

Dr. Ryan declares that the Red Cross was sending Professor Pawlow food and states that Pawlow's two sons, Victor and Vsevolod Ivanovitch, had not been heard from for two years and that he was very desirous of obtaining information regarding them. Again, April 24, Dr. Ryan reported that he had been able to send to Pawlow certain definite supplies which are listed. Furthermore, I have a letter from Professor Carl Tigerstedt of Helsingfors, Finland, dated July 30, 1921, in which he acknowledges the receipt of money collected from friends of Pawlow in the United States and sent to him for Pawlow's aid. The Finns have official representatives in Petrograd. Dr. Tigerstedt reports that he has been sending a consignment of food of all kinds twice monthly to Pawlow through the Finnish commission, and that he is thus not suffering any more from lack of nourishment. Nevertheless, I am sending to Dr. Tigerstedt the report from Budapest and asking for specific information regarding Pawlow's welfare.

SCIENTIFIC NOTES AND NEWS

DR. C. S. SHERRINGTON, professor of physiology at Oxford University and president of the Royal Society, will be elected president of the British Association for the meeting to be held at Hull in 1922. It is expected that the meeting of 1923 will be at Liverpool and the meeting of 1924 at Toronto.

THE International Eugenics Congress has been holding a successful meeting in New York City. We hope to publish next week the addresses given at the opening session by Dr. Henry Fairfield Osborn, Major Leonard Darwin and Professor Charles B. Davenport.

THE thirteenth course of lectures on the Herter Foundation at the Johns Hopkins University will be given by Sir Arthur Keith, F.R.S., conservator of the Museum and Hunterian professor of the Royal College of Surgeons, England. The lectures will be given on October 5, 6 and 7, the subject being "The differentiation of modern races of mankind in the light of the hormone theory."

At the recent meeting of the American Astronomical Society, held at Middletown, Conn., Professor C. V. L. Charlier was elected an honorary member. Professor J. C. Kapteyn and Sir Frank Dyson are the only other living astronomers who have been thus honored.

PROFESSOR ROBERT W. HEGNER, of the department of medical zoology, school of hygiene and public health, Johns Hopkins University, has been elected a fellow of the Royal Society of Tropical Medicine and Hygiene, London, England.

DR. HEBER W. YOUNGKEN, professor of botany and pharmacognosy in The Philadelphia College of Pharmacy and Science was elected chairman of The Scientific Section of The American Pharmaceutical Association at its sixty-ninth annual convention held in New Orleans, from September 5-9.

WILLARD ROUSE JILLSON, director and state geologist of the Kentucky Geological Survey with offices at Frankfort, Kentucky, received the doctorate of science from Syracuse University at its fiftieth commencement last June.

PROFESSOR J. J. THORNBURGH has been appointed director of the Agricultural Experiment Station of the University of Arizona, at Tucson, and began his work on September 1. Professor Thornburgh has completed twenty years' continuous service as head of the department of biology in the College of Letters, Arts and Sciences, University of Arizona, and henceforth will devote his time to administrative work and investigation.

PROFESSOR R. J. TERRY, of the department of anthropology of Washington University, Saint Louis, has been appointed anthropologist to the Barnes Hospital and Saint Louis Children's Hospital.

DR. MICHAEL F. GARDNER has been appointed chief of the Bureau of Preventable Diseases and director of the bacteriological laboratory of the U. S. Public Health Service.

THE Fixed Nitrogen Research Laboratory, together with about a half million dollars from the original appropriation made for the investigation of nitrogen fixation, was transferred on June 30 from the jurisdiction of the War Department to the Department of Agriculture. The laboratory is now an independent unit of the Department of Agriculture, under the direction of Dr. Richard C. Tolman, who has the assistance of an advisory committee

made up of a representative of the War Department and representatives of the agricultural bureaus which are directly interested in the fixation of nitrogen. It is expected that the present allotment will maintain the laboratory for about two years.

THE Sections of Eastern and Western Areal Geology in the U. S. Geological Survey have been merged into one section under the direction of Mr. Sidney Paige.

UPON nomination of the French Government, the Harvard University corporation has appointed Emile F. Gautier, professor of geography in the University of Algiers, as the French exchange professor at Harvard this year. He will lecture at Harvard during the second half-year. Professor Maurice DeWulf, who was one of the Louvain University (Belgium) teachers invited to Harvard after the destruction of the university by the Germans in 1914, has now been invited to return on a permanent appointment as professor of philosophy.

