stated to contain only 0.3 to 0.5% H_2O, but analysis by Mauzelius showed the correct figure to be 1.52%, so that the formula corresponds well with that of the epidote group. Cerite, the mineral in which cerium was discovered, occurs only at this locality. It has been regarded as variable in composition, but analyses have mostly been made on altered material, and the most nearly correct one appears to be Nordström's, which gives $2(Ca, Fe)O : 3(Ce, La, Nd)_2O_3 : 6SiO_2 : 3H_2O$. Its β is about 1.81.

The deposit is believed to be a contact-metamorphic replacement of limestone.

DISCUSSION

[May be regarded as established, altho there are some uncertainties about the formula which it is to be hoped will be cleared up by the subsequent finding and study of better material. E. T. W.]

DISCREDITED MINERALS.

FAMILY 3. HALIDES.

"Tysonite" (Dana No. 182) = Fluocerite (No. 196)

PER GEIJER: Fluocerite and tysonite. *Geol. För. Förh.*, **43** (1), 19–23, 1921.

Optical study of a specimen of fluocerite from the collection of Berzelius, who first described the mineral, as well as of other fluocerites and of tysonite, has shown the essential identity of all of them (Dana gives "tysonite . . . fluocerite pt."). They differ only in extent of alteration. Crystallographic and chemical evidence, which have been supposed to indicate their difference, are discussed in detail, and the discrepancies are accounted for. The name fluocerite, having priority, should be used for the species. Its formula should be stated as is now done for tysonite, $(Ce, La, Nd)F_3$, and the oxyfluoride formula of Weibull (accepted by Dana) discarded. E. T. W.

NOTES AND NEWS

The delay in the issue of this and the preceding number has been caused by the compositors' strike. It may be several months before we get back to normal again, and we ask subscribers to wait a few weeks before assuming that their copies have been lost in the mails.

Mr. Samuel G. Gordon of the Academy of Natural Sciences of Philadelphia has started on a trip to South America in the hope of obtaining some mineral specimens for the William S. Vaux Collection of the Academy.

ABSTRACTS—MINERALOGY

SOLUTION AND GROWTH FORMS OF QUARTZ FROM SODIUM TETRABORATE SOLUTIONS HEATED UNDER PRESSURE. GABRIEL LINCIO. Turin. *Beitr. Kryst. Min.*, **1**, No. 3, 87–101, 1916.

[Nos. 1 and 2 of Goldschmidt's Beiträge were abstracted in our previous volume, Feb., 1920; some additional numbers have now reached this country, and will be abstracted.]

Spheres of quartz were placed in a pressure apparatus in contact with a solution of borax, so arranged that one could be heated and the other cooled. Growth and solution figures were obtained, the crystallographic features of which are described, with the aid of numerous figures. The trigonal symmetry is well brought out, and light is thrown on the mechanism of solution and deposition. E. T. W.

AN IMPROVED SEPARATION VESSEL FOR HEAVY SOLUTIONS. GABRIEL LINCIO. *Beitr. Kryst. Min.*, **1**, No. 3, 103–105, 1916.

STIBNITE FROM FELSÓBANYA. OSCAR NEFF. Heidelberg. *Beitr. Kryst. Min.*, **1**, No. 3, 107–157, 1916.

An elaborate study of over 100 crystals, yielding 17 forms new to the mineral and 11 others new to the locality, also a few probably new but uncertain ones. The entirely new forms are: (100), (520), (530), (540), (650), (5.5.11), (225), (229), (2.2.11), (293), (10.16.21), (2.10.9), (326), (296), (4.15.12), (563), and (6.8.15). Data as to rank of forms, angles, irregularities, etc., are given Numerous drawings of the crystals are included. E. T. W.

REPORT ON THE DISCOVERY OF DIAMONDS AT ABOMOSA, NORTHWEST OF KIBBI, EASTERN PROVINCE, GOLD COAST. A. E. KITSON. Govt. Press, Accra, Gold Coast, 1919; thru *Min. Abstr.*, **1**, 16, 1920.

Small diamonds were found in Feb., 1919 in the gravels of the Abomo Su and the neighboring streams. 175 stones weighed 4–13/32 carats, the largest 1/8 carat. Good crystals showing octahedron and dodecahedron were observed. The gravels contain also topaz, zircon, black sand, garnet, corundum, rutile, and tourmaline in addition to quartz. The association suggests a granite-pegmatite origin. W. F. H.

THE ALA VALLEY AND ITS MINERALS. EMILIO REPOSSI. *Riv. Sci. Nat. "Natura," Pavia*, **10**, 89–132, 1919; thru *Min. Abstr.*, **1**, 13, 1920.

A detailed description of 11 localities in this region renowned for its wealth of minerals. The minerals occur in bands in the serpentine and include garnet, vesuvianite, diopside, epidote, apatite, clinochlore, magnetite, olivine and titanolivine, albite, prehnite, sphene, etc. Copper, cobalt and nickel minerals have been found in the mountains south of the Valley. [A copy of this article has been received by the Editor from its author; this will gladly be loaned to any one expecting to visit the region, and who wishes to translate it.] W. F. H.

THE PECULIAR SULFUR SPHERULES PRODUCED IN A CRATER LAKE OF THE VOLCANO SHIRANE, KÔZUKE, JAPAN. R. ÔHASHI. *J. Akita Mining Coll.*, No. **1**, 1–10, 1919.

Hollow spherical bodies of S float on the surface of the boiling crater-lake, while grains and vertical tubes of S are found in the mud at the bottom. Ascending H_2S passing thru molten S below the mud is believed to explain these occurrences. Three types of S are represented by this volcano, (1) pneumatolytic, around solfataras and in the fissures, (2) hydatogene, as beds of flour-sulfur in the crater lakes, and (3) from fusion, at the bottom of the crater lakes. W. F. H.