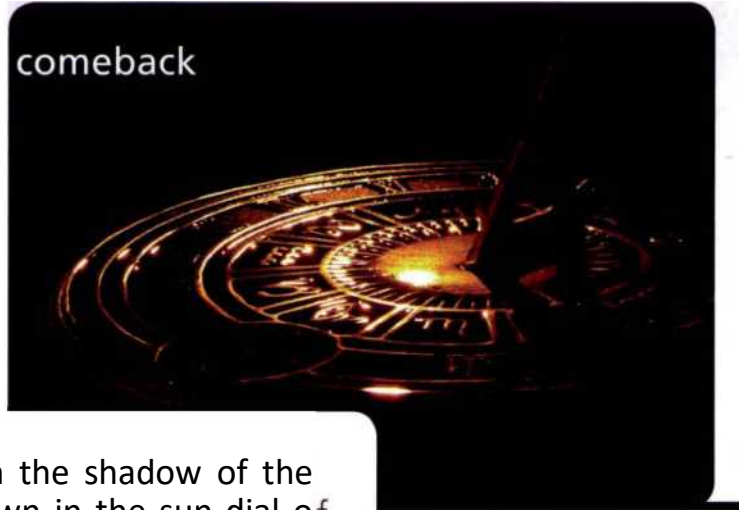


Natural

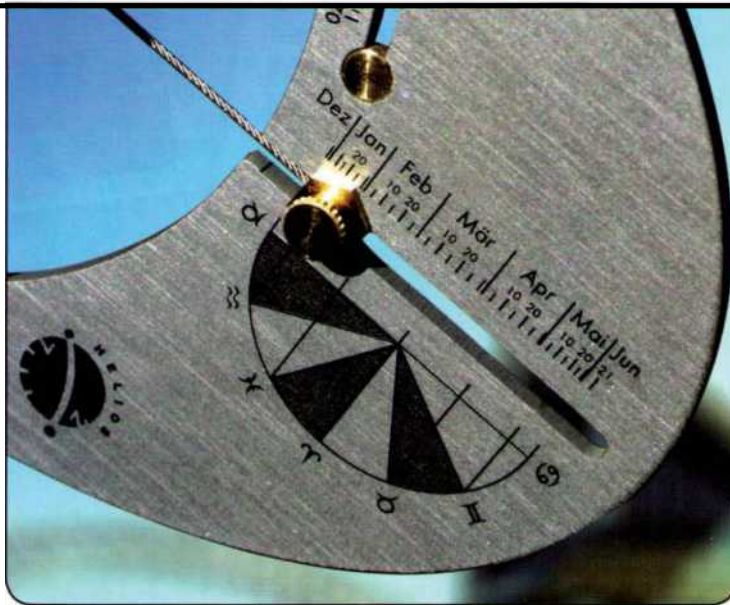
BY JORDAN A. ROTHACKER

HOROLOGY

Sundials are making a comeback



"Behold, I will bring again the shadow of the degrees which is gone down in the sun dial of Ahaz, ten degrees backward." – Isaiah 38:3



Time, and the management of it throughout the day, has always been essential to humans. To look at the technological glories of the ancient world and the great ancient civilizations is to always find creative and effective ways of recording and monitoring the passing of time.

The ancients, much like modern man, could not make these time-telling tools with a purely functional capacity. Along with the "primitive" insight of their technology, we also cherish their horological relics for their aesthetic value.

Surveying the creative means employed in time-telling, we find such devices as the hourglass, dating arguably as far back as the eleventh century the



Sundials have been used for thousands of years.
Below: A sundial ring.

It is really Reacting to the Roman just allowing the fascination, vitruvius gives sun to show where sundials detailed attention in his it is in the sky by first century B.C., *De the shadow it casts Architectura* and soon the from a standing Emperors were erecting many object or the line of massive sundials to com- light it draws across memorate events and to a surface. indicate time publicly.

water-clock from Mesopotamia and China, possibly as early as two thousand years before the common era: and the one that has remained most popular and fashionable, the sundial.

The sundial, though it might appear to be a simple clock, is actually a form of astronomical calendar, as it charts the position of a heavenly body, namely, the sun. While it charts the sun's position and reveals the time,

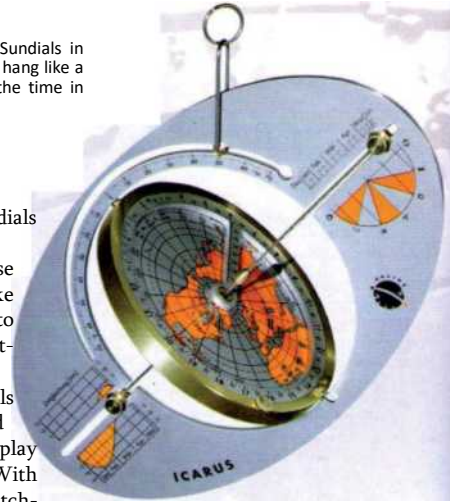
Testament mentions a sundial in the Book of Isaiah, and Herodotus reiterates the sundial's origins in ancient Babylon. Beyond these early literary references, this method of telling time most likely began in ancient Egypt before it was found throughout the ancient Near East. Soon it was seen popping up around the rest of the world but flourishing in the eastern Mediterranean. The Romans zealously adopted the similarly shaped obelisk of ancient Egypt and also adopted the concept of the sundial.

