

## LAMELLAR CALCITE AT KEYSTONE, SOUTH DAKOTA

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IN May, 1917, in the course of the writer's visit to the South Dakota School of Mines at Rapid City, Professor J. J. Runner called his attention to a peculiar form of calcium carbonate occurring in the Columbia gold mine at Keystone. The fissures in the chloritic schist country rock of this deposit are filled in part with gold-bearing translucent quartz, and in part with the carbonate mineral. Many specimens can be picked up on the mine dump. Some of the carbonate shows the typical rhombohedral cleavage of calcite, but most of it is made up of lamellas with a pearly luster. In convergent polarized light these lamellas yield interference figures which are biaxial with a small axial angle, like aragonite, and Professor Runner regarded them as representing the latter mineral. In other respects, however, the material is not essentially different from the lamellar calcite which has been described in two previous articles in this magazine.<sup>1</sup> The indices of refraction and the specific gravity are essentially those of calcite, and the transition from the normal to the lamellar form is too gradual for distinct crystalline substances to be represented. The unexpected optical behavior suggests, however, a possible explanation of the origin of the lamellar structure: it may be due to the partial alteration of the calcite into aragonite. Further study of this possibility is to be desired.

<sup>1</sup> Lamellar calcite in Rhode Island. A. C. Hawkins. *Am. Min.*, 1 (1), 3, 1916; in Pennsylvania. S. G. Gordon. *Ibid.*, 1 (4), 55, 1916.

## NOTES AND NEWS.

The Quarterly Bulletin of the Mineral Collector's Association for July-September, 1917 has been issued. It contains an announcement of the raising of the dues to 50 cents per year, payable in advance. Five new members have been added to the society. The Secretary's address is: Edmund Everett Hobbs, Sr., 3 Marron Ave., Utica, N. Y.

We regret to announce the death on October 9th of Amos Peaslee Brown, Professor of Mineralogy and Geology in the University of Pennsylvania. An account of his life and work will be published in a future number of this magazine.

## PHILADELPHIA MINERALOGICAL SOCIETY ANNOUNCEMENTS.

Meeting December 13, 1917. Diseases of minerals. Dr. Henry Leffman. Trips: Sunday, November 18. Edge Hill and Five Points. Meet at City Line, Chestnut Hill at 9 A.M. Thanksgiving Day, November 29. Brinton's Quarry, Osborn's Hill, and Strodes Mill. Meet at 69th St. Terminal at 8.15 A.M.