points mentioned with cases from his own experience. The article is to be continued in the next issue. Dr. Ward A. Holden presents some statistics on the early ocular signs of dementia paralytica, and sums up as follows: "In true, uncomplicated paresis there is early in the disease almost constant absence of the sensory reflex, in half the cases irregularity of the pupils, in nearly half inequality of the pupils, in more than half abnormally small pupils, in a fifth of the cases loss of light reaction, in another fifth marked sluggishness of light reaction, and in a few of those with diminished light reaction a diminution of convergence reaction also. A preliminary paper on psychasthenia, its clinical entity illustrated by a case, is contributed by Sidney Schwab."

BEGINNING in January next, it is announced that the Bulletin of the Geographical Society of Philadelphia will be issued every three months. Professor Emory R. Johnson will be the responsible editor and will have the cooperation of Mr. Walter Sheldon Tower as associate editor. The past year has been the most prosperous one in the history of the society—judging by the increase in membership and general activity of the organization.

### SOCIETIES AND ACADEMIES.

# THE CENTRAL ASSOCIATION OF SCIENCE AND MATHEMATICS TEACHERS.

THE association will hold its annual meeting on December 1 and 2 in the Y. M. C. A. building, 153 La Salle St., Chicago. The general meetings will be held on the second floor, and the section meetings on the seventh floor, of the building. The association, which has members in twelve states, invites all persons who are interested in the subject matter and the teaching of science and mathematics to become members. The program which follows may be had in pamphlet form upon application to the secretary, C. M. Turton, 440 Kenwood Terrace, Chicago, Ill.

### GENERAL PROGRAM.

### Friday, December 1.

9:00 A.M. Exhibits of apparatus, second floor of building.

10:00 A.M. General meeting.

Address—'Hypothesis of the Origin of the Earth,' Professor T. C. Chamberlin, head of department of geology, University of Chicago.

Address—' Relation of Forestry to Public School Instruction,' Ernest A. Sterling, U. S. Department of Forestry.

2:00 P.M. Section meetings, seventh floor of the building.

Saturday, December 2.

9:00 A.M. General meeting, reports of committees, general business, election of officers.

10:00 А.M. Section meetings.

1:30 P.M. Excursions by various sections.

### PROGRAM-BIOLOGY SECTION.

Friday, December 1, 2:00 P.M.

'What and How Much Can be Done in Ecological and Physiological Zoology in Secondary Schools?' Oscar Riddle, Central High School, St. Louis, Mo.

Report of the committee on 'The Course in Biology in Secondary Schools,' Chairman Worralo Whitney, South Chicago High School.

Discussions based on the committee's report.

'Should Botany and Zoology be Taught in Full Year Courses?' G. H. Bretnall, Monmouth College.

'The Relative Emphasis to be Given to Morphology, Physiology, Ecology and Other Phases of Biology,' Miss Elma Chandler, Elgin High School.

'What, and How Much Field Study may be taught?' Fred. L. Charles, Normal School, De-Kalb, Ill.

'In What Order Should Animal and Plant Groups be Studied?' Miss Amelia McMinn, West Division High School, Milwaukee, Wis,

Open discussion.

### Saturday, December 2, 10:00 A.M.

Election of officers and general business of the section.

The laboratory note-book problem, five-minute discussions.

'The Technique of Projection and Anesthesia of Animals, with Numerous Demonstrations,' A. H. Cole, Lake High School, Chicago.

Saturday Afternoon Excursions.—Washington Park Conservatory and Field Columbian Museum, Lincoln Park Conservatory and animal exhibit. Uihlein's orchid houses.

#### PROGRAM-CHEMISTRY SECTION. .

### Friday, December 1, 2:00 P.M.

'Recent Advances in Chemical Knowledge,' Dr. L. W. Jones, University of Chicago.

Discussion.

'Equipment of a Modern Chemical Laboratory

in the Secondary School,' Fred. J. Watson, Mc-Kinley High School, Chicago.

