

citing in the case of specific names the man who transferred the name into the proper genus, not the original authority. He also states that zoologists have picked the wrong man for their citations, since they cite "*the original authority, who first described the species.*" It is urged that the one-man citation would make citing authorities less complex, thereby saving hours for those who use botanical nomenclature, but the important advantages of citing the original authority are mostly overlooked. In reality, Peattie has built an argument for scientific names with no authorities, which is entirely reasonable for popular, literary or horticultural usage, but botanists should not regulate their precise practices to these ends.

The original authority is the most important authority because it is: (1) The one which stands for a type and an original description. Some workers seem to fail to appreciate the importance of the type-concept in systematic botany. (2) The one with which our knowledge of the species begins. From the citation of an original authority, it is immediately possible to gauge the length of time that the organism has been known to science. (3) The one which best affords us some opportunity to estimate the validity of a species. By the citation of the original authority, a conservative worker's species, transferred to a small segregate genus by a "splitter," still remains recognizable, while in the one-man citation, as proposed by Peattie, the original authority is obscured.

That the double citation has great practical advantage is evidenced by an actual experience which I had on the morning when the copy of SCIENCE, with Peattie's article, arrived. I am soon to visit an herbarium in South Carolina and desire to know what types of an early author, representing species, recognized to-day, in certain families in which I am interested, may be expected to be found there. Reference to Small's "Manual of the Southeastern Flora," recognizing many segregate genera, but fortunately employing the double citation, revealed in 15 minutes all the information that I wanted to know. Had this manual followed Peattie's proposal, it would have been necessary to indulge in endless library investigation, looking up

references by people who had transferred names, trying to determine from the old author's descriptions to what modern genera his species would have been transferred and then whether or not they are to-day valid. The slight inconvenience to the man who wrote this manual thus saved me hours of thankless drudgery, simply because he employed the double citation. It might be suggested that I could have obtained my information by reference to the writings of the original authority himself, but from them I would have no way of knowing which are recognized to-day, nor could I readily have obtained this information from Index Kewensis.

Let popular writers discard all authorities, but let systematists continue to follow their slowly evolved, meticulous practice. Authorities are not part of a name, but for accurate systematic work their careful citation becomes an absolute necessity.

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#### BACTERIAL-PLANT GROUP OF DHAINCHA

THE names of the genus "Sesban," "Sesbana," "Sesbania," are synonymous.<sup>1</sup> The plant worked by me and published elsewhere,<sup>2</sup> viz., *Sesbania aculeata* Poir, commonly called in India "Dhaincha," and the two species mentioned by Briscoe and Andrews,<sup>3</sup> viz., *Sesban emerus* Aubl and *Sesban exaltata* (Raf.) Rydb., belong to the same genus "Sesbania."<sup>4,5</sup>

Briscoe and Andrews (*loc. cit.*) confirm the writer's earlier and more elaborate observations, save a few minor points. The writer, therefore, claims priority in its nomenclature as "Dhaincha Bacterial-plant Group" instead of that tentatively proposed by Briscoe and Andrews as "Sesban Inoculation Group."

Further work conducted by the writer on three other species of Sesbania, *S. speciosa*, Taub ex Ebg.<sup>6</sup> *S. grandiflora*, Poir,<sup>1</sup> and *S. macrocarpa*, Mohl ex Rafin,<sup>1</sup> indicate that they all belong to the "Dhaincha bacterial-plant group."

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## SCIENTIFIC BOOKS

### A BIOGRAPHY OF CLAUDE BERNARD

*Claude Bernard, Physiologist.* By J. M. D. OLMSTED, Professor of Physiology, University of California. Foreword by ALEXIS CARREL. Harper and Brothers, New York and London, 1938. xvi + 272 pp. \$4.00.

CLAUDE BERNARD died on February 10, 1878. A few days later Michael Foster, then Trinity praelector in physiology at Cambridge, met his senior class and, putting his prepared lecture aside, remarked: "The

recent death of a great physiologist, Claude Bernard,

<sup>1</sup> J. D. Hooker and B. D. Jackson, "Index Kewensis Plantarum Phanerogamarum," Tomme II, p. 890, 1885.

<sup>2</sup> M. S. Raju, *Zentralblatt für Bakt.*, etc., II Abt., 94: 249-262, 1936.

<sup>3</sup> C. E. Briscoe and W. B. Andrews, *Jour. Am. Soc. Agron.*, 30: 135-138, 1938.

<sup>4</sup> A. W. Hill, "Index Kewensis Plantarum Phanerogamarum," Supl. VI, pp. 193, 1916-1920.

