

the time in going to and returning from San Francisco charged against their leave. China and Japan are near at hand and are favorite places to visit during vacations. Saturday is a half-holiday.

Appointees will be required to pay their traveling expenses to San Francisco, but the Government furnishes them transportation free of charge on its transports from that point to Manila, but exacts a charge of \$1.50 a day for meals while en route, which is returned to the appointee upon his arrival at Manila. Employees who are residents of the United States at the time of their appointment shall, after six months' satisfactory service, be reimbursed for their traveling expenses from the place of their residence to the point of embarkation for Manila.

The Philippine climate is good, and nearly all of the employees are in excellent health. Medical attendance, when required, is furnished employees without cost. Good accommodations (room and board) can be secured in Manila for about \$35 a month, while employees assigned outside of Manila obtain cheaper accommodations. The office accommodations in Manila are good, and the work is done under pleasant conditions.

The Commission also invites attention to the examination which will be held on April 22, for the position of assistant (scientific), Department of Agriculture.

This examination is designed for the purpose of securing persons who are qualified for the scientific work of the Department of Agriculture. Applications will be received from graduates of colleges or universities where it is shown that the applicants have pursued courses of instruction which will qualify them for the scientific work of the Department of Agriculture. Each applicant will be required to show the scope of the studies pursued and the length of time devoted to them, and his standing in each of the studies. At the time the application is filed the applicant must also submit therewith a thesis prepared by himself upon some special subject, either technical or scientific, selected by the applicant, relating to the work he is qualified to perform, or, in lieu thereof, such literature on the special subject selected as he has published over his own signature.

In connection with this examination applicants may also qualify as scientific aids in the

Department of Agriculture, in order to qualify for which, however, applicants must be graduates of colleges receiving the benefits of grants of land or money from the United States, and submit with their applications the material as set forth in section 73 of the Manual. In the case of applicants for assistant it is not necessary that they be graduates of colleges receiving the benefits of grants of land or money from the United States, but they must submit with their applications the matter required by the examination for scientific aid. In addition to the foregoing, the applicants may be examined in any of the following subjects: Chemistry, (a) analytical, (b) agricultural, (c) industrial; physics, (a) especially as applied to meteorology, (b) soils, (c) irrigation; botany, plant physiology and pathology, horticulture; bacteriology (plant and animal); forestry; zoology; ornithology and mammalogy; entomology; physiology and nutrition of man; animal pathology; animal production and dairying; rural engineering, specially as applied to road making and irrigation; practice of agriculture; agricultural statistics; library science and methods.

From the eligibles resulting from this examination it is expected that certification will be made to positions in the Department of Agriculture along the lines indicated, and to other departments where similar qualifications are desired.

SCIENTIFIC NOTES AND NEWS.

THE Secretary of War has sent to the House a recommendation that Surgeon-General Sternberg be granted the rank of major-general before his retirement on reaching the age limit June next.

THE University of Edinburgh has conferred its LL.D. on Professor William James, the eminent psychologist of Harvard University, and on Dr. J. G. Schurman, president and formerly professor of philosophy at Cornell University.

PROFESSOR SIMON NEWCOMB will leave New York City for Naples on April 19.

PROFESSOR WILLIAM M. PUFFER, of the Massachusetts Institute of Technology, has returned

to Boston after a visit to Europe to inspect foreign laboratories, in view of the erection of the new laboratories of electrical engineering at the institute.

DR. A. GRAHAM BELL, president of the National Geographical Society, gave a dinner on April 12 to Mr. C. E. Borchgrevink, the antarctic explorer.

DR. ANDREW S. DRAPER, president of the University of Illinois, has been thrown from a carriage and seriously injured. One of his legs has been amputated and it is feared that his condition is serious.

KING EDWARD has approved the award of a civil list pension of £75 per annum to Mrs. J. Viriamu Jones, widow of Principal Jones, the eminent physicist, in recognition of his services to higher education in Wales.

PROFESSOR VAMBERY, the well-known ethnologist of Buda Pesth, has celebrated his seventieth birthday.

THE Institute of France has awarded from the Desbrousses foundation 20,000 frs. to M. Curie for his researches on radium.

