

18<sup>th</sup> November 2020

## Eureka!

**“Give me but one firm spot on which to stand,  
and I will move the earth.”**

*Archimedes, Pappus Synagogue, Book 8, proposition 10  
(on the action of a lever)*

Hiero II, King of Syracuse in the 3<sup>rd</sup> century BC, had commissioned a crown of pure gold from a local craftsman. Being a suspicious man, Hiero suspected the craftsman of mixing base metals with the gold so he could make the crown cheaply and pocket the difference. He needed someone who could bring him proof, one way or the other. Enter Archimedes ...

This Greek mathematician, knowledgeable in a range of pursuits, knew how much gold had been provided, and that such an amount of gold would have a specific volume. So, how was he to check the volume now the gold had been worked into the irregular shape of a crown? But, as he stepped into the bath he had a revelation! He realised that the water level rose. And he had his answer. Immerse the crown in water and measure the volume of water displaced.

Legend tells us Archimedes lost his head at his discovery, prompting him to run naked through the city, shouting “Eureka! Eureka!” or “I’ve found it! I’ve found it!” The truth is, the Greek word is really *heureke*, but let’s not get too picky. Hiero’s crown was duly tested in a small bowl of water and it did, indeed, prove to have been adulterated, the result being that the goldsmith lost his head too – but in a far more literal manner!

Have you had a “eureka” moment – a sudden revelation, a grasp of the blindingly obvious, a deep understanding of faith, the experience of falling in love? Did you shout with joy, lose your head in excitement, or simply absorb your “eureka moment” into the rest of your living? However you reacted, I hope you can remember, and revisit, such moments, and find renewed inspiration and meaning in those special times when everything was clear and all was well with the world. For, remembering such moments, gives you the chance again and again to stand on that “firm spot” with Archimedes where everything made absolute sense.

### **A prayer for today**

*Lord, I pray that I can shout, “I’ve found it”, when I realise what your Love means.*

*An original reflection © Tom Gordon  
Also available at <https://swallowsnestnet.wordpress.com>*