Discussion.

'Reference Books in Chemistry,' F. C. Irwin, Central High School, Detroit, Mich.; A. B. Crowe, State Normal School, Charleston, Ill.

# Saturday, December 2, 10:00 A.M.

Election of officers and general business.

Address—'Investigations on Osmosis,' Dr. Louis Kahlenberg, University of Wisconsin.

Address—' New Theories of Matter in Relation to Chemical and Physical Theory,' Professor Charles T. Knipp, University of Illinois.

### PROGRAM-EARTH SCIENCE SECTION.

Friday, December 1, 2:00 P.M.

Address-" Commercial Geography for Secondary Schools,' Dr. J. Paul Goode, University of Chicago.

Address—'The Work of the Hydrographic Office in its Relation to Commerce,' W. J. Wilson, nautical expert in charge of the Chicago Branch of the U. S. Hydrographic Office.

Report of committee on cooperation in gathering materials in teaching physiography, Charles Emerson Peet, chairman, Lewis Institute, Chicago.

Election of officers.

### Saturday, December 2.

*Excursions.*—To the plant of the Automatic Electric Company, thence through a portion of the tunnels of the Illinois Telephone Company. The party will start immediately after the general session of the association, Saturday morning. To the Fat Stock Show and the packing houses at the Union Stock Yards. The party will start immediately after the general session of the association, on Saturday morning. An admission fee of fifty cents will be charged at the gates. Luncheon may be obtained at the yards. To the works of the Pullman Company; this is a joint excursion Saturday afternoon with the Physics Section.

For particulars see program of the Physics Section.

### PROGRAM-PHYSICS SECTION.

Friday, December 1, 2:00 P.M.

Address—'The Value of Qualitative Experiment in Physics,' L. F. Miller, University of Wisconsin; 'The Aim of High School Physics Teaching.' E. E. Burns, Medill High School, Chicago.

Report of Committee on 'Reference Books in Physics,' A. H. Sage, State Normal School, Oshkosh, Wis.

Address—'The Teaching of Physics,' H. N. Chute, High School, Ann Arbor, Mich.

Informal Discussion: 'Should the attitude of the student be that of discoverer or verifier?' 'Is consultation of two or more students on a laboratory experiment disorder?' 'Is it certain that some experiments that require several hours to perform are more valuable to a student than the time spent in reading?' 'How many times is it profitable for a student to perform certain experiments for greater accuracy, for example, finding the latent heat of vaporization of water?' 'Must the student record every experiment?' 'Should work with scales and calipers be done in advance for the purpose of learning the use of the instruments, or should the operation be done for the first time when use requires it?'

Presentation of new physical apparatus, Mr. L. B. McMullen, Shortridge High School, Indianapolis.

Saturday, December 2, 10:00 A.M. Election of officers.

Business.

Joint meeting with Chemistry Section, 10:15 A.M.

Address—' Investigations on Osmosis,' Dr. Louis Kahlenberg, University of Wisconsin.

Address—' New Theories of Matter in Relation to Chemical and Physical Theory,' Professor Charles T. Knipp, University of Illinois.

Saturday afternoon will be devoted to an excursion to the Pullman Palace Car Works, Pullman, Ill. Train will leave Randolph Street Station of the Illinois Central Railroad at 1:20 p.M. Those who wish may visit the Finsen Light Institute of America, Washington Boulevard and Hamlin Avenue.

PROGRAM-MATHEMATICS SECTION.

Friday, December 1, 2:00 P.M.

Address—' The Straight Line in Geometry,' J. W. Withers, principal, Teachers College, St. Louis.

Discussion.

Reports: Willard S. Bass, Francis W. Parker School, Chicago; Miss Mabel Sykes, South Chicago High School, Chicago.

Paper—'Interest and Progress in Teaching Mathematics,' N. J. Lennes, Wendell Phillips High School, Chicago.