DR. W. W. KEEN, professor of surgery in the Jefferson Medical College, Philadelphia, attended the recent meeting of the German Surgical Association in Berlin and was elected an honorary member of the Association.

DR. SEAMAN A. KNAPP has just returned from a nine months' trip as agricultural explorer for the Department of Agriculture. He visited Japan, China, the Philippines, and India, returning *via* Hawaii, where he spent a few days. The main object of his trip was the study of rice, although considerable attention was also given to other subjects bearing upon certain phases of the development of agriculture in the southern States.

UNDER the leadership of Mr. O. F. Cook, in charge of its tropical work, the Department of Agriculture has despatched an expedition to Guatemala and southern Mexico for the purpose of studying tropical agriculture as practiced in those countries. Rubber and coffee culture are to receive particular attention, and many interesting facts concerning the botany and the commercial cultivation of the Central

American rubber tree (*Castilloa elastica*) are anticipated.

PROFESSOR C. H. EIGENMANN has returned from a trip to the western part of Cuba in search of blind fishes. He was accompanied by Mr. Oscar Riddle, a senior in the Indiana University, as assistant and interpreter. The results of the trip are highly satisfactory. Many specimens of both species of blind fishes known from Cuba were secured. Their known distribution was widely extended. It has been found that the blind fishes which inhabit the caves of the interior and are immigrants from the abysmal regions of the ocean bring forth living young about an inch long. At the time of birth the eyes are well developed and may be functional; they degenerate and become covered with a thick layer of tissue with age. The fishes are becoming readjusted to living in the light in the sink holes along the courses of the underground waters.

MARSHALL H. SAVILLE, curator of Central American and Mexican archeology in the American Museum of Natural History, has been exploring in Oaxaca, Mexico, since last December, under the auspices of the duc de Loubat. He has already been very successful and has found, among other things at Cuilapa, seven tombs, about a dozen stone graves, two stone drains and two lines of terra cotta tubing, as well as many jade specimens. He will return about June 1.

Nature learns from the *Victorian Naturalist* that the Central Australian expedition under the leadership of Professor Baldwin Spencer and Mr. F. J. Gillen reached the Macarthur river, Northern Territory, but was detained at Borroloola, a small township about fifty miles from the mouth of the river, owing to the foundering of the steamer which should have taken them on to Port Darwin as previously arranged. The matter of affording the expedition some relief was brought before the Commonwealth Parliament without result. However, the Premier of Victoria (Hon. A. J. Peacock) placed himself in communication with the Queensland Government, and it was arranged to send a small steamer from Normanston and bring the party on to that port,

from whence there is frequent communication with eastern Australia.

LORD AND LADY KELVIN have accepted an invitation to a reception at Columbia University on Monday evening, April 21. The reception is offered by the American Institute of Electrical Engineers and other scientific societies concerned with subjects to which Lord Kelvin has contributed, the committee of arrangements being as follows: Dr. Francis B. Crocker, *Chairman*, Past Pres. A. I. E. E.; Mr. Calvin W. Rice, *Secretary*, Chairman Com. on Meetings, A. I. E. E.; Dr. Robert S. Woodward, Past Pres. A. A. A. S. and Am. Math. Soc.; Mr. Frederick P. Keppel, Sec. Columbia University; Dr. Arthur G. Webster, Vice-Pres. Am. Phys. Society; Professor James McKeen Cattell, Pres. N. Y. Academy of Science; Mr. T. Commerford Martin, Past Pres. A. I. E. E. The reception will continue from 8:30 to 11 P.M., with addresses at about 9:30 P.M. by President Nicholas Murray Butler, Columbia University, and eminent men of science representing the societies, to which it is expected that Lord Kelvin will reply.

THE Senate has confirmed the following executive nominations: Omenzo G. Dodge, to be a professor of mathematics in the Navy, with rank of commander, from the 17th day of December, 1899; Stimson J. Brown, to be a professor of mathematics in the Navy with the rank of captain, from the 25th day of August, 1900; Henry M. Paul, to be a professor of mathematics in the Navy with the rank of commander, from the 25th day of August, 1900; Edward K. Rawson, to be a professor of mathematics in the Navy with the rank of captain, from the 25th day of November, 1900; Aaron N. Skinner, to be a professor of mathematics in the Navy with the rank of commander, from the 25th day of November, 1900; Philip R. Alger, to be a professor of mathematics in the Navy with the rank of commander, from the 22d day of May, 1899.

