

was had over the disadvantage or otherwise of using the chemical and considerable excitement followed its detection at the city faucets. Material doubt was afterwards thrown upon the accuracy of the determination and upon what may be termed "prophetic taste" when it was noted that the presence of alum had been detected some four days before it was added to the raw water.

A large town was desperately in need of water and an excellent ground supply was located. The health officer, a physician who was not in favor of the proposed plan, sampled the water, carried the sample under his buggy seat during his professional visits in the country and in the course of a day or two forwarded it, by express, without ice packing, to the central authorities who condemned it upon the strength of the high count of bacteria without having ever visited the well.

An outbreak of typhoid fever manifestly due to transmission by flies occurred in a city during a period when certain repairs were being made to the conduit leading from the source of the public water. Outside authorities to whom the situation was referred reported the outbreak of disease as probably caused by the entrance of the repair gang into the tunnel carrying the municipal supply. A visit to the spot would have convinced the writers of the report of the impossibility of getting the said gang into the twenty-inch cast-iron pipe.

The duties of the water examiner, however, do not always limit him to use the sanitary survey to save a good water from unfair condemnation. Quite otherwise. A water of entirely satisfactory character judged from the laboratory standpoint may be rated as undesirable upon inspection of local conditions because of proposed changes in the immediate vicinity of the source.

A spring water of high quality was condemned because arrangements had been made to construct a sewer above the spring and near it. The engineer in charge was to construct a "tight sewer," but who could guarantee that it would stay tight? A glance at the tables showing the leakage of ground water

into sewers should shake one's faith in the permanence of such "tightness," and sewers not tight can allow of leakage out as well as in.

Damage to water through "new construction" is very fruitful of adverse and unfair reports. Springs of unassailable purity become temporarily injured (solely from the laboratory standpoint) because of "developments" made with a view to improve the surroundings. New wells and recently "improved" springs will furnish waters likely to be condemned by laboratory standards and samples of their waters should therefore not be submitted for examination.

Finally, while it is admitted that laboratory methods of water analysis have made great strides towards perfection during recent years, they can never hope to reach such perfection as to enable the analyst to uniformly rest upon chemistry and bacteriology alone, without aid from the actual sanitary survey, and they can still less be depended upon to furnish information not on what a water is, but on what it is likely to become.

W. P. MASON

TROY, N. Y.,
September 25, 1916

THE CONVOCATION-WEEK MEETINGS OF SCIENTIFIC SOCIETIES

THE American Association for the Advancement of Science and the national scientific societies named below will meet at New York City, during convocation week, beginning on Tuesday, December 26, 1916:

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.—President, Charles R. Van Hise, president of the University of Wisconsin; retiring president, Dr. W. W. Campbell, director of the Lick Observatory; permanent secretary, Dr. L. O. Howard, Smithsonian Institution, Washington, D. C.; general secretary, Professor W. E. Henderson, Ohio State University; secretary of the council, Dr. C. Stuart Gager, Brooklyn Botanical Garden.

Section A—Mathematics and Astronomy.—Vice-president, Professor L. P. Eisenhart, Princeton University; secretary, F. R. Moulton, University of Chicago, Chicago, Ill.

Section B—Physics.—Vice-president, Professor H. A. Bumstead, Yale University; secretary, Dr.

W. J. Humphreys, U. S. Weather Bureau, Washington, D. C.

Section C—Chemistry.—Vice-president, Professor Julius Stieglitz, University of Chicago; secretary, Dr. John Johnston, Geophysical Laboratory, Washington, D. C.

Section D—Mechanical Science and Engineering.—Vice-president, Dr. H. M. Howe, Columbia University; secretary, Professor Arthur H. Blanchard, Columbia University, New York City.

Section E—Geology and Geography.—Vice-president, Professor R. D. Salisbury, University of Chicago; secretary, Professor George F. Kay, University of Iowa.

Section F—Zoology.—Vice-president, Professor G. F. Parker, Harvard University; secretary, Professor Herbert V. Neal, Tufts College, Mass.

Section G—Botany.—Vice-president, Dr. C. Stuart Gager, Brooklyn Botanical Garden; secretary, Dr. A. F. Blakeslee, Cold Spring Harbor, N. Y.

Section H—Anthropology and Psychology.—Vice-president, Dr. F. W. Hodge, Bureau of American Ethnology; secretary, Professor George Grant MacCurdy, Yale University, New Haven, Conn.

Section I—Social and Economic Science.—Vice-president, Louis F. Dublin, Metropolitan Life Insurance Company; secretary, Seymour C. Loomis, 69 Church Street, New Haven, Conn.

