

THURSDAY, JANUARY 7, 1915.

LEAD POISONING.

Lead Poisoning: from the Industrial, Medical, and Social points of view. Lectures delivered at the Royal Institute of Public Health by Sir T. Oliver. Pp. x+294. (London: H. K. Lewis, 1914.) Price 5s. net.

LEAD and its compounds are among the most serviceable of metallic products, but unfortunately their use is attended by a great amount of human suffering, and lead-poisoning, or, as it is variously called, plumbism, saturnism, *Colica pictorium*, or *Colica pictorum*, is one of the commonest forms of industrial intoxication. Nearly every class of worker handling lead or its compounds is liable to be injuriously affected, from the miner engaged in getting cerussite, the smelter, desilveriser, or flue cleaner who are employed in the extraction of the metal; the worker who oxidises it to litharge and red-lead; the type-founder, stereotyper, and diamond-cutter, who use its alloys; the file-cutter, who employs it as a "bed" or "stock" to, of course, the plumber, who, as his very designation implies, is essentially concerned with the applications of the metal in its finished state. And the compounds of lead are as a class even more directly and immediately toxic than the metal. Many of them enter largely into the composition of pigments, and accordingly colour-mixers, house and coach painters, lithographers, as well as those who make the pigments, are prone to suffer from lead poisoning. Lead compounds are used in metal-polishing, in electro accumulator making, in dyeing, glass-making, pottery manufacture, and in the glazing of hollow ware, and cases of plumbism are particularly rife in those industries. Communities are occasionally subject to an epidemic of lead-poisoning, owing to the action of some kinds of drinking-water upon the leaden pipes and cisterns used to convey and store the water.

It is, therefore, scarcely to be wondered at that the subject of lead-poisoning should have received the earnest attention of pathologists and sanitarians, and of the public departments in various countries concerned with the supervision of the hygienic condition of factories and workshops. In the work before us, Sir Thomas Oliver, who has made the subject a special study, and is an acknowledged authority upon it, gives us an admirable digest from the industrial, medical, and social points of view of what is known concerning it.

He deals with the various industries concerned with the use of lead and lead compounds, and the

relative frequency among them of lead-poisoning; explains how it is actually caused, the channels of entrance of the poison, and its symptomatology; its action on the blood and nervous system; its influence on female life and motherhood; and lastly, its treatment, preventive and curative. Incidentally he shows the good that has been effected by legislation, and points out the beneficial results that have followed from Home Office inspection and regulations.

The book is primarily intended for the medical profession, but we commend it to the attention of all who are interested in the manufacture and use of lead and its compounds. Lead, of course, is too valuable a metal to be wholly dispensed with, and its good properties are such that it must continue to be used. But there is no question that certain of its more harmful compounds could be dispensed with, as innocuous substitutes are known; e.g., white lead may in many cases be replaced by zinc white, leadless glaze might more often displace lead glaze. But even where used, less harmful compounds than those actually employed are available, as, for example, fritted glazes in substitution for "raw lead glazes" in the manufacture of pottery. Although a certain amount of progress has been made, lead-poisoning in the Potteries is still far too prevalent; the actual number of cases reported may be fewer than was the fact when the Thorpe-Oliver Report to the Home Office was published, but recent statistics indicate that the number of severe cases, ending in death, has shown no sensible diminution. If, then, lead compounds must continue to be used in this industry, it is only by the intelligent appreciation and study of the facts set forth in Sir Thomas Oliver's little book that progress in remedial measures can be secured. T.

VEGETABLE TANNINS.

Die Gerbstoffe: Botanisch-chemische Monographie der Tannide. By Dr. J. Dekker. Pp. xiii+636. (Berlin: Gebrüder Borntraeger, 1913.) Price 20 marks.

THIS book is the German translation of the earlier Dutch edition (1905-8), and is supplemented and revised up to date. The author is specially fitted to write on the subject of vegetable tannins, as he is both botanist and chemist, and has for many years been engaged in research on these bodies.

In the botanical section of the book a classification of the tannins is given, which is far more complete and useful than any previous work of this kind. The excellence of this part of the book is very largely due to the original work of the author and his collaborators. The value of such

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