

T. H. MORGAN: 'An Analysis of the phenomena of Organic Polarity.' (Introduced by E. B. Wilson.)

E. B. WILSON: 'Experiments on Prelocalization in the Annelid Ovum.'

C. E. MENDENHALL: 'The absolute value of the Acceleration of Gravity determined by the Ring-Pendulum Method.' (Presented by R. S. Woodward.)

R. S. WOODWARD: 'The Double Suspension Pendulum for measuring the Acceleration of Gravity.'

EDGAR F. SMITH: 'Biographical Memoir of Robert Empie Rogers.' (By title.)

CHARLES F. HASTINGS: 'A Determination of the Dispersive Power of the Human eye.'

CHARLES F. CHANDLER: 'The Air in the New York Subway.'

SCIENTIFIC NOTES AND NEWS.

THE Hotel Walton, Locust and Broad Sts., Philadelphia, has been chosen as the headquarters of the American Association for the Advancement of Science and affiliated societies, for the meeting that opens at the University of Pennsylvania, on Wednesday, December 28.

THE seventeenth winter meeting of the Geological Society of America will be held at Philadelphia, beginning on December 29. The meeting will be called to order by President J. C. Branner, at 10 o'clock.

THE Royal Society has awarded its Rumford medal to Dr. Ernest Rutherford, professor of physics at McGill University, for his researches on radioactivity.

M. PERROT, professor of pharmacology, University of Paris; M. Henri Moissan, professor of chemistry, University of Paris; K. H. F. Rosenbusch, professor of mineralogy and geology, University of Heidelberg; Otto Bütschli, professor of zoology and paleontology, University of Heidelberg; Wilhelm Ostwald, professor of chemistry, University of Leipzig; Wilhelm Pfeffer, professor of botany, University of Leipzig, have been elected corresponding members of the Vienna Academy of Sciences.

THE Rev. Stephen D. Peet, editor of the *Antiquarian*, has been elected a corresponding

member of the Anthropological Institute of Great Britain and Ireland.

ON the evening of November 14, a dinner was given in Cambridge to Sir John Murray and Professor Albrecht Penck, of Vienna, a number of professors and students of Harvard University being present.

DR. J. K. SMALL, curator of the Museum of the New York Botanical Garden, is in Florida studying the flora of that region.

UNDER the auspices of the Corporation of Newbury, a public museum was formally opened in that borough, on October 26, by Mr. Jonathan Hutchinson, F.R.S.

SIR JOHN BURDON-SANDERSON, F.R.S., has been made a perpetual delegate of the University Museum, Oxford.

THE following is a list of fellows who have been recommended by the president and council of the Royal Society for election into the council for the year 1905, at the anniversary meeting to be held in November 30: *President*, Sir William Huggins, K.C.B.; *treasurer*, Mr. Alfred Bray Kempe; *secretaries*, Professor Joseph Larmor, Sir Archibald Geikie; *foreign secretary*, Mr. Francis Darwin; *other members of the council*, Dr. Shelford Bidwell, Mr. George Albert Boulenger, Colonel David Bruce, R.A.M.C., Mr. Frank Watson Dyson, Professor Percy Faraday Frankland, Professor Francis Gotch, Dr. Ernest William Hobson, Professor John Newport Langley, Mr. John Edward Marr, Sir William Davidson Niven, K.C.B., Professor William Henry Perkin, Jr., Professor John Perry, Mr. Adam Sedgwick, Dr. William Napier Shaw, Professor William Augustus Tilden, Rear-Admiral Sir William Wharton, K.C.B.

PROFESSOR E. SALKOWSKI, director of the chemical department of the Pathological Laboratory of the Charity Hospital at Berlin, well known for his work in physiological chemistry, celebrated his sixtieth birthday on October 11.

PROFESSOR THEOBALD SMITH, of Harvard University, will deliver an address upon 'The Place of Research in the University Medical School,' before the Harvard Medical Society of New York City, at the New York Academy of

Medicine, on Saturday, November 26, at 8:30 P.M.

