They suggest that ascorbic acid blood levels below 0.7 mg. per 100 cc are probably subnormal; in both conditions mentioned above lower values were found. A simplified respiration apparatus for work with small animals was described by M. Kleiber, who also reported, with H. Goss, on the fasting catabolism of phosphorus deficient rats. A. J. Lehman reported the preparation of extracts of urine and tissue having a marked effect upon blood pressure. Victor E. Hall read a paper on the influence of cold on the metabolic action of dinitrophenol, indicating that dinitrophenol interferes with the temperature-regulating mechanism. In reporting a genetic study of pubescent age in albino rats, Calvin P. Stone showed how rats by selection might be differentiated into two groups having a tendency to early and late maturing. O. Larsell had a number of photographs and diagrams illustrating the effect on the central nervous system of experimental limb amputation in foetal mammals; the amputations in the foetal stages were made possible by the use of marsupials. D. Warner, C. J. Robinson and Mildred Ellis read a paper on the results of long-continued asparin feeding to rats.

Five other papers were reported by title only.

WESTERN SOCIETY OF SOIL SCIENCE

(Report by S. C. Vandecaveye)

Four half-day sessions, two of these jointly with the Western Section of the American Society of Plant Physiologists, were held with an attendance ranging from 25 to 70. In a session devoted to soil morphology and classification, studies were presented on the morphological and chemical characteristics of certain soils, the physical properties and the management of the soil, and the economic approach as factors in soil classification and rating. Of particular interest was a paper by C. C. Nikiforoff pointing out that the coastal province, due to the Cascades, forms an independent physiographic unit in which the inversion of the horizontal soil zones does not show any marked vertical zonality. The morphological characteristics of the major soil groups in western Washington were further pointed out and discussed in the course of a full day field trip attended by 22 members.

A report of studies carried on at the University of California indicated that certain soils are capable of fixing soluble potassium in non-replaceable form. Tomatoes and barley were found to be able to absorb nearly all this fixed potassium in some of these soils but not in others. The anomalous behavior of magnesium in electrodialysis of soil colloids was reported from the State College of Washington. While exchangeable magnesium, like other exchangeable alkaline earth cations, is completely removable by extraction with neutral salts, it was not capable of complete removal from the exchange complex by electrodialysis.

The possible seriousness of spray residue accumulations in irrigated orchard soils was pointed out in two papers resulting from studies carried on at the Oregon State College and the State College of Washington, respectively. Lead arsenate spray accumulations seem to be confined largely to the cultivated surface layer of soil. Toxic effects on barley were found to be roughly in proportion to the concentration of the water soluble arsenic in the soil. Trees and their fruits appeared to be capable of assimilating both lead and arsenic. Barley tops absorbed appreciable quantities of arsenic but only traces of lead, while the roots absorbed large amounts of both.

Interesting results of studies on soil organic matter transformation, carried on by the University of Arizona and the State College of Washington, were presented and showed in general that the soil type, the nature of the organic residue, the temperature and the moisture affect the rate of decomposition and the nature of the soil flora. From work done at the University of Idaho it was shown that the addition of available phosphorus to calcareous soils produced a definite increase in the phosphorus and protein content of alfalfa. In a study of 30 non-irrigated orchard soils at the Oregon State College it was found that a favorable top soil is not sufficient to assure good tree growth without irrigation. In heavy soils much of the moisture classed as usable may never be used, because neither the roots can get to the moist soil nor can the moisture move to the roots.

The following officers were elected for the ensuing year: *President,* P. L. Hibbard, University of California, Berkeley; *Vice-president,* Robert Gardner, Colorado State College, Fort Collins, Colorado; *Secretary-treasurer,* S. C. Vandecaveye, State College of Washington, Pullman, Washington.

