

# THE FINALITY OF FINGERPRINTS

Proving one's identity can often be an embarrassing problem. Facial features can change within a remarkably short space of time, hair can change its colour and texture overnight and even the body itself can change its appearance drastically. But the one foolproof and infallible means of identification which remains constant from birth to death are the fingerprints. Formed before one is born, they may become temporarily affected by skin diseases, cuts, burns and other injuries, but remain fundamentally the same in character until quite some time after death.

Often referred to as "nature's identity cards," fingerprints are quite unique. Experts regard them as the only true means of identification, for the simple reason that every single fingerprint has a character of its own. If you look at your own hands, you will see that no two fingers are exactly alike in their skin formation. The thousands of "whorls," "dots," "loops," "ridge endings" and "enclosures" that form the print of one hand alone are so individual that it has been estimated that the chances of two sets being alike are somewhere in the region of sixty-four thousand million to one against—a figure which is many times greater than the population of the entire world!

As everyone knows, fingerprints play a great part in the detection of crime. Yet, strangely enough, the police and their detectives had nothing to do with the discovery of their invaluable use. Two men, working thousands of miles apart, and quite ignorant of each other's theories, happened to hit on the idea of using fingerprints as a means of identification over 100 years ago. One, a Scots missionary by name of Andrew Faulds, who was living in Japan, published a long essay about fingerprints and their possible uses after he had noticed the clarity of a potter's fingerprint clearly embedded in an ancient piece of pottery he had bought.

At the same time Sir William Herschel, a Civil Servant working for the British Government in India, published a similar article noting his conclusions on the subject. For some time, he had been asking all the natives whom he employed to give him their fingerprints. There had been several large thefts from his estate, and he thought he might be able to identify the criminal using recorded fingerprints as his basis of elimination. By coincidence, the analytical scientist, Sir Francis Galton, a cousin of Charles Darwin, happened to read both articles. He was immensely excited about the possibilities it held



Taking a man's prints

out towards the detection of crime, and set about finding a method of classifying fingerprints. In the process, he calculated the odds against two sets of identical prints.

It wasn't until some 20 years later that the law showed any interest, but when Sir Edward Henry, who was the Inspector General of Police in Bengal in 1897, showed Scotland Yard in London his development of Galton's system, they were deeply impressed and installed the system within a few months. Proof of just how invaluable the system was came to the high-ranking officials of the Criminal Investigation Department in a short time with the case of Adolph Beck.

Beck had been arrested on a charge of defrauding ten women in 1896. Although he continually pleaded not guilty, he was sentenced to seven years' penal servitude after detectives had identified him as one John Smith who had just come out of prison for a similar offence. Three years after his release, he was once again accused of fraud as John Smith. But by this time, the fingerprint system had been installed, and Beck was able to prove his identity. Meanwhile, the real John Smith was found after prints had been taken, and the law had to admit that it had made a mistake. Beck was granted a free pardon and received £5,000 in compensation!

Today, the same basic system devised by Galton and Henry is used by the police throughout the world. Fingerprints are taken by pressing the prisoner's thumbs and fingers on a thin film of printer's ink. The resulting impressions are then transferred onto a special paper, when two sets are taken and the prisoner signs his name over the impression. At the Central Fingerprint Bureau of the Commonwealth in Sydney, these prints are kept together in a library which holds just on 1,000,000 different files. The classification of these files has been refined to such an extent that a fingerprint brought