croscopical Society in 1884 and President in 1887; Vice-President for Section A of the Scientific Association in 1882 and 1883, and Vice-President of Section B in 1894. The subject of his vice-presidential address in 1883 was 'The German Survey of the Northern Heavens;' in 1894 it was 'Obscure Heat as an Agent in producing Expansion of Metals under Air Contact.'

Personally Professor Rogers was one of the most unassuming of men, always kindly and considerate in his dealings with others, yet honest and outspoken. With apparently no conception of the meaning of fatigue, he was ever ready to devote hundreds of hours, if need be, to the solution of any problem that he deemed of scientific importance. His time and labor were given freely, with no expectation of reward beyond that which springs from the consciousness of success. He leaves many friends and no enemies, and to the cause of pure science his death is a sad loss.

W. Le C. S.

SIXTH ANNUAL MEETING OF THE AMERICAN PSYCHOLOGICAL ASSOCIATION.

The American Psychological Association held its sixth annual meeting at Cornell University on December 28, 29 and 30, 1897.

For some years the number of papers offered at the meetings has been so great as to crowd the program to a point of serious inconvenience, and as a consequence the experiment was tried this year of holding simultaneous sectional meetings for the reading and discussion of technical papers, a plan which was apparently successful and will probably be followed in the future.

As might be expected from the traditions of the Association, experimental psychology predominated in the number of papers offered, but both general psychology and philosophy were well represented. Two formal discussions were held, one on 'Physical and Mental Tests,' on the 28th, and one on 'Invention,' on the 29th. The President of the Association, Professor J. Mark Baldwin, presided at the meetings.

The opening session was given up to experimental papers, the first being by Dr. J. P. Hylan on 'Fluctuation of Attention.' The speaker presented experimental results and offered the theory that each object of attention innervates certain nervous elements in the cortex, distinct to a considerable degree from those innervated by other objects, and that the comparative exhaustion of one set of elements causes another set to function and the direction of the attention to change or fluctuate in accordance with this change of function.

Dr. Charles H. Judd read a paper on 'The Visual Perception of Depth,' which aimed to show that there is no direct perception of depth by means of the sensations of a single retina unaided by sensations of movement or by binocular factors. The argument was supported by a demonstration of certain visual illusions.

Professor J. McK. Cattell described experiments showing that the time of discrimination increases as the difference in the intensity of two sensations is decreased, and spoke of the application of this principle as a method in psycho-physics. Professor Cattell also described a method for studying muscular fatigue in its relations to mental conditions and exhibited a new instrument for fatigue experiments in which a spring dynamometer is substituted for the lifted weights of Mosso. Results thus obtained were shown which do not altogether confirm those of Mosso.

Dr. E. W. Scripture presented a brief summary of recent investigation at the Yale Psychological Laboratory, the publication of which will follow in the 'Studies' from that institution.

Mr. Albert H. Abbott spoke on 'Color Saturation,' reporting results reached by

experimenting with discs constructed so as to show the same intensity over the whole disc, the same color-tone and a gradual transition from the full color-tone to gray; thus isolating saturation changes.

The following papers of an experimental character were read by title: 'Time Measurements of Visual After-Images,' by S. I. Franz; 'Class Experiments,' by A. Kirschmann; 'Recent Discussion of Color Theory,' by Mrs. Christine Ladd Franklin; 'Experiment in the Psychology of Perception,' by Brother Chrysostom.

The discussion on 'Invention' was led by Professors Royce and Jastrow and Dr. Urban, while Professor Baldwin's presidential address on the related topic, 'Selective Thinking,' which he was unfortunately prevented from reading, was in printed form and in the hands of the members for reference.

Professor Baldwin's paper discussed the material of selective thinking, the function of selection (how certain variations are singled out for survival), the criteria of selection (what variations are singled out for survival) and certain resulting interpretations, treating the problem of race evolution in the light of the author's well known theory of 'organic' selection.

Professor Royce took up the subject of 'The Psychology of Invention' and after defining the problem and, analyzing the general conditions which favor inventiveness, presented interesting results of experiments devised to encourage in simple form individuality and inventiveness. The method chosen was the drawing by the subjects of figures or combinations of curves and straight lines under varying experimental conditions. This paper, as well as Professor Baldwin's, has been published in full in *The Psychological Review*.

Professor Jastrow followed with a paper treating the problem from the point of view of anthropology, and Dr. Urban discussed at some length the limits of the 'Application of the Utility-Selection Hypothesis to Mental Phenomena.'

