ing from Colombia northward through Central America, toward southern Mexico, to be correlated with the investigations now being carried on in Middle America.

- 3. Another line of connection between South America and North America probably extended over the Antillean Islands toward the Atlantic coast of the North American continent. The investigations of explorers have demonstrated that Caribbean and Arowak influences extended from southern Brazil northward to the eastern coast of the Gulf of Mexico; and North American archeology makes us suspect the existence of an earlier connection, which may have extended between South America and the southern and central portions of the United States. In this research is involved an investigation of the many scattered and isolated tribes inhabiting the Amazon valley and neighboring regions.
- 4. While the indications of North and South American contact are fairly definite on some lines, we have much vaguer indications of foreign influence on the Pacific coast of South America, where certain traits of culture, as well as physical appearance, suggest possible contact with the Polynesian Islands. Notwithstanding the vagueness of the indications, this question is theoretically of fundamental importance. Equally uncertain are the indications of relation with the old world on the Atlantic side, but the possibility of contact by way of the Atlantic Islands to Northwest Africa may be considered.

Resolved, That to take up the four lines of research here outlined, an annual appropriation of not less than twenty thousand dollars would be required; and the extension of the work, which would necessarily follow, would make it advisable that an anthropological department, charged with the investigation of the particular problem of the ethnical relation of South America to other continents, should have a continuous appropriation of not less than forty thousand dollars, and that its work should not be limited to a definite number of years, because even now, in the imperfect state of our knowledge, we can see that the solution of the problem will require many

distinct and important lines of research. The work should therefore be continued as long as results of importance are secured in the various lines of research. Respectfully submitted,

(Signed) F. W. Putnam, Chairman, for the Archeological Institute of America.

ROLAND B. DIXON,

for the American Folk-Lore Society.
W. H. Holmes,

for the Anthropological Society of Washington.

## A. L. Kroeber,

for the American Anthropological Association.

Franz Boas, Secretary,

for the American Ethnological Society, and for Section H of the American Association for the Advancement of Science.

## SCIENTIFIC NOTES AND NEWS

Dr. Francis Galton has been appointed to deliver the Herbert Spencer Lecture for 1907, at Oxford, and proposes to lecture this term on 'Probability the Foundation of Eugenics.'

Oxford University has conferred its doctorate of science on Dr. A. Graham Bell.

McGill University has conferred its doctorate of laws on Professor Ernest Rutherford, who is leaving McGill to accept a chair at Manchester, and the doctorate of science on Dr. H. M. Ami, of the Canadian Geological Survey.

Professors E. C. Pickering, of the Harvard College Observatory, H. Poincaré, of Paris; W. Ostwald, of Leipzig, and Ramón y Cajal, of Madrid, have been elected members of the Royal Irish Academy.

PROFESSOR ALBRECHT PENCK, professor of physiography at Berlin, and Professor Max Noether, professor of mathematics at Erlangen, have been elected foreign members of the Academy of Sciences at Copenhagen.

Professor Wilhelm Roux, professor of anatomy at Halle, has been elected a corresponding member of the Biological Society of Paris.

Professor J. Wiesner, professor of botany at the University of Vienna, has been made

an honorary doctor of applied science by the Vienna Technical Institute.

THE University of Bologna has conferred an honorary doctorate of philosophy on Professor Augusto Righi, the physicist, on the occasion of the twenty-fifth anniversary of his doctorate.

Dr. H. C. Vogel, of the Astrophysical Observatory at Potsdam, has been awarded the Maximilian order for art and science of the Bavarian government.

Dr. George F. Kunz, of New York City, has received the decoration of Knight of the Legion of Honor of the French Government in recognition of his scientific work.

PROFESSOR THEODORE W. RICHARDS, of Harvard University, began his lectures at the University of Berlin on May 4.

Dr. W. C. Farabee, who is in direction of an anthropological expedition from Harvard University, has left Arequipa for explorations among the Indian tribes at the headwaters of the Amazon.

Professor Henry E. Crampton, of Columbia University, has left New York this week for a second visit to the Island of Tahiti, where he will spend four months in the study of certain terrestrial molluses.

Dr. AND Mrs. VAUGHAN CORNISH, who were at Kingston at the time of the recent earthquake, sailed on May 4 for Jamaica to study the physical effects of the seismic shock and the problem of reconstruction. Dr. Cornish will give an account of his experiences to the British Association and the Royal Geographical Society.