THE Naples Academy has awarded its prize for natural sciences for 1901 to Dr. Marussia Bakunin, the authoress of papers dealing with stereochemistry.

DR. A. H. DOTY, health officer of the Port of New York, has received from the directors of the Pan-American Exposition at Buffalo the award of a gold medal for his exhibit on sanitation.

PRESIDENT ROOSEVELT has signed the bill restoring Dr. Edward Kershner to his rank of medical inspector in the navy. In accordance with the provisions of this act, the President has appointed Dr. Kershner to be medical inspector in the navy on the retired list.

SIR WILLIAM CHURCH has been elected for the fourth time president of the Royal College of Physicians, London.

DR. WILLIAM HUNTER, formerly assistant bacteriologist at the London Hospital, has been appointed by the Colonial Office to be Government bacteriologist at Hong Kong.

THE death is announced of Mr. Patrick T. Manson, son of Dr. Patrick Manson, on Christmas Island, whither he had gone to investigate the cause and treatment of beriberi, on behalf of the London School of Tropical Medicine.

M. EMILE RENOU, founder and director of the Meteorological Observatory at St. Mauri, died in Paris on April 7, aged eighty-seven. He was the author of numerous geographical, geological and meteorological works, and made an important scientific expedition to northern Africa in 1840.

MR. GEORGE FERGUSSON WILSON, F.R.S., the author of researches on chemistry, and also known as a horticulturist, died on March 28, aged eighty years.

THERE have also died Dr. Richard Schumacher, astronomer at the Kiel Observatory, at the age of seventy-six years; Dr. Arnulf Schurtel, professor of mining in the School of Mining at Freiburg, aged sixty-one years, and Dr. E. Miller, docent in physics in the University at Erlangen.

THE provision for the U. S. Geological Survey in the sundry civil service bill, as passed by the House, is \$960,570. The debate in the House on the occasion of the passing of this item is of much interest as showing how highly the work of the survey is appreciated. The

appropriation was increased by \$80,000, while the House was sitting as committee of the whole.

DR. S. WEIR MITCHELL has established a prize of \$50 in the School of Biology at the University of Pennsylvania, for an original investigation on the autumnal coloration of plants.

IN pursuing its purpose to encourage the study of local natural history the Springfield Science Museum offers two prizes for collections of beetles. These prizes are open to children who are pupils below high school grade in any Springfield school. Specimens to show how beetles and notes are to be prepared may be seen at the museum, and two talks on 'Beetles, and How to Collect Them,' have been arranged.

THE French Chamber has voted a subsidy of 25,000 frs. for the International Bureau for the unification of physiological instruments established at Paris by Professor Marey.

THE Prussian government offers three prizes of the value of 5,000, 3,000 and 2,000 Marks for the best instrument for the measurement of the pressure of the wind; and a further prize of 3,000 Marks will be awarded if the instrument proves serviceable after long use. The plans must be submitted to the *Deutsche Seewarte* in Hamburg before April 15, 1903. The competition is open to foreigners.

KING EDWARD, who is patron of the National Antarctic expedition, has contributed £100 towards the funds for the equipment of the relief ship, which must sail in June next.

THE seventy-fourth meeting of German Naturalists and Physicians will be held at Carlsbad, beginning on September 21.

DR. LEDERLE, president of the New York City Department of Health, has asked the board of estimate and apportionment for \$1,025,000 with which to provide repairs and new hospitals for the treatment of contagious diseases.

THE House of Representatives has passed a bill making the petrified forest of Arizona a national park.

A BILL creating the National Appalachian Forest Reserve has been reported to the House.

It authorizes the Secretary of Agriculture to purchase not more than 4,000,000 acres of mountain and forest lands in Virginia, West Virginia, North Carolina, South Carolina, Georgia, Alabama and Tennessee for a forest reserve, at a cost not exceeding \$10,000,000, of which \$2,000,000 is appropriated by the bill.

