

in bringing the therapeutic applications of radium up to 1905 instead of 1904.

Jacques Danne's 'Das Radium: Seine Darstellung und seine Eigenschaften' (Veit and Co., Leipzig, 1904, pp. 1-84) is a little book which those who wish to familiarize themselves with the chemical side of the extraction of radium from its ores may well consult.

Hans Mayer's 'Die Neueren Strahlungen' (Papanschek, Mähr Ostran, 1904, pp. 1-65) is a rather unsuccessful attempt to present in elementary fashion the theory of cathode, canal, Roentgen and Becquerel rays. It is not characterized by the usual German scholarship, for while it shows wide reading on the part of its author, it contains unpardonable oversights and blunders.

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November 16, 1905.

Principles of Physiological Psychology. By WILHELM WUNDT. Translated from the Fifth German Edition (1902) by EDWARD BRADFORD TITCHENER. Vol. I. London, Sonnenschein; New York, Macmillan. 1904. Pp. xvi + 347.

One can not but admire the industry and courage of Professor Titchener, who, in the midst of an exceptional productiveness of original text-books, ventures also on a translation of so ponderous and difficult a treatise as that of Professor Wundt on physiological psychology. The labor involved and the difficulty of achieving an adequate English version of this important work are, indeed, enormous, as pointed out in a personally interesting preface by the translator. If only the translation is successful in combining the qualities of good English and faithfulness to the original, the undertaking is certainly meritorious and much to be welcomed by readers who are not disposed to cope with the author's German further than is necessary. And, to judge by the present volume, the translation does in fact fulfil these requirements. It is as readable as could be hoped; in fact it is probably easier reading than the original, even though the reader should possess equal facility in both languages. The only reservation to be made

on this score is that, as the translator has adopted the Wilder nomenclature for the nervous structures, most readers will need to familiarize themselves with a good number of new technical terms. It impedes the reader's progress to meet 'myel' for the cord, and 'cinerea' for the gray matter. Probably in this matter the translator chose to be a prophet rather than easily read. As to the faithfulness of the translation, here the reviewer's part becomes a serious one. Without pretending, however, to have compared every page of the English with the original, the reviewer can state that he has examined in detail the translation of various difficult passages, and looked up instances where the English suggested a possible error, and after all found only a few little slips. One or two rather obvious errors in the original have passed over into the translation, *e. g.*, at page 286, where, quite in contradiction with the context, the brain-weight of a full-grown orang-utan is given as only 79.7 grams.

A curious error appears in Fig. 79 and in the accompanying text on page 187. It was transferred from the original, and was apparently not passed by the translator without question. The figure purports to show the connection of the retinas with the cerebral hemispheres, but errs in connecting the right half of each retina with the left hemisphere, etc.; the nerve fibers from the nasal half of each retina are stated to pass to the brain without crossing, while those from the temporal halves cross—just the reverse of the truth. As the figure is credited to Vialet, the reviewer looked up Vialet's original figure, and found a rather complicated drawing, which had been simplified by Wundt. In the process of simplification, Vialet's diagrams of the retinas dropped out altogether, and their place was taken by some diagrams of the monocular fields of vision which Vialet had placed in front of each eye to show the crossed relation obtaining between the field of view and the retina, due to the crossing of the rays of light within the eye. Wundt's confusion of the retinas and the fields of vision in the figure led him to reverse the true relations in the text. The error is rather amusing—espe-

cially since another diagram of the same thing (Fig. 99), occurring in a later chapter, is correct—and it is made more so by a 'later note by author,' in which Wundt, whose attention had apparently been called to the discrepancy, while not recognizing the perversion of the figure and text, endeavors to slur over the contradiction in a straddling manner that has a curiously characteristic sound. There are a number of other errors in neurological details, though not by any means a large number. Wundt would of course not be the author to whom one would resort for a knowledge of nervous anatomy and physiology, with which the present instalment of the translation is concerned. The value of this portion of the work lies in the author's broad, if somewhat speculative, views on the general principles of the structure and functions of the nervous system.

