

watch in my hands but found out later when it sold for over \$10,000 it was a rare Hamilton 947.

"Knowledge is a wonderful thing but ignorance is much greater."

I Was a Very Happy Man

Julian Smith was kind enough to send us this great Fantastic Find.

I run a small shop in a small town. My landlord runs an antique shop down the street and when I went in a few months ago to pay my rent, I stood around talking for a few minutes. As I was leaving, I turned to the landlord and said, "I need a clock key." He went back in the store and brought out a clock and placed it on the counter.

I said, "Whose is that?"
He said, "It's mine."
I said, "Where did you get it?"
He said, "At a sale the other night."
I said, "What are you going to do with it?"
He said, "I'm going to sell it."
I said, "What do you want for it?"
He said, "Forty dollars."
I said, "I'll give you forty dollars for it."

I paid him and I picked it up and went back to my shop. I got a key and wound it up. It started running and I was a very happy man. He had sold me a solid brass case Chelsea ship's bell striking clock with the mahogany base. It's sitting in my den, running now.



Figure 4.

FJF: This \$40 investment is worth about \$2,350 in today's market—quite shipshape!

Horologica

Contributors this issue are Larry Crutsinger and Bob Frishman.

Member submissions are needed! Share reviews and announcements of new and interesting books, websites, digital media programs, periodicals, exhibits, and all else pertaining to horology. Please send contributions to the editor at ddelucca@nawcc.org or NAWCC, Inc., 514 Poplar St., Columbia, PA 17512-2130, c/o the Publications Dept.

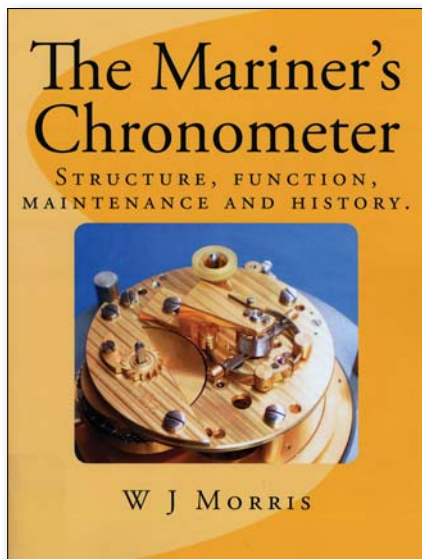
A Review of *The Mariner's Chronometer*

by Dr. W. J. Morris

Available at Amazon.com for \$34.88. This book is 10" x 8" (254 x 204 mm) paperback, with eight pages of front matter and 167 pages of subject matter, including a full index.

Since the development of practical marine chronometers 250 years ago and their use by all seagoing nations in the ensuing years, one might assume that all that could be written about them has been written. Dr. Bill Morris' new volume, *The Mariner's Chronometer*, published by MoCo Enterprises of New Zealand, has disproved that assumption. Dr. Morris has compiled in one volume the "structure, function, maintenance and history of the marine chronometer" in a comprehensive and well-researched fashion.

His explanation for the purpose of chronometers and their mechanical aspects is thorough and, although very technical at times, addresses the subject with great expertise. His discussion of the design and mechanics of



marine chronometers is complete and readily understandable. The section explaining "middle temperature error" of a movement was of particular interest because it covers an early and very stubborn problem, the many attempts to solve it, and ultimately how that solution was accomplished. It becomes readily obvious that Dr. Morris is abundantly qualified to author this treatise.

The section concerning maintenance and servicing techniques reflects Dr. Morris' in-depth experience in maintaining and repairing these timepieces. He is optimistic that a novice who is experienced in normal clock servicing can, if his instructions are followed carefully, disassemble, clean, reassemble, and return to service a chronometer movement.

I would have to add that someone with chronometer repair experience looking over the novice's shoulder in his first few servicing attempts could be helpful in preventing a mechanical disaster. Particular attention, as noted several times in the maintenance section, has to be paid to proper mainspring and maintaining power let down, or major damage and a repair job will result.

Dr. Morris' Chapter 8, "A Brief History," is extremely interesting. He acknowledges a great debt to Cmdr. Rupert Gould's book *The Marine Chronometer: Its History and Development*, which was published in 1923 and is considered by most as the "bible" on the subject. He then approaches the history of chronometry using his technique, "line of descent," which traces step by step the various developments of the early makers and their importance. I was amazed at the incredible detail of the author's history research and learned many facts that I was unaware of. I also compliment him on his generous acknowledgments of past authors and books as his extensive bibliography will attest.

