

clearly described experiments, so well fitted to elucidate the text. Even experienced teachers can gain many useful points from this book. The introduction of quantitative experiments near the beginning is a great advantage, and one could wish that Prof. Hart had increased their number, were it not for the great practical difficulty of supervising a large class of novices in quantitative manipulation.

To another feature of the book attention is called in the opening paragraph of the preface: "In compiling the following pages I have tried to bear constantly in mind the fact that a large majority of those studying chemistry are not likely to become professional chemists, and have therefore taken pains to enlarge upon those topics which all educated persons should understand, such as water purification, fertilizers, the concentration of ores, the roasting of ores, assaying, the iron blast furnace, steel manufacture, etc." In these descriptions as well as in most other cases the book is up to date, and is remarkably free from portrayals of antiquated processes handed down from author to author, and so often found in modern text-books.

The book offers occasional opportunity for criticism. NO is so universally called nitric oxid or nitrogen monoxid that it is confusing to name it nitrogen dioxid; one can hardly say that 'chloric acid is *contained in* chlorates;' but points of this kind are few.

The book is attractively gotten up and the proof has been very carefully read. It should find entrance into many laboratories outside of that of its author.

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*Die Chemie im täglichen Leben.* Gemeinverständlichen Vorträge von DR. LASSAR-COHN, Universitätsprofessor zu Königsberg in Preussen. Verlag von Leopold Voss, Hamburg und Leipzig. 1896.

This book consists of twelve popular lectures on chemistry delivered by the author before the 'Verein für fortbildende Vorträge' in Königsberg. The lectures cover a wide range of topics of interest to a popular audience and are presented in a very clear and forcible manner.

Among the many subjects considered may be mentioned breathing, the weight and analysis of the air, the barometer, argon and ozone, combustion, matches, yellow and red phosphorus, the nature of flame, candles, oils and petroleum, the elements, chemical formulas, atoms and molecules, distillation, petroleum ether, paraffin and vaseline, the manufacture of illuminating gas and its by-products, the incandescent gas-burner and cooking with gas; artificial fertilizers, bones, superphosphates, potassium salts, acids, bases and salts, food-stuffs, digestion and fermentation, albumen, fats and carbohydrates, alcoholic beverages, vinegar, milk, cheese and butter, gunpowder, gun cotton, dynamite, collodion, wool, cotton and silk; leather and tanning, bleaching and dyeing, ink and paper; the manufacture of soda, potash, sulphuric acid, bleaching powder, soap, caustic soda and potash, glass and porcelain; photography in its various forms including color-photography, the metallurgy of some of the most important metals, alloys, alkaloids, chloral, ether, chloroform, antiseptics, iodoform, carbolic acid, salicylic acid, etc.

The book is illustrated with some fourteen wood-cuts, which add much to the interest in the reading matter and serve to explain much that otherwise might not be so clear to the reader.

The most recent views on the subjects considered are given, and the book is up to date in every particular, and yet the language is so simple and the explanations so clear that any person of average intelligence can readily understand them.

The book is extremely interesting and instructive and will fully repay careful reading. Even the experienced chemist will find here much information not found in the ordinary text-books.

The publication of such a series of popular lectures, which all can understand, must have a very beneficial influence on the study of chemistry and will show the uninitiated, as nothing else can, what the chemist has done and is doing. An English translation of the book by M. M. Pattison-Muir, published by J. B. Lippincott & Co., has recently appeared.

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