Miss Eunice Rockwood Oberly, librarian of the Bureau of Plant Industry of the Department of Agriculture since 1908, whose knowledge of the organization and relations of phytopathological literature was probably unique, died suddenly at her home in Washington on the morning of November 5.

John Augustine Zahm died in Munich, Bavaria, of pneumonia, on November 11. Dr. Zahm was born in Ohio and graduated in 1871 from Notre Dame, with which university he was connected for many years as head of its scientific department, as curator of its museum, and then as president of the board of trustees. He was the author of numerous books concerned largely with the relations of science to religion.

Dr. Emil A. Budde, the German electrical engineer, died recently at the age of eighty. He was president of the International Electrochemical Commission, succeeding Dr. Elihu Thomson.

The president and council of the Royal Society, London, announce that, in view of the economic condition of the country, the anniversary dinner of the society will not be held this year.

UNIVERSITY AND EDUCATIONAL NEWS

Sir Edward Allen Brotherton, Bt., M.P., has given £20,000 to the University of Leeds for the development of bacterial study and research, more particularly in the interests of public health.

A verdict of $25,000 damages has been rendered against Cornell University in the action brought by Louise Hamburger '20. In making his charge to the jury, Justice Kellogg said that the verdict to be given rested upon one point only, as to whether the university was negligent in employing a small boy in the chemistry stock-room. A motion for retrial has been made.

R. S. Lowe, of the Nitrate Division of the Ordnance Department of the Army, has been appointed dean of the department of chemical engineering of the University of Cincinnati.

C. R. Alden, formerly dean of the school of engineering, Institute of Technology, Detroit, has accepted an appointment as dean of the college of engineering, Ohio Northern University, Ada, Ohio.

Among changes in the medical faculty at Yale are: Dr. Francis G. Blake appointed John Slate Ely professor of medicine; Dr. Edwards Albert Park, professor of pediatrics; Dr. Arthur M. Morse, professor and head of the department of obstetrics and gynecology; Dr. John T. Peters, Jr., associate professor of medicine and Dr. Albert T. Shoal, associate professor of pediatrics. Dr. Samuel C. Hardey, associate professor of surgery, has been placed in charge of the surgical department of the school.

Dr. Lansing S. Wells, until recently a research chemist with the Barrett Company, Frankford, Philadelphia, Pa., has accepted an appointment as assistant professor of organic and physical chemistry, Montana State College, Bozeman.

Professor H. C. Plummer, F.R.S., has been appointed professor of mathematics of the Ordnance College, Woolwich, England.

At the opening of the winter session of St. Andrews University, Scotland, the newly appointed professor of chemistry, Dr. Robert Robinson, F.R.S., and the newly appointed professor of bacteriology, Dr. William J. Tullock, were inducted into their respective offices.

DISCUSSION AND CORRESPONDENCE

LATITUDE AND VERTEBRÆ

To the Editor of Science: In Science for December 26, 1919, is a suggestive note by Mr. A. G. Huntsman on the problem of "Latitude and Vertebræ" among fishes, a problem of reality and importance which I have thus had mostly to myself, and to which I have failed to find a solution. As Mr. Huntsman observes, not only have the northern species a progressively increased number of vertebræ, but a similar variation may occur within the limits of the species itself. In the flounder, *Hippoglossoides platessoides*, the northern examples have most vertebræ, while in the herring—*Clupea harengus*, the numbers of vertebræ decrease in passing from the

open sea, dense, saline and cold, to the Baltic. For this reason Mr. Huntsman suggests that the density of the surface water in which the eggs develop may be a decisive element.

In this connection, I may add a few additional data. In the group of Rock Cod or Rose-fish (*Sebastinæ*), the northern genera (*Sebastes, Sebastolobus*) have twenty-nine to thirty-one vertebræ, the tropical forms nearest related twenty-four, and the intermediate group of many species on both sides of the Pacific (*Sebastodes* and its allies) were supposed to have twenty-seven.

In verifying this statement I find that four of the more primitive of these forms (*Sebastodes paucispinis, S. goodei, Rosicola pinniger* and *R. miniatus,* have but twenty-five vertebræ, while all the others examined have twenty-seven as supposed, and the metameres in the very young are also twenty-seven.

Hitherto the extinct species of this tribe have remained unknown. I have, however, lately discovered three Miocene species, which ought to throw light on the problem. At any rate they show that the variation is of long standing.

Two fossil species with thirteen dorsal species, *Rixator porteousi* and *R. ineziæ,* related to *Sebastodes goodei,* have, like the latter species, twenty-four vertebræ, besides the last one which supports the hypural. This is evidence so far as it goes that the smaller number (with greater individual development of the bones) is very ancient. Nearly all the spiny-rayed shore fishes of the present day have twenty-five.

But another fish of this type—also Miocene (*Sebastavus vertebralis*), has thirty-two vertebræ. The relation of this species to existing forms is not close, nor is it well made out. All three of these Miocene species are found in deposits made in shallow, sheltered bays, in a temperate climate. As Mr. Huntsman observes, "A fruitful field for investigation is open in this direction." It should apparently involve both embryology and paleontology, as well as the study of adult fishes and their distribution.

DAVID STARR JORDAN

ABSTRACTS AND TITLES OF SCIENTIFIC ARTICLES FROM THE LIBRARIAN'S STANDPOINT

TO THE EDITOR OF SCIENCE: In his article on "Scientific Abstracting" in SCIENCE for ...ber 30, Mr. Fulcher emphasizes the point that the time of research men should be conserved for their actual research by facilitating for them in every way the securing of the scientific information already published. No one would dispute this statement, and its truth is becoming increasingly striking as the mass of literature yearly accumulates, but it is suggested that from his list of the agencies contributing to this end as a part of what he calls "our scientific information service" Mr. Fulcher has omitted a very necessary and important agency, namely, the scientific library. A library of a scientific institution has no other purpose than to collect and make available the literature on the subjects of interest to that institution, and anything which facilitates this work is ultimately of benefit to the investigators. There is no one to whom abstracts such as those pled for by Mr. Fulcher would be of greater help than to the scientific librarian or bibliographer. As he points out, it is impossible to rely on titles alone to show the variety of information contained in an article, so that it is necessary for a librarian compiling a subject catalogue to glance through each article so that he may be sure it is entered under all the subjects of which it treats. Abstracts in the form described, with the italicized paragraph headings and subtitles would suggest at a glance possible subject headings, and in the case of articles in highly specialized subjects would frequently suggest headings which, without the abstract, only the specialist would recognize as being desirable.

Speaking of this, the present writer has thought for a long time that it would be well for persons interested in increased economy and efficiency in the recording of scientific data to give the form of titles for periodical articles careful consideration. No title can, of course, describe all the contents of an article, but many could easily be more de-