For anyone who has an interest in the history and development of marine chronometers or who is a collector of these wonderful pieces of mechanical art, I highly recommend Dr. Morris' very well-written book. The photos and illustrations are first rate, and the writing style is very comfortable. I believe it should be in the library of anyone with an interest in horology and may very well spur one on to become involved in the fascinating world of chronometers.

—Larry Crutsinger (VA)

Time and Time Again

Time and Time Again, the new exhibit in Room 231 of Harvard University's Science Center, on view until December 6, was organized by Dr. Sara Schechner and David P. Wheatland, curator in the Department of the History of Science. This small but ambitious display tells the broad story of time using materials from the Science Center's cache of historic scientific instruments, along with items from the school's other important museum and library collections.

Far more than a lineup of clocks, watches, and sundials, the exhibit digs deep into diverse cultural, religious, and historical aspects of time and timekeeping. The informative signs and labels tell many stories, and reading them is as enlightening as viewing the images and artifacts. The welcoming introductory label at the entrance summarizes all that the visitor can expect: "Themes will include time finding from nature and time keeping by human artifice. We will explore cultural beliefs about the creation and end of time, the flow of time, and personal time as marked by rites of passage. We will take time out and examine the power of keeping time together in music, dance, work, and faith. We will explore time's representation in history and objects of personal memory, its personification in art, and its expression in biological change and the geological transformations of our planet."

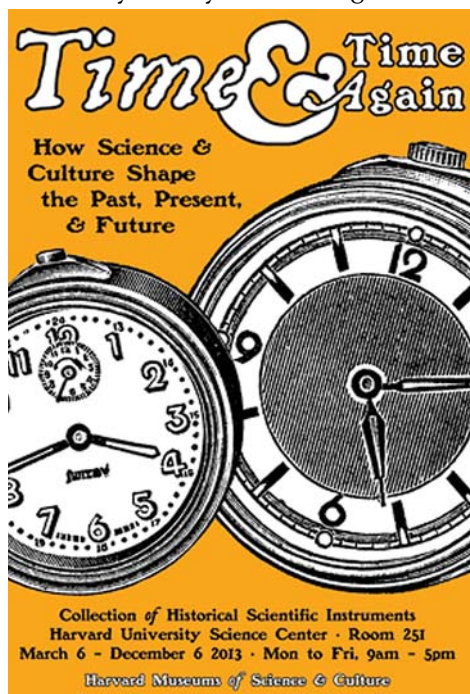
A sampling of other label headings includes Western Time, Mythic Time, Deep Time, Natural Time, Astrolabe, Nocturnals, Cyclical Time, Bach's Circles, Mozart's Arrows, Relative Time, Biological Clocks, William Bond & Son, Work Time, Daylight Saving and War Time, and The End of Time.

These labels accompany the kinds of rare objects you would expect to be unearthed from Harvard's storerooms: Medieval and Victorian texts, Native American pouches, a Mesopotamian time marker peg from the twenty-first century BCE, a Dolland orrery, a circa 1850 London deadbeat escapement model and French perpetual calendar, WPA theatrical posters, The Lady's Almanac for the Year 1869 from Boston, a circa 1700 European double sandglass, a Mercer chronometer, a nineteenth-century uprighting tool, an 1875 watch repair ledger from Northampton, MA, and much more. We cannot help wondering what other treasures lurk in those storerooms, awaiting future exhibits or energetic scholars.

Open 9-5 Monday to Friday, the exhibit is free to the public. Wandering the streets of Cambridge, the paths of the Harvard campus, and the halls of the Science Center all can add to the appeal of a visit. Just downstairs in the Putnam Gallery, Room 136, are permanent exhibits from the Harvard Collection of Historical Scientific Instruments, a resource begun in 1672 and now one of the three largest university collections of its kind in the world. Its new online database, "Waywiser," allows Internet visitors to browse the entire collection on their home computers.

The Science Center is at 1 Oxford Street, Cambridge. More information is at http://www.fas.harvard.edu/~hsdept/chsi_tta.html or by calling 617-495-2779.

—Bob Frishman (MA)



Precision and Splendor: Clocks and Watches at the Frick Collection

When Henry Clay Frick furnished his new Manhattan mansion early in the twentieth century, he included in the decor three impressive eighteenth-century French clocks. His grand Fifth Avenue home, brimming with masterpieces of fine and decorative arts, opened as a museum in 1935, and in 1999 became a horological landmark when the eccentric Manhattan collector, Winthrop Kellogg Edey, bequeathed to it his significant collection of early and rare clocks and watches.

