

later on the establishment of the experimental farms system, Dr. James Fletcher, who occupied the position, was attached to the new branch of the Department of Agriculture in the joint capacity of entomologist and botanist, which position he occupied with conspicuous success until his death in 1908. The growth in importance of the subjects necessitated their separation and accordingly divisions of entomology and botany were created. Dr. C. Gordon Hewitt was appointed Dominion entomologist in 1909 and entrusted with the work of organizing the new division of entomology of the experimental farms branch of the Department of Agriculture, with offices and laboratory at the Central Experimental Farm, Ottawa.

The urgent need of legislation in order to permit action to be taken to prevent the introduction into Canada and spread within the country of serious insect pests and plant disease was responsible for the passage of the Destructive Insect and Pest Act in 1910. The still greater need of investigations on the insect pests affecting agriculture, forestry and other branches of human activity has led to the establishment of field or regional laboratories in different parts of Canada with trained entomologists in charge to study local problems.

Owing to the consequent expansion of the entomological work along investigatory and administrative lines and the fact that such work did not constitute a necessary part of the work of the experimental farms system and executively was virtually distinct, the entomological service has now been separated from the experimental farms branch and has been constituted an independent branch of the Department of Agriculture under the direction of the Dominion entomologist. It is proposed to erect a building to provide offices and laboratories for the new entomological branch. Will correspondents kindly note that all official communications and publications should be addressed to "The Dominion Entomologist, Department of Agriculture, Ottawa."

This reorganization, which will also include the establishment of a national collection of

the insects of Canada in the Canadian National Museum (The Victoria Memorial Museum) at Ottawa under the care of the Dominion entomologist, marks an important step in Canadian entomology. It will result in a still greater development of the study of Canadian insects along scientific and practical lines.

SCIENTIFIC NOTES AND NEWS

At the meeting of the American Philosophical Society to be held at Philadelphia on April 23, 24 and 25, a large and important program of scientific papers will be presented. An account of the meeting with abstracts of the papers will be published in *SCIENCE*.

MR. F. W. HODGE, of the Bureau of American Ethnology, has been elected an honorary member of the Sociedad Científica Antonio Alzate of the City of Mexico.

PROFESSOR LAWRENCE MARTIN, of the University of Wisconsin, has been elected a corresponding member of the Kaiserlich-Königliche Geographische Gesellschaft in Vienna.

THE Austrian Zoological and Botanical Society has awarded the Archduke Rainer gold medals to two members of Yale University, Dr. Ross G. Harrison, Bronson professor of comparative anatomy, and Dr. George R. Wieland, lecturer in paleobotany.

THE British Local Government Board has authorized the following special researches, to be paid for out of the annual grant in aid of scientific investigations concerning the causes and processes of disease:

1. An investigation by Dr. Eardley Holland into the causes of stillbirths.
2. A continuation of the Board's inquiry into the cellular contents of milk by Professor Sims Woodhead.
3. A continuation of the Board's inquiry into the causes of premature arterial degeneration by Dr. F. W. Andrewes.
4. An investigation by Dr. M. H. Gordon and Dr. A. E. Gow into the etiology of epidemic diarrhoea in children.

THE council of the Royal Geographical Society has decided to award their royal medals and other honors for the present year as fol-

lows: Founder's medal, Professor Albrecht Penck, professor of geography at Berlin and director of the Oceanographical Institute; Patron's medal, Dr. Hamilton Rice, of Boston, Mass., known for his explorations of the region of South America drained by the headwaters of the Orinoco and of the northern branches of the Amazon; Murchison grant, Commander H. L. L. Pennell, R.N., a member of the Antarctic expedition of 1910, and selected by Captain Scott to command the *Terra Nova* after the landing of the shore parties; Gill memorial, Mr. A. E. R. Wollaston, who has made extensive journeys in many parts of the world, chiefly for zoological work; Cuthbert Peck grant, Dr. J. Ball, employed in the geological survey of Egypt for the past eighteen years; Back grant, Mr. J. N. Dracopouli, known for his work in the Sonora desert of Mexico and for his expedition to the Lorian Swamp.

THE former students of Dr. J. McKeen Cattell, professor of psychology in Columbia University, at a dinner held in New York on April 8, presented him, in celebration of his completion of twenty-five years as professor of psychology, with a "Festschrift" in the form of reviews of his researches and of work in psychology to which they have led. The contents of the volume are:

"Work on Reaction Time," by V. A. C. Henmon.

