

age the growing of other crops, diversification farms have been established. This work is being handled by the agrostologist of the department. The results of Mr. O. F. Cook's work in the discovery of the kelep ant have already been announced in these columns. The effects of the general propaganda work in Texas have been good, as many farmers have succeeded in growing good crops of cotton despite the presence of the weevil.

SCIENTIFIC NOTES AND NEWS.

THE registration at the International Congress of Arts and Science was as follows:

Foreign speakers	87
Officers and principal American speakers	306
Ten-minute speakers	138
General registration	1,851
Total	2,382

COLUMBIA UNIVERSITY has conferred the degree of D.Sc. on Sir William Ramsay, the retiring president, and on Mr. W. H. Nichols, the president-elect of the Society of Chemical Industry.

PROFESSOR HUGO DE VRIES, of the University of Amsterdam, gave an illustrated lecture on 'The Origin of Species, illustrated by the Evening Primrose,' at the New York Botanical Garden, on October 1. On October 3, he was given a farewell reception at the American Museum of Natural History.

At the opening exercises of the one hundred and fifty-first academic year of Columbia University on September 28, Professor Woodward gave the address, taking as his subject 'Academic Ideals.'

It is announced that the first series of the Hertzstein lectures at the University of California will be delivered in October, by Dr. A. E. Taylor, professor of pathology. The lectures have been made possible through the generosity of Dr. M. Hertzstein, of San Francisco, who fully equipped the physiological laboratory and endowed the lectureship for the discussion of special problems in scientific medicine. Professor Taylor's subject will be 'Ferments and Fermentations.'

MAJOR B. F. S. BADEN-POWELL arrived at New York on the *Campania*, on October 1.

He has brought with him kites that he will exhibit at the St. Louis Exposition.

MR. THOMAS H. KEARNEY, of the Bureau of Plant Industry, U. S. Department of Agriculture, has been authorized to proceed to North Africa and other Mediterranean coast regions for the purpose of securing new seeds and plants adapted to the southwest. A special study will be made of the date and new introductions of this fruit will be undertaken. Alkali-resistant forage crops will also be studied and the introduction of seeds of new and promising kinds will be made. Mr. Kearney will remain abroad until next spring.

THE Military-Medical Academy at St. Petersburg has recently installed a portrait of its honorary member, General Kuropatkin, in the main hall as a token of gratitude for his gifts. The academy owes to him the remodeling and enlargement of several of its scientific departments.

THE relief expedition, under Mr. W. S. Champ, which has undertaken for the second time to reach the *America*, after going as far as 79° north was driven back by the ice. The *America*, under the command of Mr. Anthony Fiala, has not been heard from for a year, but there is said to be no anxiety concerning it.

PROFESSOR ROBERT KOCH has been presented with a portrait bust and a Festschrift on the occasion of his sixtieth birthday.

THE funeral of Professor Niels Finsen, the discoverer of the light cure for lupus, took place on September 27. The Kings of Denmark and Greece were present, and there were special representatives from Emperor William, King Edward and other rulers.

MR. ARTHUR D. WYMAN, assistant in chemistry at Harvard University, was killed by an automobile on September 28.

MR. B. M. EVERHART, the botanist, died at West Chester, Pa., on September 22, at the age of eighty-seven years.

THOSE having reprints of the late Dr. Greeley's paper on 'The effect of variations in the temperature upon the process of artificial parthenogenesis' (published in the *Biological*

Bulletin, February, 1903), which they are willing to dispose of are requested by Professor Starbird, Washington University, St. Louis, Mo., to communicate with him.

AN additional appropriation of \$75,000 for the continuation of construction work at the New York Botanical Garden, voted by the Board of Estimate and Apportionment on June 24, 1904, became available by the signature of His Honor Mayor McClellan, on August 9, 1904. It is expected that the expenditure of this money will complete all the driveway bridges and their approaches, and all, or nearly all, of the driveways laid down in the general plan of the garden, approved by the board of managers and by the department of parks on June 21, 1897.

THE daily papers state that Mr. Archer M. Huntington has had incorporated the Hispanic Society of America, and has made to the trustees a gift of \$1,000,000. The gift consists of a building to be erected in Audubon Park, New York, which will cover about eight city lots, a suitable endowment, and an extremely valuable collection of Spanish books, paintings, manuscripts and objects of archeological interest now in the Huntington library at 'The Pleasance,' Bay Chester.

