

Rhode Island, President W. H. P. Faunce, D.D., **Brown University**.

In the following states appointments will be made by the chartered colleges and universities in rotation:

California, University of California, Leland Stanford University, smaller colleges every seventh year.

Maine (the order of rotation yet to be fixed).

Vermont, University of Vermont, Middlebury College.

Washington (the order of rotation yet to be fixed).

SCIENTIFIC NOTES AND NEWS.

DR. THEOBALD SMITH, professor of comparative pathology at Harvard University, has gone abroad, with a special view to studying the preparation of vaccine virus, which will hereafter be made at the Bussey Institute, of which Dr. Smith is director, under the auspices of the state of Massachusetts.

PROFESSOR FRANCIS H. HERRICK, of Western Reserve University, has been granted leave of absence for the ensuing year. From August 1, 1903, he will be engaged in scientific study in Europe, and may be addressed at Elmhurst, Bushey Grove, Watford, Herts, England. Dr. C. W. Prentiss, of Harvard and recently of the University of Strasburg, Germany, and Mr. Carl B. Tames, formerly an assistant in the biological laboratory, have been made instructors in biology in Western Reserve University, and will have charge of Professor Herrick's work.

DR. CARLSON has been appointed a research assistant by the Carnegie Institution for the coming year and will carry on his work in connection with the Physiological Laboratory of Stanford University and with its Seaside Laboratory on Monterey Bay. The subject of his investigations is 'The Mechanism of Inhibition of the Heart in Invertebrates.'

MR. CHARLES J. BRAND, who for the past year has been assistant in plant economics at the Field Columbian Museum of Chicago, has been promoted to the position of assistant curator, Department of Botany, in that institution. Mr. Brand is a graduate of the University of Minnesota and secured his

botanical training under Professor Conway MacMillan.

DR. M. P. RAVENEL, of the University of Pennsylvania, has returned from Europe, where he has been making a special study of tuberculosis.

THE daily papers report that Dr. H. C. Parker, of Columbia University, and Dr. C. E. Fay, of Tufts College, now engaged in explorations in the northern Rocky Mountains, have ascended Mt. Hungabee, the height of which was found to be 11,500 feet, and Mt. Goodsir, the height of which was found to be nearly 12,000 feet.

DR. G. C. MARTIN has sailed from Seattle for the Kayak Island to investigate the oil fields for the Geological Survey.

MR. CHARLES W. WRIGHT has left Washington to make, for the Geological Survey, an examination of the placer gold region known as the Porcupine district. This district lies close to the international boundary, a little south of west of Skagway and about twenty miles from tide water at Lynn Canal.

MR. G. MARCONI is expected to arrive in America about the middle of August.

PROFESSOR H. M. SAVILLE is spending the month of July in Mexico on behalf of the American Museum of Natural History. A part of the time will be devoted to the ruins of Mitla in order to complete his observations and obtain additional photographs for the report on the explorations recently carried on there by the Loubat expedition, and to make further studies of Zapotecan antiquities. While he is in the City of Mexico arrangements will be made for an exchange of archeological specimens between the Museo Nacional and the American Museum.

FRANK M. CHAPMAN, associate curator of mammalogy and ornithology, American Museum of Natural History, is in California collecting material for making a group on the Cadwalader fund. He has an artist with him, who will make a study of the region in which the birds are found. One of the proposed groups will represent the bird-life of the irrigated portions of the San Joaquin valley,

and will include stilts, avocets, cinnamon teal, coots, all breeding or with young, Forster's and black terns, pintail and redhead ducks, great blue heron and yellowheaded and California redwinged blackbirds. The background will show a great stretch of green irrigated country with the mountains of the Coast Range in the distance.

THE Amsterdam Academy of Sciences has awarded its Buis-Ballot medal, given once in ten years, to Professor Richard Assmann and Dr. Arthur Berson, of the Aeronautic Institute at Tegel, near Berlin.

THE Brussels Académie de Médecine has awarded to Dr. G. Joannovics, assistant at the Vienna Institute for General and Experimental Pathology, the prize of \$200 offered for the best work based on new experimental researches. His subject was 'The Pathogenesis of Icterus.'

CAPTAIN HERTZ has been appointed director of the Marine Observatory at Hamburg.

MR. LUTHER STEIRINGER, known for the part he has taken in the development of electric lighting, died on July 18 at the age of fifty-eight years.

