proprietor, The Lighting Journal; Dr. C. E. K. Mees, director, research laboratory, E. K. Co.; Professor H. D. Minchin, professor optics, U. of R.; Dr. P. G. Nutting, optical engineer, E. K. Co.; Dr. C. F. Prentice, professor of optometry, Columbia; Mr. I. G. Priest, associate physicist, optics division, Bureau of Standards; Mr. W. B. Rayton, optical design and testing, B. & L. Co.; Professor F. K. Richtmyer, professor of physics, Cornell University; Dr. F. E. Ross, astronomer and optical designer, E. K. Co.; Mr. F. B. Saegmuller, superintendent, precision optics, B. & L. Co.; Professor J. P. C. Southall, professor in charge of optometry courses, Columbia University; Mr. E. D. Tillyer, research laboratory, Am. Optical Co.; Professor E. J. Wall, professor of photography, Syracuse University; Dr. F. E. Wright, optical research, geophysical laboratory (30).

The constitution provides that only those who have contributed materially to the advancement of optics shall be eligible to regular membership in the society and hence to vote or hold office. Any one interested in optics is eligible to associate membership. The affairs of the society are in the hands of the executive council. It is planned to hold one or more annual meetings and publish a journal commencing with the year 1917. Blank application for membership may be obtained from the secretary, 1447 St. Paul St., Rochester, N. Y. Material intended for publication in the journal should be addressed to the president until the editorial staff has been selected by the council.

SCIENTIFIC NOTES AND NEWS

Dr. Haven Emerson, health commissioner of New York, has invited a number of distinguished pathologists to meet some pathologists and medical authorities of New York City for discussion of problems connected with the prevailing epidemic of infantile paralysis. For the conference, which will begin on August 5, the Board of Estimate has appropriated \$2,000. Those from a distance who are expected to be present are: Dr. William H. Welch, professor of pathology, The Johns Hopkins University; Dr. Victor C. Vaughan, dean of the medical school of the University of Michigan; Dr. Milton J. Rosenau, professor of preventive

medicine and hygiene, Harvard University; Dr. J. W. Jobling, professor of pathology, Vanderbilt University; Dr. Paul A. Lewis, Henry Phipps Institute, and professor of pathology, University of Pennsylvania; Dr. C. C. Bass, professor of pathology, Tulane University; Professor Theobald Smith, Rockefeller Institute; Professor John F. Anderson, New Brunswick, N. J., former head of the hygienic laboratories of the U.S. Public Health Service; Dr. Richard M. Pearce, professor of experimental medicine, University of Pennsylvania; Dr. Francis W. Peabody, Peter Brent Brigham Hospital, Boston: Dr. Ludwig Hektoen, professor of pathology, University of Chicago, and director of the Memorial Institute for Infectious Diseases; and Dr. John G. Adami, professor of pathology, McGill Medical College.

At the meeting of the Royal Society of Edinburgh held on July 3 the following British Honorary Fellows were elected: Sir Francis Darwin, Cambridge; Dr. J. W. L. Glaisher, Trinity College, Cambridge; Professor J. N. Langley, professor of physiology, Cambridge; Professor C. Lapworth, emeritus professor of geology, University of Birmingham; Professor A. Macalister, professor of anatomy, Cambridge; Professor A. Schuster, emeritus professor of physics, University of Manchester.

The Hon. Bertrand Russell, F.R.S., one of the most distinguished English students of philosophy, was, according to a cablegram from London, recently fined for issuing pamphlets to conscientious objectors to military service, and deprived of his lectureship at Trinity College, Cambridge; now it is said he has been refused a passport to visit America to keep his engagement to lecture at Harvard University.

Dr. Franklin C. McLean, assistant resident physician in the hospital of the Rockefeller Institute, New York, has accepted an appointment by the trustees of the Union Medical College, Pekin, to the professorship of internal medicine. The appointment carries with it the headship of the Union Medical School. This is one of the institutions of the China Medical Board of the Rockefeller Foun-

dation. Mr. Charles A. Collidge, of Boston, architect of the Rockefeller Institute and of the Harvard Medical School buildings, has been engaged to draw plans for a 200-bed hospital to be added to the equipment of Union Medical College.

Fred V. Larkin, assistant professor of mechanical engineering at Lehigh University, who was absent on leave last year, has resigned and will continue in the employ of the Harrisburg Pipe and Pipe Bending Company.

Advices from Mr. Roy Chapman Andrews, May 18, indicate that conditions in China will not interfere with the carrying out of the plans of the American Museum's expedition there. Mr. Andrews intends to work in Fukien Province, until the arrival of Mr. Edmund Heller, when the expedition will proceed into Kweichow Province.

Dr. Herbert J. Spinden has returned from Venezuela, where he has spent some months in an archeological reconnaissance for the American Museum of Natural History.

