

acting professor in the department of electrical engineering, to professor; Robert M. Anderson, acting professor in the department of engineering practise, to professor; Lewis E. Armstrong, instructor in the department of mathematics, to assistant professor.

MR. LESTER YODER, formerly with the chemical section of the Agricultural Experiment Station of Iowa State College, is now at the U. S. Technological School, Carney's Point, N. J.

THE chemistry department of the University of Nebraska announces the following additions to its teaching staff: Dr. Horace G. Deming, of the University of Illinois, as professor of chemistry in charge of general and physical chemistry; Mr. B. Clifford Hendricks, of Peru, Nebr., State Normal School, as assistant professor of chemistry; Mr. T. J. Thompson, of Kansas Wesleyan University, as instructor in organic chemistry.

#### DISCUSSION AND CORRESPONDENCE THE LILLE SOCIETY OF SCIENCES

TO THE EDITOR OF SCIENCE: I wish to call the attention of American scientists to the following extracts from a letter received from Dr. Charles Barrois, professor of geology at the University of Lille and actively interested in the Society of the Sciences of Lille. Dr. Barrois writes:

For four years I have been cut off from the number of the living, reduced to servitude, without receiving a letter or a scientific book; I have not been able during this time to communicate with anybody in the world, nor to have any news of my family. That has been harder to me than physical sufferings and bombs.

My geological institution has been twice demolished by bombs, but I was able to save the collections from the debris and they were respected by the Germans. Our library of the Society of Sciences was unfortunately burned so that I am much embarrassed in my work; the books of the Public Library were also burned, those of the university were saved, but that was the least important library.

I am working at present to build up again my university, our Geological Society of the North, all the members of which are scattered, ruined or

killed. I do not yet know if I shall succeed; books are necessary, and money is necessary to continue my publications and I fear it can not be obtained in France where they are much impoverished. I look sadly at the manuscripts of my confrères, entrusted to my care for publication. . . . I am quite a little disconcerted at being reduced to mendicancy in my old days, for our learned societies, but the American devotion and generosity have been shown so great in these latter days, that we believe we can be assisted by them openly.

If any one has any books or specimens that they think would be of assistance to Dr. Barrois and his associates in connection with the Library and Museum of the Society of the Sciences, the Smithsonian Institution will be very glad to transmit them to the society at Lille.

CHARLES D. WALCOTT

#### ROOT PRESSURE AND ROOT EXUDATION

A RECENT note in SCIENCE by Professor Kremers<sup>1</sup> upon the use of dahlias for experimental work upon osmosis reminds the writer of his use of the same plant for the demonstration of root pressure and the exudation of water in quantity. The growth from the tuberous roots is vigorous and in a short time is ready for the setting up of the experiment. The quantity of water exuded and the pressure are adequate for a thorough demonstration of these phenomena as outlined for example in Ganong's "Plant Physiology" and fully equal to the best plants which the writer has used in such demonstrations.

In this connection the writer wishes to express a thought which has been more and more impressed upon him in his work as a teacher of physiology, pathology and even morphology of plants. Each institution, and especially is this true of the smaller ones, is working out its technical problems in an isolated fashion, often repeating unprofitable experiments which have been found by other institutions to be unsuccessful. In other cases especially useful plants or types of ap-

<sup>1</sup> "Experimental Osmosis with a Living Membrane," Edward Kremers, SCIENCE, N. S., Vol. XLVIII., No. 1250, December 13, 1918, p. 599.