

Province of Quebec, would appear to be a lime-magnesia-iron pyroxene or sahlite. On peculiarities in forms of crystals from this locality, see results of observations by B. J. Harrington, Rep. Geol. Can., 1877-78, p. 18 c.

221. **SAL-AMMONIAC**—Has been met with, in association with native sulphur, constituting a deposit on the cliffs of shale on Smoky River, North-west Territory. Anal., G. C. Hoffmann, Rep. Geol. Can., 1875-76, p. 420.

222. **SAMARSKITE**—Has been found on lots one and two of the second range of Maisonneuve, Berthier County, Province of Quebec. [When first met with, this township was not laid out, consequently the locality could not be given more definitely than as it appears in the report, here referred to, viz., just beyond the north-western limits of Brassard (the adjoining township), Berthier Co.] Anal., G. C. Hoffmann, Rep. Geol. Can., 1880-82, p. 1 H.

223. **SAPONITE** Occurs in cavities in the trap of St. George or Hog Island, Richmond Bay, north coast of Prince Edward Island. Anal., B. J. Harrington, Can. Nat., 2 ser., vol. vii, p. 179, 1875.

224. **SELENITE**—Is met with in greater or less quantity at several of the gypsum deposits in the Province of Nova Scotia, as at Oxford, River Philip (Cumberland Co.). In the Province of New Brunswick it is especially abundant at Petitcodiac (Westmoreland Co.) where the gypsum deposit, which has a breadth of about forty rods and a total length of about one mile, is traversed through its entire extent by a vein of nearly pure selenite eight feet wide. This mineral is also met with in the Provinces of Quebec, Ontario, Manitoba and elsewhere.

225. **SENARMONTITE**—Occurs, with native antimony, stibnite, valentinite and kermesite, in veins traversing argillite in the township of Ham, Wolfe County, Province of Quebec.

226. **SERPENTINE**—Is met with abundantly among the metamorphic rocks of the Eastern Townships and Gaspé peninsula, in the Province of Quebec, where it forms vast masses, which are frequently almost free from other admixture, but at times enclose diallage, actinolite, garnet and chromite; or are intermixed with carbonate of lime, dolomite and occasionally ferruginous magnesite. Extensive beds, mostly containing intermixed carbonate of lime and dolomite, occur in the townships of Thetford and Coleraine (Mégantic Co.), Broughton (Beauce Co.), South Ham and Garthby (Wolfe Co.), Melbourne (Richmond Co.), Orford (Sherbrooke Co.), and Bolton (Brome Co.); around Mount Albert in the Shickshock Mountains, and at Mount Serpentine near Gaspé Bay, in Gaspé County. Among the massive and nearly pure Laurentian serpentines may be mentioned those of the townships of Grenville (Argenteuil Co.), in above named Province—and North Burgess (Lanark Co.), in the Province of Ontario. See also notes to "Chrysotile," "Picrolite" and "Retinalite." Analyses, T. S. Hunt, Geol. Can., 1863, p. 472.

227. **SEYBERTITE**—Is mentioned by Dr. Hunt, as occurring, with small crystals of blue spinel, in a crystalline limestone in the seignior of Daillebout, Joliette County, Province of Quebec.

228. **SIDERITE**—A bed of spathic iron, varying in thickness from six to ten feet, occurs in sandstones of the Millstone-grit formation, near Sutherland's River, Pictou County, Province of Nova Scotia. Occurs in thin veins in Huronian rocks in the Nerepis valley, and is also diffused to a considerable extent through rocks of Devonian age in the northern part of Charlotte County, in the Province of New Brunswick. Is found in quantity, in beds, on Flint, Davieu's, and other islands of the Nastapoka group, eastern coast of Hudson Bay—and is also met with in quantity in the township of McIntyre, Thunder Bay, Lake Superior, Province of Ontario. See also notes to "Clay iron-stone," "Sideroplesite." Analyses, Gordon Broome, Rep. Geol. Can., 1866-69, p. 442; B. J. Harrington, ib., 1877-78, p. 47 c.

229. **SIDEROPLESITE**—Occurs in the ankerite deposits of Londonderry, Colchester County, Province of Nova Scotia. Anal., H. Louis, Trans. N. S. Inst., vol. v, p. 50, 1879 2.

230. **SILICIFIED WOOD**—See note to "Pseudomorphous quartz."

231. **SILVER. NATIVE**,—Nuggets and grains of native silver have been found in washing for gold in a great many parts of British Columbia, the largest being obtained in the Omenica district. It also occurs, in association with argentite, at the various mines enumerated in the note to "Argentite."

232. **SMALTITE**—Has been met with in the form of minute crystals, in association with chalcopryite, in the Township of McKim, District of Nipissing, Province of Ontario. Ann. Rep. Geol. Can., vol. ii, p. 11 T., 1886.