M. J. CAVALIER, professor of metallurgy in the University of Toulouse, has arrived in New York City to take up his work as French exchange professor at Columbia University. He will be at Columbia from October 1 to October 30. Professor Cavalier, rector of Toulouse University, known as an authority on metallurgical chemistry, comes to America as the result of arrangements for an annual exchange of professors of engineering and applied science between French and American universities. Professor Cavalier will divide his time among Columbia, Harvard, Yale, Cornell, Johns Hopkins, Massachusetts Institute of Technology and the University of Pennsylvania.

PROFESSOR REGINALD A. DALY and Professor Charles Palache of Harvard University are members of the Shaler Memorial Expedition to South Africa. A large part of Dr. Daly's work will be conducted by Dr. Eliot Blackwelder, chief geologist of the Argus Oil Company at Denver.

THE British Tropical Disease Prevention Association is sending out a mission under Dr.

Claude H. Marshall, a senior medical officer in Uganda, whose services are being lent by the government of Uganda for that purpose, to investigate certain methods of treating trypanosomiasis.

PROFESSOR S. KATO, Keio University Medical College, Japan, plans to visit colleges and laboratories in Germany, Austria, Denmark, Belgium, France and England. He expects to return to Japan by way of America. He expected to leave Japan on September 30.

MR. F. W. L. SLADEN, the well known authority on bees, and author of "The Humble-Bee," was accidentally drowned at Duck Island, Lake Ontario, on September 10. Mr. Sladen was carrying on research work in bee breeding on this island.

IN memory of the late Dr. Susumu Sato, who devoted his life to the progress of medical science in Japan, a laboratory will be constructed at a cost of 300,000 yen, for the Yuntendo Hospital, the largest private hospital in Japan. Courses in every branch of medical science will be offered under the presidency of Dr. Susumu Nukada, and clinics will also be held in the institution.

WE learn from the *Journal* of the Washington Academy of Sciences that at the invitation of Mr. Northcott, owner of the Luray Caverns, Virginia, Dr. Ales Hrdlicka of the National Museum has visited the caverns for the purpose of examining and removing certain bones, enclosed in stalagmite, which were believed to be human. After considerable difficulties, the entire deposit containing the bones was taken out in pieces which showed the remains of most of the parts of a human skeleton; but no trace remained of the skull with the exception of a portion of the lower jaw. The specimens have been given to the museum for further study.

It has been finally decided to hold the International Congress for Comparative Pathology at Rome, beginning on September 20, 1922, under the presidency of Professor Peroncito. The *Riforma Medica* of August 13, 1921, gives the list of twenty subjects appointed for discussion, and communications

on other subjects are invited by Professor Perroncito, whose address is R. Università di Torino.

The British Medical Journal reports that at the second Congress of the History of Medicine in Paris last July it was agreed that the third Congress, to be held in July, 1922, should take place in London. There will be a meeting for business purposes towards the end of this year in Paris, which will be attended by Dr. Charles Singer, president of the Section of the History of Medicine of the Royal Society of Medicine, when the permanent organization of the congress will be discussed. A meeting of the Section of the History of Medicine will be held on October 5, to forward the arrangements for the London Congress of 1922.

THE *Journal* of the American Medical Association reports that the purpose of the Belgian University Foundation, which was established by law, July 6, 1920, is the advancement of science and learning: (1) by granting to young Belgians who are gifted but are without financial resources loans that will allow them to take up university studies; (2) by granting financial aid to scientists and to young men who are planning to teach higher subjects or to undertake scientific researches, and (3) by encouraging scientific relations between Belgium and other countries. With the last mentioned aid in view, the foundation will aid physicians engaged in medical instruction in foreign countries. It will keep in close touch with the Association pour le développement des relations médicales de la faculté de médecine de Paris, the Office national des universités françaises, the Universities Bureau of the British Empire, the American University Union and the Junta para ampliación de estudios de Madrid.

It is announced in *Nature* that the Ministry of Agriculture and Fisheries and the Royal Horticultural Society have arranged to hold an International Potato Conference in London on November 16-18 next. During the conference, which will take place at the hall of the Royal Horticultural Society, Vincent

Square, the National Potato Society will hold its annual show, at which it is expected that most British varieties of potatoes will be exhibited. An exhibit dealing with the scientific aspect of potato problems is also being arranged, and it is hoped that workers engaged on potato problems in all parts of the world will cooperate. The proceedings will open with Sir A. Daniel Hall's presidential address on the morning of November 16. Papers on the breeding and selection of potatoes in Great Britain and the United States, and on wart disease, potato blight, and other diseases which are botanically and economically important, will be read, and time has been allowed for their discussion. Invitations to attend the conference have been extended to the Dominions and Colonies and to foreign countries, and it is hoped that the meeting will be thoroughly representative from both the scientific and the commercial aspects.