On November 17, Dr. H. W. Wiley addressed The New York Academy of Medicine, on 'The Influence of Preservatives in Foods on the Public Health'; on November 18, the College of the City of New York, on 'The Attitude of the Consumers towards Purity of Foods'; on November 22, The National Union, a fraternal insurance organization at Detroit, Mich., on 'Food-Quantity and Quality.'

At the Royal Institution, London, a Christmas course of lectures, adapted to a juvenile audience, will be delivered by Mr. Henry Cunyngham, C.B., on 'Ancient and Modern Methods of Measuring Time' (experimentally illustrated). The dates of the lectures are: December 27, 29 and 31 and January 3, 5 and 7.

THE British Academy commemorated the bicentenary of the death of Locke, on October 28. Papers by Professor Campbell Fraser, on 'Locke as a Factor in Modern Thought,' and by Sir Frederick Pollock, on 'Locke's Theory of the State,' were read by the secretary in the absence of the authors.

DR. THOMAS MESSINGER DROWN, president of Lehigh University and previously professor of chemistry at Lafayette College and the Massachusetts Institute of Technology, died on November 16 at the age of sixty-two years.

MR. FRANK McCLEAN, F.R.S., a well-known British engineer and astronomer, died on November 8, at the age of sixty-six years.

THE Massachusetts Institute of Technology has been awarded six prizes for its exhibit at the St. Louis Exposition. The awards are as follows: Grand prize for general exhibit, gold medal for mining engineering exhibit, silver medal for special exhibit of drawing, silver medal for special exhibit of photography, students' work, etc., and a bronze medal for a special exhibit of transparencies.

COLUMBIA UNIVERSITY has been awarded prizes at the St. Louis Exposition as follows: Grand prizes to Columbia University, for its general exhibit, and to President Butler for twenty educational monographs entitled 'Edu-

cation in the United States.' Gold medals to the Department of Botany, for its special exhibit; to the Departments of Mining and Metallurgy, for their special exhibits; to Teachers College, for its special exhibit; to Professor J. McKeen Cattell, for his monograph on Scientific Societies and Associations; and to Professor Edward Delavan Perry, for his monograph on The American University. Bronze medals to the Department of Indo-Iranian Languages for its special exhibit.

HOBART COLLEGE has been awarded a gold medal for its astronomical exhibit at the World's Fair. The distinguishing feature of the astronomical exhibit was a photographic collection of the cometary discoveries, now twenty-four in number, made by Professor Brooks.

THE New York *Evening Post* states that the Peabody Museum, of Yale University, has received a collection of Indian relics from Christopher Wren, of Plymouth, Pa. The collection includes Indian pestles, scrapers and other utensils. Professor Schuchert, the new head of the museum, is planning an extensive relabeling and reclassification of the objects in the museum by which, for one thing, the vertebrate fossils will be grouped together, and, as far as possible, arranged topographically.

THE Free Museum of Science and Art of the University of Pennsylvania has received a gift of several rare collections of North American Indian relics from Messrs. John Wanamaker and Thomas Donaldson.

THE Royal Institution, London, has received a gift of £750 from Ludwig Mond and a bequest of £100 under the will of Miss Harriet J. Moore.

AN American Forest Congress, under the auspices of the American Forestry Association, will meet in Washington, January 2 to 6, 1905, under the presidency of James Wilson, secretary of agriculture. The sessions of the congress will be held in the National Rifles Armory. On the afternoon of January 5, President Roosevelt and other prominent men will address a special meeting in the Lafayette Theater. The subjects to be considered at the congress are: (1) Relation of the Public Forest Lands to Irrigation; (2) Relation of

the Public Forest Lands to Grazing; (3) The Lumber Industry and the Forest; (4) Importance of the Public Forest Lands to Mining; (5) Forestry in Relation to Railroad Supplies; (6) National Forest Policy; (7) State Forest Policy.

THE twelfth National Irrigation Congress held its annual session last week at El Paso, Texas, under the presidency of Senator Clark.