233. **SMOKY QUARTZ, CAIRNGORM STONE**—Is met with in several localities in the Province of Nova Scotia, amongst the most noted being Paradise River and the neighborhood of Bridgetown and Laurencetown in Annapolis County; is also found at Mud Village (Lunenburg Co.), at Margaret's Bay (Halifax Co.), and of very dark color at Little River, about five miles from Halifax.

234. **SOAPSTONE**—See note to "Talc,"

235. **SODALITE**—Occurs in the nepheline-syenites of Brome (Brome Co.), Montreal (Hochelaga Co.), and Belœil (Rouville Co.), in the Province of Quebec. A very beautiful blue sodalite, in large specimens, has been found by Dr. G. M. Dawson, in abundance, in the vicinity of Ice River, a tributary of the Beaver-foot, in the Rocky Mountains, Province of British Columbia. Anal., B. J. Harrington, Trans. Roy. Soc. Can., vol. iv, sec. iii, p. 81, 1886.

236. **SPECULAR-IRON**—Amongst other localities, is

met with in tabular crystals at Sandy Cove, Digby Neck (Digby Co.), Province of Nova Scotia: in tabular crystals, or thick plates, in the Township of Leeds (Mégantic Co.), also in thick plates in the Township of Shefford (Shefford Co.), in the Province of Quebec.

237. **SPERRYLITE**—This recently discovered and highly interesting mineral, arsenide of platinum, was found at the Vermilion mine, Township of Denison, District of Algoma, Province of Ontario. Anal., H. L. Wells, Am. Journ. Sci., 3 ser., vol. xxxvii, p. 67, 1889: on the crystalline form of Sperrylite, S. L. Penfield, ibid., p. 71.

238. **SPESSARTITE**—Is found, together with black tourmaline, uranumite, monazite, etc., in a coarse pegmatite vein—composed of microcline, albite, muscovite and white and smoky-brown quartz—in the Township of Villeneuve, Ottawa County, Province of Quebec.

239. **SPHAEROSTILITE**—Has been met with by Prof. How, at Hall's Harbor, King's County, Province of Nova Scotia.

240. **SPHALERITE**—Is somewhat widely distributed, being found, but most frequently in small quantities only, in all the Provinces of the Dominion. It is met with, in greater or less abundance, in almost every metalliferous vein which has been opened on the east and north shores of Lake Superior, and an important deposit of the same is situated some eleven miles north-east of Rossport (formerly McKay's Harbor) on the north shore of that lake, Province of Ontario. Also occurs in quantity in the Township of Calumet—where it is associated with more or less galenite and a little pyrite,—Pontiac County, in the Province of Quebec.

241. **SPINEL**—Small translucent octahedrons of blue spinel are found in a bed of crystalline limestone in the seignior of Daillebout (Joliette Co.), in the Province of Quebec. Large and not unfrequently very symmetrical black crystals, sometimes an inch or even two inches in diameter, occur in crystallized limestone in Burgess (Lanark Co.), and similar crystals, though less perfect, are found, together with fluorite, apatite and crystals of white orthoclase, in a vein of flesh-red calcite in the Township of Ross, Renfrew County, Province of Ontario.

242. **STODOLITE**—Is said, by Dr. Hunt, to have been observed in a small rolled mass of granite near Perth, Lanark County, in the Province of Ontario.

243. **STAUROLITE**—Occurs in mica-schists of Moore's Lake, Charlotte County, Province of New Brunswick.

244. **STEAUTE**—See note to "Talc."

245. **STEELEITE**—Is found imbedded in red clay in cavities in Triassic trap, at Cape Split, thirteen miles west of Cape Blomidon, King's County, Province of Nova Scotia.

246. **STELLARITE**—The name given by Prof. How to the so-called "stellar" or "oil-coal," which occurs with bituminous coal (in a seam five feet thick, of which one foot ten inches are stellarite) at the Acadia mines on the Acadia Coal Company's area, Pictou County, Province of Nova Scotia. Analyses, H. How, Min. N. S., p. 24, 1869. Sir William Dawson, referring to this substance (Acadian Geology, 3rd ed., 1878, p. 339) says:—"The material known as stellar-coal is, as I have maintained in previous publications, of the nature of an earthy bitumen; and, geologically is to be regarded as an underclay or fossil oil, extremely rich in bituminous matter, derived from decayed and comminuted vegetable substances. It is, in short, a fossil swamp muck or mud which, as I have elsewhere pointed out, is the character of the earthy bitumens and highly bituminous shales of the Coal formation generally."

247. **STIBNITE**—An important deposit of this mineral exists in the parish of Prince William (York Co.), in the Province of New Brunswick, where it is contained in numerous large and well-defined veins of quartz, filling lines of dislocation in highly tilted argillaceous slates and quartzites: also at Rawdon—where, in association with a little quartz and calcite, it constitutes a vein cutting talcose slates, and West Gore, Hants County, Province of Nova Scotia. It is found in small radiating prismatic crystallizations, with native antimony, valentinite, senarmontite and kermesite, in veins in argillite, in the Townships of South Ham (Wolfe Co.), Province of Quebec. It has been met with in small quantities, in association with pyrite and mica, in a band of crystalline dolomite in the Township of Sheffield (Addington Co.), and in small masses mixed with tremolite, under similar conditions, in the Township of Marmora (Hastings Co.), Province of Ontario—also occurs near Foster's Bar, about twenty-three miles from Lytton, Fraser River, Province of British Columbia.

