

Germany 'Centralblätter' for nearly all the sciences, and there are in all countries 'trade journals' for the applied sciences such as medicine and engineering. But there exists no journal covering the whole field of scientific philosophy, psychology, ethics and logic, appearing at frequent intervals and appealing directly to the interests of all professional students. It is a matter of importance at the present time that the relations between philosophy and psychology should remain intimate, and that the fundamental methods and concepts of the special sciences, now receiving attention on all sides, should be kept in touch with philosophy in its historic development. What may be accomplished by the prompt publication of short contributions is demonstrated by the *Comptes Rendus* of the Paris Academy, whose four-page articles cover nearly the whole scientific activity of France. A fortnightly journal is particularly suited for discussion, the interval being just long enough to permit of questions and answers. Finally the special function of such a journal is the quick and complete publication of reviews and abstracts of the literature."

*The Botanical Gazette* for December contains the following articles: E. N. Transeau, in a paper 'On the Geographic Distribution and Ecological Relation of the Bog Plant Societies of Northern North America,' finds that the bog plant societies of North America show an optimum dispersal in moist climates subject to great temperature extremes. Relations of the bog societies are with the conifer rather than with the deciduous forests. The bog societies are considered as relicts of former widespread societies, and are observed in various places largely because of favorable temperature conditions. Edward W. Berry discusses 'Aralia in American Paleobotany,' giving a critical account of the fossil forms that have been referred to this genus.—In his concluding instalment of 'The Vegetation of the Bay of Fundy Salt and Diked Marshes: an Ecological Study,' Professor Ganong considers the mesophytic and hydrophytic conditions of the Bay of Fundy marshes, also the succession of plants in place and time. In his conclusion he makes an earnest appeal for more

careful description of ecological facts, longer periods of study before publication, and advance in the method of correlating meteorological data with vegetation, the recognition of physiological as well as structural adaptations, and a careful study of the exact nature of plant cooperation and competition.—Alice Eastwood publishes a synopsis of *Garrya*, a characteristic California genus, and describes three new species.—J. Y. Bergen, in a study of 'The Transpiration of *Spartina junceum* and other Xerophytic Shrubs,' has reached the conclusion that during the leafy season the relative power of transpiration of the leaves compared with that of the cortex is much greater for equal areas, and that leafless individuals of *Spartina* grow but little in any season.

#### SOCIETIES AND ACADEMIES.

##### THE SAN FRANCISCO SECTION OF THE AMERICAN MATHEMATICAL SOCIETY.

THE fourth regular meeting of the San Francisco Section of the American Mathematical Society was held at the University of California on December 19, 1903. Fourteen members of the society were present. A number of other teachers of mathematics living in or near San Francisco attended both of the sessions. The following officers were elected for the ensuing year:

*Chairman*—Professor Allardice.

*Secretary*—Professor Miller.

*Program Committee*—Professors Haskell, Stringham and Miller.

The dates of the regular meetings of the section were changed from May and December to February and September. This change is to go into effect after the next regular meeting, which will be held at Stanford University in May. The following papers were read:

DR. E. M. BLAKE: 'Exhibition of models of polyhedra bounded by regular polygons.'

PROFESSOR M. W. HASKELL: 'Brianchon hexagons in space.'

PROFESSOR R. E. ALLARDICE: 'On the locus of the foci of a system of similar conics through three points.'

PROFESSOR IRVING STRINGHAM: 'On curvature in absolute space.'

PROFESSOR H. F. BLICHFELDT: 'On the order of linear homogeneous groups II.'

PROFESSOR E. J. WILCZYNSKI: 'Studies in the general theory of surfaces.'

PROFESSOR E. J. WILCZYNSKI: 'A fundamental theorem in the theory of ruled surfaces.'

PROFESSOR G. A. MILLER: 'On the roots of group operators.'

DR. D. N. LEHMER: 'On the Jacobian curve of three quadric surfaces and a certain ruled surface connected with it.'

DR. D. N. LEHMER: 'On a new method of finding factors of numbers.'

MR. W. A. MANNING: 'On the primitive groups of classes six and eight.'

PROFESSOR M. W. HASKELL: 'Approximations to the square root of positive numbers.'

In the absence of their authors, Dr. Blake's models were explained by Professor Haskell, Professor Wilczynski's papers were presented by Dr. Lehmer, and Mr. Manning's paper was read by the secretary. G. A. MILLER,

*Secretary.*

#### ANTHROPOLOGICAL SOCIETY OF WASHINGTON.

THE 352d meeting was held December 15, 1903. The committee on the preservation of ancient monuments reported a form of petition to congress which might be sent out for signatures. The report was accepted, the committee continued and instructed to give publicity to the petition, and they were authorized to frame a bill on the lines of the petition.

Mr. W. H. Babcock communicated to the society a letter from Mr. J. E. Betts on the aborigines of China called Changkia and Miao.

The paper of the evening was by Dr. George Byron Gordon, of Philadelphia, on the subject, 'The Ruins of Copan.'

Doctor Gordon traced the limits of the Maya and Aztec peoples, and said that they sprung from a stem whose origin and location is wrapped in mystery. Views of the elaborately carved monoliths of Quirigua were thrown on the screen and Doctor Gordon said that those showing bas reliefs of men are placed to the north and those of women to the south of a given line through the ruins. No metals were found here and few stone tools, but the sculpture was worked out with stone implements. The phases of art displayed in

the monoliths were discussed and it was pointed out that the dragon-like carvings of serpents represent the rattlesnake, the spots on the back being transferred to the side in the carving. Views of the sculptures, the ruins and surroundings of Copan were next presented and discussed. One of the pyramids has been partly cut away by a stream, and in the section are a number of successive pavements and sewers, giving evidence of considerable antiquity to the structures.

Dr. H. M. Baum asked whether the present Mayas are descendants of the people who made the buildings. Doctor Gordon replied that none of the tribes know anything about them so far as any one has been able to discover.

Doctor Fewkes said that the Pueblo Indians call the north, male; the east, female; the south, male; and the west, female. The great plumed serpent of the Pueblo mythology is also related to the serpent of Central America. Doctor Fewkes believes that the different cities of Copan carry back man on this continent a long period.

Doctor Hrdlicka said, in reference to the buried cities of Copan exposed in the section of a pyramid, that the work may represent different periods of advancement of the structure rather than different ages.

At the close of the meeting a vote of thanks of the society was given to Doctor Gordon for his interesting paper. WALTER HOUGH.

#### THE SCIENCE CLUB OF THE UNIVERSITY OF WISCONSIN.

A MEETING of the club was held on November 17, when two papers were presented by Professor Augustus Trowbridge, as follows: (a) 'Personal Reminiscence in an Italian University.' This paper was illustrated with lantern slides and dealt with the lecturer's experiences while recently traveling in Italy. (b) 'New Experiments in Wireless Telegraphy,' was a description of some recent original devices got up by the lecturer for receiving wireless messages. The paper was illustrated, and wireless messages were received in the lecture room during the lecture.

VICTOR LENHER,  
*Secretary.*