THE Austrian Meteorological Society has received from the Emperor of Austria the right to use the letters 'K.K.,' equivalent to Royal Imperial, before its name, so that its official designation now becomes the 'k.k.Oesterreichische Gesellschaft für Meteorologie.'

THE International Pure Food Congress held its session at St. Louis last week.

THE fifteenth annual general meeting of the British Institution of Mining Engineers was held at Birmingham beginning on September 14. There was a good attendance of members from various parts of the kingdom, and in addition there were present between 50 and 60 visitors from the Association des Ingénieurs Sortis de l'Ecole de Liège. The Secretary, Mr. M. Walton Brown, submitted the annual report of the council, which stated that since the formation of the institution in 1889 the membership had increased from 1,239 to 2,704. The secretary announced that Sir

Lowthian Bell had been elected president for the ensuing year.

A CORRESPONDENT writes to the *London Times* that the second International Philosophical Congress was held at the University of Geneva from September 4 to 8, and was attended by 500 members, representative of every school of philosophic thought in Europe. The congress was presided over by the venerable Swiss philosopher, M. Ernest Naville. At the inauguration of the congress Professor Gour, of the Faculty of Philosophy at the Geneva University, referred to the excellent results of the first congress held in Paris, in 1900, from the point of view of the teaching of philosophy, and of obtaining additional information of the nature and value of the divers philosophical works of our age. Professor Boutroux, of l'Institut Paris, read a paper on 'The Rôle of the History of Philosophy in the Study of Philosophy.' Professor Stein (of the University of Berne, and Gour (of the University of Geneva) dealt with 'The Definition of Philosophy'; Professor Windelband (of Heidelberg) with 'The Present Task of Logic and Philosophical Inquiry in Relation to Natural Science and Culture'; Professors Vifredo Pareto (of Lausanne) and De Greef (of Brussels) with 'The Individual and Society'; and Professor Reinke (of Kiel) and Giard (of Paris) with 'Neovitalism and Finality in Biology.' At the sectional meetings the subjects under discussion were 'The History of Philosophy,' 'General Philosophy and Psychology,' 'Applied Philosophy,' 'Logic and Philosophy of the Sciences' and 'History of the Sciences.'

THE Ben Nevis Observatories will be closed. Mr. R. T. Ormond, the honorary secretary, explains that two years ago the directors stated that they could not continue to carry on the observatories any longer under existing conditions. The meteorological council at the same time resolved to withdraw £250 of the £350 given by them. But the appointment of a committee of inquiry into the administration of the parliamentary grant for meteorology led to an effort being made to continue the work at the observatories until the committee had reported. The meteorological council

therefore continued their grants of £350 for two years, and the directors obtained from a gentleman interested in the work sufficient funds to carry on the observatories, in the same manner as hitherto, till October of this year. The committee issued their report a few months ago, but as in it they only recommended a continuance of the old grant of £350, the directors sent a letter to the First Lord of the Treasury asking for an additional grant of £600 to defray that part of the annual expenditure which has up to this time been met by subscriptions. In reply the treasury refused an additional grant, but offered to pay the £350 recommended by the Committee of Inquiry direct to the Scottish Meteorological Society on behalf of the Ben Nevis Observatory, instead of making this sum a charge on the meteorological grant. The continuance of the observatories could only be undertaken on a guaranteed income of £1,000 a year. The Treasury has only offered £350 a year, and the directors have therefore no choice but to close the observatories.

WE learn from the *Bulletin* of the American Geographical Society that the Paris Geographical Society has just issued, under the legacy of Renoust des Orgeries, the first number of the 'Documents Scientifiques de la Mission Saharienne,' by F. Foureau, chief of the expedition. It contains the astronomical and meteorological observations of the expedition, and will be followed by reports on topography, geology, biology, ethnology, and archeology. The accounts of the winds and thunder-storms and some other phenomena are especially minute. This legacy is to be applied to the aid of expeditions planned to bring the interior of Africa under the influence of France and make a homogeneous whole of her actual possessions in Algeria, Senegal and the Congo.

