for ages 55–59, representing risks that have been under observation for a longer period.

Special investigations in connection with this experience show in general that there is considerably more sickness among the outdoor industrial classes than among the indoor industrial classes and slightly more sickness among the indoor industrial classes than among the clerical and professional classes. The amount of sickness in the north and west is about the same and in each case is less than in the south—while the amount of sickness in large cities is less than in the small towns.

The following subjects were read by title:

Two Neglected Subjects of Social Economy, including interment and cremation considered from sanitary and sentimental standpoints: by MRS. L. OSBORNE TALBOTT, Washington, D. C.

Relation of Death Rates and Birth Rates, applying well known natural laws to the explanation of sociologic phenomena, and concluding that the far-reaching sociologic effects of the reduction of the birth rate are reduction of death rate, survival of the most intelligent, loss of physical robustness, and growth of higher civilization and democracy: CHARLES E. WOODRUFF, U. S. A., Plattsburg, N. Y.

The Brain and Education: THOMAS M. BALLIET, New York University. The main thesis being that while our knowledge of the brain is too scanty to build a theory of education on it, neurology can throw many side-lights on educational problems.

J. FRANKLIN CROWELL,
Secretary

SCIENTIFIC BOOKS

Chemical Abstracts. Published by the American Chemical Society. Edited by WILLIAM A. NOYES and C. A. WATERS, with the cooperation of a large staff of assistant editors and abstractors. Published semi-monthly. Easton, Pa., Chemical Publishing Co. Vol. I., No. 1, January 1, 1907. Price, $6.00 per annum.

Brief abstracts are given of all chemical investigations of any importance published in any part of the world. These abstracts are classified under the following sectional headings, each section being in charge of an expert in that particular branch of chemistry: Apparatus (Walker); General and Physical Chemistry (Lewis); Radioactivity (McCoy); Electrochemistry (Whitney); Photography (Friedburg); Inorganic Chemistry (Smith); Analytical Chemistry (Dennis); Mineralogical and Geological Chemistry (Hillebrand); Metallurgy (Richards); Organic Chemistry (Bogert); Biological Chemistry (Mendel); Foods (Bigelow); Nutrition (Langworthy); Water, Sewage and Sanitation (Kinnicutt); Soils and Fertilizers (Veitch); Fermented and Distilled Liquors (Wahl); Pharmaceutical Chemistry (Stevens); Acids, Alkalies and Salts (Briggs); Glass and Pottery (Barton and Bleininger); Cements and Mortars (Drew); Fuel, Gas and Coke (Pennock); Petroleum, Asphalt and Wood Products (Sadtler); Cellulose and Paper (Little); Explosives (Munroe); Dyes, Bleaching and Textile Fabrics (Olney); Pigments, Resins, Varnishes and India Rubber (Sabin); Fats, Fatty Oils and Soap (Richardson); Sugar, Starch and Gums (Browne); Leather; Patents (U. S., British, German and French) (Seaman).

The appearance of this journal marks an epoch in the progress of chemistry in America, and is an achievement of which the American Chemical Society may well feel proud. The establishment of such a publication has been made possible by the untiring efforts of the editor, Dr. Noyes, and the loyal support of more than 130 of the leading chemists of the country who are acting as assistant editors and abstractors either gratuitously or at a merely nominal remuneration. The society is to be congratulated also on the fact that it has had the courage to undertake this publication single-handed and without entering into 'entangling alliances' with any other organiza-

tion. This simplifies greatly the business management of the venture, insures more rapid appearance of the abstracts, and should appeal strongly to the patriotism of all American chemists. It was feared at the outset that the project might not be a financial success, and that the necessary increase in the membership dues from five dollars to eight dollars would be followed by many resignations. This fear was apparently groundless. But few resignations have been received as the result of this increase in dues. On the contrary, the membership of the society is now increasing more rapidly than ever before.

The value to the profession of such a journal can scarcely be overestimated. It will not only bring before every American chemist a concise summary, in his own native tongue, of all important chemical investigations, thus enabling him to keep abreast of the progress of the science, stimulating and encouraging research, but, furthermore, as it covers all branches of the subject, it should prove a most potent factor in drawing together in bonds of closer cooperation all chemists in this country.

Its only rival at the present time is the *Chemisches Zentralblatt* of the German Chemical Society, which has had a monopoly of this field for many decades. It is much more expensive than *Chemical Abstracts,* and in some respects (notably on the technical side) is not so complete. On the other hand, the German publication is superior to ours in certain points—it appears weekly, instead of twice a month; diagrams and illustrations are more freely used; and the abstracts do not have to be condensed quite as much, not only because they have more space available, but also because of a much more extensive use of abbreviations.

In *Chemical Abstracts* the American Chemical Society has produced a most excellent journal, and all American chemists should rally to its support, to make it, as it should be, the best of its kind in the world. Those who are not already members can best assist by joining at once and urging others to do likewise.[1]

Marston Taylor Bogert

[1] The secretary of the society is Dr. W. A. Noyes, Bureau of Standards, Washington, D. C.

Societies and Academies

The American Physical Society

A regular meeting of the Physical Society was held in Fayerweather Hall, Columbia University, on March 2, 1907. In the absence of the president, Professor W. C. Sabine was made temporary chairman.

An address was delivered before the society by Professor O. Lummer, of the University of Breslau, on 'The Temperature of the Sun and Recent Solar Theories.'

The following papers were then presented:

E. F. Northrup: 'On the Forces on the Interior of a Conductor Carrying Current.'

C. W. Waidner and G. K. Burgess: 'The Radiation from, and the Melting Points of, Palladium and Platinum.'

F. M. Pederson: 'The Viscosity of Certain Isomeric Ether Compounds.'

J. G. Coffin: 'The Effect of Frequency upon the Capacity of Absolute Condensers.'

C. C. Trowbridge: 'The Physical Nature of Meteor Trains.'

C. C. Trowbridge: 'On Atmospheric Drifts above Fifty Miles from the Surface of the Earth.'

C. C. Perry: 'On the Current carried by Canal Rays in a Discharge Tube.'

Carl Barus: 'The Equations of the Fog Chamber.

W. G. Cady: 'Note on the Hissing Metallic Arc.'

F. L. Tufts: 'The Relation between Luminosity and Electrical Conductivity of Flames.'

Ernest Merritt,
Secretary

The Biological Society of Washington

The 425th meeting was held on February 9, 1907, with President Stejneger in the chair.

Dr. A. D. Hopkins read a paper, illustrated with lantern slides, on 'Some Results of Anatomical Investigations of the Thoracic Segment of Insects.' The substance of this paper will appear in a bulletin of the Bureau of Entomology.

Mr. T. H. Kearney spoke on 'The Date Palm in the Northern Sahara,' illustrating his subject with a large number of lantern slides. He described the oases of southern Tunis and especially the group known as the Djerid, where numerous fine varieties are grown. Methods of irrigating, cultivating, pollinating