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Kurukshetra

(Ashok Kumar)
PREFACE

Crime is increasing day by day all over the world. To think about a crimeless society is a myth. Each and every crime is taking place in the society by its members. A crime is an offence in the eye of law. The offenders are punished from the beginning. In the old days, the offenders used the traditional techniques for committing the crime. They were captured and punished on the testimony of eyewitness and some evidences available against them. In the present day, the situation has been changed. Man has become selfish and materialistic by nature. He has no time for others. Eye witness is becoming a rare species and he changes colour like a chameleon. He can become hostile. But scientific aids are such evidences that can never be hostile. Scientific aids in police investigation as the name indicates, is the application of science in the police investigation. Scientific aids are the physical evidences such as fingerprints, footprints, DNA profiling, blood, CCTV cameras, dust, dyes, hairs, lie detection and call details & mobiles location etc. There are numerous occasions when evidence recovered from crime scene is forwarded to laboratories for scientific examination. There are a number of scientific aids which are utilized by the police or forensic scene of crime team experts in criminal investigation. It is essential to highlight here that physical evidence and clues when used as a tool for scientific investigation become scientific aids for the purposes to solve a criminal case and are very helpful to send the criminal to prison and safeguard the
innocent. Advancement in forensic technology has significantly increased the conviction rate and refined the investigation process as well as makes the judicial process transparent. The various types of physical evidence met with in different crimes would be in the form of DNA. The utility of DNA test is in the investigation of the following matters- disputed maternity or paternity, baby swapping, missing identity, murder, rape cases, immigration cases, road accidents. Finger prints also play an important role in providing identification of an individual. The identity of finger impressions has now been accepted by all courts of law.

When a crime is committed, it is the duty of the police officer to trace out the criminals and send them behind the bars. It is a very difficult task for an investigating officer to find out the culprit. The work of police investigation is not so easy. The National Police Commission has found that an average investigating officer is not able to devote more than 37 percent of his time to crime investigation work. While the rest of the time is taken by other duties, more particularly law and order work and VIPs security functions. Moreover, no eye-witness is available and if available can become hostile. Only the scientific aids are the main source which can help the investigating officer to conclude an investigation. As far as evidentiary value is concerned, physical evidence are more acceptable when compared to human testimony. With the passage of time the witnesses change their stand whereas physical evidence does not. Physical evidence can take any form. It
can be as large as a residence or as small as a fibre, as fleeting as an odor or as obvious as the scene of an explosion. Indeed, the variety of physical evidence that may be encountered by a police officer is enormous. Physical evidence must be handled carefully to prevent its contamination, alteration, or destruction.

Like other physical evidences, DNA is the most important and reliable scientific aid in police investigation. The main purpose of DNA evidence in forensic science is to fix the identity of a biological specimen viz. semen, saliva, bone, teeth, tissue, skin, blood etc. associated either with the scene of crime-victim-suspect or any other evidential material which can be helpful during the course of investigation and prosecution in order to fix the guilt or innocence of a person who is being investigated in civil or criminal case by any one of the investigating agency like police. Blood, body fluids, flesh, hair root, long bones, nails, saliva, semen, skin, teeth and tissue are the main sources for testing of DNA or DNA profiling. The Supreme Court of India acknowledges that the DNA Test ascertains paternity fraud in India. Therefore it is the need of hour to make more comprehensive scientific research in holding the DNA test through the ashes and bones of burnt dead bodies after cremation.

Finger prints play an important role in providing identification of an individual. The identity of finger impressions has now been accepted by all courts of law. In addition, Finger Prints are used widely by Government institutions, employers as well as Police department across
the world because no two fingerprints are the same. It is rightly said that a man can disguise himself but a fingerprint or chance print reveals his true identity.

The criminal justice system has learned to rely heavily on the analysis of physical evidence as scientific procedures and methods have become increasingly more reliable and convincing than eyewitness testimony. The influence of television programs showing the use of highly sophisticated analytical equipment to solve crimes has made the juries to come to expect complex scientific evidence to be presented in all criminal cases. Now-a-days TV channels, like Sony, Life OK and Colors are showing the crimes occurred in the past. Sony TV shows CID, Life OK Savdhaan India and Colors Code Red. The real story makes the viewers much more aware about the crime techniques; on the other hand criminals are learning how to commit the crime intelligently.

Scientific aids in police investigation as the name indicates, is the application of science in police investigation or criminal investigation. A forensic scientist examines physical evidence for one of two purposes: identification or comparison. Identification is the process of elucidating the physical or chemical identity of a substance with as much certainty as possible.

A fingerprint is an impression; it includes the ten fingers tips and palm of hands and feet's impression also. It is well known that the surface of our palms, finger tips and the soles of our feet are covered with a skin that is different from any other part of our body skin. The hair
does not grow on these parts e.g. palms, fingers and soles of feet. The raised part or lines are called ridges. These ridges are found on the opposite side of the nails of fingers either hand or feet. Moreover, these ridges are also found on the palm and soles of feet.

Personal identification by finger prints, adopted in every civilized country in the world, first took its origin in India by Sir William Herschel, when he was Collector of Hoogly in 1858. He introduced finger printing out of necessity to prevent personal misrepresentation because to him all Indians looked alike. Sir William Herschel was British administrator in Bengal. He started the practice of recording handprints of natives on contract that modern fingerprint science came to life. His concept was that fingerprint could be successfully used to prevent impersonation among natives and to induce superstitious belief that the prints were a kind of mystic symbol. He however, did not publish any of his findings.

In 1924, The Federal Bureau of Investigation (FBI) took over the cataloguing of fingerprints in America. By 1971 they had over 200 million fingerprints on file. Further, with the advancement in technology, programs began using Automated Fingerprint Identification Systems (AFIS). The AFIS’s scanned and stored fingerprints electronically in the year of 1990. Law enforcement groups saw the need to fingerprint children as a means of identifying kids who became lost, or went missing; Christ Migliaro founded Fingerprint America for this purpose. In the year of 1999 FBI started to moves their fingerprint file
to an electronic system. Millions of criminal fingerprints are now stored across the globe.

Expert evidence must be viewed not as a piece of substantive evidence of a conclusive nature, but as a piece of corroborative (tending to confirm) evidence to other evidence in the case. The expert evidence is weighed in the same way as other evidence. The court is not bound to accept the opinion of an expert automatically, but the ground on which he gives his opinion would carry value to the evidence. As to the probative value of the opinion of an expert on fingerprints, it must have the same value as the opinion of any other expert, such as a medical officer, etc. In each case the evidence is only a guide to the Court to direct its attention to judge of its value.

Science of fingerprints identification is an exact science and the opinion of the fingerprint expert is acceptable under section 45 of Indian Evidence Act, 1872. The Central Finger Print Bureau has earned many achievements in solving a number of cases.

In the light of above discussed background the present study has been divided into five chapters. In first chapter, criminal investigation, scientific aids to investigation, scene of offence, forensic science-its origin, position of forensic laboratories, justification of study, delimitation of the study, research methodology, objectives of the study, hypothesis and review of related literature and fingerprinting have been discussed.

In the second chapter, scientific aids used in police investigation- meaning and concept of scientific aids,
physical evidence & its sources, importance of physical evidence, scope of forensic science, historical background of forensic science, meaning and scope of police investigation have been discussed in details.

The Third chapter contains discussion regarding the application of DNA as scientific aids in police investigation. The Fourth chapter contains the discussion regarding the application of finger prints as scientific aids in police investigation in details. Lastly in the fifth chapter conclusion and suggestions have been discussed.

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