Bulletin No. 2. Iron Ore Deposits of the Bristol Mine, Pontiac County, Que. Magnetometric Survey, etc. ; by E. LINDEMAN. Magnetic Concentration of Ores ; by GEO. C. MACKENZIE. Pp. 15, with 2 plates and 2 figures.

Bulletin No. 3. Recent Advances in the construction of Electric Furnaces for the production of Pig Iron, Steel, and Zinc ; by EUGENE HAANEL. Pp. 76, with one plate and 17 figures. No. 68.

Report of Analyses of Ores, Non-Metallic Minerals, Fuels, etc. made in the Chemical Laboratories during the years 1906, 1907, 1908, arranged by F. G. WAIT. Pp. 126 with 2 plates. No. 59.

Map of the Porcupine Gold Area, districts of Sudbury and Nipissing, Ontario; by A. G. Burrows, geologist, and W. R. Rogers, topographer.

9. *Barbierite*, a Monoclinic Soda Feldspar ; by WALDEMAR T. SCHALLER. (Communicated.)—The existence of a monoclinic dimorphous form of albite, isomorphous with orthoclase, has long been suggested, but the presence of soda in orthoclase analyses has generally been otherwise explained. In such cases the presence of albite or anorthoclase has generally been suggested as the explanation of the soda present. In a recent paper by Barbier and Prost,* analyses are given of feldspars in which the cleavage angle varies but a few minutes from 90° and in which soda is present in molecularly greater amount than the potash. The maximum soda content is reached in a feldspar from Kragerö, Norway, in which only 1·15 per cent K_2O was found.

Examination under the microscope showed that (with one exception) albite was not present, and the existence of a monoclinic soda feldspar isomorphous with orthoclase must be admitted. I propose to call this particular monoclinic soda feldspar *barbierite*, in honor of Prof. Ph. Barbier, of the University of Lyons, France, who has recently published, in addition to the paper above cited, another one on the feldspar group, in which he gives a definite chemical difference between orthoclase and microcline.† Further analyses of soda-rich orthoclases are given by him in a later paper.‡ The feldspar from Kragerö is nearly pure barbierite.

In a very recent number of the Neues Jahrbuch für Mineralogie, etc., Angel gives a description of a soda-bearing monoclinic sanidine,§ which contains 4·92 per cent Na_2O and 6·73 K_2O. The cleavage angle (001) : (010) is 90° 01′ and the extinction on (001) is parallel. The feldspar is monoclinic and consists approximately of equal parts of the isomorphous orthoclase and barbierite. In this paper are given several references to earlier ones on

* Barbier, and Prost, A., Sur l'existence d'un feldspath sodique monoclinique, isomorphe de l'orthose, Bull. Soc. Chim., III, p. 894, 1908.

† Barbier, Ph., Recherches sur la composition chimique des feldspaths potassiques, Bull. Soc. Franc. minéral., vol. xxxi, p. 152, 1908.

‡ Barbier, Ph. and Gonnard, F., Analyses de quelques feldspaths francais. Bull. Soc. Franc. minéral., vol. xxxiii, p. 81.

§ Angel, Franz, Über einen Natronsanidin von Mitrowitza, Neues Jahrb. Mineral. Geol. u. Pal., Beilage-Band, xxx, 254, 1910.

feldspars which undoubtedly contain barbierite in isomorphous admixture. See also, for example, the orthoclase described by Ford.*

Chemical Laboratory, U. S. Geological Survey.

10. *Brief notices of some recently described Minerals* (see p. 90, vol. xxx).—WILTSHIREITE is a new species from that most prolific locality, the Binnenthal in Switzerland ; it is described by W. J. Lewis. It occurs in small crystals grouped in parallel position and associated with sartorite in a cavity in the well-known dolomite of the region. The color is tin-white with occasionally a russet tarnish. The material thus far available is too scanty for a determination of the chemical composition, but it is regarded as probably a sulpharsenite of lead. The crystals are monoclinic and are referred to the axes: $a : b : c = 1{\cdot}587 : 1 : 1{\cdot}070$; $\beta = 79° 16$. The habit is prismatic, the crystals being elongated in the vertical direction, in which zone the faces are strongly striated. The hemidomes are, however, smooth and bright and the same is true of the hemipyramids. The mineral is named in honor of the late Rev. Thomas Wiltshire, at one time Professor of Mineralogy in Kings College, London.—*Phil. Mag.*, September, 1910, p. 474.

MINGUETITE is a hydrated iron silicate described by A. Lacroix and regarded by him as intermediate between stilpnomelane and lepidomelane ; it had been called biotite. It forms masses of a greenish black color consisting of confused aggregates of small brittle plates ; these are opaque except when very thin and in that case they show a dislocated black cross of negative character. The specific gravity is 2·86 and the composition is given by the analysis (by Pisani) :

SiO_2	Al_2O_3	Fe_2O_3	FeO	MgO	CaO	Na_2O	K_2O	H_2O	
43·65	5·22	18·80	19·00	3·22	0·94	0·66	3·00	6·00	= 100·49

From the above the formula calculated is $17SiO_2 . 4Fe_2O_3 . 8FeO . K_2O . 8H_2O$. A small part of the ferric iron is replaced by aluminium. The name given refers to the mine, Minguet, at which it was found ; this is situated in the Segré region, Maine et Loire, France.—*Bull. Soc. Franç. Min.*, xxxiii, 270.

STELLERITE is a zeolitic mineral allied to heulandite and stilbite, described by J. Morozewicz from a diabase tuff on one of the Commander islands in Bering Sea. It occurs in crystals which are orthorhombic both in form and optically ; these are tabular in habit. resembling stilbite, and show perfect cleavage parallel to *b*. Hardness 3·5–4, specific gravity 2·12. Analysis gave :

	SiO_2	Al_2O_3	Fe_2O_3	CaO	Na_2O	H_2O	
$\frac{2}{2}$	59·23	14·41	0·22	8·23	*tr.*	18·15	= 100·24

From this the formula obtained is $CaAl_2Si_7O_{18} . 7H_2O$; this is

* On Orthoclase Twins of Unusual Habit, this Journal, xxvi, p. 149, 1908.