248. **STILPITE**—Is abundant, and exhibits a large number of crystallized varieties, often of great beauty, at Partridge Island (Cumberland Co.), Hall's Harbor and Morden (King's Co.), and Margaretville (Annapolis Co.), in the Province of Nova Scotia. Anal., H. How, Phil. Mag., 5 ser., vol. i, p. 134, 1876.

249. **STRONTIAN**—Occurs, in the form of white fibrous tufts, in cracks in concretionary limestone masses in the Utica slate of St. Helen's Island, Montreal, Province of Quebec. Anal., B. J. Harrington, Trans. Roy. Soc. Can., vol. i, sec. iii., p. 81, 1882-83.

250. **SULPHATITE**—The water of the so-called Sour Spring of Tuscarora (Brant Co.), as also that of a spring in the south-west corner of Niagara, and of one at St. David's, in the same Township (Lincoln Co.), and of another about a mile and a-half above Chippewa (Welland Co.), in the Province of Ontario, are all remarkable for containing a large proportion of free sulphuric acid. Analyses, T. S. Hunt, Geol. Can., 1863, pp. 540, 545.

(To be continued.)

MINING NOTES.

Nova Scotia.

From our own Correspondent.)

Waverley District.

The management of the Lake View Mining Co. closed down its stamp mill about the middle of this month (January) and have begun the work of tearing out the batteries and foundations. The mill has been in commission less than four months. This is the twenty stamp mill that was completed in September last, at a cost reported to exceed \$16,000, and was publicly announced to be the finest ever built in Nova Scotia. Three of the mortars were of Fraser & Chalmers' latest and best pattern, and the fourth was of exact Homestake pattern, but cast in Truro, N.S. Mention was made of this mill and its vibration in the November issue of the REVIEW. The reason given by Supt. Hayward for the changes to be made is that the western pattern mortars "will not save the gold" but it is rumored that there are other reasons. The superintendent also announces that the mine will close down on the 1st of February.

The Chebucto mine, known as the Gue and Wilson, has been transferred to a company organized under the laws of Nova Scotia and named "The West Waverley Gold Co., Ltd." Mr. J. E. Hardman, of Oldham mines, has been appointed manager. Work will begin this month in the mines, and will be pushed as fast as consistent with economy and permanent advantage. Mr. R. L. Sherman is the mining captain.

Renfrew District.

The Free Claim mine has been permanently closed down by its owners; the pumps having been taken out the first week in January. It is understood that the mine has not been paying for some time.

The Empress Co., have rebuilt their engine house and shaft house destroyed by fire in August and are again at work in this shaft.

The cold weather has seriously interfered with the reclaiming of the old Ophir mine, the power being derived from water and transmitted along distance. The attempt will be abandoned until spring.

Montagu District.

Work in this district continues with little new to report. The Rose lode has not come up to anticipations and will not produce much for some time to come. The DeWolfe lode is still working with average results.

Oldham District.

The new mill of the Oldham Gold Co., is approaching completion and will be ready to go into commission in February. The mines of this company are still in very low grade ore, and the large developments made have as yet failed to disclose high grade quartz.

The Standard Gold Co., will complete their new plant of pumping machinery and air compressor in February. The new hoist has been in commission now for three months and has given great satisfaction.

South Uniacke District.

The Witherow mine has secured the services of Alexander Cameron as mining captain, and have had better ore for some time past. The mine looks better to-day than for six months. It is intended to extend operations as soon as spring opens.

Killag District.

Manager MacKay of this district reports the first week's clean up at 57 ounces. Winter has somewhat retarded operations here, but work is going ahead as fast as possible.

Malaga District.

The mill of the Boston Gold Mining Company was started the week before Christmas. It is a very complete ten-stamp mill, built and equipped by the Truro Foundry and Machine Co. It is furnished with the Hammond roller ore feeder, which is reported to work perfectly. The mortar and details are modelled upon the "Homestake" pattern, and the mill as a whole is said to be the best one in the district. The quartz is said to mill from \$16 to \$36 per ton.

The mine, mill and plant of the Minneapolis and Malaga Mining Co. were sold at sheriff's sale on the 9th instant for the sum of \$13,000 to Mr. McLean, acting for Douglass et al. of Philadelphia.

Stormont District.

This district has little to report, the protracted litigation over the surface rights in Hurricane Island acting to prevent work by either party.

On the west side the North Star Company have been developing their property. The main incline on the North Star lode has been sunk over 70 feet and drifting on the lode will soon begin.

Work has also been doing on the Burke lode by the same company.