of future and supplementary investigations will be suggested. While, however, this will constitute at first the chief work of the department, it is likewise proposed to embrace favorable opportunities for supplementing, by observation, the existing data and to cooperate with others in the observing of such of the earth's magnetic and electric phenomena as are of momentary occurrence, and the investigation of which is of great importance.

Details as to the method of work to be followed by the department and the investigations undertaken will be made known later. It is proposed that whenever feasible, those having certain pieces of work already in hand will be invited to associate themselves with the department.

A word of explanation as to the 'international' character of the undertaking. As all of the funds are supplied by the Carnegie Institution, it will not be possible to organize this department in accordance with the customs governing organizations the funds of which are contributed by various nations in concert, such, for example, as the International Geodetic Association, the International Catalogue of Scientific Literature, etc. While, however, the basis of organization can not be 'international' in the sense usually defined by such bodies, it is the intention to conduct the work with the counsel of an Advisory Board composed of representative persons, irrespective of country, and in this sense, the department is to be truly 'international.'

That an important step has been taken by the Carnegie Institution, will be patent to all who are interested in the development of our knowledge of the earth's magnetism and electricity. Professor Neumayer, one of the representative investigators who endorsed the undertaking and promised support, expressed himself thus when the project was submitted to the Carnegie Institution:

"I am of opinion that if this plan reaches its fulfilment, it is the most important step ever taken for the development of our knowledge of the earth's magnetism. The thought which underlies it must appeal to every one who has ever been engaged in geomagnetic investigations. In no other branch of geophysics is it more essential to extend the inquiries over the entire earth. Magnetic research, to be successful, requires the cooperation of the most competent investigators of all countries."

All mail intended for the department should be addressed as below. L. A. BAUER.

DEPARTMENT TERRESTRIAL MAGNETISM, CARNEGIE INSTITUTION, WASHINGTON, D. C.

## SCIENTIFIC NOTES AND NEWS.

PROFESSOR W. W. CAMPBELL has been elected one of the thirty foreign members of the Italian Society of Spectroscopists.

DR. W. J. HOLLAND, director of the Carnegie Museum, Pittsburg, has been made a corresponding member of the Swedish Society of Anthropology and Geography.

PROFESSOR EUGEN WARMING, of Copenhagen, has been elected a member of the Paris Academy of Sciences in the section of botany.

PROFESSOR L. LUCIANI, of Rome, and Professor A. Mosso, of Turin, the eminent physiologists, have been appointed senators of the realm in Italy.

MM. APPEL, Lenfant and Lebaume-Pluvinet have been elected members of the council of the French Astronomical Society.

DR. W. C. FARABEE, instructor in anthropology at Harvard University, is to conduct a party on an anthropological trip through the west, starting immediately after commencement.

PROFESSOR F. S. EARLE, assistant curator at the New York Botanical Garden, has gone to Cuba, on leave of absence, at the request of the Cuban Government, for the purpose of aiding that government in the establishment of a Department of Agriculture.

PROFESSOR ROBERT KOCH will return to Berlin at the end of June. He is at present at Dar-es-salaam, South Africa, studying malaria and the prevalent cattle disease.

A CHAPTER of the Scientific Society of the Sigma Xi has been established at the University of Illinois with Professor S. A. Forbes as president.

THE staff of the Henry Phipps Institute of Philadelphia, gave a dinner on March 28, at which Dr. Lawrence F. Flick, director of the institute, was presented with a piece of silver plate.

DR. M. SALOMON has received the Alvarenga prize from the German Hufeland Society for his pamphlet on 'Tuberculosis as a Disease of the Masses and Measures to Prevent it.'

THE municipal council of the City of Paris has presented M. and Mme. Curie with silver medals.

MR. ARTHUR THOMSON, assistant superintendent of the Gardens of the Zoological Society of London, has been presented with the society's silver medal for his services extending over thirty-four years.

PROFESSOR CORNIL, of Paris, has been presented with a portrait and medallion on retiring from hospital service at the age limit of sixty-five years. Dr. Cornil remains professor of pathological anatomy in the University of Paris.

DR. WILHELM HITTORF, the eminent physicist and chemist, for many years professor at Münster, celebrated his eightieth birthday on March 27.

WE learn from *Nature* that the Belgian Royal Academy has awarded its gold medal of 1,000 francs to M. Marc de Selys-Longchamps for his memoir on the development of a Pharonis. The Théophile Gluge prize for physiology has been awarded to Dr. P. Nolf, of the University of Liège.

PROFESSOR WILHELM OSTWALD will give at the Royal Institution, London, the Faraday lecture before the Chemical Society on April 19.

THE Croonian lecture of the Royal Society was delivered on March 4, by Professor E. H. Starling, F.R.S., and Dr. W. M. Bayliss, F.R.S., the subject being 'The Chemical Regulation of the Secretory Process.' Professor E. Rutherford, of McGill University, will give in May the Bakerian lecture, on 'The succession of changes in radioactive substances.'