"Studies of Reading and Perception," by Walter F. Dearborn.

"The Association Method," by F. Lyman Wells.

"Psychophysical Contributions," by R. S. Woodworth.

"Studies by the Method of Relative Position," by H. L. Hollingworth.

"The Study of Individual Differences," by E. L. Thorndike.

On April 6, 7 and 8, there was held at Columbia University a Conference on Individual Psychology by former students of the department of psychology, at which thirty papers were presented.

DR. M. MIYOSHI, professor of botany in the Imperial University of Tokyo, is visiting the scientific institutions of the United States.

PRINCETON UNIVERSITY has granted leaves of absence for the academic year 1914-15 to Professor H. D. Thompson, of the department of mathematics; and to Philip E. Robinson, assistant professor of the department of physics.

THE American Association of Pathologists and Bacteriologists met in Toronto, on April 10 and 11, under the presidency of Professor J. J. McKenzie, of Toronto University. There also met at Toronto the International Association of Medical Museums, with Professor R. M. Pearce, of Philadelphia, as president, and the American Association for Cancer Research, under the presidency of Dr. Ernest E. Tyzzer, of the Harvard Medical School.

MR. F. J. NORTH, assistant in the geological laboratory, King's College, London, has been appointed assistant keeper in the department of geology in the National Museum of Wales.

PROFESSOR M. FRÉCHET, of the University of Poitiers, will give at the University of Illinois during the academic year 1914-15 a course of lectures on general analysis.

INDIANA UNIVERSITY will hold, on April 16 and 17, a conference on educational measurements. The principal speaker is Professor E. L. Thorndike, of Teachers College, Columbia University.

DR. JOHN A. BRASHEAR, of Pittsburgh, recently delivered two illustrated lectures at the University of Illinois on "The Contribution of Photography to our Knowledge of the Stellar Universe," and "Engineering Problems in the Construction of Large Telescopes." The lecture on celestial photography was held in the university auditorium with an audience of fifteen hundred persons.

DR. L. A. BAUER gave on April 3, in the Engineering Societies Building, the evening lecture at the first joint meeting of the American Geographical Society and of the Association of American Geographers, his subject being "The General Magnetic Survey of the Earth," illustrated by lantern slides of the work of the *Carnegie*, and of the various expeditions to more or less unexplored countries.

THE annual John Lewis Russell lecture of the Massachusetts Horticultural Society was delivered on March 21, by Dr. Perley Spaulding, pathological inspector of the Horticultural Board of the U. S. Department of Agriculture. The subject was "Undesirable Foreign Plant Diseases."

DR. M. W. TWITCHELL, the assistant geologist of New Jersey, lectured before the department of geology of Princeton University on March 16, 20, 23, 27 and 30, the general subject of the series being "The Geology of New Jersey."

PROFESSOR GEORGE GRANT MACCURDY, of Yale University, gave two lectures at Rutgers College on March 25 and 26, one before the New Jersey State Microscopical Society on "Primeval Man," the other before the Phi Beta Kappa Society on "The Dawn of Art."

PROFESSOR SAMUEL W. WILLISTON addressed the Chicago chapter of the Sigma Xi at its regular winter quarter meeting, on March 11, on the topic: "Recent Discoveries Relative to the Early Land Life of North America."

ON March 28, Professor C. H. Shattuck, of the Forestry Department of the University of Idaho, delivered a lecture before the Puget Sound Branch of the American Chemical Society on "Wood Processing."

DR. ALEXANDER F. CHAMBERLAIN, professor of anthropology at Clark University, died on April 8, at the age of forty-eight years.

DR. JOSEPH D. BRYANT, professor of surgery in the University and Bellevue Hospital Medical College, died in New York on April 8, aged sixty-nine years.

DR. ALFRED CONOR, vice director of the Pasteur Institute at Tunis, has died from infection contracted in his experimental work.

THE U. S. Civil Service Commission announces an examination for mining engineer in the Bureau of Mines, Department of the Interior, for service in the field, in relation to coal mining or metal mining, at salaries ranging from \$2,400 to \$4,000 a year. For the same bureau there will be held examinations for mine statistician and for assistant-engineer

of mine tests at Pittsburgh at salaries ranging from \$1,800 to \$2,400.