G. W. Hunter, of New York University, has returned from the Tropical Research Station established by the New York Zoological Society in Kalacoon, British Guiana. He brought with him a collection of birds and reptiles.

The Royal Society of Edinburgh has awarded its Keith prize for the biennial period 1913–15 to Dr. J. H. Ashworth for his papers on "Larvæ of Lingula and Pelagodiscus" and on "Sclerocheilus," published in the Transactions of the society, and for other papers on the morphology and histology of Polychæta.

Professor Lafavette B. Mendel delivered the address before the annual commencement joint meeting of Sigma Xi and Phi Beta Kappa at Yale University.

Dr. Victor C. Vaughan, dean of the medical school of the University of Michigan, delivered an address on "The Eradication of Disease" at the meeting of the health officers of Montana held at Miles City on July 10 and 11.

THE Harben lectures for 1916, on "Rivers as Sources of Water Supply," were delivered by Dr. A. C. Houston at the Royal Institute of Public Health, London, on July 13, 20 and 27.

The department of geography in the Columbia University summer session has arranged the following course of public illustrated lectures on consecutive Monday evenings:

July 17, "Turkey and the War," by Dr. Ellsworth Huntington.

July 24, "The Philosophy of Present and Prospective Boundaries in Europe," by Professor Albert Perry Brigham, Colgate University.

July 31, "Surface Features of Europe as a Factor in the War," by Professor Douglas W. Johnson, Columbia University.

August 7, "An Interpretation of the Scenery of the White Mountains," by Professor James Walter Goldthwait, Dartmouth College.

The first annual meeting of the Association of Resident and Ex-resident Physicians of the Mayo Clinic was held in Rochester, Minn., on June 9 and 10. A surgical clinic was given at the hospital, and in the evening papers were read. At the banquet the following officers were elected: President, Dr. Harold L. Foss, Danville, Pa.; Vice-president, Dr. Donald C. Balfour, Rochester, Minn.; Secretary, Dr. William C. Carroll, St. Paul; Treasurer, Dr. Arthur H. Sanford, Rochester, Minn., and Governors, Drs. Edward S. Judd and William F. Braasch, Rochester, Minn., and Otis F. Lamson, Seattle.

Dr. Paul J. Hanzlik, associate in pharmacology, Western Reserve University, gave a lecture on July 6, in the Graduate School in Medical Sciences, University of Illinois, Chicago, on "The Behavior of Salicylate in the Body."

Professor William Cole Esty, professor emeritus of Amherst College, from 1865 to 1905 Walker professor of mathematics and astronomy, died on July 27, at the age of seventy-eight years.

Dr. William Simon, professor of chemistry at the College of Physicians and Surgeons, Baltimore, known for his work on chromates, died on July 19, aged seventy-two years.

CHARLES RUDOLPH EDWARD KOCH, secretary of the Northwestern University Dental School, past adjutant general of the Grand Army of the Republic, died on July 20, at the age of seventy-two years. Colonel Koch, who was one of the best known dentists in the United States, spent many years of his life in working for the interests of the Grand Army of the Republic as well as for the interests of the dental profession.

The Memorial Hospital, a part of The Medical College of Virginia Corporation, has recently received \$250,000 from the citizens of Richmond and a few outside friends. These funds will be used for the addition of a new ward for Negroes, a contagious ward and a nurses' home.

The Civil Service Commission has announced that the applications received for the examination for scientific assistant in oceanography, male, previously announced to be held on July 5, 1916, were insufficient; the examination has been postponed, and will be held on August 23. From the register of eligibles resulting from this examination certification will be made to fill a vacancy in this position at \$900 a year in the Bureau of Fisheries, Department of Commerce, Washington, D. C., and vacancies as they may occur in positions requiring similar qualifications. Additional information may be obtained on application to the Civil Service Commission, Washington, D. C.

THE new wharf and library-museum building of the Scripps Institution for Biological Research of the University of California at La Jolla will be dedicated on August 9.

Professor C. W. Howard, of the state farm, is in charge of sixteen University of Minnesota students who, under his direction, are endeavoring to exterminate mosquitoes in a section of Minneapolis covering 8 square miles. The work includes the covering, screening and destroying of tin cans, rain barrels and other water containers and the oiling of stagnant pools and swamps.

THE Harvard Medical School has established four fellowships in medicine, to be known as the Boston Dispensary Fellowships. Applicants must have graduated from a medical school of good standing and must have had

a hospital internship or its equivalent. Appointments will be made jointly by the authorities of the Harvard Medical School and of the Boston Dispensary. The fellows will be expected to give a portion of their time to treating the sick in their homes in the district service of the dispensary, and a portion of their time to such study, teaching, laboratory, research or clinical work as may be assigned by the medical school. The stipend of a fellowship will be \$500 for part time, or \$750 for the physician's entire time.