CAPT. J. Francis LeBaron will return to the United States in May and resume his practise as a consulting engineer. Capt. Le-Baron has been two years in Eastern Nicaragua engaged in a study of the water powers and water supplies.

The class day address to the graduating class of the Michigan College of Mines was delivered by Dr. Ira Remsen, president of the Johns Hopkins University, on May 3, 1907.

PRESIDENT C. S. Howe, of the Case School of Applied Science, will give the commence-

ment address at the Massachusetts Agricultural College, from which he graduated in 1878.

Professor James F. Kemp, head of the department of geology of Columbia University, has been appointed non-resident lecturer in economic geology next year at the Massachusetts Institute of Technology. He will deliver a course of twenty lectures.

Dr. E. E. Brown, United States Commissioner of Education, is to deliver five lectures on the historical development of Connecticut education at the Yale Summer School.

The Croonian lecture of the Royal Society was delivered by Professor J. B. Farmer, F.R.S., on April 25, 'On the Essential Constituents of the Nucleus and their Relation to the Organization of the Individual.'

THE Cambridge Historical Society will celebrate the birth of Louis Agassiz on May 27. Brief addresses will be made by President Eliot, Professor A. Lawrence Lowell, Professor W. H. Niles, of the Massachusetts Institute of Technology, and others. Letters will be read from surviving pupils of Agassiz, who are unable to be present.

CHARLES H. HINTON, examiner in the Patent Office and known for his publications in mathematics and logic, died suddenly in Washington, on April 30. Mr. Hinton was born in London; graduated from Oxford University, and was sixty-three years old at the time of his death.

M. AIMÉ LAUSSÉDAT, member of the Paris Academy of Sciences and formerly director of the Conservatory of Arts and Trades, has died at the age of eighty-seven years.

Dr. N. Wagener, emeritus professor of zoology at the University of St. Petersburg, has died at the age of seventy-seven years.

Dr. Harmer, the superintendent of the museum of zoology of Cambridge University, announces the receipt of a cast of a skeleton of *Diprotodon Australis*, presented by Dr. E. C. Stirling F.R.S., director of the South Australian Museum at Adelaide. Dr. Harmer also records the gift of a valuable consignment

of some nine skeletons and forty skulls and skins of mammals, mostly antelopes, from tropical Africa, presented by Mr. C. B. C. Storey, M.A., of Clare College.

THE Baltimore Sun is responsible for the original announcement that "Sir William Ramsay had succeeded in accomplishing what no other chemist has ever been able to do-the segregation of one element from another and the production of copper by the synthetic or combination process from the elements sodium, lithium and potassium. A combination of these elements, when treated with radium vapor, gives as a product copper sulphate, which is readily 'broken down' into copper." This nonsense has been published with headlines on the first page by leading newspapers throughout the country. The Boston Transcript publishes an editorial article indicating that it was a breach of confidence for President Remsen to make known the private communication of Sir William Ramsay!

THE department of mammalogy of the American Museum of Natural History has recently acquired by purchase a collection of mammals from China. The series includes 106 specimens, mostly of species the size of a hare or larger, of which 43 are from the Island of Hainan and 63 from the interior of China, near the foot of the Taipashiang Mountains. The latter are all new to the collection, and the Hainan specimens do not duplicate the material previously received from that island.

WE learn from Nature that a conference on the teaching of hygiene and temperance in the universities and schools of the British Empire was held in London on April 23. Lord Strathcona presided at the morning session and Sir John Gorst occupied the chair at the afternoon meeting. Sir Victor Horsley, F.R.S., in an address on the method of introducing hygiene and temperance into secondary schools and universities, suggested that an essential reform within the Board of Education is that there shall be such advice given to the Minister of Education as will enable him to grasp the principles of scientific education. It is the business of the state to

see that the code and curriculum of education are arranged on a scientific and common-sense basis, and this will necessarily include the hygiene of common life and instruction in temperance. Sir Victor Horsley contended that we shall not make any headway unless we have expert advice at headquarters. It is clear that the whole system of education requires revision from a medico-scientific standpoint. The following resolutions were unanimously adopted: (1) "That this conference has heard with great satisfaction that instruction in hygiene and temperance is systematically given in the elementary schools of the colonies of the empire, and that there is strong evidence of the value of this teaching. While cordially acknowledging what has been already accomplished in the United Kingdom by certain educational bodies, this conference urges upon all local authorities the necessity of providing that the teaching of hygiene and temperance shall form an essential part of the whole curriculum of education of all children." (2) "This conference is of opinion that to meet adequately the responsibilities of the state towards school children, it is essential that a medical department should be instituted in the Board of Education."

