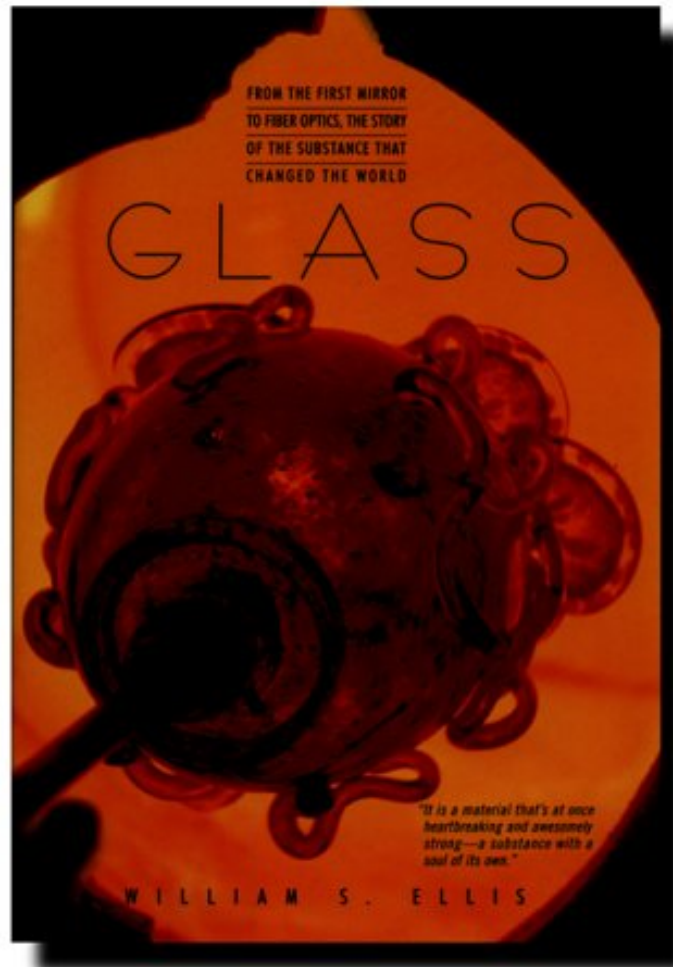


[Download pdf ebook] Glass:: From The First Mirror To Fiber Optics, The Story Of The Substance That Changed The World

Glass:: From The First Mirror To Fiber Optics, The Story Of The Substance That Changed The World

William S. Ellis

*ebooks | Download PDF | *ePub | DOC | audiobook*



[Download](#)

[Read Online](#)

#1625576 in Books 1998-11-01 1998-11-01 Original language: English PDF # 1 8.75 x 6.00 x 1.25l, #File Name: 0380974649306 pages | File size: 71.Mb

William S. Ellis : Glass:: From The First Mirror To Fiber Optics, The Story Of The Substance That Changed The World before purchasing it in order to gauge whether or not it would be worth my time, and all praised Glass:: From The First Mirror To Fiber Optics, The Story Of The Substance That Changed The World:

0 of 0 people found the following review helpful. Good introduction to glassBy Robert C. PriceReadable introduction. Only dated because of the publication date. Lovingly written throughout.7 of 7 people found the following review helpful. A Fun Read If You Don't Mind Lots of MisinformationBy A CustomerThe original article by Ellis in the

National Geographic was excellent and accurate as well. It seems most unfortunate that the detailed checking of facts that was used there was not applied to this book. Just two examples of many that could have been chosen: Ellis has Nefertiti looking into a glass mirror more than 2000 years before glass mirrors began to replace mirrors made of polished metal (page 9); in discussing fiber optical communication (page 96), he states that amplifiers are needed "to give lift to the light and prevent it from reverting back to electricity..." - of course the light merely weakens from absorption, leakage, and scattering, but always remains light. The color picture of the hanging Cage Cup is printed upside-down. And there are several places where he discusses so-called important break-throughs in fields where the discoverers have then gone on to do other things for various stated reasons. The real reasons were, of course, that these were not break-throughs but either dead ends or only self-advertised claims that did not really work. It is most unfortunate that experts in the field of each of the many and important topics covered were not asked to proof-read it, for then it would have been an excellent and accurate account. 6 of 6 people found the following review helpful.

Interesting Tidbits Lost in Annoying Metaphors and Jokes
By Aufton Wunderbar
There are many interesting tidbits in this undisciplined effort at science writing, but excessive use (of often confusing) metaphors and jokes make this annoying to the point of frustration. The topic is fascinating but the writer seems to think his flowery poetry and fine wit contributes to the readability of the book. It does not!
In addition, he has the annoying habit of presenting an interesting concept but in no way explaining the science behind it. Science writing has, at times, lapsed into sloppy writing laced with excessive poetics and personal observations of no interest to others. On the other hand, David Quammen (as in *The Song of the Dodo*) has shown us that we should expect and demand tightly written and reasoned science writing.

