

tenth congress at Halle, Germany, in 1915. The officers elected were: *President*, Dr. Alfred Denker, of Halle; *Vice-president*, Dr. Alexander B. Randall, of Philadelphia; *Secretary and Treasurer*, Dr. Henry O. Reik, of Baltimore.

MR. JAMES B. BRADY, of New York, has, it is reported, given the sum of \$220,000 to the Johns Hopkins Hospital, Baltimore, for the establishment of a ward for the treatment of diseases of the kidney.

THE annual meeting of the Association of Military Surgeons of the United States will be held in Baltimore, from October 1 to 5, under the presidency of Surgeon Charles P. Wertenbaker, U. S. Public Health Service.

#### UNIVERSITY AND EDUCATIONAL NEWS

THE new physics building at the University of Iowa, costing \$225,000 exclusive of equipment, is now completed and will be used from the opening of the college year.

DR. SHADWORTH HOLLWAY HODGSON, the distinguished philosophical author, who died on June 3, aged eighty years, has bequeathed his philosophical laboratory to Corpus Christi College, Oxford, and his general library to Rugby School. He bequeathed £500 to each institution to defray the cost of incidental expenses.

M. E. SOLVAY will give \$2,000 a year for three years to the Laboratory of Physical Chemistry of the Berlin University to assist the researches on which Professor Nernst is engaged.

IRA D. CARDIFF, Ph.D., professor of botany in Washburn College, has resigned to accept the position of professor of plant physiology in the Washington State College at Pullman.

DR. SABRAZÈS, associate professor at the laboratory of the Faculté de médecine de Bordeaux, has been appointed professor of pathology and anatomy at the same school, in place of Dr. Coyne, who has retired.

PROFESSOR LUCIEN CAYEUX, formerly professor of general geology at the National School of Mines at Paris, has been elected to the chair of "The Natural History of Inorganic Bodies" at the Collège de France, left vacant by the death of Michel-Lévy.

#### DISCUSSION AND CORRESPONDENCE

##### A REMEDY WORSE THAN THE DISEASE

TO THE EDITOR OF SCIENCE: In your issue of August 9, an article by Professor J. S. Kingsley announces various changes in the rules of zoological nomenclature proposed by certain Austrian and German zoologists, and to be submitted to the next zoological congress for approval. He inferentially asks the signatures of those interested in zoology as a backing for the proposed changes. In view of the total demoralization of zoological nomenclature which would follow the adoption of these changes (and I do not see the name of a single expert in such matters among those cited in their favor by Professor Kingsley) I feel bound to offer some comments.

I may incidentally remark that it is the past modification in a similar manner of the original British Association rules by over hasty and ill-informed action, that is responsible for ninety-nine out of every hundred of the present difficulties. Moreover, my own experience in my own field of study leads me to believe it probable that Professor Kingsley's communication greatly exaggerates the difficulties for professional naturalists of the present state of affairs. The people who find themselves in trouble are not the men who really do modern work in systematic zoology, but are men of a past generation who are annoyed by unfamiliar names, teachers relying on out-of-date text-books, some amateurs without access to recent literature and the body of anatomists, morphologists and others, not systematists, who do not like to be bothered by nomenclature at all, but wish to get names for their material without working for them or asking some one who is by way of knowing.

I would be the last to deny that there are some real difficulties, and that it would be wise to remedy them, but the authors of this outcry have not indicated the right way to bring it about. On the contrary, in some respects it is calculated to increase the difficulties tenfold, to undo good work that is already accepted by the generality of students (for I take it for granted that the new laws are intended to be *ex post facto*), and to introduce

such a mass of uncertainty, doubt and confusion as could never be remedied. The probable result would be that most experts would refuse to accept the new system and without their acquiescence nothing good could be hoped for.

The nature of nomenclature in science is such that to be stable it must be arbitrary. Past experience as well as common sense prove that such matters of controversy left to individual opinion are never finally settled. Individuals must fall back on a general rule of action. Let us examine the proposals. We shall find them containing both good and evil. The first section of the Austrian circular is stated to restrict nomenclature to binomial works, in which I heartily concur, and which, with certain arbitrary exceptions (like Brisson), has always been the rule. The second "provides that when a species has once been removed from a genus it shall not be considered as the type of the genus in any future revision." Here we have uncertainty piled upon doubt. When is a species "removed from a genus"? What constitutes "removal"? If a species *is* the type of a genus and some one "removes" it, does it for that reason lose its character? If an error has been committed by some blundering tyro, is it to remain forever uncorrected? Here is arbitrariness with a vengeance!

The third section proposes that the decision of questions in nomenclature be taken away from experts and settled by popular vote. Anybody willing to subscribe five dollars may vote. It needs no comment.

The German Zoological Society begins with an eminently rational proposition, *i. e.*, that special cases be arbitrarily settled according to their merits by a committee of experts. In the list of examples there are few which call for dissent, though it may be remarked that *Terebratula* and *Liothyryna* are different groups, and that the species now referred to *Liothyryna* are not members of the traditional *Terebratula*; also that the entire group of students of the Brachiopoda, without a dissenting voice so far as I know, are in accord on this point. If the change be made it would

in this case be solely for the benefit of those unwilling to give up a familiar blunder.

