

to Russian Hill. Mr. John Galen Howard invited me to take refuge in his home [at Berkeley], and I was glad to accept.

All my pictures and books are gone and many treasures that I prized highly; but I regret nothing for I am rich in friends and things seem of small account. I have since moved the academy things back to Russian Hill, as it was saved by the great effort of the few people who live there. My only regret is that I left for Berkeley Thursday evening instead of staying to help them, but I never dreamed it was possible to save it. It is an experience I am not sorry to have had if it could have been without the terrible loss. *There is not a reference library left in San Francisco.* I am afraid that in the rush of rebuilding the city such essential, but apparently immaterial, things will be neglected.

I am beginning already to recollect and intend to go to type localities as much as possible. I expect the academy will be able to give me but little aid for the present, but have a tiny income of my own and can get along, I feel sure. The botanical department of the academy has a fund of \$5,000. of its very own. The academy is not ruined and still has resources, though most of its income is cut off.

The academy contained among other valuable collections one of the best natural history libraries in the United States, a rich herbarium, and a superb collection of western water birds. In the bird collection was the finest and largest series of the waterfowl of the Pacific Coast extant, and the quality of the material and completeness of the series were unrivaled in the museums of this continent and, no doubt, in the world. Practically all of this accumulation of years was destroyed. At first it was feared by its friends that the academy might be irreparably ruined by the destruction of its building and contents, but fortunately this proves not to be the case. Now, although the academy still has some property with which to begin anew, it faces a serious problem in the absolute lack of a reference library. Here is an opportunity for every one interested directly or indirectly in scientific work to show in a practical way their sympathy for the loss science has sustained on the Pacific Coast, and their appreciation of the admirable courage with which

those connected with the academy are facing the situation.

If scientific societies, authors and other friends of science throughout America and abroad will each contribute according to their ability such sets or parts of sets of proceedings, books, pamphlets and authors' separates as will be of use in a general scientific library, the aggregate will be a tremendous help toward placing the academy once more on a working basis. In addition to books, contributions of specimens in various branches, especially in biology, will be extremely helpful. Small packages of books or specimens can be sent direct by mail. To help in this work the Smithsonian Institution, Washington, offers to receive all contributions of books or specimens for the academy and to forward them at its own expense. Packages from Eastern America should be addressed to the Smithsonian and plainly marked 'For California Academy of Sciences.' Packages from abroad should be marked 'Smithsonian Institution, Washington, D. C., U. S. A., care U. S. Collector of Customs, New York City. (For California Academy of Sciences.)'

The publications of the U. S. National Museum and the Smithsonian Institution need not be sent as they will be supplied direct from these institutions.

SCIENTIFIC NOTES AND NEWS.

AT the recent International Medical Congress at Lisbon, the Moscow prize was awarded to M. Laveran and the Paris prize to Professor Ehrlich.

THE International Congress of Applied Chemistry at Rome resolved that the seventh congress shall be held in London, with Sir William Ramsay as the president and Sir Henry Roscoe as honorary president.

THE sixteenth International Medical Congress will be held at Buda Pesth in 1909, under the presidency of Professor C. Müller. It is likely that the following congress will be held in New York City.

DR. FRANCIS P. KINNICUTT, of New York, has been elected president of the Association of American Physicians.

DR. P. BLASERNA, professor of physics at Rome, celebrated on April 30 the fiftieth anniversary of his academic activity.

DR. HARRY FIELDING REID, professor of physical geology at the Johns Hopkins University, has been selected by the University of California as a member of a commission to investigate this summer the causes of the recent earthquake.

DR. HARRY T. MARSHALL, instructor in pediatrics, Johns Hopkins University, has accepted a position as pathologist in the Bureau of Science at Manila.

PROFESSOR WM. H. HOBBS has resigned the chair of mineralogy and petrology at the University of Wisconsin, in order to devote his energies wholly to structural and dynamical geology and physiography, which subjects have largely constituted his field of research. Professor Hobbs expects to spend another year in Italy engaged in studies growing out of the late Calabrian earthquake.

