ABSTRACTS

Volume 24, Number 2

90 Years Later: Revisting the Lindbergh Kidnapping Case

Marie Durina

Nearly ninety years ago, the kidnapping of the baby son of famous aviator Charles Lindbergh occurred in Hopewell, New Jersey. So heinous was the act, and its tragic outcome when the baby was found dead after the ransom was paid, that the case would later come to be known in the collective public mind as "The Crime of the Century." The ensuing investigation took over 2 years and involved, among other things, the forensic analysis of handwriting. The testimony provided at trial by eight forensic document examiners identified German immigrant Bruno Hauptmann as the writer of the ransom notes and other communications. The trial also involved testimony about wood identification by a wood expert, the first of its kind to make headline news. The case, investigation, evidence, and testimony are reviewed and summarized here in the hope it will provide an interesting retrospective for the experts of today.

Indented Writing Examination: Rubber Stamp Image Transfers

James A. Green

Electrostatic Detection Devices, used by Forensic Document Examiners, are well known for their ability to recover indentations from documents. The impressions are usually the result of the pressure generated from pen strokes written upon a document placed over another document. However, images are occasionally captured that were not simply the result of pen pressure, but other types of paper fiber disturbances. This paper is related to an uncommon type of non-impact indented writing evidence recovered during casework. An image of a rubber stamp impression was recovered from the page positioned on top of the document during shipping. The vivid image was surprising, because it was not a concentrated pressure impression common to pen stroke indentations, nor due to indentations from one page affecting the following page through friction. The research conducted in this paper duplicated the results.

Several rubber stamp impressions, using various stamps and inks, were made on individual pages. The pages were then placed over a blank page, using various paper types. The file was mailed across the country, then returned. The blank pages were processed, and several stamps became clearly discernable. The transfers were subsequently determined to be caused by the inks' chemical components. The results further established that images obtained from an Electrostatic Detection Device (EDD) are not restricted to common paper fiber disturbances associated with signatures or other handwriting. The rubber stamp image may also be transferred to a page preceding, as well as following, the originating document.

Surveys of Handedness

John Welch

A short account of studies which have provided information about handedness in humans in various cultures and across historical timescales.

A Study on Signature Distortion in Photocopying Generations

Amrita Yadav^{1*}, Dr. Ranjeet Kr. Singh², Afreen Tarannum³, Prof. M.P. Sachdeva⁴

Examining original documents is considered more relevant for signature and handwriting examination, but the effectiveness may decrease significantly when considering a photocopied version of the original document. This creates challenges for the Forensic Document Examiner as various levels of tampering can be performed during the process of photocopying. In this research paper, an effort has been made to study the effect of the photocopying process in five different subsequent generations on various line quality features such as breakage in line, initial and terminal strokes of letters or words, writing instrument features like ink gooping, and different other features related with the writer itself like pen lifts, tremors, retracing, merging of strokes, and printer effect like widening in line. In this study, 2550 genuine signature samples were collected from different individuals, using different types of pens with different brands on various types of papers which are commonly used for official purposes. This study has been conducted to help the Forensic Document Examiners in understanding the challenges which are frequently seen in the multi-generation copy of signature samples.

Keywords: Signature Distortion, Multi-Generation Copy, Photocopying Machine, Stereo Zoom Microscope, Digimizer, Line Quality.