Before his death, "Kelly" Edey in 1982 organized at the Frick Collection the first major U.S. exhibit of French clocks and reportedly the largest grouping of French Re-

naissance clocks ever presented. The exhibit catalog begins with a lengthy and scholarly introduction by Edey, followed by photographs and detailed descriptions of the clocks in the exhibit. In 2001 the museum mounted another display, "The Art of the Timekeeper; Masterpieces from the Winthrop Edey Bequest," to honor his legacy. This time, the informative catalog was written by William J. H. Andrewes, guest curator, whom we know as the moving force behind the 1993 Longitude Symposium, a curator at the former Time Museum in Illinois and Harvard University's scientific instrument collection, and now as a prime organizer of the upcoming "Time for Everyone" symposium at Caltech in November.

Until February 2, 2014, another astounding horological display is on view at the Frick in their new Portico Gallery. Eleven clocks and 14 watches from the Edey collection are joined by five lavish clocks, never previously displayed in New York, loaned by collector Horace Wood Brock. (I reviewed an exhibit of "Woody" Brook's collection in the April 2009 *NAWCC Bulletin* when it was on view at Boston's Museum of Fine Arts.) Correctly titled "Precision and Splendor" and with major funding support by Brequet, the exhibit features rare, innovative, and beautiful European timekeepers from the early sixteenth to the nineteenth centuries. An April 17 lecture by Will Andrewes, "The Tapestry of Time," provided additional context for the exhibition.

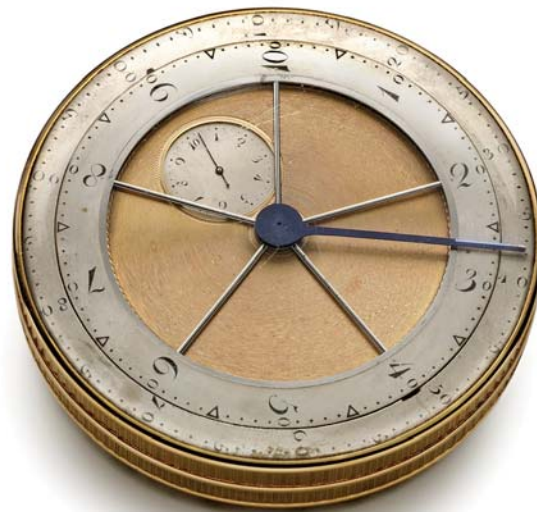
In the museum's glass-wall sunlit portico, visitors may view examples of timepieces rarely seen anywhere: a circa 1530 Pierre de Fobois gilt-brass table clock, one of the earliest known spring-driven clocks; an 1811 Abraham-Louis Breguet gilt-bronze carriage clock with calendar, and by the same maker a circa 1820 gold pocket watch with tourbillon; a circa 1580 Augsburg gilt-brass tower table clock and a 1653 David Weber gilt-brass and silver table clock with astronomical and calendar dials; a Jane-Baptiste Lepaute movement in a glass dome supported on a 1788 terra-cotta sculpture, "The Dance of Time," by Claude Michel Clodion; and much more. Images are available online but cannot compete with in-person examination.

Kelly Edey also donated his 4,418-volume library to the Frick, and researchers are welcome to scan the com-



Movement by Jean-Baptiste Lepaute, sculpture by Claude Michel Clodion, *The Dance of Time, Three Nymphs Supporting a Clock*, 1788, terracotta, gilt brass, and glass.

THE FRICK COLLECTION, NEW YORK, BEQUEST OF WINTHROP KELLOGG EDEY; PHOTO: MICHAEL BODYCOMB.



Abraham-Louis Breguet (1747-1823) and Antoine-Louis Breguet (1776-1858), *Gold and Silver Double-Dial Desk Watch Showing Decimal and Traditional Time*, c. 1795–after 1807.

THE FRICK COLLECTION, BEQUEST OF WINTHROP KELLOGG EDEY; PHOTO: MICHAEL BODYCOMB.

puterized listing and peruse these materials in the museum's reading room. Visitors may want to supplement their time with the clocks and watches with a few hours thumbing through rare volumes from the library shelves. More hours should be allocated, of course, to looking at the artworks by Vermeer, Holbein, Titian, El Greco, Velasquez, etc., which Henry Clay Frick found "pleasant to live with."

The Frick Collection is at 1 East 70th Street in New York City. More information is at www.frick.org or by calling 212-288-0700.

—Bob Frishman (MA)

Henry Arlaud (1631-1689), enameling by Pierre Huaud II (1647-c. 1698), *Gold and Enamel Pendant Watch*, c. 1685.

THE FRICK COLLECTION, NEW YORK, BEQUEST OF WINTHROP KELLOGG EDEY; PHOTO: MICHAEL BODYCOMB.