<sup>5</sup> A. W. Hill, *Ibid.*, Supl. VII, pp. 223, 1921-1925.

<sup>6</sup> T. Duarand and B. D. Jackson, *Ibid.*, Supl. I, pp. 385, 1886-1895.

has determined me to spend the whole of to-day's lecture in pointing out to how large an extent the modern doctrines of physiology have been influenced by his brilliant investigations. It is not my purpose to dwell upon his personal history; indeed, there is happily but little to tell. Men of science are fortunate when their personal histories are uneventful; they live in their work and not in their lives." Foster's senior class then heard a masterful résumé of the scientific contributions of the great French physiologist. The Trinity praelector had evidently prepared his lecture with characteristic thoroughness, for he was prevailed upon to publish it a few weeks later in the *British Medical Journal* for April 13 and 20, 1878 (pp. 519-521; 559-560). As is well known, Foster published later (1899) an attractive "Life" of Bernard in "The Masters of Medicine Series." Neither of Foster's accounts, however, were biographies in the strict sense of the word; rather were they logs of his career as a scientist. Foster was interested in the background and development of his scientific ideas and his discoveries, but he made little attempt to portray Bernard as a man.

Professor Olmsted's "Biography," on the other hand, is far better rounded out, and is all that a biography should be; indeed it at once takes its place with the great personal biographies of our literature: Masson's "Milton," Festing Jones's "Samuel Butler," Paget's "Paré," Morley's "Cardan" and "Palissy," and with Cushing's "Osler." Olmsted's text is most attractively written and exhaustively documented, and the fifteen years he has spent collecting, sifting and digesting his sources are evident in every page of the book. The conscientious documentation affords one an opportunity to verify nearly every statement in the text, yet Dr. Olmsted has handled his citations so skilfully that they seldom catch the eye on the text page and one can read the book, as perhaps it should be read, as a novel. Certainly no medical student or teacher of physiology could arise from an hour's perusal of this fascinating record without being thrilled and inspired.

After the Foreword (which unfortunately repeats some of the half-truths about Bernard which Dr. Olmsted has tried to correct in his text), the book begins with a full account of Bernard's life (eight chapters). The details here given are drawn almost entirely from hitherto unpublished source material, and the account as a whole serves to correct the misimpression created by Foster that there was little of interest to tell about Bernard's personal history. The chapter begins appropriately with an authentic account of his birth and of the oft-repeated anecdote about his first literary production, the tragedy "Arthur de Bretagne," which, when presented to the Parisian

critic Saint-Marc Girardin, was returned with the firm comment, "You have done some pharmacy, study medicine. You have not the temperament of a dramatist." Bernard forthwith matriculated at the School of Medicine in Paris. The rest of the story is well known to all physiologists. It was in the autumn of 1834 at the age of twenty-one that he entered the medical school. Save for anatomy, in which he excelled, he was not a good student; he devoted much of his spare time to anatomical dissection and while an interne at Hôtel Dieu his skill as a dissector became known to François Magendie, the founder of the French school of physiology. In 1843 Bernard became his *préparateur* at the Collège de France, which marked the beginning of Bernard's career as an experimental physiologist. He began by studying the effects of nerve section, spinal accessory, facial and vagus; his first published paper, which appeared in May, 1843, had to do with the chorda tympani—be it noted that this did not appear until he was thirty years of age. In the same year he undertook a new line of investigation and issued as a thesis for his medical degree a justly celebrated contribution entitled, "Du Suc gastrique et de son Rôle dans la Nutrition," which was the beginning of all that followed.

The second part of Professor Olmsted's biography is concerned with Bernard's contributions to the science of physiology. His early papers are described at some length and then came the themes so intimately associated with his name: pancreatic digestion, the glyco-genic function of the liver, the vasomotor nerves, curare and other poisons, his collaboration with Pasteur, general physiology and, finally, his posthumously published notes on fermentation. The third part of Olmsted's biography is taken up with Bernard's speculative contributions, his tendencies as an eclectic and agnostic, his adherence to the principles of scientific determinism, and, finally, the broad concept of the stability of the internal environment of the body touched upon in many of his early works, but published in his two volumes, "Leçons sur les Phénomènes de la Vie," issued in 1878, the year of his death.

Bernard left his mark upon all phases of modern physiology, and no student of the subject can readily understand modern physiological thought without careful study of his writings. This illuminating biography also does much to elucidate the growth of physiology in the nineteenth century. It places Bernard's contributions in their proper perspective, and it paints a faithful portrait of Bernard as a human being—including his domestic misfortunes and his fascinating correspondence with Madame Raffalovich. The book has the external appearance of one of the lesser modern novels, but despite this lapse in taste on the part of the publisher, the book is equipped with

an excellent biography and a general index, satisfactory for authors, but quite inadequate for subjects. It is understood that Professor Olmsted now intends to write a life of Magendie, and it is scarcely necessary to say that physiologists on both sides of the Atlantic

will await his second biography with a sense of high anticipation.