The Old The Greek term *gnomon*, which was used for the L-shaped carpenters square, was also given to the upright part of a sundial (the word basically means something enabling thing else to be known). For the same upright part, the Romans employed the term "stylus", from the Greek *stulos*, meaning stake pillar.

One of the most famous dials in Rome is the obelisk in the Piazza del Popolo. Brought back from Egypt by Emperor Augustus and dating back to the thirteenth century B.C,

sundials

The Icarus, made by Helios Sundials in Germany, is portable and will hang like a wind chime. It will indicate the time in any time zone.



it originally commemorated the victory over Mark Anthony and Cleopatra and was moved to this Piazza in the 16th century from its original place in the Circus Maximus.

While more advanced clocks and then watches developed throughout Europe from the Middle Ages to the Renaissance, leading into the haute horology of the Enlightenment, a special brand of purists spent time innovating the simple and natural timekeeping of the sundial. Medieval

cathedrals used large sundials to mark the times of veneration, and this period also saw the rise of portable travel sundials, like the diptych, which folded out to use a string as the shadow-casting gnomon.

The Renaissance saw sundials on grander scales and often paired with mechanical clocks to display the accuracy of the mechanism. With the complicated clocks and watches of the Enlightenment, sundials took on a more decorative capacity,

furnishing homes and becoming a staple of garden décor, especially in the English Garden style.

Lush history

The history of the sundial is visually lush and creative, as the basic engineering concept of a perpendicular stylus or gnomon over a dial and hour lines allows great freedom of expression. The ability to place a sundial anywhere open to the solar path also contributes to this freedom of expression, and

these natural clocks can be found in graveyards, flat against sides of buildings with gnomons pointing downward, in town squares, and even on one's person, most often with thematically corresponding designs per location.

Exploring and preserving this past is the California-based group the Atlantis Organization. When its members are not looking for their eponymous lost city, they are pulling rare prizes of days gone by off the ocean floor.



Simply set the time zone scale on the Icarus to your location and let the sun do the rest.



Nelson Jecas is a member of this group and also a watch enthusiast who spends his time diving for the past. Throughout his career, he has dredged up many artifacts of horological interest. Two years ago, off the coast of New Jersey, Jecas found cargo remains from what must have been a galleon. In this wreckage was an unusual horological find, a finger sundial, to be worn like a ring. Experts were able to date it to the sixteenth Century and attribute its national origin to Russia. Moreover, not only did it function for portable time-telling, but it carried an important past within, as shaking it indicates the piece of bone or relic inside. The finger sundial now rests safely in the church museum of St. John the Divine in New

York City.

Modern examples

Today, with our range of horological devices, there are still many exciting designers producing sundials, which tell time and create a fine aesthetic content for a home or garden.

The world of complicated sundials includes the Icarus, manufactured by the German Company Helios Sundials.

The Icarus is portable and will hang like a wind chime, but the amazing thing about it is its ability to indicate the time in any time zone to which one could travel. Simply set the time zone scale to your location and let the sun do the rest. Also included are a date scale and a zodiac chart to denote the sun's position in the heavens. The

Icarus retails for 295 euros (about \$375). The firm makes other varieties with equally global-minded names, including the Mondo, Magellan, and Helios, which are priced up to \$3,750.

The future of sundials might be digital, or so John Rosevear, President of the Skyclock Company, hopes. On the Skyclock website you can preview this product, which with the entry of your longitude and latitude lines can give you the precise solar time for your location. It even delineates such an important time of day as dusk, when colors start to fade and animals are more prone to be out on the road.

If Mr. Rosevear is correct, we might be seeing Skyclock in homes and cars and maybe other portable capacities.

Since 2000 there has been a watch by Zinome called the Sundial-Watch that, though it operates just like a regular timepiece, tries to evoke the sundial image with the hour hand more prominent and the minute hand smaller. The Sundial-Watch is a fun design concept and a value in two styles, each priced at \$200.

All of this just goes to show that, though we have come a long way from the ancient world, there are some technologies that never get old. The horological tradition might have branched off in so many different paths, but as long as we have the sun over our heads we can tell when we are late for an appointment ©



The Zinome Sundial Watch focuses on the hour hand, mirroring a sundial's emphasis.