Star Catalogue, was another of the original members. They were not called fellows until 1830, when the royal charter was granted, giving the society its present title; it was previously called the London Astronomical Society. The earliest publications of the society were in the form of memoirs; the Monthly Notices did not commence until several years later, and were at first only small pamphlets containing ephemerides of comets and other matters of transient interest.

The British Medical Journal writes:

Owing to the war the zoological station at Naples has suffered in many ways, and it is highly necessary that this very important international scientific institution should receive the support necessary to enable it to carry on its work without restriction. But, although its importance for zoological and morphological research has always been recognized, its advantages for physiological and biochemical studies are by no means as widely known as they ought to be. The station is fully equipped with all necessary apparatus and materials, and the section for physiology and biochemistry, being under the very capable direction of Professor Bottazzi, the professor of physiology in the University of Naples, students are assured not only of the opportunities of carrying out independent and untrammelled research, but of the best advice and direction from the staff. There is an admirable library, with very complete sets of periodical publications. The rent of a table is 2,500 francs a year (payable in gold), and the director of the station will furnish all details to students who propose to carry out any research there. The study of comparative physiology has bearings upon immunology, upon the question of functional activities, upon biochemistry and physiology in general, the importance of which in their relation to medicine needs no emphasis. The effect on international relations of a free use of these scientific facilities being made by British students and of their intercourse with Italian men of science is but little less important.

The American Fisheries Society will hold its fiftieth anniversary meeting at Ottawa, Canada, on September 20, 21 and 22, 1920. For this meeting the society will offer prizes of $100 for papers in competition in each of the following classes. (1) For the contribution showing the greatest advance in practical fish cultural work; (2) For the best contribution to biological work connected with fish problems in general; (3) For that which offers the greatest promise of the solution of problems affecting commercial fisheries work. The papers should be in the hands of the secretary not later than August 20. Further information can be obtained from the executive secretary, Professor Raymond C. Osburn, Ohio State University, Columbus, Ohio.

UNIVERSITY AND EDUCATIONAL NEWS

Yale University has received $1,000,000 from the General Education Board for the development of the New Haven General Hospital through the medical school of the university. The hospital will be made a full-time institution, the staff many of whom are members of the Yale Medical School faculty, giving all their time to the hospital and foregoing outside practise. When the Yale Medical School became affiliated with the New Haven hospital a few years ago, a gift of $500,000 from the General Education Board was received.

The General Education Board has made a gift of $500,000 each to the endowment funds of Smith College and Mount Holyoke College and $400,000 to that of Wesleyan University. It has also made an appropriation of $250,000 to Middlebury College on condition that an additional $750,000 be raised by subscription.

Mr. Edward Whitley has offered to Oxford University the sum of £10,000 towards the endowment of a professorship of biochemistry, and the British Dye-Stuffs Corporation has made a donation of £5,000 towards the cost of extending the laboratory of organic chemistry.

The Convocation of Oxford University has passed without opposition the statute providing for the matriculation and admission of

women for degrees in the university. The Cambridge University Syndicate appointed to consider the question is divided in opinion; half have reported in favor of admission to full membership, and half in favor of a separate university at Cambridge.

DR. DAVID KINLEY, professor of economics and dean of the graduate school of the University of Illinois, has been elected president to succeed Dr. Edmund Janes James.

DR. LAUDER W. JONES, dean of the School of Chemistry and also of the College of Engineering and Architecture of the University of Minnesota, has accepted an appointment as professor of organic chemistry at Princeton University.

ALICE M. BORING, of the Peking Union Medical College, China, has been appointed assistant professor of zoology at Wellesley College, beginning with the academic year 1920–21.

DR. ELLSWORTH D. ELSTON, of Cornell University, has been appointed assistant professor of geology at Dartmouth College.

ASSOCIATE PROFESSOR J. WEMYSS ANDERSON, has been appointed to the recently established John William Hughes Chair of Engineering Refrigeration at Liverpool University.

DISCUSSION AND CORRESPONDENCE

MODERN INTERPRETATION OF DIFFERENTIALS AGAIN

TO THE EDITOR OF SCIENCE: I regret that in my criticism (SCIENCE, March 26) of Professor Hathaway's exposition of differentials (SCIENCE, February 13) I was led by an unwise desire for brevity into making a statement which, in its unqualified form, will not stand analysis. The statement that "lim $N\Delta y$ is inevitably zero" is certainly not true unless N remains finite, and Professor Hathaway is quite justified (SCIENCE, May 7) in chiding me for this error, since his N is not restricted to finite values.

At the same time I can not feel that I was essentially mistaken in contending that his presentation of differentials "would prove highly misleading to the modern student."

It is true that when he defines the differential dy as the limit of $N\Delta y$ for $\lim \Delta y = 0$, he does allow the multiplier N to vary (as I should have stated); but it is also true that *he gives no indication whatever as to the manner in which N is to vary; and without some such indication his limit of $N\Delta y$, and hence his differential, dy, remain wholly undefined!*

On page 167 (I quote verbatim this time, to avoid the danger of renewed injustice), his formal interpretation of differentials is given as follows: they are "ordinary arithmetical increments, but in a variation defined as *in the first ratio,* or *as the variables begin to increase,* or, *in the instantaneous state,* which are all one."

I maintain that such vague statements are not likely to convey to any student's mind "a rigorous theory, neglecting no quantity, however small, leaving no unexplained symbol." They are much more likely to leave him with the traditional impression that differentials are really as Bishop Berkeley called them, the "ghosts of departed quantities," or, in Professor Osgood's phrase, abominable "little zeroes," unworthy of a place in mathematical discussion.

The object of my brief letter was, as stated, not to discuss historical questions (the importance and value of which no one can deny) but merely to contrast the obscurity of Professor Hathaway's presentation with the clearness and simplicity of the modern treatment—the treatment which has been the commonplace of every treatise of recognized standing since the middle of the nineteenth century.

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POPULAR SCIENTIFIC LITERATURE

TO THE EDITOR OF SCIENCE: In the issues of SCIENCE for February 20 and 27 Mr. F. L. Ransome, of the U. S. Geological Survey, published a most interesting article on the "Functions and Ideals of a National Geological Survey."

In this article, attention was given to the