

The Sampling and Assay of Precious Metals.—By Ernest A. Smith, Assoc. R. S. M. Deputy Assay Master, Sheffield Assay Office. Published by Charles Griffin & Company, London. 460 pages; 166 illustrations; size, 6 x 9 in.; cloth. Price, \$4.50.

This book is an effort at a comprehensive treatment of the whole subject, and one cannot claim that the author has not succeeded in producing a work that will be well looked upon by the student and the adept in the practice of assaying. The various methods of sampling and of assaying ores, bullion and alloys of gold, silver, platinum, and the metals of the platinum group, are fully described. The author as deputy master of the Sheffield (Eng.) assay office, has a clear conception of the importance of accuracy in sampling and assaying operations. His book bristles throughout with the indication of the happy faculty of acquiring knowledge of the essentials and of imparting it in a practical way.

There are 25 chapters, the first five of which deal with the design and equipment of assay offices and the use of apparatus and appliances. Furnaces for the use of solid, gaseous and liquid fuel; balances and weights, and the art of weighing, etc., are included. The chapters on sampling are, in the writer's opinion, the most noteworthy of the book. A chapter on laboratory in a cyanide mill comprises a valuable 40 pages. The remaining chapters are devoted to assay work of the various metals.

It should be said that some of the sections are not so adequately dealt with as others, or as their importance would seem to warrant; but the value of the book lies more in the thoroughness which has accompanied the portion of what, in the author's mind, apparently stands out most prominently.

Another creditable feature of the work is its index. It is an admirable compilation, and adds materially to the degree to which the book will be found useful.

Reviewers frequently overlook the importance of advising prospective customers of the artisan construction of the book under discussion. The publishers have left no room for suggestions for improvements. The binding, paper, and printing are excellent, and the illustrations well proportioned. Taken altogether, the book should run into several editions.

PUBLICATIONS RECEIVED.

Ontario Agricultural and Experimental Union.—34th annual report (1912).

Victorian Institute of Engineers, Melbourne, Australia.—Vol. 12—1912 of the proceedings of the Institute. 254 pages; cloth binding; illustrated.

Canadian General Electric Company.—Presidential address of Mr. Frederic Nicholls, December 27th, 1913. Reprinted in the form of a 14-page booklet.

Library Catalogue.—Public Service Corporation of New Jersey. A 152-page catalogue of Authors and Titles of the Public Service Library of New Jersey.

Ontario Good Roads Association.—Proceedings of the 11th annual meeting, 1913, appended to the annual report of Mr. W. A. McLean, Provincial Engineer of Highways.

The Third International Road Congress.—A report by the Chief Engineer of the Board of Estimate and Apportionment of the City of New York upon the London Congress, June 23rd to 28th, 1913; 54 pages.

Municipal Lighting.—A report by special committee of the Municipal Lighting for South Hadley, Mass.; containing a report by Wm. Plattner, Consulting Engineer, 714 Old South Building, Boston, Mass.

Manufacture of Hollow Reinforced Concrete Poles, Piles and Pipe.—By R. M. Jones. A 27-page illustrated descrip-

tion of the Jones process for the manufacture of hollow reinforced concrete poles, piles and pipe.

Department of Naval Service, Ottawa.—A report for year ending March 31st, 1913, including reports on the survey of tides and currents; hydrographic survey branch; radio-telegraph branch; Naval branch, etc. 128 pages, besides illustrations and maps.

The Meteorological Aspect of Smoke Problem.—By Mr. H. H. Kimball, Ph.D. Bulletin No. 5 of the Mellon Institute of Industrial Research in Pittsburg on Smoke Investigation. A 50-page pamphlet dealing with the general problem of the effect of smoke upon sunshine in large cities.

Wood-using Industries of New York.—The 28th bulletin of this character, which has been prepared by the Forest Service of the United States Department of Agriculture. A 215-page illustrated book, with numerous tables, showing the demand upon each Wood by each Industry.

Report on the Bureau of Supplies.—Department of Water, Gas and Electricity. City of New York. A 93-page report dealing with such phases of the Bureau, as scope, organization and administration, purchasing, inspecting, storage, records and issue, illustrated by photographs and colored charts.

Dangers to Workers from Dusts and Fumes and Methods of Protection.—Bulletin No. 127 of the United States Department of Labor, Bureau of Labor Statistics. Containing 62 plates exhibiting industrial machinery and appliances liable to endanger the health of the workers, and methods of remedy. This is No. 3 of a series on Industrial Accidents and Hygiene.

Problems of the Contractor.—By Leonard C. Wason, President of Aberthaw Construction Company, Boston, Mass. A 40-page booklet reprinted from the Journal of the Association of Engineering Societies for Nov. 19th, 1913; dealing with the relations between the contractor on one side, and the owner, engineer and the inspector, on the other, in the matter of building construction. Booklet sent free by the above company.

Report of the Transit Commissioner. City of Philadelphia.—An exhaustive report in two volumes of the problem of improving the transit facilities of Philadelphia, containing definite recommendations, and plans for carrying them out, for a system of rapid, efficient and cheap transit throughout the city and suburbs. Vol. I. of 267 pages, contains sections devoted to a recommended rapid transit, its general design, estimates, traffic surveys, etc., and is well supplemented by tables, diagrams, etc. Vol. II. contains 69 maps and plans of systems in other cities, construction plan, time, time-distance, distance diagrams, etc. By Ford, Bacon and Davis, Consulting Engineers, and Mr. Merrit Taylor, Transit Commissioner.

PERSONAL.

W. J. MOORE, O.L.S., A.M.Can.Soc., C.E., has been appointed Town Engineer of Pembroke, Ontario.

G. P. COLE addressed a meeting of the Montreal Electrical Society last week on the subject of "Transformers."

C. H. MITCHELL, C.E., has been elected president of the Toronto Civic Guild, of which he has been vice-president for the past three years.

A. B. GARROW, B.A.Sc., assistant engineer, Main Drainage Department, city of Toronto, left last Friday for a few weeks holiday in Bermuda.

ERNEST A. RICHARDSON, City Commissioner of Saskatoon, has handed in his resignation, to take effect April