

is furnished by Martin Smallwood, who also discusses the development of the Medusa and the origin of the sex cells. The Medusæ of *Pennaria* are considered to be in a degenerate condition. The 'Reversal of Cleavage in *Ancyclus*' is described by Samuel J. Holmes, who considers that it has a special significance from the fact that the left-handedness of this genus has probably arisen independently of that of *Physa* and *Planorbis*. The 'Synopsis of North American Invertebrates' is continued by C. H. Turner, who furnishes a 'key to the Fresh-Water *Ostracoda*.' In the Reviews of Recent Literature, zoology claims an unusually large share.

THE *Journal of the Boston Society of Medical Sciences* commences its fourth volume with the October number. Under the title 'Recent Additions to the Warren Museum of the Harvard Medical School,' Thomas Dwight describes briefly a series of interesting abnormal human backbones. G. Hay discusses 'A Curious Relation between the Positions, as given by Dr. Weiland, of two Linear After-Images, studied in connection with the Law of Listing, and the Corresponding Angles of two Pairs of Great Circle Planes, as given by Helmholtz.' J. H. Wright contributes three beautiful plates showing a number of 'Photographs of Malarial Parasites.'

SOCIETIES AND ACADEMIES.

THE NEW YORK SECTION OF THE AMERICAN CHEMICAL SOCIETY.

THE October meeting of the New York Section of the American Chemical Society was held on Friday evening, October 6th, at the Chemists' Club, 108 West 55th Street.

The following papers were read :

'Some Notes on the Year's Progress in Applied Chemistry,' by William McMurtrie.

'Filters for Purifying Public Water Supplies,' by Allen Hazen.

'The Mordanting and Dyeing of Silk,' by Rafael Granja.

Robert Wilhelm Eberhard Bunsen, In Memoriam. A Tribute from former Pupils.

Dr. Doremus asked for original papers for presentation at the conference to be held in Paris next August.

The question of holding an extra meeting in November was discussed, but no final action taken.

E. E. SMITH,

Sec'y Pro. Tem.

THE regular meeting of the Section was held in the assembly room of the Chemists' Club, 108 West 55th Street, on Friday evening, November 10th. Sixty members were in attendance, Dr. C. T. McKenna presiding. The following papers were read :

1. Wm. McMurtrie, 'Some Notes on the Year's Progress in Applied Chemistry.'

2. M. Trubek, 'The Technical Analysis of Licorice Paste.'

3. P. A. Levene, 'On the Chemistry of Mucin.'

Dr. McMurtrie's continuation of his paper on the year's progress in applied chemistry was full of valuable material, and covered a wide range of subjects, among them the electrolytic production of alkali, the production of ozone on a large scale for bleaching oils and purification of water, improved shorter methods for manufacture of white lead, and a very full comparison of the efficiency of different gases and gas burners, as well as recent experimental work on the cause of light in the Welshbach mantle, and the best mixtures for the purpose.

It is expected that this paper will be published in full.

The question of a joint meeting with the Philadelphia Section was brought up by the Chairman, who stated that it had been decided to postpone the proposed meeting until after the holidays.

DURAND WOODMAN,

Secretary.

THE WASHINGTON BOTANICAL CLUB.

THE tenth regular meeting of the Club was held at the residence of Mr. C. L. Shear, October 4, 1899. The evening was devoted to informal accounts of the season's work in the field. Mr. Shear described his investigations on the coast of Oregon and Washington, where he was engaged more particularly in studying the sandbinders. *Carex macrocephala*, *Poa macrantha*, and *Elymus arenarius*, he stated, were the best examples of this class of plants in that region. Mr. Pieters spoke of the peculiar conditions of plant growth in the lake district of Central Florida, each variety of soil yielding a different

class of species. Mr. Pollard briefly described a short collecting trip in West Virginia and Virginia.

THE eleventh regular meeting was held at the residence of Mr. C. L. Pollard, November 1, 1899. The election to active membership of Mr. William R. Maxon, of the United States National Museum, was announced. Mr. C. L. Shear spoke of his discovery of a truffle, *Terfezia oligosperma*, in Maryland, stating that this was the first record of its appearance in the United States. His remarks were illustrated by specimens and by microscope slides. Mr. J. N. Rose described the mescal industry of Mexico, exhibiting photographs of the mescal plant itself and of the mode of preparing the liquor, a sample of which was passed around among the members. Mr. L. H. Dewey gave an account of various weeds observed by him on a trip through the southern states during the past summer; the most prevalent species, he considered, were the following: *Leptilon divaricatum*, *Diodia teres*, *Cassia occidentalis*, *C. Tora*, *Helenium tenuifolium*, *Croton capitatus*, and *Solanum rostratum*. Mr. Pollard exhibited the first decade of a distribution of North American Violaceæ undertaken by Professor Greene and himself. Professor John M. Coulter, of the University of Chicago, who was present as a guest of the Club, gave a short address on the organization and aims of the department of botany in that institution.

CHARLES L. POLLARD,
Secretary.

DISCUSSION AND CORRESPONDENCE.

THE SCIENCE OF METEOROLOGY.

TO THE EDITOR OF SCIENCE: In reading the admirable address by Dr. Marcus Benjamin, in your JOURNAL of November 3d, it occurs to me that the learned Doctor is rather hard on meteorology when he speaks of "*that science which we now dignify by the name of meteorology*" (see page 628). Are we to understand that this science has recently been dignified by giving it this new baptismal name? Have we of the present generation devised this dignified name for a new branch of science? My understanding is that meteorology as a branch of philosophical study is quite as old as astronomy, if

not older, and that the name 'meteorologia' originated with that profound school of philosophy of which Plato and Socrates were the exponents. To them, or possibly even to their predecessors, we owe the system of nomenclature 'astronomia,' 'meteorologia,' 'geometria,' etc., by which they designated the various branches of knowledge. Doubtless, Dr. Benjamin meant to refer to 'that science which Plato and Socrates dignified by the name of meteorology.' The correction is worth making in order that your readers may not forget that the study of the atmosphere has from the most ancient times been recognized as a distinct branch of science.

C. A.

NOTES IN PHYSICS.

THE MAGNETIZATION OF LONG IRON BARS.

DR. C. G. LAMB, in the *Philosophical Magazine* for September, gives some interesting experimental results concerning the distribution of magnetic induction along a long cylindrical iron rod. When the rod is weakly magnetized, the mean positions of its poles are comparatively near the ends of the rod; with stronger magnetization the poles move farther from the ends; and with very strong magnetization the poles move more and more towards the ends. This result, as Dr. Lamb points out, has important bearing upon the magnetic testing of iron by Ewing's method.

THE VELOCITY OF THE CHARGED AIR PARTICLES NEAR A DISCHARGING METAL POINT.

PROFESSOR A. P. CHATTOCK in the *Philosophical Magazine* for November, gives the results of a very ingenious determination of the velocity of the charged air particles or *ions* in the electrical discharge from a metal point. He finds the velocity to be 413 centimeters per second for positive ions, and 540 centimeters per second for negative ions, both for an electric field of 300 volts per centimeter. This result is in remarkable agreement with the velocities of the air ions which are produced by X-rays and by uranium radiations. Professor Chattock also shows that the velocity of the wind which blows from a discharging point is not greater than 2 per cent. of the velocity of the ions, and