRY LEFFMANN.