Section K—Physiology and Experimental Medicine.—Vice-president, Professor Edwin O. Jordan, University of Chicago; secretary, Professor C.-E. A. Winslow, Yale University.

Section L—Education.—Vice-president, Dr. L. P. Ayres, The Russell Sage Foundation; secretary, Dr. Stuart A. Curtis, Detroit, Mich.

Section M—Agriculture.—Vice-president, Dr. W. H. Jordan, director of the New York Agricultural Experiment Station; secretary, Dr. E. W. Allen, U. S. Department of Agriculture, Washington, D. C.

AMERICAN MATHEMATICAL SOCIETY.—December 27 and 28. President, Professor Ernest W. Brown, Yale University; secretary, Professor F. N. Cole, 501 West 116th St., New York, N. Y.

MATHEMATICAL ASSOCIATION OF AMERICA.—December 28, 29 and 30. President, Professor E. R. Hedrick, University of Missouri; secretary, W. D. Cairns, 5465 Greenwood Ave., Chicago, Ill.

AMERICAN ASTRONOMICAL SOCIETY.—December 26 to 30. President, Dr. E. C. Pickering, Harvard College Observatory; secretary, Dr. Philip Fox, Dearborn Observatory, Evanston, Ill.

AMERICAN FEDERATION OF TEACHERS OF THE MATHEMATICAL AND THE NATURAL SCIENCES.—Council meeting. Secretary, W. A. Hedrick, Central High School, Washington, D. C.

AMERICAN PHYSICAL SOCIETY.—December 26 to 30. President, Professor R. A. Millikan, University of Chicago; secretary, Professor Alfred D. Cole, Ohio State University, Columbus, Ohio.

OPTICAL SOCIETY OF AMERICA.—December 28. President, Dr. Perley G. Nutting, 3 Kodak Park, Rochester, N. Y.

AMERICAN CHEMICAL SOCIETY.—President, Dr. Charles H. Herty, New York City; secretary, Dr. C. L. Parsons, U. S. Bureau of Mines, Washington, D. C.

AMERICAN ELECTROCHEMICAL SOCIETY.—Chairman, New York Section, Dr. Colin G. Fink, Edison Lamp Works, Harrison, N. J.

SOCIETY FOR THE PROMOTION OF ENGINEERING EDUCATION.—President, Professor H. S. Jacoby, Columbia University; secretary, Professor F. L. Bishop, University of Pittsburgh, Pittsburgh, Pa.

ILLUMINATING ENGINEERING SOCIETY.—President, W. J. Serrill; chairman, Committee on Reciprocal Relations, Clarence L. Law, Irving Place and 15th St., New York, N. Y.

ASSOCIATION OF AMERICAN GEOGRAPHERS.—December 28 to 30. President, Dr. Mark Jefferson, Michigan State Normal College, Ypsilanti, Mich.; secretary, Professor Isaiah Bowman, Yale University, New Haven, Conn.

AMERICAN ALPINE CLUB.—December 30. President, H. G. Bryant; secretary, Howard Palmer, New London, Conn.

AMERICAN SOCIETY OF NATURALISTS.—December 29. President, Dr. Raymond Pearl, Maine Agricultural Experiment Station; secretary, Professor Bradley M. Davis, University of Pennsylvania, Philadelphia, Pa.

AMERICAN SOCIETY OF ZOOLOGISTS.—December 27, 28 and 29. President, Professor D. H. Tennent, Bryn Mawr College; secretary, Professor Caswell Grave, Johns Hopkins University, Baltimore, Md.

ENTOMOLOGICAL SOCIETY OF AMERICA.—December 26 and 27. President, Dr. E. P. Felt; secretary, J. M. Aldrich, West Lafayette, Ind.

AMERICAN ASSOCIATION OF ECONOMIC ENTOMOLOGISTS.—December 28, 29 and 30. President, Dr. C. Gordon Hewitt, Department of Agriculture, Ottawa, Canada; secretary, Albert F. Burgess, Melrose Highlands, Mass.

AMERICAN GENETIC ASSOCIATION.—December 26, 27 and 28. President, David Fairchild, U. S. Department of Agriculture; secretary, George M. Rommel, 511 11th St., Washington, D. C.

EUGENICS RESEARCH ASSOCIATION.—President, Professor Adolf Meyer, The Johns Hopkins University; secretary, William F. Blades, 191 Haven Ave., New York, N. Y.

