IDENTIFYING PEOPLE BY FINGERPRINTS.

A Chat with Mr. Francis Galton, F.R.S.

It is conceivable that the time is not far distant when our criminal population will be as well known as the hand of a man. Mr. Francis Galton, F.R.S., the distinguished scientist, is now causing a great deal of worry to the burglar fraternity by perfecting a wonderful system of identification by means of a printer's roller. The fingers should then be pressed on the plate, and finally on a piece of paper or cardboard. The impression thus obtained is claimed to be the same as that of the fingerprint itself.

"Is it really possible, Mr. Galton," I asked, "to identify a man by his fingerprint right through life? I should have thought it possible for two fingers in the world to be exactly alike."

"There are ample points in a fingerprint to identify the owner through life, and the danger of making a mistake is so slight that it is not worth considering. I have never seen any two fingers alike; indeed, it is safe to say that there is not a single pair of fingers exactly similar." Professor Galton had a print of a baby's fingers: "Would you be able to identify that baby when it had grown up, or even reached the age of four-score?"

"There would be the least difficulty. I possess numerous impressions repeated after intervals of many years that bridge the whole range between childhood and old age; all their characteristics have remained unaltered. Lately, I have obtained a valuable set of fingerprints from an American lady, having read my books and determined to take the fingerprints of her children from the age of six months, and literally on the sixth day after their birth. As the child grew, there was absolutely no difficulty in recognising it by its fingerprints."

"A curious print in my possession is that of a man who cut off a slice of his thumb two years ago. The piece of flesh was immediately grafted on to the wound, but it was not observed at the time that it had been put on the wrong way. Altogether the fact of grafting is revealed in a fingerprint by different lines made by the papillary ridges."

Mr. Galton has over 2,500 prints of people's fingers, all carefully taken on cardboard. In order to demonstrate the value of the system, he asked me to choose any print I liked. I did so and handed it to the scientist, who solved the problem of ownership in a glance. At an index showed that the calculations corresponded with those of No. 2,148. Number 2,148 of our killers referred to a certain individual, and the identification was thus complete.

Mr. Galton now proceeded to explain his process of identification.

"First take the three middle fingers of the right hand, and secondly, the three middle fingers of the left. Then I take the right thumb and little finger, and last of all the thumb and little finger of the left. There are three peculiarities which I look for at once — the ridges running in arches, the ridges running in loops, and the circular ridges running into what are termed "squares." All these are on the finger considerably assists identification.

"All these arches, loops, and whorls will be clearly found by anyone examining his own and a few of his friends' fingers."

"There are three characteristic points on an average in a fingerprint," Mr. Galton continued. "As I have said, you will find no two pairs of fingers alike; it is like comparing the ground plans of two different cities."

"But supposing an old and hardened criminal, whose fingerprint was in your possession, hacked his finger com with a knife. I asked, "would that cause you confusion on his recapture?"

"Plenty of material for identification would still be left. He would never be able to obliterate all the ridges unless he cut off both his hands. But I don't want you to think that finger-prints are only of value for the identification of criminals. I want other people to take the finger-prints of their children for possible use in identification in after life.

"You remember what a stir there was when the rumour spread of a plot to kidnap the Duke of York's baby. Think of all the national difficulties that would have arisen had it been lost and then unowned, but his identity doubted. Many people urged me at the time to propose that his fingerprint should be taken, but I hesitated to move seriously in the matter."

"Are the fingers an index to character?"

"Thinking that there might be something in this idea, I measured the fingerprints of many Englishmen, Welshmen, Basques, Negroes, Hindoos, and members of some of the hill tribes of India, Jews, Quakers, philosophers, and idlers, but I failed to find any peculiarity. Dr. Pérez, the great brain specialist of France, however, says he finds that epileptics and persons of weak mind have more arches. The hands of idlers are particularly cold, sloppily, and disagreeable to the touch."

"Isn't it possible to tell a man's trade by his hand?"

"That is part of M. Bertillon's system. When a criminal was brought before him he inquired his trade, and receiving so many false answers he resolved to check them. In the case of a bootmaker, for instance, the knife leaves some permanent scars: there is a hard lump below the thumb, and a little hard place in the middle of the hand. There is also a black, hard place on the ring-finger, and the pressure of the tree within the boot."

"Do you consider that any feature is an index to character?"

"It is stated there is some relation between the ear and the character. At the present moment a lady is persuading her friend to let her black their ears and take impressions of them for purposes of study."

"What few facts, however, I can depend on. I find numbers of cases of families in which one child takes after one parent in feature, and after the other in character. There are many instances of twins who, practically indistinguishable in feature, are totally dissimilar in character."

"I used to wonder whether there was truth in a common belief that the leaders of men in England have peculiarly shaped noses, but on studying the statues in Westminster Abbey and St. Paul's, it appeared to me that this was certainly not a characteristic of our leading men."

"At one period, again, I endeavoured to find out whether light- or dark-haired men are the more efficient. For one of the later Arctic expeditions a large number of men offered themselves and the selection was made on the character of the hair. Where a record was kept of the colour of the hair of those men, I found that light-coloured hair largely predominated. Here, however, we must all be on our guard against the influence of life conditions."

"From pictures in the National Portrait Gallery, I once studied how far the features of Englishmen change from time to time. About Holbein's period, the highcheek-bones and thin lips appear to have been more pronounced. After the Restoration, the faces were less marked than before and the eyes became more prominent. In 1680 I was disappointed with these results, however, as painters follow their own fancy."

"The interval between the eyes is said to be an index to ability. As a national distinction I was told by an instrument maker when stereoscopes were used that the Englishman, the German, the American, the Frenchman, the Greek, and the Englishman, the intermediate size for Englishmen. I have examined a number of Greek statues, and found that the interval between the eyes was in numerous cases, but the interval of Frenchmen, with its narrowness, has been being lately induced to take up the relationship between the size of the hand and the disposition. This might be done easily at schools. My plan would be to select sets of boys at entrance who would increase in width, another for mechanical capacity, a third for refinement, and a fourth for want of refinement, so as to have a few marked cases in each group. Photographs of the hands of these boys, in the form of silhouettes on a white sheet of paper, would be easy to make, and would provide valuable data to work upon."

Bathing Too Much?

At a recent German Court, General Emperor Frederick happened to be talking to the aged General Meierhert with whom his Imperial son is constantly disagreeing about army matters. The Emperor came up during the conversation, and slighting the General, proceeded with an attempt at a joke, and at the same time alluding to their kickers —

"Your Excellency should think of marrying. Why don't you look for a wife?"

"But, perhaps, your Majesty," retorted the Emperor Frederick quickly, "the General thinks that a wife and a young Emperor would be rather too much for him."

By a Thread

How much may depend upon the mere trifle was well illustrated at a Welsh slate quarry not long ago. Here, the person concerned would not care to repeat.

"He was working a large crane which stood on the brink of one of the great shams from which the slate rock is hoisted. His duty was to catch hold of the big hook which depended from the end of the chain, and swing it to the surface. He was hoisted in the basket, and had to swing back and forth. When he got at last safe and sound."

He explained that he did not move his hand in the glove to attempt to catch the hook with his fingers, but left it, his hand moving all the time, and he would lose the button so that it would give way.

"His presence of mind in keeping as still as possible may have helped not a little to keep the slender thread from breaking."

If people saw their blessings one-half as often as they saw their sorrows, there would be more good neighbours in this world.