The translator has thoughtfully provided a special index for this volume.

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SCIENTIFIC JOURNALS AND ARTICLES.

THE contents of *The Journal of Comparative Neurology and Psychology* for November is as follows:

CLARENCE LOEB: 'Some Cellular Changes in the Primary Optic Vesicles of *Necturus*.'

RAYMOND PEARL: 'Some Results of a Study of Variation and Correlation of Brain Weight.'

A. H. ROTH: 'The Relation Between the Occurrence of White Rami Fibers and the Spinal Accessory Nerve.' (With an Addendum by J. Playfair McMurrich.)

JOHN E. ROUSE: 'Respiration and Emotion in Pigeons.'

JOHN B. WATSON: 'The effect of the Bearing of Young upon the Body-Weight and the Weight of the Central Nervous System of the Female White Rat.'

The Work of Carl Wernicke.

H. S. JENNINGS: 'Papers on Reactions to Electricity in Unicellular Organisms.'

SOCIETIES AND ACADEMIES.

THE CONVOCATION WEEK MEETINGS OF SCIENTIFIC SOCIETIES.

There will meet at New Orleans:

The American Association for the Advancement of Science.—The week beginning on December 28. Retiring president, Professor W. G. Farlow, Har-

vard University; president-elect, Professor C. M. Woodward, Washington University, St. Louis, Mo.; permanent secretary, Dr. L. O. Howard, Cosmos Club, Washington, D. C.; general secretary, Professor C. A. Waldo, Purdue University, Lafayette, Ind.; secretary of the council, Dr. John F. Hayford, U. S. Coast and Geodetic Survey, Washington, D. C.

Local Executive Committee.—Honorary president, President E. B. Craighead, Tulane University; executive president, Professor George E. Beyer, Tulane University; secretary, Henry M. Mayo, The New Orleans Progressive League; treasurer, Mr. Clarence F. Low, of the Liverpool, London and Globe Insurance Company.

Section A, Mathematics and Astronomy.—Vice-president, Dr. W. S. Eichelberger, U. S. Naval Observatory, Washington, D. C.; secretary, Professor L. G. Weld, University of Iowa, Iowa City, Iowa.

Section B, Physics.—Vice-president, Professor Henry Crew, Northwestern University, Evanston, Ill.; secretary, Professor Dayton C. Miller, Case School of Applied Science, Cleveland, Ohio.

Section C, Chemistry.—Vice-president, Professor Charles F. Mabery, Case School of Applied Science, Cleveland, Ohio; secretary, Professor Charles L. Parsons, New Hampshire College of Agriculture, Durham, N. H.

Section D, Mechanical Science and Engineering.—Vice-president, Professor F. W. McNair, Houghton, Mich.; secretary, Professor Wm. T. Magruder, Ohio State University, Columbus, Ohio.

Section E, Geology and Geography.—Vice-president, Professor Wm. North Rice, Wesleyan University, Middletown, Conn.; secretary, Dr. Edmund O. Hovey, American Museum of Natural History, New York, N. Y.

Section F, Zoology.—Vice-president, Professor Henry B. Ward, University of Nebraska, Lincoln, Nebr.; secretary, Professor C. Judson Herrick, Denison University, Granville, Ohio.

Section G, Botany.—Vice-president, Dr. Erwin F. Smith, U. S. Department of Agriculture, Washington, D. C.; secretary, Professor F. E. Lloyd, Teachers College, Columbia University, New York, N. Y.

Section H, Anthropology.—Vice-president, Dr. George Grant MacCurdy, Yale University, New Haven, Conn.; secretary, George H. Pepper, American Museum of Natural History.

Section I, Social and Economic Science.—Professor Irving Fisher, Yale University, New Haven, Conn.; secretary, Dr. J. F. Crowell, Bureau of Statistics, Washington, D. C.