Anton Van Leeuwenhoek (1632-1723)

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Postal Stamps issued on Leeuwenhoek - Netherland - 1937 and Transkei 1982

Leeuwenhoek was a Dutch storekeeper and part-time janitor in Delft. he was little educated, but his business and his job kept him comfortably off and he lived only for his hobby, grinding of lenses. He made lens after lens and was determined to make as perfect a lens as possible. These lenses were small, scarcely about 3-4 mm in diameter. He was a superb craftsman and made slender, but strong mounts and stands that supported the lenses. These ‘simple microscopes’ were remarkably effective.

The compound microscope, with two lenses systems, had been invented in 1590, but the technical problems were so great that his simple magnifying glass was far superior. Van Leeuwenhoek saw what no other man in his time could.

Leeuwenhoek had a passion for peering at the small objects and looked at everything, from tooth scraping to ditch water. In 1673, he sent his first letter to the Royal Society of London, describing his findings on structure of muscles, hair, sting of a bee etc. This was received with considerable reservations. In the later years he continued to send his communications, which numbered 375. In 1675, he discovered protozoa and also sent the description of spermatozoa, opening up a whole world of microscopic living organisms. he observed human capillaries and red blood cells with more care and detail than had the original discoverer, Malpighi. In 1680, he described and figured bacteria, calling them “moving animacules”.

The Royal Society was intrigued and wanted to borrow his microscope; but could not obtain it from the suspicious Leeuwenhoek. Roberk Hook and Grew were commissioned to build the best possible microscope with Leeuwenhoek’s specifications, as science had to verify his findings. Finally, the Royal Society honoured the untutored Dutchman, by electing him Fellow of the Society in 1680. Leeuwenhoek’s discoveries were dramatic enough to make him world famous. Unusually healthy, he continued working until his death at 91 years of age.

Van Leeuwenhoek did not have today’s sophisticated Nikon or Zeiss microscopes. However he was blessed with unsurpassed tools of dedication to an idea, infinite patience and extraordinary power of vision.

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