OBITUARY

HIRAM DRYER McCASKEY

FOR the second time within the year it has been our sad duty to pen an obituary notice of one who has devoted a part of his life and energies to the arduous and often dangerous work in our Far Eastern tropical dependency, the Philippines. Hiram Dryer McCaskey, who died recently at his estate, Boh Da Orchards, near Central Point, Oregon, had not been active in geological or mining work for several years. His most recent work had been done in connection with the U. S. Geological Survey in charge of the metallic mineral resources section. In his earlier years he served as the

second chief of the Philippine Mining Bureau in Manila. As Colonel Burrett, the first chief, was a lawyer and officer in the U. S. Volunteers, Mr. McCaskey was the first technical man to take over the work relinquished by the Spaniards, Abella y Caseriego and Centeno. Although a mining engineer, McCaskey had a keen interest in, and appreciation of, geological investigations in their relations to mining. This writer acknowledges with especial gratitude the debt he owes to his first chief in that difficult field when as a youngster he first faced the unusual task of unraveling the problems of Malayan geology.

In addition to his technical knowledge, Mr. McCaskey was possessed of true culture, gentleness of spirit, which even the most hard-boiled prospector appreciated. Although the son of a famous general of the U. S. forces in the Philippine Islands, McCaskey was essentially a man of peace and scholarly inclinations. These qualities early endeared him to the Filipinos, still chafing under the unavoidable irritations attendant upon the régime of the "Days of the Empire." He and others like him did a tremendous lot in making easy the difficult transition to civil government.

Although Mr. McCaskey's own published writings in the Philippine field were not numerous his great contribution was in making the work of his men as easy and effective as possible under pioneering conditions. He was always more than generous in giving full credit to others.

In spite of the disability which forced him to leave his Philippine labors in 1906, he rendered many years of effective service to the U. S. Geological Survey in Washington.

It was with keen sorrow that this "Old Timer" received word of the passing in southern Oregon of his former "Jefe de Minas," a very fine gentleman.

WARREN D. SMITH

UNIVERSITY OF OREGON

RECENT DEATHS

THE death at the age of seventy years has been announced of Dr. Charles Hamilton Ashton, professor of mathematics at the University of Kansas since 1903.

DR. ALFRED A. TITSWORTH, since 1886 a member of the faculty of Rutgers University, for forty-two years as professor of mathematics, died on August 15 at the age of eighty-three years.

DR. RICHARD OLDING BEARD, professor emeritus of physiology at the University of Minnesota, died on August 14. He was seventy-nine years old.

DR. FLORENCE FENWICK died on July 11 at the age of forty-two years. She received her doctor's degree at the University of Michigan in 1922 and was research fellow at Yale University from 1923 to 1928, since which time she has been physical chemist in the Research Laboratory of the U. S. Steel Corporation.

A CORRESPONDENT writes: "Dr. Julia Trueman Colpitts, associate professor of mathematics at Iowa State College, died at Southampton on August 8. She was returning from a visit to Europe, during which she had attended the International Congress of Mathematicians. Miss Colpitts was born at Pointe de Bute, N. B., received degrees at Mt. Allison University and Cornell University, and also studied at Columbia University and the University of Chicago. She had been a member of the faculty of Iowa State College since 1900. A member of Sigma Xi, Phi Kappa Phi and Sigma Delta Epsilon, Miss Colpitts had been national president of the latter organizaion. She had also been chairman of the Iowa Section of the Mathematical Association of America."

THE sudden death is announced of Dr. Frederick John Freshwater Shaw, director of the Imperial Institute of Agricultural Research, Government of India.

SCIENTIFIC EVENTS

A RADIO RESEARCH BOARD FOR INDIA

IT is stated in *Current Science,* edited at Bangalore, India, by Professor C. R. Narayan Rao, that, at the invitation of Professor S. K. Mitra, a number of distinguished investigators, including representatives of radio research workers from Australia and Canada, met recently in London to consider the question of forming a Radio Research Board for India. Professor Mitra, who was in England to acquaint himself with the latest developments in radio research, in the course of his speech emphasized the need for a coordinate organization with adequate funds at its disposal for conducting radio investigation in India. He said: "There are men available for such work in the universities, men who by their training are particularly gifted for such type of work. But without the cooperation of government departments, like the Air Ministry, the Meteorological and the Postal Departments, the universities, where alone such work is now being carried on, can not successfully conduct such investigations. The nature of the most helpful cooperation that is necessary is best exemplified by the British Radio Research Board, which maintains a close touch between the various government departments and the universities." Professor E. V. Appleton, King's College, London, supported the need for a board of the type envisaged by Professor Mitra. Sir Frank E. Smith mentioned that various problems such