copper and iron. The ludwigite forms radial and spherulitic groups of finely fibrous crystals, and isolated crystals and groups of crystals in metamorphosed limestone. It is mostly dull greenish black, but at Mountain Lake an ivy-green type was found, for which the name *magnesioludwigite* is proposed. Analysis showed only 2.55% ferrous oxide, and it has a duller luster, lighter color, weaker pleochroism and absorption, and greater translucency than the iron-richer ludwigite from Hungary. The formula for the principal constituent of the new mineral is $MgO.Fe_2O_3.3MgO.B_2O_3$, only about 15% of the corresponding ferrous compound *ferroludwigite* being present. These names are derived by using ludwigite as a group name—like feldspar, mica, etc.—and indicating end-members by chemical prefixes. S. G. G.

ABSTRACTS OF MINERALOGIC LITERATURE

THE GENESIS OF ASBESTOS AND ASBESTIFORM MINERALS. STEPHEN TABER, of the Univ. S. Car. *Bull. Am. Inst. Mining Eng.* **1916**, 1973-1998; THE ORIGIN OF VEINS OF THE ASBESTIFORM MINERALS. *Idem. Proc. Nat. Acad. Sci.* **2**, 659, 1916.

The author's conclusions are: Fibrous minerals usually occur in cross-fiber veins. Such veins are formed through a process of lateral secretion, the growing veins making room for themselves by pushing apart the enclosing walls. The veins occur in all positions. The fibers are usually normal to the vein-walls because the latter have been forced directly apart, but when the walls have had also a lateral displacement because of the simultaneous growth of adjacent non-parallel veins or other causes the fibers grow in the direction of the resultant motion. The fibrous structure is to be attributed largely to the mechanical limitation of crystal growth through the addition [accretion] of new material only in one direction. In the case of asbestiform minerals the fibrous structure is accentuated by a normal prismatic habit and cleavage."

W. G. L.

THE FLIGHT OF A METEORITE. Story of stone and iron meteors through the air, their direction and impact upon the earth. Explanation of the trail of fire of a "shooting star." ELIHU THOMSON. *Am. Mus. J.*, **17** (1) 24-28, 1917.

COLLECTIONS OF METEORITES IN THE AMERICAN MUSEUM. CHESTER A. REEDS. *Am. Mus. J.*, **17** (1) 28-31, 1917.

GEM MINING IN THE UNITED STATES; TOURMALINE AND TURQUOIS. L. P. GRATACAP, American Museum of Natural History. *Am. Mus. J.*, 17, (1), 64-69, 1917.

THE COMPOSITION OF APATITES. F. ZAMBONINI. *Compt. rend.*, **162**, 919-921, 1916.

A large number of double salts with the general formula of the apatite group can be prepared artificially. The properties of several of these are described.

E. T. W.

CONTRIBUTION TO THE MINERALOGY OF MADAGASCAR. H. UNGEMACH. *Bull. soc. franc. min.*, **39** (1), 5-38, 1916. Abstract by P. A. v. d. Meulen, reprinted by permission from *Chemical Abstracts*, **10**, 2449, 1916.

U. describes the occurrence on the island of Madagascar of bismuth, gold, pyrite, rutile, strüverite, corundum, hematite, parisite(?), barite, monazite, betafite, euxenite, ampangabeite, columbite, tourmaline, diopside, augite, beryl, orthoclase, microcline, and chevkinite ("tscheffkinite"). In many cases a crystallographic description is included.

CALOMEL CRYSTALS WITH UNUSUAL HABIT. G. CESARO. *Bull. soc. franc. min.* **39**, (1), 70-73, 1916. Abstract by P. A. v. d. Meulen, reprinted by permission from *Chemical Abstracts*, **10**, 2450, 1916.

The crystals are in plates parallel to the prism 100.

THE CHEMICAL PROCESS INVOLVED IN THE FORMATION OF DIPYRE (MIZZONITE) FROM THE PLAGIOCLASE OF THE OPHITES OF THE PYRENEES. A. LACROIX. *Bull. soc. franc. min.* **39**, (1), 74-77, 1916. Abstract by P. A. v. d. Meulen, reprinted by permission from *Chemical Abstracts*, **10**, 2450, 1916.

The formation of dipyre from plagioclase involves nothing but a molecular rearrangement, together with the fixation of the necessary amount of sodium chloride. The process is a surface phenomenon, brought about by saline waters.

THE OCCURRENCE OF VICINAL FACES ON IDOCRASE (VESUVIANITE) FROM ALA. FERDINAND GONNARD. *Bull. soc. franc. min.* **39**, (1), 65-69, 1916.

A crystallographic description.

A NEW MINERAL, BAZZITE. P. GAUBERT. *Bull. soc. franc. min.* **39**, (1), 63-64, 1916.

Abstract of the announcement of this mineral by Artini (see *App. III, Dana's System of Mineralogy*, p. 12, 1915.)

THE PRESENCE OF NICKEL IN NATIVE PLATINUM. S. PINA DE RUBIES. *Arch. sci. phys. nat.*, **41**, 475-478, 1916.

Specimens of platinum from 10 localities yielded the arc spectrum of nickel. The amount of this element seems to be proportional to that of iron.

E. T. W.

FETID DOLOMITE FROM MARZHELAN. N. SHADLUN. *Bull. acad. sci. Petrograd*, **1916**, 417-422. Abstract by H. M. Gordin, reprinted by permission from *Chemical Abstracts*, **10**, 2566, 1916.

Analysis of samples of fetid dolomite from Marzhelan showed them to be ordinary $CaMg(CO_3)_2$ containing some sulfides, probably of Ca, Mg, and Fe. The mineral may also contain some adsorbed H_2S.

CALCITE, QUARTZ AND PROCHLORITE FROM THE CAUCASUS. L. L. IVANOV. *Bull. acad. sci. Petrograd*, **1916**, 621-632. Abstract by H. M. GORDIN, reprinted by permission from *Chemical Abstracts*, **10**, 2566, 1916.

Descriptions and analyses of samples of calcite, rock crystal and prochlorite found in the Caucasus. An examination of the thermal curve of the prochlorite showed that the latter gives off almost all of its H_2O at 650°. The formula of prochlorite was found to be $3H_2O.2FeO.MgO.Al_2O_3.2SiO_2$.

ON THE IDENTITY OF HAMLINITE WITH GOYAZITE. W. T. SCHALLER, U. S. Geological Survey. *Am. J. Sci.*, [4], **43**, (2), 163-164, 1917.

The properties of gyoazite and hamlinite are tabulated to show their similarities and their practical identity; Farrington's data are shown to be in part erroneous.

S. G. G.

ON THE ETCHING FIGURES OF BERYL. ARTHUR P. HONESS, Princeton University. *Am. J. Sci.*, [4], **43**, (3), 223-236, 1917.

"This paper embodies a brief discussion of the etch figures of beryl, both artificial and natural."

S. G. G.

A DECIMAL GROUPING OF THE PLAGIOCLASES. F. C. CALKINS, U. S. Geological Survey. *J. Geol.*, **25**, [2], 157-159, 1917.

The grouping of the soda-lime feldspars by various writers is tabulated, and a new plan is proposed, with the divisions, starting from the albite end of the series, at exactly 0, 10, 30, 50, 70 and 90% albite for the minerals albite, oligoclase, andesine, labadorte, bytownite and anorthite respectively.

S. G. G.