Drift Section and Glacial Striæ in the Vicinity of Lamoni.'

The facts brought together in this symposium serve to clear up a number of debated questions relating to the glacial and interglacial deposits in Iowa, and must serve as a most substantial basis for any further studies of this interesting and important subject.

The following papers read by title were referred to the Secretary for publication in the Proceedings:

L. H. Pammel, J. R. Bumip and Hanna Thomas, 'Comparative Study of Berberidaceæ.'

L. H. Pammel, 'Notes on Fungi in Iowa for 1896–7.'

G. W. Carver, 'Notes on Fungi in Iowa for 1895–6.'

This meeting of the Academy was one of the best attended and most interesting in its history.

Its next annual meeting will be held in December, 1898.

The following officers were elected for the ensuing year: President, Professor T. H. Macbride, Iowa City; First Vice-President, Professor B. Fink, Fayette; Second Vice-President, Professor M. F. Arey, Cedar Falls; Secretary-Treasurer, Herbert Osborn, Ames; elective members of Executive Committee, Professors S. W. Beyer, Ames; A. C. Page, Cedar Falls; and W. H. Norton, Mt. Vernon.

HERBERT OSBORN.
Secretary.

CURRENT NOTES ON ANTHROPOLOGY.

THE PRE-MYCENÆAN CULTURE.

A SCORE of years ago the early history of Greece was bounded by a Homeric fog, a thousand years or so B. C. Then came the brilliant researches of Schliemann at Hissarlik, Tiryns and Mycenæ, and the fog lifted to reveal the vivid and potent Mycenæan culture at its acme, about 1500 B. C. Now, once more, the clouds have rolled away, and investigations on the islands of the Archipelago and the mainland of Greece have disclosed to us, with abundant clearness, the 'pre-Mycenæan' culture, extending from about 2000 to 3000 B. C.

It is simple and rude, that of the Grecian folk before they had been touched by the Promethean fire which transformed them to the noblest artists of all time. The statues of stone are misshapen and incomplete; the pottery is generally coarse, and it is doubtful if its moulders knew the potter's wheel; its decoration is in lines and spirals only, animal figures being unknown; neither the sword nor gold had yet been discovered; tattooing was common; and the general condition was that of barbarism.

A full, well illustrated and instructive article on this culture is that of C. Blinkenberg, in the Memoires de la Société Royale des Antiquaires du Nord, 1896.

CONTRIBUTIONS TO THE STUDY OF THE STONE AGE.

PROFESSOR ENRICO H. GIGLIOLI, of Florence, has recently published a number of interesting papers bearing on the industries of the stone age in various parts of the world.

In one he describes, from an unpublished MS., the stone age in New Caledonia as it now exists. It is in the neolithic stage, but the period is not far distant when it emerged from paleolithic types. Another article describes various stone implements still in use among the tribes of the Rio Napo, in South America. They are principally axes of various sizes and forms. Again, from Melaneria, he figures and describes the formidable maces of the natives of New Britain, made of hard wood, the end armed with a perforated stone, spheroidal in shape. Finally, in a note with several illustrations, he explains the use of the stone-armed threshing machine still a common implement in Tunisia. These and

other articles by Professor Giglioli are published in the *Archivio per l'Antropologia e l'Etnologia*, Florence.

D. G. BRINTON.

UNIVERSITY OF PENNSYLVANIA.

NOTES ON INORGANIC CHEMISTRY.

IN the *Comptes Rendus* the question of the identity of argon with nitrogen is taken up by H. Wilde, and the description given of an attempt to convert the spectrum of the one into that of the other. At a pressure of one millimeter and temperature of —76° the electric spark was passed through nitrogen for eight hours, but the spectrum remained unchanged. A negative result was also obtained when a strong spark was passed for eighteen hours through nitrogen at a pressure of twenty atmospheres. The spectrum of argon also remained unchanged by the passage of the spark at a pressure of three millimeters at a temperature of —76°.

THE work of Moissan on the metallic carbids and silicids has now been carried out, in conjunction with P. Williams, on the borids of the alkaline earths. Calcium borate, aluminum and carbon are heated together in the electric furnace. Calcium borid is obtained as a fine black powder which under the microscope consists of transparent, yellow, cubic crystals. They scratch the ruby, and are fusible at the temperature of the electric furnace. The crystals do not burn in the air until heated to redness; fluorin attacks them in the cold, chlorin at a red heat; hydrogen is without action at this temperature. Water is without action upon the crystals until a temperature of 1000° is reached. The fused borid is, however, acted upon by water with evolution of hydrogen. The borid has the formula CaB_6, but there seems to be a less stable borid with a smaller proportion of boron. The strontium and barium borids are similarly formed and possess analogous formulæ and properties. The borids of the alkaline earths thus do not fall in the same class with the carbids and silicids.

PROFESSOR MICHAELIS, of the University of Rostock, has published, in the last *Berichte*, the description of a considerable number of organic compounds of selenium, tellurium, antimony and bismuth. The tetrachlorids of selenium and tellurium unite with aromatic ethers, phenoles and ketones, giving products in which two atoms of chlorin are replaced by the organic radical. When the dichlorid of selenium is used, both chlorin atoms are replaced. The close analogy between selenium and tellurium is shown in these compounds. With antimony chlorid, anisol and phenetol react in benzene solution only in the presence of metallic sodium. Compounds of antimony with three and two anisyl groups are described, as well as a number of addition products in which the antimony is quintivalent. Analogous bismuth compounds are similarly formed. The whole work forms a valuable contribution to the relatively little known field of the compounds of organic radicals with the elements of higher atomic weight.

IN the above number of the *Berichte*, Melikoff and Pissarjewsky discuss the constitution of the salts of peruranic acid, which have been previously studied by Fairley. They consider the salts to have the formula $(R_2O_2)_2UO_4$, and to be compounds of the metallic peroxids with uranium tetroxid. By treatment with aluminum hydroxid they succeed in actually decomposing the salts into the peroxids and UO_4.

GEORG BERG has added to the number of 'complex acids' a compound of titanic acid with malic acid. As described in the *Zeitschrift für anorganische Chemie* it has the formula $2TiO_2.C_4H_6O_5$, $6H_2O$ and crystallizes in minute white prisms. When ammonia is led over it, three molecules of the water of crystallization are replaced by ammonia,