A WELSH national conference of delegates appointed by the Welsh county councils to discuss the questions of afforestation in the principality met recently at Swansea, Sir Charles Philipps, the chairman, says the *London Times*, in referring to the great importance of the study of forestry, said that the object of that meeting was to consider how

best to advise the county councils. After reference to the report of the departmental committee of 1902, the speaker said that there was in Wales an enormous area which could be profitably afforested, and pointed to the fact that afforestation gave employment to ten men, where sheep farming would only give employment to one. It was necessary that professors of the subject should be appointed at the universities and that practical demonstration areas should be set apart. One of the latter had been already established on high meadow-land in the Forest of Dean. The view was expressed, in course of discussion, that the establishment of a central school of forestry for Wales was of the utmost importance, and that such a school would become self-supporting after a few years. It was at length resolved that the members should urge on their respective councils the great importance of the study and practical application of forestry by providing lectures to be given at suitable centers and bursaries, enabling students to attend these lectures; also that a central school of forestry be established with example plants of three or more acres, and demonstration areas of suitable extent, and that the necessary expense be defrayed by the county councils on the basis of their respective ratable values, the whole amount now asked for not to exceed £5,000. It was further resolved to communicate what was being done to the government department, in the hope that a grant from the state would be made towards their efforts.

It is stated in the *Bulletin of the American Geographical Society* that Mr. Shimpei Kamase has presented to the society's library an excellent photograph of his relief map of the Japanese Empire, which is attracting much attention in the Transportation Building at the St. Louis Exposition. This map, about 100 feet in length by 50 in width, is so large that clear idea of relief features is given without very great exaggeration of the vertical scale. The exaggeration is threefold—sufficient, of course, to distort in some measure the mountain features, but it does not give the observer the grossly-erroneous impression of the topography that is conveyed by not a few

relief models where the vertical is five to eight times as large as the horizontal scale. The map, made at Fukuoka, the home of its designer, is based upon the general staff map, and the results of the topographic surveys have been carefully reproduced in this miniature representation of the mountains, valleys, plains and seas of the island empire. Every place of any importance is indicated; and the map gives a vivid idea of the remarkable development of Japan in postal, railroad, telegraph and steamship enterprises.

THE quarterly return of births, deaths and marriages for England and Wales has been published by authority of the registrar-general. The population of the United Kingdom in the middle of 1904 is estimated at 42,786,466 persons; that of England and Wales at 33,763,434, that of Scotland at 4,627,656 and that of Ireland at 4,395,376. In the United Kingdom 300,358 births and 164,534 deaths were registered in the three months ended June 30, 1904. The total increase of population was, therefore, 136,424. The number of persons married in the quarter ended March 31, 1904, was 118,968. The birth-rate in the United Kingdom in the second quarter of 1904 was 28.2, and the death-rate 15.4 per 1,000. The marriage-rate in the first quarter of 1904 was 11.2 per 1,000. According to the returns issued by the Board of Trade, it appears that 118,830 emigrants embarked, during last quarter, from the several ports of the United Kingdom at which emigration officers are stationed, for places outside Europe. Distributing proportionally 1,158 emigrants whose nationality was not ascertained, the emigrants that were natives of the United Kingdom numbered 76,294, of whom 47,054 were English, 11,648 Scottish and 17,592 Irish, while 42,536 others were of foreign nationality. The proportions of emigrants accredited to the several parts of the United Kingdom, per million of the respective estimated populations, were as follows: England, 1,394; Scotland, 2,517; and Ireland, 4,002. Compared with the averages in the three preceding second quarters, the proportion of English emigrants showed an increase of 27.2 per cent., that of Scottish emigrants an increase of 46.3

per cent., and that of Irish emigrants a decrease of 1.4 per cent.

ACCORDING to the *Scottish Geographical Journal* some interesting notes on the researches of Dr. David, a naturalist apparently of Swiss nationality, in the Congo forest and the western flanks of the Ruwenzori range, are given in a recent number of *Globus* (vol. 86, No. 4). The traveler has distinguished himself by being the first European to secure a specimen of the okapi with his own gun, which will permit for the first time an accurate knowledge of the physical characters and general bearing of the animal. According to Dr. David, the specimens which have been set up in this country and Belgium have been incorrectly treated, which, all things considered, is not surprising. The okapi, although a ruminant, has all the bearings of a tapir, not at all that of an antelope. The markings are much finer than those of the zebra, the stripes being black within white, and almost all double. The back is reddish, especially in the male, the ears enormously long, the mane erect. Some specimens of both sexes possess horns, while others are entirely without, and Dr. David is on this account inclined to distinguish two species. The animal stands from 4 to 5 feet high at the withers. Another find which is interesting from a zoological point of view is that of an armadillo 4 feet long, closely resembling its congener of the pampas. It frequently assumes an erect attitude, supporting itself on its tail and holding the tree-trunks with its powerful fore claws. Dr. David has also ascended the western slopes of the Ruwenzori range to a height which he estimates at 16,700 feet, which, if correct, would be the greatest altitude yet attained. His routes seem to have led somewhat to the north of Dr. Stuhlmann's. The range, he says, is composed of a series of ridges of granite, diorite and diabase, no traces of basalt or porphyry being seen. The snow-level occurs at about 14,500 feet, but glacier-tongues reach down to about 13,000. Two small moraine-lakes were seen, and a little below them was a third lake of milky-green color, surrounded by thick vegetation; while a fourth, which was fed by glacier streams, was clear, though of a