Gas has been discovered in ten counties of the one hundred and five in the State of Kansas. Its history and distribution in the Kansas-Indian Territory field are so closely connected with those of oil as to be almost inseparable. About the year 1860 the numerous shallow oil wells drilled to depths of a few hundred feet in southeastern Kansas yielded traces of natural gas as well as of oil. Twenty years later, gas in small quantities was found in a number of places near Independence. The first good gas well in the vicinity of Neodesha, which is now a center of production of gas as well as of oil, was drilled in 1893. The present production of gas in the Independence quadrangle is enormous. The value of the quantity now annually consumed in the quadrangle alone is estimated to be about \$800,000. More gas sands than oil sands are encountered in the drilling of individual wells. This oil may be found above the gas or below it. The gas is believed to come mainly from depths of 1,800 to 2,300 feet. Thus far most of the gas has been put to local use. It furnishes the light, fuel and power of practically all the cities and most of the farm communities and is extensively used for fuel in drilling and pumping. It also supplies the city of Parsons and its numerous industrial plants east of the quadrangle. All this, however, forms but a small percentage of the quantity consumed and to be consumed by the manufacturing industries which have grown out of this natural commodity. Of these industries the most important are those producing brick, tile, pottery, glass, cement, zinc and lead.

## UNIVERSITY AND EDUCATIONAL NEWS

A BILL is now before the legislature in which provision is made for the erection at the University of Wisconsin of men's dormitories, commons and union, and additional dormitory accommodation for women.

MRS. WILLIAM THAW has given \$50,000 to the Westminster University of Denver.

THE Cavendish Laboratory Extension Syndicate, Cambridge University, has proposed plans for the new laboratory running along Free School-lane, which will cost between £7,000 and £8,300. Towards defraying the cost of this building there is available Lord Rayleigh's gift of £5,000 out of the Nobel prize, and Professor Thomson is able to find £2,000 from the laboratory funds.

Dr. A. Ross Hill, of the University of Missouri, has been elected professor of the philosophy of education at Cornell University, and will become dean of the faculty of arts and sciences in succession to Professor Walter F. Willcox.

Promotions in the scientific departments of the University of Chicago have been made as follows: Heinrich Maschke, to a professorship in mathematics; Frank R. Lillie, to a professorship in zoology; Robert R. Bensley, to a professorship in anatomy; Edwin O. Jordan, to a professorship in pathology and bacteriology; Leonard E. Dickson, to an associate professorship in mathematics; Charles R. Mann, to an associate professorship in physics; Robert A. Millikan, to an associate professorship in physics; Henry G. Gale, to an assistant professorship in physics; Lauder W. Jones, to an assistant professorship in chemistry; William L. Tower, to an assistant professorship in zoology; Charles J. Chamberlain, to an assistant professorship in botany; Henry C. Cowles, to an assistant professorship in botany; Howard T. Ricketts, to an assistant professorship in pathology and bacteriology; Norman M. Harris, to an assistant professorship in pathology and bacteriology.

At Cornell University Hermann Diedrichs has been advanced to a professorship of experimental engineering and Dr. Ernest Albee to a professorship of philosophy.

Dr. Thomas L. Watson, professor of geology in the Virginia Polytechnic Institute, has accepted the professorship of economic geology in the University of Virginia.

Dr. Albert Ernest Jenks has been promoted to the position of professor of anthropology in the University of Minnesota.

MR. GREGORY D. WALCOTT, Ph.D. (Columbia), of Blackburn College, has been elected professor of philosophy in Hamline University.

At the University of Wisconsin promotions from assistants to instructors have been made as follows: Lawrence Martin, geology: G. M. Reed, botany; Margaret Schaffner, political science; James Milward, horticulture; Conrad Hoffman, agricultural bacteriology: O. L. Kowalke, chemical engineering; F. W. Lawrence. hydraulic engineering. New assistants were appointed as follows: Hally D. M. Jolivette, botany; H. B. Sanford, electrical engineering; K. O. Burrer, electrical engineering: L. B. Aldrich, J. H. Baker, D. S. Dye, W. E. Forsythe, O. H. Gaarden, H. J. Plagge, W. F. Steve, all physics; Matthew Michels, butter and cheese scoring; A. B. Sutherland, philosophy.

Dr. N. Ach, docent for psychology at Marburg, has been called to the chair of philosophy at Marburg.