

in the cell-cytoplasm and karyoplasm rather than in the glycogen as a substance by itself. It seems to the writer that the physiologist must demand very conclusive evidence before he can accept the view that "glycogen plays the part of a carrier to the tissues; that it contributes somewhat to the building up without losing its own molecular identity; that it is present at the formation of tissues and employed therein without becoming part of them."

In conclusion, it must be stated that the volume contains a record of most careful observations and that it is replete with interesting and important facts bearing upon the distribution of glycogen in embryonic tissues. Further, due weight must be given to Dr. Creighton's conclusions, although, as already stated, it appears to the writer that physiologists will have some difficulty in accepting them in their entirety.

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Analytic keys to the genera and species of North American Mosses. By C. R. BARNES. Revised and extended by F. D. HEALD, with the cooperation of the author. Bull. Univ. Wis. Sci. ser. I., 5, pp. 157-368, 1897.

This bulletin is the 3d edition of analytical keys of mosses published by the author. The first edition, published in 1886, included only the genera recognized in Lesquereux and James' Manual. To this was added in 1890 keys to the species, including descriptions of those published since the issue of the Manual. During the past decade there has been great activity in the study of North American mosses, which is shown in the description of 603 species and varieties since the publication of the Manual and up to January 1, 1896. The present bulletin includes besides the analytical keys descriptive of these 603 species and varieties as an appendix.

As a basis for the nomenclature used in the work the author has followed Renault and Cardot's *Musci Americæ Septentrionalis*, preferring to do this rather than make new combinations which would necessitate the citation of the 'Analytical Keys' in future taxonomic work. The former keys have been very useful to bryologists in this country, and students of the

mosses have been further placed in debt to the author by this comprehensive revision of the work.

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SCIENTIFIC JOURNALS.

JOURNAL OF GEOLOGY, FEBRUARY-MARCH, 1897.

Professor Geikie's Classification of the North European Glacial Deposits. By K. KEILHACK. The classification proposed in this *Journal* by Professor James Geikie, in which six glacial epochs separated by five interglacial epochs are recognized, is criticised. In its place is offered an unofficial announcement of the results of the detailed mapping carried on by the Royal Prussian Geological Survey.

The Average Specific Gravity of Meteorites. By O. C. FARRINGTON. Account is taken of both the weight and the specific gravity of 142 specimens which give an average of 3.69.

Drift Phenomena in the Vicinity of Devil's Lake and Baraboo, Wisconsin. By R. D. SALISBURY and W. W. ATWOOD. The region studied is on the eastern edge of the Driftless Area where the Wisconsin ice pushed out over certain high quartzite ridges. The rough topography (900-1600 A. D.) lead to certain exceptional phenomena in connection with the drift border. The ice mounted the high ridges but halted on the summits in a most peculiar manner. The edge of the ice is marked by a moraine of the character known as 'Endmoräne' by the Germans. Where it crossed the 'Devil's Nose' the slope of the upper surface of the edge of the ice was measured and found to be about 320 feet per mile. This measurement has the exceptional interest of being the first recorded measurement at the extreme margin of the ice. Skillet creek was diverted by the filling up of its lower course by the overwash; the Baraboo was dammed and a temporary lake was formed, and on the east quartzite bluff a smaller lake was formed which finally became extinct by the complete filling up of its basin.

Comparison of the Carboniferous and Permian Formation of Nebraska and Kansas, II. By CHARLES S. PROSSER. A continuation of the author's paper in the preceding number of the *Journal*. The Nebraska City section is quite