determined by actual measurement. The amount present in the ore has been found in fact to be essentially the same as the theoretical amount required by the uranium-radium ratio. The extraction figures for the last five carloads of carnotite treatment has shown a recovery of over 90 per cent, in each case.

A bulletin giving details of mining, concentration and methods of extraction is being prepared by the Bureau of Mines and will be issued early in the fall.

SCIENTIFIC NOTES AND NEWS

Dr. David Starr Jordan has been elected a member of the Royal Swedish Academy of Science at Stockholm, in appreciation of his work in zoology.

It is planned at Brown University to collect a fund to endow the library of the department of mathematics in honor of Professor Nathaniel F. Davis, who will retire from active service at the close of the present academic year, after having served Brown University for over forty years.

The University of Edinburgh has conferred the degree of doctor of laws on Professor W. A. Herdman, who holds the chair of zoology in the University of Liverpool, and on Professor Arthur Thomson, who holds the chair of human anatomy in the University of Oxford.

The Royal Scottish Geographical Society has awarded the Livingstone gold medal to Lord Kitchener in recognition of his work on the survey of Palestine and as director of the survey of Cyprus, as well as in recognition of his services to the state. The society's gold medal has been awarded to Dr. J. Scott Keltie, late secretary of the Royal Geographical Society, in consideration of his services to geographical science.

THE medal and grant for 1915 of the South African Association for the Advancement of Science have been awarded to Mr. C. P. Lounsbury, chief of the division of entomology, Union Department of Agriculture.

The following is a list of recently elected honorary fellows of the Royal Society of Medicine: *British*: Sir R. Douglas Powell, Lord

Moulton, Sir John McFadyean, Sir Francis Darwin, Robert Bridges, Lieutenant-Colonel Sir David Prain, T. Pridgin Teale, Sir John Williams, Professor E. G. Browne, Professor S. G. Shattock. *Foreign:* Professors J. Babinski, A. Chauffard, Jules Dejerine, M. T. Tuffier of Paris, and Dr. Paul Heger, of Belgium.

THE Hanbury medal has been awarded to Mr. E. M. Holmes, curator of the Pharmaceutical Society's Museum, for his original research in the natural history of drugs.

On June 30, as we learn from *Nature*, Dr. Alexander Fischer de Waldheim, director of the Imperial Botanic Garden of Peter the Great at Petrograd, completed the fiftieth year of his scientific and administrative activities. The event was made the occasion of a ceremony with presentation of addresses in the hall of the herbarium at the garden. Dr. Fischer de Waldheim commenced his botanical career as docent at the University of Moscow, and later became professor of botany at the University of Warsaw. On the death of A. F. Batalin in 1897 he was appointed director of the gardens at Petrograd.

THE committee on awards for scientific exhibits at the San Francisco meeting granted gold medals to the pathological departments of Stanford University and of the University of Michigan; to the Indiana State Board of Health, for its exhibit on a public health campaign; to Drs. C. C. Bass and F. M. Johns, of Tulane University, for their exhibit on pyorrhea alveolaris and malaria; to Drs. Claud A. Smith and J. Witherspoon, on hookworm; to the pathological laboratory of the New York Lying-in Hospital, on the demonstration of the cultivation of human tissue in vitro: to Dr. Martin H. Fischer, of Cincinnati, on newer experiments in the physiology and pathology of kidney functions, and to Dr. J. T. Case, of Battle Creek, on lantern slides illustrating Roentgen-ray studies.

The bronze thesis medal of the Science Club of the University of Wisconsin was awarded at commencement to Walter Pitz for a thesis on "The Effect of Elemental Sulphur and of Calcium Sulphate on Certain of the Higher and Lower Forms of Plant Life." This medal is awarded annually to a senior in the University of Wisconsin for quality and quantity of research in preparing a thesis in physical or natural science, or pure mathematics, or their useful applications.

Dr. Goldwater, health commissioner of New York City, has resigned in order to resume his duties as superintendent of Mt. Sinai Hospital.

EDGAR M. LEDYARD, formerly assistant professor of entomology in the University of the Philippines, who has spent the last year in research work in the laboratory of parasitology of the University of California, has been appointed director of the Agricultural Department of the United States Smelting Company, Salt Lake City, Utah.

Colonel William Hunter, M.D., assistant physician to Charing Cross Hospital; Lieutenant-Colonel G. S. Buchanan, M.D., first assistant medical officer to the local government board; Lieutenant-Colonel Andrew Balfour, C.M.G., director of the Wellcome Bureau of Scientific Research, and Lieutenant-Colonel Leonard Dudgeon, F.R.C.P., lecturer on general and special pathology at St. Thomas's Hospital, have gone to the Dardanelles, as an advisory committee to assist the British Royal Army Medical Corps in dealing with epidemics.

The St. Louis University has fitted up an expedition to make a study of tropical diseases and biology in British and Spanish Honduras. The party which left New Orleans on July 21, was composed of the following: John P. Coony, Ph.D., S.J., professor of chemistry; E. N. Tobey, M.D., instructor in tropical diseases, and A. M. Schwitalla, S.J., A.M., a student in biology.

UNIVERSITY AND EDUCATIONAL NEWS

Mr. C. W. Dyson Perrins, who gave £5,000 toward the construction of the University of Oxford chemical laboratory which is nearing completion, has lately offered to present to the university a further sum of £25,000, of which £5,000 is to be applied to the equipment of the laboratory, and the remaining £20,000 is to

form a permanent endowment fund for maintenance of the laboratory and for the encouragement of research and instruction in chemistry.

George Peabody College for Teachers has received \$8,500 from Miss Eleanor Cuyler of New York City and Mr. Thos. DeWitt Cuyler of Philadelphia, for equipping the Jesup Psychology Laboratory. This amount of money is to be spent for furniture, laboratory equipment and psychological publications.

Professor H. S. Jackson, of the Oregon Agricultural College, has accepted the position of head of the botanical department of the Agricultural Experiment Station of Purdue University, Lafayette, Indiana, to take effect September first, as successor to Dr. J. C. Arthur, who retires as a beneficiary of the Carnegie Foundation for the Advancement of Teaching.

Dr. E. W. Sinnott, of the Bussey Institution, has been appointed professor of botany and genetics at the Connecticut Agricultural College.

At Yale University, Reynold A. Spaeth, Ph.D. (Harvard, '13), instructor in embryology at Clark University, has been appointed instructor in biology in Yale College.

THE following appointments have been made at the Massachusetts Institute of Technology: George Owen (M. I. T., '94), assistant professor of naval architecture; Royal M. Frye, A.B., instructor in physics; Charles H. Calder, Horatio W. Lamson and Joseph C. MacKinnon, assistants in physics; Elwyn E. Snyder, Jr., assistant in industrial chemistry.

At Rutgers College research assistants have been appointed as follows:

Roland E. Curtis, B.S. (Oregon), soil bacteriology. F. E. Allison, B.S. (Purdue), M.S. (Iowa State), Amos Phos fellow.

Selman A. Waksman, B.S. (Rutgers), soil bacteriology.

Carl R. Fellers, B.S. (Cornell), soy bean.

William S. Porte, B.S. (Rutgers), plant physiology.

Orville Schultz, B.S. (Iowa State), plant breeding. W. H. Martin, B.S. (Maine), plant pathology. W. S. Krout, B.S., M.A. (Ohio State), plant

pathology. Homer E. Carney, B.S. (Miami), botany.