History of fingerprints

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DNA technology has revolutionized the field of forensic science. This DNA technology has helped in being more specific about criminals involve in any case. Different to the DNA, the fingerprint technology is still considered the most valid form of identification, widely used in law enforcement. In the Babylon times, fingerprints were used in making ridge patterns for trade-related transactions and in many governmental procedures. It was in the fourteenth century, that people started noticing the fact that no two fingerprints are alike. This helped in expanding the use of forensics in criminal proceedings. This was the exact time; the history of fingerprints began. In the very first phase, the scientists working on criminology started studying the spirals, loops, and ridges on finger patterns. In the year 1686, Marcello Malpighi, a professor of anatomy, started pointing out differences in the finger patterns (Pollitt, 2010). He made no declaration to the value of personal identification.

In the nineteenth century, John Evangelist of the University of Breslau published nine patterns of fingerprints. This research study about fingerprints was published in a thesis form. Although he presented the nine patterns of fingerprints, he refrained from explaining each pattern, identified in his thesis. In 1856, William Hershel, who was the Chief Magistrate used fingerprints for the first time in the native documents. Again, this time, it was a surprising fact that none of the fingerprints had the characteristics similar to others. This fact helped in proving the identification of persons whom he made transactions with. In 1880, a British Surgeon shared some new findings with Charles Darwin. Their findings were related to mainstreaming the use of fingerprints in forensics (Hawthorne, 2017). Later in the last decade of the nineteenth century, Francis Galton started working on relating fingerprints and genetic history. He also expanded the research on fingerprinting and intelligence, but his studies failed in presenting some new findings. Although he remained to fail in presenting some new findings, he proved through his experiments that fingerprints never change during one's lifetime.

With the start of the twentieth century, the field of forensic experienced new scientific findings related to fingerprints. Paul- Jean Coulier developed a new mechanism for transferring fingerprints from any surface to paper. He developed this method by using iodine fuming. This process brought revolution in forensics. It was for the first time that Scotland Yard started using fingerprints for the identification of criminals. Soon after, the United States' Police department started using the same strategy for fingerprint identification. The first conviction in recorded history was held in Scheffer's case of 1902 (Houck, 2016). The identifications, arrest, and conviction of the murderer were based on the fingerprint evidence. The fingerprint evidence for the murderer was captured some days before from a fractured glass. After the conviction of a murderer on the basis of fingerprint evidence (Houck, 2016), the fingerprints were used as the primary source of evidence in criminal cases.

At present, the identification of criminals through fingerprinting is considered essential. It is interesting to note that, fingerprinting has also been valuable in body identification in the aftermath of natural disasters. Since the beginning of the last century, fingerprinting has helped in limiting and specifying the evidence. This has also been valuable in anthropogenic hazards. The largest fingerprint identification system at present is managed by the American Federal Bureau of Investigations (Houck, 2016). Before the FBI, the French investigation firms established the mechanism to record fingerprints of the detainees. The first forensic lab for recording the fingerprints was also established by the French. Until now, there has been no mechanism to override the fingerprint evidence. There are cases in which criminal use gloves to hide their identities, but it also leaves some unique prints, which can serve the cause of criminal investigators.

**References:**

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