

ing Professor W. J. Mead, of the department of geology, W. R. Appleby, of the school of mines, University of Minnesota; Professor W. H. Emmons, University of Minnesota; Frank Hutchinson, consulting engineer, Duluth, Minn.; L. D. Davenport, mining engineer, Hibbing, Minn.; and W. H. Graigo, mining engineer, recently of South Africa, of the University of Wisconsin, will go to China this summer as consulting experts for the South Manchuria Railway company. The party will sail from Seattle early in June and return in October. Professor Mead writes:

The South Manchuria Railway company controls partly developed iron and coal deposits near Mukdan, South Manchuria. The iron deposits resemble geologically those of the Lake Superior region. The railway company has employed a group of technical men familiar with the Lake Superior iron mining industry to make a thorough investigation of the Manchurian deposits during the coming summer and to advise on the best methods of opening up and developing both the iron ore and the coal.

EXPEDITION TO THE UPPER BASIN OF THE AMAZON

AN expedition to the headwaters of the Amazon River, under the leadership of Dr. H. H. Rusby, dean of the school of pharmacy of Columbia University, will sail for Antofagasta, Chile, on June 1. The main object of the expedition, which is financed by the H. K. Mulford Company, is the collection of herbs and plants likely to be of use in medicine, but studies will be made of the fauna and flora of the region.

Dr. Frederick L. Hoffman, statistician and vice-president of the Prudential Life Insurance Company, will accompany the expedition to make a study of health conditions with a view to the possibility of the acclimatization of white men in the region. Other members of the expedition are: Dr. William M. Mann, assistant entomologist of the Bureau of Entomology of the U. S. Department of Agriculture, in charge of entomology; Dr. Everett Pearson, University of Indiana, in charge of ichthyology; Dr. Orland E. White, of the Brooklyn Botanical Garden, representing Har-

vard University, in charge of botany; and George S. McCarthy, of Woodbury, N. J., taxidermist.

From Antofagasta, the expedition will travel by way of the Guggenheim mining properties to La Paz, Bolivia. From La Paz it will pass through unexplored territory, crossing the Andes at an elevation of more than 19,000 feet. Calamar will be used as a base for the expedition.

SCIENTIFIC NOTES AND NEWS

THE ROYAL SOCIETY on May 5 elected as foreign members Dr. Albert Calmette, of the Pasteur Institute; Dr. Henri Deslandres, of the Paris Observatory; Professor Albert Einstein, of the University of Berlin; Professor Albin Haller, of the University of Paris; Professor E. B. Wilson, of Columbia University, and Professor P. Zeeman, of the University of Amsterdam.

PROFESSOR GEORGE C. WHIPPLE, of the Harvard Engineering School and the Harvard Technology School of Public Health, has been elected an honorary fellow of the Royal Sanitary Institute of Great Britain.

DR. OTTO KLOTZ, director of the Dominion Observatory, Ottawa, has been elected president of Section III. (Mathematical, Physical and Chemical Sciences) of the Royal Society of Canada.

THE following officers were elected at the annual meeting of the Kentucky Academy of Sciences on May 14:

President, George D. Smith, Eastern Kentucky State Normal School, Richmond, Ky.

Vice-president, Lucien Beckner, Winchester, Ky.

Secretary, A. M. Peter, Experiment Station, Lexington, Ky.

Treasurer, Chas. A. Shull, University of Kentucky, Lexington, Ky.

Member of Publications Committee, D. W. Martin, Georgetown College, Georgetown, Ky.

Representative in the Council of the American Association for the Advancement of Science, A. M. Peter.

DR. A. R. MANN, dean of the New York State Agricultural College at Cornell Uni-

versity, has declined the post of New York State Commissioner of Agriculture, to which he was recently appointed by the State Council of Farms and Markets.

ROBERT C. DUNCAN, physicist at the Bureau of Standards, has resigned to accept a position as technician for the Bureau of Ordnance, Navy Department.

MR. B. H. RAWL, assistant chief of the Bureau of Animal Industry, U. S. Department of Agriculture, has resigned to take charge of the educational work of the California Central Creameries, with headquarters in San Francisco.

DR. W. K. GREGORY sailed for Sydney, New South Wales, on May 31, to enlist the cooperation of Australian museums with the American Museum of Natural History and to secure material for the Australian Hall of the Museum.

MR. W. L. G. JOERG, of the scientific staff of the American Geographical Society of New York and editor of its Research Series, left on May 21 on a six months' leave of absence for a trip to Europe on behalf of the society to study the present status and tendencies of geography in Europe and to establish closer relations with kindred workers and institutions.

DR. H. H. WHETZEL, head of the department of plant pathology at Cornell University, has been granted sabbatical leave for the year 1921-22. He will sail on June 8 for Bermuda, where he is to be associated with the Department of Agriculture of the Islands in plant disease survey and research work. Dr. L. M. Massey will be acting head of the department in the absence of Professor Whetzel.

A BOTANICAL garden, established as part of Albany's park development program in cooperation with the Albany College of Pharmacy, which will contain every plant grown in the state, is included in the new college plans. According to Dean Mansfield, the garden will be one of the most complete of its kind in the United States and will be arranged after the plan of the London and Paris botanical parks.

UNIVERSITY AND EDUCATIONAL NEWS

OFFICIAL announcement is made in *Yale Alumni Weekly* of the construction in the immediate future of a new chemical laboratory by Yale University. It will be known as the Sterling Chemical Laboratory and will be constructed to accommodate all the undergraduate and graduate chemical activities of the university. At present the department of chemistry is occupying the two departmental laboratories, Kent and Sheffield, which are inadequate to meet the future growth of the department.

A MEMORIAL has been presented to the council of the Senate of the University of Cambridge for a syndicate to be appointed to consider possible alterations in the Mathematical and Natural Sciences Triposes with the object of facilitating the acquisition by candidates in one subject of a knowledge of the other.

PROFESSOR R. A. DUTCHER of the department of biochemistry will leave the University of Minnesota at the end of the school year to become head of the department of chemistry in the college of agriculture at Pennsylvania State College.

PROFESSOR A. D. ROSS, professor of mathematics and physics and formerly vice-chancellor of the University of Western Australia, Perth, has been elected a member of the governing body of the university.

It is proposed to appoint Professor H. Lamb, now in residence in the University of Cambridge, to an honorary university lectureship to be called the Rayleigh lectureship in mathematics.

DISCUSSION AND CORRESPONDENCE

THE AURORA OF MAY 14, 1921

A VERY bright auroral display was observed here on the evening of May 14. The sky was overcast until 10 P.M. eastern standard time. As the clouds dissolved, the aurora was noted in spite of the bright moonlight.

The focus of the display was near the zenith in the vicinity of the star Arcturus. From that point streamers radiated in all directions,