

# HISTORY OF FORENSIC MEDICINE AND TOXICOLOGY

Ambroise August TARDIEU (1818-1879) – 1855 - He draws attention to petechial hemorrhages occurring in cases of asphyxial deaths. Although proved wrong by modern research, this belief is so tenacious, that most forensic pathologists still find it difficult to jettison.

Sir William HERSHEL, (1858) Chief Administrative Office, Bengal India, first person to use the fingerprints on native contracts.

The Dutch scientist J. (Izaak) Van DEEN – (1862) Develops a presumptive test for identifying blood using guaiac, a West Indian shrub.

The German scientist Christian Friedrich SCHONBEIN –1863- Discovers the ability of hemoglobin to oxidize hydrogen peroxide making it foam. This is the first presumptive test for blood.

TAYLOR and WILKES write a classic paper on determination of time since death from fall of body temperature. Many of the current concepts such as the initial temperature plateau, the core temperature, heat gradient and the effect of insulation were introduced by them.

Thomas TAYLOR (1877) – Working for U.S. Department of Agriculture suggests that markings of the palms of the hands and the tips of the fingers could be used for identification in criminal cases. Although reported in the American Journal of Microscopy and Popular Science and Scientific American, apparently this was never pursued from this source.

Rudolph VIRCHOW (1879) - German pathologist, is one of the first to study hair and recognize its limitations.

Cesare LOMBROSO (1880) Uses a mechanical device to measure changes in blood volume to discover physiological changes associated with lying. Lays foundation for Lie detector.

Dr. Henry FAULDS forwards an explanation of his fingerprint classification system to Sir Charles DARWIN, who in turn passes the material to his cousin Francis GALTON.

Dr. Henry FAULDS (1880) Publishes an article in the “Nature”, discussing fingerprints as a means of personal identification, and the use of printer's ink as a method for obtaining such fingerprints. He is the first to explicitly recognize the value of latent prints left at crime scenes.

BURMAN (1880) First to use temperature graphs to determine time since death.

Gilbert THOMPSON (1882) of the U.S. Geological Survey in New Mexico, uses his own fingerprints on a document to prevent forgery. This is the first known use of fingerprints in the United States.

In Mark TWAIN's book, (1883) “Life on the Mississippi”, a murderer is identified by the use of fingerprint identification. In a later book by Mark Twain, “Pudd'n Head Wilson”, there is a dramatic court trial on fingerprint identification.