

Coast and other countries were described and the occurrence in them of bauxite and several accessory minerals was pointed out. It was shown that laterite was a rock largely composed of the mineral bauxite, which had a definite composition corresponding to the formula $Al_2O_3, 2H_2O$. Details of an experiment to trace the process of laterisation were also given.

P. K. GHOSH: *Biotite bearing greenstones*:—The biotite constituent, which has so far been ascribed to the metamorphic action of the Armorican granite on the pre-existing greenstone, is proved to be the undigested and residual part of the slate fragments stoped by the greenstone magma at the time of its intrusion. Rhyolitic pumice is noted for the first time in this region and its mineralogical characters are described.

W. CAMPBELL SMITH, *General Secretary*

NOTES AND NEWS

MINERALS IN EASTERN EXPOSURES OF THE LOCKPORT IN NEW YORK STATE

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This note deals with certain mineral localities in the Lockport group of Oneida county, New York. The minerals occurring there, in order of abundance, are dolomite, calcite, celestite, sphalerite, quartz, and pyrite. A reference in Dana¹ to the occurrence of gypsum near Starkville, in Herkimer county, probably also refers to an outcrop of the Lockport.

At Sherrill, in outcrops along the Sconodoo Creek, dolomite is extremely abundant, calcite and celestite fairly abundant, quartz, sphalerite, and pyrite, rare. The exposure here is composed of eighteen feet of black shale interbedded with stromatoporoid reef dolomite and overlain by twelve feet of thin bedded, brownish dolomite. A westerly monoclinial dip keeps the principal reef above the surface for about half a mile.

Along the growth surfaces of the stromatoporoid reefs, irregular geodes have developed, decidedly flattened, and curved parallel to the surfaces. They are often a foot in longest dimension but never more than three inches in thickness. In the overlying dolomite the geodes are of a roughly spherical form, up to six inches in diameter. The occurrence of geodes in the dolomite is, however, rather rare as contrasted with their notable abundance in the reefs.

Dolomite lines all of the geodes of the reefs, and occurs as well in those of the dolomite beds. The unit rhombohedron alone was observed. The crystals are small, usually one third to two-thirds of an inch on the long diagonal.

Calcite occurs in the reef geodes in moderate amount as dog-tooth scalenohedra three-fourths of an inch to an inch in length. In the geodes of the upper beds both scalenohedra and nail-head crystals occur. Both dolomite and calcite show the presence of strontium.

Celestite occurs in the reef geodes having crystallized with the calcite, or a little later. It forms small, yellowish, poorly developed, acicular crystals with radiating structure on the surfaces of the dolomite crystals. In the geodes of the upper beds celestite is more common. Here it forms comb-like and radiating masses of white or bluish tabular crystals. Half inch crystals are common, and in the Root collec-

¹ Dana, J. D.; System of Mineralogy, 6th edition, p. 1063 (1914).

tion of Hamilton College there is an aggregate of crystals, apparently from this locality, whose individuals are two and one half inches long and one half inch thick. The faces observed are: (001), (102), (011), and (110). Celestite also occurs in the geodes of the upper beds as white, fibrous masses, with an admixture of calcite.

Sphalerite is not common at Sherrill, occurring only in the upper beds as scattered, anhedral grains. In more easterly localities in Oneida county, however, it is more common. The citations of Beck² of regions near Rome, Vernon, and at Clinton, probably refer to Lockport localities. The principal occurrence of the sphalerite is as cleavable, red-brown masses, with calcite, filling hollows in a breccia of stromatoporoid fragments, the so-called 'horse-bone' conglomerate. It more rarely occurs in developed crystals in the reef itself. Several well developed crystals are in the Root Collection, but their forms have not been determined.

The occurrence of pyrite was observed only at Sherrill, and even here only in very small quantities. It forms minute veinlets, less than an eighth of an inch in thickness, and occasionally small, irregular masses, in the body of the reef. No connection was observed between these masses and veinlets and the geodes of the reefs.

The present officers of the Newark Mineralogical Club are: President, D. T. O'Connell; Vice President, J. A. Grenzig; Secretary, Wm. H. Broadwell. Meetings are held the first Sunday of each month at the Newark Technical School, 367 High Street. The ninety third regular meeting held December 4 was devoted to a general discussion of the subject of "Fluorescence."

At the annual general meeting of the Mineralogical Society, England, held on November 1, Dr. G. T. Prior, keeper of the department of minerals in the British Museum, was elected president.

The department of mineralogy and petrography at Harvard University was able through the Holden Travel Fund to send out several parties during the past summer. Harry Berman accompanied Dr. W. F. Foshag of the U.S. National Museum to Mexico; Professor Larsen mapped the geology of a region near Elsimore, California; and Professor Palache and L. W. Lewis visited a number of mines at Cobalt and Sydenham, Canada.

Dr. Lea McI. Luquer has been appointed research associate in optical mineralogy at the American Museum of Natural History.

Professor M. A. Lacroix, professor of mineralogy at the University of Paris, has been made a foreign member of the Stockholm Academy of Sciences.

Lady Lyell of Kinnordy has presented to the department of geology of the University of Edinburgh valuable collections of minerals, rocks and fossils, together with cabinets for keeping them. In addition Lady Lyell has given many geological books and papers of historical interest from scientific workers of note to the late Sir Charles Lyell.

² Beck, L. C.; Natural History of New York, Part 3, Mineralogy, p. 410 (1842).