greenish-brown color, perhaps derived from the neighboring moorland. Like other visitors to the range, Dr. David attempts to define the zones of vegetation met with, of which he distinguishes six or seven, though the uppermost four, above the zone of bamboos, all form moorland of one sort or another. The *Senecio Johnstoni* was found up to 12,800 feet. There was a striking absence of flowers, and of the lush dwarf vegetation characteristic of the Alps. Trees ascend higher on the wall-like sides and slopes of the mountains than on the crests and ridges, but no distinction could be traced between slopes exposed to wind, rain or sun, and the reverse. The vegetation observed on the glacier-tongues on which 3 feet of new snow was lying was of interest, the *Senecio Johnstoni* growing with its base almost in the ice, and its roots embedded in the ground-moraine, which was frozen at the surface, though of a higher temperature below. Dr. David hopes to continue his researches in this region.

UNIVERSITY AND EDUCATIONAL NEWS.

THE daily papers state that about \$300,000 is left to public institutions by Mrs. Elizabeth Green Kelly, including \$100,000 to the University of Chicago.

THE increased appropriations for Miami University by the legislature of the state of Ohio at its last session have rendered it possible to enlarge the Science Hall, given by Senator Brice, '63, to about three times its present capacity. The new Brice Hall will be occupied by the departments of chemistry, physics and biology of the Liberal Arts College and by the natural history department of the State Normal School. The \$40,000 dormitory for women, also authorized by the legislature, is in process of construction.

THE will of Mrs. Sarah B. Potter, of Boston, contains public bequests aggregating over \$1,000,000, including \$150,000 to the Boston Medical Library, \$100,000 to the Kindergarten for the Blind, at Jamaica Plains, and \$50,000 to Harvard University.

A NEW building, to cost \$100,000, is to be built on the campus of the University of

Southern California at Los Angeles. It will be devoted to the science departments.

G. C. FRACKER, A.M. (Iowa), professor of psychology at Coe College, has been granted leave of absence to take the assistantship in psychology at Columbia University, vacant by the call of Mr. Henry A. Ruger to the chair of psychology at Colorado College. Mr. Frank G. Bruner, assistant in psychology at Columbia University, has been given leave of absence until the close of the Louisiana Purchase Exposition, where in the absence of Dr. R. S. Woodworth, instructor in psychology, he has charge of the Anthropometric and Psychometric Laboratories. Mr. F. L. Wells, A.B. (Columbia), has been appointed acting assistant for this period.

THE following appointments have been made in the Albany Medical College: Dr. Richard Mills Pearce has succeeded Dr. George Blumer as professor of bacteriology and pathology; Dr. Spencer L. Dawes, adjunct professor of materia medica; Dr. Wilfred S. Hale, demonstrator of anatomy and assistant curator of the museum; Dr. Edwin McD. Stanton, lecturer on histology; Dr. Howard E. Lomax, instructor in anatomy; Dr. Charles K. Winne, Jr., instructor in bacteriology; Dr. George G. Lempe, instructor in anatomy; Dr. Donald Boyd, demonstrator in anatomy of the nervous system; Dr. Edward F. Sibley, instructor in clinical microscopy, and Dr. Silas L. Filkins, prosector of anatomy.

ACCORDING to the London *Times* Mr. Ernest Shearer, M.A., B.Sc., Kirkwall, has been appointed lecturer on agriculture at the Pusa Imperial College, Bengal. This agricultural college for all India, with a farm of 1,300 acres attached, is one of the developments resulting from the appointment two or three years ago of another Scotsman, Mr. James Mollison, as inspector-general of agriculture in India. Mr. Alexander Sangster, Montrose, has been appointed junior assistant with the Abukir Land Reclamation Company, near Alexandria, Egypt, and Mr. John C. Leslie, B.Sc., has been appointed assistant conservator of Forests in Southern Nigeria.