Discussion.

Saturday, December 2, 10:00 A. M. Election of officers.

Address—'Aids in Teaching Algebra,' Professor R. J. Aley, University of Indiana.

Discussion led by Miss Jessie J. Bullock, High School, Champaign, Ill.

Paper-'Some Thoughts on the Teaching of

Geometry,' C. A. Petterson, Jefferson High School, Chicago.

Discussion led by G. C. Shutts, State Normal School, Whitewater, Wis.

O. W. CALDWELL, President, C. M. TURTON, Secretary.

## THE ONONDAGA ACADEMY OF SCIENCE.

THE regular monthly meeting of the Onondaga Academy of Science was held Friday evening, October 20, 1905, the president, Dr. T. C. Hopkins, in the chair.

Mr. Charles E. Wheelock gave an interesting account of some overthrust faults occurring across central New York from Little Falls to Ithaca and which are most prominently developed in the Scalaris<sup>1</sup> and in the overlying Helderberg limestones. He tried to show that these disturbances were found only in rocks immediately overlying the Salina formations from which the various salts had been leached out. As the rocks of central New York dip slightly toward the south, the hypothenuse of the triangle would be shortened by the dropping down of the overlying formations due to the solution of the salts, and thus produce a lateral pressure in the rocks capable of producing the overthrusts.

Professor Philip F. Schneider read an interesting paper on 'The Correlation of Some Alnoite Dikes in East Canada Creek.' Heretofore but three dikes were known at East Canada Creek, showing only on the Montgomery side, with a narrow dike on the Herkimer side which it was impossible to correlate with either of the others. The paper established the fact that there were five dikes on the east side and also five corresponding dikes on the west side of the stream. All were located accurately and figures given as to their width, distances apart and strike, showing that they were corresponding dikes. Megascopic-

<sup>1</sup>The Scalaris limestone as described by P. F. Schneider in the October, 1905, number of the *American Journal of Science* is the prominent limestone ledge in the Camillus Shale of the Salina formation and immediately underneath the gypsum deposits. It is the first formation of the salt deposit in central New York containing fossils, the *Leperditia Scalaris* Jones being the most abundant. ally the dikes bear a close resemblance to those already known and it is believed that a microscopic study of the same would show that they are practically identical.

Dr. Daniel S. Martin, of Brooklyn, spoke of the close resemblance of the peridotite dikes in New York, Kentucky and South Africa and the possibility of diamonds occurring in them in this country. While the material composing all these dikes is practically identical, as shown by their petrographic study and chemical analyses, even to the extent of their containing certain gems in common, as the pyropes and olivenes, nevertheless the diamond is conspicuous by its presence in the African fields and equally conspicuous by its absence in the American localities.

President T. C. Hopkins spoke of the rumor that two diamonds had been found in the drift deposits south of Syracuse. The owner of the sand bed claimed to have found a goodsized diamond in the drift which was deposited in a Syracuse bank and later sold to a party in Springfield, Mass., for two hundred and fifty dollars. Another so-called diamond obtained from this same sand pit was shown to Dr. Hopkins by the owner, but a hasty examination convinced him that it was a However, nothing positive was known topaz. concerning the character of the first found stone. Geologists were advised to watch carefully excavations, both in the disintegrated dike and in the drift material, for possible diamonds. PHILIP F. SCHNEIDER,

Secretary.

# DISCUSSION AND CORRESPONDENCE.

## HONORARY DEGREES.

To THE EDITOR OF SCIENCE: I have been very much interested in your note in the issue of October 27, concerning the honorary degrees conferred at the recent inaugural of the University of Illinois. Instead of the too prevalent practise of conferring the degree of doctor of laws indiscriminately on all of the gentlemen whom it was desired to recognize, it is pleasing to see the degree of doctor of science given to a gentleman of distinguished scientific attainments, that of doctor of engi-