

Forensic Science Timeline

- 1248 A Chinese book, Hsi Duan Yu (the washing away of wrongs), contains a description of how to distinguish drowning from strangulation. This was the first recorded application of medical knowledge to the solution of crime.
- 1609 The first treatise on systematic document examination was published by François Demelle of France.
- 1784 In Lancaster, England, **John Toms** was convicted of murder on the basis of the torn edge of wad of newspaper in a pistol matching a remaining piece in his pocket. This was one of the first documented uses of physical matching.
- 1810 **Eugène François Vidocq**, in return for a suspension of arrest and a jail sentence, made a deal with the police to establish the first detective force, the Sûreté of Paris.
- 1813 **Mathiew Orfila**, a Spaniard who became professor of medicinal/forensic chemistry at University of Paris, published *Traite des Poisons Tires des Regnes Mineral, Vegetal et Animal*, ou Toxicologie General I. Orfila is considered the father of modern toxicology. He also made significant contributions to the development of tests for the presence of blood in a forensic context and is credited as the first to attempt the use of a microscope in the assessment of blood and semen stains.
- 1828 **William Nichol** invented the polarizing light microscope.
- 1835 **Henry Goddard**, one of Scotland Yard's original Bow Street Runners, first used bullet comparison to catch a murderer. His comparison was based on a visible flaw in the bullet which was traced back to a mold.
- 1836 **James Marsh**, an Scottish chemist, was the first to use toxicology (arsenic detection) in a jury trial.
- 1856 **Sir William Herschel**, a British officer working for the Indian Civil service, began to use thumbprints on documents both as a substitute for written signatures for illiterates and to verify document signatures.
- 1863 The German scientist **Schönbein** first discovered the ability of hemoglobin to oxidize hydrogen peroxide making it foam. This resulted in first presumptive test for blood.
- 1880 **Henry Faulds**, a Scottish physician working in Tokyo, published a paper in the journal Nature suggesting that fingerprints at the scene of a crime could identify the offender. In one of the first recorded uses of fingerprints to solve a crime, Faulds used fingerprints to eliminate an innocent suspect and indicate a perpetrator in a Tokyo burglary.
- 1883 **Alphonse Bertillon**, a French police employee, identified the first recidivist based on his invention of anthropometry.
- 1889 **Alexandre Lacassagne**, professor/professor of forensic medicine at the University of Lyons, France, was the first to try to individualize bullets to a gun barrel. His comparisons at the time were based simply on the number of lands and grooves.
- 1891 **Hans Gross**, examining magistrate and professor of criminal law at the University of Graz, Austria, published *Criminal Investigation*, the first comprehensive description of uses of physical evidence in solving crime. Gross is also sometimes credited with coining the word criminalistics.
- 1892 **(Sir) Francis Galton** published *Fingerprints*, the first comprehensive book on the nature of fingerprints and their use in solving crime.
- 1892 **Juan Vucetich**, an Argentinean police researcher, developed the fingerprint classification system that would come to be used in Latin America. After Vucetich implicated a mother in the murder of her own children using her bloody fingerprints, Argentina was the first country to replace anthropometry with fingerprints.
- 1894 **Alfred Dreyfus** of France was convicted of treason based on a mistaken handwriting identification by **Bertillon**.
- 1896 **Sir Edward Richard Henry** developed the print classification system that would come to be used in Europe and North America. He published *Classification and Uses of Finger Prints*.
- 1900 **Karl Landsteiner** first discovered human blood groups and was awarded the Nobel prize for his work in 1930. **Max Richter** adapted the technique to type stains. This is one of the first instances of performing validation experiments specifically to adapt a method for forensic science. **Landsteiner's** continued work on the detection of blood, its species, and its type formed the basis of practically all subsequent work.