A BILL has been introduced in the Senate authorizing the establishment of a biological station on the Great Lakes, under the control of the United States Commission of Fish and Fisheries.

A BILL has been introduced in the Senate by Senator Depew proposing that the United States erect a building in Paris, at a cost not exceeding \$250,000, to be known as the American National Institute, on ground donated by the Municipal Council.

THE physicians of Chicago are planning to erect a building for a meeting place and as a club house. It is proposed to cooperate with the John Creerar Library in the establishment of a medical library.

THE growing demand for qualified teachers of nature study in the public schools has led to the foundation of a new summer school under the direction of members of the faculty of the Massachusetts Institute of Technology. The Sharon Summer School, as it is called, is designed to furnish teachers and lovers of nature with sound training in the principles of natural science and a practical knowledge of the commoner forms of living things, rather than to provide specialists with opportunities for research. The curriculum provides for fundamental work in physiography and general biology, and for elective courses on trees, wild flowers, birds, insects, mammals and sea-shore life. Laboratory facilities are available at the Institute of Technology, and an opportunity for outdoor study and experimentation is furnished by the control of 300 acres of natural country, in the town of Sharon, where most of the field work of the school will be carried on. Information about the course, which will be given during the four weeks following July 9, may be obtained from G. W. Field, director, or C. E. A. Winslow, secretary, Sharon Summer School, Mass. Inst. Tech.,

Boston. Among other members of the faculty of the school are Professor G. H. Barton of the Institute, Mr. J. G. Jack of the Arnold Arboretum, Mr. A. H. Kirkland and Mr. Wm. Lyman Underwood.

THE department of physics of Indiana University held a *conversazione* on three evenings during the recent meeting of the Southern Indiana Teachers' Association. Each demonstration required ten minutes. The following subjects were given: 'An improved interrupter with an automatic circuit maker,' used to operate X-ray tubes of highest power; 'Motion,' the bicycle wheel gyroscope, compound pendulum, etc.; the 'Nernst lamp' (the exhibit was loaned by the Nernst Lamp Co. of Pittsburg); the 'Cooper-Hewitt Vapor Lamp,' given by the consent of the inventor; the 'Speaking arc'; and 'Wireless telegraphy.' The department was especially successful in demonstrating the Hewitt lamp, considering how difficult it is to obtain the proper vacuum conditions.

THE Peary Arctic Club, having found the steam barque *Windward* unserviceable for further work in the north, has decided to install new engines and boilers. The work will be completed by June 20 and departure will be taken immediately for the north, about a month earlier than usual in order that advantage may be taken of the conditions in Smith Sound, which experience has shown are likely to be more favorable early in the season. The *Windward* expects to effect a junction with Peary, either at Etah, on the eastern side, or at Cape Sabine, his headquarters of last year on the westward side of Smith Sound, his journey to the pole and return having by the time of its arrival been accomplished.

Nature states that in connection with the survey of British lakes provided for by the Pullar Trust, Sir John Murray has rented Rannoch Lodge, standing at the west end of Loch Rannoch, from now until the commencement of the shooting season. In the first week of April the following gentlemen will join him and will be associated with him in the work, viz.: Mr. R. M. Clark, Aberdeen; Mr. T. N. Johnston, Edinburgh; Mr. James Parsons,

London, and Mr. James Chumley, Edinburgh. Other appointments will be made later in the season. Sir Robert Menzies, who has taken a great interest in these investigations, and has placed boats, etc., at Sir John Murray's disposal for carrying on the work, has said that all Highland proprietors should render any assistance in their power to the survey by offering the use of boats. It is intended to include within the scope of the survey, in addition to the systematic physical and biological investigations, observations regarding the oscillations in the level of the water (phenomena called 'seiches' by Professor Forel) by means of self-registering 'limnographs,' which will be set up on the shores of the larger lakes. The first limnograph is now in process of construction in Geneva under the personal supervision of Professor Ed. Sarasin, of Geneva. It will be remembered that Mr. Laurence Pullar, of Bridge of Allan, has set aside funds to aid in carrying out this survey, as a memorial to his son, the late Mr. Fred. P. Pullar, who was engaged (in collaboration with Sir John Murray) in a systematic survey of the Scottish lakes at the time of his accidental death in February of last year.

