

*H. Silliman*

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makes it a new mineral under the name hydrocastorite, it having been derived from the decomposition of castorite. It is in part compact, in part it is made up of an aggregate of fine needle-like crystals. Its composition is shown by the analysis: Silica 59.59, alumina 21.35, lime 4.38, water 14.66=99.98.

*Guanajuatite*.—The sulpho-selenide of bismuth from Guanajuato, Mexico, partially described by Castillo, (1873), and later fully described by Frenzel (Jahrb. Min., 1874, 679), was named *frenzelite* in the Second Appendix to Dana's Mineralogy (1875, p. 22). It seems, however, that the same mineral was at first named *guanajuatite* by Fernandez, who described it in full in the Guanajuato paper, "La República" for July 13th, 1873. The latter name should consequently be accepted instead of the name *frenzelite*. The description by Professor Fernandez differs from that of others in that he makes the mineral solely a bismuth selenide ( $\text{Bi}_2\text{Se}_3$ ), and attributes the presence of a small amount of sulphur, shown in his analyses, to the admixture with a little pyrite. The material analyzed by Frenzel received the formula  $2\text{Bi}_2\text{Se}_3 + \text{Bi}_2\text{S}_3$ .

*Silaonite*.—In the paper, "La República," for Dec. 23d, 1873, Professor Fernandez describes a second bismuth selenide from the same locality, the Santa Catarina mine at Guanajuato. It has a lead-gray color, and is compact in structure. Its hardness is a little less than that of calcite; its specific gravity 6.428–6.45. The results of several analyses upon material more or less pure led to the conclusion that the chemical composition is expressed by the formula  $\text{Bi}_3\text{Se}$ .

E. S. D.

12. *Zeitschrift für Kristallographie und Mineralogie*; vol. i, No. 1, 1877.—The first number of this new Journal, recently received, admirably fulfills the promises made in the Prospectus. (See p. 162 of this volume.) It contains the following original articles: Mineralogical contributions by G. vom Rath; description of some immense enstatite crystals from Bamle, Norway, by W. C. Brögger and G. vom Rath; on the crystalline form of lanarkite, by A. Schrauf; on the regular grouping of quartz crystals on calcite, by E. S. Dana; on the dimorphism of hydrochinon and paranitro phenol, by O. Lehmann; a manganese variety of tremolite, by G. A. Koenig; on the form of crystals of barium sulphate, etc., by H. Baumhauer; on the schorlomite from the Kaiserstuhl, by A. Knop. In addition to the above articles, a series of notices and extracts, upwards of thirty in number, and covering as many pages, follow. These are derived from a great variety of sources, and form not the least valuable part of the number. Under the able editorship of Professor Groth, it cannot be doubted that the new Journal will always maintain the high character it has at its commencement.

E. S. D.

13. *Ueber den inneren Zusammenhang der verschiedenen Krystallgestalten des Kalkspaths*, von Dr. F. SCHARFF; 61 pp. 4to, with five plates. Frankfort, 1876.—The memoirs previously published by Dr. Scharff upon the interior crystalline structure of several