

Robert W. Whitmore and Robert C. Lawrence, Jr. *The Pegmatite Mines Known as Palermo*. Weare, NH: Palermo Mines, Ltd., 2004; 219 pp., color and b&w ill. (mineral illustrations by Frederick C. Wilda), ref., ind., cloth, \$150.00. (Available from Natures Finest Creations www.naturesfinestcreations.com, Frederick Wilda, P.O. Box 427, Hadley, MA 01035.)

The extraction of industrial minerals has been under-represented in the work of mining historians. Yet, these stories can be quite intriguing, and many of the mining methods and equipment used would be more than familiar to any metal-mining aficionado. In this case the ore of choice for the Hartford Mica Mining Company some 125 years ago was pegmatite, and the highly sought-after mineral was mica, primarily for use in stove face-plates. Mica also found application in mariners' compasses. No doubt mineral specimens have been high-graded, hidden in miners' lunchboxes, clothing, shoes, and even ingested, for centuries. It is such fine mineral specimens that in the long run ended up making New Hampshire's Palermo mines noteworthy.

This book is well planned, well prepared, and well illustrated. One can sense the enthusiasm its authors and contributors have for the celebrated Palermo mines by the presentation of their history. The quality of the publication, seen in its careful layout, formatting, and striking illustrations, promote it from coffee-table display to collectible, particularly for mineral collectors.

The first third of the book is dedicated to the mining history of the location. This portion has several interesting sidebars and many excellent illustrations to help engage the reader. The challenges of remote location, harsh weather, limited communication, and economic forces ring true to any mining historian. One of my favorite accounts, though sad and tragic, regards the death of James Allen during the winter of 1893. Allen had once worked at the famous Ely copper mine in Vermont. In a fashion typical of so many im-

migrant Cornish miners like Allen, he was dedicated to his craft to the point that it cost him his life. Allen ironically died when he became lost in a blizzard and froze to death while returning from the mine, where he had gone to stoke the boilers to keep them from freezing.

The authors take time to compare and contrast the mica mining industry of New Hampshire with the well-known pegmatite districts of North Carolina. This provides a context for some of the challenges that industrial-mineral producers have faced over the years that differ from those of the precious, base, or energy minerals. Extraction and beneficiation technology is adequately presented for the technical reader. (Did you know that the Sullivan Machinery Company was started in nearby Claremont, New Hampshire? Its Rota-tor hammer-drills saw application in the surface pit and underground operations at Palermo in addition to hundreds of mines throughout the world.)

The early mining of large sheets of mica for stoves succumbed to changing market factors and the mines closed after 1900. As seen in many other mining districts, several revivals and extraction campaigns ensued, some driven by the developing use of smaller pieces and scraps of mica for electrical insulation and other applications. The mines provided processed mica for wartime uses during the early to mid-1900s. Moreover, Palermo was a leading producer of beryl, from which the metal beryllium was adapted for use during the atomic age.

General Electric owned and operated the mines for several years. Several mine owners in the latter portion of the twentieth century faced a wide range of challenges trying to make the mine a successful producer of industrial minerals or quality mineral specimens and gems. The involvement of Robert Whitmore, the owner since 1974, is recounted to the present, enhanced by interesting stories and photographs, many in color.

The balance of the book focuses on minerals, of which the Palermo Mines feature over

150. Many of these are interesting and rare phosphate minerals, several of them being unique to Palermo. Whether one does or does not have an appreciation for mineral specimens and mineralogy, Frederick C. Wilda's illustrations are most impressive. The book contains over one hundred pages of beautiful watercolors of mineral specimens from the locality. Arranged alphabetically by species name, these illustrations bring out subtle detail and shading of minerals of various size, color, form, and habit that would not be evident in standard mineral photography. A brief section features large color photographs of some faceted gemstones and gem carvings that have been crafted from Palermo's golden, green, and aquamarine beryls and smoky and clear quartz crystals.

This publication lacks a meaningful index map to relate the site's location to the little village of North Groton, New Hampshire. A standard U.S.G.S. topographic quadrangle map or regional geology map of the White Mountains with the site noted would have been fine. It is as if the authors were trying to keep the locality hidden while promoting its accessibility to mineral collecting clubs. Or maybe it was just an oversight. The book does include a recent site map, in addition to a World War II era plane table and tape and compass surveys in the back. Including a late-nineteenth or early-twentieth century atlas map near the beginning of the book would have made a fine locator map with some historical significance.

Readers interested in geology will find limited information regarding theories of pegmatite formation and about this particular deposit, but the book does describe pegmatite zoning with illustrated cross-sections. Moreover, the mineral descriptions also give many details of their occurrence and in which Palermo mine they have been found. Mines Nos. 1 and 2 are the largest openings, with shafts and sizeable underground workings. Other pits and trenches, numbered up to 16, are also found on the southeast flank

of Baldhead Mountain about one-and-a-quarter miles southwest of North Groton.

The book does provide references and an index to assist in finding topics and minerals. A time-line covering 140 years of site history versus some illustrated national and world events is also interesting. Frederick Wilda provided very nice historic drawings on the inside cover, and other artwork. These fit nicely into the subject of recording mining history through artwork that has been of recent interest in the Mining History Association. *The Pegmatite Mines Known as Palermo* is visually pleasing and an enjoyable read.

Johnny Johnsson
Finksburg, Maryland

Fritz Wolff. *A Room for the Summer, Adventure, Misadventure, and Seduction in the Mines of the Coeur d'Alene*. Norman: University of Oklahoma Press, 2004; 264 pp., cloth, \$29.95. ISBN: 0806136588

Robert Lenon with Robert and Judith Whitcomb. *It Seems Like Only Yesterday: Mining and Mapping in Arizona's First Century. Vol. 1: The Yuma Years, and Vol 2.: Bisbee and Patagonia*. New York: iUniverse, Inc., 2004 and 2005, vol. 1, 178 pp., vol. 2, 211 pp., paper, \$17.95 and \$18.95. ISBN: 0595361498

Teresa Williams Irvin. *Let the Tail Go With the Hide: The Story of Ben F. Williams*. Bloomington, Indiana: Unlimited Publishing, 2001, 288 pp., paper, \$15.99. ISBN: 1588320227

The history of mining in the twentieth-century West has yet to be written, but these three volumes provide a good start for anyone interested in three original characters and twentieth century mining, especially during the 1930s-60s. I enjoy individual reminiscences more than any other type of book and Wolff, Williams, and Lenon stand out as among the best of miners' published accounts.

Many MHA members know Fritz Wolff from meetings and discussions, such as the tours during