

terior would be authorized "to conduct explorations and researches with a view to determining the practicability of developing from such ores a supply of radium and to provide for the mining and treatment of radium-bearing ores in such manner as would best secure a supply of radium for the use of the government of the United States and the hospitals of this country."

Secretary Lane points out that there are only two grams of radium at present in the United States. It is valued at \$120,000 a gram. All has been procured from Europe. "Three fourths of the radium produced in the world during the year 1912," says Secretary Lane, "came from American ores, yet we have, up to this time, taken no steps whatever to preserve for our own people this invaluable metal, and our physicians and hospitals are dependent upon European laboratories for such supply as they can procure, and are subject to whatever monopoly charge the European laboratories demand for their product."

In view of the use of radium in the treatment of cancer and the difficulty now experienced in obtaining a supply of it, Secretary Lane says, that as one person in every ten in this country more than fifty years of age suffers from cancer, "it is difficult to overestimate the necessity of securing immediately as large a supply as possible of this mysterious remedy." Continuing, the secretary says: "Radium is found in ores carrying uranium and vanadium, which are used extensively in the arts, and processes by which it is extracted are secret. A process has been invented by the chemists in our Bureau of Mines which promises, from the laboratory experiments thus far made, to be successful. Under the endowment of two Americans, a building is now being erected in Denver (which, with its equipment, will be opened for work in the coming February), in which an effort will be made to prove the commercial possibility of this American process. If successful, this process will be given to the world, and all of the radium secured over and above a small minimum will be the property of the United States, and will be put into the hands of the

United States Public Health Service for public use. Under all these circumstances it seems to me that the only prudent course that the United States can follow is to withdraw such of its lands as are supposed to contain radium from public entry. This will guard against these lands being taken up by those who would not put them to their highest and most beneficial use. It would be inhuman to deprive other nations of access to our radium deposits if they alone were masters of the secret by which this mineral could be secured, and it is believed that there is a sufficient amount of carnotite and pitchblend already in private ownership in this country to permit of continued European experimentation and production. The people of the United States, however, should be entitled to protection against the exhaustion of this resource and its exclusive control by the scientists of other lands."

SCIENTIFIC NOTES AND NEWS

It is proposed to place a suitable memorial of the late Alfred Russel Wallace in Westminster Abbey. It is also proposed to present a statue or bust to the British Museum of Natural History and a portrait to the Royal Society. Contributions to the Alfred Russel Wallace Memorial Fund may be sent to the Union of London and Smith Bank, Holborn Circus, London, E. C.

LORD RAYLEIGH will unveil a tablet to the memory of Lord Lister at King's College, London, on January 14. The ceremony will be followed by the inaugural lecture of the newly appointed professor of physics, Professor O. W. Richardson, F.R.S., recently of Princeton University, who will take as his subject "The Discharge of Electricity from Hot Bodies." Lord Rayleigh will also preside at this lecture.

SIR ARCHIBALD GEIKIE, the distinguished British geologist, has been appointed a member of the Order of Merit, filling the vacancy caused by the death of Alfred Russel Wallace.

OTHER New Year's honors in Great Britain include a viscounty conferred on Mr. James

Bryce, recently British ambassador at Washington.

THE National Geographical Society has awarded a medal in honor of the late Professor Franklin Hiram King for his work on Chinese agriculture.

COLONEL GORGAS, M.D., chief sanitary officer of the Panama Canal, has been elected an honorary fellow of the Royal Sanitary Institute, London.

THE executive committee of the board of trustees of Cornell University has made the following expression of its feeling with respect to the resignation of Professor J. H. Comstock:

In accepting the foregoing resignation the trustees congratulate Professor Comstock on his long, honorable and fruitful service to Cornell University, with which as student and teacher he has been associated almost without interruption since he matriculated as a freshman, and they bear grateful testimony to his success in teaching and in inspiring students and also in scientific investigation, for the continuance of which they trust his health and energy may be preserved for many years to come to the honor of his alma mater and the advancement of truth and knowledge.

After accepting the resignation of Professor Charles DeGarmo, the committee adopted the following minute:

Dr. DeGarmo came to Cornell after twenty-five years' labor as teacher and administrator in school, college and university. Under his guidance the department of education was reorganized and has been a large factor in the preparation of many students for usefulness. During his years of service to Cornell he has wielded a widespread influence in the country through his writings, his addresses to gatherings of school men, his helpfulness to those charged with school administration. In the university he has inspired others by his teaching and even more by the gentle nobility of his character, and by his steadfast devotion to the highest standards of life and work.

PROFESSOR SIMONIN, of the Paris Observatory, Professor Abraham, of the University of Paris, and Captain Carrier, of the French army, the three savants cooperating with a similar party of Americans in determining, with the assistance of radio signals, the differ-

ence of longitude between Washington and Paris, recently delivered short addresses before an audience comprising the Naval Observatory staff and representatives drawn from the naval and scientific circles of Washington.

