

Two volumes, with a portrait of the author.
Pp. 840 + 890.

The influence which an untiring worker like Professor Nencki exerts on the development of science is perpetuated in at least two ways. The enthusiasm of the investigator is transmitted to his pupils and thus continues to live; and his definite contributions to knowledge are recorded in books which do not die with the author. With the methods of publication adopted in scientific circles of the present day, the researches of an individual are usually scattered in many papers and numerous journals. What this may mean in the course of thirty years of unceasing labor in the advancement of learning is illustrated in the case of Nencki's published work, embodying his studies in organic and physiological chemistry, in bacteriology, hygiene and pharmacology, presented in many places and in several languages. Nencki's interest continued to center in the chemical aspects of various allied branches of biological and medical science, although his writings are not strictly limited by such definition. No résumé or critical discussion of the literature of urea formation and the behavior of aromatic compounds in the animal body, of the chemistry of putrefaction, of the composition of the blood pigments, of the chemistry of various digestive secretions and processes and the activity of enzymes, would be at all adequate without reference to his published contributions. Furthermore, this does not take into account Nencki's many valuable investigations in organic chemistry and hygiene.

In view of what has been stated, and especially the personal circumstances which led to such diverse channels of publication, it is timely and appropriate that the life-work of this distinguished physiological chemist should be collected and presented in a more readily available form, thus supplying what an untimely death prevented on the part of the late scientist; and it is, indeed, fortunate that two pupils so well known and closely associated with Nencki as N. Sieber and J. Zaleski have undertaken the compilation of his collected works. The two volumes which they have edited embrace all of Nencki's scientific

papers, together with abstracts of such investigations as were directly inspired by him and conducted under his supervision. A detailed reference to the papers would interest the specialist alone; but the array of contributions appearing in uninterrupted succession from 1869 to 1901 is an impressive monument to industry. A brief biographical sketch of the author is included in the volumes, which are of quite unusual typographical excellence.

LAFAYETTE B. MENDEL.

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Manual of Chemical Analysis as Applied to the Assay of Fuels, Ores, Metals, Alloys, Salts and other Mineral Products. By EUGÈNE PROST, D.Sc., of the University of Liège. Translated by J. CRUICKSHANK SMITH, B.Sc., F.C.S. Large 8vo. Pp. 300. Price \$4.50. New York, D. Van Nostrand Company. 1905.

The work comprises a short introduction on the 'preparation of samples for analysis,' nearly two hundred pages on the analysis of fuels, waters and various native and artificial chemical compounds, and one hundred pages on the analysis of metals and alloys. According to the author's preface, it is intended as a manual for the industrial chemist.

Viewing the book in the light of its intended usefulness, our verdict upon it is that it is as nearly superfluous a work as could be written. The plan is fragmentary, many important analyses are omitted; the directions are poorly expressed, in most cases insufficient and in many inaccurate; obsolete methods are mixed in with more modern ones without criticism or discrimination; there is scarcely to be found a single reference to any other works on analysis or journals of any kind, to supplement the fragmentary information given; the translator was evidently as little fitted for his task as the author, as is evident from poorly translated phrases which betray an ignorance of English chemical expressions and especially of metallurgical terms; the paper is wretchedly poor, the bind-

ing flimsy, the typography bad, the cuts miserable.

The reviewer is not suffering from either indigestion or disordered liver, and on taking second thought is convinced that the above estimate is not undeservedly harsh.

JOSEPH W. RICHARDS.

Histoire de l'habillement et de la parure. By L. BOURDEAU. 1 vol. 8vo. Bibliothèque scientifique internationale. Paris, Felix Alcan. Pp. 300. 6 francs.

This volume completes a series of culture-historical studies by the author: The forces of industry, the history of alimentation, the conquest of the animal kingdom, the conquest of the vegetal kingdom, and history of dress and adornment. Three motives are urged as having given rise to vestment—protection from injury caused by the things that are without, the love of pleasure and modesty. The male sex and the female have vied with each other in the elaboration of innumerable inventions in this category. Animals have clothing provided by nature—carapaces, shells, hair, bristles, feathers, down, wool and more. Man's skin, on the contrary, is a tissue of sensation structures, putting him into lively contact and communication with the outside world, but shielding him little.

The unfolding of this story is divided into two parts: (1) the materials—skins and textile substances and their preparations, and (2) the history of costume. The substances fit for clothing are not innumerable. They had to be bad conductors of heat from the body and to the body; they had to be pliable, fitting themselves to the form, tough enough to wear and last and pay for the time spent in manufacturing them. The story begins with skins and passes on through animal textiles, vegetal textiles and other substances, from which must not be omitted the great variety of things ornamental. Add to all this the fashions in tissues, the dyeing, staining, painting, bleaching, printing of patterns on goods, cutting out, sewing and trimming, and it will appear what a large fraction of human hours are given to raiment. The making of

buttons requires the services of 30,000 workmen and an outlay of 30,000,000 francs (1900).

The development of costume fills the last one hundred pages, its general evolution, the special history of modern costume, head dresses, foot gear and gloves, accessories of costume, such as handkerchiefs, fans, parasols, umbrellas and jewelry. There is a chapter (pp. 124–147) on artificial coloring of the hair and skin, tattooing, painting and dyeing. And the goodly friend of the species, soap, together with perfumeries, baths, etc., is not neglected. It is a great pity that there is no index to the work, for there is an infinite amount of petty detail gathered here, to which one would like to refer. The author assumes the existence of naked and unadorned peoples. When you go to look for them, they are seldom to be found, which leads to the inquiry whether really there are any such. O. T. M.

SCIENTIFIC JOURNALS AND ARTICLES.

The Journal of the American Chemical Society for November contains the following articles:

ROY D. HALL and EDGAR E. SMITH: 'Some Observations on Columbium.'

JOSEPH H. GOODWIN: 'Electrolytic Calcium.'

GEO. A. HULETT: 'Preparation of Nitrogen from the Atmosphere.'

H. M. GORDIN: 'On the Crystalline Alkaloid of *Calycanthus Glauca*.'

WILLIAM A. NOYES and HOWARD W. DOUGHTY: 'Derivatives of Trimethylparaconic and of Camphoronic Acids.'

EDWARD GUDEMAN: 'Artificial Digestion Experiments.'

A. T. LINCOLN: 'A New Burette Holder.'

Review of American Chemical Research.

The Museum News, of the Brooklyn Institute, for November may be termed a zoological number, as it is principally devoted to notes pertaining to that branch of science. There is a little leader in the matter of labels, which explains why labels are frequently absent, and also gives the point of view of the curator. The completion of a group of fur seals is announced which has been in preparation for some time, and is the finest of its kind in any museum, comprising as it does thirteen speci-