

was held at Harvard College Observatory on November 8, was attended by about fifty members and friends. Mr. Leon Campbell was elected president for the year and Professor Anne Young, of Mount Holyoke, was elected vice-president. The program of the meeting consisted of papers and reports, followed by a banquet at which Rev. Joel Metcalf was the guest of honor. This association is composed of amateur astronomers who are anxious to contribute observations of value, and over a hundred thousand observations have been published. It offers an opportunity for all lovers of astronomy to do work of value; particularly those who have small telescopes stored away and do not know how to put them to use. Any one interested should write to Mr. William T. Olcott, secretary, 62 Church Street, Norwich, Conn.

THE University of Illinois has recently added to its collections a historical herbarium of about 3,000 specimens formed early in the last century by Dr. Jonathan Roberts (1805-1878). Dr. Paddock, after holding a professorship in the literary department of the college became a professor in Worthington Medical College, at Worthington, Ohio, when Dr. J. L. Riddell, well known as a botanist in his day, moved from that institution to the University of Louisiana. He is said to have been a scholarly man, and an ardent botanist, who enjoyed particularly the friendship of Sullivant, the banker-bryologist of Columbus.

A MEETING was held in New York City on December 3 to commemorate the eightieth anniversary of the beginning of Captain John Ericsson's work in this country, and the thirtieth anniversary of the death of Captain Ericsson and of Mr. Cornelius H. DeLamater, founder of the DeLamater Iron Works, where Captain Ericsson's most important work was executed. The exercises included addresses by Hon. Lewis Nixon, commissioner of public works, Borough of Manhattan; Rear-Admiral Bradley A. Fiske and Hon. W. A. Ekengren, Sweden's Minister at Washington. Mr. H. F. J. Porter gave an illustrated historical review of the work per-

formed at the Phoenix Foundry and the DeLamater Iron Works.

UNIVERSITY AND EDUCATIONAL NEWS

MR. CHARLES H. SWIFT, of Chicago, has given \$5,000 to the University of Chicago for its department of geography, for the purpose of sending a member of its staff to Asia the coming autumn. Assistant Professor Wellington D. Jones is to make the trip. He will carry on geographic studies either in China or in India, the choice being determined by conditions in Asia when the trip is made. This will be the second trip of Professor Jones to Asia made possible by Mr. Swift's generosity.

BOSTON UNIVERSITY has concluded an arrangement for an exchange of professorships in mathematics for the college year 1920-21 with Tsing Hua College, Peking, China. Professor Robert E. Bruce, chairman of the department in Boston University, will exchange with Professor Albert H. Heinz, of Tsing Hua. Professor Heinz, head of the department of mathematics, is a graduate of the University of Missouri and has been at Tsing Hua nine years. This college is under the control of the Chinese government and was founded with part of the returned Boxer Indemnity. Professor Bruce will sail from the Pacific coast in April. Professor Heinz will reach this country in time to begin his work at Boston University at the opening of the college in September.

IN recognition of the gift of £34,500 by Sir Ralph Forster, Bt., to the fund for the chemistry building and equipment at University College, London, the organic department of the chemical laboratories will be known by his name.

At the University of California, Assistant Professor B. M. Woods has been promoted to a full professorship of aerodynamics.

DR. CARROLL W. DODGE has succeeded Professor Harlan H. York, as head of the department of botany at Brown University and

Walter H. Snell, formerly of the Office of Investigations in Forest Pathology of the Department of Agriculture, has accepted an instructorship in the same department.

PROFESSOR A. K. PEITERSEN, who for the past seven years has been assistant professor of botany and assistant botanist of the experiment station, of the University of Vermont, has gone to Fort Collins, Colorado, where he has been elected professor of botany.

PROFESSOR SWALE VINCENT, who has occupied the chair of physiology at the University of Manitoba (Winnipeg) since 1904, has been appointed professor of physiology in the University of London (Middlesex Hospital). He will probably take up his duties in London at the beginning of May.

DR. HAROLD PRINGLE, lecturer on histology and assistant in physiology in the University of Edinburgh, has been appointed professor of physiology in Trinity College, Dublin, succeeding the late Sir Henry Thompson.

DISCUSSION AND CORRESPONDENCE FURTHER HISTORY OF THE CALCULUS

TO THE EDITOR OF SCIENCE: Please make a correction of my college address to Rose Polytechnic Institute, in the paper on "The Early History of Calculus," in SCIENCE for July 11. The error is due perhaps to the fact that only my name was signed to the article.

The quotation from the "Encyclopedia Britannica" should be stated as from the ninth edition, since it has been omitted in the eleventh. The historical part of the article "Inf. Cal." is entirely changed in the last edition to one of still stronger German bias. It makes the statement, for example, that Leibniz did not meet Collins, nor see the tract "De analysi per aequationen . . ." on his first visit to London in 1673. No verification of this statement is offered. English histories and documents have it the other way with regard to Collins.

Evidence of the possible duplicity of Collins which indicates that he was an agent under Oldenberg as early as 1669, appears in the rewritten history. To quote:

The tract "De analysi per aequationen . . ." was sent by Newton to Barrow, who sent it to John Collins with a request that it might be made known. One way of making it known would have been to print it in the *Philosophical Transactions* of the Royal Society, but this course was not adopted. Collins made a copy of the tract and sent it to Lord Brouncker, but neither of them brought it before the Royal Society. . . . In 1680 Collins sought the assistance of the Royal Society for the publication of the tract and this was granted in 1682, yet it remained unpublished. The reason is unknown. . . .

The usual history is that Collins was the active agent in soliciting the tract "to make it known." Also, Oldenberg was secretary of the Royal Society, and published the *Transactions* for his private profit, without supervision from the society. The relations of these two men were intimate. The tract was probably brought directly to Oldenberg—he has shown that he had knowledge of it—and that he did not act upon it in his official capacity is evidence of conspiracy to suppress it. When both were urging Newton, as already cited, to undertake "for the honor of England," a correspondence which Leibnitz had planned, it was at that time within their power to promote greater honor to England by publishing the tract in the *Transactions*. In reference to the threatened publication in 1680, the death of Oldenberg about two years before, had left Collins without his principal, if Oldenberg were such, and that transaction might have been a shrewd move on Collins' part to retain his honorariums through Leibniz. At least some cause delayed Leibniz seven years in the publication of his calculus, already prepared, while it was put in in the hands of the printer *immediately* after the death of Collins.

There is reason to believe that Leibniz had information of matters transpiring in England before he left Germany. It is difficult to explain otherwise the grandiloquent announcement of wonderful discoveries of new methods in mathematics, which heralded his visit to Paris in 1672, with no work to show, and with admittedly inferior mathematical knowledge for such work. The London exposure by