DR. HENRY E. CRAMPTON, professor of zoology in Barnard College, Columbia University, has returned from a scientific expedition of three months to the island of Tahiti, the Society group. He went for the American Museum of Natural History to study various species of mollusca which have undergone individual evolution in the isolated valleys of this island.

PROFESSOR ROBERT KOCH, who returned to equatorial Africa in March in order to continue the study of tropical diseases, has written to the Berlin Medical Society, saying that he has become so interested in his further researches, especially in connection with the 'sleeping sickness,' that he will not return to Germany for two years. Dr. Koch, therefore, resigns the presidency of the society.

PROFESSOR H. H. HORNE has been granted a Sabbatical year of leave by Dartmouth College, which he will spend abroad in travel and reading philosophy. His place will be filled by Dr. Charles H. Johnston of the State Normal School in East Stroudsburg, Pa.

DR. C. R. LANMAN, professor of Sanskrit at Harvard University, will represent the uni-

versity at the celebration of the four hundredth anniversary of the University of Aberdeen in September.

THE University of Edinburgh has conferred its doctorate of laws on Dr. E. von Bergmann, professor of surgery at Berlin.

DR. G. HABERLANDT, of Graz, has been elected an honorary member of the Botanical Society of Edinburgh.

MR. W. C. GORDON, who has been in charge of the Houghton Office of the Michigan Geological Survey, has resigned, to take a position with the Steel Corporation.

PROFESSOR JAMES F. KEMP, of Columbia University, has been delivering during April and May to the students in geology at the Johns Hopkins University a course of lectures on 'The Origin of Ore Deposits.' The subjects of his lectures are: (1) The general problem. (2) Underground waters. (3) Waterways and places of precipitation. (4) Veins (structural features, methods of study, etc.). (5) Contact deposits. (6) Magmatic segregations. (7) Secondary enrichment. (8) Sedimentary deposits. (9) Placers. (10) Geology in the law.

PROFESSOR FRIEDRICH MÜLLER, of Munich, will deliver the Herter lectures on pathological chemistry at the University and Bellevue Hospital Medical College in the spring of 1907. The lectures will be given in English.

PROFESSOR ELIE METCHNIKOFF, of the Pasteur Institute, will give three lectures before the Royal Sanitary Institute, London, on May 25, 28 and 30. The subjects are: (1) The hygiene of the tissues; (2) the hygiene of the alimentary canal; (3) syphilis.

DR. EUGENE RENEVIER, professor of geology and paleontology in the University of Lausanne, president of the Swiss Geological Society, was killed, on May 5, by falling down an elevator shaft.

SIR DAVID DALE, of Darlington, at one time president of the British Iron and Steel Institute, died on April 28. The death is also announced in English journals of Mrs. Brightwen, a popular writer on natural history and

a member of the Entomological and Zoological Societies.

THERE will be a civil service examination on June 13 for the position of statistical clerk in the Geological Survey, at a salary of from \$1,000 to \$1,800 per annum, according to qualifications.

THE Prince of Monaco has offered to give his Museum of Oceanography and Laboratory for the Investigation of the Seas, now at Monaco, to the city of Paris, with an endowment of \$1,000,000. The institution is to be under the charge of an international committee.

By the will of Roland Hayward, of Milton, Mass., the Museum of Comparative Zoology of Harvard University will receive the testator's collection of Coleoptera. The Boston Society of Natural History is given the right of selecting any works on entomology that may be lacking in its library. The balance of the works on entomology is left to the Milton Public Library.

THE biological laboratory of the United States Bureau of Fisheries at Wood's Hole, Mass., will be opened as usual this summer for a period of about three months, beginning June 15. A limited number of research tables are annually placed at the disposal of qualified investigators free of charge. Materials for various studies in marine biology are yielded by collecting expeditions continually in progress. Candidates should apply as early as possible either to the Commissioner of Fisheries, Washington, D. C., or to the director of the laboratory, Dr. F. B. Sumner, 17 Lexington Avenue, New York City.