At a meeting of the council of the Michigan Academy of Sciences, held on November 12, the date of the next meeting was set at March 31 to April 1, and the place Ann Arbor.

At the 23d annual meeting of the Natural Science Association of Staten Island the following were elected officers for the ensuing year: *President*, Howard R. Bayne; *secretary*, Arthur Hollick; *treasurer*, J. Blake Hillyer; *curator and librarian*, C. A. Ingalls.

THE fourth volume of Professor Moritz Cantor's 'Vorlesungen über Geschichte der Mathematik' will contain the history of mathematics for the period of forty years, from 1759 to 1799. The preparation of the volume is divided up among different authors as follows: (1) 'Geschichte der Mathematik, Klassikerausgaben Wörterbücher,' von S. Günther (München); (2) 'Lehrbücher der Elementargeometrie, Praktische Geometrie (Feldmesskunst), Elementargeometrische Einzeluntersuchungen Parallelenlehre,' von V. Bobynin (Moskau); (3) 'Trigonometrie, Polygonometrie, Tabellen (trigonometrische, logarithmische und andere)' von A. v. Braumühl (München); (4) 'Rechenkunst und Buchstabenrechnung, Algebra (Lehre von den Gleichungen) Zahlentheorie,' von F. Cajori (Colorado Springs); (5) 'Reihen, Kombinatorik, Wahrscheinlichkeitsrechnung Imaginäres,' von E. Netto (Giessen); (6) 'Analytische Geometrie der Ebene und des Raumes,' von V. Kommerell (Reutlingen); 'Darstellende Geometrie,' von G. Loria (Genua); (7) 'Lehrbücher der Infinitesimalrechnung, Einzeluntersuchungen der Infinitesimalrechnung, Bestimmte Integrale Transzendenten,' von G. Vivanti (Messina); (8) 'Totale und partielle Differentialgleichungen, Variationsrechnung Differenzen- und Summenrechnung,' von C. R.

Wallner (München); (9) 'Entwicklung der Mathematik zwischen 1759 und 1799, Geschichte der Ideen in diesem Zeitraume,' von M. Cantor (Heidelberg).

THE statutory annual meeting of the Royal Society of Edinburgh was held in the Royal Institute, Edinburgh, on October 31, Lord M'Laren presiding. The following members of the new council were elected: *President*, Lord Kelvin; *vice-presidents*, Professor James Geikie, Lord M'Laren, the Rev. Professor Flint, Dr. Robert Munro, Sir John Murray and Dr. R. H. Traquair; *general secretary*, Professor George Chrystal; *secretaries to ordinary meetings*, Professor Crum Brown and Professor D. J. Cunningham; *treasurer*, Mr. P. R. D. MacLagan; *curator of library and museum*, Dr. Alex. Buchan; *councilors*, Dr. John Horne, Mr. C. G. Knott, Professor R. Stockman, Professor James Walker, Professor Andrew Gray, Mr. Robert Kidston, Dr. D. Noel Paton, Professor John Chiene, Professor J. Graham Kerr, Mr. William Peddie, Dr. Leonard Dobbin and Professor J. C. Ewart.

UNIVERSITY AND EDUCATIONAL NEWS.

THE daily papers state that it is proposed to move the Western University of Pennsylvania from the suburbs of Allegheny to Pittsburgh proper, near the new Carnegie Technical School. About fifty acres of ground, sufficient for twenty large university buildings, is being secured at a cost of about \$2,000,000, and the work of construction will be begun before long. Fifty citizens of Pittsburgh have agreed to give each from \$40,000 to \$100,000 for the school. The contribution of Mr. Carnegie has not been announced.

THE general assembly of the state of Vermont has appropriated \$60,000 for the use of the agricultural department of the university. The money is to be expended in the erection and equipment of a building to be known as Morrill Agricultural Hall, in memory of the father of the agricultural colleges of the country, the late Senator Justin S. Morrill. The building will be devoted to instructional and experimental work in agriculture.