

GEM CUTTING: A LAPIDARY'S MANUAL

By John Sinkankas, 365 pp., illus.,
publ. by Van Nostrand Reinhold
Co., New York, NY, 1984. US\$46.95*

Although this book is primarily oriented toward those persons involved (or who wish to be involved) in the cutting of gem materials, it is nonetheless of interest to gemologists as well. In fact, all gemologists should be curious about the intricacies and craftsmanship of the lapidary's art—whereby an otherwise nondescript material is expertly transformed into a gem. Through an awareness of gem cutting, a finer and deeper appreciation of the lapidary's product will surely result, whether that product is a faceted stone, cabochon, bead, carving, or inlay work.

This third edition of *Gem Cutting* is well organized, and discusses lapidary techniques, including many supplemental ones, that may seem difficult and complicated at first. But the author's approach is so logical in its manner and seemingly elementary in its language that the text is both readable and easily understood by all. The book begins, logically, with the very basics, discussing the concepts and various methodologies of sawing, grinding, lapping, sanding, and polishing gem materials. In this new edition, basics are presented not only in the context of modern (e.g., diamond abrasive-based) equipment but also in the use of older tried-and-true techniques. The latter provides both historical interest and a convenient "how-to" methodology for those persons who wish to approach the lapidary art in a less expensive frame of mind and still achieve professional results. The more advanced gem-cutting techniques, such as faceting, intarsia work, carving, and the making of spheres, are likewise approached in a thorough and unpretentious manner. And in this new version, Sinkankas has included more specific cutting information for a wider range of gem materials.

Reading this book is like talking to a well-informed friend or next-

BOOK REVIEWS

Jeffrey M. Burbank, Editor

door neighbor. And even though the book is 357 pages of explanations, discussions, and recommendations, it doesn't seem as if that next-door neighbor is talking your ear off. This is because the book is organized in easily absorbable and informative chapters and sections that hold the reader's interest. In addition, each chapter ends with an appendix of books or articles for those who wish to look further into the subject. The book also features over 230 black-and-white photographs and line drawings that are instructive rather than decorative. This is not, after all, a coffee-table book. It is also well worth the price. As a gemcutter with 15 years' experience, I found this book gave me many insights into both new techniques and those in which I thought I was well versed. In short, this third edition of *Gem Cutting* combines the effectiveness of the best "how-to" book with the reliability of a solid reference work.

RICHARD HOMER
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JADE FOR YOU: VALUE GUIDE TO FINE-QUALITY JADE

By John Y. Ng and Edmond Root, 107
pp., illus., Jade N Gem Corp., Los
Angeles, CA, 1984. US\$49.95*

Jade for You is specifically written with the retail jeweler in mind. From cover to cover, it is one practical and concise reference page after another. The book's intent is to provide the reader with an objective system of jade evaluation—although the book is not without flaws, it does fulfill its basic purpose in a very attractive package. However, one may want to

question the usefulness of yet another grading system for jade.

While the book begins with an all-too-brief and nontechnical discussion of the development of jade from source to jeweler, the authors are able to hold the reader's interest, drawing as they do from their personal experience and giving fresh insights on the jade market today. The book's main focus, however, is the seven factors for evaluating jade: (1) color and tone; (2) texture; (3) translucency or clarity; (4) desirable shape or balance; (5) size and dimensions; (6) polish; and (7) finish, including matching or graduation in the case of pairs or beads. The discussions of these seven value elements are quite complete; however, they are at times inconsistent, not only with respect to the commonly accepted trade terminology, but also with respect to the terminology used within the text itself. For example, Imperial jadeite is first described as being "highly translucent" with "rich tone," yet the authors' translucency scale presents "near transparent" as the highest value rating of translucency (and lists nothing as "highly translucent"). Likewise, in the tone scale, "very fine medium" and "very fine dark" are presented as the highest-valued tones (again, nothing is listed as "rich"). Yet, even with these and other slight confusions, the numerous pages of color and black-and-white photographs prove again that a picture is worth a thousand words. As each value element is discussed, a numerical rating from "most valuable" (5) to "least valuable" (1) is presented with accompanying photographs. This numerical scale is put to use later in the text.