MR. ANDREW CARNEGIE has given \$100,000 to the New York Zoological Society to provide a pension fund for the New York Zoological Park and the Aquarium. The scientific staff and the employees will contribute annually 2 per cent. of their salaries, and any sum that may be lacking will be made up by the Zoological Society.

THE Rockefeller Institute for Medical Research, New York, announces that it has received from Mr. John D. Rockefeller an additional endowment of \$1,000,000 for the purpose of organizing a department for the study of animal diseases. A gift of \$50,000 has also been received from Mr. James J. Hill, for the study of hog cholera. The announcement says: "It is the expectation of the trustees of the institute that the new department by making possible a very thorough and exhaustive study of animal diseases by trained experts will prove a great boon to raisers of cattle, hogs, sheep, and other animals, as the opinion has been expressed that many of the diseases could be held in check and perhaps practically stamped out if the breeders had practical knowledge on which to act. With the present facilities at hand, the income from the \$1,000,000 endowment will make it possible to carry on the work on a broad scope at once."

THE department of terrestrial magnetism of the Carnegie Institution of Washington, founded on April 1, 1904, is now occupying its new building, which has been especially erected, at 36th Street and Broad Branch Road, Washington, D. C., to provide the requisite facilities for the varied research work of the department, both along experimental and observational lines.

SIR ERNEST SHACKLETON has bought the ship *Polaris*, now at Sandefjord, to be his "flag-ship" on his forthcoming Antarctic expedition.

THE Swedish government has appropriated \$13,500 for traveling expenses to be dis-

tributed among Swedish engineers who desire to visit the Panama-Pacific Exposition in San Francisco in 1915.

THE fiftieth meeting of the New England Association of Chemistry Teachers will be held in Boston on Saturday, April 25, 1914. The morning session will be devoted to the past, present and future of the association. Past presidents will speak, and the history of the association will be read. A complimentary luncheon will follow. It is hoped that the afternoon session will include a moving picture exhibition of chemical industries. In the evening there will be a reception and collation, followed by speaking, at the Copley Plaza.

THE twenty-fifth session of the Biological Laboratory of the Brooklyn Institute of Arts and Sciences, located at Cold Spring Harbor, Long Island, will be held from June to September. The regular class work will begin Wednesday, July first, and will continue for six weeks, to August 12. The instruction offered includes a course in field zoology by Dr. H. E. Walter, of Brown University, assisted by Dr. S. I. Kornhauser; in bird study by Mrs. H. E. Walter; in comparative anatomy by Professor H. S. Pratt, of Haverford, and Dr. D. D. Whitney, of Wesleyan University; in animal bionomics and evolution by Dr. C. B. Davenport; cryptogamic botany by Professor H. H. York, of Brown University, and Dr. W. E. Maneval; systematic and field botany by Professor John W. Harshberger, of the University of Pennsylvania. Opportunities are also offered for investigation in zoology and botany. A training course for field workers in eugenics is given under the direction of Dr. C. B. Davenport and Mr. H. H. Laughlin. The complete announcement may be got by addressing the Biological Laboratory, Cold Spring Harbor, N. Y.

THERE are now being assembled in the United States National Museum, the bones of a very small three-horned dinosaur which is being made the type of a new species. This diminutive dinosaur, when completely assembled, will measure about six feet in length and stand only about three feet high. Its head

is twenty-two inches long. When its bones are compared with those of the larger members of this extraordinary family of reptiles, it will be seen that this specimen is less than one fourth of their size. In the National Museum are several skulls of one of the large horned dinosaurs, *Triceratops*, which measure from six to eight feet, and in one case, nine feet. The group to which this new member belongs is called the *Ceratopsia*, from the horns which adorn their heads; two above the eyes and one on the end of the nose. Unlike the others, this species has small and not prominent horns over the eyes, while the nasal horn is an outgrowth of the nasal bone and not an additional growth, as is the case with the others. Another peculiarity is that this horn is split lengthwise in such a manner that one side has the appearance of having slipped by the other. Its jaws are like those of a turtle, there being no front teeth but a sharp curved beak. Farther back in the jaws, however, are very finely sculptured cutting teeth, which show the animal to have been herbivorous. Like the other members of this group, it has a deep collar known as a frill, but in this species it has an open space on either side of the neck. The frill was covered with horn and formed a defensive armor for the protection of the neck. This particular specimen was found with the foot and tail articulated, which makes it especially interesting as being the first complete and connected specimen ever obtained. The foot has four toes, the first with two bones, the second with three, the fourth with five, while only a trace of the fifth toe remains, tending to show the loss of that member through disuse, as is the case with the horse. Parts of the other feet are also in this collection, as well as nearly all the bones of one individual. In the whole specimen there are but few bones and parts which will have to be restored. Considering that the first specimens of this family were discovered some forty years ago, it is curious that this small individual is the most complete one that has been found. These fossils were found by Mr. Charles W. Gilmore during the summer of 1913, while he was working for the Geological