Their second proposition opens the way to chaos. Who is to decide when a given situation "will lead to lasting confusion or error"? Hardly the authors of this circular.

The third proposition returns to sanity. "Certain works are not to be considered in the determination of questions of priority." If these are settled, case by case, by expert committees, the rule is one I have long advocated; but it should not be decided by a vote of heterogeneous subscribers of five dollars. Looking over the list submitted as examples we find many of which the exclusion would probably meet with general approval; some which would probably be by expert vote retained. It should not be in any case decided without grave consideration of the effect on existing systematics.

The fourth proposition relapses into an appeal for chaos again. "Articles in encyclopedias, popular works of travel, journals of hunting and fishing, catalogues, garden journals, agricultural periodicals, political and local newspapers and other non-scientific journals which are without influence in systematic science" are to be ignored.

No one even moderately acquainted with the history of systematic zoology could make such a proposition as this, except in the haste which obscures clear thinking. All the above denounced journals which have influenced systematic science are, of course, *not* to be ignored (by the terms of the last clause of the proposal), but who cares what is done to those which have not? Systematists are only concerned with those which have; and which by the language of this self-contradictory announcement are endorsed, though not intentionally. Accepting the real intent of this proposal it seems impossible that those who propose it can have any conception of the new confusion and uncertainty it would create.

To sum up, the only practicable method of settling disputed questions of this sort is that adopted by the International Commission as now established. Each case to be decided on its merits, and decided by experts,

after proper consideration of the effect of the decision. To run with the unthinking crowd is no part of scientific business. If the present method has its drawbacks, it has also accomplished a preponderating amount of good service.

WM. H. DALL

August 16, 1912

#### SCIENTIFIC BOOKS

*Founders of Modern Psychology.* By G. STANLEY HALL. New York and London, D. Appleton & Company. 1912. Pp. ix + 471.

Of the twelve years from 1870 to 1882, the author spent nearly six as a student in Germany. The first triennium, ending with the year 1873, was devoted to philosophy, and it was at this period that I came under the influence of those men [Zeller, Lotze, Fechner and von Hartmann] characterized in the first four chapters. After coming home and teaching what I had learned from these masters and others for six years, during which my interest in more scientific methods and modes of approach grew, especially after the first edition of Wundt's "Psychologie" in 1874 and as a pupil of James and Bowditch, I passed a second triennium in Germany, to which period Wundt and Helmholtz [the subjects of the two concluding chapters] belong.

Six years in Germany, without the haunting oppression of the doctor's thesis!—such was our author's opportunity, and he made the most of what was offered. He heard Hegel from the lips of Michelet; he sat with Paulsen in Trendelenburg's seminary; he undertook work of research in Ludwig's laboratory, with von Kries as partner; he experimented with Helmholtz; he was the first American student in Wundt's newly founded laboratory of psychology; he discussed psychophysics with Fechner, the creator of psychophysics; he was present at Heidenhain's early essays in hypnotism; he attended those lavishly experimental lectures of Czermak, where hecatombs of dogs were sacrificed on the altar of science and "in one case even a horse was introduced to show heart action"; he was informed by Zöllner of the marvels wrought by Slade, and later he saw those same marvels performed "at evening parties in Berlin by a young docent in physics"; he followed courses in theology, metaphysics, logic, ethics, psychology, the

philosophy of religion—in physics, chemistry, biology, physiology, anatomy, neurology, anthropology, psychiatry; he frequented clinic and seminary, laboratory and lecture; and he roamed afield as far as Paris on the west and Vienna on the east. *Non cuivis homini contingit adire Corinthum!* But Dr. Hall made the journey twice over, and took his fill of the intellectual feast.

The six men to whom the present volume is devoted have already been named. First in order stands Eduard Zeller (1814–1908), who began his public life as a protestant theologian—he married the daughter of F. C. Baur, the founder of the Tübingen school—but is better known to the present generation of scholars as the historian of Greek philosophy and the dreaded examiner at the university of Berlin, where he became professor of philosophy in 1872. Zeller is followed by Rudolf Hermann Lotze (1817–1881), the greatest name in German philosophy between Herbart and Wundt, who spent his working life in Göttingen (1844–1881) and died within a few months of his call to Berlin. Next comes Gustav Theodor Fechner (1801–1887), physicist and mystic, whose philosophy was held during his lifetime in ill repute, though its by-product brought him enduring fame as the founder of psychophysics. Fourth upon the list stands Karl Robert Eduard von Hartmann (1842–1906), the apostle of pessimism and of the unconscious, an invalid and recluse, who lived his days with philosophy and music in a cottage just outside Berlin, and who enjoyed the popularity that has fallen in later times to Haeckel and to Nietzsche. Next comes Helmholtz, unquestionably the greatest figure in the book. Last of all stands Wundt, the *Altmeister* of experimental psychology, still happily with us, though now on the eve of his eightieth birthday.

To understand the choice of these six men—for who beside the author would count Zeller and von Hartmann among the founders of modern psychology?—we must understand something of Dr. Hall's own training and temperament. Passing to Germany from a denominational American college, he took