algæ, as some Polysiphonias, in forming a cortex by developing a layer of cells on its surface. The latter small cells absorb mineral matter, especially silica and lime. The Characeæ are important purifiers of water by means of this surface absorption. They are also interesting as examples of the great length to which it is possible for a single cell to develop—sometimes reaching 12 feet.

EDWARD S. BURGESS,
Secretary.

MEETING OF THE AMERICAN CHEMICAL SOCIETY.

THE regular meeting of the New York Section of the American Chemical Society was held on Friday evening, January 7th, at the College of the City of New York,* Dr. Wm. McMurtrie presiding.

Mr. G. E. Stone exhibited samples of manganese alloys of the following composition:

	Spiegel.	White.	Gray.
Total carbon.....	4.92	4.45	3.98
Graphitic carbon.....		2.43	3.14
Silicon.....	1.94	1.51	3.25
Manganese.....	11.00	11.00	11.00
Phosphorus.....	0.04	0.04	0.04
Iron, sulphur, etc., difference	82.10	80.57	78.59
	100.00	100.00	100.00

The alloys are characterized by great hardness and strength, as compared with ordinary pig irons.

Mr. P. C. McIlhiney described a method of determining the resistance of electrolytes having the advantage of making readings at very short intervals. The more accurate method of Kohlrausch requires two minutes between readings, while by the method described a reading may be made every five seconds, which was necessary in the work for which the method was devised.

Professor Loeb gave a very exhaustive review of the speculations in regard to variations of the atomic weights, the theories of condensation, of the 'meta' elements and of ideas in regard to simpler forms of matter. He protests against the notion that any simpler conditions would result from assuming that all elements are a form of one element, and considers that the acceptance of a reasonable number of forms of matter is a decided advantage.

Miss Hitchcock reported experiments showing that nitrogen was given off from tungsten and molybdenum oxides when reduced in a current of hydrogen. On lowering the temperature the amount of nitrogen decreased and increased on again raising the heat. Argon and helium were not found. The results obtained on other oxides indicate that nitrogen is generally present and is considered as a cause of obtaining low atomic weights by the reduction method. Further results are promised.

DURAND WOODMAN,
Secretary.

BIOLOGICAL SOCIETY OF WASHINGTON.

THE eighteenth anniversary meeting of the Biological Society of Washington, D. C., was held on the evening of January 7th. The subject of the presidential address, by Dr. L. O. Howard, was 'A Great Experiment in Economic Entomology: The Work of Massachusetts against the Gipsy Moth.' Both the practical and biological aspects of the work were considered. The address will not be published in full, but the practical portion will appear in Bulletin 10, New Series, Division of Entomology, United States Department of Agriculture. The biological portion comprised a consideration of the interesting points which have developed in the course of the work of the committee of the State Board of Agriculture for Massachusetts, under the direction of the entomological adviser, Professor C. H. Fernald. The points especially considered were the analyses of the caterpillars fed upon arsenical poisons, the experiments upon rate of travel, amount and character of food, effects of starving, of heat and cold upon the larvæ, the occurrence of hermaphroditism, of polygamy and polyandry with the adults, the experiments upon the eggs, especially as to the effects of heat and cold, and the very important and interesting work done on the assembling of the adults. More detailed consideration was given to the biological interest attaching to the work as a whole, as an attempt to exterminate a species existing under the most favorable circumstances over a considerable extent of country.

F. A. LUCAS.