

Title:

Sundials - Time Keeping Through The Ages

Word Count:

441

Summary:

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Keywords:

sundials,garden ornaments,sun dial,placing a sundial,history of sundials

Article Body:

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Sundials, which are the earliest known and ancient device for timekeeping were invented during the second millennium BC. China, Egypt and the Middle East produced fixed and mobile sundials during that period. To measure the time, these sundials used the height of the sun in the sky and the length of the shadow it produced.

Using horizontal or vertical shadow casters and the hollow of the bowl marked with hour lines were some of the important features of the various designs of sundials developed by Romans and Greeks. Using the altitude of the sun as a guideline to measure the time, the Romans also designed a portable ring and pillar dials.

In the first century AD, it was discovered that shadow casters set parallel to the axis of the Earth caused a shadow to fall in the same time and in the same direction during all the 365 days to make it more reliable.

In 1556, Johann Gebhart of Nuremberg designed an ivory diptych dial. During the

sixteenth and seventeenth centuries, Nuremberg was famous for the collection of ivory sundials.

If the direction of South could not be found immediately then it is not possible to use a mobile direction sundial. The invention of the magnetic compass greatly helped the sundials achieve correct orientation.

During Renaissance and Mediaeval periods, sundials of elaborate designs were produced. These sundials were intended for accurate calculation of the time. Still, most of these sundials were used as a decorative item by wealthy merchants.

Horizontal dials, vertical dials, equatorial dials, polar dials analemmatic dials, reflected ceiling dials and portable dials are some of the different types of sundials made for the calculation of time. The Horizontal Sundials are mounted on pedestals and located in gardens. The vertical sundials are mostly fixed on the walls of buildings and churches. Portable dials have several variations such as the tablet dial, ring dial, shepherd's dials and many others.

One of the famous sundials in the UK is located at the Science Centre, Green's Windmill, Nottingham which was the former home of George Green, noted physicist and mathematician. The interactive sundial is admired by school students visiting the museum.

You can buy a portable East/West Sundial with a 4 inch etched brass disc, which can be used in latitudes 25 degree to 65 degrees north, for \$50. Very basic models of sundials are also available for lesser price and indeed more elaborate sundials cost a lot more.