Arrangements for the course of lectures on illuminating engineering to be given at the University of Pennsylvania in September are rapidly being completed. These lectures will be open to all engineers, surgeons, manufacturers, and others interested in illuminating engineering, and the course is designed to indicate the proper coordination of those arts and sciences which constitute illuminating engineering and to furnish a condensed outline of study suitable for elaborating into an undergraduate course, and to give engineers an opportunity to obtain a conception of the science of illuminating engineering as a whole.

AT a recent meeting held in the rooms of the Chemical Society, London, the Association of British Chemical Manufacturers, which has been under consideration for some time, was definitely formed. Among its main objects are to promote cooperation between British chemical manufacturers, to act as a medium for placing before the government and government officials the views of such manufacturers upon matters affecting the chemical industry; to develop technical organization and promote industrial research; to keep in touch with the progress of chemical knowledge and to facilitate the development of new British industries and the extension of existing ones, and to encourage the sympathetic association of British chemical manufacturers with the various universities and technical colleges. The membership is confined to British firms engaged in chemical manufacture or closely allied industries. The minimum annual subscription is 25 guineas in respect of a subscribed capital of £50,000 or less, rising by 2½ guineas for each additional £10,000 up to a maximum of 250 guineas. A provisional committee has been appointed, to hold office for three months and including: Dr. E. F. Armstrong (Messrs. Joseph Crosfield and Sons), Mr. F. W. Brock (Messrs. Brunner, Mond and Co.), Dr. Chas. Carpenter (South Metropolitan Gas Co.), Dr. M. O. Forster (British Dyes, Limited), Mr. John Gray (Messrs. Lever Brothers), Mr. Norman Hoden (Messrs. Hardman and Holden), Mr. C. A. Hill (British Drug Houses, Limited), Mr. C. P. Merriam (British Xylonite Company), Sir Alfred Mond, M.P. (Mond Nickel Company), Mr. Max Muspratt (United Alkali Company), Sir William Pearce, M.P. (Messrs. Spencer, Chapman and Messel), Mr. R. G. Perry (Messrs. Chance and Hunt), Mr. R. D. Pullar (Pullar's Dye Works), Dr. Alfred Ree (Society of Dyers and Colorists), Mr. A. T. Smith (Castner-Kellner Alkali Company), and Mr. John W. Wilson, M.P. (Messrs. Albright and Wilson).

In an item published in Science for July 7, the cost of printing for the Cornell and Geneva Agricultural Experiment Stations was reported as \$60,000 each, whereas this was probably the sum for the two institutions. We are informed that at the Geneva Station the cost of bulletins and reports for three years has been as follows: 1913, \$11,978.85; 1914, \$14,514.28; 1915, \$14,944.81. These figures include the cost of both bulletins and the annual reports, with the exception of Part 2 of 1915, known as "The Cherries of New York." This cost \$4,455 extra.

Action by congress has recently created six new scientific positions in the division of scientific inquiry of the Bureau of Fisheries. The positions comprise two assistants for the Washington office, two field assistants and a superintendent and scientific aid for the laboratory to be constructed at Key West, Florida. The bureau will be enabled to extend its scientific work particularly in relation to marine shellfish, fresh-water mussels and fishery problems of the Gulf of Mexico. A slight increase was made in the appropriations for miscellaneous expenses available for investigations. The Bureau of Fisheries has never before re-

ceived in one year so substantial an increment to its scientific staff.

THE secretary of commerce announces the completion of the work at the Rio Grande to the westward of Brownsville, Texas, and Matamoras, Mexico, which connects the triangulation systems of the United States and of Mexico. In the United States the arc of primary triangulation extends from the northwestern part of Minnesota southward along the ninety-eighth meridian to the Rio Grande, and Mexico had extended an arc of primary triangulation along the ninety-eighth meridian from its Pacific coast to the Rio Grande. Mr. E. H. Pagenhart, of the Coast and Geodetic Survey, and Mr. Silverio Aleman, of the Mexican Geodetic Commission, in April and May, made the observations from towers erected on both sides of the river and the work was successfully completed. The length of the completed arc is 2,270 miles. This is a notable event in the history of geodesy and will make it possible to have the maps of the two countries harmonize at the border.

UNIVERSITY AND EDUCATIONAL NEWS

Last December, the University of Illinois purchased for its School of Pharmacy, property at the corner of Wood and Flournoy Streets, with two substantial brick buildings. One of these is a four-story college building containing a large auditorium, several lecture and recitation rooms as well as offices, microscopical laboratory and several smaller laboratories. This building was formerly occupied by a medical college. The second building was constructed for a hospital and is now being remodeled as a laboratory building in which will be located the qualitative analytical laboratory, the laboratory for organic chemistry and the pharmaceutical laboratory. The college building was occupied by the school on June 1. The trustees of the university have appropriated \$32,000 for refitting the buildings, providing new heating, lighting and plumbing, as well as new furniture and equipment for lecture halls and laboratories.