Two years ago a Committee of the Association was appointed to inquire into the subject of physical and mental tests and to agree, if possible, upon a series of such tests suitable for use with the undergraduates of our universities. This Committee is still at work and in connection with its report this year a discussion was held, opened by Professor Jastrow, with a paper on 'Popular Tests of Mental Capacity.' The speaker took up first the selection of the capacities to be tested and the practical methods of testing them, emphasizing the importance of devising specific typical tests rather than general ones and of obtaining information regarding a single or a very limited group of powers, the advantages of which in the interpretation of results are obvious enough. He then discussed in turn treatment of the senses, the motor capacities and the more complex mental processes.

Professor Baldwin spoke briefly, laying particular stress upon the importance of memory tests, and Professor Cattell, as Chairman, discussed the report of the Committee embodying the results of its work thus far and recommending that a series of tests which can be made upon one subject in one hour be made as far as possible in all psychological laboratories, that a variety of tests and methods be tried and the results reported to the Committee. This Committee, consisting of Professors Cattell, Baldwin, Jastrow, Sanford and Witmer was continued and an appropriation made from the funds of the Association for carrying on its work.

The following papers were also presented at the meeting: 'The Place of Experimental Psychology in the Undergraduate Course,' by Professor F. C. French; 'Concept of Sensation,' by Dr. E. A. Singer, Jr.; 'The Intellectual Content in Dream Con-

sciousness,' by Dr. Robert MacDougall; 'Morality in Child Life,' by Dr. Albert Schinz; 'Professor Titchener's View of the Self,' by Professor William Caldwell; 'Aristotle's Doctrine of ψυχή as Biological Principle,' by Professor William A. Hammond; 'Epistemology and Theories in Physical Science—A Fatal Parallelism,' by Professor A. H. Lloyd; 'Romanes and Mill,' by Professor J. G. Hibben; 'Contributions of Psychology to Morality and Religion,' by Professor J. G. Hume.

Informal communications were also made by several members of the Association.

At the regular business meeting Professor Hugo Münsterberg, of Harvard University, was elected President of the Association for 1898; Dr. Livingston Farrand, of Columbia University, Secretary and Treasurer, and Professors J. E. Creighton, A. Kirschmann and E. B. Delabarre to fill vacancies in the Council.

It was also decided to hold a summer meeting in 1898 at Boston at the time of meeting of the American Association for the Advancement of Science and that the next annual meeting should be at Columbia University, New York, that place having been chosen by the affiliated societies upon invitation from the University.

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THE AUSTRALASIAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

THE seventh session of the Australasian Association for the Advancement of Science was held at Sydney from January 6th to January 14th, under the presidency of Professor A. Liversidge. There was a large attendance and full program, no less than 269 papers being presented before the ten sections.

The President, in his address, after referring to the losses the Association had suffered in the deaths of Sir Robert G. C. Hamilton, Baron von Müller and Professor Parker, gave an account of the work of the Association since its first meeting in August, 1888, under the presidency of Mr. H. C. Russell, when 850 members were present. Since then meetings have been held in Melbourne, Christchurch (N. Z.), Hobart, Adelaide and Brisbane. In referring to the last session at Brisbane, in 1895, he called attention to the research committees then appointed. Chief among these were (1) the committee reappointed for the investigation of glacial deposits; (2) the seismological committee; (3) a committee to consider and report upon the thermodynamics of the voltaic cell; (4) the geology, land flora, land fauna and natural resources generally of the islands and islets of the Great Barrier Reef; (5) the habits of the teredo and the best means of preserving timber or structures subject to the action of tidal waters; (6) the committee to give effect to the suggestions contained in Sir Samuel Griffith's paper, entitled 'A Plea for the Study of the Unconscious Vital Processes in the Life of a Community.' The Association had published six volumes of reports, each of about 1,000 pages. Professor Liversidge then proceeded to give an account of the history, teaching and recent advances of chemistry.

The addresses of the Vice-Presidents before the sections were as follows: *Astronomy, Mathematics and Physics*, 'Astronomy and Terrestrial Physics,' by Mr. P. Baracchi, Government Astronomer of Victoria; *Chemistry*, 'The Constitution of the Matter in the Universe,' by Mr. William M. Hamlet; *Geology and Mineralogy*, 'Early Life on the Earth,' by Professor F. W. Hutton, F. R. S.; *Biology*, 'The Relations of Morphology and Physiology,' by Professor C. J. Martin; *Geography*, 'Submarine Geography,' by Sir James Hector, F. R. S.; *Ethnology and Anthropology*, 'Origin of the Aborigines of Tasmania and Australia,' by Mr. A. W. Howitt;