

#1517330 in Books Firefly Books 2002Original language:EnglishPDF # 1 .82 x 6.88 x 9.70l, #File Name:

1552976548176 pages | File size: 66.Mb



*David Christianson*

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[Download] Timepieces: Masterpieces of Chronometry

## **Timepieces: Masterpieces of Chronometry**

**David Christianson : Timepieces: Masterpieces of Chronometry** before purchasing it in order to gage whether or not it would be worth my time, and all praised Timepieces: Masterpieces of Chronometry:

0 of 0 people found the following review helpful. This is it!By Christopher J LeahyThis is the best book explaining how we keep time, the history of the development of our different timepieces, and the illustration of a wide variety of historically important and beautiful clocks and watches.The explanations are understandable, logical, and well illustrated. In fact, the diagrams of the essential mechanics of a clock or watch are one of the most educational features of the book. I've always been facinated with mechanical clocks and watches; now I know how the ubiquitous Quartz watch works as well!1 of 1 people found the following review helpful. Excellent photos and picturesBy Jordan

The book begins by briefly telling how units of time more precise than the day were introduced. It takes some thought to think of breaking up time into units of hours. Christianson writes that the length of an hour originally varied with the time of year (p. 8). If the day is broken into 12 hours then in the summer an hour will be longer than an hour in the winter. The first chapter of the book is about the use of timekeepers for regulating when monks prayed. On pp. 21-22 Christianson describes the important verge and foliot clock which was used to ring a bell at certain times to wake the monks for prayer. I'm suspicious of his claim that "during the Middle Ages time was the only aspect of science that moved ahead" (p. 25), but I do agree that medieval Europe was surprisingly more advanced than Rome at timekeeping. For the history of science and technology clocks are very important, and it seems like the spread of clocks led to a diffusion of technical skill that is probably important in European history. I believe that David Landes deals with the importance of clocks in European history in his book "Revolution in Time". I hadn't read anything about craft guilds before and thus I found Chapter 4 on the guild system for clockmaking especially enjoyable. The photographs and pictures in the book are good, and the diagrams are also good, e.g. verge and foliot (p. 22), escapements (pp. 32-33), the stackfreed and fuse (p. 36), cylinder and detached level escapements (pp. 80-81), and multiple views of the movement of a watch with a detached lever escapement (p. 93). Jean-Antoine Lepine introduced in 1770 a thinner pocket watch (p. 53). Before Lepine, pocket watches had several stacks. Compare to the "oignon watch" on p. 69. Christianson explains that it was possible to have thinner pocket watches because of the "simpler small-cylinder escapement that allowed this arrangement," and also "better mainspring metallurgy that permitted longer, thinner and more flexible springs to drive the watch." This is a book for casual reading, not a reference book. It would make a good coffee table book, since it is printed on high quality pages and it has good photos and diagrams. One can read a few pages of the book and come away with something. Examples of special topics explained in the sidebars: "Clockwork gearing" (p. 23), "Lepine and the modern watch" (p. 53), "The bored-ruby jewel" (p. 70), and "How the mechanical watch works" (pp. 152-153). "The oscillator and escapement are the heart of the clock. The more consistent or stable the oscillations are and the more efficient the escapement is, the more accurate is the clock." (p. 32)

3 of 8 people found the following review helpful. A resume about the mechanical clocks and watches development

By flavio pimenta This book is a resume of what is written on the brilliant book of David Landes, Revolution in Time. It has a huge amount of photos, and worths every penny paid. The book, as mentioned by the reader above, does not cover American Watches history in depth. Even though, is a very good book.

Over the centuries, clocks have slowly, methodically and inextricably come to regulate every aspect of our lives. Timepieces tells the history of clocks and how the pursuit of an ever better clock has had a remarkable influence on scientific and technological developments. The 800-year journey to a perfect clock involved the greatest thinkers, scientists and mechanical geniuses, including those who improved the accuracy of mechanical clocks to such a degree that sailors could successfully determine longitude. That advance alone resulted in an explosion of travel, commerce and political expansion that would change the world map. Tracing the history of "the key machine of the modern industrial age" is a remarkable way to trace the histories of technology and society. Each chapter focuses on one era of the clock's growth: The Celestial Clock A Call to Prayer The Priceless Possession of a Few From Tabletop to Waistcoat and Beyond The Craft Era in Watchmaking The Industrial Revolution Swiss Watchmaking The Standardization of Time The Quartz Revolution Illustrated with beautiful artworks and photographs from museums and clock collections, Timepieces is a thorough and attractive historical survey.

From Booklist A renowned watchmaker unfolds horological history from the sundial to the atomic clock, accenting the inventions and artistry of the craft in a colorfully attractive book. Numerous diagrams show various versions of a device called the escapement, which meets watchmaking's central challenge: the even, continuous release of stored energy to track time. Although the escapement is about 500 years old, improvements have been made to it as recently as 1981. Christianson pairs technical aspects of the craft to the organizational side of watch manufacturing, describing how early modern guilds regulated it and also relating the eclipse of the individual craftsman by the mass production of the industrial age. Portraits and thumbnails of those prominent in this process, such as John Harrison, the hero of Dava Sobel's Longitude (1995), populate the work, which palpably bears the author's enthusiasm for his subject--except for modern innovations: "It's hard to love a quartz watch," he writes. However, all who are seduced by the aesthetics of a watch will find it easy to love Christianson's account. Gilbert Taylor Copyright American Library Association. All rights reserved A beautifully illustrated book on the history of timepieces ... perfect for the general reader. (Frank Edgcombe E-Streams, Vol. 6, No. 4) A renowned watchmaker unfolds horological history ... in a colorfully attractive book ... all who are seduced by the aesthetics of a watch will find it easy to love Christianson's account. (Gilbert Taylor Booklist 2002-12-01) Should appeal not just to those fascinated by timepieces, but anyone interested in browsing through history. (Globe and Mail 2002-12-07) A lovely accompaniment ... a handsomely illustrated history of the measurement of time. (Mary Ann Gwinn Seattle Times 2003-01-19) From the Publisher Timepieces: Masterpieces of Chronometry by David Christianson is a must for every watch and clock collector, curator and also the curious. An amazing amount of historical and technical research as well as an

abundance of color photographs illustrate every topic making the book a work of art. (Bert Kalisher, Editor of Chronos Magazine and Executive Director of the American Watch Guild)