THE Torrey Botanical Club held, on May 23, a meeting to celebrate the tenth anniversary of the beginning of work in the development of the New York Botanical Garden. The meeting was held in the museum building of the garden. Professor Henry H. Rusby, president of the club, gave an address on 'The History of Botany in New York,' which was followed by an informal reception in the museum halls, library and laboratories.

THE editor of the *Monthly Weather Review* invites librarians to address the Weather

Bureau, Washington, D. C., as to what numbers or volumes are needed in order to complete their sets of this periodical.

THE director of the Geological Survey has recommended in a letter to the Secretary of the Interior that the United States accept the invitation of the German government to join the International Seismological Association, provided that congress shall see fit to make the necessary appropriation. The total sum that congress is called on to appropriate annually is \$1,300, which includes \$800, the fee that the United States would be required to contribute to the association, and \$500 for the expenses of the delegate.

THE summer meeting of the Anatomical Society of Great Britain and Ireland will be held in Belfast on the first and second of June. Dr. Symington, professor in Queen's College, Belfast, writes: "Should any of the American anatomists be on this side of the Atlantic at that time we should be very pleased to see them at our meeting, and if they let me know in time I will arrange to have them put up during their stay here. After the meeting there will be an excursion along the Antrim coast with a visit to the Giant's Causeway." It is to be hoped that some of our American anatomists will be able to take advantage of this kind invitation.

THE eighty-ninth annual meeting of the Swiss Society of Natural Science will be held at St. Gall from July 21 to August 1, under the presidency of Dr. G. Ambuhl.

THE German Bunsen Society held its meeting this week at Dresden.

THE ninth annual meeting of the British Childhood Society was held on May 8, at the residence of the president, Earl Egerton of Tatton. Sir Edward Brabrook delivered an address.

THE twenty-eighth conference of the American Library Association will be held at Narragansett Pier, R. I., from Friday, June 29, to Saturday, July 7.

CAPTAIN BOYD ALEXANDER, writing from Angu, Africa, says the Alexander-Gosling expedition has obtained the skin of an okapi,

and, furthermore, saw the animal alive. It will be remembered that the okapi is a giraffe-like animal first described by Sir Harry Johnston.

THE general totals of the Paris census, taken on March 4, and now published in the French press, show that the total population of the French capital is 2,731,728, as compared with 2,660,559 in 1901 and 2,511,629 in 1896. The increase during the last five years is, therefore, less than half that of the preceding quinquennial period.

Nature says: "After being closed for a very considerable time, the fish gallery of the British Museum (Natural History)—or, to be accurate, the southern half of it—has just been reopened to the public in what may be termed a metamorphosed condition. In place of a dismal crowd of ill-mounted specimens, faded, for the most part, to one dull uniformity, the public has now a small but well-assorted selection of specimens, colored artificially to imitate, so far as practicable, their appearance in life, and arranged in such a manner that they can be seen to the very best advantage. Descriptive labels—of which only a portion are yet printed—will render the exhibit about as perfect as is at present possible, and the gallery as a whole will enable the public to gain the greatest possible amount of information about fishes with the least possible trouble. As regards the advisability of coloring exhibited specimens of this nature there can scarcely be two opinions, for, although with our present methods and our present lack of knowledge of the appearance of many fishes in life it is impossible to imitate nature closely, yet such an approximation to natural coloring as is practicable to make is infinitely better than no color at all."

THE report of the council of the London Zoological Society was presented to the annual meeting on April 30. According to the report in the *London Times* the *Zoological Record*, beginning with the literature of 1906, has been provisionally amalgamated with the 'International Catalogue of Scientific Literature'; the high level of the society's publications has been maintained; three editions

