

best collection of minerals collected in the province of Ontario during the year 1908 by any one not employed as a collector by a public institution or dealer in minerals. The collection must contain at least thirty mineral species, and it is suggested that where convenient the size of the specimens should be 2 x 3 inches. Each specimen must be labeled with the exact locality from which it was obtained, and the date on which it was collected. No specimen will be considered unless it is so labeled. A typewritten list of the specimens, with names of minerals and localities, in triplicate, together with a declaration stating that they were personally collected by the signer of such declaration in the province of Ontario in 1908 at the localities stated, with the post-office address of the collector, must accompany each collection. The collections must be addressed: "Examiners, Tyrell Prize, Government Assay Office, Belleville, Ont.," and must be sent, *prepaid*, to the Government Assay Office, Belleville, Ontario, on or before December 1, 1908, where they will be opened and examined jointly by Professor Nicol, of the School of Mining, Kingston, and Dr. Walker, of Toronto University. If requested the collections will be returned, charges collect, as soon as possible after the prize is awarded.

#### LECTURES ON HYGIENE AT CORNELL UNIVERSITY

It is proposed to give next year at Cornell University a course of public lectures on hygiene and public health. These lectures are to be given in cooperation with the state department of health. A committee of the university faculty has adopted a provisional scheme for the first term under which the following course of lectures has been arranged:

October 8—Introductory lecture by President Schurman.

October 13 and 15—"Public Health Administration," E. H. Porter, M.D., State Health Commissioner.

October 20—"Epidemiology," Arthur Newsholme, M.D., health officer, Brighton, England.

October 22—To be announced; foreign visitor.

October 27—"The Relation of the State to the Health of the Rural Community," R. A. Pearson, State Commissioner of Agriculture.

October 29—To be announced; Dr. W. L. Russell.

November 3 and 5—"Social Problems in their Relation to the Public Health," Professor J. W. Jenks.

November 10 and 12—"The Public Health Law," A. H. Seymour, Secretary of the State Department of Health.

November 17, 19 and 24—"The Various Aspects of Vital Statistics," Professor Walter F. Willcox.

December 1—"Public Morality," John B. Huber, M.D., lecturer on tuberculosis, State Department of Health.

December 3—"The Influence of the Action of the Laws of Heredity upon Public Health," Professor S. H. Gage.

December 8—"Voluntary Organization in Public Health Work," Homer Folks, member of the tuberculosis advisory board, State Department of Health.

December 10, 15 and 17—"Bacteriology and Comparative Epidemiology," Professor V. A. Moore.

January 5—"Recent Results of Research upon Causation and Transmission of Malignant Diseases," Professor James Ewing.

January 7—"The Relation of Psychology to Preventive Medicine," Professor E. B. Titchener.

January 12 and 14—"Immunity and Epidemiology," Herbert P. Pease, M.D., director of the hygienic laboratory, State Department of Health.

#### SCIENTIFIC NOTES AND NEWS

PROFESSOR RUFUS I. COLE, of the Johns Hopkins University, has accepted the directorship of the Research Hospital of the Rockefeller Institute of New York City. He had previously declined the chair of medicine at the University of Michigan.

PROFESSOR HUGO VON SEELIGER, of Munich, has declined a call to the directorship of the Astrophysical Observatory at Potsdam.

DR. HOMER D. HOUSE has been appointed associate director in the Biltmore Forest School.

DR. RAYMOND H. POND, has been appointed biologist of the Metropolitan Sewerage Commission of New York.

THE Oklahoma Geological Commission, consisting of the governor, the state superintendent of public instruction and the president of the state university, met for organization on July 25. Governor Haskell was elected president of the commission, Superintendent Cameron, secretary, and President Evans, executive officer. Dr. Chas. N. Gould, professor of geology at the State University of Oklahoma, was elected director of the survey and instructed to begin at once the preparation of reports dealing with the geologic structure and mineral resources of the state.

DR. HARVEY W. WILEY, chief of the Bureau of Chemistry, Department of Agriculture, has been appointed honorary president of the First International Congress for the Repression of Adulteration of Alimentary and Pharmaceutical Products, which will meet in Geneva, Switzerland, beginning September 8.