WE learn from the London *Times* that Mr. Consul Neville Rolfe in his last report from Naples states that the subject of mosquitoes and malaria is still attracting considerable attention in Italy, more especially in the Naples district, where a large area is subject to malaria. Next to Sardinia, the province of Basilicata is the largest malarious tract in Italy, and therefore, the most interested in the extermination of the disease. The most fatal season occurs in August and September, but the further south the longer does the dangerous season continue, so that in Basilicata security can rarely be enjoyed or reckoned upon until October is past. Mosquitoes are not transported by wind, as has been often supposed, but they move from place to place on or about men or animals, and on any baggage which attracts them. This explains isolated cases and epidemics which have occurred in places distant alike from marshes and stagnant water. Some interesting cases of fever, owing to this cause, occurred at the station of

Termini, near Rome, the cases having probably originated from the mosquitoes conveyed by the Terracina train, which crosses the most deadly part of the Pontine marshes. There is a special aniline dye which when diluted even to the extent of 0.00031 per mil., is said to kill the larvæ. The well-known pastilles and powder, similar to ordinary insect-powder, which can either be burnt or distributed by means of bellows, are also mentioned. This powder is made of the flowers of the *pyrethrum roseum*, a herb extensively grown on the Dalmatian coast, the cultivation of which is being tried near Ceprano, a town about half-way between Naples and Rome. It is found that valerian root, powdered and mixed with the other, renders it more efficacious. Experiments were made during last summer by Professor Grassi to combat the malady by the use of drugs. In this he has obtained a great measure of success, but the expense of the drugs and the difficulty of getting the large quantity necessary taken at regular times will form an insuperable difficulty in the case of the peasantry. Having selected one of the most malarious places in Italy, Ostia, at the mouth of the Tiber, Professor Grassi and his staff have administered six pills a day to adults, and a proportionate dose to children, the pills being composed of a compound called 'esanofele,' a harmless drug composed of quinine, arsenic, iron and bitter herbs. Dr. Grassi speaks highly of the results, and the tabulated statistics of the Ostia treatment appear very favorable.

UNIVERSITY AND EDUCATIONAL NEWS.

THE litigation over the will of the late Thomas Armstrong, of Plattsburgh, N. Y., in which he bequeathed his entire estate, valued at \$250,000, to Union College, has been terminated by amicable settlement outside of court. The college officials agreed to give the son of the testator one half of the estate.

COLUMBIA UNIVERSITY has received a bequest of \$50,000 from Mrs. Lena Currier, subject to a life interest. The money is to form a fund for the purchase of books.

WASHINGTON UNIVERSITY has let the con-

tracts for building three additional buildings, a library, a dormitory, and a gymnasium, the approximate cost of which will be \$550,000.

At the annual meeting of the board of regents of the University of Nebraska, the Omaha Medical College was affiliated. Two years of the medical work will be given in Lincoln and the clinical years at Omaha. The work will be strengthened at all points, and it is believed that the combination will result in better opportunities for medical education in this region. Dr. Henry B. Ward of the university was elected dean of the school.

At a meeting of the board of directors of the Agricultural and Mechanical College of Texas, held in Waco, April 7, 1902, David E. Houston, M.A., professor of political science in the University of Texas, was elected president. The newly elected president is thirty-six years of age, a graduate of South Carolina College in 1887, and a M.A. of Harvard University in 1892. In 1894 he was elected adjunct professor of political science in the University of Texas; advanced to associate professor in 1897; promoted to the full title in 1899, and at the same time made dean of the academic faculty. That his reputation is more than local is shown by the fact that he has already given a course of lectures before the officers and students of the Johns Hopkins University and further that his literary productions have been sought by the leading publications of our country.

MR. J. STUART HORNER has been appointed by the corporation of McGill University its honorary representative in England. It is planned to hold an entrance examination in London next June.

At Harvard University, Dr. Charles Palache has been appointed assistant professor of mineralogy, and Dr. R. B. Dixon instructor in anthropology.

MR. GEORGE P. BACON, instructor in mathematics and astronomy in Beloit College has been appointed professor of physics in Wooster University.

DR. ALBERT R. SWEETSER has been appointed professor of biology in the State University of Oregon.