

man and the lower animals by the biogenetic law of Haeckel. He also made some suggestions about the best method of studying and of teaching anatomy. It was claimed that in the biogenetic law of Haeckel a scientific background, or rather a working hypothesis, was given, by means of which the recorded facts of zoology, botany, paleontology, etc., were made understandable and really became useful to science. He also gave a definition and illustration of the meaning of the term differentiation as used in biology.

Three new members were elected.

At the meeting of February 7, 1898, fourteen persons present, a paper by Professor A. S. Hitchcock, on the ecological plant geography of Kansas, was presented and referred to the Council for publication. Professor L. H. Pammel spoke on the anatomical characters of seeds from the standpoint of systematic botany, presenting in abstract the results of an extensive study of the subject, on which he has been engaged for some years past.

Twenty-four new members were elected.

WILLIAM TRELEASE,
Recording Secretary.

AMERICAN CHEMICAL SOCIETY.

THE regular meeting of the New York Section of the American Chemical Society was held on Friday evening, February 4th. Dr. Wm. McMurtrie presided, and seventy-two members and visitors were present.

The chairman opened the meeting with a very interesting surprise in the announcement that he had just received a half-gallon of liquid air from Mr. Tripler, and the first half-hour was occupied in an exhibition of its properties.

The liquid was ladled out of a covered receptacle packed in several thicknesses of felt, very much as if it had been ordinary ice water, but on pouring it into any glass, porcelain or iron vessel it boiled with great violence until the container cooled to the temperature of the intensely cold liquid, which means about -310° F.

Drops falling on the lecture table immediately took the spheroidal form and ran about exactly as drops of water on a hot stove. Placed in a glass beaker the liquid first boiled, then became clouded with a crystalline precipi-

tate of carbon dioxide, which was present as an impurity, and from which it was separated by filtration through an ordinary paper filter, and the clear liquid was caught in a double-walled glass cylinder. The space between the walls, having been exhausted, to produce a vacuum, the clear, slightly blue liquid air remained in the tube for over an hour before complete evaporation. Among other experiments, alcohol was quickly frozen, rubber tubing was hardened by the low temperature so as to break when struck by a hammer almost like glass, and a piece of thin sheet iron, after immersion in the cold liquid, became very brittle.

The following papers were read: 'Determination of Boric Acid,' T. S. Gladding; 'Recent Progress in the Chemistry of the Leather Industry,' J. H. Yocum; 'Review of Chemical and Physical Methods for Examining Documents and Handwriting,' C. A. Doremus.

The next meeting will be held on March 11th.

DURAND WOODMAN,
Secretary.

NEW BOOKS.

Text-Book of Zoology. T. JEFFERY PARKER and WILLIAM A. HASWELL. London and New York, The Macmillan Company. 1897. Vol. I., pp. xxxv + 779. Vol. II., pp. xx + 683. \$9.00.

Lehrbuch der Entwicklungsgeschichte des Menschen. J. KOLLMANN. Jena, Gustav Fischer. 1896. Pp. xii + 658. 15 Marks.

Organographie der Pflanzen. K. GOEBEL. 1st Part, *Allgemeine Organographie.* Jena, Gustav Fischer. 1898. Pp. ix + 232. 6 Marks.

Laboratory Experiments on the Class Reactions and Identification of Organic Substances. ARTHUR A. NOYES and SAMUEL P. MULLIKEN. Easton, Pa., Chemical Publishing Co. 1897. Pp. 28. 50 cts.

The Freezing Point, Boiling Point and Conductivity Methods. HARRY C. JONES. Easton, Pa., Chemical Publishing Co. 1897. Pp. vii + 64. 75 cts.

Garden Making. L. H. BAILEY. New York and London, The Macmillan Company. 1898. Pp. vii + 417. \$1.00.