(81,665 copies) of the Garden Guide have been sold, and the fourth has just been issued. Naturalists in increasing numbers have availed themselves of the advantages of the library in Hanover-square, to which important additions have been made. Valuable scientific work has been done by the prosector, Mr. F. E. Beddard, and the pathologist, Dr. Seligmann. Mr. Beddard has carried out anatomical researches, supplied material to anatomists and museums and superintended the preservation of surplus material; Dr. Seligmann has taken over the *post mortem* investigations, and reported on the cause of death of 206 mammals and 218 birds in 1905. There were practically no deaths among the monkeys in outdoor cages, whereas there was a marked mortality among those in the house. The total number of animals in the collection on December 31, 1905, was 2,913, as against 2,552 on the corresponding date of 1904; in consequence, the food bill went up £95—from £3,423 to £3,518. This contrasts favorably with £4,858, the cost of provisions in 1902, when the number of animals was 2,783. At the end of 1905 the roll of members stood at 3,702, the largest number of fellows in the history of the society. The income last year was £30,421, and the ordinary expenditure £25,288. Out of the balance of over £5,000 the whole of the cost (£4,281) of the improvements at the gardens for that year has been paid. The work of reorganizing the gardens began in 1903, and over £11,000 has been spent in providing new buildings or enclosures. If the assets, which now stand at £62,000, be not taken into account, there was at the end of 1902 a cash deficit of over £3,700. During the last three years, in spite of the large expenditure for improvements, this deficit has only increased by about £500, the difference having been paid out of income.

AN account of Dr. Koch's travels in the northern Amazon Basin was given by Dr. Koch before the Berlin Geographical Society at the close of 1905, and has since appeared in the *Zeitschrift* of that body (1906, No. 2). It appears from the abstract in the *Geographical Journal* that Dr. Koch's researches were

primarily devoted to ethnological subjects. Ascending the Rio Negro, he made his headquarters at São Felipe, just below the junction of the Isanna with the main stream, a well-ordered settlement in which a good deal of real civilization has been introduced by Don Germano Garrido y Otero, a native of the north of Spain. A first journey led up the Isanna, and its tributary the Aiari, which was ascended to a point where it approaches so close to the Uaupes as to permit the journey from one stream to the other to be made in three and a half hours, across a quite low water-parting. This near approach of one river-system to another seems to be a characteristic of the region, for other instances were subsequently brought to light, the most remarkable being the separation of the Tikié, a western tributary of the Uaupes, from the system of the Yapura by a low water-parting that could be crossed in as short a time as fifty minutes. On the second journey, Dr. Koch descended the Rio Negro to the mouth of the Curicuriari, whence he ascended the mountain of the same name, with which many legends are associated by the natives. The path led through magnificent virgin forests, and involved much toilsome work, but the view from the summit over the boundless forests was full compensation for this. The few resident Indians of this region are emigrants from the Uaupes—mostly Tukanos—who have here found a refuge from the advance of so-called civilization. There are also wandering Indians—the Maku—on a much lower level of culture. Dr. Koch ascended the Curicuriari for a considerable distance, afterwards making a portage across a low divide to another tributary of the Uaupes, and ascending the Tikié, already referred to, almost to its source. The Tikié, like most of the rivers of this region, is broken by falls, among them the Pari Fall, reached by Count Stradelli in 1881. Dr. Koch collected much ethnological material among the tribes visited, some of whom had never seen a white man. He alludes to the remarkable way in which the black- and white-water streams alternate without apparent reason, the two kinds occurring sometimes only a

few hundred yards apart, though flowing through the same forest and over the same soil. Like other travelers, he found a reputation for fever ascribed to the white-water streams, while those with black water are immune. The third journey was in some ways the most important, as it led up the main stream of the Uaupes or Caiari (Uacaiari of Wallace), past the turning-point of that traveler at the mouth of the Cuduiari (Codiari), and the Jurupari Fall reached by Stradelli, to a station of Colombian rubber collectors on its upper course. The many falls involved great labor, but after the Jurupari the river presented a quite different character, flowing sluggishly through periodically water-logged lands, entirely uninhabited. Above his furthest point it is said to be formed by two branches, one from the west, the other from the open savannahs near the sources of the Guaviare in the north. On the return voyage Dr. Koch ascended the Cuduiari to the more open country near its source (though this is rather thin scrub than true savannah), and visited some extensive underground chambers and passages carved by natural agencies out of the sandstone. When finally leaving the country on his return to Europe, he explored the route from the Tikié to the Yapura system before alluded to, descending the latter river to the Amazon. The navigation of the small streams leading to the Apaporis branch of the Yapura was a matter of difficulty, and the country here was still quite a virgin field, the tribes met with having not previously seen a white man. Dr. Koch concludes with a sketch of the ethnology of the region, and especially the dances, of which he made a special study.