THE following are among the lecture arrangements at the Royal Institution: Professor L. C. Miall, three lectures on 'The Transformations of Animals'; Mr. L. Fletcher, three on 'Meteorites'; Mr. H. F. Newall, two on the 'Solar Corona'; Professor Dewar, three on 'Dissociation'; and Sir W. Martin Conway, two on 'Spitzbergen in the Seventeenth Century.' The Friday evening meetings will be resumed on April 15, when Mgr. Count vay de Vaya and Luskod will deliver a discourse on 'Korea and the Koreans.'

DR. HENRY MILTON WHELPLEY, professor of materia medica and pharmacy, Medical Department, Washington University, and of microscopy, St. Louis College of Pharmacy, delivered by invitation the valedictory address at the Pharmacy Department of Purdue University, on March 30.

A MEMORIAL has recently been erected to Max Schede in the grounds of the clinic at Bonn. The address was delivered by his successor, Professor Bier.

MR. HENRY L. MARINDIN, hydrographer connected with the United States Coast and Geodetic Survey since 1863 and a member of the Mississippi River Commission, has died at the age of sixty.

THE death is also announced of M. Jules Garnier, known as a geologist and metallurgist, at the age of sixty-five years, and of Captain Deburaux, known for his aeronautical experiments at the age of forty years.

THE A. W. ANTHONY collection of birds has been purchased by the Carnegie Museum, The collection contains ten thou-Pittsburg. sand specimens, including the types of all the species and subspecies described by Mr. Anthony. Mr. C. V. Hartman, the curator of archeology and ethnology in the museum, has removed the collection of Costa Rican antiquities made by Padre Jose Maria Velasco from the Archeological Department of the Free Museum of Science and Art in West Philadelphia to the Carnegie Museum at This collection, together with Pittsburg. another scarcely less important collection made by Padre Velasco, supplemented by the Troyo, the Ferraz and other collections recently acquired by the museum, give this institution the largest assemblage of Costa Rican antiquities in existence outside of Costa Rica. In fact, the Carnegie Museum possesses more specimens of Costa Rican antiquities than are found in all the museums of the world put together.

At a meeting held at the College of Physicians at Philadelphia on March 28, steps were taken to effect the organization of the United States Association for the Study of Tuberculosis, and Drs. E. L. Trudeau, George M. Sternberg, W. H. Welch, L. F. Flick and H. M. Biggs were appointed members of the committee. Dr. Wm. Osler was chosen chairman and Dr. H. Barton Jacobs, secretary for the committee, when it shall meet in connection with the American Medical Association at the annual session in June at Atlantic City.

THE American Neurological Association will hold its meeting at St. Louis on September 15, 16 and 17 immediately preceding the sessions of the various medical departments of the Congress of Arts and Sciences, beginning September 19.

OWING, it is said, to the war in the east, the Congress of Polish Scientific Men and Physicians will not meet at Lemberg this year, as has been announced.

A REUTER telegram from Vienna, dated March 19, states that at the request of the Academy of Science, the Austrian Minister of Agriculture, in order to facilitate the solution of certain important questions relating to the nature of radium, has ordered that from January 1 last until further notice no trading should be permitted in the residues from the manufacture of uranium colors at Joachimsthal, and that 10,000 kilograms of those residues should be reserved for purchase by the academy and another 10,000 kilograms for M. Curie, the discoverer of radium, in Paris. These consignments are to be devoted entirely to the purpose of scientific experiment.

M. DEUTSCH, having offered a prize of \$25,-000 for the first flying machine making a flight in a circle of one kilometer, M. Ernest Archdeacon has added a like sum and has appealed for further subscriptions.

THE electric railway at Nice having interfered with the magnetic observations of the observatory, suit was brought by M. Bischoffsheim, and damages have been awarded to the amount of about \$20,000.

THE Civil Service Commission invites attention to the following named scientific and technical examinations to be held on April 19, 1904, with the statement that but few applications have been filed therefor:

Aid, Coast and Geodetic Survey.

Civil and electrical engineer.

Civil and electrical engineer, Philippine Service.

Civil engineer, Philippine Service.

Civil engineer and draftsman.

Architectural computer (Supervising Architect's Office).

Computer, Nautical Almanac Office.

Computer, Naval Observatory.

Deck officer, Coast and Geodetic Survey.

Topographical draftsman (Land Office Service). Library assistant.

Manual training teacher.

Trained nurse, Philippine Service.

As the commission has experienced considerable difficulty in securing eligibles for the positions named, qualified persons are urged to enter the examination. Those who desire to compete should at once apply to the United States Civil Service Commission, Washington, D. C., for a copy of the Manual of Examinations and the necessary forms of application.

## UNIVERSITY AND EDUCATIONAL NEWS.

THE assembly has passed a bill appropriating \$250,000 for the New York State College of Agriculture at Cornell University.

PRESIDENT C. E. MILLER, of Heidelberg University, Tiffin, Ohio, announced on March 24, that he had secured pledges to the amount of \$150,000 for the fuller equipment of the university, \$50,000 of this amount to be expended in buildings and \$100,000 to be added to the permanent endowment.

A LADY, who has requested that her name be not made known, has given \$40,000 for the erection of a dormitory for the women students at Colby College, Waterville, Me.

MR. ANDREW CARNEGIE has given \$30,000, to Berea College in Kentucky. The trustees of the institution are preparing to test the constitutionality of the law recently passed forbidding coeducation of the races. It is also