

G. L. CANNON: 'The Necessity for Science Conferences in Colorado.'

JUNIUS HENDERSON: 'The Collecting of Mollusks in Colorado.'

T. D. A. COCKERELL: 'The Fossil Beds of Florissant.'

A. E. BEARDSLEY: 'The Crustaceans of Colorado.'

H. E. SOVEREIGN: 'Apparatus illustrating the Laws of Electromagnetic Induction.'

A. N. FINN: 'A Report on the Quantitative Analysis of Uranium and Vanadium.'

J. ARTHUR BIRCHLEY: 'A Study of the Kater Pendulum.'

WM. DUANE: 'New Kinds of Radiation.'

G. S. DODDS: 'The Projection Microscope for Work in Botany and Zoology.'

W. D. ENGLE: 'The Effect of Bile on the Surface Tension of Water.'

GEORGE I. FINLEY: 'Recent Geological Correlation Work in the Cañon City Field.'

PHILIP FITCH: 'A Review of the Development of the Modern Kinetic Theory of Gases as a Basis for the Study of Radioactivity.'

F. L. ABBOTT: 'Producer-gas and Producer-gas Engines.'

J. VINCENT DANIELS: 'A Report on the Formation of Malic Acid by Fermentation.'

All of the institutions in the state of collegiate grade were represented by delegates, and a number of the larger high schools as well. A public address was given by Professor Thomas H. MacBride, of the State University of Iowa, his subject being 'The Response of Plants.'

FRANCIS RAMALEY,
Secretary, Local Committee.

DISCUSSION AND CORRESPONDENCE.

A PERSISTENT ERROR.

MY attention has recently been called to an error in the use of geologic names, which, since I am inadvertently responsible, it seems desirable I should correct.

The terms Des Moines and Missourian have been in use for some years, especially in the publications of the Iowa and Missouri Surveys, for the lower and upper coal measures of the older classification. When I prepared for the 22d Annual Report of the U. S. Geological Survey a brief discussion of the western interior coal field, I was located in a mining camp with no opportunity for stenographic

services. The report was, therefore, written out in long hand and sent down to Washington to be copied. Instead of being returned to me it went through the press, and I had no opportunity to examine it until the printed copies came to hand. It seems that in one of the early pages of the manuscript, by some inadvertence I had transposed the terms. The editor with painstaking care transposed them through all the remainder of the manuscript to correspond to this one wrong usage, and they appeared in this form in the published paper. The mistake was to my mind so obvious, and the usage so well established, that I never considered it worth while to make the correction. However, it misled Dr. Buckley, of the Missouri Survey, and in his report on the quarry industry the terms are accordingly misused. His attention having been called to this, the following note was made in the Geology of Moniteau County, page 8:

Attention is here called to the names Missourian and Des Moines, in the use of which there is evidently some confusion. In the earlier reports of the Iowa and Missouri Geological Surveys the term 'Missourian' has been applied to the upper coal measures, and the term 'Des Moines' to the lower coal measures. In the late reports of the U. S. Geological Survey (22d Annual Report, part 3, plate 22, page 341), their use has been reversed, the term 'Missourian' being applied to the lower coal measures, and the term 'Des Moines' to the upper coal measures. These names were first applied in the Missouri reports during the Keyes administration, and there appears to be no good reason for reversing their application.

This would seem to have been sufficient to make the matter clear, but in the report of the coal-testing plant of the U. S. Geological Survey, Professional Paper 48, page 74, the wrong usage again appears. I desire, therefore, to enter protest in public against the persistence of the usage, which was a typographical mistake to begin with, and for which there is, as Dr. Buckley says, no good reason.

H. FOSTER BAIN.

THE NORTHERN LIMIT OF THE PAPA TREE.

THE article by Dr. C. A. White in the May 11 issue of SCIENCE on the northern limit of