Fountain pen, Ceramics, Telescopes and the Astrolabe

The Fountain Pen

In the 10th century CE, many wrote with a feather or with a piece of wood in the form of a pen. Often leaving behind messy ink dots and slowing work if the writer was inexperienced. This is because ink drops fell freely on papyrus, paper and parchment (animal skin) and one had to dip ink out of the inkwell when the pen stopped writing. The Sultan of Egypt in the year 953 CE gave the order to develop the first fountain pen. This predecessor of the modern fountain pen looked very much like the fountain pen that is used today. The Sultan got his wish fulfilled thanks to an inventor named Al Mu'izz. This fountain pen had its own ink tank and ink flowed out of the pen by the capillary system of the ink canal. Along with the industrial-scale production of paper and the use of the pen, it was no surprise that the Islamic world had more books, charts and letters than the rest of the world combined. Books from Mali (Africa) on the European (Roman and Greek) history were even sold to Europeans.

Ceramics and Glassware

Tin-Enamel is one of the many ceramic innovations in the Islamic world. Previously, pots, jugs and works of art were made primarily from simple baked clay. The colors did not last for long, because they were not always waterproof and became brittle after a few years. Ceramic production was accompanied with high quality glassware. Blast furnace (furnace) technology from Hindustan(India), which was used for high-grade steel production was used in the Muslim world on a large scale to produce ceramics and glassware. Dishes, pots, jugs, cups and even artwork were harder, had higher density and colors were fixed. Even the Christian churches in Europe were filled with Islamic glassware. Ceramics and glassware from the 9th century CE with Islamic calligraphy and decorations have been found in China, Hindustan, Madagascar and Indonesia.

Telescopes, lens technology and the Astrolabe

The effect of light through clear and curved lenses (made of glass or crystal) has been known for thousands of years. With the advent of optical science by Ibn Haytam (965-1040 CE) and advanced glass and metal machining technology, the foundations were laid for the first telescopes and magnifying glasses. Naked eye astronomy had reached its peak by the Muslims of the Middle East, Persia and Hindustan. Astronomical tools, books and theories of these scientists remained in use until the 16th and 17th centuries CE. One of the most complex inventions of medieval Muslim scientists was the Astrolabe. A handheld machine that could calculate your position based on the stars. The Astrolabe was in use until the 1st world war in the 20th century CE. It is considered the greatest navigational invention after the compass.

Astrolab, Iran; 830 H = 1426-1427 CE

Telescope18th century CE, Engeland