Another chapter of the book, aimed at the retail sales staff, is devoted to jade symbolism. Seven pages of line drawings accompany the history and lore of dragons, bats, fu-dogs, the yin and yang, and more, to enhance the reader's sense of the mystique of jade carvings. However,

*This book is available for purchase at the GIA Bookstore, 1660 Stewart Street, Santa Monica, CA 90404.

a chapter entitled "Jade Mimics and Fakes," is somewhat disconcerting in that the authors mention the destructive tests used to identify those substitutes that have been dye-treated.

With the discussions and ratings of the seven value factors complete, Ng and Root wrap up their evaluation system by "scoring" each of those elements and adding an "appeal factor" for each as well as totaling all the points. All of the foregoing seems to make the evaluation system somewhat cumbersome. However, the authors come right back with an excellent, easy-to-follow jade-inspection procedure, complete with more photographs. This is a must for the jade buyer.

So, if you are a retailer who wants to help your staff prepare for that all-important jade sale—or simply want to purchase jade for your own inventory—then *Jade for You* is indeed for you.

GARY ROSKIN
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GEMS AND JEWELS: A CONNOISSEUR'S GUIDE

*By Benjamin Zucker, 248 pp., illus., publ. by Thames and Hudson, New York, NY, 1984. US\$50.00**

The main purpose of this handsome book is to heighten the reader's interest in ruby, sapphire, emerald, diamond, pearl, amber, lapis, jade, turquoise, opal, and garnet. Mr. Zucker does this through his research into the background of each gem—especially its history and lore. Each chapter is filled with many beautiful photographs and provides essential information on the characteristics of these gems, their major sources, and the most desirable qualities in each stone. Each chapter is also introduced by a literary quote—ranging from Tavernier to Bob Dylan!

This book will, true to its title, appeal to the connoisseur and the collector, as well as to dealers and to

those who simply enjoy the beauty and mystique of gemstones. It is truly enjoyable to read: the text flows beautifully and effortlessly, and is set in an attractive typeface. The work is well organized and indexed, and good references are noted throughout. I especially liked the list of museums that display fine rare and important gems.

An important feature of the book are the 256 color photographs, which range in subject from gemstones and jewelry (both antique and modern) to inclusions and mining. All photos are well chosen and excellently reproduced.

This attractive book is well worth its \$50.00 price tag. I recommend it for everyone's gemological library: it's a showpiece in itself.

JAN ARNOLD
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MANUAL OF MINERALOGY (AFTER JAMES D. DANA)

*By Cornelis Klein and Cornelius S. Hurlbut, Jr., 596 pp., illus., publ. by John Wiley & Sons, New York, NY, 1985. US\$35.95**

Since it first appeared in 1837, James D. Dana's *System of Mineralogy* has evolved into one of the standard references on mineral classification. In 1848, Dana introduced a *Manual of Mineralogy* to serve as a textbook in introductory courses. The 20th edition of this classic textbook, revised by Klein and Hurlbut, continues the tradition Dana began almost 140 years ago.

Written for undergraduate college students with little or no background in mineralogy, the book has two main goals: to convey fundamental concepts that underlie the science of mineralogy, and to present a summary description of approximately 200 of the most common minerals. Both purposes are achieved in a manner that allows the student to quickly gain a basic understanding of a broad range of mineralogy topics.

The unifying theme throughout the book is that of crystal chemistry—the relationship between the chemical composition, internal atomic structure, and physical properties of minerals. The chapters of the book are presented in the following sequence: a history of mineralogy; the external morphology of crystals; the relation of external form to internal atomic structure; crystal chemistry and chemical composition; physical properties; X-ray crystallography; and systematic mineralogy. Furthermore, this edition of the mineralogy textbook is unique in that it contains a chapter that specifically deals with gemology. The material is well organized, complete, and readable. Several hundred high-quality photographs and line drawings illustrate key points. At the end of each chapter, selected references are given for additional reading on the subject. Extensive determinative tables in the appendix are especially useful for laboratory study and identification of unknown minerals. The overall quality of production of the book is excellent.

The book will be valuable to gemologists seeking a basic reference on mineralogy. Descriptions of all the important gem minerals are included along with discussions of topics such as crystallography, mineral compositions, physical properties, and the optical properties of minerals. Those seeking to learn more about gem minerals will benefit greatly from this reference work.