PROFESSOR FREIHERR ADOLF V. LA VALETTE ST. GEORGE, professor of anatomy, at Bonn, has celebrated the fiftieth anniversary of his doctorate.

DR. ANTONIO LAGORIO is taking treatment at the Chicago Pasteur Institute, of which he has charge, on account of infection from a wound from the bone of a rabbit which had been inoculated with rabies.

WE learn from the *Journal* of the American Medical Association that the professional silver jubilee of Professor Julius Dollinger, of Budapest, was celebrated recently by his friends, and the last issue of the *Orvosi Hetilap* was expanded into a *Festschrift* in his honor. His present and former pupils contributed a number of interesting articles on various phases of surgery and orthopedics, Dr. Dollinger having been docent in the latter specialty before he was appointed to the chair of general surgery. The recent systematic organization of cancer research in Hungary is also his work.

THE silver medal of the Zoological Society of London has been awarded to Sir William Ingram for his gifts of birds of paradise to the society's collection.

AT the suggestion of the director of the Aeronautical Observatory at Lindenberg, Prussia, Professor Arthur Berson and Dr. Hermann Elias, of the observatory staff, have been sent to East Africa to make meteorological observations in the upper air by means of balloons and kites, on the days that have been assigned for international cooperation in these investigations.

ACCORDING to a press despatch, Lieutenants Colin, Jeance and Mercier, of the French navy, have obtained excellent results with a wireless telephone of their invention. Communication has been maintained between Paris and a wireless station at Raz de Seine, Department of Finistère, a distance of about 300 miles.

A MONUMENT to the memory of Richard Freiherr von Krafft-Ebing will be unveiled in the court of the University of Vienna on October 6.

MR. HARRY DAY EVERETT, superintendent in the Philippine Forest Service, was murdered by natives in the island of Negros in the early summer. He had been a student of forestry at Cornell and Michigan and was twenty-eight years of age.

DR. JACOB FARNUM HOLT, professor of anatomy, physiology and hygiene at Philadelphia High School, died on August 31.

MR. FRANK B. KLEINHAUS, mechanical engineer at Pittsburgh and scientific author, was killed through a collision of an electric car with his carriage on September 2. He was thirty-nine years of age.

THE death is announced of Dr. Charles Taylor, master of St. John's College, Cambridge, known for his work on geometrical conics and as a theologian.

DR. HERMANN SETTEGAST, professor of agriculture at Berlin, has died at the age of ninety years.

THE department of superintendence of the National Education Association will meet at Chicago, on February 23, 24 and 25, 1909.

THE use of the metric system of weights and measures will be compulsory in the Philippine Islands after January 1, 1909.

*Nature* states that some interesting experiments on coal-dust explosions have been started under the direction of Mr. W. E. Garforth, at the Altofts Colliery, Yorkshire. An experimental explosion was witnessed on August 14 by Mr. E. Reumaux (Lens), Dr. J. A. Holmes (United States Geological Survey), Captain Desborough, H.M., inspector of explosives, and a number of experts from France and the United States. The cost of the experiments is borne from a special fund of £10,000 contributed by colliery proprietors.

THE president of the British local government board has authorized, as we learn from the *Journal* of the American Medical Association, the following researches in connection with the annual parliamentary grant in aid of scientific investigations, concerning disease: (1) A further inquiry by Dr. H. M. Gordon into the character and differential tints for the microbes in the throats of patients suffering from scarlet fever. (2) An investigation of protracted and recurrent infection in diphtheria by Dr. Theodore Thomson and Dr. C. J. Thomas. (3) An investigation of protracted and recurrent infection in typhoid fever by Dr. Theodore Thomson, in conjunction with Dr. Hedingham. (4) Investigations by Dr. V. G. Savage into the presence of paratyphoid bacilli in men, the differentiation of streptococci in goats and the bacteriologic measurement of pollutions in milk. (5) A statement of the results of bacteriologic examination of over 7,000 samples of milk from different parts of the country by Professor Delépine. (6) An investigation of the rôle played by flies as carriers of disease, by Dr. Copeman and Professor Nuttall. (7) An inquiry into the condition of flock bedding by Dr. Farrar. The bacteriology and biology of bedding will be undertaken by Professor Nuttall. (8) A statistical inquiry into the social incidence of disease will also be begun.