ECOLOGICAL SOCIETY OF AMERICA.—December 27, 28 and 29. President, Professor V. E. Shelford, University of Illinois; secretary, Forrest Shreve, Desert Botanical Laboratory, Tucson, Ariz.

BOTANICAL SOCIETY OF AMERICA.—December 27 to 30. President, Professor R. A. Harper, Columbia University; secretary, Dr. H. H. Bartlett, University of Michigan, Ann Arbor, Mich.

AMERICAN PHYTOPATHOLOGICAL SOCIETY.—December 27 to 30. President, Dr. Erwin F. Smith, U. S. Department of Agriculture; secretary, Dr. C. L. Shear, U. S. Department of Agriculture, Washington, D. C.

AMERICAN FERN SOCIETY.—December 29. President, Dr. C. H. Bissell, Michigan Agricultural College; secretary, C. A. Weatherby, 920 Main St., East Hartford, Conn.

SULLIVANT MOSS SOCIETY.—December 29. President, Mrs. Elizabeth G. Britton, N. Y. Botanical Garden; secretary, Edward B. Chamberlain, 18 West 89th St., New York, N. Y.

SOCIETY OF HORTICULTURAL SCIENCE.—December 28, 29. Secretary, C. P. Close, U. S. Department of Agriculture, Washington, D. C.

ASSOCIATION OF OFFICIAL SEED ANALYSTS.—Will meet on dates to be announced. Secretary, John P. Helyar, New Brunswick, N. J.

SOCIETY OF AMERICAN FORESTERS.—Meets on Friday, December 29. President, Dr. B. E. Fernow, University of Toronto; secretary, C. R. Tiltonson, U. S. Forest Service, Washington, D. C.

MID-WEST FORESTRY ASSOCIATION.—President, Fred W. Smith, State School of Forestry, Botineau, N. Dak.

AMERICAN MICROSCOPICAL SOCIETY.—Business sessions. President, Professor M. F. Guyer, University of Wisconsin; secretary, Professor T. W. Galloway, Beloit College, Beloit, Wis.

AMERICAN ANTHROPOLOGICAL ASSOCIATION.—December 26 to 29. President, Dr. F. W. Hodge, Bureau of American Ethnology; secretary, Professor George G. MacCurdy, Yale University Museum, New Haven, Conn.

AMERICAN FOLK-LORE SOCIETY.—December 27. President, Dr. R. H. Lowie, American Museum of Natural History; secretary, Charles Peabody, Harvard University, Cambridge, Mass.

AMERICAN PSYCHOLOGICAL ASSOCIATION.—December 27 to 30. President, Professor Raymond Dodge, Wesleyan University; secretary, Professor R. M. Ogden, Cornell University, Ithaca, N. Y.

AMERICAN PHILOSOPHICAL ASSOCIATION.—December 27, 28 and 29. President, Professor A. O. Lovejoy, The Johns Hopkins University; secretary, Professor E. G. Spaulding, Princeton University, Princeton, N. J.

AMERICAN SOCIETY OF BACTERIOLOGISTS.—December 29. Secretary, A. P. Hitchens, Glen Olden, Pa.

AMERICAN ASSOCIATION OF ANATOMISTS.—December 27, 28 and 29. President, Dr. H. H. Donaldson, Wistar Institute of Anatomy; secretary, Professor C. R. Stockard, Cornell Medical School, New York, N. Y.

AMERICAN PHYSIOLOGICAL SOCIETY.—December 27, 28, 29 and 30. President, Professor W. B. Cannon, Harvard Medical School; secretary, Professor Charles W. Greene, University of Missouri, Columbia, Mo.

AMERICAN SOCIETY OF BIOLOGICAL CHEMISTS.—December 27, 28 and 29. President, Professor Walter Jones, The Johns Hopkins University; secretary, Dr. Stanley R. Benedict, Cornell Medical College, New York, N. Y.

AMERICAN SOCIETY FOR PHARMACOLOGY AND EXPERIMENTAL THERAPEUTICS.—December 28, 29 and 30. President, Professor Reid Hunt, Harvard Medical School; secretary, Dr. John Auer, Rockefeller Institute, New York, N. Y.

AMERICAN SOCIETY FOR EXPERIMENTAL PATHOLOGY.—December 28, 29 and 30. President, Simon Flexner, The Rockefeller Institute; secretary, Dr. Peyton Rous, Rockefeller Institute, New York, N. Y.

(The above four societies compose the Federation of American Societies for Experimental Biology. Executive Secretary, Dr. Peyton Rous.)