In prose as crystalline as his subject, the author celebrates the versatility and functionality of glass, and explains how a substance known to all but understood by few has been shaped and molded to serve mankind in innumerable ways. Readers will learn how glass has both shaped and been shaped by man's changing relationship to the environment; how it has brought vision to the sight-deprived and to humans beings huddling in the dark; and how glass enters the 21st century yielding an almost unlimited horizon of possibilities. With grace, charm and authority, Glass delves into history, invention, manufacturing, fine art, and the myriad faces and forms of this protean substance. Whether visiting the flamboyant glass artist Dale Chihuly, dissecting the creation of a twenty-ton telescopic mirror, sampling the history of Tiffany's magnificent lamps, or watching the design and construction of the greenhouses of Kew Gardens, this book treats its readers to a multifaceted vision of a material eternally destined to die a violent death, and to be constantly reborn in a relentlessly changing world.

From Publishers Weekly
A popularly written survey of glass, from the artifacts of ancient Mesopotamia and Egypt to modern lasers and telescopes, Ellis's first book offers a wondrous excursion into science, history, culture and invention. Through the prism of glassmaking, Ellis traces the imperial power of Rome; the spreading influence of Islam; Renaissance ferment refracted in the glassware of Venice, England and Bohemia; the founding of Jamestown, among whose first colonizers were half-a-dozen German glassblowers; and the scientific revolution. A former National Geographic editor and writer, Ellis draws on his global travels, from Babylonian ruins to Venetian factories to Corning research labs, for this dizzying, hugely entertaining and informative report. Filled with intriguing observations on milk bottles, thermometers, mirrors, paperweights, light bulbs (blown by hand until 1922) and the fish tank aboard the space shuttle Columbia, his investigation also examines weightier topics, such as fiber-optic communications systems and the disposal of radioactive materials through vitrification?turning waste into glass. His heady tour delves into future possibilities for glass and ideas on the drawing boards, including replacement body parts, nonflammable glass/plastic alloys and radioactive glass beads to kill diseased kidneys. A snappy overview of glass artistry extends from medieval stained-glass windows through London's Crystal Palace of 1851, corporate architecture, profiles of Seattle glass artists Dale Chihuly and William Morris, even an interview with virtuoso glass-harp player Jamey Turner. Ellis's amazing exploration of glass's resurgence in technology and art proves that glass, despite appearances, has muscle as well as soul. Includes eight pages of color illustrations, not seen by PW. Agent, Jane Dystel. Copyright 1998 Reed Business Information, Inc.

From Kirkus s
Glass, like the articles Ellis has written for National Geographic, contains his reflections on a wonderful journey. The book evolved from his most famous article about the ubiquitous but disregarded substance that has advanced our civilization with everything from high-rise buildings to fiber optics. Ellis's research took him around the world to discover the technological, aesthetic, and historical dimensions of his subject. In Mesopotamia (modern-day Iraq and Syria), glass was accidentally discovered by sailors cooking on the beaches some 2,250 years ago. In this ancient setting now stand the modern computerized crystal factories of Waterford. Arabs, Mongols, and Crusaders were dazzled by the beauty and utility of glassware. Possessing glass objects reflected wealth and status. The movement in glass making, however, was toward Europe, where Persian and Egyptian master craftsmen came to exhibit their skills. During the Middle Ages the world center of glass-making shifted to the island of Murano, where Venetian craftsmen formed a union whose penalty for desertion was death. Contemporary artists' glass creations command exorbitant prices. From elegant, pristine Steuben crystal to

magnificent Tiffany lamps, artwork in glass rivals more highbrow art media. But the most impressive progress is in science and technology. It is impossible to imagine cars without windshields or houses without light bulbs (1.8 billion manufactured annually in the US alone). Once a fragile substance, glass can be made heat-resistant, shatterproof, even bulletproof, without sacrificing visibility. Airplane windshields withstand tremendous air pressure. Glass is used to trap radioactive waste. Radioactive glasses cure cancer. We see ourselves with mirrors and view our world more effectively with eyeglasses, telescopes, microscopes, and now fiber optics. One mile of glass fiber optics weighs only four ounces, with 25,000 times the capacity to carry information as a mile of copper wire weighing 30tons. Ellis breathes life into his technical subject. With an eloquent storyteller's charm, he chronicles the love affair between our civilization and increasingly versatile glass. -- Copyright 1998, Kirkus Associates, LP. All rights reserved. "Glass is a book-length love letter to one of the most enchanting, strange and important classes of materials humankind has wrought from this Earth. Ellis gives us illuminating, often off-beat snapshots of how we and glass have been, are, and will be inextricably linked in an ongoing adventure of art, science and life." -- Ivan Amato author of the New York Times Notable Book Stuff: *The Materials the World Is Made Of*"Like the master glassmakers of Murano on up to Dale Chihuly, Bill Ellis skillfully controls the flow of his raw material to produce a seamless work of great clarity and poetry." -- Stephen Fenichell, author of *Plastic: The Making of a Synthetic Century*