At the annual meeting of the American Ornithologists' Union in November last it was decided to increase the membership of the Committee on Classification and Nomenclature from seven to eleven with the object of having it organize as two subcommittees, one of four members to consider matters of nomenclature, the other of seven members, to cover systematic and geographic questions, especially the acceptance or rejection of proposed new forms. The president, Dr. Frank M. Chapman, has reappointed the old committee, consisting of J. A. Allen, William Brewster, Jonathan Dwight, Jr., C. Hart Merriam, Charles W. Richmond, Robert Ridgway and Witmer Stone; and as the four additional members he has named Joseph Grinnell, E. W. Nelson, Harry C. Oberholser and T. S. Palmer.

MR. G. W. LAMPLUGH, F.R.S., has been promoted to be assistant director of the Geological Survey of Great Britain, and Mr. T. C. Cantrill to be district geologist.

W. S. VALIANT, for twenty years assistant in the geological museum of Rutgers College, has been appointed curator. Professor J. Volney Lewis, formerly designated curator, has been made director.

THE autumn series of public lectures, given at Washington University, St. Louis, came to a close with an address by Dr. Eugene L. Opie on "Modern Tendencies in Medicine."

THE Friday evening meetings of the Royal Institution, London, will be resumed on January 23, when Sir James Dewar will speak on the coming of age of the vacuum flask. Among the lectures announced is one on the mechanics of muscular effort, by Mr. H. S. Hele-Shaw, F.R.S., and another on the production of neon and helium by electric discharge, by Professor Norman Collie, F.R.S. On February 20 Professor Arthur Keith, conservator of the Museum of the Royal College of Surgeons of England, will relate the results of an

anthropological study of the busts and portraits of Shakespeare and Burns.

THE library of the late Professor Ernest Ziegler, formerly professor of pathology at the University of Freiburg, purchased for the University of Pittsburgh by Mr. Richard Beatty Mellen was formally presented to the university at a meeting held in the University Club, Pittsburgh, December 5. The addresses of the evening were given by Dr. William H. Welch, Baltimore, and Mr. Harrison W. Carver, Pittsburgh.

DR. S. WEIR MITCHELL, distinguished as a man of science, as a man of letters and as a physician, died at his home in Philadelphia, on January 7, at the age of nearly eighty-four years.

DR. SETH CARLO CHANDLER, the distinguished astronomer, at one time assistant to Dr. B. A. Gould, aid in the U. S. Coast Survey and in the Harvard College Observatory, since 1885 engaged in private investigation, died on January 31, at the age of sixty-seven years.

DR. FREDERICK CARL BUSCH, for some years professor of physiology at the University of Buffalo, recently engaged in cancer research, died from that disease on January 3, aged forty years.

HIRAM JOHN MESSENGER, Ph.D. (Cornell), for the last fifteen years the actuary of the Travelers Insurance Company, at one time associate professor of mathematics in New York University, author of publications on social statistics, died at his home in Hartford, Conn., on December 15.

By the will of the late Mr. Arnold Friedlander, an English merchant, \$25,000 is left for a cancer research fund.

THE Ecuadorean government has approved the contract with a London firm for the sanitation of Guayaquil. The question of cleaning up Guayaquil has been under consideration for a long time. Bubonic plague and yellow fever have been prevalent there, and the proper sanitation of the port was made the subject of an investigation by Colonel

William C. Gorgas, head of the sanitary work in the Panama Canal zone. The installation of a proper sanitary system has been made imperative by the early opening of the Panama Canal. It is understood that the cost of the work will approximate \$10,000,000.

UNIVERSITY AND EDUCATIONAL NEWS

THE movement for the establishment of a national university in Washington on the plan indorsed by the National Association of State Universities is taking form, and President James, of the University of Illinois, has, it is understood, commenced the preparation of a bill soon to be submitted to President Wilson for his approval and afterwards to be introduced in both houses of Congress. The bill will carry a preliminary appropriation of \$500,000 toward the establishment of a university to be under the control of a board appointed by the president of the United States. It will propose an advisory board made up of one delegate from each state to frame the policy of the institution.

THE will of the late Seth K. Sweetser, of Brookline, Mass., makes public bequests amounting to \$137,000, including \$25,000 to the Massachusetts Institute of Technology.

ANNOUNCEMENT is made that the Cleveland City Hospital and the school of medicine of Western Reserve University are to be affiliated. The agreement which will be entered into by the city and the university will provide that all members of the visiting staff of the City Hospital shall be nominated by the trustees of Western Reserve University upon recommendation by the faculty of the school of medicine. The visiting staff will have absolute authority over the professional treatment of all patients of the hospital. The director of public welfare will be the administrative head of the hospital. The university will have all teaching and research privileges.

TWELVE colleges, hospitals and charitable institutions of Minnesota, nine of them in Minneapolis, are the recipients of New Year's gifts aggregating \$230,000 from David D. Stewart, of St. Albans, Me., who inherited the