AMERICAN NATURE-STUDY SOCIETY.—December 27. President, Professor L. H. Bailey, Ithaca, N. Y.; secretary, E. R. Downing, University of Chicago, Chicago, Ill.

SCHOOL GARDEN ASSOCIATION OF AMERICA.—December 29 and 30. President, Van Evrie Kilpatrick, 124 West 30th St., New York, N. Y.

GAMMA ALPHA GRADUATES SCIENTIFIC FRATERNITY.—Will meet on dates to be announced. President, Professor W. J. Meek, University of Wisconsin; recorder, L. C. Johnson, 2018 Madison St., Madison, Wis.

SOCIETY OF THE SIGMA XI.—December 27. President, Dr. Charles S. Howe, Case School of Applied Science; secretary, Professor Henry B. Ward, University of Illinois, Urbana, Ill.

AMERICAN ASSOCIATION OF UNIVERSITY PROFESSORS.—December 29 and 30. President, Dr. John H. Wigmore, Northwestern University; secretary, Dr. H. W. Tyler, Massachusetts Institute of Technology.

SCIENTIFIC NOTES AND NEWS

THE following is a list of those recommended by the president and council of the Royal Society for election at the anniversary meeting on November 30: *President*, Sir J. J. Thomson, O.M., M.A., D.Sc., LL.D.; *Treasurer*, Sir A. B. Kempe, M.A., D.C.L.; *Secretaries*, Professor A. Schuster, Sc.D., Ph.D., and W. B. Hardy, M.A.; *Foreign Secretary*, Professor W. A. Herdman, D.Sc.; *Other Members of the Council*, Professor J. G. Adami, M.D., H. T. Brown, LL.D., Dugald Clerk, D.Sc., Professor A. R. Cushny, M.D., Professor A. Dendy, D.Sc., Professor P. F. Frankland, LL.D., Professor J. W. Gregory, D.Sc., H. Head, M.D., J. H. Jeans, Major H. G. Lyons, Major P. A. McMahon, D.Sc., Professor F. W. Oliver, D.Sc., Professor C. S. Sherrington, M.D., Professor A. Smithells, B.Sc., Hon. R. J. Strutt, M.A., and R. Threlfall, M.A.

As has been noted in SCIENCE Dr. Wilhelm Waldeyer, professor of anatomy at the University of Berlin since 1883, was raised to the hereditary peerage on the occasion of his eightieth birthday on October 6. The *Journal* of the American Medical Association states that a bronze portrait plaque was presented to him by his present and former pupils, and a duplicate was hung in the headquarters of the Postgraduate Instruction System. He has been chairman of the central committee of this work for many years. The Leopold-Karolinische Akademie of Halle presented him with the gold Cothenius medal, and honorary memberships in various scientific and

other societies poured in on him. He announced that although he was thinking of retiring from his teaching chair at the university at the close of this semester, yet he intended to keep up his other work.

SIR FRANK DYSON, astronomer royal, Professor R. A. Sampson, astronomer royal for Scotland and professor of astronomy in the University of Edinburgh, and Professor H. C. Plummer, astronomer royal of Ireland and Andrews professor in the University of Dublin have been elected honorary members of the British Optical Society.

DR. HENRY HEAD, F.R.S., physician to the London Hospital and editor of *Brain*, has been added to the government committee which, under the chairmanship of Sir J. J. Thomson, president of the Royal Society, is inquiring into the position occupied by natural science in the educational system of Great Britain, especially in secondary schools and universities.

At a recent meeting of the Royal Astronomical Society, Mrs. R. A. Proctor, widow of the astronomer Richard A. Proctor, was formally admitted as fellow of the society. Exactly 50 years ago, in November, 1866, the late Richard A. Proctor was elected to fellowship.

THE University of London has awarded the Rogers prize of £100 for 1916, for an essay on "The Nature of Pyrexia and Its Relation to Microorganisms" to Dr. J. L. Jona.

THE trustees of the Massachusetts Horticultural Society have awarded the George Robert White Medal of Honor for the year 1916 to William Robinson, of Gravetye Manor, Sussex, England. The medal, by John Flanagan, is of coin gold, weighs 8½ ounces and was struck at the mint of the United States, Philadelphia. This is the eighth award of this medal made by the society in recognition of eminent service in the advancement of horticulture. Previous awards have been made to Professor C. S. Sargent, of the Arnold Arboretum; Jackson T. Dawson, Victor Lemoine, of Nancy, France; Michael H. Walsh, the rose specialist of Woods Hole; Sir Harry J. Veitch, of London, and Ernest H. Wilson. William Robinson, to whom the medal is now