

Dr. F. H. H. Calhoun, who discussed two features of glaciation in the northwestern part of Montana. The first was as to the relative ages of the ice of the Kewatin ice sheet, and the ice of the mountain glaciers. The second dealt with the question of the Albertan drift period. From data gathered in the three river valleys, the conclusion was reached that the mountain ice was the older of the two sheets. In the valley of Birch Creek a valley train from the mountain glacier was found beneath lake deposit formed in front of the Kewatin ice sheet. In the valley of the Two Medicine River, the moraine of the mountain ice was covered by lake deposit, and in the same valley further east, the moraine of the Kewatin ice sheet rested on a valley train from the mountain glacier. In the valley of the Belly River, the mountain drift was found under the Kewatin drift. Dr. Calhoun also arrived at the conclusion that the so-called Albertan drift sheet of Dawson was nothing more than old river gravels picked up by the Kansan ice sheet, and now found at the bottom of that drift sheet. This paper will be published by the U. S. Geological Survey.

HAVEN METCALF,

Secretary.

ONONDAGA ACADEMY OF SCIENCE.

At the last meeting of the Academy, held in Syracuse, N. Y., October 21, Dr. H. C. Cooper addressed the meeting on 'Physical Chemistry and its Service to the Other Sciences.'

Physical chemistry was shown to have an important bearing on physiology in virtue of the application of the modern theory of solution to vital processes and the discovery of the similarity of behavior between enzymes and inorganic contact agents. The work of van't Hoff and his pupils on chemical equilibria in various geological formations, and the determinations of the transition-points of geologically important substances were commended to the study of geologists. The speaker also showed how, by physico-chemical methods, various physiologically and mineralogically important substances have been prepared in the laboratory.

J. E. KIRKWOOD,

Corresponding Secretary.

WELLESLEY COLLEGE SCIENCE CLUB.

THE first regular meeting of the club for the year was held at the Whitin Observatory on October 18. Professor Ellen Hayes presented a paper on 'Nature the Master of Man.'

The second meeting was held in the Physics Lecture Room on November 8. Mr. Albert E. Leach, of the Massachusetts State Board of Health, read a paper on 'The Purity of our Food.'

GRACE E. DAVIS,

Secretary.

DISCUSSION AND CORRESPONDENCE.

DAVENPORT'S 'STATISTICAL METHODS.'

TO THE EDITOR OF SCIENCE: In the preface to the second edition of Dr. C. B. Davenport's useful 'Statistical Methods' occur the following sentences: "Especial attention is called to Table IV., which is an extension of Table IV. of the first edition that was calculated by Professor Frederick H. Safford, and appears to have been the first published table of the normal probability integrals based on the standard deviation. More recently Mr. W. F. Sheppard has published in *Biometrika* a similar table. * * *"

In justice to Mr. Sheppard I wish to point out that his tables in *Biometrika* are only the extension of the table which appears in his memoir read before the Royal Society in 1897 and issued in 1898 (cited by Dr. Davenport, second edition, pp. 84, 101). Dr. Davenport's first edition of his 'Statistical Methods' did not appear until 1899. Thus there can be no claim as to priority for Professor Safford's table of 1899. If we desire to be absolutely accurate in the matter, we shall probably not attribute the first published table even to Mr. Sheppard, still less to Professor Safford. On the other hand, Mr. Sheppard's table at present stands quite unsurpassed for its range, accuracy and the number of decimal places in the probability integral.

KARL PEARSON.

UNIVERSITY COLLEGE, LONDON, ENGLAND,
November 5, 1904.

CORALS.

TO THE EDITOR OF SCIENCE: I find myself in the position of an author replying to a