At a meeting of the Geological Society, London, on May 9, a paper giving a scientific account of the recent great eruption of Mount Vesuvius was read by Professor Giuseppe de Lorenzo, of the Mineralogical Museum in the Royal University of Naples, a foreign correspondent of the society. According to the report in the London *Times* Professor de Lorenzo stated that after the great eruption of 1872 Vesuvius lapsed into repose, marked

by merely solfataric phenomena, for three years. Fissuring of the cone and slight outpourings of lava began in May, 1905, and continued until April 5, 1906, when the fourth great outburst from the principal crater occurred, accompanied by the formation of deeper and larger fissures in the southeastern wall of the cone, from which a great mass of fluid and scoriaceous lava was erupted. After a pause the maximum outburst took place during the night of April 7 and 8, and blew 3,000 feet into the air scoriæ and lapilli of lava as fragments derived from the wreckage of the cone. The southwesterly wind carried this ash to Ottajano and San Giuseppe, which were buried under three feet of it, and even swept it on to the Adriatic and Montenegro. At this time the lava which reached Torre Annunziato was erupted. The decrescent phase began on April 8, but the collapse of the cone of the principal crater was accompanied by the ejection of steam and dust to a height of from 22,000 feet to 26,000 feet. On April 9 and 10 the wind was northeast, and the dust was carried over Torre del Greco and as far as Spain; but on April 11 the cloud was again impelled northward. The ash in the earlier eruptions was dark in color and made of materials derived directly from the usual type of leucotephritic magma; but later it became grayer and mixed with weathered clastic material from the cone. The great cone had an almost horizontal rim on April 13, very little higher than Monte Somma, and with a crater possibly exceeding 1,300 feet in diameter; this cone was almost snow white from the deposit of sublimates. Many deaths, Professor de Lorenzo states, were due to asphyxia, but the collapse of roofs weighted with dust was a source of much danger, as was the case at Pompeii in A.D. 79. The lava streams surrounded trees, many of which still stood in the hot lava with their leaves and blossoms apparently uninjured. The sea level during April 7 and 8 was lowered six inches near Pozzuoli, and as much as twelve inches near Portici, and had not returned to its former level on April 13. The maximum activity coincided almost exactly with full

moon, and at the time the volcanoes of the Phlegræan Fields and of the islands remained in their normal condition. Professor de Lorenzo believes that this eruption of Vesuvius is greater than any of those recorded in history with two exceptions—those of A.D. 79, the historic eruption which destroyed Pompeii and Herculaneum, and of 1631, when Torre del Greco was overwhelmed and 4,000 persons perished.

UNIVERSITY AND EDUCATIONAL NEWS.

UNION THEOLOGICAL SEMINARY has received two anonymous gifts amounting to \$325,000 toward the cost of its building to be erected on a site adjacent to Columbia University.

ALBION COLLEGE is now building a new biological laboratory, 45 to 60 feet, four stories high, which is expected to be completed in time for the opening of the college year in September. Mr. Andrew Carnegie has pledged \$20,000 to the endowment fund of the college on condition that \$80,000 additional be raised for the purpose. Mr. Carnegie has also given Kenyon College \$25,000 to aid poor students.

A NEW scholarship of \$5,000 has been given to Barnard College, Columbia University, by Mrs. George W. Collord in memory of her brother, George W. Smith.

THE council of New York University has decided to buy the Schwab property, of about thirty acres, adjoining the campus on the south.

LADY JEBB has given Cambridge University a fund amounting to upwards of £3,500 in memory of the late Sir Richard Jebb. The income of the fund is to be paid to Lady Jebb during her lifetime, and afterwards to be devoted to such object, related to classical or other literary studies, as the university may select.

ACCORDING to the New York *Evening Post* a project is well under way for the establishment of a university in British Columbia. Lieutenant-Governor Dunsmuir offered to endow a department of mineralogy, metallurgy and mining to the extent of \$125,000, with subsequent annual subscriptions for its sup-