JAMES E. SHIGLEY
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OTHER BOOKS RECEIVED IN 1985

The Barakat Gallery: A Catalogue of the Collection, Vol. 1, 319 pp., illus., publ. by The Barakat Gallery, Beverly Hills, CA, 1985. Faye Barakat introduces this catalogue, explaining that "Collecting has consumed most of my

time and thoughts for more than three decades, since I began learning as a child at the side of my father, grandfather, and renowned archaeologists. As the collection has finally taken shape as a mirror of ages and cultures, I feel an obligation to it and wish to share my experience and collection with all others who appreciate the art of collecting." Indeed, the book is splendidly and lovingly put together, photographs illustrating in faithfully reproduced colors 1,468 pieces—almost all of Middle Eastern and Pre-Columbian origin—which comprise a portion of the collection gathered by generations of the Barakat family. The wealth of beads, sculptures, pottery, carvings, scarabs, and coins makes for a most stimulating browse or design inspiration. Those involved in appraisal will appreciate the many examples for study, as well as the price list included.

Stephanie Dillon
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Benitoite: California State Gemstone, by G. D. Louderback, 76 pp., illus., publ. by Gemmary, Redondo Beach, CA, 1985, US\$5.00* Published to mark benitoite's official status as the California state gemstone, this reprint includes the two classic and definitive studies of the mineral—"Benitoite, a New California Gem Mineral" (1907) and "Benitoite, Its Paragenesis and Mode of Occurrence" (1909)—both authored by George Davis Louderback and originally published by the University of California in its *Bulletin of the Department of Geology*. Although the scientific material is now almost 80 years old, it is still astonishingly current (in part because no other discovery of gem-quality benitoite has been made since the initial one in 1906). However, more recent information is indeed available, and this reprint does

not, unfortunately, include an appendix or other modern textual apparatus to update the historical material. Nevertheless, it is a welcome and affordable reprint of two very hard-to-find classic papers on California's rare, endemic gemstone.

Jeffrey M. Burbank
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Diamonds from India, rev. ed., by K. Chhotalal, 102 pp., illus., publ. by The Gem & Jewellery Export Promotion Council, Bombay, India, 1984. This book is a revised edition of the 1983 book of the same title. Comprised of approximately 75% text and 25% statistical tables, it attempts to review all aspects of diamonds and provide more specific information on the Indian diamond trade. Included are sections that cover diamond rough, sorting, industrial-grade material, synthetics, cutting, Indian and other Asian cutting centers, the world diamond trade, prices of Indian polished goods, the Indian Diamond Institute Surat, and financial requirements of Indian diamond exporters. While a number of technical inaccuracies exist and the quality of the printing leaves much to be desired, this book may still prove of some value to those interested in the specifics of the Indian diamond trade.

Robert C. Kammerling
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The Magic of Indian Diamonds, by M. D. Dewani, 36 pp., illus., publ. by The Gem & Jewellery Export Promotion Council, Bombay, India, 1984. This brief booklet is "intended to give the layman some idea of the growth, problems and prospects of this largely cottage-based industry." It begins with a chapter that traces the modern history of the Indian diamond industry, beginning in 1963, and follows with chapters

on the early history of the Indian diamond trade and its revival in the 1950s. There are also brief sections on sources and supply of rough, sorting of rough, the art of the Indian cutter, and famous Indian diamonds. While this booklet has little to offer in the way of information that is not available elsewhere, the author does have some interesting comments in his chapter on the future of the diamond industry in India.

Robert C. Kammerling
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Mountain of Light, by Dale R. Perelman, 194 pp., illus., publ. by Apollo Books, Winona, MN, 1984, \$US10.00* "The first piece which Akil Khan placed in my hands was the great diamond, which is a round rose, very high at one side. At the basal margin, it has a small notch and flaw inside." Jean Baptiste Tavernier further describes the stone as having "beautiful" color and weighing 280 ct. He says that when the Shah Jahan had received it, in rough form, it weighed 700.05 carats, and "had several flaws." Perelman offers various legends as to the origins of this stone—the fabled Koh-I-Noor—which was originally called Semantik Mani ("the Prince and Leader of All Gemstones"), but the 14th century marks the beginning of its known history. The author, now chatty, now melodramatic, tells the saga—generally written in blood—of the famous gray stone, reduced from rose to oval cut at the behest of Victoria's Prince Albert, and now weighing in at 108.93 ct. A helpful chronology summarizes the stone's adventures from 1304 to 1937 and its placement in the Tower of London. There is a bibliography of 58 books and three periodicals; nine black-and-white illustrations and one map accompany the text.

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