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## THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

### SYMPOSIUM ON MENTAL HEALTH

#### PRELIMINARY ANNOUNCEMENT

THE Section on Medical Sciences of the American Association for the Advancement of Science announces a Symposium on Mental Health to be held in conjunction with the annual meeting of the association at Richmond, Va., from December 28 to 30, 1938, and cordially invites the attendance and participation of all interested persons.

#### A COOPERATIVE PROJECT

Collaborating in the plans for the event are the American Psychiatric Association (an affiliated body of the A. A. A. S.), the U. S. Public Health Service, the Mental Hospital Survey Committee (composed of representatives of eight national medical bodies),<sup>1</sup> the National Committee for Mental Hygiene and a special committee<sup>2</sup> of eminent psychiatrists who are developing the program for the symposium under the chairmanship of Dr. Walter L. Treadway, formerly assistant surgeon general of the Public Health Service.

#### PURPOSE OF THE SYMPOSIUM

The symposium will provide an unusual opportunity to bring the great problem of mental health before the forum of the A. A. A. S. and, through it, to the scientific and lay public of America. It will be the tenth in the series of symposia held by the Section on Medical Sciences since 1934 and the first to deal with

<sup>1</sup> American Medical Association, American Psychiatric Association, American Neurological Association, American Board of Psychiatry and Neurology, U. S. Public Health Service, National Committee for Mental Hygiene, Canadian Medical Association and National Committee for Mental Hygiene of Canada.

<sup>2</sup> Members of the committee, besides Dr. Treadway, are Dr. Clarence M. Hincks, general director, National Committee for Mental Hygiene, New York; Dr. Franklin G. Ebaugh, professor of psychiatry, University of Colorado, Denver; Dr. Roscoe Hall, clinical director, St. Elizabeth's Hospital, Washington, D. C.; Dr. Samuel W. Hamilton, director, Mental Hospital Survey Committee, New York; Dr. Grover Kempf, senior surgeon, Public Health Service, New York; Dr. Nolan D. C. Lewis, director, New York State Psychiatric Institute, New York; Dr. Abraham Myerson, director of research, Boston State Hospital; Dr. James S. Plant, director, Essex County Juvenile Clinic, Newark, N. J.; Dr. Harry Stack Sullivan, president, William Alanson White Psychiatric Foundation, New York; Dr. Joseph Zubin, assistant psychologist, Public Health Service, New York, and Dr. Malcolm H. Soule, director, Hygienic Laboratory, University of Michigan, Ann Arbor.

this important subject. All who have a serious interest in the subject will be welcome—scientists and laymen, professional workers and others—for the mental hygiene movement is a *public movement*, including among its adherents representatives from all walks of life and courting the good-will and support of all in its far-reaching aims and activities.

Its object will be, essentially, to present a synthesis of existing knowledge of the mental health problem, to evaluate past experience, crystallize aims and objectives and to marshal the scientific forces of the nation for a concerted, coordinated and more effective attack on mental disorders and disease. By drawing on the various scientific disciplines, within and without the field of mental hygiene, that are in a position to contribute new knowledge, we hope to light up the problem as never before and to arrive at a new and better orientation in dealing with it on its practical as well as theoretic side.

#### PLAN AND METHOD

The Symposium on Mental Health will be a three-day affair, with six sectional sessions, running consecutively, and with upwards of seventy scientific contributions. In addition, mental hygiene will be the topic of discussion at the final general session of the association's meeting, at which the symposium proceedings will be summarized. Headquarters for the symposium will be established at the Jefferson Hotel in Richmond, at which the administrative business of the symposium will be conducted during the conference period.<sup>3</sup> The special sessions of the symposium will be held in the auditorium of the Commonwealth Club; the general session at the Mosque.

The symposium will be, in some respects, a unique affair, in that most of the contributions will not be read at the meeting but will be published in advance, in a series of six brochures, one for each session, which will be used as a basis for discussion at the meeting. The various sessions of the symposium will be arranged and conducted under the leadership of section chairmen, who will summarize and critically analyze the

<sup>3</sup> Until then, correspondence in relation to the symposium should be addressed to the Administrative Office, Symposium on Mental Health, A. A. A. S., Room 822, 50 West 50th Street., New York City, Paul O. Komora, Administrative Secretary.