PROFESSOR HENRY GRISWALD JESUP, from 1876 to 1898 professor of natural history at Dartmouth College, and author of contributions to local botany, died on the 15th inst. at the age of seventy-seven years.

DR. AUGUSTINE GATTINGER, author of an extensive flora of Tennessee, at one time assistant commissioner of agriculture, died at Nashville, Tenn., on July 18, at the age of seventy-eight years.

WE learn from the *Forestry Quarterly* that Theodor Karlowitsch Arnold, councillor of the Public Lands Office of Russia and known as the father of Russian Forestry, died recently at an advanced age. His work for forestry dates from the forties of the last century and he was, directly or through his pupils the teacher of all Russian foresters.

SIR JOSHUA G. FITCH, one of the best known students of education in England, died on July 14, aged seventy-nine years.

BARON DE BUSH, an English chemist, engaged especially in the distillation of essential oils, was killed by falling from a railway train on July 24 at the age of forty-three years.

THE Civil Service Commission announces an examination on August 26, 1903, to secure an eligible list from which to make certification to fill a vacancy in the position of entomological draftsman in the Division of Entomology, Department of Agriculture, at \$1,000 per annum.

THE Desert Laboratory, being erected by an appropriation from the Carnegie Institution at Tucson, Arizona, is expected to be ready for occupancy on September 1, when Dr. W. A. Cannon, now assistant in the laboratory of the New York Botanical Garden, will become resident investigator.

ACCORDING to a press dispatch, the Royal Commission which was appointed to examine into the question of London street traffic has decided to send a sub-committee to the United States in the autumn to study American systems of transportation.

THE Eleventh National Irrigation Congress will be held at Ogden, Utah, from September 15 to 18. The program will include: Practical irrigation and forestry lessons; reports of experts; application of provisions of the reclamation act; state progress under the national act; views on settlement of legal complications, and the theme of colonization.

A REUTER telegram from Aden states that the expedition under Mr. W. N. Macmillan, which was proceeding to the Blue Nile, has been abandoned. The boats of the expedition were swamped, but there were no casualties. The members of the party are returning to Jibuti by way of Harar.

WORD has been received at the Geological Survey of the safe arrival on the Yukon of the survey parties under Mr. L. M. Prindle and Mr. T. G. Gerdine, respectively. These parties sailed from Seattle in the latter part of May, equipped with twenty horses. Reaching Skagway about June 1, they found that the lakes of the Upper Lewes River were still frozen, which necessitated a delay of some

ten days. From Skagway the parties went by rail to Whitehorse Rapids, and thence by steamer to Eagle, on the Upper Yukon. From this point Mr. Prindle is to make his way to the southwest, visiting the placer gold fields of the Fortymile region. Mr. Gerdine will begin topographic work, extending a survey across to the new gold district on the Lower Tanana, which Mr. Prindle will examine later in the season.

At the meeting of the Zoological Society of London on July 16 it was announced that the diving birds' tank and the fish-house would be finished within a month, and the new large aviary on the south bank of the canal in August. Six loose boxes are being erected on the north bank for the accommodation of some of the valuable collections of Equidæ now in the gardens. The work of re-roofing and restoring the eastern and western aviaries had been undertaken. The erection of a suitable building for the accommodation of keepers had been sanctioned and plans were being prepared. The plans for new cages for the birds of prey had been prepared and passed, and the contracts were being arranged. The erection of a new house for small mammals had been decided upon. Plans of the most recent buildings of this nature had been obtained from continental gardens and the erection of the buildings would be forthwith undertaken.

A REUTER telegram from Berlin says that, according to the *National-Zeitung*, Professor Kossel, of the Imperial Health Office, has read a paper at a meeting of the Berlin Medical Society upon the results of the work done by the Tuberculosis Commission in connection with the investigations made by Professors Koch and Schuetz. Professor Kossel summed up the results of a series of experiments as proving that tuberculosis in the human being can be communicated to cattle, and *vice versa*. The practical question—namely, which communication was more frequent and how great was the danger attaching to it—remained, however, still undecided. The results of the experiments, which consisted of the inoculation of calves with human tuberculosis by

subcutaneous injection, tend to support Professor Koch's view that the bovine tuberculosis bacillus is of a different species from that of human tuberculosis. A definitive opinion on the point is, however, reserved for the result of a further series of experiments in which inoculation will be made by means of feeding and inhalation.