*Petermann's Mittheilungen*, as quoted in the *Bulletin* of the American Geographical Society, gives further particulars concerning the expedition which the Swedish government has despatched to Spitzbergen in charge of

this well-known geologist. The purpose is geographical and geological research. It is expected to make a more exact survey of the coasts of Ice Fiord and to map the glaciers tributary to it. Excursions inland will be made to ascertain what changes the glaciers have undergone since they were last studied. Many photographs of the glaciers will be taken. The party includes the geologists, C. Wiman, B. Högbom and S. de Geer, the brother of the leader; the zoologist, N. von Hofsten; the photographer, O. Halldin, and the cartographer, E. Jansson. The expedition was taken to Spitzbergen by the gunboat *Svensksund*, whose officers were instructed to make soundings and engage in other hydrographic work.

MR. HARLAN I. SMITH has returned from an archeological reconnoissance of northeastern Wyoming, made in continuation of the work which he started last year for the American Museum of Natural History. The work already accomplished is only the beginning of an investigation into the archeology of a vast region, including the Great Plains, the Barren Lands and the Plateaus of America—a region larger than the entire remaining portion of the continent and regarding which there is practically no archeological knowledge or available specimens from which to secure such knowledge. Among the general problems which are awaiting elucidation may be mentioned the following: (1) When the region came to be first inhabited; (2) what the material culture of the people was; (3) whether people were living in the region before the introduction of the horse, and, if so, how the coming of this valuable animal affected their culture; (4) whether there was more than one culture in the region, and, in this event, where the boundaries of these culture areas may be found. While, on the whole, the results of the two archeological trips to Wyoming would suggest that that particular region was not inhabited until after the advent of the horse, yet such a conclusion can not be definitely reached without an accumulation of such negative archeological evidence, or without making sure that mythological, ethnological

or historical evidence may not lead to a contrary result.

AN additional construction appropriation of \$25,000 for the New York Botanical Garden, voted on June 26, and approved on August 4, will be expended in the continuation of construction of driveways and paths, principally on the eastern side of the grounds, in the completion of the grading operations necessary at the museum building, in the extension of the system of water-supply and drainage, and for minor works. All the earth and rock to be excavated at the museum building is required for filling and for telford foundation of roads and paths, so that the same money will effect two pieces of work, as has been the case in nearly all the grading operations hitherto accomplished, a result made possible by following the original plan of development approved by the Board of Managers in December, 1896. It is now planned to complete the driveway system and to build at least an additional mile of paths.

ACCORDING to *Charities* reports from Alaska through a special charge to the Grand Jury sitting at Juneau show that tuberculosis, trachoma, and other diseases are spreading to such an extent among the Indians that their very existence is threatened. From the data furnished it would appear that within a few decades, if the mortality of the race continues as in the recent past, there will be no longer any native inhabitants. The statistics taken from a typical settlement of the natives, show a greater mortality than that of any other primitive race which has come in contact with Anglo-Saxon civilization. An appended report by Army Surgeon Paul Churchill Hutton states that he doubts if any country in the world can show such a percentage of tuberculous natives, and the mortality from this disease is really terrible. He proposes that Alaska be divided into sanitary districts and that sixteen sanitary officers be appointed. He also suggests that an intelligent Indian inspector be appointed for each town having 200 or more inhabitants, and that each Indian inspector study under the regular inspector and disseminate his knowledge among his own people.

