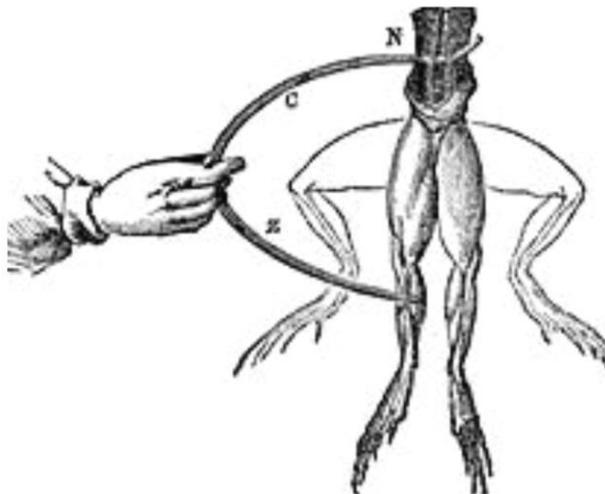


Battery



Just as how an apple had inspired Newton to discover gravity, the dry cell or battery that we use daily, was inspired by a frog. The man who was inspired is none other than Luigi Aloisio Galvani (1737 – 1798), an Italian biologist.

Sometime in 1786, Galvani stumbled upon a strange incident while dissecting a frog. While holding two rods of different metals, he accidentally touched the leg of the dead frog. To his surprise, the leg muscles of the dead frog twitched, as though being struck by an electric current. He then termed this phenomenon as “animal electricity”, i.e. the self-induced current within living things. This accidental discovery not only sparked the interests of biologists but also initiated the development of bioelectricity.



For many years, physicists strived in identifying methods to produce electricity. Being inspired by Galvani, they believed that a particular liquid in the frog's muscles can produce electricity. Hence, they relentlessly attempted on different combinations of metals immersed in a variety of liquid. Finally, it was discovered by Alessandro Volta (1745 – 1827) from Como, Italy.

Volta first formed the most basic compiled-battery; Voltaic pile, by using a penny and a zinc plate of equal size with a piece of wet paper sandwiched between them. He then connected twenty, thirty and subsequently more sets of the compiled-batteries together to produce larger electric current. When a conducting wire was used to connect the two ends of the compiled batteries, strong sparks were seen.

Through continuous development, Volta finally discovered that more sparks could be produced by replacing water with saline water. As for the types for metal used, the combination of zinc and copper produced the best effect. In 1800, the first battery was produced and as a sign of appreciation and acknowledgement of the inventor, it was named as “Voltaic Cell”.



Food for Thought:



Inventors and innovators must possess good observation skills in order to notice the details that others might disregard.



Apart from observation skills, inventors and innovators must possess the ability to analyze logically, hypothesize any accidental discovery as well as to study and prove the hypothesis to be true.

