

aplite and myrmecite are considered. It is not possible within the limits of this brief notice to do more than draw attention to the cosmographical significance attributed to the granites by Professor Tchirwinsky and his opinion of the place they occupy in the earth's crust (pp. 645-654). He believes that granite is only to be found in the outermost part of the crust, and that it plays a very small part in the upbuilding of our planet. This conclusion is drawn from the relation of the mean specific gravity of granite to that of the earth. The average specific gravity of the basic eruptive rocks, according to figures for gabbro, diabase, basalt and diorite, as given by Osann, is about 2.9; that of granite is from 2.67 to 2.68 (p. 636). Now it is computed that the specific gravity of the earth's crust to a depth of 4,000 meters only is on the average 3.13. This would indicate that the granite formations are comparatively superficial. In this connection it is interesting to note that the mean specific gravity of the moon, which Professor Tchirwinsky terms "the sister or the daughter of the earth," and that of the meteorites, is from 3.4 to 3.5. Much importance is based upon the absence of magnesia, and the associated biotite; the latter is only of rare occurrence and magnesia is one of the least plentiful of the constituents so that it could be questioned whether its presence is of much or any importance.

There are three things to be regarded in a volume of such magnitude as the work of Professor Tchirwinsky. We regret that a communication of such value as he sets forth in his work should be published only in the Russian language, an unfortunate circumstance for most workers who understand only English, German or French.

Second, many of the analyses quoted are old ones; the more recent ones by American analysts having been omitted. This is regrettable since they would have greatly increased the value of the deductions.

Nevertheless the work is a monument of great value and as a contribution to petrology, of great importance.

GEORGE FREDERICK KUNZ

De Rietsuikerindustrie in de Verschillende Landen van Productie. H. C. PRINSEN GEERLIGS. Pp. xviii + 416 + xxiii. Amsterdam, J. H. De Bussy. 1911.

This is the fourth volume of a hand-book of sugar-cane culture and cane-sugar manufacture, published by the Iavanese sugar-experiment stations, a work of great value and importance for the sugar industry.

The author first gives a concise historical review of the sugar industry from the earliest times and then passes on to describe in detail the cane industry of all countries—some forty-odd in number—at the present time.

Prinsen Geerligs considers his theme from the historical, the technical and the economic point of view; he enters into the geographical and the climatic conditions of each country, discusses the technical evolution of the industry, studies the bounty question, and gives copious data on the consumption and export of sugar in the several countries.

A number of charts, diagrams and maps, as well as sundry illustrations, scattered throughout the book, add greatly to the elucidation of the immense amount of material brought together within these pages, material nowhere else available in so convenient a form.

Issue of a publication of this kind, a publication of importance to workers in many sections of the globe, causes one to voice regret that it should have appeared in Dutch, a language known to but comparatively few. There certainly is need of a true world language in which all works of great and general interest should be published and thus prove accessible to all without expenditure of the additional labor of translation and loss of time.

It is to be hoped that this book may soon appear in one or more of the leading tongues—an English version, certainly, would be sure of a warm welcome. F. G. WIECHMANN

The Reduction of Domestic Mosquitoes: Instructions for the Use of Municipalities, Town Councils, Health Officers, Sanitary Inspectors and Residents in Warm Climates. By EDWARD HALFORD ROSS, M.R.C.S. Eng-

land. Philadelphia, P. Blakiston's Son & Co. 1911. Pp. 114, with eighteen maps and illustrations.

This is an attractive and well-printed work, yet withal a great disappointment. The principal title, "The Reduction of Domestic Mosquitoes," covers so fully one of the present great needs in the book line, that it is a distinct shock to discover that it practically applies "in warm climates" only. Mr. Ross was "late health officer, Port Said and Suez Canal District," and his practical experience seems all to have been gained in those localities. He tells, most interestingly, of the methods there adopted, of the difficulties encountered with the native population and of the successes attained. But the smallest portion of all this is applicable, except in the most general way, to American (United States) conditions.

Nearly half the book is taken up with generalities, telling of the life history of the domestic mosquitoes, by which he means chiefly the *Stegomyia fasciata* (yellow fever carrier) and *Culex fatigans* or *pipiens* (ordinary rain-barrel mosquito) and how objectionable they are. There is nothing new in this and the information is not even reasonably complete. American work is scarcely referred to at all and even the New Orleans, Havana and Panama work receives only more than a mere mention. It is perhaps natural that Theobald's work should be the only one considered worthy of mention from the systematic standpoint; but surely from the practical point of view the work done by Dr. Howard and his assistants in the U. S. Department of Agriculture deserves at least some notice.

Some of the statements concerning the life cycle are perhaps open to question, unless there is a greater difference between *C. fatigans* and *C. pipiens* than is usually supposed, and so in the brief consideration of natural enemies, not all can be considered strictly applicable to our conditions. Some of the matters are absolutely incorrect, as where waterboatmen or "backswimmers" (*Notonecta*) are credited with catching wrigglers and pupæ in their "jaws"—appendages which

they do not possess. That there may be no doubt of the mix-up, it is said that "it is a water-beetle," instead of as should be, a water-bug.

The importance of the mosquito work and the difficulties are not minimized and that a really effective campaign is an expensive matter is well brought out; but unfortunately the calculations and the preliminary work required do not fit or even serve as fairly accurate guides to conditions in those sections of the United States where "the reduction of domestic mosquitoes" is just now considered rather a timely matter, and the figures supplied would discourage the average American municipality if offered as a basis of an effective campaign.

JOHN B. SMITH

NEW BRUNSWICK, N. J.,
August 23, 1911

SCIENTIFIC JOURNALS AND ARTICLES

THE number of the *Journal of Medical Research* issued in September contains the following articles:

"The Vaccination of Cattle against Tuberculosis. II.," Theobald Smith.

"Organic Matter in the Expired Breath," Milton J. Rosenau and Harold L. Amoss.

"A Study of Primary Intimal Arteritis of Syphilitic Origin" (with one plate), Fraser B. Gurd and H. W. Wade.

"The Rapid Isolation of Typhoid, Paratyphoid and Dysentery Bacilli," Arthur I. Kendall and Alexander A. Day.

"An Investigation on the Permeability of Slow Sand Filters to *Bacillus Typhosus*," Edward B. Beasley.

"Certain Fundamental Principles Relating to the Activity of Bacteria in the Intestinal Tract," Arthur I. Kendall.

"Tuberculosis among Ground Squirrels (*Citellus beecheyi* Richardson)," George W. McCoy and Charles W. Chapin.

"Precipitation Tests for Syphilis," Lawrence W. Strong.

"Notes on Twenty-two Spontaneous Tumors in Wild Rats (*M. Norvegicus*)" (with one plate), Paul G. Wooley and Wm. B. Wherry.

"The Isolation of Typhoid Bacilli from Urine and Feces," F. F. Russell.