THE work accomplished by the Reichsanstalt last year, according to an abstract of the annual report in *Nature*, includes the following: In accordance with a commission received by the institution, tests were started on the exact measurement of very small pressures (of the order of between  $10^{-6}$  and  $10^{-8}$  mm.), the pressures being determined from the deflection of a metallic membrane of 25 cm. diameter by means of the Fizeau interference method. The absolute velocity of sound in dry air (free from carbonic acid) has been investigated and found to be  $33,192 \pm 5$  cm. per second. Dr. Scheel has tested some further materials for expansion between  $-191^{\circ}$  and  $+16^{\circ}$  C. with the Fizeau dilatometer described in the previous year's report, and has obtained results varying from 2,120 microns per meter for palladium to  $-41$  microns per meter for quartz glass. Scheel and Schmidt have obtained a much lower value for the refractive index of helium than that found previously by Lord Rayleigh and by Ramsay and Travers, the figures of the former being 1.0000340. Some useful work has been done in regard to the specific heat of nitrogen,  $\text{CO}_2$ , and water-vapor, up to  $1,400^{\circ}$  C., and experiments to determine the saturation-pressure of water-vapor above  $100^{\circ}$  C. have been commenced. In the Electrical Standards Department the variations in manganin resistances have been found to be very slight and the "humidity effect" only just perceptible. Resistance coils are now being wound on metallic spools with longitudinal slots to render them somewhat flexible; in this way it is hoped to make any effect due to humidity practically negligible. Measurements of the wave-length of electric oscillations can be made with an accuracy within 1 part in 1,000 for long waves (above 1,000 meters), and for shorter wave-lengths the accuracy is within 1 per cent. Other experiments have been made with undamped electric oscillations produced after the Poulsen method by means of an arc burning in oxygen. A research of importance to opticians was carried out in regard to the secular variation of the planeness of surfaces of optical glasses,

results being given in the report. In addition to the researches mentioned, a number of routine tests were carried out in the various departments of the Reichsanstalt, some of these yielding interesting results from a commercial standpoint.

#### UNIVERSITY AND EDUCATIONAL NEWS

By the will of the late Senator William F. Villas the University of Wisconsin will ultimately receive his entire estate, valued at between two and three million dollars. By the provisions of the will, Mrs. Villas receives the income during her lifetime, and after her death her daughter receives \$30,000 a year. After the property is given to the university, part of the income will be reserved until the principal becomes \$30,000,000. The will provides for the erection of a Henry Villas Theater, and for the establishment of ten professorships, each with a salary of not less than \$8,000, nor more than \$10,000 a year.

By the will of Frederick Cooper Hewitt, Yale University receives \$500,000; the New York Post-graduate School and Hospital \$2,000,000, and the Metropolitan Museum of Art \$1,500,000 and the residue of the estate.

THE General Education Board has offered Richmond College, at Richmond, Va., \$150,000, on condition that an additional \$350,000 be subscribed.

NORWICH UNIVERSITY, at Northfield, Vt., receives an unrestricted endowment of \$100,000 by the will of Colonel C. S. Barrett, of Cleveland, O.

MR. W. J. HORNE, lecturer in physics at the South African College, Cape Town, has been appointed to the inspectorate of the Transvaal Department of Public Education as organizer for technical education.

#### DISCUSSION AND CORRESPONDENCE

##### THE AMERICAN SOCIETY OF NATURALISTS

TO THE EDITOR OF SCIENCE: Whether the American Society of Naturalists should be preserved or not depends on whether it has an important work to do and whether its work

can be coordinated with that of other societies so that it shall be regularly called upon to perform its proper functions. I, for one, think it has a more important potential part to play than ever before, but whether it shall be permitted to play that part depends upon the cooperation of naturalists in general.

It is argued by those who regard the Society of Naturalists as an anachronism that natural history is no more, that in the differentiation and specialization that accompany the development of science it has broken up into botany, zoology, etc., and that these special sciences are each amply provided for by at least two national societies. It does not, however, follow because we have societies of students of plants, ferns, animals, birds, pigeons, carrier pigeons, insects and butterflies that the Society of Naturalists has become unnecessary. I conceive that even if we had a national society for each *genus* of animals and plants there would still be biologists who would find in a grand meeting of such societies no home. Indeed, the more you multiply societies on the basis of the material studied the more need for a society which shall bring together for mutual conference persons working on the general biological *topics* that are common to plants, animals, insects, butterflies. Our modern societies work directly against such a result. I may be working on heredity in insects and you on heredity in violets, but we hardly speak as we pass by because, forsooth, you are a botanist and I am a zoologist. Consequently we attend different meetings and we fraternize with different colleagues while we read papers of precisely the same theoretic import at the same time in buildings far apart, you to your colleagues who are interested in fossil cycads, in the hourly rate of growth of a gourd, in the development of a moss, or in a bog-society, and I to my colleagues who are awaiting their turn to tell of their discoveries in the circulation of an earthworm, in the properties of a new nerve stain, in the bird fauna of Christmas Island and the distribution of the Characinidæ of Brazil. No wonder we have so little discussions at our meetings with the diversity of interests represented and the scattering of