preheating goldstone rods before use is graphically illustrated.

Step-by-step instructions follow for the production of fish beads, double-handled amphora beads, Phoenician face beads and two types of dichroic beads, as well as multicolored swirl marbles and colorful cabochons using hemispherical half molds.

Part 2 of *Lampworking* highlights the work of various talented beadmakers. The tape starts with a colorful survey of the creations of 17 artisans, including Brian Kerkvliet (face and aquarium beads), Patricia Frantz (fish beads), Tom Holland (combed beads) and Phyllis Clarke (cat beads). Kevin O'Grady then takes center stage to display some of his creations, including "tongue," raked (combed), millefiori and chevron-approximating beads. Moving to his worktable, he produces a fascinating "bead inside a bead," as well as two attractive Pyrex bracelets.

Following a quick survey of his beads, Scott Cahoon creates a spirally decorated black barrel bead. Keith Krieter also shows us the results of his talents and then makes one of his specialties: a "dancer" bead (a tabular bead trail-decorated with dancing human figures). Those interested in marbles will enjoy Gerry Colman's replication of an old "corkscrew" variety.

Mr. Wilson returns at the end of the tape to illustrate some useful tools not mentioned in *Lewis C*. *Wilson on Glass Bead Making*, and names several useful publications which deal with lampworking and wound beadmaking. He also lists sources for equipment, supplies and publications, and provides the addresses and telephone numbers of those beadmakers whose creations appear in the video.

The camera work and color in both videos are excellent, and all the procedures are clearly depicted. The accompanying running commentary by Wilson and his colleagues is equally clear and easy to follow.

While nothing can replace an instructor guiding a novice beadmaker at the workbench, these two videos come very close. Both are well worth the money.

> Karlis Karklins Parks Canada 1600 Liverpool Court Ottawa, Ontario K1A 0M5 Canada

Baubles, Buttons and Beads: The Heritage of Bohemia.

Sibylle Jargstorf. Schiffer Publishing Ltd., 77 Lower Valley Road, Atglen, Pennsylvania 19310. 1993. 176 pp., 356 color figs., 79 b&w figs., price guide, index. \$29.95 (paper) + \$2.95 postage (North America).

Sibylle Jargstorf is a trained chemist and a glass historian, as the introduction to her book tells us. These are impeccable credentials for the author of Baubles, Buttons and Beads: The Heritage of Bohemia, a visual delight and a source of solid information. It is a welcome complement to Jargstorf's previous work, Glass in Jewelry (reviewed in Volume 3 of Beads). Although beads come last in the title and there is only one brief chapter under the specific heading "Beads," there is hardly a page that does not contain material relevant to bead collectors and researchers. After all, the three items are closely related, in material, design and use. The text is supplemented by the detailed captions of the illustrations which depict jewelry, documents, sample cards and advertisements, as well as well-fed, primly buttoned-up women of the turn of the century who are seen wearing the items dealt with in the book.

The author presents a clear overview of Bohemia's history and of the political circumstances that affected the glass industry at different times, in different ways. She pinpoints, with great precision, the villages and townships of Northern Bohemia where glasshouses were established in an area whose center — and the only town known to the outside world by name — was Gablonz an der Neisse, called Jablonec nad Nisou (on the Nisa) since 1918, when the Czechoslovak Republic came into being. Each one of the localities Jargstorf mentions developed its own techniques, glass recipes and designs. Jargstorf renders tribute to the glass dynasties that remained anonymous as they worked behind the scenes, through intermediaries. They were the innovators and movers of an industry that made its mark throughout the world. This prominence was achieved in a relatively short time. There is some evidence that glasshouses have existed in the densely wooded areas of Northern Bohemia since ancient times, but the industry as such only took off as late as the mid-18th century.

By the mid-1800s, Bohemia was outpacing the powerful centuries-old bead industry of Venice/ Murano. This was the result of a continuous search for new ideas and methods. A decisive invention, dating to the second half of the 18th century, was the molding tong. It was used to mold-press pendants, buttons, beads and imitation gem stones from heated canes into all kinds of shapes. The process was fast and economical. At first the molds were crude and the articles had to undergo additional cutting and polishing. But by the middle of the 19th century, the tool was perfected to the extent that the pressed items looked as if they had been cut or engraved. Jargstorf disputes the frequently held notion that pressed glass is inferior to cut glass. She points out that molding opened new horizons for glass design. To her, the buttonmakers of the Victorian era were the real initiators of this revolutionary process and, therefore, the predecessors of the most famous molded glass artist, René Lalique.

By the end of the 18th century, the glass artisans of Bohemia were developing new ways to color glass. Prominent in this field was the Riedel family which also pioneered the use of uranium to achieve certain shades of yellow and green. The famous ruby, garnet and carnelian reds were elaborated by the Zenkner family. The technique to achieve iridescent glass was discovered in 1873. Gold-lined blown glass was introduced in 1898, and remained a monopoly until 1945, when the glassmakers of the area (known as the Sudetenland) that had been incorporated into Hitler's Germany in 1938, were expelled when World War II ended.

During the mid-1800s, the Bohemian glassmakers began adopting and adapting Venetian styles, as well as mosaic glass, and aventurine which they called *venetianer Fluss* (Venetian flux).

The only one of the Gablonz glassmakers to become known internationally was Daniel Swarovski. Jargstorf explains that he overcame the anonymity of his compatriots and colleagues because he dealt directly with his clients. Swarovski moved his enterprise to the Tyrol, Austria, in 1890.

Jablonec has become synonymous with glass. But the craftsmen of the area used many other materials natural and synthetic — in the production of adornments. *Baubles, Buttons and Beads* devotes a chapter to each of the two categories. Among the curious inventions of the early 1900s are "Ballottini" beads of lacquered wood which are given a satiny finish by coating them with tiny glass pellets. Such beads occasionally appear at flea markets without creating much of a stir. Now that we know their history, they might.

The glass beadmakers of Bohemia scattered an infinity of unique creations throughout the world. Jargstorf barely mentions the painstaking market research involved in this achievement.

It is also a pity that the author closes the chapter on Bohemian beads with the relocation of the Sudeten German craftsmen to New Gablonz and other parts of Germany. It would have been interesting to learn about the industry under more than three decades of Communist rule during which the production continued, shrouded in secrecy.

It is hoped that Sibylle Jargstorf will elaborate on these subjects in a future volume as enjoyable and well documented as her previous work.

> Anita von Kahler Gumpert 3752 McKinley Street, N.W. Washington, D.C. 20015

Beads of the Bison Robe Trade: The Fort Union Trading Post Collection.

Steven Leroy DeVore. Fort Union Monograph Series, Publication 1, Friends of Fort Union Trading Post, Buford Route, Williston, North Dakota 58801. 1992. i-ix, 136 pp., 11 color figs., 5 b&w figs., 20 tables, appendices. \$16.45 (paper).

DeVore's monograph summarizes the 38,578 trade beads of glass, bone and shell found during the 1968-1972 excavations at Fort Union Trading Post National Historic Site, North Dakota and Montana. A major trade outpost between 1829 and 1867 for the acquisition of bison robes from the Native Americans of the Northern Plains, Fort Union was built by the American Fur Company on the Missouri River across from the mouth of the Yellowstone River.

The National Park Service (NPS) conducted the 1968-1972 testing and excavations at Fort Union as part of an extensive reconstruction and interpretive program at the site (further investigations were also