Survey in the Blackfeet Reservation in north-western Montana. The partial skeletons of five individuals were uncovered at the same time and form a most valuable addition to science. Mr. Gilmore has written a preliminary paper on the new species, published in the Smithsonian Miscellaneous Collections, and is working on the assembling of the specimens for exhibition in the National Museum.

CALIFORNIA state inspectors at San Francisco have found a new canker disease on chestnut trees recently imported from Japan. According to Dr. Haven Metcalf, the government's expert on such diseases, this appears to be of the same type as the chestnut blight which is ravaging the forests of the eastern United States, and it is possible that the new disease would be equally destructive if it became established in this country.

UNIVERSITY AND EDUCATIONAL NEWS

THE General Education Board has promised to give \$750,000 to Wellesley on condition that the balance of the \$2,000,000 restoration and endowment fund is completed by January 1, 1915.

It is said that one million dollars will be received by the University of Pennsylvania from the estate of Dr. Louis A. Duhring, for many years professor of dermatology. At the time of his death on May 8, 1913, his bequest was estimated at only \$400,000.

GRINNELL COLLEGE has completed its \$500,000 endowment fund. Of this sum \$100,000 was given by the General Education Board and the rest was raised by the college. The productive funds of the college now total more than \$1,300,000. Of the amount just secured, \$150,000 is to be devoted to the erection of new buildings.

THE managers of the Presbyterian Hospital, New York, have taken action reorganizing the administration of the scientific and therapeutic work at the hospital so as to provide for single responsibility for both the medical and the surgical services. Dr. Theodore C. Janeway, Bard professor of the practise of medicine in the College of Physicians and Sur-

geons, Columbia University, has been designated medical director of the hospital, and Dr. George E. Brewer, professor of surgery, has been designated surgical director. Dr. William G. MacCallum, professor of pathology, has been appointed pathologist at the Hospital.

PROFESSOR ALAN W. C. MENZIES, Ph.D., now head of the department of chemistry at Oberlin College, has been elected professor of chemistry at Princeton University. Other changes are Dr. Edward Gleason Spaulding, promoted to a full professorship in philosophy; and Dr. Thomas Hakon Gronwall, elected assistant professor and preceptor in mathematics.

RECENT promotions in the faculties of the University of Chicago include the following: To professorships: Harlan H. Barrows, geography; and Ernest J. Wilczynski, mathematics. To associate professorships: Elliot R. Downing, natural science (College of Education); Albert Johannsen, petrology; Walter S. Tower, geography. To assistant professorships: Storrs B. Barrett, Yerkes Observatory; Albert D. Brokaw, mineralogy and economic geology; Rollin T. Chamberlin, geology; and Arno B. Luckhardt, physiology. The new appointments include that of Oliver J. Lee to an instructorship in astronomy.

JAMES WITHYCOMBE has resigned his position as director of the Oregon Agricultural College Experiment Station.

DR. WILLIAM E. HOCKING, professor of philosophy in the University, has accepted a chair of philosophy in Harvard University.

MR. G. H. HARDY, M.A., fellow of Trinity College, University of Cambridge, has been appointed to be Cayley lecturer in mathematics, and Mr. A. Berry, M.A., fellow of King's College, a university lecturer in mathematics.

DISCUSSION AND CORRESPONDENCE

MINERAL NOMENCLATURE

THE need for revision of mineral nomenclature has been recently emphasized by Professor Austin F. Rogers, of Stanford University.¹ While I agree in the main with the

¹ *Proc. Amer. Phil. Soc.*, 52, 606-615, 1913.