

combination of 40-inch focal length was used by reversing the lens and putting the flint and crown about 1 mm. apart. A number of views were shown to illustrate the advantages of such lenses.

Several pictures were taken with an ordinary spectacle lens, 34-inch focus, stopped to about $\frac{3}{8}$ -inch diameter, which were very good indeed and scarcely distinguishable from those taken with the telescopic lens or a telephotic combination. Such a lens can be bought for ten cents.

J. F. Kemp spoke of the comparative uselessness of ordinary photographs in the study of mountain geology, and believed that such a simple camera would be of great value in field work. The paper was discussed by others.

WM. HALLOCK,
Secretary of Section.

NEW YORK ACADEMY OF SCIENCES—SECTION OF
GEOLOGY, FEBRUARY 15, 1897.

THE first paper of the evening was by Mr. F. C. Nicholas, and was entitled 'Explorations in the Gold Fields of Western Colombia.' Mr. Nicholas described the curious placers in western Colombia, which, while extremely rich in limited portions, are of very low grade when considered as extended propositions. The gold gravels occur along the western base of the Andes Mountains, and extend from the Gulf of Darien southward, up the Atrato River, to Quibdo. They are also found to the southward of the San Juan River and are in the form of terraces similar to the terraces of the Atlantic States. After the formation of the auriferous gravels the speaker supported the view that igneous intrusions and upheavals had cut them off from their parent hills in the interior and had recognized the drainage, so that the streams do not now head in auriferous rocks. The surface geology indicated that the Gulf of Darien formerly extended a long distance up the valley of the Atrato. Quite detailed descriptions of the gravels and of the character of the terraces were given in the paper. Mr. Nicholas described a route by which a man could sail in a canoe from the Atlantic to the Pacific in the wet season by going up the Atrato River to the Quito River, thence

to the divide, which is in a series of swamps, thence into the San Pablo River and on down the San Juan to the Pacific.

The second paper of the evening was by Professor R. E. Dodge, entitled 'Recent Work in Physiography.'

Professor Dodge gave an outline of De Laparent's 'Leçons en Géographie Physique,' of Sir John Lubbock's 'Scenery of Switzerland,' and of two recent papers, one by M. R. Campbell, entitled 'Drainage Modifications and their Interpretation,' and the other by C. F. Marbutt, 'On the Physical Features of Missouri.'

The last paper of the evening was by A. A. Julien, on the 'Sculpture and Sorting of Sands.' The speaker, by means of lantern slides, illustrated various varieties of sand and their chief methods of origin and their composition. After citing the schemes for the classification of sands advanced by Zirkel and Daubrée he gave one of his own which was more elaborate and was partly based on the method of origin and partly on the physical characters.

J. F. KEMP,
Secretary.

AMERICAN CHEMICAL SOCIETY—NEW YORK
SECTION.

THE meeting was held at the College of the City of New York on Friday, February 5th, at 8:30 p. m., Dr. Wm. McMurtrie presiding, and about fifty members present.

The first hour was occupied with the 'Discussion of the Relations of the Section with the Scientific Alliance.'

Professor Breneman opened the discussion. Dr. Wiley described the work done by the Affiliated Societies of Washington, the advantages resulting from cooperation and more which might result from a little additional effort. He stated that, with possibly one exception, the Washington Societies were all strictly professional.

Professors Sabin, Doremus and others spoke strongly in favor of the Alliance; others thought the promised advantages had not materialized and that the returns were not proportionate to the annual subscription.

Dr. H. W. Wiley read a paper on the 'Value of Foods and the Methods of Ascertaining it,'