THE report of the council of the Marine Biological Association of the United Kingdom for 1902-1903, as summarized in the *London Times*, states that the work of the council has this year been considerably augmented in consequence of the fact that a commission has been accepted from his Majesty's government to carry out in the southern British area the program of scientific fishery investigations adopted by the International Conference which met at Christiania in 1901. The share of the international program undertaken by the association includes a scientific survey, by means of the steamship *Huxley*, of the trawling grounds lying between the east coast of England and about 3° 30' E. longitude. The *Huxley* began her fishing work on November 1. Up to the middle of June the *Huxley* had completed twelve scientific trawling voyages in the North Sea. Over 34,000 fishes have been measured, the majority being flat fish. The animal life of the bottom has been systematically studied from the point of view of distribution, and the food-contents of about 3,000 fishes have been examined and determined. In the investigation of the plaice nurseries near the Horn Reef in May Mr. Garstang was joined on board the *Huxley* by the distinguished superintendent of the Danish investigations, Dr. C. G. Joh. Peterson. Opportunity was thus afforded of repeating investigations on some of the same stations which had been explored by the Danish vessel *Thor* six weeks earlier. The comparison of results revealed certain changes in the distribution of fish in the interval, which were further investigated with definite and interesting results. Plaice have been marked and liberated in various parts of the area south of the latitude of Bridlington. In November and December last the first experiments were

made on the grounds where small flat fish congregate west of the Borkum Reef, and the results obtained are already of great interest and importance. They indicate that during December and January there was a marked migration southwards and westwards of the small plaice previously congregated on the inshore grounds of the northern and western coasts of Holland, the distances traveled being in many cases quite unprecedented—viz., from 100 to 160 miles in six weeks or two months. Over 10 per cent. of the fish liberated have already been recovered. Although it is not proposed to draw conclusions at the present stage of the inquiry, these results already suggest that the supply of flat fish in the southern part of the North Sea, as far south as the Thames estuary, is maintained to some extent by immigrations of small fish from the 'nurseries' off the north coast of Holland. The investigation of fish eggs will not be commenced until the next breeding season. During a recent visit of the *Huxley* to Heligoland for this purpose Drs. Heincke and Ehrenbaum joined Mr. Garstang for a day's fishing, and demonstrated their appliances for this part of the work. Uniform apparatus is now being prepared for next season's investigations. Special assistants are being trained for the work in the markets, but have not yet begun operations away from Lowestoft. The English portion of the international scheme of hydrographic and plankton observations, the execution of which has been assigned to the Marine Biological Association, is to be carried out in the western half of the English Channel. These investigations have for their object the study of the seasonal changes which take place in the physical and biological conditions prevailing over the entire region covered by the international program, though more particularly directed to a study of the waters entering the North Sea from different directions.

UNIVERSITY AND EDUCATIONAL NEWS.

THE late Andrew F. Gault bequeathed \$10,000 to McGill University, and the will of the late James Cooper gave \$60,000 to endow a chair of internal medicine.

THE Maine legislature having appropriated \$2,500 a year for a department of forestry at the University of Maine, the trustees have authorized the appointment of a professor of forestry.

CORNELL UNIVERSITY has recently acquired three new farms. These farms, with its campus and original farm give Cornell University about 460 acres of land, 275 of which are available for the use of its College of Agriculture.

By the will of Spencer Morris, formerly professor of medical jurisprudence and toxicology at the Medico-Chirurgical College in Philadelphia, \$12,250 is bequeathed to that institution, the income of which is to be awarded annually to the member of the graduating class who receives the highest general average at the final examination for the degree of Doctor of Medicine.

THE trustees of Trinity College have established a course in civil engineering to be opened in September next.

DR. J. E. DUERDEN, interim professor of biology at the University of North Carolina, has been appointed acting assistant professor of zoology at the University of Michigan.

PROFESSOR NORMAN E. GILBERT, professor of physics and instructor in mathematics at Hobart College, has accepted a call as assistant professor of physics at Dartmouth College.

PROFESSOR ALBERT LEFEVRE, of Cornell University, has been called to take charge of the Department of Philosophy at Tulane University.

DR. IRVING KING, head of the department of psychology and pedagogy in the Wisconsin Normal School, at Oshkosh, has been elected to the chair of psychology and history of education in Pratt Institute, Brooklyn.

THE honorary professorship of forestry at the Royal Agricultural College, Cirencester, vacant some time ago by the death of the late Sir Henry Gilbert, F.R.S., has now been filled up by the appointment of Dr. W. Schlich, C.I.E., F.R.S., late Inspector-General of Forests, Government of India, principal professor of forestry, Coopers Hill.