WITH the approach of cold weather renewed activity in the radio market news service is planned by the Bureau of Markets and Crop Estimates, United States Department of Agriculture, for the eight months beginning October 1. Atmospheric conditions are unfavorable to radio communication in warm weather, and many amateurs and experimenters discontinue their operations during the summer. It is expected, however, that with the coming of autumn the interest in radio activity will increase. Many states have shown keen interest in the development of radio news service covering market, crop and weather reports. State cooperation is planned by the bureau and will be taken up with the various states within range of the radio stations. The states that cooperate will be asked to determine the agency or agencies that are to work with the federal bureau in order to prevent duplication of effort. The handling of news matter will necessarily vary with the different states, depending on administrative organizations, geographical position, climate, and other factors.

CORN that grew in Tennessee in pre-historic times was unearthed recently by W. E. Meyer, of the Bureau of American Ethnology, and sent to the United States Department of Agricul-

ture for identification. During recent excavations in Davidson County, Tenn., Mr. Meyer came upon a number of stone slab graves containing mortuary vessels. Some of these held specimens of charred maize in fairly good condition. From the size and shape of the grains it was possible to identify the variety as Many-Rowed Tropical Flint, a form about half way between true flint and popcorn. The same type of Indian corn occurs in the West Indies, and there appears to have been a very early communication between the West Indies and North America. Not only corn but beans, squashes, pumpkins, and tobacco are of tropical and subtropical origin. These staples, now so important throughout both hemispheres, found their way into North America and were cultivated beyond the Great Lakes in Canada long before the discovery of America. There is abundant evidence of communication between the West Indies and Florida, and up the Mississippi and its tributaries.

THE *Brazil Medico* announces that Dr. Cleef, professor of chemistry at Bello Horizonte, reports the discovery in Minas Geraes of a mineral substance hitherto unknown which possesses great radioactive properties.

UNIVERSITY AND EDUCATIONAL NEWS

YALE UNIVERSITY has begun the construction of the new Sterling Chemical Laboratory. It is hoped that this building will be ready for the use of the department of chemistry in October, 1922.

New members of the faculty at the University of North Carolina, at the beginning of the fall term include G. M. Braune, professor of civil engineering; H. B. Anderson, associate professor of pathology; H. F. Janda, associate professor of highway engineering; F. C. Vilbrandt, associate professor of industrial chemistry; H. W. Crane, associate professor of psychology, and E. L. Mackie, assistant professor of mathematics.

MISS EDITH NASON, Ph.D., Yale, 1921, has been appointed an instructor in organic chemistry at the University of Illinois.

MR. HENRY R. HENZE, who received his Ph.D. degree from Yale in June, 1921, has become adjunct professor of chemistry in the medical school of the University of Texas at Galveston.

DISCUSSION AND CORRESPONDENCE A NEW DEFINITION OF PURE MATHEMATICS

DURING the present year there appeared a volume of the *Acta Mathematica*, volume 38, which was dedicated to the memory of H. Poincaré, the noted French mathematician who died in 1912. This volume opens with an account of his own works by Poincaré in which he deals briefly with his own contributions to the advancement of various subjects. This is followed by a report on the theory of groups and the works of E. Cartan, which Poincaré read before the council of the faculty of sciences of the University of Paris on the eve of the operation resulting in his death. The rest of the volume is devoted to letters and to various articles written by others but relating to Poincaré and his works.

In the present note we desire to direct attention to the second article mentioned above, which seems to be one of the last articles, if not the last article, written by Poincaré, and contains some remarkable statements in regard to the theory of groups. One of these is as follows: "The theory of groups is, so to say, entire mathematics, divested of its matter and reduced to a pure form." The interest in this statement should be increased by the fact that it may be regarded as a new definition of pure mathematics, the skyscraper among scientific structures. One of the best known other definitions is due to B. Peirce, who stated that "mathematics is the science which draws necessary conclusions." It should, however, not be inferred that the latter definition has been generally accepted as an entirely satisfactory one, nor do we want to create the impression that the former is likely to be universally adopted.

It may, however, be a matter of wide interest to see what Poincaré meant by the statement quoted above. Such an insight can probably be best gained by reading his own