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The father of magnetick philosophy

William Feindel, m.d.

William Gilbert (1544-1603) studied medicine at Cambridge University and took up practice in London, eventually becoming President of the Royal College of Physicians and the Physician to Queen Elizabeth I.

After some twenty years of systematic experimental observations, Gilbert in 1600 published a book on the magnet in which he gathered all the knowledge at that time as well as his own observations concerning magnetic phenomena. He correctly viewed the earth as a giant magnet and by making a **terella** or small earth from naturally occurring magnetic stone (lode stone) he was able to test in practice his theories of « magnetick vigour » and the « orbe of virtue » or the limit of the magnetic field around a lode stone. He showed that many substances — gold, silver, lead, glass had no magnetic properties and he disproved the long standing myth that garlic and diamonds neutralized a magnet's power to attract iron by making « an experiment with 70 excellent diamonds, in the presence of many witnesses ». In another observation, he examined the variations from the meridian which the navigators had noted and the deflection from the horizontal known as declination. His instructions for this experiment were quite specific. « Fix a slender iron wire of 3 digits length through a round cork, so that the cork may support the iron in water. Let this water be in a good sized glass vase or bowl ». The idea was to allow the wire to float in the middle of the liquid and freely point to indicate the magnetic field. He further argued that this « magnetic cocktail » could be used to determine latitude and magnetic variation.



1. William Gilbert (1544-1603)

Gilbert was fully aware of the importance of understanding magnetism in every day commerce and navigation. He was the first in England to support the Copernican idea of the planetary system. He clearly distinguished magnetism from the phenomenon of static electricity. His works served as a significant base from which all later scientific research on magnetism could be advanced. He made these extensive observations over the years

(Continued on page 2)

