Series,' by F. W. Sardeson. A supplementary discussion to the papers by the same author on these formations, showing the confusion arising from a shifting nomenclature.

N. H. Winchell gives a partial bibliography with notes on 'The Age of the Great Lakes of North America.' It is interesting to have the various opinions thus summarized for reference. The prevailing belief has been that these lakes occupy preglacial valleys which have been shut off by earth movements and by glacial accumulations.

Warren Upham discusses the 'Relation of the Lafayette or Ozarkian Uplift of North America to Glaciation.' Both are referred to the Quaternary.

SOCIETIES AND ACADEMIES.

THE 95TH REGULAR MEETING OF THE CHEMI-CAL SOCIETY OF WASHINGTON, APRIL

8, 1897.

The first paper, 'Three Early American Chemical Societies,' was read by Dr. H. Carrington Bolton.

The first Chemical Society ever organized in either hemisphere was founded at Philadelphia in 1772, forty-nine years before the Chemical Society of London, the oldest in Europe. The President was Dr. James Woodhouse, professor of chemistry in the medical department of the University of Pennsylvania, and the first Vice-President was Felix Pascalis Ouvrière, a naturalist born in France and sometime a resident of Santo Domingo. On December 10, 1801, Robert Hare presented to the Chemical Society of Philadelphia his memorable paper on the 'Hydrostatic Blow-pipe,' which was published by the Society in the following year as a pamphlet with the title: 'Memoir on the Supply and Application of the Blow-pipe.'

In 1811 a second Chemical Society was founded in Philadelphia called the 'Columbian,' under the presidency of Professor James Cutbush. The constitution of this Society provided for levying fines on absent members and those who refused to accept office when elected. The Society numbered sixty-nine members, of which thirty-one were foreign chemists, and thirteen junior members; these included the most prominent chemists and philosophers living on both sides of the Atlantic. In 1815 The Columbian Chemical Society of Philadelphia published one volume of memoirs; this contained twenty-six essays on a variety of topics original, speculative and practical.

The third Chemical Society was the Delaware Chemical and Geological Society, organized at Delhi, New York, in 1821; it was, however, short lived and issued no publications.

Dr. Bolton's essay contained brief biographical sketches of the prominent members of these early Societies.

The second paper, on 'The Experimental Determination of the Hydrothermal Value of a Bomb Calorimeter,' was read by H. W. Wiley and W. D. Bigelow. The methods previously suggested by other authors for this purpose were reviewed and their advantages and disadvantages discussed. The authors employed a relatively large body of warm water, instead of a very small portion, as had previously been used. Two Beckmann thermometers were employed, which made it possible to read a temperature to a thousandth of a degree, so that the error which would otherwise arise from the slight change of temperature was overcome by the accuracy in reading.

The last paper, on 'The Influence of Vegetable Mold on the Nitrogenous Content of Oats,' was read by Dr. Wiley. Attention having been called several years ago to the large increase in the nitrogen in sugar cane grown in the muck soils of Florida, an investigation was instituted by the Department of Agriculture, in 1894, to determine in what way the humus of such soils influenced the nitrogen contents of cereal crops. The first year's investigation was preliminary, but it showed distinctly that oats grown on soils rich in vegetable mold contained a larger percentage of nitrogen than that grown in other The total increase is, in general, about soils. This was not in the grain alone, but also 25%. in the straw. The second year's investigation verified this result. The increase was largely in amid nitrogen, the percentage of proteids not being greatly increased. The results are, therefore, not so interesting from an economic point of view. When it is remembered that these vegetable soils are extremely rich in nitrogen,

and when it is further considered that they are quite deficient in nitrifying organisms, it is fair to conclude that at least a portion of this excess of nitrogen which they contain is assimilated directly from the vegetable mold without previous oxidation to nitric acid. Data was adduced which showed that the addition of phosphatic fertilizers tended to diminish the actual percentage of nitrogen in the crop harvested.

At the end of the regular program Professor Warder exhibited some photographs which showed the power of various chemical substances to absorb X-rays, and explained the technique of the manipulation.

V. K. CHESNUT, Secretary.

ENTOMOLOGICAL SOCIETY OF WASHINGTON, MAY 13, 1897.

THE President announced the death, on May 3d, of Martin L. Linell, an active member of the Society.

Mr. B. E. Fernow referred to the recent increase of pin holes in timber from the Southern States, caused either by some Ptinid beetle or a Scolytid, and discussed the possibility of preventing damage by some system of timber management.

Dr. E. F. Smith showed Beijerinck's recently published paper on the 'Cecidiogenesis and alternation of genera of *Cynips calicis*,' and briefly reviewed the work.

Mr. Schwarz exhibited specimens of the Meloid beetle, *Phodaga alticeps* Lec., and read a letter from Mr. Hubbard detailing the habits of this insect.

Mr. Schwarz presented a paper entitled 'Two genera of beetles new to the United States.' The genera are *Cylidrella*, family Trogositidæ, discovered by Mr. H. G. Hubbard at Yuma, Arizona, preying upon a Scolytid in Parkinsonia wood, this genus having been founded by Dr. Sharp upon a single species, *C. mollis*, found by Mr. Champion in Guatemala; and *Latheticus*, family Tenebrionidæ, found by Mr. Hubbard under Mesquite bark at Indio, in the Colorado desert of California, the only other species of this genus, *L. oryzæ* Waterhouse, having been found in rice brought to England from India. Mr. Banks presented a paper entitled 'Three new lace-winged flies,' in which the following species were described: *Chrysopa sabulosa*, *C. Fraterna* and *Leucochrysa americana*.

Mr. Howard presented a communication on 'An interesting wax insect from California.'

Mr. Ashmead presented a paper entitled 'The genera of the Encyrtinæ,' which reviewed the history of the subfamily and included a table of the known genera, to which he had added nine.

L. O. H.

ANTHROPOLOGICAL SOCIETY.

THE 264th regular meeting of the Anthropological Society was held Tuesday, May 4, 1897. Dr. George M. Kober read a paper entitled 'Progress and Achievements in Hygiene,' in which he gave a résumé of the various attempts to introduce sanitary measures, either general or specific, in various countries at divers times, and noted the good results which followed, many of them being permanent in character.

The marked immunity of the Jews was noted, and how it had continued even to the present day, as evidenced by the extremely low mortality; this condition of affairs was attributed not so much, to rigid enforcement of the laws of health prescribed by the Hebraic law as to their racial sobriety producing of a sturdy constitution, capable of resisting disease to a considerable degree. The author then recited incidents tending to prove the assertion that the desire to prevent diseases was innate in the human race. The relation of medicine and religion, the medicine dance, the disposal of the dead, cremation and other forms of primitive practices were given in detail.

A 'General Discussion upon Sanitation among Primitive Peoples' then followed. Mr. Geo. R. Stetson said that in equatorial Africa there was an absence of filth in persons and places, and spoke of the misconception concerning the climatic and physical conditions of Africa. The endemic and introduced diseases were then noted. The general discussion was then taken up by Professor L. F. Ward, Drs. McGee, Woodward, Magruder and McCormick.

> J. H. MCCORMICK, General Secretary.