

The inferences concerning the inadequacy of the traditional entrance examinations as tests of merit and their great injustice in many individual cases are too obvious to need comment. The author's suggestions for the improvement of the conditions of entrance to eastern colleges have been stated briefly in the *Educational Review* for May, 1906.<sup>1</sup> In place of any practical suggestions I may be allowed to call attention to the general problem of which the college-entrance problem is but one particular instance.

The whole matter of the means of selecting students for continued education is in great need of scientific study. Pupils are eliminated from special forms of education and from formal education of any sort at all ages and by all sorts of arbitrary selective agencies, some permitted and others deliberately created by our educational system. The traditional college entrance examination is but one of a hundred agencies that decide which individuals shall progress to a given kind of educational opportunity.

In an ideal system these agencies would secure to each individual continued education to such extent and in such directions as would be for the greatest welfare of the most deserving. Under present conditions they are at times administered to suit the personal convenience of school principals, college faculties and the like, and are almost always administered without the guidance of scientific knowledge. It is the duty of scientific men to apply the same methods of thought to this question of so-

cial policy that they would demand in their special science.

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#### SCIENTIFIC BOOKS.

*Methods of Organic Analysis.* By HENRY C. SHERMAN, Ph.D., Adjunct Professor of Analytical Chemistry in Columbia University. New York, The Macmillan Co. 1905.

In this volume of 240 pages is comprised a very considerable amount of information regarding methods of proximate organic analysis. An idea of the scope of the work may be gained from an enumeration of the topics treated. Methods of ultimate organic analysis, analysis of ash, the determination of the nitrogen, sulphur and phosphorus of organic compounds, are first taken up. This preliminary treatment is followed by descriptions in considerable detail of selected methods for the estimation and examination of such classes of organic bodies as alcohols, aldehydes, carbohydrates, acids, oils, soaps, proteids and milk. Special prominence is given to processes bearing on food analysis.

Commendable features are: the free use of references, in the form of both foot-notes and bibliographical compilations; the carefully worked-out procedures; the clear and pertinent notes and discussions. The isolated student or casual worker in methods of organic analysis will find the book of especial value in pointing out original and often scattered sources of information.

Naturally there are some particulars in which every chemist would not coincide with the author's experience or conclusions. Such, for example, are the rather unsatisfactory methods described for the detection of borates and of fluorides on pages 232 and 233, and the summary way in which the two common methods for estimating fusel oil are dismissed as equally unsatisfactory (p. 35). It would have been of interest to food analysts, especially, to have had something from the author's experience with either of these two methods. Such minor points, however, de-

<sup>1</sup> The gist of these was the recommendation that schools be credited on the basis in each case of a systematic record of the actual success in college of candidates endorsed in the past by the school, the records of success in college being sent in from all colleges to some central board.

tract nothing from the general excellence of the book, of which it is, perhaps, sufficient to say that it is in keeping with what would be expected from one of Professor Sherman's high rank as a teacher and investigator in this field of analytical chemistry.

The mechanical part of the work is well done, the book being of convenient size, well printed and bound. Personal experience with the index for several months has shown that for the practical purposes of an index it leaves much to be desired. A. G. WOODMAN.

#### SCIENTIFIC JOURNALS AND ARTICLES.

##### THE AMERICAN JOURNAL OF ANATOMY.

At a meeting of the board of editors of the *American Journal of Anatomy* on April 18, 1906, Dr. Lewellys F. Barker resigned, and Dr. Charles R. Bardeen, professor of anatomy at the University of Wisconsin, and Dr. Henry H. Donaldson, professor of neurology of the Wistar Institute, were elected editors.

The contents of Vol. V., No. 2, May, 1906, are as follows:

ROSS G. HARRISON: 'Further Experiments on the Development of Peripheral Nerves.' With five figures.

ALBERT C. EYCLSHYMER and J. M. WILSON: 'The Gastrulation and Embryo Formation in *Amia Calva*.' With four double plates.

C. F. W. McCLURE: 'A Contribution to the Anatomy and Development of the Venous System of *Didelphys Marsupialis* (L.)—Part II., Development.' With twenty-seven text figures and five double plates.

Proceedings of the Association of American Anatomists, Nineteenth Session, August 6-10, 1905, and Twentieth Session, December 27-29, 1905.

List of Members of the Association of Anatomists.

#### SOCIETIES AND ACADEMIES.

##### SOCIETY FOR EXPERIMENTAL BIOLOGY AND MEDICINE.

The sixteenth meeting of the Society for Experimental Biology and Medicine was held in the new building of the Rockefeller Institute for Medical Research on Wednesday, April 18. The president, Simon Flexner, was in the chair.

*Members Present.*—Atkinson, Auer, Beebe, Buxton, Calkins, Dunham, Emerson, Field, Flexner, Foster, Gibson, Gies, Herter, Lee, Levene, Lusk, Meltzer, Meyer, Murlin, Noguchi, Opie, Parker,<sup>1</sup> Pratt,<sup>1</sup> Salant, Schwyzer, Sherman, Terry, Wolf, Wood.

*Members Elected.*—Charles R. Bardeen, G. H. A. Clowes, N. B. Foster, J. H. Kastle, Ralph S. Lillie, D. T. MacDougal, J. J. R. Macleod, Robert M. Yerkes.

#### Abstracts of Reports of Original Investigations.<sup>2</sup>

*On the Digestion of Gelatin:* P. A. LEVENE and W. A. BEATTY.

The authors used phosphotungstic acid to effect separation of the amino-acids produced from proteins by hydrolysis. Tryptic digestion of gelatin resulted in the formation of a substance apparently identical with prolineglycyl anhydrid ( $C_7H_{10}N_2O_2$ ).

*The Reactions of Amphioxus to Light:* G. H. PARKER.

When strong light was thrown into a basin of sea-water containing many amphioxus, the whole assembly swam about in wild confusion. This has been taken to indicate that amphioxus is very sensitive to light. But when twenty individuals were illuminated singly only twelve responded. The wild confusion in the first experiment is due quite as much to tactile stimulation as to light. When a strong, well-circumscribed beam of light was thrown on the tail of amphioxus the animal almost always reacted by a slight forward spring. When the light was thrown on the middle of the body there was usually no reaction, though sometimes a backward movement. When the light was applied to the head end, there was always a backward spring. This sensitiveness was not lost or impaired by cut-

<sup>1</sup> Non-resident.

<sup>2</sup> The abstracts presented in this account of the proceedings have been greatly condensed from abstracts given to the secretary by the authors themselves. The latter abstracts of the communications may be found in current numbers of *The Journal of the American Medical Association*, *American Medicine* and the *New York Medical Journal*.