

acknowledgments, Professor Crosby is not mentioned among those personally consulted, although he could have been reached by the author by a half hour's ride. This circumstance is in keeping with the general tone of the text, which leads one to believe that Crosby's work is to be proved faulty. Such a tone is unfortunate, since, with but three or four exceptions, the author is obliged to agree with all of Crosby's conclusions. Of the exceptions noted, one, on page 214, is a resurrection of a controversy between Crosby and Burr, in which the former's contention that certain melaphyr areas were effusive, was disputed by the latter. Crosby's convincing answer to Burr's paper was published in the *American Geologist* (Vol. XXVII., p. 324, 1901), and, so far as known, has met with no reply; but still the present author believes that Burr's conclusions are in many instances correct. Regarding the other exceptions, on pages 206 and 220, the author forms a different *opinion*, but in neither case proves himself correct nor Crosby wrong. In the second case the author states that he has not visited the outcrops which furnish Crosby's evidence. In his concluding chapter he states that, while Crosby attributed to the Roxbury conglomerate a marine origin, 'the evidence, largely negative and unsatisfactory, favors non-marine origin.' This and the conclusion that glaciers may have furnished material to torrents by which it was deposited either upon the land or in lakes are possible, though rather uncertain additions to the previous knowledge of the geology of the Boston Basin. The author has evidently accomplished a great deal of work in the time at his disposal, but it is unfortunate that so criticizing a tone should be employed by a young man in reviewing the work of so experienced and painstaking a geologist as Professor Crosby. It must, however, be exceedingly gratifying to the latter to see that his work, much of it done many years ago, when knowledge of geologic structure was far less advanced than at present, has stood so successfully all critical tests of recent years, and remains still *the* authority.

S. L. W.

*A Text-book of Sanitary and Applied Chemistry.* By E. H. S. BAILEY. New York, The Macmillan Company. Price, \$1.40.

The author states that the object of this work is to furnish a text-book upon applied chemistry that is suitable for use by those students who have had a good high school course in general chemistry. Scattered material is also presented from government reports and other sources which has been added with the intention of making the book useful for reference. Part I. is entitled 'Sanitary Chemistry' and deals with: The Atmosphere, Fuels, Heating and Ventilation, Lighting, Water and its Purification, Sewage and its Disposal, Soap, Disinfectants, etc.

Under Part II. is considered the 'Chemistry of Foods.' Stress is laid upon the vitiated character of 'ground air,' and it is further noted how small is the attention given by the general public to the question of good ventilation, the reason being that the ills arising from a poor air supply are slow in making their appearance.

Under each heading there are experiments introduced with the view to fix in the student's mind the important points covered by the general text. In some cases, however, it is difficult to see the value of these experiments. Thus, those under Water are qualitative only. Surely the results of a water analysis can scarcely be of service unless stated in a quantitative form. The field covered by the work is so very great that it is hardly to be expected that thoroughness can be attained in a book of 345 small pages. We find, for instance, Mineral Waters, Potable Waters, Drinking Water and Disease and the Purification of Water Supplies covered in twenty-three pages, while only seven are given to Sewage Disposal.

There are many things in the book which will interest the student reader, but he must remember that it is essentially elementary. Doubtless the author intended that it should be so considered.

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#### SCIENTIFIC JOURNALS AND ARTICLES

*The Psychological Clinic*, a journal for the study and treatment of mental retardation and deviation, by Professor Lightner Witmer,

of the University of Pennsylvania, is announced. It will be published monthly, beginning in March, except during the summer months, each volume containing about 300 pages. "*The Psychological Clinic* will be devoted primarily to the study and treatment of mentally and morally deficient children, but this will not preclude the consideration of other types deviating from the normal child, nor yet of that hypothetical type, the so-called normal child. The methods of clinical psychology are necessarily invoked wherever the status of an individual consciousness is determined by observation and experiment, and pedagogical treatment applied to affect a change, *i. e.*, the development of such individual mind. Whether the subject be a child or an adult, the result of examination and treatment may be conducted and expressed in the terms of the clinical method. Thus, the phenomena of adolescence, of criminality and insanity, are best investigated by the clinical method. The neurologist and psychiatrist are just awakening to a realization of the psychological and pedagogical significance of the treatment usually prescribed in cases of hysteria, psychasthenia, aphasia and allied mental disorders."

#### SOCIETIES AND ACADEMIES

##### THE AMERICAN MATHEMATICAL SOCIETY

THE one hundred and thirty-second meeting of the society was held at Columbia University on Saturday, February 23. President H. S. White and Vice-President P. F. Smith occupied the chair at the two sessions. Thirty-three members were present. The following new members were admitted to the society: Professor T. M. Focke, Case School of Applied Science; Dr. D. C. Gillespie, Cornell University; Professor C. C. Grove, Hamilton College; Professor T. W. Palmer, University of Alabama; Professor N. A. Pattillo, Randolph-Macon Woman's College; Mr. F. D. Posey, University of Chicago; Miss Gertrude Smith, Vassar College; Dr. A. L. Underhill, Princeton University. Ten applications for membership were received.

Professor J. H. Tanner was elected treasurer

of the society, to succeed Dr. W. S. Dennett, who retires after seven years' service. Professor E. H. Moore, who has been editor-in-chief of the *Transactions* since the founding of that journal in 1899, retires from the editorial committee at the completion of the present volume. The vacancy in the committee was filled by the election of Professor Maxime Bôcher. Appropriate resolutions expressing the society's grateful appreciation of the services of these retiring officers were adopted.

A standing finance committee, consisting of the treasurer, Professor Brown, and Dr. Dennett, was established to have charge of the investment of the life-membership and surplus funds of the society. For the better regulation of the presentation of papers, it was ordered that papers should hereafter be read in the order and at the session announced on the printed program, except that papers whose reading is postponed may be read at the close of a session. Papers not on the printed program, but accepted for presentation, will be read at the close of a session after the printed list is exhausted. Abstracts of papers will hereafter be included in the printed program if furnished at least three weeks in advance of the meeting.

The Annual Register of the society, containing the list of officers and members, constitution and by-laws, reports of officers, catalogue of the library, etc., has recently been issued. Copies can be obtained from the secretary.

The following papers were read at this meeting:

R. D. CARMICHAEL: 'On dividing an angle into parts having the ratio of any given straight lines.'

R. D. CARMICHAEL: 'A table of multiple perfect numbers.'

G. A. MILLER: 'The groups generated by three operators each of which is the product of the other two.'

R. P. STEPHENS: 'On a quintic with three parallel tangents in any direction.'

E. B. WILSON: 'On the revolutions of a dark body about the sun.'

C. N. MOORE: 'On the introduction of convergence factors into summable series and summable integrals.'